



Digest of United Kingdom Energy Statistics 2012

INTERNET BOOKLET

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Aggregate energy balance 2008

Gross calorific values

Thousand tonnes of oil equivalent

	Coal	Manufactured fuel(1)	Primary oils	Petroleum products	Natural gas(2)	Bioenergy & waste(3)	Primary electricity	Electricity	Heat sold	Total
Supply										
Indigenous production	11,305	-	78,580	-	69,681	4,502r	12,964r	-	-	177,031r
Imports	28,410	500	65,575	26,374	35,000	975r	-	1,057	-	157,892r
Exports	-457	-142	-52,984	-31,281	-10,548	-	-	-109	-	-95,521
Marine bunkers	-	-	-	-2,728	-	-	-	-	-	-2,728
Stock change(4)	-1,971	+162	+259	+138r	-265	-	-	-	-	-1,677r
Primary supply	37,287	520	91,430	-7,497r	93,868	5,477r	12,964r	948	-	234,997r
Statistical difference(5)	-203	-7	+196	+114r	+1	-	-	+29r	-	+130r
Primary demand	37,490	527	91,235	-7,610r	93,867	5,477r	12,964r	919r	-	234,866r
Transfers	-	-126	-3,098	+3,106	-6	-	-1,055r	+1,055r	-	-124
Transformation	-35,641	1,671	-88,136	85,919r	-34,586	-3,513r	-11,909	32,041r	1,537	-52,617r
Electricity generation	-29,943	-858	-	-1,598r	-32,400	-3,513r	-11,909	32,041r	-	-48,181r
Major power producers	-28,972	-	-	-1,108r	-29,618	-803	-11,909	29,367r	-	-43,043r
Autogenerators	-971	-858	-	-490	-2,782	-2,709r	-	2,673r	-	-5,138r
Heat generation	-314	-51	-	-66	-2,186	-	-	-	1,537	-1,080
Petroleum refineries	-	-	-88,136	87,800	-	-	-	-	-	-336
Coke manufacture	-4,280	4,064	-	-	-	-	-	-	-	-217
Blast furnaces	-852	-1,718	-	-217	-	-	-	-	-	-2,787
Patent fuel manufacture	-251	235	-	-	-	-	-	-	-	-16
Other	-	-	-	-	-	-	-	-	-	-
Energy industry use	4	849	-	5,546	6,215	-	-	2,227r	72	14,913r
Electricity generation	-	-	-	-	-	-	-	1,405r	-	1,405r
Oil and gas extraction	-	-	-	510	5,270	-	-	51	-	5,831
Petroleum refineries	-	-	-	5,036	427	-	-	374	72	5,909
Coal extraction	4	-	-	-	8	-	-	84	-	96
Coke manufacture	-	429	-	-	-	-	-	7	-	436
Blast furnaces	-	420	-	-	62	-	-	39	-	521
Patent fuel manufacture	-	-	-	-	-	-	-	-	-	-
Pumped storage	-	-	-	-	-	-	-	110	-	110
Other	-	-	-	-	447	-	-	156	-	604
Losses	-	236	-	-	1,171	-	-	2,395r	-	3,803r
Final consumption	1,845	986	-	75,869r	51,888	1,964r	-	29,391r	1,465	163,410r
Industry	1,296	748	-	5,552r	11,925	449	-	9,815r	1,021	30,807r
Unclassified	-	239	-	2,383	3	449	-	-	-	3,074
Iron and steel	49	509	-	62	595	-	-	400r	-	1,616r
Non-ferrous metals	20	-	-	47	257	-	-	636	-	959
Mineral products	759	-	-	222	1,579	-	-	682	-	3,242
Chemicals	65	-	-	175	2,681	-	-	1,744r	592	5,258
Mechanical engineering etc	10	-	-	98	662	-	-	741	4	1,515
Electrical engineering etc	4	-	-	46	335	-	-	636r	-	1,021
Vehicles	35	-	-	115	741	-	-	500	-	1,390
Food, beverages etc	28	-	-	292	2,095	-	-	1,054	10	3,478
Textiles, leather etc	53	-	-	104	524	-	-	292r	-	973
Paper, printing etc	105	-	-	65	1,428	-	-	1,106	1	2,704
Other industries	142	-	-	1,786r	815	-	-	1,868r	413	5,024r
Construction	27	-	-	158	211	-	-	156	-	552
Transport (6)	14	-	-	57,015r	-	845	-	339r	-	58,212r
Air	-	-	-	13,507	-	-	-	-	-	13,507
Rail	14	-	-	653r	-	-	-	337	-	1,004r
Road	-	-	-	41,098r	-	845	-	2	-	41,944r
National navigation	-	-	-	1,757	-	-	-	-	-	1,757
Pipelines	-	-	-	-	-	-	-	-	-	-
Other	536	238	-	4,446	39,139	670r	-	19,237	445	64,711r
Domestic	515	238	-	3,032	30,916	431	-	10,301	52	45,485
Public administration	9	-	-	470	3,660	89	-	1,750	387	6,365
Commercial	7	-	-	399	2,868	13r	-	6,836	6	10,130r
Agriculture	3	-	-	304	186	137r	-	350	-	979r
Miscellaneous	1	-	-	241	1,509	-	-	-	-	1,752
Non energy use	-	-	-	8,855r	824	-	-	-	-	9,679r

(1) Includes all manufactured solid fuels, benzole, tars, coke oven gas and blast furnace gas.

(2) Includes colliery methane.

(3) Includes geothermal and solar heat.

(4) Stock fall (+), stock rise (-).

(5) Primary supply minus primary demand.

(6) See paragraphs 5.11 regarding electricity use in transport and 6.24 regarding renewables use in transport.

Aggregate energy balance 2007

Gross calorific values

Thousand tonnes of oil equivalent

	Coal	Manufactured fuel(1)	Primary oils	Petroleum products	Natural gas(2)	Bioenergy & waste(3)	Primary electricity	Electricity	Heat sold	Total
Supply										
Indigenous production	10,697	-	83,912	-	72,125	4,310r	14,927r	-	-	185,970r
Imports	28,195	733	62,611	27,532r	29,065	454	-	741	-	149,331r
Exports	-419	-170	-55,754	-32,640r	-10,590	-110	-	-292	-	-99,975r
Marine bunkers	-	-	-	-2,506	-	-	-	-	-	-2,506
Stock change(4)	+1,947	-22	+856	+1,180	+471	-	-	-	-	+4,433
Primary supply	40,420	541	91,625	-6,434r	91,071	4,654r	14,927r	448	-	237,252r
Statistical difference(5)	+12	-13	+3	-203r	+16	-	-	-34r	-	-219r
Primary demand	40,408	554	91,622	-6,231r	91,055	4,654r	14,927r	482r	-	237,471r
Transfers	-	-126	-2,670	+2,693	-7	-	-891r	+891r	-	-110
Transformation	-38,617	1,703	-88,952	87,229r	-32,633	-3,419r	-14,036	32,898r	1,406	-54,421r
Electricity generation	-32,904	-961	-	-1,161	-30,600	-3,419r	-14,036	32,898r	-	-50,182r
Major power producers	-31,975	-	-	-704	-27,501	-675	-14,036	30,073r	-	-44,818r
Autogenerators	-929	-961	-	-457	-3,099	-2,744r	-	2,825r	-	-5,364r
Heat generation	-304	-51	-	-65	-2,033	-	-	-	1,406	-1,047
Petroleum refineries	-	-	-88,952	88,664r	-	-	-	-	-	-288r
Coke manufacture	-4,319	4,171	-	-	-	-	-	-	-	-147
Blast furnaces	-904	-1,633	-	-210	-	-	-	-	-	-2,747
Patent fuel manufacture	-186	176	-	-	-	-	-	-	-	-9
Other	-	-	-	-	-	-	-	-	-	-
Energy industry use	3	881	-	5,353r	6,537	-	-	2,468r	68	15,310r
Electricity generation	-	-	-	-	-	-	-	1,521	-	1,521
Oil and gas extraction	-	-	-	437	5,523	-	-	48	-	6,008
Petroleum refineries	-	-	-	4,916r	448	-	-	484	68	5,916r
Coal extraction	3	-	-	-	8	-	-	85	-	96
Coke manufacture	-	424	-	-	-	-	-	8	-	432
Blast furnaces	-	458	-	-	62	-	-	41	-	561
Patent fuel manufacture	-	-	-	-	-	-	-	-	-	-
Pumped storage	-	-	-	-	-	-	-	104	-	104
Other	-	-	-	-	497	-	-	176	-	673
Losses	-	216	-	-	1,038	-	-	2,427r	-	3,682r
Final consumption	1,788	1,032	-	78,338r	50,840	1,235r	-	29,377r	1,338	163,949r
Industry	1,268	839	-	6,077r	11,466	276	-	9,699r	896	30,522r
Unclassified	-	239	-	2,647	3	276	-	-	-	3,316r
Iron and steel	54	600	-	67	630	-	-	425	-	1,776
Non-ferrous metals	22	-	-	48	246	-	-	635	-	952
Mineral products	759	-	-	238	1,451	-	-	672	-	3,120
Chemicals	76	-	-	192	2,592	-	-	1,737	480	5,075
Mechanical engineering etc	7	-	-	107	659	-	-	727	3	1,503
Electrical engineering etc	4	-	-	35	321	-	-	627	-	987
Vehicles	35	-	-	122	734	-	-	492	-	1,383
Food, beverages etc	25	-	-	282	1,975	-	-	1,039	2	3,322
Textiles, leather etc	52	-	-	118	523	-	-	288	-	981
Paper, printing etc	101	-	-	66r	1,334	-	-	1,096	1	2,597r
Other industries	134	-	-	1,988r	794	-	-	1,808r	411	5,134r
Construction	-	-	-	168	204	-	-	155	-	527
Transport (6)	14	-	-	59,044r	-	362	-	341	-	59,760r
Air	-	-	-	13,906	-	-	-	-	-	13,906
Rail	14	-	-	642r	-	-	-	339	-	995r
Road	-	-	-	42,884r	-	362	-	2	-	43,248r
National navigation	-	-	-	1,612	-	-	-	-	-	1,612
Pipelines	-	-	-	-	-	-	-	-	-	-
Other	506	193	-	4,368	38,495	597r	-	19,338	442	63,939r
Domestic	487	193	-	2,876r	30,341	400	-	10,583	52	44,931
Public administration	10	-	-	485	3,650	89	-	1,727	383	6,343r
Commercial	4	-	-	406	2,846	19	-	6,679	7	9,962r
Agriculture	3	-	-	293	172	89r	-	349	-	906r
Miscellaneous	2	-	-	308	1,486	-	-	-	-	1,797
Non energy use	-	-	-	8,848	879	-	-	-	-	9,728r

(1) Includes all manufactured solid fuels, benzole, tars, coke oven gas and blast furnace gas.

(2) Includes colliery methane.

(3) Includes geothermal and solar heat.

(4) Stock fall (+), stock rise (-).

(5) Primary supply minus primary demand.

(6) See paragraphs 5.11 regarding electricity use in transport and 6.24 regarding renewables use in transport.

Aggregate energy balance 2006

Gross calorific values

Thousand tonnes of oil equivalent

	Coal	Manufactured fuel(1)	Primary oils	Petroleum products	Natural gas(2)	Bioenergy & waste(3)	Primary electricity	Electricity	Heat sold	Total
Supply										
Indigenous production	11,418	-	83,958	-	80,012	3,969	17,889	-	-	197,246
Imports	32,668	695	64,872	29,354r	20,983	550	-	884	-	150,006r
Exports	-342	-120	-54,875	-31,370r	-10,369	-97	-	-238	-	-97,410r
Marine bunkers	-	-	-	-2,479	-	-	-	-	-	-2,479
Stock change(4)	-808	-153	-391	-934r	-553	-	-	-	-	-2,839r
Primary supply	42,936	422	93,564	-5,429r	90,072	4,423	17,889	646	-	244,524r
Statistical difference(5)	-151	-5	-127	+125r	+13	-	-	+9	-	-135r
Primary demand	43,087	427	93,691	-5,554r	90,060	4,423	17,889	637	-	244,659r
Transfers	-	-109	-2,835	+2,873	-5	-	-759	+759	-	-76
Transformation	-41,457	1,796	-90,856	88,834r	-28,670	-3,471	-17,130	33,070	1,305	-56,580r
Electricity generation	-35,846	-967	-	-1,316r	-26,776	-3,471	-17,130	33,070	-	-52,437r
Major power producers	-34,944	-	-	-843r	-23,917	-780	-17,130	30,412	-	-47,201
Autogenerators	-902	-967	-	-473	-2,860	-2,691	-	2,658	-	-5,236r
Heat generation	-286	-51	-	-65	-1,894	-	-	-	1,305	-991
Petroleum refineries	-	-	-90,856	90,453r	-	-	-	-	-	-403
Coke manufacture	-4,315	4,271	-	-	-	-	-	-	-	-44
Blast furnaces	-816	-1,659	-	-238	-	-	-	-	-	-2,713
Patent fuel manufacture	-194	202	-	-	-	-	-	-	-	8
Other	-	-	-	-	-	-	-	-	-	-
Energy industry use	3	871	-	5,627r	7,039	-	-	2,425	60	16,025r
Electricity generation	-	-	-	-	-	-	-	1,591	-	1,591
Oil and gas extraction	-	-	-	465	5,955	-	-	47	-	6,467
Petroleum refineries	-	-	-	5,162r	444	-	-	401	60	6,067r
Coal extraction	3	-	-	-	10	-	-	89	-	101
Coke manufacture	-	414	-	-	-	-	-	8	-	423
Blast furnaces	-	457	-	-	53	-	-	43	-	552
Patent fuel manufacture	-	-	-	-	-	-	-	-	-	-
Pumped storage	-	-	-	-	-	-	-	92	-	92
Other	-	-	-	-	578	-	-	155	-	732
Losses	-	177	-	-	1,033	-	-	2,357	-	3,567
Final consumption	1,627	1,065	-	80,526r	53,313	952	-	29,684	1,245	168,412r
Industry	1,164	849	-	6,079r	12,428	213	-	9,879	809	31,422r
Unclassified	-	231	-	2,791r	4	213	-	-	-	3,240r
Iron and steel	1	618	-	20	721	-	-	504	-	1,863
Non-ferrous metals	37	-	-	53	267	-	-	647	-	1,004
Mineral products	691	-	-	199	1,531	-	-	677	-	3,097
Chemicals	84	-	-	187	2,952	-	-	1,753	371	5,347
Mechanical engineering etc	9	-	-	106	703	-	-	730	2	1,550
Electrical engineering etc	4	-	-	84	337	-	-	631	-	1,057
Vehicles	37	-	-	123	814	-	-	494	-	1,469
Food, beverages etc	17	-	-	281	2,039	-	-	1,042	1	3,380
Textiles, leather etc	49	-	-	130	571	-	-	289	-	1,039
Paper, printing etc	99	-	-	59	1,420	-	-	1,110	22	2,710
Other industries	135	-	-	1,874r	848	-	-	1,844	414	5,115r
Construction	-	-	-	173	220	-	-	158	-	551
Transport (6)	14	-	-	58,944r	-	188	-	344	-	59,489r
Air	-	-	-	13,999	-	-	-	-	-	13,999
Rail	14	-	-	627r	-	-	-	342	-	984
Road	-	-	-	42,513r	-	188	-	2	-	42,702r
National navigation	-	-	-	1,805	-	-	-	-	-	1,805
Pipelines	-	-	-	-	-	-	-	-	-	-
Other	450	216	-	4,770	40,205	550	-	19,461	436	66,088
Domestic	426	216	-	3,249	31,550	358	-	10,723	52	46,574
Public administration	13	-	-	487	3,938	83	-	1,721	376	6,618
Commercial	4	-	-	392	2,947	19	-	6,673	8	10,043
Agriculture	3	-	-	305	173	90	-	345	-	915
Miscellaneous	3	-	-	338	1,596	-	-	-	-	1,938
Non energy use	-	-	-	10,732	680	-	-	-	-	11,413

(1) Includes all manufactured solid fuels, benzole, tars, coke oven gas and blast furnace gas.

(2) Includes colliery methane.

(3) Includes geothermal and solar heat.

(4) Stock fall (+), stock rise (-).

(5) Primary supply minus primary demand.

(6) See paragraphs 5.11 regarding electricity use in transport and 6.24 regarding renewables use in transport.

Aggregate energy balance 2005

Gross calorific values

Thousand tonnes of oil equivalent

	Coal	Manufactured fuel(1)	Primary oils	Petroleum products	Natural gas(2)	Bioenergy & waste(3)	Primary electricity	Electricity	Heat sold	Total
Supply										
Indigenous production	12,714	-	92,883	-	88,219	3,681	19,044	-	-	216,541
Imports	28,534	623	64,255	24,536r	14,904	487	-	960	-	134,299r
Exports	-420	-89	-59,177	-32,293	-8,270	-	-	-244	-	-100,494
Marine bunkers	-	-	-	-2,174	-	-	-	-	-	-2,174
Stock change(4)	-1,406	-97	-416	+2,090r	+114	-	-	-	-	285r
Primary supply	39,422	437	97,545	-7,841r	94,966	4,168	19,044	715	-	248,457r
Statistical difference(5)	+23	-7	-121	+469r	+10	-	-	+20	-	+394r
Primary demand	39,399	443	97,665	-8,310r	94,957	4,168	19,044	696	-	248,063r
Transfers	-	-113	-3,643	+3,648	-4	-	-674	+674	-	-112
Transformation	-37,700	1,737	-94,022	92,083r	-30,451	-3,371	-18,370	33,327	1,366	-55,402r
Electricity generation	-32,408	-990	-	-1,347	-28,517	-3,371	-18,370	33,327	-	-51,677
Major power producers	-31,528	-	-	-827	-25,421	-810	-18,370	30,564	-	-46,392
Autogenerators	-880	-990	-	-521	-3,097	-2,561	-	2,764	-	-5,285
Heat generation	-286	-51	-	-65r	-1,934	-	-	-	1,366	-971r
Petroleum refineries	-	-	-94,022	93,778r	-	-	-	-	-	-245r
Coke manufacture	-4,053	4,024	-	-	-	-	-	-	-	-29
Blast furnaces	-756	-1,446	-	-281	-	-	-	-	-	-2,484
Patent fuel manufacture	-197	200	-	-	-	-	-	-	-	3
Other	-	-	-	-	-	-	-	-	-	-
Energy industry use	4	820	-	6,486r	7,495	-	-	2,337	98	17,239r
Electricity generation	-	-	-	-	-	-	-	1,537	26	1,563
Oil and gas extraction	-	-	-	515	6,309	-	-	43	-	6,867
Petroleum refineries	-	-	-	5,971r	444	-	-	383	71	6,870r
Coal extraction	4	-	-	-	10	-	-	92	-	106
Coke manufacture	-	396	-	-	-	-	-	8	-	404
Blast furnaces	-	424	-	-	81	-	-	44	-	549
Patent fuel manufacture	-	-	-	-	-	-	-	-	-	-
Pumped storage	-	-	-	-	-	-	-	67	-	67
Other	-	-	-	-	651	-	-	162	-	813
Losses	-	211	-	-	943	-	-	2,380	-	3,533
Final consumption	1,695	1,035	-	80,936r	56,064	798	-	29,981	1,268	171,776r
Industry	1,180	812	-	6,260r	13,022	201	-	9,976	831	32,281r
Unclassified	-	226	-	2,675	5	201	-	-	-	3,107
Iron and steel	-	586	-	17	727	-	-	432	-	1,761
Non-ferrous metals	24	-	-	54	272	-	-	661	-	1,011
Mineral products	739	-	-	219	1,574	-	-	686	-	3,218
Chemicals	84	-	-	203	3,102	-	-	1,816	392	5,597
Mechanical engineering etc	10	-	-	118	737	-	-	742	3	1,610
Electrical engineering etc	3	-	-	36	355	-	-	638	-	1,033
Vehicles	38	-	-	140	856	-	-	502	-	1,537
Food, beverages etc	19	-	-	327	2,143	-	-	1,055	1	3,544
Textiles, leather etc	50	-	-	111	605	-	-	292	-	1,057
Paper, printing etc	98	-	-	91	1,521	-	-	1,137	31	2,878
Other industries	116	-	-	2,081r	894	-	-	1,848	405	5,345
Construction	-	-	-	189	230	-	-	166	-	585
Transport (6)	3	-	-	58,357r	-	74	-	349	-	58,783r
Air	-	-	-	13,856	-	-	-	-	-	13,856
Rail	3	-	-	629r	-	-	-	347	-	980r
Road	-	-	-	42,507r	-	74	-	2	-	42,582r
National navigation	-	-	-	1,365	-	-	-	-	-	1,365
Pipelines	-	-	-	-	-	-	-	-	-	-
Other	512	223	-	4,856	42,362	523	-	19,655	437	68,568
Domestic	474	223	-	3,092	32,836	318	-	10,809	52	47,804
Public administration	27	-	-	539	4,327	105	-	1,722	376	7,095
Commercial	4	-	-	386	3,284	20	-	6,780	10	10,484
Agriculture	6	-	-	380	194	81	-	344	-	1,005
Miscellaneous	1	-	-	458	1,721	-	-	-	-	2,180
Non energy use	-	-	-	11,463	680	-	-	-	-	12,143

(1) Includes all manufactured solid fuels, benzole, tars, coke oven gas and blast furnace gas.

(2) Includes colliery methane.

(3) Includes geothermal and solar heat.

(4) Stock fall (+), stock rise (-).

(5) Primary supply minus primary demand.

(6) See paragraphs 5.11 regarding electricity use in transport and 6.24 regarding renewables use in transport.

Aggregate energy balance 2004

Gross calorific values

Thousand tonnes of oil equivalent

	Coal	Manufactured fuel(1)	Primary oils	Petroleum products	Natural gas(2)	Bioenergy & waste(3)	Primary electricity	Electricity	Heat sold	Total
Supply										
Indigenous production	15,594	-	104,547	-	96,411	3,080	18,746	-	-	238,378
Imports	23,458	724	68,214	20,180	11,439	402	-	841	-	125,258
Exports	-448	-124	-70,513	-33,108	-9,812	-	-	-197	-	-114,202
Marine bunkers	-	-	-	-2,221	-	-	-	-	-	-2,221
Stock change (4)	-56	-83	-149	-327	-536	-	-	-	-	-1,152
Primary supply	38,548	517	102,099	-15,476	97,502	3,482	18,746	644	-	246,062
Statistical difference (5)	+1	-52	-176	-51	+60	-	-	+211	-	-6
Primary demand	38,547	568	102,275	-15,426	97,441	3,482	18,746	433	-	246,068
Transfers	-	-118	-4,196	+4,178	-3	-	-583	+583	-	-139
Transformation	-36,554	1,706	-98,080	97,272	-31,184	-2,767	-18,163	33,061	1,273	-53,437
Electricity generation	-31,368	-921	-	-645	-29,306	-2,767	-18,163	33,061	-	-50,109
Major power producers	-30,471	-	-	-153	-26,182	-540	-18,163	30,246	-	-45,263
Autogenerators	-897	-921	-	-492	-3,124	-2,227	-	2,815	-	-4,846
Heat generation	-297	-51	-	-72	-1,878	-	-	-	1,273	-1,024
Petroleum refineries	-	-	-98,080	98,297	-	-	-	-	-	217
Coke manufacture	-3,997	3,978	-	-	-	-	-	-	-	-18
Blast furnaces	-652	-1,541	-	-309	-	-	-	-	-	-2,502
Patent fuel manufacture	-241	241	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-
Energy industry use	6	849	-	5,810	7,607	-	-	2,291	16	16,579
Electricity generation	-	-	-	-	-	-	-	1,464	2	1,466
Oil and gas extraction	-	-	-	-	6,619	-	-	48	-	6,667
Petroleum refineries	-	-	-	5,809	264	-	-	402	14	6,489
Coal extraction	6	-	-	1	13	-	-	88	-	108
Coke manufacture	-	397	-	-	-	-	-	8	-	405
Blast furnaces	-	449	-	-	63	-	-	40	-	552
Patent fuel manufacture	-	3	-	-	-	-	-	-	-	3
Pumped storage	-	-	-	-	-	-	-	73	-	73
Other	-	-	-	-	648	-	-	167	-	815
Losses	-	201	-	-	706	-	-	2,642	-	3,549
Final consumption	1,988	1,106	-	80,214	57,942	715	-	29,144	1,258	172,365
Industry	1,235	839	-	6,918	13,238	265	-	9,584	832	32,912
Unclassified	-	257	-	2,632	6	265	-	-	-	3,160
Iron and steel	-	582	-	35	835	-	-	465	-	1,918
Non-ferrous metals	7	-	-	53	275	-	-	642	-	977
Mineral products	751	-	-	201	1,152	-	-	648	-	2,752
Chemicals	94	-	-	203	3,611	-	-	1,714	394	6,015
Mechanical engineering etc.	10	-	-	117	740	-	-	723	2	1,593
Electrical engineering etc.	3	-	-	38	358	-	-	568	-	967
Vehicles	56	-	-	109	879	-	-	480	-	1,525
Food, beverages, etc.	26	-	-	345	2,428	-	-	1,036	2	3,837
Textiles, leather, etc.	58	-	-	74	612	-	-	287	-	1,030
Paper, printing etc.	96	-	-	59	1,193	-	-	1,132	27	2,508
Other industries	133	-	-	2,898	895	-	-	1,734	407	6,067
Construction	-	-	-	156	252	-	-	155	-	563
Transport (6)	-	-	-	57,025	-	-	-	349	-	57,374
Air	-	-	-	12,908	-	-	-	-	-	12,908
Rail	-	-	-	700	-	-	-	347	-	1,047
Road	-	-	-	42,221	-	-	-	2	-	42,222
National navigation	-	-	-	1,196	-	-	-	-	-	1,196
Pipelines	-	-	-	-	-	-	-	-	-	-
Other	752	267	-	4,703	43,842	449	-	19,211	425	69,650
Domestic	733	267	-	3,265	34,085	252	-	10,679	52	49,333
Public administration	9	-	-	504	4,466	104	-	1,733	368	7,184
Commercial	4	-	-	417	3,233	20	-	6,451	5	10,129
Agriculture	5	-	-	277	202	74	-	348	-	906
Miscellaneous	1	-	-	240	1,857	-	-	-	-	2,098
Non energy use	-	-	-	11,567	862	-	-	-	-	12,429

(1) Includes all manufactured solid fuels, benzole, tars, coke oven gas and blast furnace gas.

(2) Includes colliery methane.

(3) Includes geothermal and solar heat.

(4) Stock fall (+), stock rise (-).

(5) Primary supply minus primary demand.

(6) See paragraphs 5.11 regarding electricity use in transport and 6.24 regarding renewables use in transport.

Aggregate energy balance 2003

Gross calorific values

Thousand tonnes of oil equivalent

	Coal	Manufactured fuel(1)	Primary oils	Petroleum products	Natural gas(2)	Bioenergy & waste(3)	Primary electricity	Electricity	Heat sold	Total
Supply										
Indigenous production	17,636	-	116,242	-	102,996	3,008	20,428	-	-	260,310
Imports	20,703	694	59,114	17,948	7,420	110	-	440	-	106,430
Exports	-396	-133	-81,927	-25,274	-15,223	-	-	-254	-	-123,208
Marine bunkers	-	-	-	-1,879	-	-	-	-	-	-1,879
Stock change (4)	+2,070	-91	+511	-294	+304	-	-	-	-	+2,499
Primary supply	40,013	469	93,940	-9,500	95,498	3,118	20,428	186	-	244,152
Statistical difference (5)	-97	-49	+210	-661	+133	-	-	+190	-	-273
Primary demand	40,109	518	93,730	-8,839	95,364	3,118	20,428	-4	-	244,425
Transfers	-	-124	-1,367	+1,295	-7	-	-388	+388	-	-203
Transformation	-38,027	1,853	-92,363	91,545	-29,614	-2,408	-20,040	33,616	1,789	-53,649
Electricity generation	-32,548	-934	-	-591	-27,909	-2,408	-20,040	33,616	-	-50,813
Major power producers	-31,592	-	-	-105	-24,476	-381	-20,040	30,722	-	-45,872
Autogenerators	-956	-934	-	-486	-3,432	-2,027	-	2,894	-	-4,941
Heat generation	-386	-116	-	-158	-1,705	-	-	-	1,789	-576
Petroleum refineries	-	-	-92,363	92,533	-	-	-	-	-	169
Coke manufacture	-4,170	4,212	-	-	-	-	-	-	-	42
Blast furnaces	-642	-1,601	-	-238	-	-	-	-	-	-2,481
Patent fuel manufacture	-282	292	-	-	-	-	-	-	-	10
Other	-	-	-	-	-	-	-	-	-	-
Energy industry use	4	898	-	5,806	7,646	-	-	2,523	2	16,879
Electricity generation	-	-	-	-	-	-	-	1,559	2	1,562
Oil and gas extraction	-	-	-	-	6,608	-	-	47	-	6,655
Petroleum refineries	-	-	-	5,804	238	-	-	496	-	6,539
Coal extraction	4	-	-	2	16	-	-	102	-	124
Coke manufacture	-	421	-	-	-	-	-	-	-	421
Blast furnaces	-	473	-	-	46	-	-	42	-	562
Patent fuel manufacture	-	3	-	-	-	-	-	-	-	3
Pumped storage	-	-	-	-	-	-	-	70	-	70
Other	-	-	-	-	737	-	-	206	-	943
Losses	-	160	-	-	535	-	-	2,568	-	3,262
Final consumption	2,078	1,190	-	78,195	57,563	710	-	28,910	1,787	170,432
Industry	1,248	844	-	6,899	14,292	267	-	9,396	1,128	34,074
Unclassified	-	255	-	2,505	6	267	-	-	-	3,033
Iron and steel	-	572	-	19	888	-	-	467	-	1,947
Non-ferrous metals	8	17	-	48	411	-	-	623	-	1,107
Mineral products	799	-	-	243	1,213	-	-	641	-	2,895
Chemicals	46	-	-	197	3,873	-	-	1,697	1,097	6,911
Mechanical engineering etc.	10	-	-	151	785	-	-	734	12	1,692
Electrical engineering etc.	1	-	-	28	378	-	-	513	-	921
Vehicles	49	-	-	100	999	-	-	482	14	1,644
Food, beverages, etc.	36	-	-	222	2,476	-	-	984	5	3,724
Textiles, leather, etc.	61	-	-	110	679	-	-	293	-	1,143
Paper, printing etc.	88	-	-	56	1,367	-	-	1,079	-	2,590
Other industries	148	-	-	2,899	957	-	-	1,736	-	5,740
Construction	-	-	-	322	259	-	-	146	-	727
Transport (6)	-	-	-	55,660	-	-	-	706	-	56,366
Air	-	-	-	11,936	-	-	-	-	-	11,936
Rail	-	-	-	667	-	-	-	706	-	1,373
Road	-	-	-	41,823	-	-	-	-	-	41,823
National navigation	-	-	-	1,234	-	-	-	-	-	1,234
Pipelines	-	-	-	-	-	-	-	-	-	-
Other	830	346	-	4,213	42,409	443	-	18,807	659	67,707
Domestic	813	346	-	3,068	33,232	247	-	10,576	11	48,293
Public administration	8	-	-	399	3,814	104	-	1,756	627	6,709
Commercial	4	-	-	326	3,400	20	-	6,131	-	9,879
Agriculture	4	-	-	328	200	72	-	344	-	949
Miscellaneous	2	-	-	91	1,764	-	-	-	21	1,877
Non energy use	-	-	-	11,423	862	-	-	-	-	12,285

(1) Includes all manufactured solid fuels, benzole, tars, coke oven gas and blast furnace gas.

(2) Includes colliery methane.

(3) Includes geothermal and solar heat.

(4) Stock fall (+), stock rise (-).

(5) Primary supply minus primary demand.

(6) See paragraphs 5.11 regarding electricity use in transport and 6.24 regarding renewables use in transport.

Aggregate energy balance 2002

Gross calorific values

Thousand tonnes of oil equivalent

	Coal	Manufactured fuel(1)	Primary oils	Petroleum products	Natural gas(2)	Bioenergy & waste(3)	Primary electricity	Electricity	Heat sold	Total
Supply										
Indigenous production	18,808	-	127,037	-	103,646	2,755	20,619	-	-	272,864
Imports	18,814	181	62,152	16,195	5,201	-	-	790	-	103,334
Exports	-394	-272	-95,288	-25,470	-12,961	-	-	-66	-	-134,451
Marine bunkers	-	-	-	-2,044	-	-	-	-	-	-2,044
Stock change (4)	+375	+188	+158	+1,356	-633	-	-	-	-	+1,445
Primary supply	37,603	96	94,060	-9,963	95,255	2,755	20,619	723	-	241,149
Statistical difference (5)	+188	-34	-556	+66	+153	-	-	+84	-	-99
Primary demand	37,415	131	94,616	-10,029	95,102	2,755	20,619	639	-	241,248
Transfers	-	-102	-2,017	+1,972	-9	-	-520	+520	-	-156
Transformation	-35,200	2,390	-92,599	90,817	-30,254	-2,073	-20,099	32,549	2,089	-52,379
Electricity generation	-29,683	-594	-	-731	-28,362	-2,073	-20,099	32,549	-	-48,993
Major power producers	-28,706	-	-	-124	-25,044	-275	-20,099	29,872	-	-44,375
Autogenerators	-978	-594	-	-607	-3,318	-1,798	-	2,677	-	-4,617
Heat generation	-446	-164	-	-260	-1,892	-	-	-	2,089	-673
Petroleum refineries	-	-	-92,599	92,001	-	-	-	-	-	-598
Coke manufacture	-4,226	4,193	-	-	-	-	-	-	-	-34
Blast furnaces	-529	-1,362	-	-193	-	-	-	-	-	-2,083
Patent fuel manufacture	-315	317	-	-	-	-	-	-	-	2
Other	-	-	-	-	-	-	-	-	-	-
Energy industry use	6	829	-	6,044	7,847	-	-	2,463	6	17,195
Electricity generation	-	-	-	-	-	-	-	1,473	6	1,478
Oil and gas extraction	-	-	-	-	6,824	-	-	46	-	6,871
Petroleum refineries	-	-	-	6,044	288	-	-	563	-	6,896
Coal extraction	6	-	-	-	17	-	-	100	-	123
Coke manufacture	-	411	-	-	-	-	-	-	-	411
Blast furnaces	-	399	-	-	19	-	-	43	-	461
Patent fuel manufacture	-	20	-	-	-	-	-	-	-	20
Pumped storage	-	-	-	-	-	-	-	70	-	70
Other	-	-	-	-	699	-	-	168	-	867
Losses	-	89	-	-	831	-	-	2,578	-	3,498
Final consumption	2,209	1,501	-	76,716	56,161	682	-	28,667	2,084	168,020
Industry	1,186	1,085	-	6,248	14,202	250	-	9,473	1,321	33,764
Unclassified	-	307	-	2,185	8	250	-	-	-	2,749
Iron and steel	-	736	-	82	756	-	-	438	-	2,011
Non-ferrous metals	14	42	-	80	452	-	-	544	-	1,132
Mineral products	782	-	-	259	1,215	-	-	603	4	2,864
Chemicals	40	-	-	229	3,807	-	-	1,923	1,310	7,309
Mechanical engineering etc.	11	-	-	229	797	-	-	730	-	1,767
Electrical engineering etc.	5	-	-	49	397	-	-	501	-	952
Vehicles	42	-	-	198	991	-	-	479	-	1,710
Food, beverages, etc.	32	-	-	256	2,484	-	-	1,020	6	3,799
Textiles, leather, etc.	60	-	-	125	674	-	-	294	-	1,153
Paper, printing etc.	82	-	-	79	1,329	-	-	1,005	-	2,495
Other industries	117	-	-	2,003	1,009	-	-	1,788	-	4,917
Construction	-	-	-	476	284	-	-	146	-	906
Transport (6)	-	-	-	54,958	-	-	-	727	-	55,685
Air	-	-	-	11,658	-	-	-	-	-	11,658
Rail	-	-	-	662	-	-	-	727	-	1,389
Road	-	-	-	41,936	-	-	-	-	-	41,936
National navigation	-	-	-	702	-	-	-	-	-	702
Pipelines	-	-	-	-	-	-	-	-	-	-
Other	1,024	416	-	4,893	41,032	432	-	18,468	763	67,027
Domestic	1,009	416	-	3,087	32,362	243	-	10,319	33	47,471
Public administration	5	-	-	743	3,697	97	-	1,750	730	7,022
Commercial	4	-	-	396	3,115	19	-	6,050	-	9,583
Agriculture	4	-	-	563	202	72	-	348	-	1,189
Miscellaneous	1	-	-	104	1,657	-	-	-	-	1,762
Non energy use	-	-	-	10,617	927	-	-	-	-	11,544

(1) Includes all manufactured solid fuels, benzole, tars, coke oven gas and blast furnace gas.

(2) Includes colliery methane.

(3) Includes geothermal and solar heat.

(4) Stock fall (+), stock rise (-).

(5) Primary supply minus primary demand.

(6) See paragraphs 5.11 regarding electricity use in transport and 6.24 regarding renewables use in transport.

Aggregate energy balance 2001

Gross calorific values

Thousand tonnes of oil equivalent

	Coal	Manufactured fuel(1)	Primary oils	Petroleum products	Natural gas(2)	Bioenergy & waste(3)	Primary electricity	Electricity	Heat sold	Total
Supply										
Indigenous production	19,969	-	127,828	-	105,870	2,533	21,227	-	-	277,426
Imports	23,455	111	58,425	18,811	2,619	-	-	917	-	104,337
Exports	-412	-268	-95,047	-20,633	-11,894	-	-	-23	-	-128,277
Marine bunkers	-	-	-	-2,433	-	-	-	-	-	-2,433
Stock change (4)	-2,192	+115	-667	-666	-57	-	-	-	-	-3,467
Primary supply	40,820	-42	90,538	-4,922	96,538	2,533	21,227	894	-	247,586
Statistical difference (5)	-140	-56	+109	+376	+179	-	-	+100	-	+569
Primary demand	40,960	14	90,429	-5,298	96,359	2,533	21,227	794	-	247,017
Transfers	-	-112	+490	-365	-6	-	-432	+432	-	+8
Transformation	-38,249	2,890	-90,919	87,921	-28,936	-1,877	-20,795	32,445	2,330	-55,190
Electricity generation	-31,485	-600	-	-1,040	-26,908	-1,877	-20,795	32,445	-	-50,261
Major power producers	-30,489	-	-	-380	-23,797	-688	-20,795	29,873	-	-46,277
Autogenerators	-996	-600	-	-660	-3,110	-1,189	-	2,572	-	-3,984
Heat generation	-468	-207	-	-699	-2,028	-	-	-	2,330	-1,071
Petroleum refineries	-	-	-90,919	89,817	-	-	-	-	-	-1,101
Coke manufacture	-5,372	5,068	-	-	-	-	-	-	-	-304
Blast furnaces	-575	-1,727	-	-157	-	-	-	-	-	-2,459
Patent fuel manufacture	-350	356	-	-	-	-	-	-	-	6
Other	-	-	-	-	-	-	-	-	-	-
Energy industry use	7	957	-	5,421	7,863	-	-	2,405	3	16,656
Electricity generation	-	-	-	-	-	-	-	1,496	3	1,498
Oil and gas extraction	-	-	-	-	6,746	-	-	58	-	6,804
Petroleum refineries	-	-	-	5,421	360	-	-	450	-	6,231
Coal extraction	7	-	-	-	18	-	-	90	-	115
Coke manufacture	-	462	-	-	1	-	-	15	-	478
Blast furnaces	-	464	-	-	32	-	-	76	-	572
Patent fuel manufacture	-	32	-	-	-	-	-	-	-	32
Pumped storage	-	-	-	-	-	-	-	68	-	68
Other	-	-	-	-	706	-	-	152	-	858
Losses	-	103	-	-	762	-	-	2,657	-	3,522
Final consumption	2,704	1,731	-	76,838	58,792	656	-	28,609	2,327	171,657
Industry	1,195	1,355	-	6,611	15,464	243	-	9,573	1,001	35,443
Unclassified	-	243	-	2,122	9	243	-	-	-	2,617
Iron and steel	1	1,023	-	79	731	-	-	456	-	2,290
Non-ferrous metals	8	89	-	81	487	-	-	630	-	1,295
Mineral products	812	-	-	292	1,338	-	-	623	2	3,068
Chemicals	23	-	-	253	4,305	-	-	1,812	988	7,382
Mechanical engineering etc.	10	-	-	272	830	-	-	737	-	1,849
Electrical engineering etc.	6	-	-	62	432	-	-	490	-	990
Vehicles	41	-	-	186	1,035	-	-	501	-	1,763
Food, beverages, etc.	29	-	-	297	2,553	-	-	995	-	3,875
Textiles, leather, etc.	54	-	-	170	685	-	-	284	10	1,202
Paper, printing etc.	73	-	-	111	1,425	-	-	990	-	2,599
Other industries	138	-	-	2,171	1,353	-	-	1,910	-	5,573
Construction	-	-	-	514	280	-	-	146	-	940
Transport (6)	-	-	-	54,378	-	-	-	759	-	55,137
Air	-	-	-	11,774	-	-	-	-	-	11,774
Rail	-	-	-	664	-	-	-	759	-	1,423
Road	-	-	-	41,097	-	-	-	-	-	41,097
National navigation	-	-	-	844	-	-	-	-	-	844
Pipelines	-	-	-	-	-	-	-	-	-	-
Other	1,509	376	-	6,095	42,351	413	-	18,277	1,326	70,346
Domestic	1,461	376	-	3,527	32,625	240	-	9,917	32	48,178
Public administration	34	-	-	845	3,975	90	-	1,815	1,287	8,045
Commercial	3	-	-	940	3,190	11	-	6,192	-	10,336
Agriculture	3	-	-	650	200	72	-	353	7	1,286
Miscellaneous	7	-	-	133	2,360	-	-	-	-	2,500
Non energy use	-	-	-	9,754	978	-	-	-	-	10,732

(1) Includes all manufactured solid fuels, benzole, tars, coke oven gas and blast furnace gas.

(2) Includes colliery methane.

(3) Includes geothermal and solar heat.

(4) Stock fall (+), stock rise (-).

(5) Primary supply minus primary demand.

(6) See paragraphs 5.11 regarding electricity use in transport and 6.24 regarding renewables use in transport.

Aggregate energy balance 2000

Gross calorific values

Thousand tonnes of oil equivalent

	Coal	Manufactured fuel(1)	Primary oils	Petroleum products	Natural gas(2)	Bioenergy & waste(3)	Primary electricity	Electricity	Heat sold	Total
Supply										
Indigenous production	19,551	-	138,282	-	108,397	2,306	20,153	-	-	288,690
Imports	15,732	347	59,341	15,470	2,238	-	-	1,230	-	94,359
Exports	-497	-315	-101,585	-22,338	-12,583	-	-	-12	-	-137,330
Marine bunkers	-	-	-	-2,208	-	-	-	-	-	-2,208
Stock change (4)	+3,836	-113	+1,196	-389	-952	-	-	-	-	+3,579
Primary supply	38,622	-81	97,235	-9,464	97,100	2,306	20,153	1,219	-	247,090
Statistical difference (5)	-39	-194	+542	+241	+242	+0	-	+128	-	+920
Primary demand	38,661	113	96,693	-9,705	96,858	2,306	20,153	1,090	-	246,169
Transfers	-	-61	-196	+307	-38	-	-519	+519	-	+13
Transformation	-35,919	2,996	-96,140	92,364	-30,048	-1,634	-19,634	31,672	2,515	-53,828
Electricity generation	-28,626	-899	-	-1,047	-27,907	-1,634	-19,634	31,672	-	-48,076
Major power producers	-27,748	-	-	-392	-24,401	-239	-19,634	28,784	-	-43,630
Autogenerators	-878	-899	-	-656	-3,506	-1,395	-	2,888	-	-4,446
Heat generation	-443	-209	-	-733	-2,140	-	-	-	2,515	-1,010
Petroleum refineries	-	-	-96,140	94,345	-	-	-	-	-	-1,795
Coke manufacture	-6,131	5,686	-	-	-	-	-	-	-	-446
Blast furnaces	-340	-1,977	-	-200	-	-	-	-	-	-2,517
Patent fuel manufacture	-380	395	-	-	-	-	-	-	-	16
Other	-	-	-	-	-	-	-	-	-	-
Energy industry use	9	1,134	357	5,623	6,702	-	-	2,406	-	16,230
Electricity generation	-	-	-	-	-	-	-	1,402	-	1,402
Oil and gas extraction	-	-	357	-	5,637	-	-	45	-	6,039
Petroleum refineries	-	-	-	5,576	313	-	-	547	-	6,436
Coal extraction	9	-	-	-	19	-	-	94	-	122
Coke manufacture	-	569	-	-	1	-	-	16	-	586
Blast furnaces	-	531	-	-	61	-	-	75	-	667
Patent fuel manufacture	-	35	-	-	-	-	-	-	-	35
Pumped storage	-	-	-	-	-	-	-	69	-	69
Other	-	-	-	46	670	-	-	157	-	874
Losses	-	165	-	-	1,761	-	-	2,549	-	4,475
Final consumption	2,733	1,750	-	77,343	58,310	672	-	28,325	2,515	171,649
Industry	1,228	1,290	-	6,039	15,773	264	-	9,812	1,099	35,506
Unclassified	-	398	-	2,399	10	264	-	-	-	3,072
Iron and steel	1	778	-	150	770	-	-	546	-	2,245
Non-ferrous metals	7	114	-	41	507	-	-	529	-	1,198
Mineral products	800	-	-	261	1,363	-	-	697	2	3,123
Chemicals	23	-	-	216	4,260	-	-	2,041	1,087	7,628
Mechanical engineering etc.	7	-	-	200	958	-	-	810	-	1,975
Electrical engineering etc.	2	-	-	37	454	-	-	533	-	1,026
Vehicles	34	-	-	135	1,011	-	-	543	-	1,723
Food, beverages, etc.	12	-	-	224	2,565	-	-	1,008	-	3,810
Textiles, leather, etc.	45	-	-	149	727	-	-	309	10	1,241
Paper, printing etc.	84	-	-	44	1,485	-	-	982	-	2,594
Other industries	213	-	-	1,715	1,398	-	-	1,678	-	5,004
Construction	-	-	-	467	264	-	-	136	-	867
Transport (6)	-	-	-	54,720	-	-	-	741	-	55,461
Air	-	-	-	11,978	-	-	-	-	-	11,978
Rail	-	-	-	639	-	-	-	741	-	1,380
Road	-	-	-	41,071	-	-	-	-	-	41,071
National navigation	-	-	-	1,032	-	-	-	-	-	1,032
Pipelines	-	-	-	-	-	-	-	-	-	-
Other	1,505	460	-	5,534	41,304	408	-	17,772	1,416	68,398
Domestic	1,448	460	-	3,239	31,806	236	-	9,617	44	46,851
Public administration	42	-	-	1,044	3,831	88	-	1,798	1,287	8,090
Commercial	5	-	-	469	3,114	11	-	5,982	-	9,581
Agriculture	5	-	-	634	131	72	-	375	-	1,216
Miscellaneous	6	-	-	148	2,422	-	-	-	84	2,660
Non energy use	-	-	-	11,050	1,233	-	-	-	-	12,283

(1) Includes all manufactured solid fuels, benzole, tars, coke oven gas and blast furnace gas.

(2) Includes colliery methane.

(3) Includes geothermal and solar heat.

(4) Stock fall (+), stock rise (-).

(5) Primary supply minus primary demand.

(6) See paragraphs 5.11 regarding electricity use in transport and 6.24 regarding renewables use in transport.

Aggregate energy balance 1999

Gross calorific values

Thousand tonnes of oil equivalent

	Coal	Manufactured fuel(1)	Primary oils	Petroleum products	Natural gas(2)	Bioenergy & waste(3)	Primary electricity	Electricity	Heat sold	Total
Supply										
Indigenous production	23,219	-	150,160	-	99,109	2,225	22,942	-	-	297,655
Imports	13,734	305	48,964	15,121	1,106	-	-	1,247	-	80,476
Exports	-578	-195	-100,396	-23,524	-7,260	-	-	-23	-	-131,976
Marine bunkers	-	-	-	-2,471	-	-	-	-	-	-2,471
Stock change (4)	-668	+177	-214	+642	+670	-	-	-	-	+606
Primary supply	35,706	287	98,514	-10,232	93,624	2,225	22,942	1,225	-	244,291
Statistical difference (5)	-400	-269	+68	+1,122	+61	-	-	+134	-	+715
Primary demand	36,106	556	98,446	-11,353	93,564	2,226	22,942	1,090	-	243,576
Transformation										
Transfers	-	-20	-1,650	+1,694	-44	-	-532	+532	-	-20
Transformation	-32,641	2,622	-96,406	92,569	-29,379	-1,538	-22,410	30,874	2,498	-53,811
Electricity generation	-25,516	-901	-	-1,247	-27,128	-1,434	-22,410	30,874	-	-47,761
Major power producers	-24,541	-	-	-386	-24,247	-193	-22,410	28,313	-	-43,464
Autogenerators	-975	-901	-	-860	-2,881	-1,241	-	2,561	-	-4,297
Heat generation	-402	-246	-	-734	-2,252	-104	-	-	2,498	-1,238
Petroleum refineries	-	-	-96,406	94,828	-	-	-	-	-	-1,578
Coke manufacture	-5,900	5,401	-	-	-	-	-	-	-	-499
Blast furnaces	-368	-2,101	-	-279	-	-	-	-	-	-2,748
Patent fuel manufacture.	-455	469	-	-	-	-	-	-	-	14
Other	-	-	-	-	-	-	-	-	-	-
Energy industry use	7	1,120	391	5,943	6,618	-	-	2,312	-	16,391
Electricity generation	-	-	-	-	-	-	-	1,437	-	1,437
Oil & gas extraction	-	-	391	-	5,558	-	-	35	-	5,983
Petroleum refineries	-	-	-	5,879	357	-	-	428	-	6,665
Coal extraction	7	-	-	-	22	-	-	117	-	146
Coke manufacture	-	547	-	-	1	-	-	-	-	548
Blast furnaces	-	548	-	4	55	-	-	82	-	689
Patent fuel manufacture	-	24	-	-	-	-	-	-	-	24
Pumped storage	-	-	-	-	-	-	-	75	-	75
Other	-	-	-	60	626	-	-	139	-	825
Losses	-	163	-	-	1,262	-	-	2,433	-	3,858
Final consumption	3,458	1,875	-	76,966	56,261	688	-	27,751	2,498	169,497
Industry										
Industry	1,353	1,379	-	5,374	15,203	283	-	9,542	1,086	34,222
Unclassified	-	250	-	2,309	13	283	-	-	-	2,856
Iron and steel	9	1,027	-	33	1,859	-	-	841	-	3,768
Non-ferrous metals	207	102	-	40	477	-	-	507	-	1,333
Mineral products	378	-	-	228	1,250	-	-	625	2	2,482
Chemicals	297	-	-	67	4,023	-	-	1,864	1,074	7,326
Mechanical engineering etc.	18	-	-	160	875	-	-	759	-	1,812
Electrical engineering etc.	5	-	-	28	339	-	-	516	-	888
Vehicles	55	-	-	112	913	-	-	483	-	1,562
Food, beverages, etc.	151	-	-	173	2,399	-	-	1,077	-	3,800
Textiles, leather, etc.	42	-	-	124	599	-	-	323	10	1,098
Paper, printing etc.	83	-	-	30	1,078	-	-	945	-	2,135
Other industries	109	-	-	1,559	1,196	-	-	1,472	-	4,336
Construction	-	-	-	511	184	-	-	131	-	826
Transport (6)	-	-	-	54,115	-	-	-	738	-	54,853
Air	-	-	-	11,017	-	-	-	-	-	11,017
Rail	-	-	-	632	-	-	-	-	-	632
Road	-	-	-	41,399	-	-	-	-	-	41,399
National navigation	-	-	-	1,067	-	-	-	-	-	1,067
Pipelines	-	-	-	-	-	-	-	-	-	-
Other	2,105	496	-	5,626	39,944	405	-	17,471	1,412	67,459
Domestic	1,916	496	-	3,162	30,788	230	-	9,485	44	46,121
Public admin	162	-	-	1,065	3,719	95	-	1,887	1,287	8,215
Commercial	-	-	-	481	3,149	7	-	5,739	-	9,377
Agriculture	5	-	-	751	99	72	-	359	-	1,287
Miscellaneous	22	-	-	167	2,189	-	-	-	82	2,459
Non energy use	-	-	-	11,850	1,113	-	-	-	-	12,963

(1) Includes all manufactured solid fuels, benzole, tars, coke oven gas and blast furnace gas.

(2) Includes colliery methane.

(3) Includes geothermal and solar heat.

(4) Stock fall (+), stock rise (-).

(5) Primary supply minus primary demand.

(6) See paragraphs 5.11 regarding electricity use in transport and 6.24 regarding renewables use in transport.

Aggregate energy balance 1998

Gross calorific values

Thousand tonnes of oil equivalent

	Coal	Manufactured fuel(1)	Primary oils	Petroleum products	Natural gas(2)	Bioenergy & waste(3)	Primary electricity	Electricity	Total
Supply									
Indigenous production	25,757	-	145,263	-	90,186	2,077	23,950	-	287,233
Imports	14,782	590	52,352	12,345	910	-	-	1,083	82,061
Exports	-706	-225	-92,516	-26,381	-2,717	-	-	-11	-122,556
Marine bunkers	-	-	-	-3,257	-	-	-	-	-3,257
Stock change (4)	+907	-134	-649	-92	-32	-	-	-	-
Primary supply	40,739	231	104,450	-17,386	88,346	2,077	23,950	1,072	243,480
Statistical difference (5)	+129	-89	-1,147	+454	+455	-	-	+160	-38
Primary demand	40,611	320	105,597	-17,840	87,891	2,077	23,950	912	243,518
Transfers	-	-129	-2,729	+2,705	-52	-	-515	+515	-206
Transformation	-36,891	3,384	-102,442	99,557	-23,021	-1,212	-23,435	30,532	-53,529
Electricity generation	-29,902	-901	-	-1,482	-23,021	-1,212	-23,435	30,532	-49,421
Major power producers	-28,713	-	-	-784	-20,318	-147	-23,435	28,195	-45,202
Autogenerators	-1,190	-901	-	-698	-2,703	-1,065	-	2,337	-4,219
Petroleum refineries	-	-	-102,442	101,316	-	-	-	-	-1,127
Coke manufacture	-6,112	5,737	-	-	-	-	-	-	-375
Blast furnaces	-418	-1,904	-	-277	-	-	-	-	-2,599
Patent fuel manufacture	-459	452	-	-	-	-	-	-	-7
Other	-	-	-	-	-	-	-	-	-
Energy industry use	4	1,185	426	6,608	6,534	-	-	2,412	17,168
Electricity generation	-	-	-	-	-	-	-	1,497	1,497
Oil and gas extraction	-	-	426	-	5,632	-	-	46	6,104
Petroleum refineries	-	-	-	6,549	323	-	-	442	7,313
Coal extraction	4	-	-	-	28	-	-	115	147
Coke manufacture	-	583	-	-	1	-	-	-	583
Blast furnaces	-	572	-	4	45	-	-	82	703
Patent fuel manufacture	-	30	-	-	-	-	-	-	30
Pumped storage	-	-	-	-	-	-	-	83	83
Other	-	-	-	55	505	-	-	148	708
Losses	-	156	-	-	1,398	-	-	2,404	3,957
Final consumption	3,716	2,234	-	77,814	56,886	865	-	27,143	168,658
Industry	1,607	1,709	-	6,379	15,140	461	-	9,216	34,512
Unclassified	-	292	-	1,929	15	461	-	-	2,697
Iron and steel	7	1,322	-	89	1,729	-	-	823	3,969
Non-ferrous metals	122	95	-	41	476	-	-	490	1,224
Mineral products	485	-	-	241	1,263	-	-	614	2,603
Chemicals	444	-	-	605	3,988	-	-	1,798	6,837
Mechanical engineering etc.	20	-	-	215	862	-	-	733	1,829
Electrical engineering etc.	2	-	-	92	302	-	-	516	912
Vehicles	32	-	-	134	883	-	-	480	1,530
Food, beverages, etc.	204	-	-	418	2,345	-	-	1,019	3,986
Textiles, leather, etc.	50	-	-	100	625	-	-	315	1,090
Paper, printing etc.	75	-	-	125	1,225	-	-	919	2,343
Other industries	167	-	-	1,839	1,239	-	-	1,377	4,622
Construction	-	-	-	551	189	-	-	132	871
Transport (6)	-	-	-	53,040	-	-	-	732	53,772
Air	-	-	-	10,237	-	-	-	-	10,237
Rail	-	-	-	608	-	-	-	-	608
Road	-	-	-	41,020	-	-	-	-	41,020
National navigation	-	-	-	1,175	-	-	-	-	1,175
Pipelines	-	-	-	-	-	-	-	-	-
Other	2,109	525	-	6,687	40,715	404	-	17,196	67,637
Domestic	1,819	525	-	3,543	30,601	230	-	9,408	46,126
Public administration	220	-	-	1,501	4,469	96	-	1,855	8,141
Commercial	-	-	-	605	3,501	6	-	5,585	9,698
Agriculture	6	-	-	851	82	72	-	348	1,359
Miscellaneous	65	-	-	187	2,061	-	-	-	2,313
Non energy use	-	-	-	11,707	1,030	-	-	-	12,737

(1) Includes all manufactured solid fuels, benzole, tars, coke oven gas and blast furnace gas.

(2) Includes colliery methane.

(3) Includes geothermal and solar heat.

(4) Stock fall (+), stock rise (-).

(5) Primary supply minus primary demand.

(6) See paragraphs 5.11 regarding electricity use in transport and 6.24 regarding renewables use in transport.

Value balance of traded energy in 2008⁽¹⁾

	£million								
	Coal	Manufactured solid fuels	Crude oil	Petroleum products	Natural gas	Electricity	Heat sold	Other fuels	Total
Supply									
Indigenous production	385	110	26,645	39,985	9,755	10,015	400	310	87,605
Imports	3,545	165	21,720	13,255	6,425	485	-	300	45,890
Exports	-55	-30	-17,080	-14,735	-1,945	-110	-	-	-33,960
Marine bunkers	-	-	-	-900	-	-	-	-	-900
Stock change	-160	-10	105	10	-45	-	-	-	-100
Basic value of inland consumption	3,715	235	31,385	37,625	14,190	10,390	400	610	98,545
Tax and margins									
Distribution costs and margins	690	30	-	3,465	9,330	19,975	-	65	33,555
Electricity generation	360	-	-	30	-	-	-	-	385
Solid fuel manufacture	190	-	-	-	-	-	-	-	190
of which iron & steel sector	170	-	-	-	-	-	-	-	170
Iron & steel final use	35	10	-	15	-	-	-	-	60
Other industry	5	10	-	435	-	-	-	-	450
Air transport	-	-	-	125	-	-	-	-	125
Rail and national navigation	-	-	-	30	-	-	-	-	30
Road transport	-	-	-	2,095	-	-	-	65	2,155
Domestic	100	10	-	325	-	-	-	-	440
Agriculture	-	-	-	15	-	-	-	-	15
Commercial and other services	-	-	-	65	-	-	-	-	65
Non energy use	-	-	-	335	205	-	-	-	540
VAT and duties	10	5	-	33,560	575	680	-	740	35,565
Electricity generation	-	-	-	90	-	-	-	-	90
Iron & steel final use	-	-	-	-	-	-	-	-	-
Other industry	-	-	-	320	-	-	-	-	320
Air transport	-	-	-	15	-	-	-	-	15
Rail and national navigation	-	-	-	240	-	-	-	-	240
Road transport	-	-	-	32,665	-	-	-	740	33,405
Domestic	10	5	-	100	575	680	-	-	1,370
Agriculture	-	-	-	20	-	-	-	-	20
Commercial and other services	-	-	-	115	-	-	-	-	115
Climate Change Levy	5	-	-	-	180	540	-	-	730
Total tax and margins	705	35	-	37,025	10,085	21,195	-	805	69,850
Market value of inland consumption	4,420	270	31,385	74,650	24,275	31,585	400	1,410	168,395
Energy end use									
Total energy sector	3,950	-	31,385	760	6,770	360	-	70	43,290
Transformation	3,950	-	31,385	510	6,605	-	-	70	42,510
Electricity generation	3,080	-	-	490	6,185	-	-	70	9,825
of which from stocks	70	-	-	-	-	-	-	-	70
Heat Generation	35	-	-	20	420	-	-	-	470
Petroleum refineries	-	-	31,385	-	-	-	-	-	31,385
Solid fuel manufacture	835	-	-	-	-	-	-	-	835
of which iron & steel sector	740	-	-	-	-	-	-	-	740
Other energy sector use	-	-	-	255	165	360	-	-	780
Oil & gas extraction	-	-	-	255	-	45	-	-	300
Petroleum refineries	-	-	-	-	80	240	-	-	320
Coal extraction	-	-	-	-	-	75	-	-	75
Other energy sector	-	-	-	-	85	-	-	-	85
Total non energy sector use	475	270	-	71,160	17,300	31,225	400	1,340	122,170
Industry	275	170	-	2,735	2,945	8,750	280	30	15,180
Iron & steel final use	155	145	-	95	155	185	-	-	730
Other industry	115	25	-	2,640	2,790	8,565	280	30	14,445
Transport	-	-	-	65,950	-	290	-	1,260	67,505
Air	-	-	-	7,640	-	-	-	-	7,640
Rail and national navigation	-	-	-	1,200	-	285	-	-	1,490
Road	-	-	-	57,115	-	-	-	1,260	58,375
Other final users	200	100	-	2,470	14,360	22,185	120	50	39,490
Domestic	200	100	-	1,695	12,070	14,245	15	50	28,380
Agriculture	-	-	-	145	65	415	-	-	625
Commercial and other services	-	-	-	630	2,225	7,525	105	-	10,485
Total value of energy end use	4,420	270	31,385	71,920	24,070	31,585	400	1,410	165,460
Value of non energy end use	-	-	-	2,730	205	-	-	-	2,935
Market value of inland consumption	4,420	270	31,385	74,650	24,275	31,585	400	1,410	168,395

(1) For further information see paragraphs 1.39 to 1.45.

Value balance of traded energy in 2007⁽¹⁾

	£million								
	Coal	Manufactured solid fuels	Crude oil	Petroleum products	Natural gas	Electricity	Heat sold	Other fuels	Total
Supply									
Indigenous production	585	55	21,735	26,645	7,745	8,420	270	255	65,705
Imports	1,960	140	13,290	9,205	2,885	240	-	-	27,720
Exports	-40	-25	-13,740	-9,900	-995	-110	-	-	-24,815
Marine bunkers	-	-	-	-555	-	-	-	-	-555
Stock change	+105	-10	+175	+335	+5	-	-	-	610
Basic value of inland consumption	2,605	160	21,455	25,725	9,635	8,550	270	255	68,665
Tax and margins									
Distribution costs and margins	360	50	-	3,010	8,335	17,225	-	25	29,000
Electricity generation	115	-	-	5	-	-	-	-	120
Solid fuel manufacture	110	-	-	-	-	-	-	-	110
of which iron & steel sector	100	-	-	-	-	-	-	-	100
Iron & steel final use	20	35	-	20	-	-	-	-	80
Other industry	10	10	-	380	-	-	-	-	400
Air transport	-	-	-	110	-	-	-	-	110
Rail and national navigation	-	-	-	10	-	-	-	-	10
Road transport	-	-	-	2,100	-	-	-	25	2,125
Domestic	105	10	-	80	-	-	-	-	190
Agriculture	-	-	-	10	-	-	-	-	10
Commercial and other services	-	-	-	35	-	-	-	-	35
Non energy use	-	-	-	260	150	-	-	-	410
VAT and duties	10	5	-	32,050	475	595	-	320	33,450
Electricity generation	-	-	-	55	-	-	-	-	55
Iron & steel final use	-	-	-	-	-	-	-	-	-
Other industry	-	-	-	320	-	-	-	-	320
Air transport	-	-	-	15	-	-	-	-	15
Rail and national navigation	-	-	-	195	-	-	-	-	195
Road transport	-	-	-	31,280	-	-	-	315	31,595
Domestic	10	5	-	70	475	595	-	-	1,155
Agriculture	-	-	-	15	-	-	-	-	15
Commercial and other services	-	-	-	105	-	-	-	-	105
Climate Change Levy	5	-	-	-	165	515	-	-	685
Total tax and margins	370	55	-	35,060	8,975	18,335	-	340	63,140
Market value of inland consumption	2,975	215	21,455	60,790	18,610	26,890	175	595	131,705
Energy end use									
Total energy sector	2,630	-	21,455	270	4,555	325	-	50	29,290
Transformation	2,630	-	21,455	270	4,420	-	-	50	28,830
Electricity generation	2,130	-	-	260	4,390	-	-	50	6,830
of which from stocks	60	-	-	-	-	-	-	-	60
Heat Generation	20	-	-	15	30	-	-	-	65
Petroleum refineries	-	-	21,455	-	-	-	-	-	21,455
Solid fuel manufacture	480	-	-	-	-	-	-	-	480
of which iron & steel sector	435	-	-	-	-	-	-	-	435
Other energy sector use	-	-	-	-	135	325	-	-	460
Oil & gas extraction	-	-	-	-	-	40	-	-	40
Petroleum refineries	-	-	-	-	65	220	-	-	285
Coal extraction	-	-	-	-	-	65	-	-	65
Other energy sector	-	-	-	-	70	-	-	-	70
Total non energy sector use	345	215	-	58,360	13,905	26,565	175	545	100,110
Industry	185	145	-	2,275	1,975	6,970	90	20	11,660
Iron & steel final use	95	125	-	70	110	170	-	-	575
Other industry	90	20	-	2,205	1,865	6,795	90	20	11,085
Transport	-	-	-	54,385	-	495	-	480	55,360
Air	-	-	-	4,475	-	-	-	-	4,475
Rail and national navigation	-	-	-	790	-	495	-	-	1,280
Road	-	-	-	49,120	-	-	-	480	49,600
Other final users	160	70	-	1,700	11,930	19,100	85	45	33,090
Domestic	160	70	-	1,130	9,950	12,540	10	45	23,905
Agriculture	-	-	-	105	50	370	-	-	520
Commercial and other services	-	-	-	465	1,930	6,195	75	-	8,665
Total value of energy end use	2,975	215	21,455	58,630	18,460	26,890	175	595	129,395
Value of non energy end use	-	-	-	2,160	150	-	-	-	2,310
Market value of inland consumption	2,975	215	21,455	60,790	18,610	26,890	175	595	131,705

(1) For further information see paragraphs 1.39 to 1.45.

Value balance of traded energy in 2006⁽¹⁾

	£million								
	Coal	Manufactured solid fuels	Crude oil	Petroleum products	Natural gas	Electricity	Heat sold	Other fuels	Total
Supply									
Indigenous production	545	100	20,180	26,295	10,300	7,760	250	180	65,610
Imports	2,135	90	13,600	9,790	2,510	420	-	-	28,545
Exports	-30	-20	-12,510	-9,625	-1,315	-105	-	-	-23,610
Marine bunkers	-	-	-	-595	-	-	-	-	-595
Stock change	-45	-	-95	-260	-10	-	-	-	-405
Basic value of inland consumption	2,605	175	21,175	25,600	11,485	8,075	250	180	69,545
Tax and margins									
Distribution costs and margins	415	35	-	3,515	6,990	15,990	-	10	26,950
Electricity generation	175	-	-	20	-	-	-	-	195
Solid fuel manufacture	125	-	-	-	-	-	-	-	125
of which iron & steel sector	115	-	-	-	-	-	-	-	115
Iron & steel final use	25	15	-	25	-	-	-	-	65
Other industry	10	5	-	440	-	-	-	-	460
Air transport	-	-	-	115	-	-	-	-	115
Rail and national navigation	-	-	-	50	-	-	-	-	50
Road transport	-	-	-	2,325	-	-	-	10	2,340
Domestic	80	10	-	140	-	-	-	-	230
Agriculture	-	-	-	15	-	-	-	-	15
Commercial and other services	-	-	-	60	-	-	-	-	60
Non energy use	-	-	-	320	145	-	-	-	465
VAT and duties	5	5	-	30,190	480	540	-	165	31,385
Electricity generation	-	-	-	30	-	-	-	-	30
Iron & steel final use	-	-	-	-	-	-	-	-	-
Other industry	-	-	-	285	-	-	-	-	285
Air transport	-	-	-	20	-	-	-	-	20
Rail and national navigation	-	-	-	170	-	-	-	-	170
Road transport	-	-	-	29,520	-	-	-	160	29,685
Domestic	5	5	-	70	480	540	-	-	1,105
Agriculture	-	-	-	10	-	-	-	-	10
Commercial and other services	-	-	-	85	-	-	-	-	85
Climate Change Levy	5	-	-	-	185	525	-	-	720
Total tax and margins	425	35	-	33,705	7,660	17,055	-	175	59,055
Market value of inland consumption	3,030	210	21,175	59,305	19,145	25,130	155	355	128,505
Energy end use									
Total energy sector	2,725	-	21,175	190	4,115	295	-	40	28,535
Transformation	2,725	-	21,175	190	3,995	-	-	40	28,120
Electricity generation	2,150	-	-	180	3,965	-	-	40	6,330
of which from stocks	35	-	-	-	-	-	-	-	35
Heat Generation	15	-	-	15	30	-	-	-	60
Petroleum refineries	-	-	21,175	-	-	-	-	-	21,175
Solid fuel manufacture	555	-	-	-	-	-	-	-	555
of which iron & steel sector	505	-	-	-	-	-	-	-	505
Other energy sector use	-	-	-	-	120	295	-	-	415
Oil & gas extraction	-	-	-	-	-	35	-	-	35
Petroleum refineries	-	-	-	-	35	195	-	-	230
Coal extraction	-	-	-	-	-	65	-	-	65
Other energy sector	-	-	-	-	85	-	-	-	85
Total non energy sector use	310	210	-	56,555	14,890	24,835	155	315	97,265
Industry	175	135	-	2,420	2,635	6,775	70	30	12,240
Iron & steel final use	100	120	-	65	155	210	-	-	650
Other industry	75	15	-	2,355	2,480	6,565	70	30	11,590
Transport	-	-	-	52,330	-	460	-	250	53,040
Air	-	-	-	4,595	-	-	-	-	4,595
Rail and national navigation	-	-	-	855	-	460	-	-	1,315
Road	-	-	-	46,880	-	-	-	250	47,125
Other final users	135	75	-	1,800	12,255	17,600	80	40	31,985
Domestic	130	75	-	1,225	10,100	11,340	10	40	22,925
Agriculture	-	-	-	105	45	340	-	-	490
Commercial and other services	-	-	-	470	2,110	5,920	70	-	8,570
Total value of energy end use	3,030	210	21,175	56,745	19,005	25,130	155	355	125,800
Value of non energy end use	-	-	-	2,560	145	-	-	-	2,705
Market value of inland consumption	3,030	210	21,175	59,305	19,145	25,130	155	355	128,505

(1) For further information see paragraphs 1.39 to 1.45.

Value balance of traded energy in 2005⁽¹⁾

	£million								
	Coal	Manufactured solid fuels	Crude oil	Petroleum products	Natural gas	Electricity	Heat sold	Other fuels	Total
Supply									
Indigenous production	560	95	18,930	22,485	8,260	5,145	260	95	55,825
Imports	1,870	110	11,565	7,850	1,730	440	-	-	23,570
Exports	-40	-15	-11,290	-8,305	-735	-100	-	-	-20,490
Marine bunkers	-	-	-	-415	-	-	-	-	-415
Stock change	-80	-5	-60	+260	-	-	-	-	+115
Basic value of inland consumption	2,315	175	19,145	21,880	9,255	5,485	260	95	58,610
Tax and margins									
Distribution costs and margins	280	70	-	3,340	5,750	13,885	-	-	23,325
Electricity generation	50	-	-	20	-	-	-	-	70
Solid fuel manufacture	105	-	-	-	-	-	-	-	105
of which iron & steel sector	90	-	-	-	-	-	-	-	90
Iron & steel final use	20	50	-	15	-	-	-	-	85
Other industry	15	10	-	340	-	-	-	-	365
Air transport	-	-	-	25	-	-	-	-	25
Rail and national navigation	-	-	-	20	-	-	-	-	20
Road transport	-	-	-	2,370	-	-	-	-	2,370
Domestic	95	10	-	170	-	-	-	-	275
Agriculture	-	-	-	15	-	-	-	-	15
Commercial and other services	-	-	-	55	-	-	-	-	55
Non energy use	-	-	-	315	135	-	-	-	450
VAT and duties	5	5	-	29,840	390	460	-	-	30,705
Electricity generation	-	-	-	25	-	-	-	-	25
Iron & steel final use	-	-	-	-	-	-	-	-	-
Other industry	-	-	-	250	-	-	-	-	250
Air transport	-	-	-	20	-	-	-	-	20
Rail and national navigation	-	-	-	115	-	-	-	-	115
Road transport	-	-	-	29,285	-	-	-	-	29,285
Domestic	5	5	-	55	390	460	-	-	920
Agriculture	-	-	-	10	-	-	-	-	10
Commercial and other services	-	-	-	75	-	-	-	-	75
Climate Change Levy	5	-	-	-	195	535	-	-	735
Total tax and margins	295	70	-	33,185	6,335	14,880	-	-	54,765
Market value of inland consumption	2,610	250	19,145	55,065	15,590	20,365	160	95	113,275
Energy end use									
Total energy sector	2,300	-	19,145	175	3,475	230	5	35	25,365
Transformation	2,300	-	19,145	175	3,355	-	5	35	25,015
Electricity generation	1,830	-	-	160	3,335	-	5	35	5,365
of which from stocks	60	-	-	-	-	-	-	-	60
Heat Generation	15	-	-	15	25	-	-	-	50
Petroleum refineries	-	-	19,145	-	-	-	-	-	19,145
Solid fuel manufacture	455	-	-	-	-	-	-	-	455
of which iron & steel sector	405	-	-	-	-	-	-	-	405
Other energy sector use	-	-	-	-	120	230	-	-	350
Oil & gas extraction	-	-	-	-	-	25	-	-	25
Petroleum refineries	-	-	-	-	45	155	-	-	200
Coal extraction	-	-	-	-	-	50	-	-	50
Other energy sector	-	-	-	-	75	-	-	-	75
Total non energy sector use	305	250	-	52,505	11,980	20,135	155	60	85,390
Industry	160	175	-	2,015	2,110	5,060	75	20	9,615
Iron & steel final use	80	155	-	55	125	120	-	-	535
Other industry	80	20	-	1,965	1,985	4,940	75	20	9,085
Transport	-	-	-	48,925	-	345	-	-	49,270
Air	-	-	-	3,810	-	-	-	-	3,810
Rail and national navigation	-	-	-	580	-	345	-	-	925
Road	-	-	-	44,535	-	-	-	-	44,535
Other final users	145	70	-	1,565	9,870	14,725	80	40	26,500
Domestic	145	70	-	1,010	8,215	9,665	10	40	19,155
Agriculture	-	-	-	110	35	275	-	-	420
Commercial and other services	5	-	-	445	1,620	4,785	70	-	6,925
Total value of energy end use	2,610	250	19,145	52,680	15,455	20,365	160	95	110,755
Value of non energy end use	-	-	-	2,385	135	-	-	-	2,520
Market value of inland consumption	2,610	250	19,145	55,065	15,590	20,365	160	95	113,275

(1) For further information see paragraphs 1.39 to 1.45.

Value balance of traded energy in 2004⁽¹⁾

	£million								
	Coal	Manufactured solid fuels	Crude oil	Petroleum products	Natural gas	Electricity	Heat sold	Other fuels	Total
Supply									
Indigenous production	585	90	15,280	19,715	6,915	6,785	240	65	49,680
Imports	1,330	75	8,625	5,195	670	345	-	-	16,240
Exports	-35	-15	-9,905	-6,565	-645	-150	-	-	-17,315
Marine bunkers	-	-	-	-340	-	-	-	-	-340
Stock change	-5	-5	-20	-65	-5	-	-	-	-100
Basic value of inland consumption	1,875	150	13,980	17,940	6,935	6,980	240	65	48,170
Tax and margins									
Distribution costs and margins	385	50	-	2,045	6,335	8,935	-	-	17,750
Electricity generation	155	-	-	5	-	-	-	-	160
Solid fuel manufacture	70	-	-	-	-	-	-	-	70
of which iron & steel sector	65	-	-	-	-	-	-	-	65
Iron & steel final use	10	35	-	15	-	-	-	-	60
Other industry	10	10	-	255	-	-	-	-	270
Air transport	-	-	-	80	-	-	-	-	80
Rail and national navigation	-	-	-	20	-	-	-	-	20
Road transport	-	-	-	1,380	-	-	-	-	1,380
Domestic	140	5	-	100	-	-	-	-	245
Agriculture	-	-	-	5	-	-	-	-	5
Commercial and other services	-	-	-	30	-	-	-	-	30
Non energy use	-	-	-	160	95	-	-	-	255
VAT and duties	10	5	-	31,030	395	435	-	-	31,875
Electricity generation	-	-	-	15	-	-	-	-	15
Iron & steel final use	-	-	-	-	-	-	-	-	-
Other industry	-	-	-	180	-	-	-	-	180
Air transport	-	-	-	20	-	-	-	-	20
Rail and national navigation	-	-	-	90	-	-	-	-	90
Road transport	-	-	-	30,620	-	-	-	-	30,620
Domestic	10	5	-	45	395	435	-	-	890
Agriculture	-	-	-	5	-	-	-	-	5
Commercial and other services	-	-	-	50	-	-	-	-	50
Climate Change Levy	5	-	-	-	195	555	-	-	755
Total tax and margins	400	55	-	33,075	6,925	9,925	-	-	50,380
Market value of inland consumption	2,275	205	13,980	51,020	13,860	16,905	155	65	98,460
Energy end use									
Total energy sector	1,945	-	13,980	125	2,675	170	-	25	18,925
Transformation	1,945	-	13,980	125	2,605	-	-	25	18,685
Electricity generation	1,615	-	-	115	2,590	-	-	25	4,345
of which from stocks	40	-	-	-	-	-	-	-	40
Heat Generation	15	-	-	10	15	-	-	-	40
Petroleum refineries	-	-	13,980	-	-	-	-	-	13,980
Solid fuel manufacture	320	-	-	-	-	-	-	-	320
of which iron & steel sector	285	-	-	-	-	-	-	-	285
Other energy sector use	-	-	-	-	70	170	-	-	240
Oil & gas extraction	-	-	-	-	-	20	-	-	20
Petroleum refineries	-	-	-	-	15	110	-	-	125
Coal extraction	-	-	-	-	-	40	-	-	40
Other energy sector	-	-	-	-	55	-	-	-	55
Total non energy sector use	325	205	-	48,850	11,085	16,735	155	40	77,395
Industry	120	120	-	1,485	1,480	3,255	75	15	6,550
Iron & steel final use	50	100	-	50	95	110	-	-	400
Other industry	70	20	-	1,435	1,385	3,150	75	15	6,150
Transport	-	-	-	46,215	-	260	-	-	46,475
Air	-	-	-	2,785	-	-	-	-	2,785
Rail and national navigation	-	-	-	455	-	260	-	-	715
Road	-	-	-	42,975	-	-	-	-	42,975
Other final users	210	80	-	1,150	8,820	12,990	80	30	24,370
Domestic	205	80	-	805	6,900	8,895	10	30	18,535
Agriculture	-	-	-	65	30	230	-	-	325
Commercial and other services	-	-	-	280	1,290	3,865	70	-	5,505
Total value of energy end use	2,275	205	13,980	48,970	13,765	16,905	155	65	96,320
Value of non energy end use	-	-	-	2,045	95	-	-	-	2,140
Market value of inland consumption	2,275	205	13,980	51,020	13,860	16,905	155	65	98,460

(1) For further information see paragraphs 1.39 to 1.45.

Value balance of traded energy in 2003⁽¹⁾

	£million								
	Coal	Manufactured solid fuels	Crude oil	Petroleum products	Natural gas	Electricity	Heat sold	Other fuels	Total
Supply									
Indigenous production	710	120	14,310	15,280	7,160	7,240	345	55	45,400
Imports	925	70	6,495	3,615	135	170	-	-	11,405
Exports	-35	-15	-9,815	-4,950	-945	-180	-	-	-15,940
Marine bunkers	-	-	-	-255	-	-	-	-	-255
Stock change	+85	-5	+65	-45	-	-	-	-	+95
Basic value of inland consumption	1,685	170	11,055	13,635	6,350	7,410	345	55	40,705
Tax and margins									
Distribution costs and margins	295	20	-	2,590	4,260	6,160	-	-	13,330
Electricity generation	80	-	-	10	-	-	-	-	90
Solid fuel manufacture	55	-	-	-	-	-	-	-	55
of which iron & steel sector	45	-	-	-	-	-	-	-	45
Iron & steel final use	10	5	-	5	-	-	-	-	20
Other industry	10	5	-	270	-	-	-	-	285
Air transport	-	-	-	110	-	-	-	-	110
Rail and national navigation	-	-	-	20	-	-	-	-	20
Road transport	-	-	-	1,660	-	-	-	-	1,660
Domestic	145	5	-	90	-	-	-	-	245
Agriculture	-	-	-	10	-	-	-	-	10
Commercial and other services	-	-	-	20	-	-	-	-	25
Non energy use	-	-	-	390	80	-	-	-	470
VAT and duties	10	5	-	25,940	300	365	-	-	26,620
Electricity generation	-	-	-	10	-	-	-	-	10
Iron & steel final use	-	-	-	-	-	-	-	-	-
Other industry	-	-	-	185	-	-	-	-	185
Air transport	-	-	-	20	-	-	-	-	20
Rail and national navigation	-	-	-	90	-	-	-	-	90
Road transport	-	-	-	25,545	-	-	-	-	25,545
Domestic	10	5	-	45	300	365	-	-	725
Agriculture	-	-	-	10	-	-	-	-	10
Commercial and other services	-	-	-	35	-	-	-	-	35
Climate Change Levy	5	-	-	-	195	620	-	-	820
Total tax and margins	310	25	-	28,530	4,755	7,145	-	-	40,765
Market value of inland consumption	1,995	190	11,055	42,165	11,105	14,560	335	55	81,465
Energy end use									
Total energy sector	1,685	-	11,055	125	2,300	145	-	20	15,325
Transformation	1,685	-	11,055	125	2,225	-	-	20	15,105
Electricity generation	1,445	-	-	105	2,210	-	-	20	3,775
of which from stocks	35	-	-	-	-	-	-	-	35
Heat Generation	15	-	-	25	15	-	-	-	55
Petroleum refineries	-	-	11,055	-	-	-	-	-	11,055
Solid fuel manufacture	220	-	-	-	-	-	-	-	220
of which iron & steel sector	195	-	-	-	-	-	-	-	195
Other energy sector use	-	-	-	-	75	145	-	-	220
Oil & gas extraction	-	-	-	-	-	15	-	-	15
Petroleum refineries	-	-	-	-	20	95	-	-	115
Coal extraction	-	-	-	-	-	30	-	-	30
Other energy sector	-	-	-	-	60	-	-	-	60
Total non energy sector use	310	190	-	40,135	8,725	14,415	335	40	64,150
Industry	95	90	-	1,240	1,345	2,925	210	10	5,920
Iron & steel final use	30	70	-	35	85	100	-	-	320
Other industry	65	20	-	1,205	1,265	2,830	210	10	5,600
Transport	-	-	-	37,915	-	215	-	-	38,135
Air	-	-	-	2,445	-	-	-	-	2,445
Rail and national navigation	-	-	-	420	-	215	-	-	635
Road	-	-	-	35,055	-	-	-	-	35,055
Other final users	215	105	-	975	7,380	11,270	125	30	20,100
Domestic	215	105	-	730	6,260	7,660	-	30	15,000
Agriculture	-	-	-	70	30	195	-	-	295
Commercial and other services	5	-	-	175	1,090	3,420	125	-	4,805
Total value of energy end use	1,995	190	11,055	40,260	11,025	14,560	335	55	79,480
Value of non energy end use	-	-	-	1,905	80	-	-	-	1,985
Market value of inland consumption	1,995	190	11,055	42,165	11,105	14,560	335	55	81,465

(1) For further information see paragraphs 1.39 to 1.45.

Value balance of traded energy in 2002⁽¹⁾

	£million								
	Coal	Manufactured solid fuels	Crude oil	Petroleum products	Natural gas	Electricity	Heat sold	Other fuels	Total
Supply									
Indigenous production	900	180	14,580	12,800	6,390	7,535	405	50	42,840
Imports	850	20	6,425	3,165	260	190	-	-	10,905
Exports	-30	-25	-10,510	-4,220	-850	-	-	-	-15,640
Marine bunkers	-	-	-	-245	-	-	-	-	-245
Stock change	-10	-	+5	+190	-5	-	-	-	+180
Basic value of inland consumption	1,710	175	10,495	11,680	5,795	7,725	405	50	38,040
Tax and margins									
Distribution costs and margins	325	25	-	1,930	4,275	5,995	-	-	12,550
Electricity generation	50	-	-	5	-	-	-	-	55
Solid fuel manufacture	5	-	-	-	-	-	-	-	5
of which iron & steel sector	5	-	-	-	-	-	-	-	5
Iron & steel final use	-	5	-	5	-	-	-	-	10
Other industry	10	10	-	235	-	-	-	-	260
Air transport	-	-	-	50	-	-	-	-	50
Rail and national navigation	-	-	-	5	-	-	-	-	5
Road transport	-	-	-	1,190	-	-	-	-	1,190
Domestic	250	10	-	85	-	-	-	-	345
Agriculture	-	-	-	15	-	-	-	-	15
Commercial and other services	-	-	-	30	-	-	-	-	35
Non energy use	-	-	-	305	85	-	-	-	390
VAT and duties	15	5	-	26,115	290	360	-	-	26,785
Electricity generation	-	-	-	15	-	-	-	-	15
Iron & steel final use	-	-	-	-	-	-	-	-	-
Other industry	-	-	-	185	-	-	-	-	185
Air transport	-	-	-	20	-	-	-	-	20
Rail and national navigation	-	-	-	45	-	-	-	-	45
Road transport	-	-	-	25,735	-	-	-	-	25,735
Domestic	15	5	-	40	290	360	-	-	710
Agriculture	-	-	-	20	-	-	-	-	20
Commercial and other services	-	-	-	50	-	-	-	-	50
Climate Change Levy	5	-	-	-	205	625	-	-	835
Total tax and margins	345	30	-	28,045	4,770	6,980	-	-	40,170
Market value of inland consumption	2,055	205	10,495	39,725	10,570	14,705	405	50	78,210
Energy end use									
Total energy sector	1,640	-	10,495	130	2,090	150	-	15	14,520
Transformation	1,640	-	10,495	130	2,020	-	-	15	14,300
Electricity generation	1,365	-	-	100	2,005	-	-	15	3,485
of which from stocks	35	-	-	-	-	-	-	-	35
Heat Generation	30	-	-	35	15	-	-	-	75
Petroleum refineries	-	-	10,495	-	-	-	-	-	10,495
Solid fuel manufacture	245	-	-	-	-	-	-	-	245
of which iron & steel sector	210	-	-	-	-	-	-	-	210
Other energy sector use	-	-	-	-	70	150	-	-	220
Oil & gas extraction	-	-	-	-	-	15	-	-	15
Petroleum refineries	-	-	-	-	20	100	-	-	120
Coal extraction	-	-	-	-	-	35	-	-	35
Other energy sector	-	-	-	-	50	-	-	-	50
Total non energy sector use	410	205	-	38,065	8,395	14,550	400	40	62,075
Industry	70	85	-	1,065	1,280	2,995	255	10	5,760
Iron & steel final use	30	55	-	35	65	85	-	-	270
Other industry	40	30	-	1,030	1,215	2,905	255	10	5,495
Transport	-	-	-	36,005	-	220	-	-	36,005
Air	-	-	-	1,795	-	-	-	-	1,795
Rail and national navigation	-	-	-	190	-	220	-	-	410
Road	-	-	-	34,020	-	-	-	-	34,020
Other final users	345	120	-	995	7,110	11,340	145	30	20,090
Domestic	345	120	-	645	6,090	7,510	5	30	14,740
Agriculture	-	-	-	105	30	215	-	-	350
Commercial and other services	-	-	-	245	995	3,615	140	-	5,000
Total value of energy end use	2,055	205	10,495	38,200	10,485	14,705	405	50	76,600
Value of non energy end use	-	-	-	1,525	85	-	-	-	1,610
Market value of inland consumption	2,055	205	10,495	39,725	10,570	14,705	405	50	78,210

(1) For further information see paragraphs 1.39 to 1.45.

Value balance of traded energy in 2001⁽¹⁾

	€million								
	Coal	Manufactured solid fuels	Crude oil	Petroleum products	Natural gas	Electricity	Heat sold	Other fuels	Total
Supply									
Indigenous production	965	190	14,915	13,200	6,985	7,805	405	55	44,520
Imports	1,180	10	6,235	3,555	185	180	-	-	11,345
Exports	-30	-25	-10,845	-3,770	-745	-	-	-	-15,415
Marine bunkers	-	-	-	-325	-	-	-	-	-325
Stock change	-110	-	-130	-115	-	-	-	-	-355
Basic value of inland consumption	2,005	180	10,175	12,545	6,425	7,980	405	55	39,770
Tax and margins									
Distribution costs and margins	410	30	-	1,825	3,755	6,450	-	-	12,475
Electricity generation	85	-	-	5	-	-	-	-	90
Solid fuel manufacture	10	-	-	-	-	-	-	-	10
of which iron & steel sector	5	-	-	-	-	-	-	-	5
Iron & steel final use	-	5	-	5	-	-	-	-	10
Other industry	10	15	-	250	-	-	-	-	275
Air transport	-	-	-	125	-	-	-	-	125
Rail and national navigation	-	-	-	15	-	-	-	-	15
Road transport	-	-	-	935	-	-	-	-	935
Domestic	305	10	-	125	-	-	-	-	440
Agriculture	-	-	-	20	-	-	-	-	20
Commercial and other services	-	-	-	65	-	-	-	-	65
Non energy use	-	-	-	280	90	-	-	-	375
VAT and duties	20	5	-	26,365	275	360	-	-	27,025
Electricity generation	-	-	-	20	-	-	-	-	20
Iron & steel final use	-	-	-	10	-	-	-	-	10
Other industry	-	-	-	150	-	-	-	-	150
Air transport	-	-	-	20	-	-	-	-	20
Rail and national navigation	-	-	-	45	-	-	-	-	45
Road transport	-	-	-	26,010	-	-	-	-	26,010
Domestic	20	5	-	40	275	360	-	-	700
Agriculture	-	-	-	15	-	-	-	-	15
Commercial and other services	-	-	-	45	-	-	-	-	50
Climate Change Levy	-	-	-	-	120	400	-	-	520
Total tax and margins	430	35	-	28,190	4,150	7,210	-	-	40,015
Market value of inland consumption	2,435	215	10,175	40,740	10,575	15,195	405	55	79,790
Energy end use									
Total energy sector	1,910	-	10,175	205	2,170	175	-	15	14,645
Transformation	1,910	-	10,175	205	2,090	-	-	15	14,390
Electricity generation	1,595	-	-	125	2,070	-	-	15	3,805
of which from stocks	40	-	-	-	-	-	-	-	40
Heat Generation	25	-	-	80	15	-	-	-	120
Petroleum refineries	-	-	10,175	-	-	-	-	-	10,175
Solid fuel manufacture	290	-	-	-	-	-	-	-	290
of which iron & steel sector	245	-	-	-	-	-	-	-	245
Other energy sector use	-	-	-	-	80	175	-	-	255
Oil & gas extraction	-	-	-	-	-	25	-	-	25
Petroleum refineries	-	-	-	-	30	110	-	-	140
Coal extraction	-	-	-	-	-	40	-	-	40
Other energy sector	-	-	-	-	55	-	-	-	55
Total non energy sector use	525	215	-	39,145	8,310	15,020	405	40	63,660
Industry	95	105	-	1,235	1,470	3,145	175	15	6,235
Iron & steel final use	30	65	-	50	165	195	-	-	505
Other industry	65	40	-	1,180	1,300	2,950	175	15	5,730
Transport	-	-	-	36,700	-	240	-	-	36,940
Air	-	-	-	2,140	-	-	-	-	2,140
Rail and national navigation	-	-	-	240	-	240	-	-	485
Road	-	-	-	34,320	-	-	-	-	34,320
Other final users	430	105	-	1,210	6,845	11,630	230	30	20,485
Domestic	430	105	-	715	5,735	7,540	5	30	14,560
Agriculture	-	-	-	125	25	225	-	-	380
Commercial and other services	5	-	-	370	1,085	3,865	225	-	5,545
Total value of energy end use	2,435	215	10,175	39,350	10,485	15,195	405	55	78,305
Value of non energy end use	-	-	-	1,390	90	-	-	-	1,480
Market value of inland consumption	2,435	215	10,175	40,740	10,575	15,195	405	55	79,790

(1) For further information see paragraphs 1.39 to 1.45.

Value balance of traded energy in 2000⁽¹⁾

	£million								
	Coal	Manufactured solid fuels	Crude oil	Petroleum products	Natural gas	Electricity	Heat Sold	Other fuels	Total
Supply									
Indigenous production	970	205	17,175	15,565	5,890	7,840	440	60	48,145
Imports	665	25	6,875	3,250	135	375	-	-	11,320
Exports	-30	-30	-12,215	-4,435	-575	-	-	-	-17,290
Marine bunkers	-	-	-	-285	-	-	-	-	-285
Stock change	+105	+5	+165	-35	-5	-	-	-	+235
Basic value of inland consumption	1,710	205	12,000	14,065	5,440	8,215	440	60	42,125
Tax and margins									
Distribution costs and margins	295	35	-	1,910	3,840	7,455	-	-	13,540
Electricity generation	20	-	-	10	-	-	-	-	30
Solid fuel manufacture	40	-	-	-	-	-	-	-	40
of which iron & steel sector	35	-	-	-	-	-	-	-	35
Iron & steel final use	-	5	-	10	-	-	-	-	20
Other industry	5	15	-	240	-	-	-	-	260
Air transport	-	-	-	215	-	-	-	-	215
Rail and national navigation	-	-	-	25	-	-	-	-	25
Road transport	-	-	-	875	-	-	-	-	875
Domestic	225	15	-	130	-	-	-	-	365
Agriculture	-	-	-	25	-	-	-	-	25
Commercial and other services	-	-	-	60	-	-	-	-	60
Non energy use	-	-	-	330	85	-	-	-	415
VAT and duties	15	5	-	26,675	260	355	-	-	27,315
Electricity generation	-	-	-	25	-	-	-	-	25
Iron & steel final use	-	-	-	5	-	-	-	-	5
Other industry	-	-	-	115	-	-	-	-	115
Air transport	-	-	-	20	-	-	-	-	20
Rail and national navigation	-	-	-	50	-	-	-	-	50
Road transport	-	-	-	26,345	-	-	-	-	26,345
Domestic	15	5	-	40	260	355	-	-	680
Agriculture	-	-	-	20	-	-	-	-	20
Commercial and other services	-	-	-	55	-	-	-	-	55
Total tax and margins	310	40	-	28,590	4,105	7,810	-	-	40,855
Market value of inland consumption	2,020	245	12,000	42,650	9,545	16,025	440	60	82,980
Energy end use									
Total energy sector	1,640	-	12,000	235	2,015	165	-	15	16,070
Transformation	1,640	-	12,000	230	1,945	-	-	15	15,830
Electricity generation	1,315	-	-	140	1,930	-	-	10	3,400
of which from stocks	30	-	-	-	-	-	-	-	30
Heat Generation	20	-	-	90	15	-	-	5	125
Petroleum refineries	-	-	12,000	-	-	-	-	-	12,000
Solid fuel manufacture	305	-	-	-	-	-	-	-	305
of which iron & steel sector	270	-	-	-	-	-	-	-	270
Other energy sector use	-	-	-	10	70	165	-	-	240
Oil & gas extraction	-	-	-	-	-	20	-	-	20
Petroleum refineries	-	-	-	-	20	100	-	-	125
Coal extraction	-	-	-	-	-	45	-	-	45
Other energy sector	-	-	-	10	45	-	-	-	55
Total non energy sector use	375	245	-	40,740	7,445	15,860	440	45	65,155
Industry	40	120	-	1,145	1,115	3,435	190	15	6,065
Iron & steel final use	15	75	-	70	135	125	-	-	420
Other industry	25	45	-	1,080	980	3,310	190	15	5,645
Transport	-	-	-	38,395	-	285	-	-	38,685
Air	-	-	-	2,485	-	-	-	-	2,485
Rail and national navigation	-	-	-	280	-	285	-	-	565
Road	-	-	-	35,635	-	-	-	-	35,635
Other final users	335	130	-	1,200	6,330	12,135	245	30	20,405
Domestic	335	130	-	735	5,485	7,475	10	30	14,195
Agriculture	-	-	-	130	15	230	-	-	370
Commercial and other services	5	-	-	335	835	4,435	240	-	5,840
Total value of energy end use	2,020	245	12,000	40,980	9,460	16,025	440	60	81,225
Value of non energy end use	-	-	-	1,670	85	-	-	-	1,755
Market value of inland consumption	2,020	245	12,000	42,650	9,545	16,025	440	60	82,980

(1) For further information see paragraphs 1.39 to 1.45.

Value balance of traded energy in 1999⁽¹⁾

	£million								
	Coal	Manufactured solid fuels	Crude oil	Petroleum products	Natural gas	Electricity	Heat Sold	Other fuels	Total
Supply									
Indigenous production	1,170	215	10,910	11,125	4,915	7,655	435	65	36,490
Imports	565	20	3,280	1,960	25	395	-	-	6,250
Exports	-40	-20	-7,155	-2,855	-225	-	-	-	-10,295
Marine bunkers	-	-	-	-190	-	-	-	-	-190
Stock change	-50	-	-30	+60	+5	-	-	-	-15
Basic value of inland consumption	1,650	215	7,005	10,105	4,720	8,050	435	65	32,245
Tax and margins									
Distribution costs and margins	295	30	-	1,255	4,455	8,055	-	-	14,095
Electricity generation	25	-	-	-	-	-	-	-	25
Solid fuel manufacture	10	-	-	-	-	-	-	-	10
of which iron & steel sector	5	-	-	-	-	-	-	-	5
Iron & steel final use	-	5	-	-	-	-	-	-	5
Other industry	15	15	-	35	-	-	-	-	65
Air transport	-	-	-	40	-	-	-	-	40
Rail and national navigation	-	-	-	-	-	-	-	-	-
Road transport	-	-	-	765	-	-	-	-	765
Domestic	240	15	-	85	-	-	-	-	340
Agriculture	-	-	-	10	-	-	-	-	10
Commercial and other services	5	-	-	30	-	-	-	-	35
Non energy use	-	-	-	285	70	-	-	-	355
VAT and duties	20	5	-	29,960	265	360	-	-	30,620
Electricity generation	-	-	-	5	-	-	-	-	25
Iron & steel final use	-	-	-	10	-	-	-	-	10
Other industry	-	-	-	110	-	-	-	-	110
Air transport	-	-	-	15	-	-	-	-	15
Rail and national navigation	-	-	-	50	-	-	-	-	50
Road transport	-	-	-	29,640	-	-	-	-	29,640
Domestic	20	5	-	30	265	360	-	-	685
Agriculture	-	-	-	25	-	-	-	-	25
Commercial and other services	-	-	-	60	-	-	-	-	60
Total tax and margins	315	40	-	31,215	4,725	8,415	-	-	44,710
Market value of inland consumption	1,965	250	7,005	41,320	9,440	16,470	435	65	76,955
Energy end use									
Total energy sector	1,460	-	7,005	180	2,020	140	-	15	10,820
Transformation	1,460	-	7,005	170	1,950	-	-	15	10,600
Electricity generation	1,170	-	-	110	1,935	-	-	15	3,230
of which from stocks	30	-	-	-	-	-	-	-	30
Heat Generation	20	-	-	60	15	-	-	-	95
Petroleum refineries	-	-	7,005	-	-	-	-	-	7,005
Solid fuel manufacture	270	-	-	-	-	-	-	-	270
of which iron & steel sector	225	-	-	-	-	-	-	-	225
Other energy sector use	-	-	-	5	70	140	-	-	220
Oil & gas extraction	-	-	-	-	-	15	-	-	15
Petroleum refineries	-	-	-	-	25	80	-	-	105
Coal extraction	-	-	-	-	-	45	-	-	45
Other energy sector	-	-	-	5	45	-	-	-	50
Total non energy sector use	505	250	-	39,640	7,355	16,330	435	55	64,570
Industry	85	120	-	735	970	3,730	190	25	5,855
Iron & steel final use	15	75	-	45	115	225	-	-	480
Other industry	70	45	-	690	855	3,505	190	25	5,375
Transport	-	-	-	38,080	-	305	-	-	38,385
Air	-	-	-	1,210	-	-	-	-	1,210
Rail and national navigation	-	-	-	190	-	305	-	-	500
Road	-	-	-	36,680	-	-	-	-	36,680
Other final users	420	135	-	825	6,390	12,290	245	30	20,330
Domestic	405	135	-	465	5,610	7,600	10	30	14,255
Agriculture	-	-	-	100	10	220	-	-	335
Commercial and other services	10	-	-	255	770	4,465	240	-	5,740
Total value of energy end use	1,965	250	7,005	39,820	9,375	16,470	435	65	75,390
Value of non energy end use	-	-	-	1,500	65	-	-	-	1,565
Market value of inland consumption	1,965	250	7,005	41,320	9,440	16,470	435	65	76,955

(1) For further information see paragraphs 1.39 to 1.45.

Value balance of traded energy in 1998⁽¹⁾

£ million

	Coal	Manufactured solid fuels	Crude oil	Petroleum products	Natural gas	Electricity	Other fuels	Total
Supply								
Indigenous production	1,315	160	8,080	8,880	5,270	7,550	75	31,330
Imports	640	45	2,275	1,410	45	375	-	4,785
Exports	-45	-25	-5,085	-2,300	-80	-	-	-7,530
Marine bunkers	-	-	-	-230	-	-	-	-230
Stock change	+40	+5	-35	-5	-	-	-	-
Basic value of inland consumption	1,950	190	5,235	7,755	5,230	7,925	75	28,360
Tax and margins								
Distribution costs and margins	330	80	-	1,875	4,255	8,225	-	14,765
Electricity generation	35	-	-	-	-	-	-	35
Solid fuel manufacture	35	-	-	-	-	-	-	35
of which iron & steel sector	35	-	-	-	-	-	-	35
Iron & steel final use	-	10	-	-	-	-	-	10
Other industry	15	20	-	60	-	-	-	95
Air transport	-	-	-	85	-	-	-	85
Rail and national navigation	-	-	-	15	-	-	-	15
Road transport	-	-	-	1,355	-	-	-	1,355
Domestic	225	50	-	120	-	-	-	395
Agriculture	-	-	-	25	-	-	-	30
Commercial and other services	10	-	-	70	-	-	-	80
Non energy use	-	-	-	145	65	-	-	215
VAT and duties	20	5	-	24,460	285	360	-	25,135
Electricity generation	-	-	-	25	-	-	-	25
Iron & steel final use	-	-	-	10	-	-	-	10
Other industry	-	-	-	120	-	-	-	120
Air transport	-	-	-	10	-	-	-	10
Rail and national navigation	-	-	-	50	-	-	-	50
Road transport	-	-	-	24,130	-	-	-	24,130
Domestic	20	5	-	30	285	360	-	705
Agriculture	-	-	-	25	-	-	-	25
Commercial and other services	-	-	-	65	-	-	-	65
Total tax and margins	345	85	-	26,335	4,540	8,590	-	39,900
Market value of inland consumption	2,300	275	5,235	34,090	9,770	16,515	75	68,260
Energy end use								
Total energy sector	1,785	-	5,235	125	1,820	180	10	9,150
Transformation	1,785	-	5,235	115	1,755	-	10	8,900
Electricity generation	1,445	-	-	115	1,755	-	10	3,325
of which from stocks	35	-	-	-	-	-	-	35
Petroleum refineries	-	-	5,235	-	-	-	-	5,235
Solid fuel manufacture	340	-	-	-	-	-	-	340
of which iron & steel sector	305	-	-	-	-	-	-	305
Other energy sector use	-	-	-	5	65	180	-	250
Oil & gas extraction	-	-	-	-	-	20	-	20
Petroleum refineries	-	-	-	-	25	115	-	140
Coal extraction	-	-	-	-	-	45	-	50
Other energy sector	-	-	-	5	40	-	-	45
Total non energy sector use	515	275	-	32,555	7,885	16,335	70	57,635
Industry	105	135	-	715	990	3,535	40	5,520
Iron & steel final use	20	80	-	45	110	220	-	475
Other industry	85	55	-	670	880	3,320	40	5,045
Transport	-	-	-	30,965	-	300	-	31,265
Air	-	-	-	965	-	-	-	965
Rail and national navigation	-	-	-	190	-	300	-	495
Road	-	-	-	29,810	-	-	-	29,810
Other final users	410	140	-	875	6,900	12,495	30	20,845
Domestic	385	140	-	465	6,015	7,595	30	14,625
Agriculture	-	-	-	115	10	230	-	355
Commercial and other services	25	-	-	295	875	4,670	-	5,870
Total value of energy end use	2,300	275	5,235	32,680	9,705	16,515	75	66,785
Value of non energy end use	-	-	-	1,410	65	-	-	1,475
Market value of inland consumption	2,300	275	5,235	34,090	9,770	16,515	75	68,260

(1) For further information see paragraphs 1.39 to 1.45.

Commodity balances 2008

Coal

Thousand tonnes

	Steam coal	Coking coal	Anthracite	Total
Supply				
Production	16,010	307	1,287	17,604
Other sources	368	-	81	449
Imports	37,382	6,349	144	43,875
Exports	-357	-139	-104	-599
Marine bunkers	-	-	-	-
Stock change (1)	-3,473	+414	-51	-3,110
Transfers	-	-	-	-
Total supply	49,930	6,931	1,358	58,219
Statistical difference (2)	+82	-114	-134	-166
Total demand	49,849	7,045	1,492	58,385
Transformation	47,498	7,045	1,165	55,707
Electricity generation	46,990	-	817	47,808
Major power producers	45,435	-	817	46,252
Autogenerators	1,555	-	-	1,555
Heat generation	503	-	-	503
Petroleum refineries	-	-	-	-
Coke manufacture	-	5,875	-	5,875
Blast furnaces	-	1,170	-	1,170
Patent fuel manufacture and low temperature carbonisation	5	-	347	352
Energy industry use	5	-	-	5
Electricity generation	-	-	-	-
Oil and gas extraction	-	-	-	-
Petroleum refineries	-	-	-	-
Coal extraction	5	-	-	5
Coke manufacture	-	-	-	-
Blast furnaces	-	-	-	-
Patent fuel manufacture	-	-	-	-
Pumped storage	-	-	-	-
Other	-	-	-	-
Losses	-	-	-	-
Final consumption	2,346	-	327	2,672
Industry	1,779	-	162	1,940
Unclassified	-	-	-	-
Iron and steel	2	-	67	69
Non-ferrous metals	33	-	-	33
Mineral products	1,149	-	1	1,150
Chemicals	102	-	-	102
Mechanical engineering etc	14	-	-	14
Electrical engineering etc	6	-	-	6
Vehicles	49	-	-	49
Food, beverages etc	27	-	11	39
Textiles, leather, etc	76	-	-	76
Paper, printing etc	149	-	-	149
Other industries	129	-	82	212
Construction	43	-	-	43
Transport	19	-	-	19
Air	-	-	-	-
Rail (3)	19	-	-	19
Road	-	-	-	-
National navigation	-	-	-	-
Pipelines	-	-	-	-
Other	548	-	165	713
Domestic	520	-	164	683
Public administration	13	-	-	13
Commercial	10	-	-	10
Agriculture	5	-	-	5
Miscellaneous	0	-	1	1
Non energy use	-	-	-	-

(1) Stock fall (+), stock rise (-).

(2) Total supply minus total demand.

(3) Estimate revised following research carried out into heritage railways.

Commodity balances 2007

Coal

Thousand tonnes

	Steam coal	Coking coal	Anthracite	Total
Supply				
Production	..	266	..	16,540
Other sources	..	-	..	467
Imports	35,746	7,481	137	43,364
Exports	-428	-13	-103	-544
Marine bunkers	-	-	-	-
Stock change (1)	..	-533	..	+3,076
Transfers	-	-	-	-
Total supply	..	7,202	..	62,903
Statistical difference (2)	..	+27	..	-125
Total demand	54,609	7,174	1,246	63,029
Transformation	52,279	7,174	981	60,434
Electricity generation	51,795	-	716	52,511
Major power producers	50,315	-	716	51,031
Autogenerators	1,480	-	-	1,480
Heat generation	485	-	-	485
Petroleum refineries	-	-	-	-
Coke manufacture	-	5,932	-	5,932
Blast furnaces	-	1,242	-	1,242
Patent fuel manufacture and low temperature carbonisation	-	-	265	265
Energy industry use	4	-	1	5
Electricity generation	-	-	-	-
Oil and gas extraction	-	-	-	-
Petroleum refineries	-	-	-	-
Coal extraction	4	-	1	5
Coke manufacture	-	-	-	-
Blast furnaces	-	-	-	-
Patent fuel manufacture	-	-	-	-
Pumped storage	-	-	-	-
Other	-	-	-	-
Losses	-	-	-	-
Final consumption	2,325	-	264	2,590
Industry	1,820	-	76	1,896
Unclassified	-	-	-	-
Iron and steel	..	-	..	75
Non-ferrous metals	..	-	..	36
Mineral products	..	-	..	1,150
Chemicals	..	-	..	119
Mechanical engineering etc	..	-	..	10
Electrical engineering etc	..	-	..	6
Vehicles	..	-	..	49
Food, beverages etc	..	-	..	34
Textiles, leather, etc	..	-	..	74
Paper, printing etc	..	-	..	144
Other industries	..	-	..	200
Construction	..	-	..	-
Transport	19	-	-	19
Air	-	-	-	-
Rail (3)	19	-	-	19
Road	-	-	-	-
National navigation	-	-	-	-
Pipelines	-	-	-	-
Other	..	-	..	675
Domestic	462	-	186	648
Public administration	..	-	..	14
Commercial	..	-	..	6
Agriculture	..	-	..	4
Miscellaneous	..	-	..	2
Non energy use	-	-	-	-

(1) Stock fall (+), stock rise (-).

(2) Total supply minus total demand.

(3) Estimate revised following research carried out into heritage railways.

Commodity balances 2006

Coal

Thousand tonnes

	Steam coal	Coking coal	Anthracite	Total
Supply				
Production	..	266	..	18,079
Other sources	..	-	..	438
Imports	43,609	6,774	145	50,528
Exports	-349	-1	-94	-443
Marine bunkers	-	-	-	-
Stock change (1)	..	+4	..	-1,262
Transfers	-	-	-	-
Total supply	..	7,044	..	67,340
Statistical difference (2)	..	-6	..	-254
Total demand	59,024	7,049	1,520	67,594
Transformation	56,907	7,049	1,264r	65,220
Electricity generation	56,450	-	988	57,438
Major power producers	54,938	-	988r	55,926
Autogenerators	1,511	-	-	1,511
Heat generation	457	-	-	457
Petroleum refineries	-	-	-	-
Coke manufacture	-	5,929	-	5,929
Blast furnaces	-	1,121	-	1,121
Patent fuel manufacture and low temperature carbonisation	-	-	276	276
Energy industry use	3	-	1	4
Electricity generation	-	-	-	-
Oil and gas extraction	-	-	-	-
Petroleum refineries	-	-	-	-
Coal extraction	3	-	1	4
Coke manufacture	-	-	-	-
Blast furnaces	-	-	-	-
Patent fuel manufacture	-	-	-	-
Pumped storage	-	-	-	-
Other	-	-	-	-
Losses	-	-	-	-
Final consumption	2,115	-	256	2,370
Industry	1,712	-	44	1,756
Unclassified	-	-	-	-
Iron and steel	..	-	..	1
Non-ferrous metals	..	-	..	62
Mineral products	..	-	..	1,047
Chemicals	..	-	..	131
Mechanical engineering etc	..	-	..	12
Electrical engineering etc	..	-	..	6
Vehicles	..	-	..	53
Food, beverages etc	..	-	..	25
Textiles, leather, etc	..	-	..	70
Paper, printing etc	..	-	..	141
Other industries	..	-	..	208
Construction	..	-	-	-
Transport	19	-	-	19
Air	-	-	-	-
Rail (3)	19	-	-	19
Road	-	-	-	-
National navigation	-	-	-	-
Pipelines	-	-	-	-
Other	..	-	..	596
Domestic	349	-	212	561
Public administration	..	-	..	19
Commercial	..	-	..	6
Agriculture	..	-	..	5
Miscellaneous	..	-	..	5
Non energy use	-	-	-	-

(1) Stock fall (+), stock rise (-).

(2) Total supply minus total demand.

(3) Estimate revised following research carried out into heritage railways.

Commodity balances 2005

Coal

Thousand tonnes

	Steam coal	Coking coal	Anthracite	Total
Supply				
Production	..	274	..	20,008
Other sources	..	-	..	490
Imports	37,230	6,551	187	43,968
Exports	-364	-3	-169	-536
Marine bunkers	-	-	-	-
Stock change (1)	..	-253	..	-2,151
Transfers	-	-	-	-
Total supply	..	6,570	..	61,780
Statistical difference (2)	..	-39	..	-72
Total demand	53,343r	6,609	1,900	61,852
Transformation	51,225	6,609	1,558	59,392
Electricity generation	50,766	-	1,292	52,058
Major power producers	49,291	-	1,292	50,582
Autogenerators	1,476	-	-	1,476
Heat generation	459	-	-	459
Petroleum refineries	-	-	-	-
Coke manufacture	-	5,570	-	5,570
Blast furnaces	-	1,039	-	1,039
Patent fuel manufacture and low temperature carbonisation	-	-	266	266
Energy industry use	5	-	1	6
Electricity generation	-	-	-	-
Oil and gas extraction	-	-	-	-
Petroleum refineries	-	-	-	-
Coal extraction	5	-	1	6
Coke manufacture	-	-	-	-
Blast furnaces	-	-	-	-
Patent fuel manufacture	-	-	-	-
Pumped storage	-	-	-	-
Other	-	-	-	-
Losses	-	-	-	-
Final consumption	2,114	-	341	2,455
Industry	1,756	-	25	1,781
Unclassified	-	-	-	-
Iron and steel	-	-	-	-
Non-ferrous metals	..	-	..	41
Mineral products	..	-	..	1,120
Chemicals	..	-	..	132
Mechanical engineering etc	..	-	..	12
Electrical engineering etc	..	-	..	5
Vehicles	..	-	..	55
Food, beverages etc	..	-	..	26
Textiles, leather, etc	..	-	..	71
Paper, printing etc	..	-	..	142
Other industries	..	-	..	178
Construction	-	-	-	-
Transport	4	-	-	4
Air	-	-	-	-
Rail	4	-	-	4
Road	-	-	-	-
National navigation	-	-	-	-
Pipelines	-	-	-	-
Other	..	-	..	669
Domestic	298	-	316	614
Public administration	..	-	..	38
Commercial	..	-	..	6
Agriculture	..	-	..	9
Miscellaneous	..	-	..	2
Non energy use	-	-	-	-

(1) Stock fall (+), stock rise (-).

(2) Total supply minus total demand.

Commodity balances 2004

Coal

Thousand tonnes

	Steam coal	Coking coal	Anthracite	Total
Supply				
Production	..	352	..	24,535
Other sources	..	-	..	561
Imports	29,614	6,345	194	36,153
Exports	-440	-9	-172	-622
Marine bunkers	-	-	-	-
Stock change (1)	..	-206	..	-60
Transfers	-	-	-	-
Total supply	..	6,482	..	60,567
Statistical difference (2)	..	+101	..	+117
Total demand	52,159	6,382	1,910	60,451
Transformation	49,934	6,382	1,310	57,626
Electricity generation	49,461	-	983	50,444
Major power producers	47,985	-	983	48,968
Autogenerators	1,476	-	-	1,476
Heat generation	473	-	-	473
Petroleum refineries	-	-	-	-
Coke manufacture	-	5,487	-	5,487
Blast furnaces	-	895	-	895
Patent fuel manufacture and low temperature carbonisation	-	-	327	327
Energy industry use	7	-	1	8
Electricity generation	-	-	-	-
Oil and gas extraction	-	-	-	-
Petroleum refineries	-	-	-	-
Coal extraction	7	-	1	8
Coke manufacture	-	-	-	-
Blast furnaces	-	-	-	-
Patent fuel manufacture	-	-	-	-
Pumped storage	-	-	-	-
Other	-	-	-	-
Losses	-	-	-	-
Final consumption	2,217	-	599	2,816
Industry	1,815	-	33	1,848
Unclassified	-	-	-	-
Iron and steel	-	-	-	-
Non-ferrous metals	..	-	..	12
Mineral products	..	-	..	1,127
Chemicals	..	-	..	148
Mechanical engineering etc	..	-	..	13
Electrical engineering etc	..	-	..	5
Vehicles	..	-	..	80r
Food, beverages etc	..	-	..	38
Textiles, leather, etc	..	-	..	82
Paper, printing etc	..	-	..	141
Other industries	..	-	..	203
Construction	-	-	-	-
Transport	-	-	-	-
Air	-	-	-	-
Rail	-	-	-	-
Road	-	-	-	-
National navigation	-	-	-	-
Pipelines	-	-	-	-
Other	..	-	..	968
Domestic	375	-	566	941
Public administration	..	-	..	13
Commercial	..	-	..	5
Agriculture	..	-	..	8
Miscellaneous	..	-	..	2
Non energy use	-	-	-	-

(1) Stock fall (+), stock rise (-).

(2) Total supply minus total demand.

Commodity balances 2003

Coal

Thousand tonnes

	Steam coal	Coking coal	Anthracite	Total
Supply				
Production	..	373	..	27,759
Other sources	..	-	..	520
Imports	25,098	6,474	319	31,891
Exports	-359	-2	-181	-543
Marine bunkers	-	-	-	-
Stock change (1)	..	+62	..	+3,237
Transfers	-	-	-	-
Total supply	..	6,907	..	62,865
Statistical difference (2)	..	+296	..	-158
Total demand	54,314	6,611	2,099	63,024
Transformation	52,073	6,611	1,409	60,093
Electricity generation	51,451	-	1,013	52,464
Major power producers	49,883	-	1,013	50,896
Autogenerators	1,568	-	-	1,568
Heat generation	622	-	-	622
Petroleum refineries	-	-	-	-
Coke manufacture	-	5,729	-	5,729
Blast furnaces	-	882	-	882
Patent fuel manufacture and low temperature carbonisation	-	-	396	396
Energy industry use	5	-	1	6
Electricity generation	-	-	-	-
Oil and gas extraction	-	-	-	-
Petroleum refineries	-	-	-	-
Coal extraction	5	-	1	6
Coke manufacture	-	-	-	-
Blast furnaces	-	-	-	-
Patent fuel manufacture	-	-	-	-
Pumped storage	-	-	-	-
Other	-	-	-	-
Losses	-	-	-	-
Final consumption	2,235	-	689	2,924
Industry	1,785	-	72	1,857
Unclassified	-	-	-	-
Iron and steel	-	-	-	-
Non-ferrous metals	..	-	..	13
Mineral products	..	-	..	1,199
Chemicals	..	-	..	70
Mechanical engineering etc	..	-	..	14
Electrical engineering etc	..	-	..	2
Vehicles	..	-	..	70
Food, beverages etc	..	-	..	50
Textiles, leather, etc	..	-	..	86
Paper, printing etc	..	-	..	128
Other industries	..	-	..	225
Construction	-	-	-	-
Transport	-	-	-	-
Air	-	-	-	-
Rail	-	-	-	-
Road	-	-	-	-
National navigation	-	-	-	-
Pipelines	-	-	-	-
Other	..	-	..	1,068
Domestic	426	-	617	1,043
Public administration	..	-	..	12
Commercial	..	-	..	5
Agriculture	..	-	..	6
Miscellaneous	..	-	..	2
Non energy use	-	-	-	-

(1) Stock fall (+), stock rise (-).

(2) Total supply minus total demand.

Commodity balances 2002

Coal

Thousand tonnes

	Steam coal	Coking coal	Anthracite	Total
Supply				
Production	..	373	..	29,539
Other sources	..	-	..	450
Imports	21,895	6,315	477	28,686
Exports	-342	-3	-192	-537
Marine bunkers	-	-	-	-
Stock change (1)	..	+162	..	+501
Transfers	-	-	-	-
Total supply	..	6,846	..	58,640
Statistical difference (2)	..	+313	..	+88
Total demand	49,111	6,533	2,909	58,553
Transformation	46,819	6,533	2,075	55,427
Electricity generation	46,102	-	1,639	47,741
Major power producers	44,506	-	1,639	46,145
Autogenerators	1,596	-	-	1,596
Heat generation	717	-	-	717
Petroleum refineries	-	-	-	-
Coke manufacture	-	5,807	-	5,807
Blast furnaces	-	726	-	726
Patent fuel manufacture and low temperature carbonisation	-	-	436	436
Energy industry use	8	-	1	9
Electricity generation	-	-	-	-
Oil and gas extraction	-	-	-	-
Petroleum refineries	-	-	-	-
Coal extraction	8	-	1	9
Coke manufacture	-	-	-	-
Blast furnaces	-	-	-	-
Patent fuel manufacture	-	-	-	-
Pumped storage	-	-	-	-
Other	-	-	-	-
Losses	-	-	-	-
Final consumption	2,283	-	834	3,117
Industry	1,778	-	31	1,809
Unclassified	-	-	-	-
Iron and steel	-	-	-	-
Non-ferrous metals	..	-	..	24
Mineral products	..	-	..	1,213
Chemicals	..	-	..	61
Mechanical engineering etc	..	-	..	14
Electrical engineering etc	..	-	..	7
Vehicles	..	-	..	61
Food, beverages etc	..	-	..	45
Textiles, leather, etc	..	-	..	84
Paper, printing etc	..	-	..	119
Other industries	..	-	..	181
Construction	-	-	-	-
Transport	-	-	-	-
Air	-	-	-	-
Rail	-	-	-	-
Road	-	-	-	-
National navigation	-	-	-	-
Pipelines	-	-	-	-
Other	..	-	..	1,308
Domestic	483	-	803	1,286
Public administration	..	-	..	9
Commercial	..	-	..	5
Agriculture	..	-	..	6
Miscellaneous	..	-	..	2
Non energy use	-	-	-	-

(1) Stock fall (+), stock rise (-).

(2) Total supply minus total demand.

Commodity balances 2001

Coal

Thousand tonnes

	Steam coal	Coking coal	Anthracite	Total
Supply				
Production	..	312	..	31,513
Other sources	..	-	..	417
Imports	27,041	7,723	778	35,542
Exports	-301	-4	-244	-550
Marine bunkers	-	-	-	-
Stock change (1)	..	-366	..	-3,392
Transfers	-	-	-	-
Total supply	..	7,664	..	63,530
Statistical difference (2)	..	-231	..	-320
Total demand	52,924	7,895	3,031	63,850
Transformation	50,304	7,895	1,873	60,072
Electricity generation	49,554	-	1,378	50,932
Major power producers	47,913	-	1,378	49,290
Autogenerators	1,641	-	-	1,641
Heat generation	750	-	-	750
Petroleum refineries	-	-	-	-
Coke manufacture	-	7,132	-	7,132
Blast furnaces	-	764	-	764
Patent fuel manufacture and low temperature carbonisation	-	-	496	496
Energy industry use	9	-	1	10
Electricity generation	-	-	-	-
Oil and gas extraction	-	-	-	-
Petroleum refineries	-	-	-	-
Coal extraction	9	-	1	10
Coke manufacture	-	-	-	-
Blast furnaces	-	-	-	-
Patent fuel manufacture	-	-	-	-
Pumped storage	-	-	-	-
Other	-	-	-	-
Losses	-	-	-	-
Final consumption	2,611	-	1,157	3,768
Industry	1,779	-	48	1,826
Unclassified	-	-	-	-
Iron and steel	1	-	-	1
Non-ferrous metals	..	-	..	13
Mineral products	..	-	..	1,260
Chemicals	..	-	..	35
Mechanical engineering etc	..	-	..	13
Electrical engineering etc	..	-	..	8
Vehicles	..	-	..	60
Food, beverages etc	..	-	..	42
Textiles, leather, etc	..	-	..	75
Paper, printing etc	..	-	..	107
Other industries	..	-	..	213
Construction	-	-	-	-
Transport	-	-	-	-
Air	-	-	-	-
Rail	-	-	-	-
Road	-	-	-	-
National navigation	-	-	-	-
Pipelines	-	-	-	-
Other	..	-	..	1,942
Domestic	764	-	1,110	1,874
Public administration	..	-	..	47
Commercial	..	-	..	6
Agriculture	..	-	..	5
Miscellaneous	..	-	..	10
Non energy use	-	-	-	-

(1) Stock fall (+), stock rise (-).

(2) Total supply minus total demand.

Commodity balances 2000

Coal

Thousand tonnes

	Steam coal	Coking coal	Anthracite	Total
Supply				
Production	..	255	..	30,600
Other sources	..	-	..	598
Imports	14,425	8,462	558	23,446
Exports	-351	-4	-306	-660
Marine bunkers	-	-	-	-
Stock change (1)	..	+111	..	+5,855
Transfers	-	-	-	-
Total supply	..	8,824	..	59,838
Statistical difference (2)	..	+139	..	-151
Total demand	48,337	8,685	2,909	59,931
Transformation	45,480	8,685	1,913	56,078
Electricity generation	44,825	-	1,373	46,198
Major power producers	43,389	-	1,373	44,762
Autogenerators	1,436	-	-	1,436
Heat generation	656	-	-	656
Petroleum refineries	-	-	-	-
Coke manufacture	-	8,229	-	8,229
Blast furnaces	-	456	-	456
Patent fuel manufacture and low temperature carbonisation	-	-	540	540
Energy industry use	9	-	3	12
Electricity generation	-	-	-	-
Oil and gas extraction	-	-	-	-
Petroleum refineries	-	-	-	-
Coal extraction	9	-	3	12
Coke manufacture	-	-	-	-
Blast furnaces	-	-	-	-
Patent fuel manufacture	-	-	-	-
Pumped storage	-	-	-	-
Other	-	-	-	-
Losses	-	-	-	-
Final consumption	2,848	-	993	3,841
Industry	1,801	-	75	1,876
Unclassified	-	-	-	-
Iron and steel	2	-	-	2
Non-ferrous metals	..	-	..	11
Mineral products	..	-	..	1,240
Chemicals	..	-	..	34
Mechanical engineering etc	..	-	..	9
Electrical engineering etc	..	-	..	3
Vehicles	..	-	..	49
Food, beverages etc	..	-	..	18
Textiles, leather, etc	..	-	..	62
Paper, printing etc	..	-	..	122
Other industries	..	-	..	326
Construction	-	-	-	-
Transport	-	-	-	-
Air	-	-	-	-
Rail	-	-	-	-
Road	-	-	-	-
National navigation	-	-	-	-
Pipelines	-	-	-	-
Other	..	-	..	1,965
Domestic	965	-	917	1,883
Public administration	..	-	..	60
Commercial	..	-	..	7
Agriculture	..	-	..	7
Miscellaneous	..	-	..	8
Non energy use	-	-	-	-

(1) Stock fall (+), stock rise (-).

(2) Total supply minus total demand.

Commodity balances 1999

Coal

Thousand tonnes

	Steam coal	Coking coal	Anthracite	Total
Supply				
Production	..	263	..	36,163
Other sources	..	-	..	914
Imports	11,675	8,020	598	20,293
Exports	-434	-	-327	-761
Marine bunkers	-	-	-	-
Stock change (1)	..	+258	..	-1,164
Transfers	-	-	-	-
Total supply	..	8,541	..	55,445
Statistical difference (2)	..	+128	..	-279
Total demand	44,837	8,413	2,474	55,724
Transformation	41,027	8,413	1,446	50,886
Electricity generation	40,378	-	800	41,178
Major power producers	38,783	-	800	39,583
Autogenerators	1,595	-	-	1,595
Heat generation	649	-	-	649
Petroleum refineries	-	-	-	-
Coke manufacture	-	7,919	-	7,919
Blast furnaces	-	494	-	494
Patent fuel manufacture and low temperature carbonisation	-	-	646	646
Energy industry use	9	-	1	10
Electricity generation	-	-	-	-
Oil and gas extraction	-	-	-	-
Petroleum refineries	-	-	-	-
Coal extraction	9	-	1	10
Coke manufacture	-	-	-	-
Blast furnaces	-	-	-	-
Patent fuel manufacture	-	-	-	-
Pumped storage	-	-	-	-
Other	-	-	-	-
Losses	-	-	-	-
Final consumption	3,801	-	1,027	4,828
Industry	1,913	-	127	2,040
Unclassified	-	-	-	-
Iron and steel	12	-	-	12
Non-ferrous metals	..	-	..	346
Mineral products	..	-	..	586
Chemicals	..	-	..	434
Mechanical engineering etc	..	-	..	25
Electrical engineering etc	..	-	..	7
Vehicles	..	-	..	79
Food, beverages etc	..	-	..	215
Textiles, leather, etc	..	-	..	58
Paper, printing etc	..	-	..	121
Other industries	..	-	..	157
Construction	-	-	-	-
Transport	-	-	-	-
Air	-	-	-	-
Rail	-	-	-	-
Road	-	-	-	-
National navigation	-	-	-	-
Pipelines	-	-	-	-
Other	..	-	..	2,788
Domestic	1,619	-	898	2,517
Public administration	..	-	..	229
Commercial	..	-	..	4
Agriculture	..	-	..	7
Miscellaneous	..	-	..	31
Non energy use	-	-	-	-

(1) Stock fall (+), stock rise (-).

(2) Total supply minus total demand.

Commodity balances 1998

Coal

Thousand tonnes

	Steam coal	Coking coal	Anthracite	Total
Supply				
Production	..	541	..	40,046
Other sources	..	-	..	1,131
Imports	12,079	8,646	519	21,244
Exports	-689	-	-282	-971
Marine bunkers	-	-	-	-
Stock change (1)	..	-184	..	+1,421
Transfers	-	-	-	-
Total supply	..	9,003	..	62,871
Statistical difference (2)	..	+275	..	-281
Total demand	51,997	8,728	2,427	63,152
Transformation	47,847	8,728	1,376	57,951
Electricity generation	47,847	-	741	48,588
Major power producers	45,886	-	741	46,627
Autogenerators	1,961	-	-	1,961
Petroleum refineries	-	-	-	-
Coke manufacture	-	8,169	-	8,169
Blast furnaces	-	559	-	559
Patent fuel manufacture and low temperature carbonisation	-	-	635	635
Energy industry use	4	-	1	5
Electricity generation	-	-	-	-
Oil and gas extraction	-	-	-	-
Petroleum refineries	-	-	-	-
Coal extraction	4	-	1	5
Coke manufacture	-	-	-	-
Blast furnaces	-	-	-	-
Patent fuel manufacture	-	-	-	-
Pumped storage	-	-	-	-
Other	-	-	-	-
Losses	-	-	-	-
Final consumption	4,146	-	1,050	5,196
Industry	2,329	-	85	2,414
Unclassified	-	-	-	-
Iron and steel	9	-	-	9
Non-ferrous metals	..	-	..	208
Mineral products	..	-	..	763
Chemicals	..	-	..	643
Mechanical engineering etc	..	-	..	28
Electrical engineering etc	..	-	..	3
Vehicles	..	-	..	46
Food, beverages etc	..	-	..	288
Textiles, leather, etc	..	-	..	69
Paper, printing etc	..	-	..	108
Other industries	..	-	..	249
Construction	-	-	-	-
Transport	-	-	-	-
Air	-	-	-	-
Rail	-	-	-	-
Road	-	-	-	-
National navigation	-	-	-	-
Pipelines	-	-	-	-
Other	..	-	..	2,782
Domestic	1,413	-	953	2,366
Public administration	..	-	..	312
Commercial	..	-	..	4
Agriculture	..	-	..	9
Miscellaneous	..	-	..	91
Non energy use	-	-	-	-

(1) Stock fall (+), stock rise (-).

(2) Total supply minus total demand.

Commodity balances 2008

Manufactured fuels

	Thousand tonnes				GWh		
	Coke oven coke	Coke breeze	Other manuf. solid fuel	Total manuf. solid fuel	Benzole and tars (5)	Coke oven gas	Blast furnace gas
Supply							
Production (1)	4,324	35	302	4,661	1,816	9,410	15,345
Other sources	-	-	-	-	-	-	-
Imports	503	219	16	738	-	-	-
Exports	-111	-74	-25	-210	-	-	-
Marine bunkers	-	-	-	-	-	-	-
Stock change (2)	+287	-79	6r	+214	-	-	-
Transfers (3)	-1,104	+1,104	-	-	-	+71	-3
Total supply	3,899	1,205	299	5,403	1,816	9,481	15,342
Statistical difference (4)	-0	+0	+4	+5	+0	-8	-110
Total demand	3,900	1,204	294	5,398	1,816	9,489	15,452
Transformation	3,796	567	-	4,363	-	2,681	7,900
Electricity generation	-	-	-	-	-	2,263	7,721
Major power producers	-	-	-	-	-	-	-
Autogenerators	-	-	-	-	-	2,263	7,721
Heat generation	-	-	-	-	-	418	179
Petroleum refineries	-	-	-	-	-	-	-
Coke manufacture	-	-	-	-	-	-	-
Blast furnaces	3,796	567	-	4,363	-	-	-
Patent fuel manufacture	-	-	-	-	-	-	-
Low temperature carbonisation	-	-	-	-	-	-	-
Energy industry use	-	-	-	-	-	5,117	4,759
Electricity generation	-	-	-	-	-	-	-
Oil and gas extraction	-	-	-	-	-	-	-
Petroleum refineries	-	-	-	-	-	-	-
Coal extraction	-	-	-	-	-	-	-
Coke manufacture	-	-	-	-	-	4,349	639
Blast furnaces	-	-	-	-	-	768	4,121
Patent fuel manufacture	-	-	-	-	-	-	-
Pumped storage	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-
Losses	-	-	-	-	-	413	2,332
Final consumption	104	638	294	1,036	1,816	1,278	461
Industry	91	638	-	729	1,816	1,278	461
Unclassified	78	16	-	94	1,816	207	-
Iron and steel	13	621	-	635	-	1,071	461
Non-ferrous metals	-	-	-	-	-	-	-
Mineral products	-	-	-	-	-	-	-
Chemicals	-	-	-	-	-	-	-
Mechanical engineering, etc	-	-	-	-	-	-	-
Electrical engineering, etc	-	-	-	-	-	-	-
Vehicles	-	-	-	-	-	-	-
Food, beverages, etc	-	-	-	-	-	-	-
Textiles, leather, etc	-	-	-	-	-	-	-
Paper, printing, etc	-	-	-	-	-	-	-
Other industries	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-
Transport	-	-	-	-	-	-	-
Other	12	-	294	307	-	-	-
Domestic	12	-	294	307	-	-	-
Public administration	-	-	-	-	-	-	-
Commercial	-	-	-	-	-	-	-
Agriculture	-	-	-	-	-	-	-
Miscellaneous	-	-	-	-	-	-	-
Non energy use	-	-	-	-	-	-	-

(1) See paragraph 2.45- 2.53

(2) Stock fall (+), stock rise (-).

(3) Coke oven gas and blast furnace gas transfers are for synthetic coke oven gas, see paragraph 2.53.

(4) Total supply minus total demand.

(5) Because of the small number of benzole suppliers, figures for benzole and tars cannot be given separately.

Commodity balances 2007

Manufactured fuels

	Thousand tonnes				GWh		
	Coke oven coke	Coke breeze	Other manuf. solid fuel	Total manuf. solid fuel	Benzole and tars (5)	Coke oven gas	Blast furnace gas
Supply							
Production (1)	4,451	25	227	4,703	1,838	9,651	16,701
Other sources	-	-	-	-	-	-	-
Imports	745	325	13	1,083	-	-	-
Exports	-105	-152	-7	-264	-	-	-
Marine bunkers	-	-	-	-	-	-	-
Stock change (2)	+34	-80	+2	-44	-	-	-
Transfers (3)	-1,115	+1,115	-	-	-	+81	-3
Total supply	4,010	1,233	235	5,478	1,838	9,732	16,698
Statistical difference (4)	-14	+3	+0	-10	+0	+47	-113
Total demand	4,024	1,229	235	5,488	1,838	9,685	16,811
Transformation	3,910	483	-	4,392	-	2,671	9,102
Electricity generation	-	-	-	-	-	2,253	8,922
Major power producers	-	-	-	-	-	-	-
Autogenerators	-	-	-	-	-	2,253	8,922
Heat generation	-	-	-	-	-	418	179
Petroleum refineries	-	-	-	-	-	-	-
Coke manufacture	-	-	-	-	-	-	-
Blast furnaces	3,910	483	-	4,392	-	-	-
Patent fuel manufacture	-	-	-	-	-	-	-
Low temperature carbonisation	-	-	-	-	-	-	-
Energy industry use	-	-	-	-	-	5,170	5,082
Electricity generation	-	-	-	-	-	-	-
Oil and gas extraction	-	-	-	-	-	-	-
Petroleum refineries	-	-	-	-	-	-	-
Coal extraction	-	-	-	-	-	-	-
Coke manufacture	-	-	-	-	-	4,228	703
Blast furnaces	-	-	-	-	-	942	4,379
Patent fuel manufacture	-	-	-	-	-	-	-
Pumped storage	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-
Losses	-	-	-	-	-	445	2,071
Final consumption	114	747	235	1,096	1,838	1,399	557
Industry	99	747	-	846	1,838	1,399	557
Unclassified	76	13	-	89	1,838	221	-
Iron and steel	23	734	-	757	-	1,178	557
Non-ferrous metals	-	-	-	-	-	-	-
Mineral products	-	-	-	-	-	-	-
Chemicals	-	-	-	-	-	-	-
Mechanical engineering, etc	-	-	-	-	-	-	-
Electrical engineering, etc	-	-	-	-	-	-	-
Vehicles	-	-	-	-	-	-	-
Food, beverages, etc	-	-	-	-	-	-	-
Textiles, leather, etc	-	-	-	-	-	-	-
Paper, printing, etc	-	-	-	-	-	-	-
Other industries	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-
Transport	-	-	-	-	-	-	-
Other	15	-	235	249	-	-	-
Domestic	15	-	235	249	-	-	-
Public administration	-	-	-	-	-	-	-
Commercial	-	-	-	-	-	-	-
Agriculture	-	-	-	-	-	-	-
Miscellaneous	-	-	-	-	-	-	-
Non energy use	-	-	-	-	-	-	-

(1) See paragraph 2.45- 2.53

(2) Stock fall (+), stock rise (-).

(3) Coke oven gas and blast furnace gas transfers are for synthetic coke oven gas, see paragraph 2.53.

(4) Total supply minus total demand.

(5) Because of the small number of benzole suppliers, figures for benzole and tars cannot be given separately.

Commodity balances 2006

Manufactured fuels

	Thousand tonnes				GWh		
	Coke oven coke	Coke breeze	Other manuf. solid fuel	Total manuf. solid fuel	Benzole and tars (5)	Coke oven gas	Blast furnace gas
Supply							
Production (1)	4,384	245	260	4,889	1,873	9,828	16,443
Other sources	-	-	-	-	-	-	-
Imports	748	261	10	1,019	-	-	-
Exports	-94	-74	-12	-180	-	-	-
Marine bunkers	-	-	-	-	-	-	-
Stock change (2)	-237	+25	+2	-211	-	-	-
Transfers (3)	-955	+955	-	-	-	+55	-2
Total supply	3,846	1,411	260	5,518	1,873	9,882	16,441
Statistical difference (4)	-1	-4	+3	-2	+0	+76	-119
Total demand	3,847	1,415	257	5,519	1,873	9,806	16,560
Transformation	3,745	688	-	4,433	-	2,593	9,249
Electricity generation	-	-	-	-	-	2,175	9,070
Major power producers	-	-	-	-	-	-	-
Autogenerators	-	-	-	-	-	2,175	9,070
Heat generation	-	-	-	-	-	418	179
Petroleum refineries	-	-	-	-	-	-	-
Coke manufacture	-	-	-	-	-	-	-
Blast furnaces	3,745	688	-	4,433	-	-	-
Patent fuel manufacture	-	-	-	-	-	-	-
Low temperature carbonisation	-	-	-	-	-	-	-
Energy industry use	-	-	-	-	-	5,300	4,831
Electricity generation	-	-	-	-	-	-	-
Oil and gas extraction	-	-	-	-	-	-	-
Petroleum refineries	-	-	-	-	-	-	-
Coal extraction	-	-	-	-	-	-	-
Coke manufacture	-	-	-	-	-	4,282	536
Blast furnaces	-	-	-	-	-	1,019	4,294
Patent fuel manufacture	-	-	-	-	-	-	-
Pumped storage	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-
Losses	-	-	-	-	-	483	1,578
Final consumption	102	727	257	1,086	1,873	1,430	902
Industry	80	727	-	807	1,873	1,430	902
Unclassified	53	26	-	79	1,873	194	-
Iron and steel	26	701	-	727	-	1,236	902
Non-ferrous metals	-	-	-	-	-	-	-
Mineral products	-	-	-	-	-	-	-
Chemicals	-	-	-	-	-	-	-
Mechanical engineering, etc	-	-	-	-	-	-	-
Electrical engineering, etc	-	-	-	-	-	-	-
Vehicles	-	-	-	-	-	-	-
Food, beverages, etc	-	-	-	-	-	-	-
Textiles, leather, etc	-	-	-	-	-	-	-
Paper, printing, etc	-	-	-	-	-	-	-
Other industries	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-
Transport	-	-	-	-	-	-	-
Other	22	-	257	279	-	-	-
Domestic	22	-	257	279	-	-	-
Public administration	-	-	-	-	-	-	-
Commercial	-	-	-	-	-	-	-
Agriculture	-	-	-	-	-	-	-
Miscellaneous	-	-	-	-	-	-	-
Non energy use	-	-	-	-	-	-	-

(1) See paragraph 2.45- 2.53

(2) Stock fall (+), stock rise (-).

(3) Coke oven gas and blast furnace gas transfers are for synthetic coke oven gas, see paragraph 2.53.

(4) Total supply minus total demand.

(5) Because of the small number of benzole suppliers, figures for benzole and tars cannot be given separately.

Commodity balances 2005

Manufactured fuels

	Thousand tonnes				GWh		
	Coke oven coke	Coke breeze	Other manuf. solid fuel	Total manuf. solid fuel	Benzole and tars (5)	Coke oven gas	Blast furnace gas
Supply							
Production (1)	4,105	259	258	4,622	1,749	9,290	16,199
Other sources	-	-	-	-	-	-	-
Imports	674	235	6	915	-	-	-
Exports	-64	-55	-15	-134	-	-	-
Marine bunkers	-	-	-	-	-	-	-
Stock change (2)	-94	-59	+6	-147	-	-	-
Transfers (3)	-983	+983	-	-	-	+53	-2
Total supply	3,638	1,363	254	5,256	1,749	9,343	16,197
Statistical difference (4)	-2	-1	-2	-4	+0	+64	-107
Total demand	3,639	1,364	256	5,259	1,749	9,279	16,304
Transformation	3,516	568	-	4,084	-	2,625	9,490
Electricity generation	-	-	-	-	-	2,207	9,310
Major power producers	-	-	-	-	-	-	-
Autogenerators	-	-	-	-	-	2,207	9,310
Heat generation	-	-	-	-	-	418	179
Petroleum refineries	-	-	-	-	-	-	-
Coke manufacture	-	-	-	-	-	-	-
Blast furnaces	3,516	568	-	4,084	-	-	-
Patent fuel manufacture	-	-	-	-	-	-	-
Low temperature carbonisation	-	-	-	-	-	-	-
Energy industry use	-	-	-	-	-	5,064	4,474
Electricity generation	-	-	-	-	-	-	-
Oil and gas extraction	-	-	-	-	-	-	-
Petroleum refineries	-	-	-	-	-	-	-
Coal extraction	-	-	-	-	-	-	-
Coke manufacture	-	-	-	-	-	4,321	285
Blast furnaces	-	-	-	-	-	743	4,189
Patent fuel manufacture	-	-	-	-	-	-	-
Pumped storage	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-
Losses	-	-	-	-	-	441	2,014
Final consumption	123	796	256	1,175	1,749	1,149	326
Industry	89	796	-	885	1,749	1,149	326
Unclassified	67	14	-	81	1,749	236	-
Iron and steel	22	782	-	804	-	913	326
Non-ferrous metals	-	-	-	-	-	-	-
Mineral products	-	-	-	-	-	-	-
Chemicals	-	-	-	-	-	-	-
Mechanical engineering, etc	-	-	-	-	-	-	-
Electrical engineering, etc	-	-	-	-	-	-	-
Vehicles	-	-	-	-	-	-	-
Food, beverages, etc	-	-	-	-	-	-	-
Textiles, leather, etc	-	-	-	-	-	-	-
Paper, printing, etc	-	-	-	-	-	-	-
Other industries	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-
Transport	-	-	-	-	-	-	-
Other	34	-	256	290	-	-	-
Domestic	34	-	256	290	-	-	-
Public administration	-	-	-	-	-	-	-
Commercial	-	-	-	-	-	-	-
Agriculture	-	-	-	-	-	-	-
Miscellaneous	-	-	-	-	-	-	-
Non energy use	-	-	-	-	-	-	-

(1) See paragraph 2.45- 2.53

(2) Stock fall (+), stock rise (-).

(3) Coke oven gas and blast furnace gas transfers are for synthetic coke oven gas, see paragraph 2.53.

(4) Total supply minus total demand.

(5) Because of the small number of benzole suppliers, figures for benzole and tars cannot be given separately.

Commodity balances 2004

Manufactured fuels

	Thousand tonnes				GWh		
	Coke oven coke	Coke breeze	Other manuf. solid fuel	Total manuf. solid fuel	Benzole and tars (5)	Coke oven gas	Blast furnace gas
Supply							
Production (1)	4,038	298	318	4,653	1,722	9,076	15,770
Other sources	-	-	-	-	-	-	-
Imports	847	199	5	1,051	-	-	-
Exports	-80	-62	-39	-182	-	-	-
Marine bunkers	-	-	-	-	-	-	-
Stock change (2)	-88	-63	+22	-129	-	-	-
Transfers (3)	-1,012	+1,012	-	-	-	+40	-2
Total supply	3,704	1,384	305	5,392	1,722	9,116	15,768
Statistical difference (4)	-14	-45	-14	-73	+0	+65	-103
Total demand	3,718	1,428	320	5,466	1,722	9,051	15,872
Transformation	3,569	602	-	4,171	-	1,944	9,370
Electricity generation	-	-	-	-	-	1,526	9,191
Major power producers	-	-	-	-	-	-	-
Autogenerators	-	-	-	-	-	1,526	9,191
Heat generation	-	-	-	-	-	418	179
Petroleum refineries	-	-	-	-	-	-	-
Coke manufacture	-	-	-	-	-	-	-
Blast furnaces	3,569	602	-	4,171	-	-	-
Patent fuel manufacture	-	-	-	-	-	-	-
Low temperature carbonisation	-	-	-	-	-	-	-
Energy industry use	-	-	4	4	-	5,273	4,570
Electricity generation	-	-	-	-	-	-	-
Oil and gas extraction	-	-	-	-	-	-	-
Petroleum refineries	-	-	-	-	-	-	-
Coal extraction	-	-	-	-	-	-	-
Coke manufacture	-	-	-	-	-	4,326	297
Blast furnaces	-	-	-	-	-	948	4,273
Patent fuel manufacture	-	-	4	4	-	-	-
Pumped storage	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-
Losses	-	-	-	-	-	783	1,557
Final consumption	149	827	316	1,291	1,722	1,050	375
Industry	98	827	12	936	1,722	1,050	375
Unclassified	76	39	12	127	1,722	265	-
Iron and steel	22	788	-	810	-	785	375
Non-ferrous metals	-	-	-	-	-	-	-
Mineral products	-	-	-	-	-	-	-
Chemicals	-	-	-	-	-	-	-
Mechanical engineering, etc	-	-	-	-	-	-	-
Electrical engineering, etc	-	-	-	-	-	-	-
Vehicles	-	-	-	-	-	-	-
Food, beverages, etc	-	-	-	-	-	-	-
Textiles, leather, etc	-	-	-	-	-	-	-
Paper, printing, etc	-	-	-	-	-	-	-
Other industries	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-
Transport	-	-	-	-	-	-	-
Other	51	-	303	354	-	-	-
Domestic	51	-	303	354	-	-	-
Public administration	-	-	-	-	-	-	-
Commercial	-	-	-	-	-	-	-
Agriculture	-	-	-	-	-	-	-
Miscellaneous	-	-	-	-	-	-	-
Non energy use	-	-	-	-	-	-	-

(1) See paragraph 2.45- 2.53

(2) Stock fall (+), stock rise (-).

(3) Coke oven gas and blast furnace gas transfers are for synthetic coke oven gas, see paragraph 2.53.

(4) Total supply minus total demand.

(5) Because of the small number of benzole suppliers, figures for benzole and tars cannot be given separately.

Commodity balances 2003

Manufactured fuels

	Thousand tonnes				GWh		
	Coke oven coke	Coke breeze	Other manuf. solid fuel	Total manuf. solid fuel	Benzole and tars (5)	Coke oven gas	Blast furnace gas
Supply							
Production (1)	4,286	315	392	4,993	1,773	9,564	15,790
Other sources	-	-	-	-	-	-	-
Imports	928	49	5	984	-	-	-
Exports	-74	-64	-55	-193	-	-	-
Marine bunkers	-	-	-	-	-	-	-
Stock change (2)	-60	-83	-	-143	-	-	-
Transfers (3)	-1,095	1,095	-	-	-	86	-3
Total supply	3,986	1,312	343	5,641	1,773	9,650	15,787
Statistical difference (4)	-19	-20	-19	-58	+0	36	-106
Total demand	4,005	1,332	362	5,699	1,773	9,614	15,893
Transformation	3,716	530	-	4,246	-	2,909	9,301
Electricity generation	-	-	-	-	-	1,854	9,002
Major power producers	-	-	-	-	-	-	-
Autogenerators	-	-	-	-	-	1,854	9,002
Heat generation	-	-	-	-	-	1,055	299
Petroleum refineries	-	-	-	-	-	-	-
Coke manufacture	-	-	-	-	-	-	-
Blast furnaces	3,716	530	-	4,246	-	-	-
Patent fuel manufacture	-	-	-	-	-	-	-
Low temperature carbonisation	-	-	-	-	-	-	-
Energy industry use	-	-	4	4	-	5,630	4,771
Electricity generation	-	-	-	-	-	-	-
Oil and gas extraction	-	-	-	-	-	-	-
Petroleum refineries	-	-	-	-	-	-	-
Coal extraction	-	-	-	-	-	-	-
Coke manufacture	-	-	-	-	-	4,466	432
Blast furnaces	-	-	-	-	-	1,164	4,339
Patent fuel manufacture	-	-	4	4	-	-	-
Pumped storage	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-
Losses	-	-	-	-	-	457	1,398
Final consumption	289	802	358	1,449	1,773	618	423
Industry	160	802	17	979	1,773	618	423
Unclassified	113	7	17	137	1,773	53	-
Iron and steel	23	795	-	818	-	565	423
Non-ferrous metals	24	-	-	24	-	-	-
Mineral products	-	-	-	-	-	-	-
Chemicals	-	-	-	-	-	-	-
Mechanical engineering, etc	-	-	-	-	-	-	-
Electrical engineering, etc	-	-	-	-	-	-	-
Vehicles	-	-	-	-	-	-	-
Food, beverages, etc	-	-	-	-	-	-	-
Textiles, leather, etc	-	-	-	-	-	-	-
Paper, printing, etc	-	-	-	-	-	-	-
Other industries	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-
Transport	-	-	-	-	-	-	-
Other	129	-	341	470	-	-	-
Domestic	129	-	341	470	-	-	-
Public administration	-	-	-	-	-	-	-
Commercial	-	-	-	-	-	-	-
Agriculture	-	-	-	-	-	-	-
Miscellaneous	-	-	-	-	-	-	-
Non energy use	-	-	-	-	-	-	-

(1) See paragraph 2.45- 2.53

(2) Stock fall (+), stock rise (-).

(3) Coke oven gas and blast furnace gas transfers are for synthetic coke oven gas, see paragraph 2.53.

(4) Total supply minus total demand.

(5) Because of the small number of benzole suppliers, figures for benzole and tars cannot be given separately.

Commodity balances 2002

Manufactured fuels

	Thousand tonnes				GWh		
	Coke oven coke	Coke breeze	Other manuf. solid fuel	Total manuf. solid fuel	Benzole and tars (5)	Coke oven gas	Blast furnace gas
Supply							
Production (1)	4,335	224	431	4,990	1,781	9,549	13,130
Other sources	-	-	-	-	-	-	-
Imports	226	12	17	255	-	-	-
Exports	-272	-45	-67	-385	-	-	-
Marine bunkers	-	-	-	-	-	-	-
Stock change (2)	+261	-14	+14	+261	-	-	-
Transfers (3)	-927	+927	-	-	-	+104	-4
Total supply	3,624	1,103	394	5,121	1,781	9,653	13,125
Statistical difference (4)	-33	+28	-30	-35	+0	+64	-92
Total demand	3,657	1,075	424	5,155	1,781	9,590	13,218
Transformation	3,224	331	-	3,555	-	2,973	5,843
Electricity generation	-	-	-	-	-	1,487	5,422
Major power producers	-	-	-	-	-	-	-
Autogenerators	-	-	-	-	-	1,487	5,422
Heat generation	-	-	-	-	-	1,486	422
Petroleum refineries	-	-	-	-	-	-	-
Coke manufacture	-	-	-	-	-	-	-
Blast furnaces	3,224	331	-	3,555	-	-	-
Patent fuel manufacture	-	-	-	-	-	-	-
Low temperature carbonisation	-	-	-	-	-	-	-
Energy industry use	17	-	10	27	-	5,321	4,095
Electricity generation	-	-	-	-	-	-	-
Oil and gas extraction	-	-	-	-	-	-	-
Petroleum refineries	-	-	-	-	-	-	-
Coal extraction	-	-	-	-	-	-	-
Coke manufacture	-	-	-	-	-	4,270	510
Blast furnaces	-	-	-	-	-	1,051	3,585
Patent fuel manufacture	17	-	10	27	-	-	-
Pumped storage	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-
Losses	-	-	-	-	-	387	648
Final consumption	417	744	414	1,575	1,781	909	2,632
Industry	239	744	22	1,005	1,781	909	2,632
Unclassified	151	44	22	217	1,781	40	-
Iron and steel	29	700	-	729	-	869	2,632
Non-ferrous metals	59	-	-	59	-	-	-
Mineral products	-	-	-	-	-	-	-
Chemicals	-	-	-	-	-	-	-
Mechanical engineering, etc	-	-	-	-	-	-	-
Electrical engineering, etc	-	-	-	-	-	-	-
Vehicles	-	-	-	-	-	-	-
Food, beverages, etc	-	-	-	-	-	-	-
Textiles, leather, etc	-	-	-	-	-	-	-
Paper, printing, etc	-	-	-	-	-	-	-
Other industries	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-
Transport	-	-	-	-	-	-	-
Other	178	-	392	570	-	-	-
Domestic	178	-	392	570	-	-	-
Public administration	-	-	-	-	-	-	-
Commercial	-	-	-	-	-	-	-
Agriculture	-	-	-	-	-	-	-
Miscellaneous	-	-	-	-	-	-	-
Non energy use	-	-	-	-	-	-	-

(1) See paragraph 2.45- 2.53

(2) Stock fall (+), stock rise (-).

(3) Coke oven gas and blast furnace gas transfers are for synthetic coke oven gas, see paragraph 2.53.

(4) Total supply minus total demand.

(5) Because of the small number of benzole suppliers, figures for benzole and tars cannot be given separately.

Commodity balances 2001

Manufactured fuels

	Thousand tonnes				GWh		
	Coke oven coke	Coke breeze	Other manuf. solid fuel	Total manuf. solid fuel	Benzole and tars (5)	Coke oven gas	Blast furnace gas
Supply							
Production (1)	5,224	210	487	5,921	2,114	11,516	14,767
Other sources	-	-	-	-	-	-	-
Imports	101	56	8	165	-	-	-
Exports	-174	-145	-75	-395	-	-	-
Marine bunkers	-	-	-	-	-	-	-
Stock change (2)	+120	+7	+37	+165	-	-	-
Transfers (3)	-967	967	-	-	-	68	-3
Total supply	4,305	1,095	457	5,857	2,114	11,584	14,764
Statistical difference (4)	-24	-9	-38	-71	+0	142	-100
Total demand	4,329	1,104	495	5,928	2,114	11,442	14,864
Transformation	3,893	309	-	4,202	-	3,365	6,025
Electricity generation	-	-	-	-	-	1,490	5,493
Major power producers	-	-	-	-	-	-	-
Autogenerators	-	-	-	-	-	1,490	5,493
Heat generation	-	-	-	-	-	1,875	532
Petroleum refineries	-	-	-	-	-	-	-
Coke manufacture	-	9	-	9	-	-	-
Blast furnaces	3,893	300	-	4,193	-	-	-
Patent fuel manufacture	-	-	-	-	-	-	-
Low temperature carbonisation	-	-	-	-	-	-	-
Energy industry use	32	-	12	44	-	6,053	4,709
Electricity generation	-	-	-	-	-	-	-
Oil and gas extraction	-	-	-	-	-	-	-
Petroleum refineries	-	-	-	-	-	-	-
Coal extraction	-	-	-	-	-	-	-
Coke manufacture	-	-	-	-	-	4,720	649
Blast furnaces	-	-	-	-	-	1,333	4,060
Patent fuel manufacture	32	-	12	44	-	-	-
Pumped storage	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-
Losses	-	-	-	-	-	231	965
Final consumption	404	796	483	1,683	2,114	1,794	3,165
Industry	337	796	37	1,169	2,114	1,794	3,165
Unclassified	181	16	37	234	2,114	367	-
Iron and steel	32	780	-	811	-	1,427	3,165
Non-ferrous metals	125	-	-	125	-	-	-
Mineral products	-	-	-	-	-	-	-
Chemicals	-	-	-	-	-	-	-
Mechanical engineering, etc	-	-	-	-	-	-	-
Electrical engineering, etc	-	-	-	-	-	-	-
Vehicles	-	-	-	-	-	-	-
Food, beverages, etc	-	-	-	-	-	-	-
Textiles, leather, etc	-	-	-	-	-	-	-
Paper, printing, etc	-	-	-	-	-	-	-
Other industries	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-
Transport	-	-	-	-	-	-	-
Other	67	-	446	513	-	-	-
Domestic	67	-	446	513	-	-	-
Public administration	-	-	-	-	-	-	-
Commercial	-	-	-	-	-	-	-
Agriculture	-	-	-	-	-	-	-
Miscellaneous	-	-	-	-	-	-	-
Non energy use	-	-	-	-	-	-	-

(1) See paragraph 2.45- 2.53

(2) Stock fall (+), stock rise (-).

(3) Coke oven gas and blast furnace gas transfers are for synthetic coke oven gas, see paragraph 2.53.

(4) Total supply minus total demand.

(5) Because of the small number of benzole suppliers, figures for benzole and tars cannot be given separately.

Commodity balances 2000

Manufactured fuels

	Thousand tonnes				GWh		
	Coke oven coke	Coke breeze	Other manuf. solid fuel	Total manuf. solid fuel	Benzole and tars (5)	Coke oven gas	Blast furnace gas
Supply							
Production (1)	6,058	148	537	6,743	2,393	12,661	17,743
Other sources	-	-	-	-	-	-	-
Imports	421	62	14	497	-	-	-
Exports	-243	-138	-79	-460	-	-	-
Marine bunkers	-	-	-	-	-	-	-
Stock change (2)	-216	+22	+38	-156	-	-	-
Transfers (3)	-827	+827	-	-	-	+460	-17
Total supply	5,193	921	510	6,624	2,393	13,121	17,726
Statistical difference (4)	-108	-112	-23	-243	+0	-264	-103
Total demand	5,300	1,033	532	6,865	2,393	13,385	17,829
Transformation	4,764	202	-	4,966	-	3,797	9,089
Electricity generation	-	-	-	-	-	1,987	8,470
Major power producers	-	-	-	-	-	-	-
Autogenerators	-	-	-	-	-	1,987	8,470
Heat generation	-	-	-	-	-	1,810	619
Petroleum refineries	-	-	-	-	-	-	-
Coke manufacture	-	14	-	14	-	-	-
Blast furnaces	4,764	188	-	4,952	-	-	-
Patent fuel manufacture	-	-	-	-	-	-	-
Low temperature carbonisation	-	-	-	-	-	-	-
Energy industry use	37	-	11	48	-	6,748	6,034
Electricity generation	-	-	-	-	-	-	-
Oil and gas extraction	-	-	-	-	-	-	-
Petroleum refineries	-	-	-	-	-	-	-
Coal extraction	-	-	-	-	-	-	-
Coke manufacture	-	-	-	-	-	5,555	1,057
Blast furnaces	-	-	-	-	-	1,193	4,977
Patent fuel manufacture	37	-	11	48	-	-	-
Pumped storage	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-
Losses	-	-	-	-	-	325	1,592
Final consumption	499	831	521	1,852	2,393	2,514	1,114
Industry	367	831	25	1,223	2,393	2,514	1,114
Unclassified	188	38	25	251	2,393	200	-
Iron and steel	19	793	-	812	-	2,315	1,114
Non-ferrous metals	160	-	-	160	-	-	-
Mineral products	-	-	-	-	-	-	-
Chemicals	-	-	-	-	-	-	-
Mechanical engineering, etc	-	-	-	-	-	-	-
Electrical engineering, etc	-	-	-	-	-	-	-
Vehicles	-	-	-	-	-	-	-
Food, beverages, etc	-	-	-	-	-	-	-
Textiles, leather, etc	-	-	-	-	-	-	-
Paper, printing, etc	-	-	-	-	-	-	-
Other industries	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-
Transport	-	-	-	-	-	-	-
Other	133	-	496	629	-	-	-
Domestic	133	-	496	629	-	-	-
Public administration	-	-	-	-	-	-	-
Commercial	-	-	-	-	-	-	-
Agriculture	-	-	-	-	-	-	-
Miscellaneous	-	-	-	-	-	-	-
Non energy use	-	-	-	-	-	-	-

(1) See paragraph 2.45- 2.53

(2) Stock fall (+), stock rise (-).

(3) Coke oven gas and blast furnace gas transfers are for synthetic coke oven gas, see paragraph 2.53.

(4) Total supply minus total demand.

(5) Because of the small number of benzole suppliers, figures for benzole and tars cannot be given separately.

Commodity balances 1999

Manufactured fuels

	Thousand tonnes				GWh		
	Coke oven coke	Coke breeze	Other manuf. solid fuel	Total manuf. solid fuel	Benzole and tars (5)	Coke oven gas	Blast furnace gas
Supply							
Production (1)	5,837	33	635	6,505	2,343	12,090	19,023
Other sources	-	-	-	-	-	-	-
Imports	389	40	6	435	-	-	-
Exports	-79	-165	-54	-298	-	-	-
Marine bunkers	-	-	-	-	-	-	-
Stock change (2)	+290	-40	-7	+243	-	-	-
Transfers (3)	-951	+1,035	-	+84	-	+528	-22
Total supply	5,486	903	580	6,969	2,343	12,618	19,001
Statistical difference (4)	-154	-206	-5	-365	+0	-210	-142
Total demand	5,640	1,109	585	7,334	2,343	12,828	19,143
Transformation	5,113	189	-	5,302	-	3,748	9,585
Electricity generation	-	-	-	-	-	1,999	8,476
Major power producers	-	-	-	-	-	-	-
Autogenerators	-	-	-	-	-	1,999	8,476
Heat generation	-	-	-	-	-	1,749	1,109
Petroleum refineries	-	-	-	-	-	-	-
Coke manufacture	-	24	-	24	-	-	-
Blast furnaces	5,113	165	-	5,278	-	-	-
Patent fuel manufacture	-	-	-	-	-	-	-
Low temperature carbonisation	-	-	-	-	-	-	-
Energy industry use	20	-	13	33	-	6,522	6,219
Electricity generation	-	-	-	-	-	-	-
Oil and gas extraction	-	-	-	-	-	-	-
Petroleum refineries	-	-	-	-	-	-	-
Coal extraction	-	-	-	-	-	-	-
Coke manufacture	-	-	-	-	-	5,283	1,083
Blast furnaces	-	-	-	-	-	1,239	5,136
Patent fuel manufacture	20	-	13	33	-	-	-
Pumped storage	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-
Losses	-	-	-	-	-	173	1,723
Final consumption	507	920	572	1,999	2,343	2,385	1,616
Industry	386	920	18	1,324	2,343	2,385	1,616
Unclassified	226	33	18	277	580	72	-
Iron and steel	17	887	-	904	1,763	2,313	1,616
Non-ferrous metals	143	-	-	143	-	-	-
Mineral products	-	-	-	-	-	-	-
Chemicals	-	-	-	-	-	-	-
Mechanical engineering, etc	-	-	-	-	-	-	-
Electrical engineering, etc	-	-	-	-	-	-	-
Vehicles	-	-	-	-	-	-	-
Food, beverages, etc	-	-	-	-	-	-	-
Textiles, leather, etc	-	-	-	-	-	-	-
Paper, printing, etc	-	-	-	-	-	-	-
Other industries	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-
Transport	-	-	-	-	-	-	-
Other	121	-	554	675	-	-	-
Domestic	121	-	554	675	-	-	-
Public administration	-	-	-	-	-	-	-
Commercial	-	-	-	-	-	-	-
Agriculture	-	-	-	-	-	-	-
Miscellaneous	-	-	-	-	-	-	-
Non energy use	-	-	-	-	-	-	-

(1) See paragraph 2.45- 2.53

(2) Stock fall (+), stock rise (-).

(3) Coke oven gas and blast furnace gas transfers are for synthetic coke oven gas, see paragraph 2.53.

(4) Total supply minus total demand.

(5) Because of the small number of benzole suppliers, figures for benzole and tars cannot be given separately.

Commodity balances 1998

Manufactured fuels

	Thousand tonnes				GWh		
	Coke oven coke	Coke breeze	Other manuf. solid fuel	Total manuf. solid fuel	Benzole and tars (5)	Coke oven gas	Blast furnace gas
Supply							
Production (1)	6,178	37	616	6,831	2,542	13,126	20,114
Other sources	-	-	-	-	-	-	-
Imports	753	78	10	841	-	-	-
Exports	-93	-196	-56	-345	-	-	-
Marine bunkers	-	-	-	-	-	-	-
Stock change (2)	-314	+42	+87	-185	-	-	-
Transfers (3)	-1,223	+1,163	-	-60	-	+630	-22
Total supply	5,301	1,124	657	7,082	2,542	13,756	20,092
Statistical difference (4)	-131	-66	+13	-184	+0	+127	+291
Total demand	5,432	1,190	644	7,266	2,542	13,629	20,059
Transformation	4,908	287	-	5,195	-	1,963	8,512
Electricity generation	-	-	-	-	-	1,963	8,512
Major power producers	-	-	-	-	-	-	-
Autogenerators	-	-	-	-	-	1,963	8,512
Petroleum refineries	-	-	-	-	-	-	-
Coke manufacture	-	-	-	-	-	-	-
Blast furnaces	-	50	-	50	-	-	-
Patent fuel manufacture	4,908	237	-	5,145	-	-	-
Low temperature carbonisation	-	-	-	-	-	-	-
Energy industry use	27	-	14	41	-	6,855	6,578
Electricity generation	-	-	-	-	-	-	-
Oil and gas extraction	-	-	-	-	-	-	-
Petroleum refineries	-	-	-	-	-	-	-
Coal extraction	-	-	-	-	-	-	-
Coke manufacture	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	5,690	1,085
Patent fuel manufacture	27	-	14	41	-	1,165	5,493
Pumped storage	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-
Losses	-	-	-	-	-	-	-
Final consumption	497	903	630	2,030	2,542	335	1,474
Industry	377	903	32	1,312	2,542	4,476	3,237
Unclassified	220	81	32	333	617	4,476	3,237
Iron and steel	23	822	-	845	1,925	116	-
Non-ferrous metals	134	-	-	134	-	4,360	3,237
Mineral products	-	-	-	-	-	-	-
Chemicals	-	-	-	-	-	-	-
Mechanical engineering, etc	-	-	-	-	-	-	-
Electrical engineering, etc	-	-	-	-	-	-	-
Vehicles	-	-	-	-	-	-	-
Food, beverages, etc	-	-	-	-	-	-	-
Textiles, leather, etc	-	-	-	-	-	-	-
Paper, printing, etc	-	-	-	-	-	-	-
Other industries	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-
Transport	-	-	-	-	-	-	-
Other	120	-	598	718	-	-	-
Domestic	120	-	598	718	-	-	-
Public administration	-	-	-	-	-	-	-
Commercial	-	-	-	-	-	-	-
Agriculture	-	-	-	-	-	-	-
Miscellaneous	-	-	-	-	-	-	-
Non energy use	-	-	-	-	-	-	-

(1) See paragraph 2.45- 2.53

(2) Stock fall (+), stock rise (-).

(3) Coke oven gas and blast furnace gas transfers are for synthetic coke oven gas, see paragraph 2.53.

(4) Total supply minus total demand.

(5) Because of the small number of benzole suppliers, figures for benzole and tars cannot be given separately.

Commodity balances 2008⁽¹⁾

Primary oil

Thousand tonnes

	Crude oil	Ethane	Propane	Butane	Condensate	Total NGL	Feedstock	Total primary oil
Supply								
Production	65,497	1,202	1,953	1,439	1,574	6,168	-	71,665
Other sources	-	-	-	-	-	-	-	-
Imports	51,466	180	223	124	122	649	7,926	60,041
Exports	-41,504	-12	-1,369	-683	-975	-3,039	-3,858	-48,401
Marine bunkers	-	-	-	-	-	-	-	-
Stock change (2)	+261	..	..	..	..	+59	-86	+234
Transfers	-	-1,328	-727	-433	-312	-2,800	208	-2,592
Total supply	75,720	..	..	..	..	1,037	4,190	80,947
Statistical difference (3)(4)	-124	..	..	..	..	+60	272	208
Total demand (4)	75,844	..	..	..	..	978	3,918	80,740
Transformation (4)	75,844	..	..	..	..	978	3,918	80,740
Electricity generation	-	-	-	-	-	-	-	-
Major power producers	-	-	-	-	-	-	-	-
Autogenerators	-	-	-	-	-	-	-	-
Heat generation	-	-	-	-	-	-	-	-
Petroleum refineries	75,844	..	..	..	..	978	3,918	80,740
Coke manufacture	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-
Patent fuel manufacture	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-
Energy industry use	-	-	-	-	-	-	-	-
Electricity generation	-	-	-	-	-	-	-	-
Oil & gas extraction	-	-	-	-	-	-	-	-
Petroleum refineries	-	-	-	-	-	-	-	-
Coal extraction	-	-	-	-	-	-	-	-
Coke manufacture	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-
Patent fuel manufacture	-	-	-	-	-	-	-	-
Pumped storage	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-
Losses	-	-	-	-	-	-	-	-

(1) As there is no use made of primary oils and feedstocks by industries other than the oil and gas extraction and petroleum refining industries, other industry headings have not been included in this table. As such, this table is a summary of the activity of what is known as the Upstream oil industry.

(2) Stock fall (+), stock rise (-).

(3) Total supply minus total demand.

(4) Figures for total demand for the individual NGLs (and thus for the statistical differences as well) are not available.

Commodity balances 2007⁽¹⁾

Primary oil

Thousand tonnes

	Crude oil	Ethane	Propane	Butane	Condensate	Total NGL	Feedstock	Total primary oil
Supply								
Production	70,357	1,153	1,796	1,412	1,858	6,218	-	76,575
Other sources	-	-	-	-	-	-	-	-
Imports	49,893	62	84	50	61	257	7,206	57,357
Exports	-45,129	-13	-836	-548	-1,186	-2,584	-3,287	-50,999
Marine bunkers	-	-	-	-	-	-	-	-
Stock change (2)	+650	..	..	..	..	+9	+125	+784
Transfers	-	-1,203	-861	-362	-328	-2,754	+547	-2,207
Total supply	75,772	..	..	..	..	1,146	4,591	81,509
Statistical difference (3)(4)	+66	..	..	..	..	-6	-28	32
Total demand (4)	75,707	..	..	..	..	1,152	4,619	81,477
Transformation (4)	75,707	..	..	..	..	1,152	4,619	81,477
Electricity generation	-	-	-	-	-	-	-	-
Major power producers	-	-	-	-	-	-	-	-
Autogenerators	-	-	-	-	-	-	-	-
Heat generation	-	-	-	-	-	-	-	-
Petroleum refineries	75,707	..	..	..	..	1,152	4,619	81,477
Coke manufacture	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-
Patent fuel manufacture	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-
Energy industry use	-	-	-	-	-	-	-	-
Electricity generation	-	-	-	-	-	-	-	-
Oil & gas extraction	-	-	-	-	-	-	-	-
Petroleum refineries	-	-	-	-	-	-	-	-
Coal extraction	-	-	-	-	-	-	-	-
Coke manufacture	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-
Patent fuel manufacture	-	-	-	-	-	-	-	-
Pumped storage	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-
Losses	-	-	-	-	-	-	-	-

(1) As there is no use made of primary oils and feedstocks by industries other than the oil and gas extraction and petroleum refining industries, other industry headings have not been included in this table. As such, this table is a summary of the activity of what is known as the Upstream oil industry.

(2) Stock fall (+), stock rise (-).

(3) Total supply minus total demand.

(4) Figures for total demand for the individual NGLs (and thus for the statistical differences as well) are not available.

Commodity balances 2006⁽¹⁾

Primary oil

Thousand tonnes

	Crude oil	Ethane	Propane	Butane	Condensate	Total NGL	Feedstock	Total primary oil
Supply								
Production	69,665	1,281	1,947	1,542	2,143	6,913	-	76,578
Other sources	-	-	-	-	-	-	-	-
Imports	51,446	-	-	-	-	-	7,997	59,443
Exports	-44,923	-17	-891	-488	-1,232	-2,628	-2,643	-50,195
Marine bunkers	-	-	-	-	-	-	-	-
Stock change (2)	-354	..	..	..	..	-79	+78	-355
Transfers	-	-1,264	-848	-484	-427	-3,024	+683	-2,341
Total supply	75,834	..	..	..	..	1,182	6,115	83,130
Statistical difference (3)(4)	-10	..	..	..	..	+12	-85	-83
Total demand (4)	75,844	..	..	..	..	1,169	6,200	83,213
Transformation (4)	75,844	..	..	..	..	1,169	6,200	83,213
Electricity generation	-	-	-	-	-	-	-	-
Major power producers	-	-	-	-	-	-	-	-
Autogenerators	-	-	-	-	-	-	-	-
Heat generation	-	-	-	-	-	-	-	-
Petroleum refineries	75,844	..	..	..	..	1,169	6,200	83,213
Coke manufacture	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-
Patent fuel manufacture	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-
Energy industry use	-	-	-	-	-	-	-	-
Electricity generation	-	-	-	-	-	-	-	-
Oil & gas extraction	-	-	-	-	-	-	-	-
Petroleum refineries	-	-	-	-	-	-	-	-
Coal extraction	-	-	-	-	-	-	-	-
Coke manufacture	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-
Patent fuel manufacture	-	-	-	-	-	-	-	-
Pumped storage	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-
Losses	-	-	-	-	-	-	-	-

(1) As there is no use made of primary oils and feedstocks by industries other than the oil and gas extraction and petroleum refining industries, other industry headings have not been included in this table. As such, this table is a summary of the activity of what is known as the Upstream oil industry.

(2) Stock fall (+), stock rise (-).

(3) Total supply minus total demand.

(4) Figures for total demand for the individual NGLs (and thus for the statistical differences as well) are not available.

Commodity balances 2005⁽¹⁾

Primary oil

Thousand tonnes

	Crude oil	Ethane	Propane	Butane	Condensate	Total NGL	Feedstock	Total primary oil
Supply								
Production	77,179	1,414	2,181	1,648	2,300	7,543	-	84,721
Other sources	-	-	-	-	-	-	-	-
Imports	52,210	-	-	-	-	-	6,675	58,885
Exports	-48,879	-14	-1,204	-760	-1,249	-3,227	-1,992	-54,099
Marine bunkers	-	-	-	-	-	-	-	-
Stock change (2)	-277	..	..	..	..	+73	-180	-385
Transfers	-	-1,398	-857	-500	-632	-3,387	+332	-3,054
Total supply	80,233	..	..	..	..	1,001	4,835	86,069
Statistical difference (3)(4)	+12	..	..	..	..	+8	-85	-65
Total demand (4)	80,221	..	..	..	..	993	4,920	86,134
Transformation (4)	80,221	..	..	..	..	993	4,920	86,134
Electricity generation	-	-	-	-	-	-	-	-
Major power producers	-	-	-	-	-	-	-	-
Autogenerators	-	-	-	-	-	-	-	-
Heat generation	-	-	-	-	-	-	-	-
Petroleum refineries	80,221	..	..	..	..	993	4,920	86,134
Coke manufacture	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-
Patent fuel manufacture	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-
Energy industry use	-	-	-	-	-	-	-	-
Electricity generation	-	-	-	-	-	-	-	-
Oil & gas extraction	-	-	-	-	-	-	-	-
Petroleum refineries	-	-	-	-	-	-	-	-
Coal extraction	-	-	-	-	-	-	-	-
Coke manufacture	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-
Patent fuel manufacture	-	-	-	-	-	-	-	-
Pumped storage	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-
Losses	-	-	-	-	-	-	-	-

(1) As there is no use made of primary oils and feedstocks by industries other than the oil and gas extraction and petroleum refining industries, other industry headings have not been included in this table. As such, this table is a summary of the activity of what is known as the Upstream oil industry.

(2) Stock fall (+), stock rise (-).

(3) Total supply minus total demand.

(4) Figures for total demand for the individual NGLs (and thus for the statistical differences as well) are not available.

Commodity balances 2004⁽¹⁾

Primary oil

Thousand tonnes

	Crude oil	Ethane	Propane	Butane	Condensate	Total NGL	Feedstock	Total primary oil
Supply								
Production	87,516	1,473	2,441	1,863	2,081	7,858	-	95,374
Other sources	-	-	-	-	-	-	-	-
Imports	55,858	-	-	-	-	-	6,659	62,517
Exports	-60,724	-10	-1,265	-639	-774	-2,688	-1,091	-64,504
Marine bunkers	-	-	-	-	-	-	-	-
Stock change (2)	-136	..	..	..	..	-53	+55	-133
Transfers	-	-1,417	-828	-645	-835	-3,724	+181	-3,543
Total supply	82,514	..	..	..	..	1,392	5,804	89,710
Statistical difference (3)(4)	+341	..	..	..	..	+35	-487	-110
Total demand (4)	82,173	..	..	..	..	1,357	6,291	89,821
Transformation (4)								
Transformation (4)	82,173	..	..	..	..	1,357	6,291	89,821
Electricity generation	-	-	-	-	-	-	-	-
Major power producers	-	-	-	-	-	-	-	-
Autogenerators	-	-	-	-	-	-	-	-
Heat generation	-	-	-	-	-	-	-	-
Petroleum refineries	82,173	..	..	..	..	1,357	6,291	89,821
Coke manufacture	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-
Patent fuel manufacture	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-
Energy industry use								
Electricity generation	-	-	-	-	-	-	-	-
Oil & gas extraction	-	-	-	-	-	-	-	-
Petroleum refineries	-	-	-	-	-	-	-	-
Coal extraction	-	-	-	-	-	-	-	-
Coke manufacture	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-
Patent fuel manufacture	-	-	-	-	-	-	-	-
Pumped storage	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-
Losses								
Losses	-	-	-	-	-	-	-	-

(1) As there is no use made of primary oils and feedstocks by industries other than the oil and gas extraction and petroleum refining industries, other industry headings have not been included in this table. As such, this table is a summary of the activity of what is known as the Upstream oil industry.

(2) Stock fall (+), stock rise (-).

(3) Total supply minus total demand.

(4) Figures for total demand for the individual NGLs (and thus for the statistical differences as well) are not available.

Commodity balances 2003⁽¹⁾

Primary oil

Thousand tonnes

	Crude oil	Ethane	Propane	Butane	Condensate	Total NGL	Feedstock	Total primary oil
Supply								
Production	97,835	1,531	2,578	1,999	2,130	8,238	-	106,073
Other sources	-	-	-	-	-	-	-	-
Imports	48,589	-	-	-	-	-	5,588	54,177
Exports	-68,823	-24	-1,785	-917	-978	-3,703	-2,372	-74,898
Marine bunkers	-	-	-	-	-	-	-	-
Stock change (2)	+486	..	..	..	..	-5	-11	+469
Transfers	-	-1,509	-628	-524	-	-2,661	+1,653	-1,008
Total supply	78,086	..	..	..	..	1,869	4,859	84,814
Statistical difference (3)(4)	+778	..	..	..	..	+596	-1,145	+229
Total demand (4)	77,309	..	..	..	..	1,273	6,004	84,585
Transformation (4)								
Transformation (4)	77,309	..	..	..	..	1,273	6,004	84,585
Electricity generation	-	-	-	-	-	-	-	-
Major power producers	-	-	-	-	-	-	-	-
Autogenerators	-	-	-	-	-	-	-	-
Heat generation	-	-	-	-	-	-	-	-
Petroleum refineries	77,309	..	..	..	..	1,273	6,004	84,585
Coke manufacture	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-
Patent fuel manufacture	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-
Energy industry use								
Electricity generation	-	-	-	-	-	-	-	-
Oil & gas extraction	-	-	-	-	-	-	-	-
Petroleum refineries	-	-	-	-	-	-	-	-
Coal extraction	-	-	-	-	-	-	-	-
Coke manufacture	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-
Patent fuel manufacture	-	-	-	-	-	-	-	-
Pumped storage	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-
Losses								
Losses	-	-	-	-	-	-	-	-

(1) As there is no use made of primary oils and feedstocks by industries other than the oil and gas extraction and petroleum refining industries, other industry headings have not been included in this table. As such, this table is a summary of the activity of what is known as the Upstream oil industry.

(2) Stock fall (+), stock rise (-).

(3) Total supply minus total demand.

(4) Figures for total demand for the individual NGLs (and thus for the statistical differences as well) are not available.

Commodity balances 2002⁽¹⁾

Primary oil

Thousand tonnes

	Crude oil	Ethane	Propane	Butane	Condensate	Total NGL	Feedstock	Total primary oil
Supply								
Production	107,430	1,596	2,728	2,071	2,118	8,514	-	115,944
Other sources	-	-	-	-	-	-	-	-
Imports	52,042	-	-	-	-	-	4,926	56,968
Exports	-81,198	-10	-1,909	-888	-1,022	-3,830	-2,116	-87,144
Marine bunkers	-	-	-	-	-	-	-	-
Stock change (2)	+33	..	..	..	..	+34	+75	+143
Transfers	-	-1,578	-670	-1,046	-	-3,294	+1,739	-1,555
Total supply	78,306	..	..	..	..	1,424	4,625	84,356
Statistical difference (3)(4)	+506	..	..	..	..	-143	-791	-428
Total demand (4)	77,801	..	..	..	..	1,567	5,416	84,784
Transformation (4)								
Transformation (4)	77,801	..	..	..	..	1,567	5,416	84,784
Electricity generation	-	-	-	-	-	-	-	-
Major power producers	-	-	-	-	-	-	-	-
Autogenerators	-	-	-	-	-	-	-	-
Heat generation	-	-	-	-	-	-	-	-
Petroleum refineries	77,801	..	..	..	..	1,567	5,416	84,784
Coke manufacture	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-
Patent fuel manufacture	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-
Energy industry use								
Electricity generation	-	-	-	-	-	-	-	-
Oil & gas extraction	-	-	-	-	-	-	-	-
Petroleum refineries	-	-	-	-	-	-	-	-
Coal extraction	-	-	-	-	-	-	-	-
Coke manufacture	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-
Patent fuel manufacture	-	-	-	-	-	-	-	-
Pumped storage	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-
Losses								
Losses	-	-	-	-	-	-	-	-

(1) As there is no use made of primary oils and feedstocks by industries other than the oil and gas extraction and petroleum refining industries, other industry headings have not been included in this table. As such, this table is a summary of the activity of what is known as the Upstream oil industry.

(2) Stock fall (+), stock rise (-).

(3) Total supply minus total demand.

(4) Figures for total demand for the individual NGLs (and thus for the statistical differences as well) are not available.

Commodity balances 2001⁽¹⁾

Primary oil

Thousand tonnes

	Crude oil	Ethane	Propane	Butane	Condensate	Total NGL	Feedstock	Total primary oil
Supply								
Production	108,387	1,599	2,718	1,962	2,012	8,292	-	116,678
Other sources	-	-	-	-	-	-	-	-
Imports	48,992	-	-	-	-	-	4,559	53,551
Exports	-80,919	-11	-1,748	-961	-802	-3,522	-2,489	-86,930
Marine bunkers	-	-	-	-	-	-	-	-
Stock change (2)	-1,045	..	..	..	..	+17	+414	-614
Transfers	-	-1,587	-967	-1,020	-	-3,575	+4,328	+753
Total supply	75,415	..	..	..	..	1,212	6,812	83,438
Statistical difference (3)(4)	-495	..	..	..	..	-322	+913	+96
Total demand (4)	75,910	..	..	..	..	1,534	5,899	83,343
Transformation (4)								
Transformation (4)	75,910	..	..	..	..	1,534	5,899	83,343
Electricity generation	-	-	-	-	-	-	-	-
Major power producers	-	-	-	-	-	-	-	-
Autogenerators	-	-	-	-	-	-	-	-
Heat generation	-	-	-	-	-	-	-	-
Petroleum refineries	75,910	..	..	..	..	1,534	5,899	83,343
Coke manufacture	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-
Patent fuel manufacture	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-
Energy industry use								
Electricity generation	-	-	-	-	-	-	-	-
Oil & gas extraction (2)(5)	-	-	-	-	-	-	-	-
Petroleum refineries	-	-	-	-	-	-	-	-
Coal extraction	-	-	-	-	-	-	-	-
Coke manufacture	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-
Patent fuel manufacture	-	-	-	-	-	-	-	-
Pumped storage	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-
Losses								
Losses	-	-	-	-	-	-	-	-

(1) As there is no use made of primary oils and feedstocks by industries other than the oil and gas extraction and petroleum refining industries, other industry headings have not been included in this table. As such, this table is a summary of the activity of what is known as the Upstream oil industry.

(2) Stock fall (+), stock rise (-).

(3) Total supply minus total demand.

(4) Figures for total demand for the individual NGLs (and thus for the statistical differences as well) are not available.

Commodity balances 2000⁽¹⁾

Primary oil

Thousand tonnes

	Crude oil	Ethane	Propane	Butane	Condensate	Total NGL	Feedstock	Total primary oil
Supply								
Production	117,882	1,884	2,725	1,783	1,971	8,363	-	126,245
Other sources	-	-	-	-	-	-	-	-
Imports	48,868	-	-	-	-	-	5,519	54,386
Exports	-86,533	-18	-1,810	-942	-779	-3,549	-2,836	-92,917
Marine bunkers	-	-	-	-	-	-	-	-
Stock change (2)	+1,171	..	..	..	..	-17	-56	+1,098
Transfers	-	-1,411	-977	-995	-	-3,383	+3,493	+110
Total supply	81,389	..	..	..	..	1,413	6,120	88,922
Statistical difference (3)(4)	+698	..	..	..	..	-565	+480	+613
Total demand (4)	80,691	..	..	..	..	1,978	5,640	88,308
Transformation (4)	80,691	..	..	..	..	1,683	5,640	88,013
Electricity generation	-	-	-	-	-	-	-	-
Major power producers	-	-	-	-	-	-	-	-
Autogenerators	-	-	-	-	-	-	-	-
Heat generation	-	-	-	-	-	-	-	-
Petroleum refineries	80,691	..	..	..	..	1,683	5,640	88,013
Coke manufacture	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-
Patent fuel manufacture	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-
Energy industry use	-	294	1	-	-	295	-	295
Electricity generation	-	-	-	-	-	-	-	-
Oil & gas extraction (5)	-	294	1	-	-	295	-	295
Petroleum refineries	-	-	-	-	-	-	-	-
Coal extraction	-	-	-	-	-	-	-	-
Coke manufacture	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-
Patent fuel manufacture	-	-	-	-	-	-	-	-
Pumped storage	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-
Losses	-	-	-	-	-	-	-	-

(1) As there is no use made of primary oils and feedstocks by industries other than the oil and gas extraction and petroleum refining industries, other industry headings have not been included in this table. As such, this table is a summary of the activity of what is known as the Upstream oil industry.

(2) Stock fall (+), stock rise (-).

(3) Total supply minus total demand.

(4) Figures for total demand for the individual NGLs (and thus for the statistical differences as well) are not available.

Commodity balances 1999⁽¹⁾

Primary oil

Thousand tonnes

	Crude oil	Ethane	Propane	Butane	Condensate	Total NGL	Feedstock	Total primary oil
Supply								
Production	128,262	2,022	2,853	2,005	1,957	8,837	-	137,099
Other sources	-	-	-	-	-	-	-	-
Imports	39,321	-	-	-	-	-	5,548	44,869
Exports	-85,052	-36	-1,980	-1,154	-700	-3,870	-2,875	-91,797
Marine bunkers	-	-	-	-	-	-	-	-
Stock change (2)	-347	..	..	..	..	+17	+132	-198
Transfers	-	-1,527	-865	-931	-	-3,323	+2,105	-1,218
Total supply	82,184	..	..	..	..	1,661	4,910	88,755
Statistical difference (3)(4)	+636	..	..	..	..	+42	-532	+146
Total demand (4)	81,548	..	..	..	..	1,619	5,442	88,609
Transformation (4)								
Transformation (4)	81,548	..	..	..	..	1,296	5,442	88,286
Electricity generation	-	-	-	-	-	-	-	-
Major power producers	-	-	-	-	-	-	-	-
Autogenerators	-	-	-	-	-	-	-	-
Heat generation	-	-	-	-	-	-	-	-
Petroleum refineries	81,548	..	..	..	..	1,296	5,442	88,286
Coke manufacture	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-
Patent fuel manufacture	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-
Energy industry use	-	316	7	-	-	323	-	323
Electricity generation	-	-	-	-	-	-	-	-
Oil & gas extraction (5)	-	316	7	-	-	323	-	323
Petroleum refineries	-	-	-	-	-	-	-	-
Coal extraction	-	-	-	-	-	-	-	-
Coke manufacture	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-
Patent fuel manufacture	-	-	-	-	-	-	-	-
Pumped storage	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-
Losses	-	-	-	-	-	-	-	-

(1) As there is no use made of primary oils and feedstocks by industries other than the oil and gas extraction and petroleum refining industries, other industry headings have not been included in this table. As such, this table is a summary of the activity of what is known as the Upstream oil industry.

(2) Stock fall (+), stock rise (-).

(3) Total supply minus total demand.

(4) Figures for total demand for the individual NGLs (and thus for the statistical differences as well) are not available.

Commodity balances 1998⁽¹⁾

Primary oil

Thousand tonnes

	Crude oil	Ethane	Propane	Butane	Condensate	Total NGL	Feedstock	Total primary oil
Supply								
Production	124,222	1,646	3,031	2,000	1,734	8,411	-	132,633
Other sources	-	-	-	-	-	-	-	-
Imports	39,460	-	-	-	-	-	8,498	47,958
Exports	-79,651	-40	-1,842	-856	-640	-3,378	-1,581	-84,610
Marine bunkers	-	-	-	-	-	-	-	-
Stock change (2)	-622	..	..	..	..	-29	+58	-593
Transfers	-	-1,215	-1,071	-1,171	-	-3,457	+1,255	-2,202
Total supply	83,409	..	..	..	..	1,547	8,230	93,186
Statistical difference (3)(4)	-1,101	..	..	..	..	-163	+300	-964
Total demand (4)	84,510	..	..	..	..	1,710	7,930	94,150
Transformation (4)								
Transformation (4)	84,510	..	..	..	..	1,357	7,930	93,797
Electricity generation	-	-	-	-	-	-	-	-
Major power producers	-	-	-	-	-	-	-	-
Autogenerators	-	-	-	-	-	-	-	-
Petroleum refineries	84,510	..	..	..	..	1,357	7,930	93,797
Coke manufacture	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-
Patent fuel manufacture	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-
Energy industry use	-	301	39	13	-	353	-	353
Electricity generation	-	-	-	-	-	-	-	-
Oil & gas extraction (4)	-	301	39	13	-	353	-	353
Oil & gas extraction (5)	-	-	-	-	-	-	-	-
Coal extraction	-	-	-	-	-	-	-	-
Coke manufacture	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-
Patent fuel manufacture	-	-	-	-	-	-	-	-
Pumped storage	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-
Losses	-	-	-	-	-	-	-	-

- (1) As there is no use made of primary oils and feedstocks by industries other than the oil and gas extraction and
 (1) As there is no use made of primary oils and feedstocks by industries other than the oil and gas extraction and
 petroleum refining industries, other industry headings have not been included in this table. As such, this table is a
 summary of the activity of what is known as the Upstream oil industry.
 (2) Stock fall (+), stock rise (-).
 (3) Total supply minus total demand.
 (4) Figures for total demand for the individual NGLs (and thus for the statistical differences as well) are not available.

Commodity balances 2008

Petroleum products

Thousand tonnes

	Ethane	Propane	Butane	Other gases	Naphtha	Aviation spirit	Motor spirit	White Spirit & SBP	Aviation turbine fuel
Supply									
Production	-	1,612	636	2,980	1,863	0	20,319	55	6,549
Other sources	1,328	727	433	-	312	-	-	-	-
Imports	12	260	548	-	634	22	3,302	92	8,035
Exports	-	-565	-495	-	-2,066	-2	-7,017	-4	-1,908
Marine bunkers	-	-	-	-	-	-	-	-	-
Stock change (2)	-	0	80	0	76	1	5r	5	-154
Transfers	-	-	-54	0	-4	1	17	-0	-300
Total supply	1,340	2,034	1,149	2,980	814	22	16,626r	148	12,222
Statistical difference (3)	12	25	-21	-24	-4	-8	85r	-0	6
Total demand	1,328	2,008	1,169	3,005	818	30	16,542r	148	12,216
Transformation	-	5	-	343	-	-	-	-	-
Electricity generation	-	-	-	343	-	-	-	-	-
Major power producers	-	-	-	-	-	-	-	-	-
Autogenerators	-	-	-	343	-	-	-	-	-
Heat generation	-	5	-	-	-	-	-	-	-
Petroleum refineries	-	-	-	-	-	-	-	-	-
Coke manufacture	-	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-	-
Patent fuel manufacture	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Energy industry use	-	-	-	2,532	-	-	-	-	-
Electricity generation	-	-	-	-	-	-	-	-	-
Oil & gas extraction	-	-	-	-	-	-	-	-	-
Petroleum refineries	-	-	-	2,532	-	-	-	-	-
Coal extraction	-	-	-	-	-	-	-	-	-
Coke manufacture	-	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-	-
Patent fuel manufacture	-	-	-	-	-	-	-	-	-
Pumped storage	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Losses	-	-	-	-	-	-	-	-	-
Final consumption	1,328	2,004	1,169	130	818	30	16,542r	148	12,216
Industry	-	356	312	-	-	-	-	-	-
Unclassified	-	356	312	-	-	-	-	-	-
Iron & steel	-	-	-	-	-	-	-	-	-
Non-ferrous metals	-	-	-	-	-	-	-	-	-
Mineral products	-	-	-	-	-	-	-	-	-
Chemicals	-	-	-	-	-	-	-	-	-
Mechanical engineering, etc	-	-	-	-	-	-	-	-	-
Electrical engineering, etc	-	-	-	-	-	-	-	-	-
Vehicles	-	-	-	-	-	-	-	-	-
Food, beverages, etc	-	-	-	-	-	-	-	-	-
Textiles, leather, etc	-	-	-	-	-	-	-	-	-
Paper, printing etc	-	-	-	-	-	-	-	-	-
Other industries	-	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	-	-
Transport	-	125	-	-	-	30	16,542r	-	12,216
Air	-	-	-	-	-	30	-	-	12,216
Rail	-	-	-	-	-	-	-	-	-
Road	-	125	-	-	-	-	16,542r	-	-
National navigation	-	-	-	-	-	-	-	-	-
Pipelines	-	-	-	-	-	-	-	-	-
Other	-	401	33	-	-	-	-	-	-
Domestic	-	297	33	-	-	-	-	-	-
Public administration	-	-	-	-	-	-	-	-	-
Commercial	-	-	-	-	-	-	-	-	-
Agriculture	-	104	-	-	-	-	-	-	-
Miscellaneous	-	-	-	-	-	-	-	-	-
Non energy use (4)	1,328	1,121	825	130	818	-	-	148	-

(1) Includes marine diesel oil.

(2) Stock fall (+), stock rise (-).

(3) Total supply minus total demand.

Commodity balances 2008 (continued)

Petroleum products

Thousand tonnes

Burning oil	DERV	Gas Oil ⁽¹⁾	Fuel oils	Lubri-cants	Bitu-men	Petroleum coke	Misc. products	Total Products	
Supply									
3,092	16,194	10,566	11,349	514	1,485	2,029	1,182	80,425	Production
-	-	-	-	-	-	-	-	2,800	Other sources
528	6,777	855	1,215	452	422	883	150	24,186	Imports
-213	-2,362	-4,884	-7,304	-399	-195	-608	-769	-28,791	Exports
-	-	-680	-1,915	-	-	-	-	-2,594	Marine bunkers
5	-115	110	150	-40	-7	-7	14	123r	Stock change (2)
288	72	-60	-186	-12	5	-	25	-208	Transfers
3,699	20,567	5,907	3,309	516	1,710	2,296	602	75,942r	Total supply
6	66r	-60	1	2	-30	10	7	72r	Statistical difference (3)
3,693	20,501r	5,967	3,308	514	1,741	2,286	596	75,870r	Total demand
Transformation									
-	-	59	1,128	-	-	309r	-	1,845r	Electricity generation
-	-	54	868	-	-	309r	-	1,575r	Major power producers
-	-	50	790	-	-	309r	-	1,149r	Autogenerators
-	-	4	78	-	-	-	-	426	Heat generation
-	-	5	52	-	-	-	-	62	Petroleum refineries
-	-	-	-	-	-	-	-	-	Coke manufacture
-	-	-	-	-	-	-	-	-	Blast furnaces
-	-	-	208	-	-	-	-	208	Patent fuel manufacture
-	-	-	-	-	-	-	-	-	Other
-	-	472	853	-	-	1,367	-	5,223	Energy industry use
-	-	-	-	-	-	-	-	-	Electricity generation
-	-	472	-	-	-	-	-	472	Oil & gas extraction
-	-	-	853	-	-	1,367	-	4,752	Petroleum refineries
-	-	-	-	-	-	-	-	-	Coal extraction
-	-	-	-	-	-	-	-	-	Coke manufacture
-	-	-	-	-	-	-	-	-	Blast furnaces
-	-	-	-	-	-	-	-	-	Patent fuel manufacture
-	-	-	-	-	-	-	-	-	Pumped storage
-	-	-	-	-	-	-	-	-	Other
-	-	-	-	-	-	-	-	-	Losses
3,693	20,501r	5,436	1,327	514	1,741	610	596	68,801r	Final Consumption
1,449	-	2,452r	499	-	-	-	-	5,068r	Industry
1,449	-	-	-	-	-	-	-	2,117	Unclassified
-	-	-	60	-	-	-	-	60	Iron & steel
-	-	19	25	-	-	-	-	44	Non-ferrous metals
-	-	158	49	-	-	-	-	207	Mineral products
-	-	96	68	-	-	-	-	165	Chemicals
-	-	72	19	-	-	-	-	91	Mechanical engineering etc
-	-	35	8	-	-	-	-	43	Electrical engineering etc
-	-	86	22	-	-	-	-	107	Vehicles
-	-	218	54	-	-	-	-	272	Food, beverages etc
-	-	86	10	-	-	-	-	96	Textiles, leather, etc
-	-	30	31	-	-	-	-	61	Paper, printing etc
-	-	1,524r	134	-	-	-	-	1,658r	Other industries
-	-	128	19	-	-	-	-	147	Construction
-	20,501r	1,610	644	-	-	-	-	51,667r	Transport
-	-	-	-	-	-	-	-	12,246	Air
-	-	604r	-	-	-	-	-	604r	Rail
-	20,501r	-	-	-	-	-	-	37,167r	Road
-	-	1,005	644	-	-	-	-	1,649	National navigation
-	-	-	-	-	-	-	-	-	Pipelines
2,244	-	1,173	183	-	-	-	-	4,035	Other
2,236	-	164	-	-	-	-	-	2,730	Domestic
4	-	362	71	-	-	-	-	437	Public administration
-	-	295	77	-	-	-	-	372	Commercial
4	-	140	24	-	-	-	-	272	Agriculture
-	-	212	11	-	-	-	-	223	Miscellaneous
-	-	201	-	514	1,741	610r	596	8,032r	Non energy use (4)

Commodity balances 2007

Petroleum products

Thousand tonnes

	Ethane	Propane	Butane	Other gases	Naphtha	Aviation spirit	Motor spirit	White Spirit & SBP	Aviation turbine fuel
Supply									
Production	-	1,697	601	2,737	2,561	0	21,313	70	6,176
Other sources	1,203	861	362	-	328	-	-	-	-
Imports	-	386	473	8	1,713	21	3,495r	107	7,708
Exports	-0	-979	-578	-	-3,014	-4	-7,331	-7	-1,221
Marine bunkers	-	-	-	-	-	-	-	-	-
Stock change (2)	2	11	111	0	69	5	106	2	182
Transfers	-	-0	-40	8	14	8	60	-1	-338
Total supply	1,204	1,976	929	2,752	1,671	30	17,643r	171	12,507
Statistical difference (3)	8	22	17	-86	64	-3	28r	4	-67
Total demand	1,197	1,955	911	2,838	1,608	33	17,615r	167	12,574
Transformation	-	4	-	251	-	-	-	-	-
Electricity generation	-	-	-	251	-	-	-	-	-
Major power producers	-	-	-	-	-	-	-	-	-
Autogenerators	-	-	-	251	-	-	-	-	-
Heat generation	-	4	-	-	-	-	-	-	-
Petroleum refineries	-	-	-	-	-	-	-	-	-
Coke manufacture	-	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-	-
Patent fuel manufacture	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Energy industry use	-	39	-	2,220	-	-	-	-	-
Electricity generation	-	-	-	-	-	-	-	-	-
Oil & gas extraction	-	-	-	-	-	-	-	-	-
Petroleum refineries	-	39	-	2,220	-	-	-	-	-
Coal extraction	-	-	-	-	-	-	-	-	-
Coke manufacture	-	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-	-
Patent fuel manufacture	-	-	-	-	-	-	-	-	-
Pumped storage	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Losses	-	-	-	-	-	-	-	-	-
Final consumption	1,197	1,912	911	367	1,608	33	17,615r	167	12,574
Industry	49	660	194	-	-	-	-	-	-
Unclassified	49	660	194	-	-	-	-	-	-
Iron & steel	-	-	-	-	-	-	-	-	-
Non-ferrous metals	-	-	-	-	-	-	-	-	-
Mineral products	-	-	-	-	-	-	-	-	-
Chemicals	-	-	-	-	-	-	-	-	-
Mechanical engineering, etc	-	-	-	-	-	-	-	-	-
Electrical engineering, etc	-	-	-	-	-	-	-	-	-
Vehicles	-	-	-	-	-	-	-	-	-
Food, beverages, etc	-	-	-	-	-	-	-	-	-
Textiles, leather, etc	-	-	-	-	-	-	-	-	-
Paper, printing etc	-	-	-	-	-	-	-	-	-
Other industries	-	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	-	-
Transport	-	119	-	-	-	33	17,615r	-	12,574
Air	-	-	-	-	-	33	-	-	12,574
Rail	-	-	-	-	-	-	-	-	-
Road	-	119	-	-	-	-	17,615r	-	-
National navigation	-	-	-	-	-	-	-	-	-
Pipelines	-	-	-	-	-	-	-	-	-
Other	-	323	26	-	-	-	-	-	-
Domestic	-	225	26	-	-	-	-	-	-
Public administration	-	-	-	-	-	-	-	-	-
Commercial	-	-	-	-	-	-	-	-	-
Agriculture	-	98	-	-	-	-	-	-	-
Miscellaneous	-	-	-	-	-	-	-	-	-
Non energy use (4)	1,148	811	691	367	1,608	-	-	167	-

(1) Includes marine diesel oil.

(2) Stock fall (+), stock rise (-).

(3) Total supply minus total demand.

Commodity balances 2007 (continued)

Petroleum products

Thousand tonnes

Burning oil	DERV	Gas Oil ⁽¹⁾	Fuel oils	Lubri-cants	Bitu-men	Petroleum coke	Misc. products	Total Products	
Supply									
2,968	16,138r	10,165	11,452	547	1,628	2,074	1,058	81,184r	Production
-	-	-	-	-	-	-	-	2,754	Other sources
551	6,571r	1,388	1,141	375	477	485	210	25,110r	Imports
-356	-1,357r	-5,160	-7,739	-194	-532	-613	-898	-29,983r	Exports
-	-	-901	-1,471	-	-	-	-	-2,371	Marine bunkers
33	195	267	137	-47	26	-4	-23	1,073	Stock change (2)
363	-254	14	-419	33	9	-0	-3	-547	Transfers
3,560	21,293r	5,773	3,102	715	1,607	1,942	344	77,220r	Total supply
-68	255r	-344r	-126	43	44	0	6	-204r	Statistical difference (3)
3,628	21,038r	6,117r	3,228	672	1,563	1,942	338	77,424r	Total demand
Transformation									
-	-	70	884	-	-	178	-	1,388	Electricity generation
-	-	65	631	-	-	178	-	1,126	Major power producers
-	-	51	492	-	-	178	-	721	Autogenerators
-	-	14	140	-	-	-	-	405	Heat generation
-	-	5	52	-	-	-	-	61	Petroleum refineries
-	-	-	-	-	-	-	-	-	Coke manufacture
-	-	-	201	-	-	-	-	201	Blast furnaces
-	-	-	-	-	-	-	-	-	Patent fuel manufacture
-	-	-	-	-	-	-	-	-	Other
-	-	405r	1,019	-	-	1,398	-	5,080	Energy industry use
-	-	-	-	-	-	-	-	-	Electricity generation
-	-	404	-	-	-	-	-	404	Oil & gas extraction
-	-	-	1,019	-	-	1,398	-	4,676	Petroleum refineries
-	-	-	-	-	-	-	-	-	Coal extraction
-	-	-	-	-	-	-	-	-	Coke manufacture
-	-	-	-	-	-	-	-	-	Blast furnaces
-	-	-	-	-	-	-	-	-	Patent fuel manufacture
-	-	-	-	-	-	-	-	-	Pumped storage
-	-	-	-	-	-	-	-	-	Other
-	-	-	-	-	-	-	-	-	Losses
3,628	21,038r	5,642r	1,325	672	1,563	366	338	70,956	Final Consumption
1,434	-	2,557r	639	-	-	-	-	5,534r	Industry
1,434	-	-	-	-	-	-	-	2,337	Unclassified
-	-	-	64	-	-	-	-	64	Iron & steel
-	-	20	25	-	-	-	-	46	Non-ferrous metals
-	-	180	41	-	-	-	-	221	Mineral products
-	-	104	76	-	-	-	-	180	Chemicals
-	-	81	18	-	-	-	-	99	Mechanical engineering etc
-	-	25	8	-	-	-	-	33	Electrical engineering etc
-	-	91	23	-	-	-	-	114	Vehicles
-	-	208	55	-	-	-	-	263	Food, beverages etc
-	-	100	10	-	-	-	-	110	Textiles, leather, etc
-	-	30	32	-	-	-	-	62	Paper, printing etc
-	-	1,583r	265	-	-	-	-	1,849r	Other industries
-	-	135	21	-	-	-	-	156	Construction
-	21,038r	1,537r	569	-	-	-	-	53,485r	Transport
-	-	-	-	-	-	-	-	12,607	Air
-	-	594r	-	-	-	-	-	594r	Rail
-	21,038r	-	-	-	-	-	-	38,772r	Road
-	-	942	569	-	-	-	-	1,511	National navigation
-	-	-	-	-	-	-	-	-	Pipelines
2,194	-	1,310	117	-	-	-	-	3,970	Other
2,170	-	173	-	-	-	-	-	2,594	Domestic
12	-	393	45	-	-	-	-	450	Public administration
-	-	323	55	-	-	-	-	378	Commercial
12	-	143	10	-	-	-	-	262	Agriculture
-	-	278	7	-	-	-	-	286	Miscellaneous
-	-	238	-	672	1,563	366	338	7,967	Non energy use (4)

Commodity balances 2006

Petroleum products

Thousand tonnes

	Ethane	Propane	Butane	Other gases	Naphtha	Aviation spirit	Motor spirit	White Spirit & SBP	Aviation turbine fuel
Supply									
Production	0	1,737	406	3,102	2,734	25	21,443	107	6,261
Other sources	1,264	848	484	-	427	-	-	-	-
Imports	12	275	545	0	2,003	16	3,799r	82	7,983
Exports	-13	-683	-463	-	-2,925	-3	-6,933r	-2	-995
Marine bunkers	-	-	-	-	-	-	-	-	-
Stock change (2)	-2	-1	-39	0	-32r	-6	-29	-27	-256
Transfers	-	-	-26	-	67	15	15	-	-404
Total supply	1,262	2,176	906	3,103	2,275r	47	18,295r	159	12,589
Statistical difference (3)	5	-39	-44	-2	-3r	2	204r	3	-52
Total demand	1,257	2,215	950	3,105	2,278	46	18,091r	156	12,641
Transformation	-	4	-	206	-	-	-	-	-
Electricity generation	-	-	-	206	-	-	-	-	-
Major power producers	-	-	-	-	-	-	-	-	-
Autogenerators	-	-	-	206	-	-	-	-	-
Heat generation	-	4	-	-	-	-	-	-	-
Petroleum refineries	-	-	-	-	-	-	-	-	-
Coke manufacture	-	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-	-
Patent fuel manufacture	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Energy industry use	-	38	-	2,441	-	-	-	-	-
Electricity generation	-	-	-	-	-	-	-	-	-
Oil & gas extraction	-	-	-	-	-	-	-	-	-
Petroleum refineries	-	38	-	2,441	-	-	-	-	-
Coal extraction	-	-	-	-	-	-	-	-	-
Coke manufacture	-	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-	-
Patent fuel manufacture	-	-	-	-	-	-	-	-	-
Pumped storage	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Losses	-	-	-	-	-	-	-	-	-
Final consumption	1,257	2,173	950	457	2,278	46	18,091r	156	12,641
Industry	66	667	179	-	-	-	-	-	-
Unclassified	66	667	179	-	-	-	-	-	-
Iron & steel	-	-	-	-	-	-	-	-	-
Non-ferrous metals	-	-	-	-	-	-	-	-	-
Mineral products	-	-	-	-	-	-	-	-	-
Chemicals	-	-	-	-	-	-	-	-	-
Mechanical engineering, etc	-	-	-	-	-	-	-	-	-
Electrical engineering, etc	-	-	-	-	-	-	-	-	-
Vehicles	-	-	-	-	-	-	-	-	-
Food, beverages, etc	-	-	-	-	-	-	-	-	-
Textiles, leather, etc	-	-	-	-	-	-	-	-	-
Paper, printing etc	-	-	-	-	-	-	-	-	-
Other industries	-	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	-	-
Transport	-	126	-	-	-	46	18,091r	-	12,641
Air	-	-	-	-	-	46	-	-	12,641
Rail	-	-	-	-	-	-	-	-	-
Road	-	126	-	-	-	-	18,091r	-	-
National navigation	-	-	-	-	-	-	-	-	-
Pipelines	-	-	-	-	-	-	-	-	-
Other	-	386	34	-	-	-	-	-	-
Domestic	-	281	34	-	-	-	-	-	-
Public administration	-	-	-	-	-	-	-	-	-
Commercial	-	-	-	-	-	-	-	-	-
Agriculture	-	105	-0	-	-	-	-	-	-
Miscellaneous	-	-	-	-	-	-	-	-	-
Non energy use (4)	1,191	994	737	457	2,278	-	-	156	-

(1) Includes marine diesel oil.

(2) Stock fall (+), stock rise (-).

(3) Total supply minus total demand.

Commodity balances 2006 (continued)

Petroleum products

Thousand tonnes

Burning oil	DERV	Gas Oil ⁽¹⁾	Fuel oils	Lubri-cants	Bitu-men	Petroleum coke	Misc. products	Total Products	
Supply									
3,374	15,821	10,259	12,277	617	1,749	1,964	964	82,839	Production
-	-	-	-	-	-	-	-	3,024	Other sources
670	7,125	938	1,332	505	404	869	277	26,836	Imports
-314	-1,130	-4,690	-8,368	-401	-628	-559	-839	-28,945	Exports
-	-	-1,035	-1,313	-	-	-	-	-2,348	Marine bunkers
-105	-201	-82	-146r	25	11	-15	49r	-856	Stock change (2)
403	-	-205	-573	-1	22	-	4	-683	Transfers
4,028r	21,615	5,185	3,209r	745	1,558	2,260	455r	79,866r	Total supply
12r	1,454r	-1,384	-39r	32	-52	-23	18r	93r	Statistical difference (3)
4,016r	20,161r	6,569	3,248r	713	1,610	2,283	437r	79,774r	Total demand
Transformation									
-	-	115	1,205	-	-	-	-	1,530	Electricity generation
-	-	110	922	-	-	-	-	1,238	Major power producers
-	-	87	723	-	-	-	-	810	Autogenerators
-	-	22	200	-	-	-	-	428	Heat generation
-	-	6	53	-	-	-	-	62	Petroleum refineries
-	-	-	-	-	-	-	-	-	Coke manufacture
-	-	-	230	-	-	-	-	230	Blast furnaces
-	-	-	-	-	-	-	-	-	Patent fuel manufacture
-	-	-	-	-	-	-	-	-	Other
-	-	473	997	-	-	1,358	-	5,307	Energy industry use
-	-	-	-	-	-	-	-	-	Electricity generation
-	-	430	-	-	-	-	-	430	Oil & gas extraction
-	-	44	997	-	-	1,358	-	4,878	Petroleum refineries
-	-	-	-	-	-	-	-	-	Coal extraction
-	-	-	-	-	-	-	-	-	Coke manufacture
-	-	-	-	-	-	-	-	-	Blast furnaces
-	-	-	-	-	-	-	-	-	Patent fuel manufacture
-	-	-	-	-	-	-	-	-	Pumped storage
-	-	-	-	-	-	-	-	-	Other
-	-	-	-	-	-	-	-	-	Losses
4,016	20,161r	5,980	1,046	713	1,610	925	437r	72,936r	Final Consumption
Industry									
1,552	-	2,629	427	-	-	-	-	5,521	Unclassified
1,552	-	-	-	-	-	-	-	2,465r	Iron & steel
-	-	0	19	-	-	-	-	19	Non-ferrous metals
-	-	22	28	-	-	-	-	50	Mineral products
-	-	183	1	-	-	-	-	184	Chemicals
-	-	105	72	-	-	-	-	176	Mechanical engineering etc
-	-	81	18	-	-	-	-	98	Electrical engineering etc
-	-	70	9	-	-	-	-	78	Vehicles
-	-	92	22	-	-	-	-	115	Food, beverages etc
-	-	219	42	-	-	-	-	261	Textiles, leather, etc
-	-	110	11	-	-	-	-	121	Paper, printing etc
-	-	23	33	-	-	-	-	56	Other industries
-	-	1,584	154	-	-	-	-	1,738r	Construction
-	-	141	19	-	-	-	-	161	Transport
-	20,161r	1,765	504	-	-	-	-	53,333r	Air
-	-	-	-	-	-	-	-	12,686	Rail
-	-	580	-	-	-	-	-	580	Road
-	20,161r	-	-	-	-	-	-	38,378r	National navigation
-	-	1,185	504	-	-	-	-	1,689	Pipelines
-	-	-	-	-	-	-	-	-	Other
2,464	-	1,328	114	-	-	-	-	4,326	Domestic
2,440	-	171	-	-	-	-	-	2,927	Public administration
12	-	394	46	-	-	-	-	452	Commercial
-	-	314	50	-	-	-	-	364	Agriculture
12	-	145	10	-	-	-	-	272	Miscellaneous
-	-	304	9	-	-	-	-	312	
-	-	259	-	713	1,610	925	437r	9,756	Non energy use (4)

Commodity balances 2005

Petroleum products

Thousand tonnes

	Ethane	Propane	Butane	Other gases	Naphtha	Aviation spirit	Motor spirit	White Spirit & SBP	Aviation turbine fuel
Supply									
Production	5	1,704	518	2,996	3,023	32	22,604	136	5,167
Other sources	1,398	857	500	-	632	-	-	-	-
Imports	-	281	502	137	1,380	13	2,310	224	9,083
Exports	-	-748	-550	-	-3,167	-3	-6,586	-63	-1,397
Marine bunkers	-	-	-	-	-	-	-	-	-
Stock change (2)	6r	66r	49r	1	284r	-2	410r	-2r	96
Transfers	0	-5	2	-3	32	14	-4	3	-343
Total supply	1,409r	2,154r	1,021r	3,130	2,186r	53	18,734r	298r	12,606
Statistical difference (3)	-50r	-127r	-50r	-6	266r	1	-118r	13r	109r
Total demand	1,459	2,282	1,071	3,136	1,919	52	18,852r	284	12,497
Transformation	-	4	-	182	-	-	-	-	-
Electricity generation	-	-	-	182	-	-	-	-	-
Major power producers	-	-	-	-	-	-	-	-	-
Autogenerators	-	-	-	182	-	-	-	-	-
Heat generation	-	4	-	-	-	-	-	-	-
Petroleum refineries	-	-	-	-	-	-	-	-	-
Coke manufacture	-	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-	-
Patent fuel manufacture	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Energy industry use	5	38	-	2,569	3	-	-	-	-
Electricity generation	-	-	-	-	-	-	-	-	-
Oil & gas extraction	-	-	-	-	-	-	-	-	-
Petroleum refineries	5	38	-	2,569	3	-	-	-	-
Coal extraction	-	-	-	-	-	-	-	-	-
Coke manufacture	-	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-	-
Patent fuel manufacture	-	-	-	-	-	-	-	-	-
Pumped storage	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Losses	-	-	-	-	-	-	-	-	-
Final consumption	1,454	2,240	1,071	384	1,916	52	18,852r	284	12,497
Industry	71	628	161	-	-	-	-	-	-
Unclassified	71	628	161	-	-	-	-	-	-
Iron & steel	-	-	-	-	-	-	-	-	-
Non-ferrous metals	-	-	-	-	-	-	-	-	-
Mineral products	-	-	-	-	-	-	-	-	-
Chemicals	-	-	-	-	-	-	-	-	-
Mechanical engineering, etc	-	-	-	-	-	-	-	-	-
Electrical engineering, etc	-	-	-	-	-	-	-	-	-
Vehicles	-	-	-	-	-	-	-	-	-
Food, beverages, etc	-	-	-	-	-	-	-	-	-
Textiles, leather, etc	-	-	-	-	-	-	-	-	-
Paper, printing etc	-	-	-	-	-	-	-	-	-
Other industries	-	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	-	-
Transport	-	120	-	-	-	52	18,852r	-	12,497
Air	-	-	-	-	-	52	-	-	12,497
Rail	-	-	-	-	-	-	-	-	-
Road	-	120	-	-	-	-	18,852r	-	-
National navigation	-	-	-	-	-	-	-	-	-
Pipelines	-	-	-	-	-	-	-	-	-
Other	-	404	9	-	-	-	-	-	-
Domestic	-	289	9	-	-	-	-	-	-
Public administration	-	-	-	-	-	-	-	-	-
Commercial	-	-	-	-	-	-	-	-	-
Agriculture	-	115	-	-	-	-	-	-	-
Miscellaneous	-	-	-	-	-	-	-	-	-
Non energy use (4)	1,383	1,088	901	384	1,916	-	-	284	-

(1) Includes marine diesel oil.

(2) Stock fall (+), stock rise (-).

(3) Total supply minus total demand.

Commodity balances 2005 (continued)

Petroleum products

Thousand tonnes

Burning oil	DERV	Gas Oil ⁽¹⁾	Fuel oils	Lubri-cants	Bitu-men	Petroleum coke	Misc. products	Total Products	
Supply									
3,325	19,056	9,635	11,728	936	1,912	1,867	1,103	85,747	Production
-	-	-	-	-	-	-	-	3,387	Other sources
407	3,146	1,809	1,530	424	216	947	70	22,481	Imports
-282	-1,935	-4,379	-8,452	-709	-242	-570	-638	-29,722	Exports
-	-	-889	-1,166	-	-	-	-	-2,055	Marine bunkers
44r	-2	390r	266r	77r	51r	174r	29r	1,937r	Stock change (2)
333	-39	-224	-92	-2	24	-	-30	-334	Transfers
3,827r	20,227r	6,343r	3,813r	727r	1,961r	2,417r	533r	81,440	Total supply
-42r	850r	-582r	34r	-23r	55r	168r	-22r	476r	Statistical difference (3)
3,869r	19,377r	6,924r	3,779	750	1,906	2,249	556	80,963r	Total demand
Transformation									
-	-	105	1,310	-	-	-	-	1,601	Electricity generation
-	-	99	987	-	-	-	-	1,268	Major power producers
-	-	60	732	-	-	-	-	793	Autogenerators
-	-	39	254	-	-	-	-	475	Heat generation
-	-	6	52	-	-	-	-	62	Petroleum refineries
-	-	-	-	-	-	-	-	-	Coke manufacture
-	-	-	271	-	-	-	-	271	Blast furnaces
-	-	-	-	-	-	-	-	-	Patent fuel manufacture
-	-	-	-	-	-	-	-	-	Other
-	-	681	1,573	-	-	1,207	-	6,076	Energy industry use
-	-	-	-	-	-	-	-	-	Electricity generation
-	-	475	-	-	-	-	-	475	Oil & gas extraction
-	-	206	1,573	-	-	1,207	-	5,601	Petroleum refineries
-	-	-	-	-	-	-	-	-	Coal extraction
-	-	-	-	-	-	-	-	-	Coke manufacture
-	-	-	-	-	-	-	-	-	Blast furnaces
-	-	-	-	-	-	-	-	-	Patent fuel manufacture
-	-	-	-	-	-	-	-	-	Pumped storage
-	-	-	-	-	-	-	-	-	Other
-	-	-	-	-	-	-	-	-	Losses
3,869	19,377	6,138	897	750	1,906	1,042	556	73,286	Final Consumption
Industry									
1,502	-	2,887	441	-	-	-	-	5,690	Unclassified
1,502	-	-	-	-	-	-	-	2,361	Iron & steel
-	-	0	16	-	-	-	-	16	Non-ferrous metals
-	-	28	23	-	-	-	-	50	Mineral products
-	-	199	3	-	-	-	-	202	Chemicals
-	-	109	82	-	-	-	-	191	Mechanical engineering etc
-	-	90	20	-	-	-	-	110	Electrical engineering etc
-	-	26	7	-	-	-	-	34	Vehicles
-	-	109	21	-	-	-	-	130	Food, beverages etc
-	-	259	44	-	-	-	-	303	Textiles, leather, etc
-	-	93	10	-	-	-	-	103	Paper, printing etc
-	-	54	32	-	-	-	-	86	Other industries
-	-	1,760	168	-	-	-	-	1,928	Construction
-	-	159	16	-	-	-	-	175	Air
-	19,377r	1,501r	355	-	-	-	-	52,755r	Rail
-	-	-	-	-	-	-	-	12,549	Road
-	19,377r	581r	-	-	-	-	-	581r	National navigation
-	-	-	-	-	-	-	-	38,350r	Pipelines
-	-	920	355	-	-	-	-	1,274	Other
-	-	-	-	-	-	-	-	-	Domestic
2,368	-	1,522	101	-	-	-	-	4,403	Public administration
2,344	-	141	-	-	-	-	-	2,783	Commercial
12	-	444	43	-	-	-	-	499	Agriculture
-	-	315	43	-	-	-	-	358	Miscellaneous
12	-	208	5	-	-	-	-	340	
-	-	413	10	-	-	-	-	423	
-	-	229	-	750	1,906	1,042	556	10,439	Non energy use (4)

Commodity balances 2004

Petroleum products

Thousand tonnes

	Ethane	Propane	Butane	Other gases	Naphtha	Aviation spirit	Motor spirit	White Spirit & SBP	Aviation turbine fuel
Supply									
Production	15	1,794	376	3,012	3,176	31	24,589	100	5,615
Other sources	1,417	828	645	-	835	-	-	-	-
Imports	-	245	245	34	871	19	2,175	210	7,658
Exports	-	-621	-411	-	-2,940	-8	-7,334	-62	-983
Marine bunkers	-	-	-	-	-	-	-	-	-
Stock change (2)	-	-15	-19	0	-109	1	-40	2	-112
Transfers	-	-37	42	-1	79	0	-11	23	-345
Total supply	1,432	2,193	879	3,045	1,911	44	19,380	273	11,834
Statistical difference (3)	-7	-26	-36	59	-125	-6	-105	-8	197
Total demand	1,439	2,219	914	2,986	2,036	49	19,484	281	11,637
Transformation	-	-	-	181	-	-	-	-	-
Electricity generation	-	-	-	181	-	-	-	-	-
Major power producers	-	-	-	-	-	-	-	-	-
Autogenerators	-	-	-	181	-	-	-	-	-
Heat generation	-	-	-	-	-	-	-	-	-
Petroleum refineries	-	-	-	-	-	-	-	-	-
Coke manufacture	-	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-	-
Patent fuel manufacture	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Energy industry use	15	19	-	2,492	7	-	-	-	-
Electricity generation	-	-	-	-	-	-	-	-	-
Oil & gas extraction	-	-	-	-	-	-	-	-	-
Petroleum refineries	15	19	-	2,492	7	-	-	-	-
Coal extraction	-	-	-	-	-	-	-	-	-
Coke manufacture	-	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-	-
Patent fuel manufacture	-	-	-	-	-	-	-	-	-
Pumped storage	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Losses	-	-	-	-	-	-	-	-	-
Final consumption	1,424	2,200	914	313	2,029	49	19,484	281	11,637
Industry	76	592	190	-	-	-	-	-	-
Unclassified	76	592	190	-	-	-	-	-	-
Iron & steel	-	-	-	-	-	-	-	-	-
Non-ferrous metals	-	-	-	-	-	-	-	-	-
Mineral products	-	-	-	-	-	-	-	-	-
Chemicals	-	-	-	-	-	-	-	-	-
Mechanical engineering, etc	-	-	-	-	-	-	-	-	-
Electrical engineering, etc	-	-	-	-	-	-	-	-	-
Vehicles	-	-	-	-	-	-	-	-	-
Food, beverages, etc	-	-	-	-	-	-	-	-	-
Textiles, leather, etc	-	-	-	-	-	-	-	-	-
Paper, printing etc	-	-	-	-	-	-	-	-	-
Other industries	-	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	-	-
Transport	-	112	-	-	-	49	19,484	-	11,637
Air	-	-	-	-	-	49	-	-	11,637
Rail	-	-	-	-	-	-	-	-	-
Road	-	112	-	-	-	-	19,484	-	-
National navigation	-	-	-	-	-	-	-	-	-
Pipelines	-	-	-	-	-	-	-	-	-
Other	-	391	45	-	-	-	-	-	-
Domestic	-	285	45	-	-	-	-	-	-
Public administration	-	-	-	-	-	-	-	-	-
Commercial	-	-	-	-	-	-	-	-	-
Agriculture	-	106	-	-	-	-	-	-	-
Miscellaneous	-	-	-	-	-	-	-	-	-
Non energy use (4)	1,348	1,106	680	313	2,029	-	-	281	-

(1) Includes marine diesel oil.

(2) Stock fall (+), stock rise (-).

(3) Total supply minus total demand.

Commodity balances 2004 (continued)

Petroleum products

Thousand tonnes

Burning oil	Gas/Diesel Oil ¹	Fuel oils	Lubri-cants	Bitu-men	Petroleum coke	Misc. products	Total Products	
3,613	28,839	12,988	1,136	2,196	1,645	702	89,828	Supply
-	-	-	-	-	-	-	3,724	Production
360	4,216	612	530	227	1,081	61	18,545	Other sources
-413	-6,623	-8,936	-750	-336	-598	-480	-30,495	Imports
-	-1,073	-1,012	-	-	-	-	-2,085	Exports
-58	-268	-46	-14	-11	31	368	-289	Marine bunkers
413	-393	-19	-3	22	-	27	-203	Stock change (2)
3,915	24,698	3,586	900	2,098	2,160	678	79,025	Transfers
-35	-38	-157	-15	108	2	151	-41	Total supply
3,950	24,736	3,743	914	1,991	2,157	527	79,066	Statistical difference (3)
-	82	694	-	-	-	-	958	Total demand
-	67	345	-	-	-	-	593	Transformation
-	11	136	-	-	-	-	147	Electricity generation
-	56	209	-	-	-	-	446	Major power producers
-	16	52	-	-	-	-	68	Autogenerators
-	-	-	-	-	-	-	-	Heat generation
-	-	-	-	-	-	-	-	Petroleum refineries
-	-	-	-	-	-	-	-	Coke manufacture
-	-	297	-	-	-	-	297	Blast furnaces
-	-	-	-	-	-	-	-	Patent fuel manufacture
-	-	-	-	-	-	-	-	Other
-	192	1,681	-	-	1,012	-	5,419	Energy industry use
-	-	-	-	-	-	-	-	Electricity generation
-	-	-	-	-	-	-	-	Oil & gas extraction
-	192	1,680	-	-	1,012	-	5,417	Petroleum refineries
-	-	-	-	-	-	-	-	Coal extraction
-	-	1	-	-	-	-	1	Coke manufacture
-	-	-	-	-	-	-	-	Blast furnaces
-	-	-	-	-	-	-	-	Patent fuel manufacture
-	-	-	-	-	-	-	-	Pumped storage
-	-	-	-	-	-	-	-	Other
-	-	-	-	-	-	-	-	Losses
3,950	24,462	1,368	914	1,991	1,146	527	72,690	Final Consumption
1,465	3,008	971	-	-	-	-	6,303	Industry
1,465	-	-	-	-	-	-	2,324	Unclassified
-	2	31	-	-	-	-	33	Iron & steel
-	27	23	-	-	-	-	49	Non-ferrous metals
-	171	15	-	-	-	-	186	Mineral products
-	116	73	-	-	-	-	189	Chemicals
-	90	18	-	-	-	-	108	Mechanical engineering etc
-	22	13	-	-	-	-	35	Electrical engineering etc
-	79	22	-	-	-	-	101	Vehicles
-	261	58	-	-	-	-	319	Food, beverages etc
-	58	10	-	-	-	-	68	Textiles, leather, etc
-	27	28	-	-	-	-	55	Paper, printing etc
-	2,012	680	-	-	-	-	2,692	Other industries
-	143	-	-	-	-	-	143	Construction
12	19,988	266	-	-	-	-	51,549	Transport
-	-	-	-	-	-	-	11,686	Air
12	630	-	-	-	-	-	642	Rail
-	18,514	-	-	-	-	-	38,110	Road
-	844	266	-	-	-	-	1,110	National navigation
-	-	-	-	-	-	-	-	Pipelines
2,472	1,216	130	-	-	-	-	4,254	Other
2,448	160	-	-	-	-	-	2,938	Domestic
12	394	60	-	-	-	-	465	Public administration
-	341	44	-	-	-	-	385	Commercial
12	122	5	-	-	-	-	245	Agriculture
-	200	21	-	-	-	-	221	Miscellaneous
-	249	-	914	1,991	1,146	527	10,584	Non energy use (4)

Commodity balances 2003

Petroleum products

Thousand tonnes

	Ethane	Propane	Butane	Other gases	Naphtha	Aviation spirit	Motor spirit	White Spirit & SBP ⁴	Aviation turbine fuel
Supply									
Production	11	1,620	679	2,891	3,516	26	22,627	104	5,277
Other sources	1,509	628	524	-	-	-	-	-	-
Imports	-	194	172	-	782	12	2,022	34	7,346
Exports	-	-328	-16	-7	-2,461	-5	-5,603	-	-587
Marine bunkers	-	-	-	-	-	-	-	-	-
Stock change (2)	-	+5	+22	+1	-74	-1	-88	+4	-100
Transfers	-9	-254	-703	-196	+742	-1	+454	-0	-1,347
Total supply	1,510	1,865	679	2,688	2,506	31	19,412	141	10,588
Statistical difference (3)	-60	-180	-311	-40	+161	-15	-506	-6	-176
Total demand	1,571	2,046	990	2,728	2,345	46	19,918	147	10,765
Transformation	-	1	-	229	-	-	-	-	-
Electricity generation	-	1	-	229	-	-	-	-	-
Major power producers	-	-	-	-	-	-	-	-	-
Autogenerators	-	1	-	229	-	-	-	-	-
Heat generation	-	-	-	-	-	-	-	-	-
Petroleum refineries	-	-	-	-	-	-	-	-	-
Coke manufacture	-	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-	-
Patent fuel manufacture	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Energy industry use	9	19	-	2,176	13	-	-	-	-
Electricity generation	-	-	-	-	-	-	-	-	-
Oil & gas extraction	-	-	-	-	-	-	-	-	-
Petroleum refineries	9	19	-	2,176	13	-	-	-	-
Coal extraction	-	-	-	-	-	-	-	-	-
Coke manufacture	-	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-	-
Patent fuel manufacture	-	-	-	-	-	-	-	-	-
Pumped storage	-	-	-	-	-	-	-	-	-
Other	-	0	-	-	-	-	-	-	-
Losses	-	-	-	-	-	-	-	-	-
Final consumption	1,562	2,027	990	323	2,332	46	19,918	147	10,765
Industry	75	690	154	-	-	-	-	-	-
Unclassified	75	690	154	-	-	-	-	-	-
Iron & steel	-	-	-	-	-	-	-	-	-
Non-ferrous metals	-	-	-	-	-	-	-	-	-
Mineral products	-	-	-	-	-	-	-	-	-
Chemicals	-	-	-	-	-	-	-	-	-
Mechanical engineering, etc	-	-	-	-	-	-	-	-	-
Electrical engineering, etc	-	-	-	-	-	-	-	-	-
Vehicles	-	-	-	-	-	-	-	-	-
Food, beverages, etc	-	-	-	-	-	-	-	-	-
Textiles, leather, etc	-	-	-	-	-	-	-	-	-
Paper, printing etc	-	-	-	-	-	-	-	-	-
Other industries	-	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	-	-
Transport	-	104	-	-	-	46	19,918	-	10,765
Air	-	-	-	-	-	46	-	-	10,765
Rail	-	-	-	-	-	-	-	-	-
Road	-	104	-	-	-	-	19,918	-	-
National navigation	-	-	-	-	-	-	-	-	-
Pipelines	-	-	-	-	-	-	-	-	-
Other	-	397	48	-	-	-	-	-	-
Domestic	-	294	47	-	-	-	-	-	-
Public administration	-	-	-	-	-	-	-	-	-
Commercial	-	-	-	-	-	-	-	-	-
Agriculture	-	103	-	-	-	-	-	-	-
Miscellaneous	-	-	-	-	-	-	-	-	-
Non energy use (4)	1,487	835	789	323	2,332	-	-	147	-

(1) Includes marine diesel oil.

(2) Stock fall (+), stock rise (-).

(3) Total supply minus total demand.

Commodity balances 2003 (continued)

Petroleum products

Thousand tonnes

Burning oil	Gas/Diesel Oil ⁵	Fuel oils	Lubri-cants	Bitu-men	Petroleum coke	Misc. products	Total Products	
								Supply
3,521	27,579	11,517	576	1,925	1,630	1,030	84,529	Production
-	-	-	-	-	-	-	2,661	Other sources
327	3,503	394	570	249	834	34	16,472	Imports
-556	-5,528	-6,385	-678	-329	-566	-274	-23,323	Exports
-	-897	-867	-	-	-	-	-1,764	Marine bunkers
+36	-27	-3	+46	-9	+17	-90	-262	Stock change (2)
+151	-625	+136	+454	+43	-22	-476	-1,652	Transfers
3,479	24,006	4,792	968	1,879	1,893	224	76,661	Total supply
-90	-231	+1,230	+101	-80	-5	-282	-492	Statistical difference (3)
3,569	24,237	3,562	868	1,959	1,898	506	77,154	Total demand
								Transformation
-	47	639	-	-	-	-	916	Electricity generation
-	29	277	-	-	-	-	536	Major power producers
-	17	83	-	-	-	-	100	Autogenerators
-	12	194	-	-	-	-	436	Heat generation
-	18	133	-	-	-	-	151	Petroleum refineries
-	-	-	-	-	-	-	-	Coke manufacture
-	-	229	-	-	-	-	229	Blast furnaces
-	-	-	-	-	-	-	-	Patent fuel manufacture
-	-	-	-	-	-	-	-	Other
-	200	2,024	-	-	1,018	-	5,458	Energy industry use
-	-	-	-	-	-	-	-	Electricity generation
-	-	-	-	-	-	-	-	Oil & gas extraction
-	199	2,022	-	-	1,018	-	5,456	Petroleum refineries
-	-	-	-	-	-	-	-	Coal extraction
-	-	1	-	-	-	-	1	Coke manufacture
-	0	-	-	-	-	-	0	Blast furnaces
-	-	-	-	-	-	-	-	Patent fuel manufacture
-	-	-	-	-	-	-	-	Pumped storage
-	0	-	-	-	-	-	0	Other
-	-	-	-	-	-	-	-	Losses
3,569	23,990	899	868	1,959	880	506	70,780	Final Consumption
								Industry
1,285	3,359	707	-	-	-	-	6,270	Unclassified
1,285	-	-	-	-	-	-	2,204	Iron & steel
-	1	17	-	-	-	-	19	Non-ferrous metals
-	21	24	-	-	-	-	45	Mineral products
-	206	17	-	-	-	-	223	Chemicals
-	111	73	-	-	-	-	184	Mechanical engineering etc
-	113	27	-	-	-	-	140	Electrical engineering etc
-	13	13	-	-	-	-	26	Vehicles
-	69	24	-	-	-	-	93	Food, beverages etc
-	154	52	-	-	-	-	206	Textiles, leather, etc
-	78	24	-	-	-	-	102	Paper, printing etc
-	21	32	-	-	-	-	53	Other industries
-	2,279	401	-	-	-	-	2,680	Construction
-	293	3	-	-	-	-	295	Transport
12	19,398	50	-	-	-	-	50,292	Air
-	-	-	-	-	-	-	10,810	Rail
12	600	-	-	-	-	-	612	Road
-	17,712	-	-	-	-	-	37,735	National navigation
-	1,085	50	-	-	-	-	1,135	Pipelines
-	-	-	-	-	-	-	-	Other
2,272	947	142	-	-	-	-	3,806	Domestic
2,248	163	6	-	-	-	-	2,759	Public administration
12	283	75	-	-	-	-	370	Commercial
-	258	43	-	-	-	-	301	Agriculture
12	173	4	-	-	-	-	292	Miscellaneous
-	70	14	-	-	-	-	84	
-	287	-	868	1,959	880	506	10,411	Non energy use (4)

Commodity balances 2002

Petroleum products

Thousand tonnes

	Ethane	Propane	Butane	Other gases	Naphtha	Aviation spirit	Motor spirit	White Spirit & SBP ⁴	Aviation turbine fuel
Supply									
Production	50	1,620	529	2,928	3,174	28	22,944	121	5,365
Other sources	1,578	670	1,047	-	-	-	-	-	-
Imports	-	82	110	-	96	9	2,307	45	6,700
Exports	-	-448	-377	-	-2,077	-6	-5,532	-2	-588
Marine bunkers	-	-	-	-	-	-	-	-	-
Stock change (2)	-	+80	-11	-3	+20	-4	+273	+2	+269
Transfers	-83	-259	-483	+42	+743	+3	+499	-	-1,972
Total supply	1,546	1,744	815	2,966	1,956	30	20,490	166	9,773
Statistical difference (3)	-173	-87	+84	+63	+344	-19	-319	+8	-746
Total demand	1,718	1,832	731	2,903	1,612	50	20,808	157	10,519
Transformation	-	-	-	228	-	-	-	-	-
Electricity generation	-	-	-	228	-	-	-	-	-
Major power producers	-	-	-	-	-	-	-	-	-
Autogenerators	-	-	-	228	-	-	-	-	-
Heat generation	-	-	-	-	-	-	-	-	-
Petroleum refineries	-	-	-	-	-	-	-	-	-
Coke manufacture	-	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-	-
Patent fuel manufacture	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Energy industry use	50	10	-	2,390	20	-	-	-	-
Electricity generation	-	-	-	-	-	-	-	-	-
Oil & gas extraction	-	-	-	-	-	-	-	-	-
Petroleum refineries	50	10	-	2,390	20	-	-	-	-
Coal extraction	-	-	-	-	-	-	-	-	-
Coke manufacture	-	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-	-
Patent fuel manufacture	-	-	-	-	-	-	-	-	-
Pumped storage	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Losses	-	-	-	-	-	-	-	-	-
Final consumption	1,668	1,822	731	284	1,592	50	20,808	157	10,519
Industry	72	484	99	-	-	-	-	-	-
Unclassified	72	474	99	-	-	-	-	-	-
Iron & steel	-	10	-	-	-	-	-	-	-
Non-ferrous metals	-	-	-	-	-	-	-	-	-
Mineral products	-	-	-	-	-	-	-	-	-
Chemicals	-	-	-	-	-	-	-	-	-
Mechanical engineering, etc	-	-	-	-	-	-	-	-	-
Electrical engineering, etc	-	-	-	-	-	-	-	-	-
Vehicles	-	-	-	-	-	-	-	-	-
Food, beverages, etc	-	-	-	-	-	-	-	-	-
Textiles, leather, etc	-	-	-	-	-	-	-	-	-
Paper, printing etc	-	-	-	-	-	-	-	-	-
Other industries	-	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	-	-
Transport	-	86	-	-	-	50	20,808	-	10,519
Air	-	-	-	-	-	50	-	-	10,519
Rail	-	-	-	-	-	-	-	-	-
Road	-	86	-	-	-	-	20,808	-	-
National navigation	-	-	-	-	-	-	-	-	-
Pipelines	-	-	-	-	-	-	-	-	-
Other	-	369	48	-	-	-	-	-	-
Domestic	-	271	48	-	-	-	-	-	-
Public administration	-	-	-	-	-	-	-	-	-
Commercial	-	-	-	-	-	-	-	-	-
Agriculture	-	98	-	-	-	-	-	-	-
Miscellaneous	-	-	-	-	-	-	-	-	-
Non energy use	1,597	883	584	284	1,592	-	-	157	-

(1) Includes marine diesel oil.

(2) Stock fall (+), stock rise (-).

(3) Total supply minus total demand.

Commodity balances 2002 (continued)

Petroleum products

Thousand tonnes

Burning oil	Gas/Diesel Oil ⁵	Fuel oils	Lubri-cants	Bitu-men	Petroleum coke	Misc. products	Total Products	
								Supply
3,506	28,393	10,551	509	1,918	1,543	818	83,996	Production
-	-	-	-	-	-	-	3,295	Other sources
299	3,219	558	422	232	790	32	14,900	Imports
-402	-6,352	-5,780	-521	-261	-541	-556	-23,444	Exports
-	-1,144	-769	-	-	-	-	-1,913	Marine bunkers
-8	+194	-32	-16	+24	+16	+423	+1226	Stock change (2)
+150	-722	+235	+442	+50	-1	-383	-1,739	Transfers
3,545	23,588	4,763	836	1,963	1,806	334	76,321	Total supply
-33	+513	+996	+7	-39	-188	-323	+86	Statistical difference (3)
3,578	23,075	3,767	829	2,002	1,995	658	76,233	Total demand
-	52	828	-	-	-	-	1,108	Transformation
-	29	415	-	-	-	-	671	Electricity generation
-	10	108	-	-	-	-	119	Major power producers
-	18	306	-	-	-	-	553	Autogenerators
-	23	227	-	-	-	-	250	Heat generation
-	-	-	-	-	-	-	-	Petroleum refineries
-	-	-	-	-	-	-	-	Coke manufacture
-	-	186	-	-	-	-	186	Blast furnaces
-	-	-	-	-	-	-	-	Patent fuel manufacture
-	-	-	-	-	-	-	-	Other
-	49	2,046	-	-	1,102	11	5,678	Energy industry use
-	-	-	-	-	-	-	-	Electricity generation
-	-	-	-	-	-	-	-	Oil & gas extraction
-	49	2,045	-	-	1,102	11	5,677	Petroleum refineries
-	-	-	-	-	-	-	-	Coal extraction
-	-	-	-	-	-	-	-	Coke manufacture
-	-	1	-	-	-	-	1	Blast furnaces
-	-	-	-	-	-	-	-	Patent fuel manufacture
-	-	-	-	-	-	-	-	Pumped storage
-	-	-	-	-	-	-	-	Other
-	-	-	-	-	-	-	-	Losses
3,578	22,974	893	829	2,002	893	647	69,448	Final Consumption
1,288	3,043	711	-	-	-	-	5,697	Industry
1,288	-	-	-	-	-	-	1,933	Unclassified
-	2	66	-	-	-	-	77	Iron & steel
-	41	34	-	-	-	-	75	Non-ferrous metals
-	213	26	-	-	-	-	239	Mineral products
-	129	85	-	-	-	-	214	Chemicals
-	155	58	-	-	-	-	213	Mechanical engineering etc
-	21	25	-	-	-	-	46	Electrical engineering etc
-	151	32	-	-	-	-	183	Vehicles
-	180	58	-	-	-	-	238	Food, beverages etc
-	79	37	-	-	-	-	116	Textiles, leather, etc
-	35	39	-	-	-	-	74	Paper, printing etc
-	1,602	248	-	-	-	-	1,851	Other industries
-	435	2	-	-	-	-	437	Construction
12	18,126	42	-	-	-	-	49,643	Transport
-	-	-	-	-	-	-	10,568	Air
12	595	-	-	-	-	-	607	Rail
-	16,926	-	-	-	-	-	37,821	Road
-	605	42	-	-	-	-	647	National navigation
-	-	-	-	-	-	-	-	Pipelines
2,278	1,599	140	-	-	-	-	4,434	Other
2,254	202	4	-	-	-	-	2,779	Domestic
12	602	71	-	-	-	-	685	Public administration
-	315	51	-	-	-	-	366	Commercial
12	395	3	-	-	-	-	508	Agriculture
-	85	11	-	-	-	-	96	Miscellaneous
-	205	-	829	2,002	893	647	9,673	Non energy use

Commodity balances 2001

Petroleum products

Thousand tonnes

	Ethane	Propane	Butane	Other gases	Naphtha	Aviation spirit	Motor spirit	White Spirit & SBP ⁴	Aviation turbine fuel
Supply									
Production	83	1,250	520	2,511	3,463	101	21,455	121	5,910
Other sources	1,587	967	1,020	-	-	-	-	-	-
Imports	-	236	172	-	337	10	3,702	26	6,217
Exports	-	-315	-77	-	-1,078	-6	-4,447	-2	-456
Marine bunkers	-	-	-	-	-	-	-	-	-
Stock change (2)	-	-26	-17	+2	+4	+6	-377	0	-291
Transfers	-101	-258	-314	-	-633	+5	+1,062	-0	+9
Total supply	1,569	1,854	1,304	2,512	2,093	114	21,396	145	11,388
Statistical difference (3)	-124	+277	+778	-194	+466	+55	+456	-6	+774
Total demand	1,693	1,578	526	2,706	1,627	59	20,940	151	10,614
Transformation	-	36	-	179	-	-	-	-	-
Electricity generation	-	36	-	179	-	-	-	-	-
Major power producers	-	-	-	-	-	-	-	-	-
Autogenerators	-	36	-	179	-	-	-	-	-
Heat generation	-	-	-	-	-	-	-	-	-
Petroleum refineries	-	-	-	-	-	-	-	-	-
Coke manufacture	-	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-	-
Patent fuel manufacture	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Energy industry use	83	7	-	2,239	35	-	-	-	-
Electricity generation	-	-	-	-	-	-	-	-	-
Oil & gas extraction	-	-	-	-	-	-	-	-	-
Petroleum refineries	83	7	-	2,239	35	-	-	-	-
Coal extraction	-	-	-	-	-	-	-	-	-
Coke manufacture	-	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-	-
Patent fuel manufacture	-	-	-	-	-	-	-	-	-
Pumped storage	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Losses	-	-	-	-	-	-	-	-	-
Final consumption	1,610	1,535	526	287	1,592	59	20,940	151	10,614
Industry	82	189	68	-	-	-	-	-	-
Unclassified	82	189	68	-	-	-	-	-	-
Iron & steel	-	-	-	-	-	-	-	-	-
Non-ferrous metals	-	-	-	-	-	-	-	-	-
Mineral products	-	-	-	-	-	-	-	-	-
Chemicals	-	-	-	-	-	-	-	-	-
Mechanical engineering, etc	-	-	-	-	-	-	-	-	-
Electrical engineering, etc	-	-	-	-	-	-	-	-	-
Vehicles	-	-	-	-	-	-	-	-	-
Food, beverages, etc	-	-	-	-	-	-	-	-	-
Textiles, leather, etc	-	-	-	-	-	-	-	-	-
Paper, printing etc	-	-	-	-	-	-	-	-	-
Other industries	-	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	-	-
Transport	-	53	-	-	-	59	20,940	-	10,614
Air	-	-	-	-	-	59	-	-	10,614
Rail	-	-	-	-	-	-	-	-	-
Road	-	53	-	-	-	-	20,940	-	-
National navigation	-	-	-	-	-	-	-	-	-
Pipelines	-	-	-	-	-	-	-	-	-
Other	-	709	116	-	-	-	-	-	-
Domestic	-	270	68	-	-	-	-	-	-
Public administration	-	-	-	-	-	-	-	-	-
Commercial	-	324	47	-	-	-	-	-	-
Agriculture	-	115	1	-	-	-	-	-	-
Miscellaneous	-	-	-	-	-	-	-	-	-
Non energy use	1,529	584	342	287	1,592	-	-	151	-

(1) Includes marine diesel oil.

(2) Stock fall (+), stock rise (-).

(3) Total supply minus total demand.

Commodity balances 2001 (continued)

Petroleum products

Thousand tonnes

Burning oil	Gas/Diesel Oil ⁵	Fuel oils	Lubri-cants	Bitu-men	Petroleum coke	Misc. products	Total Products	
3,088	26,796	11,863	656	1,707	1,445	1,140	82,109	Supply
-	-	-	-	-	-	-	-	Production
203	4,073	980	319	251	688	22	17,234	Other sources
-167	-5,288	-5,440	-806	-269	-460	-277	-19,088	Imports
-	-1,433	-841	-	-	-	-	-2,274	Exports
+122	+49	+86	-3	-51	-27	-74	-598	Marine bunkers
+261	-1,247	-3,174	+51	+303	-	-290	-4,328	Stock change (2)
3,507	22,950	3,474	216	1,941	1,646	520	76,631	Transfers
-729	-117	-788	-630	+6	+13	-21	+217	Total supply
4,236	23,067	4,262	846	1,934	1,633	541	76,413	Statistical difference (3)
-	63	1,515	-	-	-	-	1,793	Total demand
-	32	724	-	-	-	-	971	Transformation
-	10	356	-	-	-	-	366	Electricity generation
-	22	368	-	-	-	-	605	Major power producers
-	31	640	-	-	-	-	671	Autogenerators
-	-	-	-	-	-	-	-	Heat generation
-	-	-	-	-	-	-	-	Petroleum refineries
-	-	-	-	-	-	-	-	Coke manufacture
-	-	151	-	-	-	-	151	Blast furnaces
-	-	-	-	-	-	-	-	Patent fuel manufacture
-	-	-	-	-	-	-	-	Other
-	48	1,684	-	-	931	32	5,059	Energy industry use
-	-	-	-	-	-	-	-	Electricity generation
-	-	-	-	-	-	-	-	Oil & gas extraction
-	48	1,684	-	-	931	32	5,059	Petroleum refineries
-	-	-	-	-	-	-	-	Coal extraction
-	-	-	-	-	-	-	-	Coke manufacture
-	-	-	-	-	-	-	-	Blast furnaces
-	-	-	-	-	-	-	-	Patent fuel manufacture
-	-	-	-	-	-	-	-	Pumped storage
-	-	-	-	-	-	-	-	Other
-	-	-	-	-	-	-	-	Losses
4,236	22,956	1,063	846	1,934	702	509	69,561	Final Consumption
1,561	3,319	842	-	-	-	-	6,061	Industry
1,561	-	-	-	-	-	-	1,899	Unclassified
-	1	75	-	-	-	-	76	Iron & steel
-	41	35	-	-	-	-	76	Non-ferrous metals
-	238	31	-	-	-	-	270	Mineral products
-	139	98	-	-	-	-	237	Chemicals
-	169	85	-	-	-	-	254	Mechanical engineering etc
-	24	35	-	-	-	-	59	Electrical engineering etc
-	140	32	-	-	-	-	172	Vehicles
-	200	77	-	-	-	-	277	Food, beverages etc
-	90	69	-	-	-	-	159	Textiles, leather, etc
-	37	69	-	-	-	-	105	Paper, printing etc
-	1,772	232	-	-	-	-	2,004	Other industries
-	469	2	-	-	-	-	472	Construction
12	17,400	34	-	-	-	-	49,112	Transport
-	-	-	-	-	-	-	10,673	Air
12	598	-	-	-	-	-	610	Rail
-	16,059	-	-	-	-	-	37,052	Road
-	743	34	-	-	-	-	777	National navigation
-	-	-	-	-	-	-	-	Pipelines
2,663	1,826	187	-	-	-	-	5,501	Other
2,639	193	6	-	-	-	-	3,177	Domestic
12	674	95	-	-	-	-	781	Public administration
-	406	57	-	-	-	-	834	Commercial
12	448	12	-	-	-	-	587	Agriculture
-	105	17	-	-	-	-	123	Miscellaneous
-	411	-	846	1,934	702	509	8,887	Non energy use

Commodity balances 2000

Petroleum products

Thousand tonnes

	Ethane	Propane	Butane	Other gases	Naphtha	Aviation spirit	Motor spirit	White Spirit & SBP ⁴	Aviation turbine fuel
Supply									
Production	52	1,407	512	2,821	3,100	30	23,445	122	6,484
Other sources	1,411	977	995	-	-	-	-	-	-
Imports	-	78	253	-	348	16	2,443	38	4,675
Exports	-	-560	-150	-	-973	-	-4,708	-9	-487
Marine bunkers	-	-	-	-	-	-	-	-	-
Stock change (2)	-1	-18	-	+3	-58	+2	+260	-	-25
Transfers	-60	-222	-438	-37	-568	-11	+625	-	+429
Total supply	1,403	1,662	1,173	2,787	1,850	37	22,066	150	11,076
Statistical difference (3)	-191	+31	+732	-91	-513	-16	+663	-20	+270
Total demand	1,593	1,631	440	2,878	2,363	52	21,403	170	10,806
Transformation	-	53	-	179	-	-	-	-	-
Electricity generation	-	36	-	179	-	-	-	-	-
Major power producers	-	-	-	-	-	-	-	-	-
Autogenerators	-	36	-	179	-	-	-	-	-
Heat generation	-	17	-	-	-	-	-	-	-
Petroleum refineries	-	-	-	-	-	-	-	-	-
Coke manufacture	-	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-	-
Patent fuel manufacture	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Energy industry use	53	16	26	2,532	19	-	-	-	-
Electricity generation	-	-	-	-	-	-	-	-	-
Oil & gas extraction	-	-	-	-	-	-	-	-	-
Petroleum refineries	53	2	-	2,532	19	-	-	-	-
Coal extraction	-	-	-	-	-	-	-	-	-
Coke manufacture	-	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-	-
Patent fuel manufacture	-	-	-	-	-	-	-	-	-
Pumped storage	-	-	-	-	-	-	-	-	-
Other	-	14	26	-	-	-	-	-	-
Losses	-	-	-	-	-	-	-	-	-
Final consumption	1,540	1,563	415	166	2,344	52	21,403	170	10,806
Industry	80	746	-	-	-	-	-	-	-
Unclassified	80	722	-	-	-	-	-	-	-
Iron & steel	-	24	-	-	-	-	-	-	-
Non-ferrous metals	-	-	-	-	-	-	-	-	-
Mineral products	-	-	-	-	-	-	-	-	-
Chemicals	-	-	-	-	-	-	-	-	-
Mechanical engineering, etc	-	-	-	-	-	-	-	-	-
Electrical engineering, etc	-	-	-	-	-	-	-	-	-
Vehicles	-	-	-	-	-	-	-	-	-
Food, beverages, etc	-	-	-	-	-	-	-	-	-
Textiles, leather, etc	-	-	-	-	-	-	-	-	-
Paper, printing etc	-	-	-	-	-	-	-	-	-
Other industries	-	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	-	-
Transport	-	-	22	-	-	52	21,403	-	10,806
Air	-	-	-	-	-	52	-	-	10,806
Rail	-	-	-	-	-	-	-	-	-
Road	-	-	22	-	-	-	21,403	-	-
National navigation	-	-	-	-	-	-	-	-	-
Pipelines	-	-	-	-	-	-	-	-	-
Other	-	147	133	-	-	-	-	-	-
Domestic	-	147	133	-	-	-	-	-	-
Public administration	-	-	-	-	-	-	-	-	-
Commercial	-	-	-	-	-	-	-	-	-
Agriculture	-	-	-	-	-	-	-	-	-
Miscellaneous	-	-	-	-	-	-	-	-	-
Non energy use	1,460	671	259	166	2,344	-	-	170	-

(1) Includes marine diesel oil.

(2) Stock fall (+), stock rise (-).

(3) Total supply minus total demand.

Commodity balances 2000 (continued)

Petroleum products

Thousand tonnes

Burning oil	Gas/Diesel Oil ⁵	Fuel oils	Lubri-cants	Bitu-men	Petroleum coke	Misc. products	Total Products	
								Supply
3,078	28,398	11,523	702	1,438	1,891	1,379	86,381	Production
-	-	-	-	-	-	-	3,383	Other sources
86	3,815	596	211	255	657	741	14,212	Imports
-199	-6,416	-5,360	-636	-283	-502	-393	-20,677	Exports
-	-1,141	-938	-	-	-	-	-2,079	Marine bunkers
-70	-54	+266	-26	+25	+36	-672	-331	Stock change (2)
+587	-783	-2773	+249	+319	+1	-811	-3,493	Transfers
3,481	23,820	3,313	501	1,754	2,083	244	77,397	Total supply
-358	+442	-34	-301	-222	+74	-265	+201	Statistical difference (3)
3,839	23,377	3,346	801	1,975	2,010	510	77,196	Total demand
								Transformation
-	190	1,459	-	-	-	-	1,881	Electricity generation
-	158	605	-	-	-	-	978	Major power producers
-	135	238	-	-	-	-	373	Autogenerators
-	23	367	-	-	-	-	605	Heat generation
-	33	659	-	-	-	-	708	Petroleum refineries
-	-	-	-	-	-	-	-	Coke manufacture
-	-	195	-	-	-	-	195	Blast furnaces
-	-	-	-	-	-	-	-	Patent fuel manufacture
-	-	-	-	-	-	-	-	Other
-	169	1,227	-	-	1,234	15	5,291	Energy industry use
-	-	-	-	-	-	-	-	Electricity generation
-	-	-	-	-	-	-	-	Oil & gas extraction
-	169	1,227	-	-	1,234	15	5,252	Petroleum refineries
-	-	-	-	-	-	-	-	Coal extraction
-	-	-	-	-	-	-	-	Coke manufacture
-	-	-	-	-	-	-	-	Blast furnaces
-	-	-	-	-	-	-	-	Patent fuel manufacture
-	-	-	-	-	-	-	-	Pumped storage
-	-	-	-	-	-	-	39	Other
-	-	-	-	-	-	-	-	Losses
3,839	23,017	660	801	1,975	776	495	70,024	Final Consumption
								Industry
1,312	2,844	501	-	-	-	-	5,483	Unclassified
1,312	-	-	-	-	-	-	2,114	Iron & steel
-	69	45	-	-	-	-	138	Non-ferrous metals
-	29	10	-	-	-	-	38	Mineral products
-	195	47	-	-	-	-	242	Chemicals
-	126	77	-	-	-	-	203	Mechanical engineering etc
-	167	18	-	-	-	-	184	Electrical engineering etc
-	22	12	-	-	-	-	35	Vehicles
-	116	9	-	-	-	-	125	Food, beverages etc
-	139	71	-	-	-	-	210	Textiles, leather, etc
-	53	89	-	-	-	-	142	Paper, printing etc
-	21	21	-	-	-	-	42	Other industries
-	1,481	100	-	-	-	-	1,581	Construction
-	427	2	-	-	-	-	429	Transport
12	17,119	38	-	-	-	-	49,452	Air
-	-	-	-	-	-	-	10,859	Rail
12	575	-	-	-	-	-	587	Road
-	15,632	-	-	-	-	-	37,057	National navigation
-	912	38	-	-	-	-	950	Pipelines
-	-	-	-	-	-	-	-	Other
2,514	2,118	121	-	-	-	-	5,034	Domestic
2,490	147	3	-	-	-	-	2,920	Public administration
12	871	79	-	-	-	-	963	Commercial
-	405	27	-	-	-	-	432	Agriculture
12	560	10	-	-	-	-	582	Miscellaneous
-	134	2	-	-	-	-	136	
-	936	-	801	1,975	776	495	10,055	Non energy use

Commodity balances 1999

Petroleum products

Thousand tonnes

	Ethane	Propane	Butane	Other gases	Naphtha	Aviation spirit	Motor spirit	White Spirit & SBP ⁴	Aviation turbine fuel
Supply									
Production	33	1,505	471	2,815	2,451	16	25,230	129	7,249
Other sources	1,527	865	931	-	-	-	-	-	-
Imports	-	101	264	-	608	15	2,492	62	2,945
Exports	-15	-316	-169	-	-605	-1	-6,332	-15	-739
Marine bunkers	-	-	-	-	-	-	-	-	-
Stock change (2)	+1	-24	+3	+1	+113	+7	+125	+11	+173
Transfers	-28	-110	-557	-33	+181	+28	+143	+12	+274
Total supply	1,518	2,021	943	2,783	2,748	65	21,658	199	9,903
Statistical difference (3)	-136	+378	+337	-91	-373	+20	-129	+25	-36
Total demand	1,654	1,643	607	2,874	3,121	45	21,787	174	9,939
Transformation	-	53	-	214	-	-	-	-	-
Electricity generation	-	37	-	214	-	-	-	-	-
Major power producers	-	-	-	-	-	-	-	-	-
Autogenerators	-	37	-	214	-	-	-	-	-
Heat generation	-	16	-	-	-	-	-	-	-
Petroleum refineries	-	-	-	-	-	-	-	-	-
Coke manufacture	-	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-	-
Patent fuel manufacture	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Energy industry use	33	25	25	2,454	21	-	-	-	-
Electricity generation	-	-	-	-	-	-	-	-	-
Oil & gas extraction	-	-	-	-	-	-	-	-	-
Petroleum refineries	33	1	-	2,454	21	-	-	-	-
Coal extraction	-	-	-	-	-	-	-	-	-
Coke manufacture	-	-	-	-	-	-	-	-	-
Blast furnaces	-	3	-	-	-	-	-	-	-
Patent fuel manufacture	-	-	-	-	-	-	-	-	-
Pumped storage	-	-	-	-	-	-	-	-	-
Other	-	21	25	-	-	-	-	-	-
Losses	-	-	-	-	-	-	-	-	-
Final consumption	1,621	1,565	582	208	3,100	45	21,787	174	9,939
Industry	74	784	-	-	-	-	-	-	-
Unclassified	74	763	-	-	-	-	-	-	-
Iron & steel	-	21	-	-	-	-	-	-	-
Non-ferrous metals	-	-	-	-	-	-	-	-	-
Mineral products	-	-	-	-	-	-	-	-	-
Chemicals	-	-	-	-	-	-	-	-	-
Mechanical engineering, etc	-	-	-	-	-	-	-	-	-
Electrical engineering, etc	-	-	-	-	-	-	-	-	-
Vehicles	-	-	-	-	-	-	-	-	-
Food, beverages, etc	-	-	-	-	-	-	-	-	-
Textiles, leather, etc	-	-	-	-	-	-	-	-	-
Paper, printing etc	-	-	-	-	-	-	-	-	-
Other industries	-	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	-	-
Transport	-	-	8	-	-	45	21,787	-	9,939
Air	-	-	-	-	-	45	-	-	9,939
Rail	-	-	-	-	-	-	-	-	-
Road	-	-	8	-	-	-	21,787	-	-
National navigation	-	-	-	-	-	-	-	-	-
Pipelines	-	-	-	-	-	-	-	-	-
Other	-	139	159	-	-	-	-	-	-
Domestic	-	139	159	-	-	-	-	-	-
Public administration	-	-	-	-	-	-	-	-	-
Commercial	-	-	-	-	-	-	-	-	-
Agriculture	-	-	-	-	-	-	-	-	-
Miscellaneous	-	-	-	-	-	-	-	-	-
Non energy use	1,547	642	415	208	3,100	-	-	174	-

(1) Includes marine diesel oil.

(2) Stock fall (+), stock rise (-).

(3) Total supply minus total demand.

Commodity balances 1999 (continued)

Petroleum products

Thousand tonnes

Burning oil	Gas/Diesel Oil ⁵	Fuel oils	Lubri-cants	Bitu-men	Petroleum coke	Misc. products	Total Products	
								Supply
3,553	25,870	12,195	907	1,644	1,813	854	86,733	Production
-	-	-	-	-	-	-	3,323	Other sources
212	5,425	657	182	259	643	31	13,896	Imports
-253	-6,667	-4,929	-673	-271	-642	-103	-21,730	Exports
-	-1,151	-1,179	-	-	-	-	-2,329	Marine bunkers
-82	+231	+65	+123	+4	-40	-134	+577	Stock change (2)
+44	-690	-1,683	+110	+380	-6	-170	-2,105	Transfers
3,474	23,018	5,126	649	2,016	1,768	478	78,365	Total supply
-159	-60	+676	-141	+88	-57	+53	+392	Statistical difference (3)
3,633	23,078	4,450	790	1,928	1,825	425	77,974	Total demand
								Transformation
-	123	1,753	-	-	-	-	2,143	Electricity generation
-	90	826	-	-	-	-	1,167	Major power producers
-	58	313	-	-	-	-	371	Autogenerators
-	32	513	-	-	-	-	796	Heat generation
-	33	657	-	-	-	-	706	Petroleum refineries
-	-	-	-	-	-	-	-	Coke manufacture
-	-	270	-	-	-	-	270	Blast furnaces
-	-	-	-	-	-	-	-	Patent fuel manufacture
-	-	-	-	-	-	-	-	Other
-	116	1,754	-	-	1,165	-	5,593	Energy industry use
-	-	-	-	-	-	-	-	Electricity generation
-	-	-	-	-	-	-	-	Oil & gas extraction
-	115	1,749	-	-	1,165	-	5,538	Petroleum refineries
-	-	-	-	-	-	-	-	Coal extraction
-	-	-	-	-	-	-	-	Coke manufacture
-	-	-	-	-	-	-	3	Blast furnaces
-	-	-	-	-	-	-	-	Patent fuel manufacture
-	-	-	-	-	-	-	-	Pumped storage
-	1	5	-	-	-	-	52	Other
-	-	-	-	-	-	-	-	Losses
3,633	22,839	942	790	1,928	660	425	70,238	Final Consumption
								Industry
1,211	2,744	521	-	-	-	-	5,334	Unclassified
1,211	-	-	-	-	-	-	2,048	Iron & steel
-	13	25	-	-	-	-	59	Non-ferrous metals
-	22	16	-	-	-	-	38	Mineral products
-	155	57	-	-	-	-	212	Chemicals
-	118	39	-	-	-	-	157	Mechanical engineering etc
-	143	33	-	-	-	-	176	Electrical engineering etc
-	23	12	-	-	-	-	35	Vehicles
-	98	21	-	-	-	-	119	Food, beverages etc
-	129	136	-	-	-	-	265	Textiles, leather, etc
-	39	79	-	-	-	-	118	Paper, printing etc
-	24	37	-	-	-	-	61	Other industries
-	1,514	62	-	-	-	-	1,576	Construction
-	466	4	-	-	-	-	470	Transport
12	16,989	72	-	-	-	-	48,852	Air
-	-	-	-	-	-	-	9,984	Rail
12	569	-	-	-	-	-	581	Road
-	15,508	-	-	-	-	-	37,303	National navigation
-	912	72	-	-	-	-	984	Pipelines
-	-	-	-	-	-	-	-	Other
2,410	2,262	349	-	-	-	-	5,319	Domestic
2,386	161	5	-	-	-	-	2,850	Public administration
12	928	203	-	-	-	-	1,143	Commercial
-	442	36	-	-	-	-	478	Agriculture
12	589	93	-	-	-	-	694	Miscellaneous
-	142	12	-	-	-	-	154	
-	844	-	790	1,928	660	425	10,733	Non energy use

Commodity balances 1998

Petroleum products

Thousand tonnes

	Ethane	Propane	Butane	Other gases	Naphtha	Aviation spirit	Motor spirit	White Spirit & SBP ⁴	Aviation turbine fuel
Supply									
Production	36	1,538	424	2,924	2,333	-	27,166	135	7,876
Other sources	1,215	1,071	1,171	-	-	-	-	-	-
Imports	-	82	158	-	855	32	1,986	51	2,660
Exports	-13	-727	-155	-	-520	-1	-7,986	-32	-828
Marine bunkers	-	-	-	-	-	-	-	-	-
Stock change (2)	+1	+38	+1	-1	-117	-6	+244	-8	-60
Transfers	-17	-19	-1,351	-44	-153	-3	+1,103	+81	-131
Total supply	1,222	1,983	248	2,879	2,398	22	22,513	227	9,517
Statistical difference (3)	-174	+178	-317	-43	-501	-14	+665	+48	+276
Total demand	1,396	1,805	565	2,922	2,899	36	21,848	179	9,241
Transformation	-	37	-	218	-	-	-	-	-
Electricity generation	-	37	-	218	-	-	-	-	-
Major power producers	-	-	-	-	-	-	-	-	-
Autogenerators	-	37	-	218	-	-	-	-	-
Heat generation	-	-	-	-	-	-	-	-	-
Petroleum refineries	-	-	-	-	-	-	-	-	-
Coke manufacture	-	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-	-
Patent fuel manufacture	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Energy industry use	36	28	22	2,530	17	-	-	-	-
Electricity generation	-	-	-	-	-	-	-	-	-
Oil & gas extraction	-	-	-	-	-	-	-	-	-
Petroleum refineries	36	1	-	2,530	17	-	-	-	-
Coal extraction	-	-	-	-	-	-	-	-	-
Coke manufacture	-	-	-	-	-	-	-	-	-
Blast furnaces	-	3	-	-	-	-	-	-	-
Patent fuel manufacture	-	-	-	-	-	-	-	-	-
Pumped storage	-	-	-	-	-	-	-	-	-
Other	-	24	22	-	-	-	-	-	-
Losses	-	-	-	-	-	-	-	-	-
Final consumption	1,360	1,740	543	174	2,882	36	21,848	179	9,241
Industry	69	797	-	-	-	-	-	-	-
Unclassified	69	776	-	-	-	-	-	-	-
Iron & steel	-	21	-	-	-	-	-	-	-
Non-ferrous metals	-	-	-	-	-	-	-	-	-
Mineral products	-	-	-	-	-	-	-	-	-
Chemicals	-	-	-	-	-	-	-	-	-
Mechanical engineering, etc	-	-	-	-	-	-	-	-	-
Electrical engineering, etc	-	-	-	-	-	-	-	-	-
Vehicles	-	-	-	-	-	-	-	-	-
Food, beverages, etc	-	-	-	-	-	-	-	-	-
Textiles, leather, etc	-	-	-	-	-	-	-	-	-
Paper, printing etc	-	-	-	-	-	-	-	-	-
Other industries	-	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	-	-
Transport	-	-	4	-	-	36	21,848	-	9,241
Air	-	-	-	-	-	36	-	-	9,241
Rail	-	-	-	-	-	-	-	-	-
Road	-	-	4	-	-	-	21,848	-	-
National navigation	-	-	-	-	-	-	-	-	-
Pipelines	-	-	-	-	-	-	-	-	-
Other	-	149	156	-	-	-	-	-	-
Domestic	-	149	156	-	-	-	-	-	-
Public administration	-	-	-	-	-	-	-	-	-
Commercial	-	-	-	-	-	-	-	-	-
Agriculture	-	-	-	-	-	-	-	-	-
Miscellaneous	-	-	-	-	-	-	-	-	-
Non energy use	1,291	794	383	174	2,882	-	-	179	-

(1) Includes marine diesel oil.

(2) Stock fall (+), stock rise (-).

(3) Total supply minus total demand.

Commodity balances 1998 (continued)

Petroleum products

Thousand tonnes

Burning oil	Gas/Diesel Oil ⁵	Fuel oils	Lubri-cants	Bitu-men	Petroleum coke	Misc. products	Total Products	
								Supply
3,442	27,704	13,365	1,125	2,172	1,869	684	92,792	Production
-	-	-	-	-	-	-	3,457	Other sources
131	3,468	791	198	76	883	47	11,418	Imports
-267	-6,201	-5,834	-632	-334	-831	-14	-24,375	Exports
-	-1,396	-1,684	-	-	-	-	-3,080	Marine bunkers
+31	-215	+84	-5	+20	-42	-58	-93	Stock change (2)
+166	-63	-949	+71	+57	+8	-11	-1,255	Transfers
3,503	23,297	5,773	757	1,991	1,887	648	78,864	Total supply
-71	+83	+428	-56	+24	-191	+92	+426	Statistical difference (3)
3,574	23,214	5,345	813	1,967	2,078	556	78,438	Total demand
-	76	1,332	-	-	-	-	1,663	Transformation
-	76	1,064	-	-	-	-	1,395	Electricity generation
-	56	700	-	-	-	-	756	Major power producers
-	20	364	-	-	-	-	639	Autogenerators
-	-	-	-	-	-	-	-	Heat generation
-	-	-	-	-	-	-	-	Petroleum refineries
-	-	-	-	-	-	-	-	Coke manufacture
-	-	268	-	-	-	-	268	Blast furnaces
-	-	-	-	-	-	-	-	Patent fuel manufacture
-	-	-	-	-	-	-	-	Other
-	163	2,240	-	-	1,191	-	6,227	Energy industry use
-	-	-	-	-	-	-	-	Electricity generation
-	-	-	-	-	-	-	-	Oil & gas extraction
-	162	2,240	-	-	1,191	-	6,177	Petroleum refineries
-	-	-	-	-	-	-	-	Coal extraction
-	-	-	-	-	-	-	-	Coke manufacture
-	-	-	-	-	-	-	3	Blast furnaces
-	-	-	-	-	-	-	-	Patent fuel manufacture
-	-	-	-	-	-	-	-	Pumped storage
-	1	-	-	-	-	-	47	Other
-	-	-	-	-	-	-	-	Losses
3,574	22,975	1,773	813	1,967	887	556	70,548	Final Consumption
840	2,959	1,169	-	-	-	-	5,834	Industry
840	-	-	-	-	-	-	1,685	Unclassified
-	31	29	-	-	-	-	81	Iron & steel
-	22	17	-	-	-	-	39	Non-ferrous metals
-	176	48	-	-	-	-	224	Mineral products
-	153	425	-	-	-	-	578	Chemicals
-	165	34	-	-	-	-	199	Mechanical engineering etc
-	27	61	-	-	-	-	88	Electrical engineering etc
-	93	32	-	-	-	-	125	Vehicles
-	151	246	-	-	-	-	397	Food, beverages etc
-	38	57	-	-	-	-	95	Textiles, leather, etc
-	35	84	-	-	-	-	119	Paper, printing etc
-	1,573	124	-	-	-	-	1,697	Other industries
-	495	12	-	-	-	-	507	Construction
12	16,672	104	-	-	-	-	47,917	Transport
-	-	-	-	-	-	-	9,277	Air
12	547	-	-	-	-	-	559	Rail
-	15,143	-	-	-	-	-	36,995	Road
-	982	104	-	-	-	-	1,086	National navigation
-	-	-	-	-	-	-	-	Pipelines
2,722	2,584	500	-	-	-	-	6,111	Other
2,698	191	1	-	-	-	-	3,195	Domestic
12	1,022	364	-	-	-	-	1,398	Public administration
-	512	47	-	-	-	-	559	Commercial
12	698	76	-	-	-	-	786	Agriculture
-	161	12	-	-	-	-	173	Miscellaneous
-	760	-	813	1,967	887	556	10,686	Non energy use

Commodity balances

Natural gas

GWh

	1998			1999			2000		
	Natural gas	Colliery methane	Total Natural gas	Natural gas	Colliery methane	Total Natural gas	Natural gas	Colliery methane	Total Natural gas
Supply									
Production	1,048,385	474	1,048,859	1,152,154	481	1,152,635	1,260,168	488	1,260,656
Other sources	-	-	-	-	-	-	-	-	-
Imports	10,582	-	10,582	12,862	-	12,862	26,032	-	26,032
Exports	-31,604	-	-31,604	-84,433	-	-84,433	-146,342	-	-146,342
Marine bunkers	-	-	-	-	-	-	-	-	-
Stock change (1)	-374	-	-374	+7,787	-	+7,787	-11,068	-	-11,068
Transfers (2)	-608	-	-608	-506	-	-506	-442	-	-442
Total supply	1,026,381	474	1,026,855	1,087,864	481	1,088,345	1,128,348	488	1,128,836
Statistical difference (3)	+5,295	-	+5,295	+704	-	+704	+2,818	-	+2,818
Total demand	1,021,086	474	1,021,560	1,087,160	481	1,087,641	1,125,530	488	1,126,018
Transformation	267,703	30	267,733	341,585	93	341,678	349,304	150	349,454
Electricity generation	267,703	30	267,733	315,400	93	315,493	324,413	150	324,563
Major power producers	236,300	-	236,300	281,988	-	281,988	283,784	-	283,784
Autogenerators	31,403	30	31,433	33,412	93	33,505	40,629	150	40,779
Heat generation (5)	-	-	-	26,185	-	26,185	24,891	-	24,891
Petroleum refineries	-	-	-	-	-	-	-	-	-
Coke manufacture	-	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-	-
Patent fuel manufacture	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Energy industry use	75,729	264	75,993	76,735	238	76,973	77,723	218	77,941
Electricity generation	-	-	-	-	-	-	-	-	-
Oil and gas extraction	65,500	-	65,500	64,634	-	64,634	65,555	-	65,555
Petroleum refineries	3,753	-	3,753	4,155	-	4,155	3,641	-	3,641
Coal extraction	67	264	331	14	238	252	6	218	224
Coke manufacture	7	-	7	13	-	13	17	-	17
Blast furnaces	527	-	527	643	-	643	712	-	712
Patent fuel manufacture	-	-	-	-	-	-	-	-	-
Pumped storage	-	-	-	-	-	-	-	-	-
Other	5,875	-	5,875	7,276	-	7,276	7,792	-	7,792
Losses (4)	16,254	-	16,254	14,678	-	14,678	20,480	-	20,481
Final consumption	661,400	180	661,580	654,162	150	654,312	678,022	120	678,142
Industry	175,904	180	176,084	176,665	150	176,815	183,320	120	183,441
Unclassified	-	180	180	-	150	150	-	120	120
Iron and steel	20,105	-	20,105	21,622	-	21,622	8,953	-	8,953
Non-ferrous metals	5,532	-	5,532	5,549	-	5,549	5,900	-	5,900
Mineral products	14,689	-	14,689	14,533	-	14,533	15,851	-	15,851
Chemicals	46,386	-	46,386	46,792	-	46,792	49,546	-	49,546
Mechanical Engineering, etc	10,022	-	10,022	10,173	-	10,173	11,145	-	11,145
Electrical engineering, etc	3,507	-	3,507	3,941	-	3,941	5,281	-	5,281
Vehicles	10,274	-	10,274	10,616	-	10,616	11,760	-	11,760
Food, beverages, etc	27,269	-	27,269	27,901	-	27,901	29,835	-	29,835
Textiles, leather, etc	7,268	-	7,268	6,966	-	6,966	8,454	-	8,454
Paper, printing, etc	14,241	-	14,241	12,532	-	12,532	17,268	-	17,268
Other industries	14,415	-	14,415	13,905	-	13,905	16,261	-	16,261
Construction	2,196	-	2,196	2,135	-	2,135	3,067	-	3,067
Transport	-	-	-	-	-	-	-	-	-
Air	-	-	-	-	-	-	-	-	-
Rail	-	-	-	-	-	-	-	-	-
Road	-	-	-	-	-	-	-	-	-
National navigation	-	-	-	-	-	-	-	-	-
Pipelines	-	-	-	-	-	-	-	-	-
Other	473,519	-	473,519	464,553	-	464,553	480,365	-	480,365
Domestic	355,895	-	355,895	358,066	-	358,066	369,909	-	369,909
Public administration	51,976	-	51,976	43,253	-	43,253	44,552	-	44,552
Commercial	40,722	-	40,722	36,622	-	36,622	36,216	-	36,216
Agriculture	953	-	953	1,155	-	1,155	1,522	-	1,522
Miscellaneous	23,973	-	23,973	25,457	-	25,457	28,166	-	28,166
Non energy use	11,977	-	11,977	12,944	-	12,944	14,336	-	14,336

(1) Stock fall (+), stock rise (-).

(2) Natural gas used in the manufacture of synthetic coke oven gas.

(3) Total supply minus total demand.

(4) For an explanation of what is included under losses, see paragraphs 4.41 to 4.45.

(5) Heat generation data are not available before 1999. For earlier years gas used to generate heat for sale is allocated to final consumption by sector.

Commodity balances (continued)

Natural gas

GWh

	2001			2002			2003		
	Natural gas	Colliery methane	Total Natural gas	Natural gas	Colliery methane	Total Natural gas	Natural gas	Colliery methane	Total Natural gas
Supply									
Production	1,230,533	730	1,231,263	1,204,713	692	1,205,405	1,196,931	915	1,197,846
Other sources	-	-	-	-	-	-	-	-	-
Imports	30,464	-	30,464	60,493	-	60,493	86,298	-	86,298
Exports	-138,330	-	-138,330	-150,731	-	-150,731	-177,039	-	-177,039
Marine bunkers	-	-	-	-	-	-	-	-	-
Stock change (1)	-661	-	-661	-7,356	-	-7,356	+3,532	-	+3,532
Transfers (2)	-65	-	-65	-99	-	-99	-82	-	-82
Total supply	1,121,941	730	1,122,671	1,107,020	692	1,107,712	1,109,640	915	1,110,555
Statistical difference (3)	+2,079	-	+2,079	+1,779	-	+1,779	+1,552	-	+1,552
Total demand	1,119,862	730	1,120,592	1,105,241	692	1,105,933	1,108,087	915	1,109,002
Transformation	336,107	418	336,525	351,450	406	351,856	343,757	653	344,410
Electricity generation	312,521	418	312,939	329,441	406	329,847	323,927	653	324,580
Major power producers	276,764	-	276,764	291,264	-	291,264	284,662	-	284,662
Autogenerators	35,757	418	36,175	38,177	406	38,583	39,265	653	39,918
Heat generation	23,586	-	23,586	22,009	-	22,009	19,830	-	19,830
Petroleum refineries	-	-	-	-	-	-	-	-	-
Coke manufacture	-	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-	-
Patent fuel manufacture	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Energy industry use	91,244	207	91,451	91,064	196	91,260	88,731	187	88,918
Electricity generation	-	-	-	-	-	-	-	-	-
Oil and gas extraction	78,457	-	78,457	79,364	-	79,364	76,848	-	76,848
Petroleum refineries	4,189	-	4,189	3,350	-	3,350	2,773	-	2,773
Coal extraction	4	207	211	-	196	196	-	187	187
Coke manufacture	9	-	9	-	-	-	1	-	1
Blast furnaces	375	-	375	222	-	222	539	-	539
Patent fuel manufacture	-	-	-	-	-	-	-	-	-
Pumped storage	-	-	-	-	-	-	-	-	-
Other	8,210	-	8,210	8,128	-	8,128	8,570	-	8,570
Losses (4)	8,863	-	8,863	9,666	-	9,666	6,217	-	6,217
Final consumption	683,648	105	683,753	653,061	90	653,151	669,382	75	669,457
Industry	179,738	105	179,843	165,076	90	165,166	166,142	75	166,217
Unclassified	-	105	105	-	90	90	-	75	75
Iron and steel	8,502	-	8,502	8,791	-	8,791	10,327	-	10,327
Non-ferrous metals	5,663	-	5,663	5,255	-	5,255	4,781	-	4,781
Mineral products	15,565	-	15,565	14,136	-	14,136	14,105	-	14,105
Chemicals	50,064	-	50,064	44,277	-	44,277	45,048	-	45,048
Mechanical Engineering, etc	9,656	-	9,656	9,273	-	9,273	9,126	-	9,126
Electrical engineering, etc	5,022	-	5,022	4,615	-	4,615	4,395	-	4,395
Vehicles	12,035	-	12,035	11,521	-	11,521	11,621	-	11,621
Food, beverages, etc	29,697	-	29,697	28,884	-	28,884	28,799	-	28,799
Textiles, leather, etc	7,966	-	7,966	7,837	-	7,837	7,901	-	7,901
Paper, printing, etc	16,569	-	16,569	15,452	-	15,452	15,898	-	15,898
Other industries	15,741	-	15,741	11,731	-	11,731	11,126	-	11,126
Construction	3,258	-	3,258	3,304	-	3,304	3,015	-	3,015
Transport	-	-	-	-	-	-	-	-	-
Air	-	-	-	-	-	-	-	-	-
Rail	-	-	-	-	-	-	-	-	-
Road	-	-	-	-	-	-	-	-	-
National navigation	-	-	-	-	-	-	-	-	-
Pipelines	-	-	-	-	-	-	-	-	-
Other	492,537	-	492,537	477,205	-	477,205	493,219	-	493,219
Domestic	379,426	-	379,426	376,372	-	376,372	386,486	-	386,486
Public administration	46,232	-	46,232	42,998	-	42,998	44,362	-	44,362
Commercial	37,098	-	37,098	36,224	-	36,224	39,537	-	39,537
Agriculture	2,329	-	2,329	2,346	-	2,346	2,324	-	2,324
Miscellaneous	27,452	-	27,452	19,265	-	19,265	20,510	-	20,510
Non energy use	11,373	-	11,373	10,780	-	10,780	10,021	-	10,021

Commodity balances (continued)

Natural gas

GWh

	2004			2005			2006		
	Natural gas	Colliery methane	Total Natural gas	Natural gas	Colliery methane	Total Natural gas	Natural gas	Colliery methane	Total Natural gas
Supply									
Production	1,120,447	810	1,121,257	1,025,232	757	1,025,989	929,784	754	930,538
Other sources	-	-	-	-	-	-	-	-	-
Imports	133,033	-	133,033	173,328	-	173,328	244,029	-	244,029
Exports	-114,112	-	-114,112	-96,181	-	-96,181	-120,591	-	-120,591
Marine bunkers	-	-	-	-	-	-	-	-	-
Stock change (1)	-6,235	-	-6,235	+1,321	-	+1,321	-6,435	-	-6,435
Transfers (2)	-39	-	-39	-51	-	-51	-55	-	-55
Total supply	1,133,094	810	1,133,904	1,103,649	757	1,104,406	1,046,732	754	1,047,486
Statistical difference (3)	+702	-	+702	+111	-	+111	+148	-	+148
Total demand	1,132,392	810	1,133,202	1,103,538	757	1,104,295	1,046,584	754	1,047,338
Transformation	362,073	595	362,668	353,558	588	354,146	332,836	595	333,431
Electricity generation	340,229	595	340,824	331,070	588	331,658	310,813	595	311,408
Major power producers	304,497	-	304,497	295,643	-	295,643	278,149	-	278,149
Autogenerators	35,733	595	36,328	35,427	588	36,015	32,664	595	33,259
Heat generation	21,844	-	21,844	22,488	-	22,488	22,023	-	22,023
Petroleum refineries	-	-	-	-	-	-	-	-	-
Coke manufacture	-	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-	-
Patent fuel manufacture	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Energy industry use	88,318	150	88,468	87,047	114	87,161	81,747	112	81,859
Electricity generation	-	-	-	-	-	-	-	-	-
Oil and gas extraction	77,753	-	77,753	73,372	-	73,372	69,252	-	69,252
Petroleum refineries	3,076	-	3,076	5,163	-	5,163	5,161	-	5,161
Coal extraction	-	150	150	-	114	114	-	112	112
Coke manufacture	-	-	-	-	-	-	-	-	-
Blast furnaces	728	-	728	941	-	941	611	-	611
Patent fuel manufacture	-	-	-	-	-	-	-	-	-
Pumped storage	-	-	-	-	-	-	-	-	-
Other	6,761	-	6,761	7,572	-	7,572	6,723	-	6,723
Losses (4)	8,207	-	8,207	10,964	-	10,964	12,014	-	12,014
Final consumption	673,795	65	673,860	651,969	55	652,024	619,988	47	620,035
Industry	153,888	65	153,953	151,386	55	151,441	144,494	47	144,541
Unclassified	-	65	65	-	55	55	-	47	47
Iron and steel	9,715	-	9,715	8,453	-	8,453	8,391	-	8,391
Non-ferrous metals	3,199	-	3,199	3,168	-	3,168	3,106	-	3,106
Mineral products	13,401	-	13,401	18,302	-	18,302	17,803	-	17,803
Chemicals	42,002	-	42,002	36,076	-	36,076	34,334	-	34,334
Mechanical Engineering, etc	8,611	-	8,611	8,577	-	8,577	8,180	-	8,180
Electrical engineering, etc	4,158	-	4,158	4,134	-	4,134	3,922	-	3,922
Vehicles	10,228	-	10,228	9,959	-	9,959	9,470	-	9,470
Food, beverages, etc	28,232	-	28,232	24,921	-	24,921	23,714	-	23,714
Textiles, leather, etc	7,120	-	7,120	7,031	-	7,031	6,637	-	6,637
Paper, printing, etc	13,879	-	13,879	17,689	-	17,689	16,518	-	16,518
Other industries	10,413	-	10,413	10,400	-	10,400	9,864	-	9,864
Construction	2,931	-	2,931	2,676	-	2,676	2,555	-	2,555
Transport	-	-	-	-	-	-	-	-	-
Air	-	-	-	-	-	-	-	-	-
Rail	-	-	-	-	-	-	-	-	-
Road	-	-	-	-	-	-	-	-	-
National navigation	-	-	-	-	-	-	-	-	-
Pipelines	-	-	-	-	-	-	-	-	-
Other	509,886	-	509,886	492,670	-	492,670	467,582	-	467,582
Domestic	396,411	-	396,411	381,879	-	381,879	366,928	-	366,928
Public administration	51,934	-	51,934	50,319	-	50,319	45,803	-	45,803
Commercial	37,595	-	37,595	38,197	-	38,197	34,273	-	34,273
Agriculture	2,355	-	2,355	2,261	-	2,261	2,013	-	2,013
Miscellaneous	21,591	-	21,591	20,014	-	20,014	18,564	-	18,564
Non energy use	10,021	-	10,021	7,913	-	7,913	7,913	-	7,913

Commodity balances (continued)

Natural gas

GWh

	2007			2008		
	Natural gas	Colliery methane	Total Natural gas	Natural gas	Colliery methane	Total Natural gas
Supply						
Production	838,092	717	838,809	809,649	736	810,385
Other sources	-	-	-	-	-	-
Imports	338,026	-	338,026	407,054	-	407,054
Exports	-123,158	-	-123,158	-122,670	-	-122,670
Marine bunkers	-	-	-	-	-	-
Stock change (1)	+5,480	-	+5,480	-3,087	-	-3,087
Transfers (2)	-78	-	-78	-68	-	-68
Total supply	1,058,363	717	1,059,080	1,090,878	736	1,091,614
Statistical difference (3)	+186	-	+186	+14	-	+14
Total demand	1,058,177	717	1,058,894	1,090,865	736	1,091,600
Transformation	378,932	586	379,518	401,630	607	402,236
Electricity generation	355,292	586	355,878	376,204	607	376,810
Major power producers	319,836	-	319,836	344,454	-	344,454
Autogenerators	35,456	586	36,042	31,750	607	32,357
Heat generation	23,640	-	23,640	25,426	-	25,426
Petroleum refineries	-	-	-	-	-	-
Coke manufacture	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-
Patent fuel manufacture	-	-	-	-	-	-
Other	-	-	-	-	-	-
Energy industry use	75,934	91	76,025	72,185	95	72,280
Electricity generation	-	-	-	-	-	-
Oil and gas extraction	64,230	-	64,230	61,292	-	61,292
Petroleum refineries	5,206	-	5,206	4,971	-	4,971
Coal extraction	-	91	91	-	95	95
Coke manufacture	-	-	-	-	-	-
Blast furnaces	719	-	719	718	-	718
Patent fuel manufacture	-	-	-	-	-	-
Pumped storage	-	-	-	-	-	-
Other	5,779	-	5,779	5,204	-	5,204
Losses (4)	12,078	-	12,078	13,623	-	13,623
Final consumption	591,234	40	591,274	603,427	34	603,461
Industry	133,310	40	133,350	138,654	34	138,688
Unclassified	-	40	40	-	34	34
Iron and steel	7,323	-	7,323	6,920	-	6,920
Non-ferrous metals	2,864	-	2,864	2,989	-	2,989
Mineral products	16,878	-	16,878	18,363	-	18,363
Chemicals	30,140	-	30,140	31,182	-	31,182
Mechanical Engineering, etc	7,670	-	7,670	7,704	-	7,704
Electrical engineering, etc	3,736	-	3,736	3,895	-	3,895
Vehicles	8,532	-	8,532	8,613	-	8,613
Food, beverages, etc	22,973	-	22,973	24,361	-	24,361
Textiles, leather, etc	6,078	-	6,078	6,099	-	6,099
Paper, printing, etc	15,511	-	15,511	16,602	-	16,602
Other industries	9,229	-	9,229	9,475	-	9,475
Construction	2,378	-	2,378	2,452	-	2,452
Transport	-	-	-	-	-	-
Air	-	-	-	-	-	-
Rail	-	-	-	-	-	-
Road	-	-	-	-	-	-
National navigation	-	-	-	-	-	-
Pipelines	-	-	-	-	-	-
Other	447,695	-	447,695	455,190	-	455,190
Domestic	352,868	-	352,868	359,554	-	359,554
Public administration	42,444	-	42,444	42,565	-	42,565
Commercial	33,098	-	33,098	33,358	-	33,358
Agriculture	1,998	-	1,998	2,161	-	2,161
Miscellaneous	17,286	-	17,286	17,552	-	17,552
Non energy use	10,228	-	10,228	9,583	-	9,583

Commodity balances

Electricity

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Total electricity											GWh
Supply											
Production	361,078	365,250	374,374	382,356	384,594	395,475	391,280	395,430	393,429	392,971r	384,900r
Other sources (1)	1,624	2,902	2,694	2,422	2,652	2,734	2,649	2,930	3,853	3,859	4,089
Imports	12,599	14,507	14,308	10,663	9,182	5,119	9,784	11,160	10,282	8,613	12,294
Exports	-131	-263	-134	-264	-768	-2,959	-2,294	-2,839	-2,765	-3,398	-1,272
Marine bunkers	-	-	-	-	-	-	-	-	-	-	-
Stock change	-	-	-	-	-	-	-	-	-	-	-
Transfers	-	-	-	-	-	-	-	-	-	-	-
Total supply	375,170	382,396	391,243	395,177	395,661	400,369	401,418	406,681	404,799	402,044r	400,011r
Statistical difference (2)	+1,861	+1,564	+1,497	+1,167	+983	+2,208	+2,447	+227	+104	-392r	+338r
Total demand	373,309	380,832	389,746	394,010	394,678	398,161	398,971	406,454	404,695	402,437r	399,674r
Transformation	-	-	-	-	-	-	-	-	-	-	-
Electricity generation	-	-	-	-	-	-	-	-	-	-	-
Major power producers	-	-	-	-	-	-	-	-	-	-	-
Other generators	-	-	-	-	-	-	-	-	-	-	-
Heat generation	-	-	-	-	-	-	-	-	-	-	-
Petroleum refineries	-	-	-	-	-	-	-	-	-	-	-
Coke manufacture	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-	-	-	-
Patent fuel manufacture	-	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-	-
Energy industry use	29,674	29,790	30,680	30,387	31,297	32,081	29,296	30,105	32,055	32,558r	29,995r
Electricity generation	17,408	16,707	16,304	17,394	17,126	18,136	17,032	17,873	18,503	17,694r	16,346r
Oil and gas extraction	537	408	527	675	540	551	558	505	546	560	598
Petroleum refineries	5,136	4,981	6,362	5,231	6,553	5,769	4,681	4,459	4,660	5,634	4,351
Coal extraction and coke manufacture	1,334	1,358	1,283	1,223	1,163	1,190	1,118	1,165	1,133	1,073	1,058
Blast furnaces	948	948	877	885	502	492	468	515	497	479	452
Patent fuel manufacture	-	-	-	-	-	-	-	-	-	-	-
Pumped storage	2,594	3,774	3,499	3,210	3,463	3,546	3,497	3,707	4,918	5,071	5,371
Other	1,717	1,614	1,828	1,769	1,950	2,398	1,942	1,881	1,798	2,047	1,818
Losses	27,957	28,298	29,649	30,902	29,980	29,862	30,728	27,674	27,410	28,223r	27,857r
Final consumption	315,678	322,744	329,420	332,721	333,401	336,218	338,948	348,675	345,229	341,656r	341,822r
Industry	107,177	110,978	114,112	111,337	110,168	109,278	111,467	116,024	114,896	112,799r	114,151r
Unclassified	-	-	-	-	-	-	-	-	-	-	-
Iron and steel	9,571	9,779	6,349	5,303	5,092	5,434	5,412	5,020	5,860	4,937	4,657r
Non-ferrous metals	5,698	5,895	6,152	7,324	6,325	7,244	7,468	7,693	7,524	7,386	7,391r
Mineral products	7,142	7,265	8,109	7,247	7,015	7,409	7,535	7,978	7,869	7,811	7,931r
Chemicals	20,916	21,677	23,732	21,079	22,361	19,741	19,928	21,125	20,391	20,197	20,287r
Mechanical engineering, etc	8,520	8,824	9,420	8,569	8,494	8,539	8,410	8,633	8,490	8,458r	8,614r
Electrical engineering, etc	5,996	6,006	6,196	5,697	5,830	5,969	6,609	7,420	7,341	7,290	7,397r
Vehicles	5,586	5,615	6,316	5,824	5,575	5,610	5,582	5,841	5,748	5,723	5,812r
Food, beverages, etc	11,852	12,524	11,724	11,570	11,866	11,449	12,048	12,273	12,117	12,082	12,257r
Textiles, leather, etc	3,666	3,751	3,599	3,303	3,423	3,403	3,333	3,393	3,360	3,349	3,395r
Paper, printing, etc	10,684	10,989	11,416	11,511	11,688	12,550	13,171	13,225	12,906	12,741	12,865r
Other industries	16,012	17,125	19,514	22,213	20,799	20,186	20,166	21,495	21,449	21,028	21,729r
Construction	1,534	1,528	1,586	1,698	1,700	1,701	1,804	1,929	1,840	1,798r	1,817
Transport (3)	8,511	8,579	8,623	8,828	8,454	8,212	4,058	4,059	4,002	3,962	3,943r
Air	-	-	-	-	-	-	-	-	-	-	-
Rail	2,700	2,700	2,700	2,700	2,700	2,700	4,039	4,040	3,983	3,943	3,925r
Road	-	-	-	-	-	-	19	19	19	18r	18r
National navigation	-	-	-	-	-	-	-	-	-	-	-
Pipelines	-	-	-	-	-	-	-	-	-	-	-
Other	199,990	203,187	206,685	212,557	214,779	218,728	223,423	228,591	226,331	224,895	223,728
Domestic	109,410	110,308	111,842	115,337	120,014	123,001	124,200	125,711	124,704	123,076	119,800
Public administration	21,577	21,951	20,913	21,105	20,357	20,423	20,157	20,028	20,012	20,087	20,355
Commercial	64,952	66,748	69,571	72,014	70,363	71,298	75,021	78,850	77,606	77,677	79,506
Agriculture	4,051	4,180	4,358	4,100	4,045	4,005	4,044	4,002	4,009	4,055	4,067
Miscellaneous	-	-	-	-	-	-	-	-	-	-	-
Non energy use	-	-	-	-	-	-	-	-	-	-	-

Commodity balances (continued)

Electricity

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
GWh											
Electricity production											
Total production (4)	361,078	365,250	374,374	382,356	384,594	395,475	391,280	395,430	393,429	392,971r	384,900r
Primary electricity											
Major power producers	103,723	99,564	89,394	93,307	91,776	91,254	83,907	85,444	79,144	70,741	62,067
Nuclear	99,486	95,133	85,063	90,093	87,848	88,686	79,999	81,618	75,451	63,028	52,486
Large scale hydro (4)	4,237	4,431	4,331	3,215	3,927	2,523	3,773	3,637	3,481	3,906	3,971
Small scale hydro (7)	..	..	..	..	..(7)	44	135	189	212	238	253
Wind (5)	-	-	-	-	-	-	-	-	-	3,569	5,357
Other generators	1,757	1,756	1,701	1,805	2,119	1,948	2,875	4,008	5,136	2,652r	2,688r
Nuclear	-	-	-	-	-	-	-	-	-	-	-
Large scale hydro	674	698	540	630	657	561	788	841	634	648	629
Small scale hydro (7)	206	207	214	210	204	99	148	254	266	285r	302r
Wind (5)	877	851	947	965	1,259	1,288	1,939	2,912	4,236	1,719	1,757
Secondary electricity											
Major power producers	228,417	234,142	249,695	257,328	259,566	268,612	271,758	273,838	278,236	286,717r	289,053r
Coal	118,595	102,074	117,025	127,128	120,958	134,023	127,827	130,690	144,947	132,074	120,305
Oil	3,442	2,943	2,415	2,472	2,011	2,197	1,883	2,921	3,723	2,955r	4,558r
Gas	105,804	128,365	129,558	126,999	135,741	131,238	140,577	137,483	126,637	149,346	161,583r
Renewables	576	760	698	729	856	1,154	1,471	2,744	2,928	2,341r	2,607r
Other	-	-	-	-	-	-	-	-	-	-	-
Other generators	27,181	29,788	33,584	29,915	31,133	33,660	32,740	32,140	30,914	32,860r	31,093r
Coal	4,376	4,106	2,925	4,333	3,321	4,282	3,961	3,947	3,903	3,870	4,077
Oil	3,913	3,606	4,109	2,781	2,788	2,397	2,761	2,417	2,450	2,093	2,152
Gas	11,994	14,537	18,519	14,906	16,536	17,643	16,487	15,159	14,191	16,447	14,636
Renewables	2,661	3,227	3,630	4,318	4,769	5,537	6,469	6,941	6,999	6,983r	7,040r
Other	4,237	4,312	4,401	3,577	3,719	3,800	3,062	3,676	3,371	3,467r	3,188r
Primary and secondary production (6)											
Nuclear	99,486	95,133	85,063	90,093	87,848	88,686	79,999	81,618	75,451	63,028	52,486r
Hydro	5,117	5,336	5,085	4,055	4,788	3,228	4,844	4,921	4,593	5,077r	5,155r
Wind	877	851	947	965	1,259	1,288	1,939	2,912	4,236	5,288	7,114
Coal	122,971	106,180	119,950	131,461	124,279	138,305	131,788	134,637	148,850	135,944	124,381
Oil	7,355	6,549	6,524	5,253	4,799	4,594	4,644	5,338	6,173	5,048r	6,710r
Gas	117,798	142,902	148,077	141,905	152,277	148,881	157,064	152,642	140,828	165,793	176,219r
Other renewables	3,237	3,987	4,328	5,048	5,625	6,692	7,940	9,685	9,928	9,325r	9,647r
Other	4,237	4,312	4,401	3,577	3,719	3,800	3,062	3,676	3,371	3,467r	3,188r
Total production	361,078	365,250	374,375	382,356	384,594	395,475	391,280	395,430	393,429	392,971r	384,900r

(1) Pumped storage production.

(2) Total supply minus total demand.

(3) From 2004, non-traction Transport sector consumption is included under 'Commercial'.

(4) Excludes pumped storage production.

(5) From 2007, major wind farm companies are included under Major Power Producers, see paragraph 5.59

(6) These figures are the same as the electricity generated figures in Table 5.6 except that they exclude pumped storage production. Table 5.6 shows that electricity used on works is deducted to obtain electricity supplied. It is electricity supplied that is used to produce Chart 5.2 showing each fuel's share of electricity output (see paragraph 5.31).

(7) A re-assessment in 2004 showed that some small scale hydro output previously classified to Other Generators should be classified to Major Power Producers.

Commodity balances 2008

Renewables and waste

	Thousand tonnes of oil equivalent					
	Wood waste	Wood	Poultry litter, meat and bone, and farm waste	Straw, SRC, and other plant-based biomass (3)	Sewage gas	Landfill gas
Supply						
Production	220	359	296	464r	224	1,574
Other sources	-	-	-	-	-	-
Imports	-	-	-	433	-	-
Exports	-	-	-	-	-	-
Marine bunkers	-	-	-	-	-	-
Stock change (1)	-	-	-	-	-	-
Transfers	-	-	-	-	-	-
Total supply	220	359	296	897r	224	1,574
Statistical difference (2)	-	-	-	-	-	-
Total demand	220	359	296	897r	224	1,574
Transformation	-	-	253	706r	174	1,560
Electricity generation	-	-	253	706r	174	1,560
Major power producers	-	-	170	541	-	-
Autogenerators	-	-	83	166r	174	1,560
Heat generation	-	-	-	-	-	-
Petroleum refineries	-	-	-	-	-	-
Coke manufacture	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-
Patent fuel manufacture	-	-	-	-	-	-
Other	-	-	-	-	-	-
Energy industry use	-	-	-	-	-	-
Electricity generation	-	-	-	-	-	-
Oil and gas extraction	-	-	-	-	-	-
Petroleum refineries	-	-	-	-	-	-
Coal extraction	-	-	-	-	-	-
Coke manufacture	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-
Patent fuel manufacture	-	-	-	-	-	-
Pumped storage	-	-	-	-	-	-
Other	-	-	-	-	-	-
Losses	-	-	-	-	-	-
Final consumption	220	359	42	190r	50	14
Industry	220	-	40	56	-	14
Unclassified	220	-	40	56	-	14
Iron and steel	-	-	-	-	-	-
Non-ferrous metals	-	-	-	-	-	-
Mineral products	-	-	-	-	-	-
Chemicals	-	-	-	-	-	-
Mechanical engineering, etc	-	-	-	-	-	-
Electrical engineering, etc	-	-	-	-	-	-
Vehicles	-	-	-	-	-	-
Food, beverages, etc	-	-	-	-	-	-
Textiles, leather, etc	-	-	-	-	-	-
Paper, printing, etc	-	-	-	-	-	-
Other industries	-	-	-	-	-	-
Construction	-	-	-	-	-	-
Transport	-	-	-	-	-	-
Air	-	-	-	-	-	-
Rail	-	-	-	-	-	-
Road	-	-	-	-	-	-
National navigation	-	-	-	-	-	-
Pipelines	-	-	-	-	-	-
Other	-	359	2	135r	50	-
Domestic	-	359	-	-	-	-
Public administration	-	-	-	-	50	-
Commercial	-	-	-	-	-	-
Agriculture	-	-	2	135r	-	-
Miscellaneous	-	-	-	-	-	-
Non energy use	-	-	-	-	-	-

(1) Stock fall (+), stock rise (-).

(2) Total supply minus total demand.

(3) SRC is short rotation coppice.

(4) Municipal solid waste, general industrial waste and hospital waste.

(5) The amount of shoreline waste included is less than 0.05 ktoe.

Commodity balances 2008 (continued)

Renewables and waste

Thousand tonnes of oil equivalent

Waste(4) and tyres	Geothermal, active solar heat and PV	Heat pumps	Hydro	Wind and wave (5)	Liquid biofuels	Total renewables	
							Supply
1,002	58	3r	443r	610	302	5,555r	Production
-	-	-	-	-	-	-	Other sources
-	-	-	-	-	542r	975r	Imports
-	-	-	-	-	-	-	Exports
-	-	-	-	-	-	-	Marine bunkers
-	-	-	-	-	-	-	Stock change (1)
-	-	-	-	-	-	-	Transfers
1,002	58	3r	443r	610	845r	6,530r	Total supply
-	-	-	-	-	-	-	Statistical difference (2)
1,002	58	3r	443r	610	845r	6,530r	Total demand
817	1	-	443r	610	-	4,566r	Transformation
817	1	-	443r	610	-	4,566r	Electricity generation
93	-	-	363	461	-	1,627	Major power producers
724	1	-	80r	150	-	2,939r	Autogenerators
-	-	-	-	-	-	-	Heat generation
-	-	-	-	-	-	-	Petroleum refineries
-	-	-	-	-	-	-	Coke manufacture
-	-	-	-	-	-	-	Blast furnaces
-	-	-	-	-	-	-	Patent fuel manufacture
-	-	-	-	-	-	-	Other
-	-	-	-	-	-	-	Energy industry use
-	-	-	-	-	-	-	Electricity generation
-	-	-	-	-	-	-	Oil and gas extraction
-	-	-	-	-	-	-	Petroleum refineries
-	-	-	-	-	-	-	Coal extraction
-	-	-	-	-	-	-	Coke manufacture
-	-	-	-	-	-	-	Blast furnaces
-	-	-	-	-	-	-	Patent fuel manufacture
-	-	-	-	-	-	-	Pumped storage
-	-	-	-	-	-	-	Other
-	-	-	-	-	-	-	Losses
185	57	3r	-	-	845	1,964r	Final consumption
119	-	0	-	-	-	449	Industry
119	-	0	-	-	-	449	Unclassified
-	-	-	-	-	-	-	Iron and steel
-	-	-	-	-	-	-	Non-ferrous metals
-	-	-	-	-	-	-	Mineral products
-	-	-	-	-	-	-	Chemicals
-	-	-	-	-	-	-	Mechanical engineering, etc
-	-	-	-	-	-	-	Electrical engineering, etc
-	-	-	-	-	-	-	Vehicles
-	-	-	-	-	-	-	Food, beverages, etc
-	-	-	-	-	-	-	Textiles, leather, etc
-	-	-	-	-	-	-	Paper, printing, etc
-	-	-	-	-	-	-	Other industries
-	-	-	-	-	-	-	Construction
-	-	-	-	-	845	845	Transport
-	-	-	-	-	-	-	Air
-	-	-	-	-	-	-	Rail
-	-	-	-	-	845	845	Road
-	-	-	-	-	-	-	National navigation
-	-	-	-	-	-	-	Pipelines
66	57	3r	-	-	-	670r	Other
16	56	1	-	-	-	431	Domestic
39	0	-	-	-	-	89	Public administration
11	0	1r	-	-	-	13r	Commercial
-	-	-	-	-	-	137r	Agriculture
-	-	-	-	-	-	-	Miscellaneous
-	-	-	-	-	-	-	Non energy use

Commodity balances 2007

Renewables and waste

Thousand tonnes of oil equivalent

	Wood waste	Wood	Poultry litter, meat and bone, and farm waste	Straw, SRC, and other plant-based biomass (3)	Sewage gas	Landfill gas
Supply						
Production	101	332	270	449	211	1,547
Other sources	-	-	-	-	-	-
Imports	-	-	-	378	-	-
Exports	-	-	-	-	-	-
Marine bunkers	-	-	-	-	-	-
Stock change (1)	-	-	-	-	-	-
Transfers	-	-	-	-	-	-
Total supply	101	332	270	827	211	1,547
Statistical difference (2)	-	-	-	-	-	-
Total demand	101	332	270	827	211	1,547
Transformation	-	-	223	714	162	1,534
Electricity generation	-	-	223	714	162	1,534
Major power producers	-	-	145	437	-	-
Autogenerators	-	-	77	277	162	1,534
Heat generation	-	-	-	-	-	-
Petroleum refineries	-	-	-	-	-	-
Coke manufacture	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-
Patent fuel manufacture	-	-	-	-	-	-
Other	-	-	-	-	-	-
Energy industry use	-	-	-	-	-	-
Electricity generation	-	-	-	-	-	-
Oil and gas extraction	-	-	-	-	-	-
Petroleum refineries	-	-	-	-	-	-
Coal extraction	-	-	-	-	-	-
Coke manufacture	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-
Patent fuel manufacture	-	-	-	-	-	-
Pumped storage	-	-	-	-	-	-
Other	-	-	-	-	-	-
Losses	-	-	-	-	-	-
Final consumption	101	332	48	113	49	14
Industry	101	-	46	25	-	14
Unclassified	101	-	46	25	-	14
Iron and steel	-	-	-	-	-	-
Non-ferrous metals	-	-	-	-	-	-
Mineral products	-	-	-	-	-	-
Chemicals	-	-	-	-	-	-
Mechanical engineering, etc	-	-	-	-	-	-
Electrical engineering, etc	-	-	-	-	-	-
Vehicles	-	-	-	-	-	-
Food, beverages, etc	-	-	-	-	-	-
Textiles, leather, etc	-	-	-	-	-	-
Paper, printing, etc	-	-	-	-	-	-
Other industries	-	-	-	-	-	-
Construction	-	-	-	-	-	-
Transport	-	-	-	-	-	-
Air	-	-	-	-	-	-
Rail	-	-	-	-	-	-
Road	-	-	-	-	-	-
National navigation	-	-	-	-	-	-
Pipelines	-	-	-	-	-	-
Other	-	332	2	87	49	-
Domestic	-	332	-	-	-	-
Public administration	-	-	-	-	49	-
Commercial	-	-	-	-	-	-
Agriculture	-	-	2	87	-	-
Miscellaneous	-	-	-	-	-	-
Non energy use	-	-	-	-	-	-

(1) Stock fall (+), stock rise (-).

(2) Total supply minus total demand.

(3) SRC is short rotation coppice.

(4) Municipal solid waste, general industrial waste and hospital waste.

(5) The amount of shoreline waste included is less than 0.05 ktoe.

Commodity balances 2007 (continued)

Renewables and waste

Thousand tonnes of oil equivalent

Waste(4) and tyres	Geothermal, active solar heat and PV	Hydro	Wind and wave (5)	Liquid biofuels	Total renewables	
						Supply
956	47	437	453	396	5,200	Production
-	-	-	-	-	-	Other sources
-	-	-	-	76	454	Imports
-	-	-	-	-110	-110	Exports
-	-	-	-	-	-	Marine bunkers
-	-	-	-	-	-	Stock change (1)
-	-	-	-	-	-	Transfers
956	47	437	453	362	5,544	Total supply
-	-	-	-	-	-	Statistical difference (2)
956	47	437	453	362	5,544	Total demand
785	1	437	453	-	4,309	Transformation
785	1	437	453	-	4,309	Electricity generation
93	-	356	307	-	1,338	Major power producers
692	1	80	147	-	2,971	Autogenerators
-	-	-	-	-	-	Heat generation
-	-	-	-	-	-	Petroleum refineries
-	-	-	-	-	-	Coke manufacture
-	-	-	-	-	-	Blast furnaces
-	-	-	-	-	-	Patent fuel manufacture
-	-	-	-	-	-	Other
-	-	-	-	-	-	Energy industry use
-	-	-	-	-	-	Electricity generation
-	-	-	-	-	-	Oil and gas extraction
-	-	-	-	-	-	Petroleum refineries
-	-	-	-	-	-	Coal extraction
-	-	-	-	-	-	Coke manufacture
-	-	-	-	-	-	Blast furnaces
-	-	-	-	-	-	Patent fuel manufacture
-	-	-	-	-	-	Pumped storage
-	-	-	-	-	-	Other
-	-	-	-	-	-	Losses
171	46	-	-	362	1,235	Final consumption
90	-	-	-	-	276	Industry
90	-	-	-	-	276	Unclassified
-	-	-	-	-	-	Iron and steel
-	-	-	-	-	-	Non-ferrous metals
-	-	-	-	-	-	Mineral products
-	-	-	-	-	-	Chemicals
-	-	-	-	-	-	Mechanical engineering, etc
-	-	-	-	-	-	Electrical engineering, etc
-	-	-	-	-	-	Vehicles
-	-	-	-	-	-	Food, beverages, etc
-	-	-	-	-	-	Textiles, leather, etc
-	-	-	-	-	-	Paper, printing, etc
-	-	-	-	-	-	Other industries
-	-	-	-	-	-	Construction
-	-	-	-	362	362	Transport
-	-	-	-	-	-	Air
-	-	-	-	-	-	Rail
-	-	-	-	362	362	Road
-	-	-	-	-	-	National navigation
-	-	-	-	-	-	Pipelines
81	46	-	-	-	597	Other
23	45	-	-	-	400	Domestic
39	0	-	-	-	89	Public administration
19	0	-	-	-	20	Commercial
-	-	-	-	-	89	Agriculture
-	-	-	-	-	-	Miscellaneous
-	-	-	-	-	-	Non energy use

Commodity balances 2006

Renewables and waste

Thousand tonnes of oil equivalent

	Wood waste	Wood	Poultry litter, meat and bone, and farm waste	Straw, SRC, and other plant-based biomass (3)	Sewage gas	Landfill gas
Supply						
Production	97	299	173	558	190	1,465
Other sources	-	-	-	-	-	-
Imports	-	-	-	497	-	-
Exports	-	-	-	-	-	-
Marine bunkers	-	-	-	-	-	-
Stock change (1)	-	-	-	-	-	-
Transfers	-	-	-	-	-	-
Total supply	97	299	173	1,055	190	1,465
Statistical difference (2)	-	-	-	-	-	-
Total demand	97	299	173	1,055	190	1,465
Transformation	-	-	149	952	146	1,451
Electricity generation	-	-	149	952	146	1,451
Major power producers	-	-	129	555	-	-
Autogenerators	-	-	19	397	146	1,451
Heat generation	-	-	-	-	-	-
Petroleum refineries	-	-	-	-	-	-
Coke manufacture	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-
Patent fuel manufacture	-	-	-	-	-	-
Other	-	-	-	-	-	-
Energy industry use	-	-	-	-	-	-
Electricity generation	-	-	-	-	-	-
Oil and gas extraction	-	-	-	-	-	-
Petroleum refineries	-	-	-	-	-	-
Coal extraction	-	-	-	-	-	-
Coke manufacture	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-
Patent fuel manufacture	-	-	-	-	-	-
Pumped storage	-	-	-	-	-	-
Other	-	-	-	-	-	-
Losses	-	-	-	-	-	-
Final consumption	97	299	25	103	44	14
Industry	97	-	23	15	-	14
Unclassified	97	-	23	15	-	14
Iron and steel	-	-	-	-	-	-
Non-ferrous metals	-	-	-	-	-	-
Mineral products	-	-	-	-	-	-
Chemicals	-	-	-	-	-	-
Mechanical engineering, etc	-	-	-	-	-	-
Electrical engineering, etc	-	-	-	-	-	-
Vehicles	-	-	-	-	-	-
Food, beverages, etc	-	-	-	-	-	-
Textiles, leather, etc	-	-	-	-	-	-
Paper, printing, etc	-	-	-	-	-	-
Other industries	-	-	-	-	-	-
Construction	-	-	-	-	-	-
Transport	-	-	-	-	-	-
Air	-	-	-	-	-	-
Rail	-	-	-	-	-	-
Road	-	-	-	-	-	-
National navigation	-	-	-	-	-	-
Pipelines	-	-	-	-	-	-
Other	-	299	2	88	44	-
Domestic	-	299	-	-	-	-
Public administration	-	-	-	-	44	-
Commercial	-	-	-	-	-	-
Agriculture	-	-	2	88	-	-
Miscellaneous	-	-	-	-	-	-
Non energy use	-	-	-	-	-	-

(1) Stock fall (+), stock rise (-).

(2) Total supply minus total demand.

(3) SRC is short rotation coppice.

(4) Municipal solid waste, general industrial waste and hospital waste.

(5) The amount of shoreline waste included is less than 0.05 ktoe.

Commodity balances 2006 (continued)

Renewables and waste

Thousand tonnes of oil equivalent

Waste ⁽⁴⁾ and tyres	Geothermal, active solar heat and PV	Hydro	Wind and wave (5)	Liquid biofuels	Total renewables	
						Supply
918	38	395	363	231	4,728	Production
-	-	-	-	-	-	Other sources
-	-	-	-	53	550	Imports
-	-	-	-	-97	-97	Exports
-	-	-	-	-	-	Marine bunkers
-	-	-	-	-	-	Stock change (1)
-	-	-	-	-	-	Transfers
918	38	395	363	188	5,181	Total supply
-	-	-	-	-	-	Statistical difference (2)
918	38	395	363	188	5,181	Total demand
773	1	395	363	-	4,229	Transformation
773	1	395	363	-	4,229	Electricity generation
96	-	318	-	-	1,097	Major power producers
677	1	77	363	-	3,132	Autogenerators
-	-	-	-	-	-	Heat generation
-	-	-	-	-	-	Petroleum refineries
-	-	-	-	-	-	Coke manufacture
-	-	-	-	-	-	Blast furnaces
-	-	-	-	-	-	Patent fuel manufacture
-	-	-	-	-	-	Other
-	-	-	-	-	-	Energy industry use
-	-	-	-	-	-	Electricity generation
-	-	-	-	-	-	Oil and gas extraction
-	-	-	-	-	-	Petroleum refineries
-	-	-	-	-	-	Coal extraction
-	-	-	-	-	-	Coke manufacture
-	-	-	-	-	-	Blast furnaces
-	-	-	-	-	-	Patent fuel manufacture
-	-	-	-	-	-	Pumped storage
-	-	-	-	-	-	Other
-	-	-	-	-	-	Losses
145	37	-	-	188	952	Final consumption
65	-	-	-	-	213	Industry
65	-	-	-	-	213	Unclassified
-	-	-	-	-	-	Iron and steel
-	-	-	-	-	-	Non-ferrous metals
-	-	-	-	-	-	Mineral products
-	-	-	-	-	-	Chemicals
-	-	-	-	-	-	Mechanical engineering, etc
-	-	-	-	-	-	Electrical engineering, etc
-	-	-	-	-	-	Vehicles
-	-	-	-	-	-	Food, beverages, etc
-	-	-	-	-	-	Textiles, leather, etc
-	-	-	-	-	-	Paper, printing, etc
-	-	-	-	-	-	Other industries
-	-	-	-	-	-	Construction
-	-	-	-	188	188	Transport
-	-	-	-	-	-	Air
-	-	-	-	-	-	Rail
-	-	-	-	188	188	Road
-	-	-	-	-	-	National navigation
-	-	-	-	-	-	Pipelines
81	37	-	-	-	550	Other
23	36	-	-	-	358	Domestic
39	0	-	-	-	83	Public administration
19	0	-	-	-	20	Commercial
-	-	-	-	-	90	Agriculture
-	-	-	-	-	-	Miscellaneous
-	-	-	-	-	-	Non energy use

Commodity balances 2005

Renewables and waste

	Thousand tonnes of oil equivalent					
	Wood waste	Wood	Poultry litter, meat and bone, and farm waste	Straw, SRC, and other plant-based biomass (3)	Sewage gas	Landfill gas
Supply						
Production	93	266	176	632	206	1,421
Other sources	-	-	-	-	-	-
Imports	-	-	-	421	-	-
Exports	-	-	-	-	-	-
Marine bunkers	-	-	-	-	-	-
Stock change (1)	-	-	-	-	-	-
Transfers	-	-	-	-	-	-
Total supply	93	266	176	1,052	206	1,421
Statistical difference (2)	-	-	-	-	-	-
Total demand	93	266	176	1,052	206	1,421
Transformation	-	-	162	960	153	1,407
Electricity generation	-	-	162	960	153	1,407
Major power producers	-	-	138	582	-	-
Autogenerators	-	-	23	378	153	1,407
Heat generation	-	-	-	-	-	-
Petroleum refineries	-	-	-	-	-	-
Coke manufacture	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-
Patent fuel manufacture	-	-	-	-	-	-
Other	-	-	-	-	-	-
Energy industry use	-	-	-	-	-	-
Electricity generation	-	-	-	-	-	-
Oil and gas extraction	-	-	-	-	-	-
Petroleum refineries	-	-	-	-	-	-
Coal extraction	-	-	-	-	-	-
Coke manufacture	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-
Patent fuel manufacture	-	-	-	-	-	-
Pumped storage	-	-	-	-	-	-
Other	-	-	-	-	-	-
Losses	-	-	-	-	-	-
Final consumption	93	266	14	92	53	14
Industry	93	-	12	14	-	14
Unclassified	93	-	12	14	-	14
Iron and steel	-	-	-	-	-	-
Non-ferrous metals	-	-	-	-	-	-
Mineral products	-	-	-	-	-	-
Chemicals	-	-	-	-	-	-
Mechanical engineering, etc	-	-	-	-	-	-
Electrical engineering, etc	-	-	-	-	-	-
Vehicles	-	-	-	-	-	-
Food, beverages, etc	-	-	-	-	-	-
Textiles, leather, etc	-	-	-	-	-	-
Paper, printing, etc	-	-	-	-	-	-
Other industries	-	-	-	-	-	-
Construction	-	-	-	-	-	-
Transport	-	-	-	-	-	-
Air	-	-	-	-	-	-
Rail	-	-	-	-	-	-
Road	-	-	-	-	-	-
National navigation	-	-	-	-	-	-
Pipelines	-	-	-	-	-	-
Other	-	266	2	79	53	-
Domestic	-	266	-	-	-	-
Public administration	-	-	-	-	53	-
Commercial	-	-	-	-	-	-
Agriculture	-	-	2	79	-	-
Miscellaneous	-	-	-	-	-	-
Non energy use	-	-	-	-	-	-

(1) Stock fall (+), stock rise (-).

(2) Total supply minus total demand.

(3) SRC is short rotation coppice.

(4) Municipal solid waste, general industrial waste and hospital waste.

(5) The amount of shoreline waste included is less than 0.05 ktoe.

Commodity balances 2005 (continued)

Renewables and waste

Thousand tonnes of oil equivalent

Waste ⁽⁴⁾ and tyres	Geothermal, active solar heat and PV	Hydro	Wind and wave (5)	Liquid biofuels	Total renewables	
						Supply
849	31	423	250	8	4,354	Production
-	-	-	-	-	-	Other sources
-	-	-	-	66	487	Imports
-	-	-	-	-	-	Exports
-	-	-	-	-	-	Marine bunkers
-	-	-	-	-	-	Stock change (1)
-	-	-	-	-	-	Transfers
849	31	423	250	74	4,841	Total supply
-	-	-	-	-	-	Statistical difference (2)
849	31	423	250	74	4,841	Total demand
688	1	423	250	-	4,043	Transformation
688	1	423	250	-	4,043	Electricity generation
89	-	329	-	-	1,139	Major power producers
599	1	94	250	-	2,905	Autogenerators
-	-	-	-	-	-	Heat generation
-	-	-	-	-	-	Petroleum refineries
-	-	-	-	-	-	Coke manufacture
-	-	-	-	-	-	Blast furnaces
-	-	-	-	-	-	Patent fuel manufacture
-	-	-	-	-	-	Other
-	-	-	-	-	-	Energy industry use
-	-	-	-	-	-	Electricity generation
-	-	-	-	-	-	Oil and gas extraction
-	-	-	-	-	-	Petroleum refineries
-	-	-	-	-	-	Coal extraction
-	-	-	-	-	-	Coke manufacture
-	-	-	-	-	-	Blast furnaces
-	-	-	-	-	-	Patent fuel manufacture
-	-	-	-	-	-	Pumped storage
-	-	-	-	-	-	Other
-	-	-	-	-	-	Losses
161	30	-	-	74	798	Final consumption
68	-	-	-	-	201	Industry
68	-	-	-	-	201	Unclassified
-	-	-	-	-	-	Iron and steel
-	-	-	-	-	-	Non-ferrous metals
-	-	-	-	-	-	Mineral products
-	-	-	-	-	-	Chemicals
-	-	-	-	-	-	Mechanical engineering, etc
-	-	-	-	-	-	Electrical engineering, etc
-	-	-	-	-	-	Vehicles
-	-	-	-	-	-	Food, beverages, etc
-	-	-	-	-	-	Textiles, leather, etc
-	-	-	-	-	-	Paper, printing, etc
-	-	-	-	-	-	Other industries
-	-	-	-	-	-	Construction
-	-	-	-	74	74	Transport
-	-	-	-	-	-	Air
-	-	-	-	-	-	Rail
-	-	-	-	74	74	Road
-	-	-	-	-	-	National navigation
-	-	-	-	-	-	Pipelines
93	30	-	-	-	523	Other
23	29	-	-	-	318	Domestic
51	0	-	-	-	105	Public administration
19	0	-	-	-	20	Commercial
-	-	-	-	-	81	Agriculture
-	-	-	-	-	-	Miscellaneous
-	-	-	-	-	-	Non energy use

Commodity balances 2004

Renewables and waste

Thousand tonnes of oil equivalent

	Wood waste	Wood	Poultry litter, meat and bone, and farm waste	Straw, SRC, and other plant-based biomass (3)	Sewage gas	Landfill gas
Supply						
Production	196	204	184	124	177	1,327
Other sources	-	-	-	-	-	-
Imports	-	-	-	402	-	-
Exports	-	-	-	-	-	-
Marine bunkers	-	-	-	-	-	-
Stock change (1)	-	-	-	-	-	-
Transfers	-	-	-	-	-	-
Total supply	196	204	184	526	177	1,327
Statistical difference (2)	-	-	-	-	-	-
Total demand	196	204	184	526	177	1,327
Transformation	-	-	182	454	124	1,313
Electricity generation	-	-	182	454	124	1,313
Major power producers	-	-	159	290	-	-
Autogenerators	-	-	23	164	124	1,313
Heat generation	-	-	-	-	-	-
Petroleum refineries	-	-	-	-	-	-
Coke manufacture	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-
Patent fuel manufacture	-	-	-	-	-	-
Other	-	-	-	-	-	-
Energy industry use	-	-	-	-	-	-
Electricity generation	-	-	-	-	-	-
Oil and gas extraction	-	-	-	-	-	-
Petroleum refineries	-	-	-	-	-	-
Coal extraction	-	-	-	-	-	-
Coke manufacture	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-
Patent fuel manufacture	-	-	-	-	-	-
Pumped storage	-	-	-	-	-	-
Other	-	-	-	-	-	-
Losses	-	-	-	-	-	-
Final consumption	196	204	2	72	53	14
Industry	196	-	-	-	-	14
Unclassified	196	-	-	-	-	14
Iron and steel	-	-	-	-	-	-
Non-ferrous metals	-	-	-	-	-	-
Mineral products	-	-	-	-	-	-
Chemicals	-	-	-	-	-	-
Mechanical engineering, etc	-	-	-	-	-	-
Electrical engineering, etc	-	-	-	-	-	-
Vehicles	-	-	-	-	-	-
Food, beverages, etc	-	-	-	-	-	-
Textiles, leather, etc	-	-	-	-	-	-
Paper, printing, etc	-	-	-	-	-	-
Other industries	-	-	-	-	-	-
Construction	-	-	-	-	-	-
Transport	-	-	-	-	-	-
Air	-	-	-	-	-	-
Rail	-	-	-	-	-	-
Road	-	-	-	-	-	-
National navigation	-	-	-	-	-	-
Pipelines	-	-	-	-	-	-
Other	-	204	2	72	53	-
Domestic	-	204	-	-	-	-
Public administration	-	-	-	-	53	-
Commercial	-	-	-	-	-	-
Agriculture	-	-	2	72	-	-
Miscellaneous	-	-	-	-	-	-
Non energy use	-	-	-	-	-	-

(1) Stock fall (+), stock rise (-).

(2) Total supply minus total demand.

(3) SRC is short rotation coppice.

(4) Municipal solid waste, general industrial waste and hospital waste.

(5) The amount of shoreline waste included is less than 0.05 ktoe.

Commodity balances 2004 (continued)

Renewables and waste

Thousand tonnes of oil equivalent

Waste ⁽⁴⁾ and tyres	Geothermal, active solar heat and PV	Hydro	Wind and wave (5)	Total renewables	
					Supply
843	26	417	166	3,663	Production
-	-	-	-	-	Other sources
-	-	-	-	402	Imports
-	-	-	-	-	Exports
-	-	-	-	-	Marine bunkers
-	-	-	-	-	Stock change (1)
-	-	-	-	-	Transfers
843	26	417	166	4,065	Total supply
-	-	-	-	-	Statistical difference (2)
843	26	417	166	4,065	Total demand
693	0	417	166	3,350	Transformation
693	0	417	166	3,350	Electricity generation
90	-	337	-	876	Major power producers
603	0	80	166	2,474	Autogenerators
-	-	-	-	-	Heat generation
-	-	-	-	-	Petroleum refineries
-	-	-	-	-	Coke manufacture
-	-	-	-	-	Blast furnaces
-	-	-	-	-	Patent fuel manufacture
-	-	-	-	-	Other
-	-	-	-	-	Energy industry use
-	-	-	-	-	Electricity generation
-	-	-	-	-	Oil and gas extraction
-	-	-	-	-	Petroleum refineries
-	-	-	-	-	Coal extraction
-	-	-	-	-	Coke manufacture
-	-	-	-	-	Blast furnaces
-	-	-	-	-	Patent fuel manufacture
-	-	-	-	-	Pumped storage
-	-	-	-	-	Other
-	-	-	-	-	Losses
149	25	-	-	715	Final consumption
56	-	-	-	265	Industry
56	-	-	-	265	Unclassified
-	-	-	-	-	Iron and steel
-	-	-	-	-	Non-ferrous metals
-	-	-	-	-	Mineral products
-	-	-	-	-	Chemicals
-	-	-	-	-	Mechanical engineering, etc
-	-	-	-	-	Electrical engineering, etc
-	-	-	-	-	Vehicles
-	-	-	-	-	Food, beverages, etc
-	-	-	-	-	Textiles, leather, etc
-	-	-	-	-	Paper, printing, etc
-	-	-	-	-	Other industries
-	-	-	-	-	Construction
-	-	-	-	-	Transport
-	-	-	-	-	Air
-	-	-	-	-	Rail
-	-	-	-	-	Road
-	-	-	-	-	National navigation
-	-	-	-	-	Pipelines
93	25	-	-	449	Other
23	25	-	-	252	Domestic
51	-	-	-	104	Public administration
19	-	-	-	19	Commercial
-	-	-	-	74	Agriculture
-	-	-	-	-	Miscellaneous
-	-	-	-	-	Non energy use

Commodity balances 2003

Renewables and waste

	Thousand tonnes of oil equivalent				
	Wood waste	Wood	Poultry litter, meat and bone, biomass, straw, farm waste and SRC ⁽³⁾	Sewage gas	Landfill gas
Supply					
Production	196	204	460	165	1,088
Other sources	-	-	-	-	-
Imports	-	-	110	-	-
Exports	-	-	-	-	-
Marine bunkers	-	-	-	-	-
Stock change ⁽¹⁾	-	-	-	-	-
Transfers	-	-	-	-	-
Total supply	196	204	570	165	1,088
Statistical difference ⁽²⁾	-	-	-	-	-
Total demand	196	204	570	165	1,088
Transformation	-	-	499	113	1,075
Electricity generation	-	-	499	113	1,075
Major power producers	-	-	292	-	-
Autogenerators	-	-	207	113	1,075
Heat generation	-	-	-	-	-
Petroleum refineries	-	-	-	-	-
Coke manufacture	-	-	-	-	-
Blast furnaces	-	-	-	-	-
Patent fuel manufacture	-	-	-	-	-
Other	-	-	-	-	-
Energy industry use	-	-	-	-	-
Electricity generation	-	-	-	-	-
Oil and gas extraction	-	-	-	-	-
Petroleum refineries	-	-	-	-	-
Coal extraction	-	-	-	-	-
Coke manufacture	-	-	-	-	-
Blast furnaces	-	-	-	-	-
Patent fuel manufacture	-	-	-	-	-
Pumped storage	-	-	-	-	-
Other	-	-	-	-	-
Losses	-	-	-	-	-
Final consumption	196	204	72	53	14
Industry	196	-	-	-	14
Unclassified	196	-	-	-	14
Iron and steel	-	-	-	-	-
Non-ferrous metals	-	-	-	-	-
Mineral products	-	-	-	-	-
Chemicals	-	-	-	-	-
Mechanical engineering, etc	-	-	-	-	-
Electrical engineering, etc	-	-	-	-	-
Vehicles	-	-	-	-	-
Food, beverages, etc	-	-	-	-	-
Textiles, leather, etc	-	-	-	-	-
Paper, printing, etc	-	-	-	-	-
Other industries	-	-	-	-	-
Construction	-	-	-	-	-
Transport	-	-	-	-	-
Air	-	-	-	-	-
Rail	-	-	-	-	-
Road	-	-	-	-	-
National navigation	-	-	-	-	-
Pipelines	-	-	-	-	-
Other	-	204	72	53	-
Domestic	-	204	-	-	-
Public administration	-	-	-	53	-
Commercial	-	-	-	-	-
Agriculture	-	-	72	-	-
Miscellaneous	-	-	-	-	-
Non energy use	-	-	-	-	-

(1) Stock fall (+), stock rise (-).

(2) Total supply minus total demand.

(3) SRC is short rotation coppice and other energy crops.

(4) Municipal solid waste, general industrial waste and hospital waste.

(5) The amount of shoreline waste included is less than 0.05 ktoe.

Commodity balances 2003 (continued)

Renewables and waste

Thousand tonnes of oil equivalent

Waste ⁽⁴⁾ and tyres	Geothermal and active solar heat	Hydro	Wind and wave (5)	Total renewables	
					Supply
874	21	278	111	3,396	Production
-	-	-	-	-	Other sources
-	-	-	-	110	Imports
-	-	-	-	-	Exports
-	-	-	-	-	Marine bunkers
-	-	-	-	-	Stock change (1)
-	-	-	-	-	Transfers
874	21	278	111	3,506	Total supply
-	-	-	-	-	Statistical difference (2)
874	21	278	111	3,506	Total demand
723	-	278	111	2,796	Transformation
723	-	278	111	2,796	Electricity generation
89	-	221	-	602	Major power producers
634	-	57	111	2,194	Autogenerators
-	-	-	-	-	Heat generation
-	-	-	-	-	Petroleum refineries
-	-	-	-	-	Coke manufacture
-	-	-	-	-	Blast furnaces
-	-	-	-	-	Patent fuel manufacture
-	-	-	-	-	Other
-	-	-	-	-	Energy industry use
-	-	-	-	-	Electricity generation
-	-	-	-	-	Oil and gas extraction
-	-	-	-	-	Petroleum refineries
-	-	-	-	-	Coal extraction
-	-	-	-	-	Coke manufacture
-	-	-	-	-	Blast furnaces
-	-	-	-	-	Patent fuel manufacture
-	-	-	-	-	Pumped storage
-	-	-	-	-	Other
-	-	-	-	-	Losses
151	21	-	-	710	Final consumption
58	-	-	-	267	Industry
58	-	-	-	267	Unclassified
-	-	-	-	-	Iron and steel
-	-	-	-	-	Non-ferrous metals
-	-	-	-	-	Mineral products
-	-	-	-	-	Chemicals
-	-	-	-	-	Mechanical engineering, etc
-	-	-	-	-	Electrical engineering, etc
-	-	-	-	-	Vehicles
-	-	-	-	-	Food, beverages, etc
-	-	-	-	-	Textiles, leather, etc
-	-	-	-	-	Paper, printing, etc
-	-	-	-	-	Other industries
-	-	-	-	-	Construction
-	-	-	-	-	Transport
-	-	-	-	-	Air
-	-	-	-	-	Rail
-	-	-	-	-	Road
-	-	-	-	-	National navigation
-	-	-	-	-	Pipelines
93	21	-	-	443	Other
23	21	-	-	247	Domestic
51	-	-	-	104	Public administration
19	-	-	-	19	Commercial
-	-	-	-	72	Agriculture
-	-	-	-	-	Miscellaneous
-	-	-	-	-	Non energy use

Commodity balances 2002

Renewables and waste

Thousand tonnes of oil equivalent

	Wood waste	Wood	Poultry litter, meat and bone, straw, farm waste and SRC ⁽³⁾	Sewage gas	Landfill gas
Supply					
Production	196	204	439	174	892
Other sources	-	-	-	-	-
Imports	-	-	-	-	-
Exports	-	-	-	-	-
Marine bunkers	-	-	-	-	-
Stock change (1)	-	-	-	-	-
Transfers	-	-	-	-	-
Total supply	196	204	439	174	892
Statistical difference (2)	-	-	-	-	-
Total demand	196	204	439	174	892
Transformation	-	-	368	121	879
Electricity generation	-	-	368	121	879
Major power producers	-	-	185	-	-
Autogenerators	-	-	183	121	879
Heat generation	-	-	-	-	-
Petroleum refineries	-	-	-	-	-
Coke manufacture	-	-	-	-	-
Blast furnaces	-	-	-	-	-
Patent fuel manufacture	-	-	-	-	-
Other	-	-	-	-	-
Energy industry use	-	-	-	-	-
Electricity generation	-	-	-	-	-
Oil and gas extraction	-	-	-	-	-
Petroleum refineries	-	-	-	-	-
Coal extraction	-	-	-	-	-
Coke manufacture	-	-	-	-	-
Blast furnaces	-	-	-	-	-
Patent fuel manufacture	-	-	-	-	-
Pumped storage	-	-	-	-	-
Other	-	-	-	-	-
Losses	-	-	-	-	-
Final consumption	196	204	72	53	14
Industry	196	-	-	-	14
Unclassified	196	-	-	-	14
Iron and steel	-	-	-	-	-
Non-ferrous metals	-	-	-	-	-
Mineral products	-	-	-	-	-
Chemicals	-	-	-	-	-
Mechanical engineering, etc	-	-	-	-	-
Electrical engineering, etc	-	-	-	-	-
Vehicles	-	-	-	-	-
Food, beverages, etc	-	-	-	-	-
Textiles, leather, etc	-	-	-	-	-
Paper, printing, etc	-	-	-	-	-
Other industries	-	-	-	-	-
Construction	-	-	-	-	-
Transport	-	-	-	-	-
Air	-	-	-	-	-
Rail	-	-	-	-	-
Road	-	-	-	-	-
National navigation	-	-	-	-	-
Pipelines	-	-	-	-	-
Other	-	204	72	53	-
Domestic	-	204	-	-	-
Public administration	-	-	-	53	-
Commercial	-	-	-	-	-
Agriculture	-	-	72	-	-
Miscellaneous	-	-	-	-	-
Non energy use	-	-	-	-	-

(1) Stock fall (+), stock rise (-).

(2) Total supply minus total demand.

(3) SRC is short rotation coppice and other energy crops.

(4) Municipal solid waste, general industrial waste and hospital waste.

(5) The amount of shoreline waste included is less than 0.05 ktoe.

Commodity balances 2002 (continued)

Renewables and waste

Thousand tonnes of oil equivalent

Waste ⁽⁴⁾ and tyres	Geothermal and active solar heat	Hydro	Wind and wave (5)	Total renewables	
					Supply
832	17	412	108	3,275	Production
-	-	-	-	-	Other sources
-	-	-	-	-	Imports
-	-	-	-	-	Exports
-	-	-	-	-	Marine bunkers
-	-	-	-	-	Stock change (1)
-	-	-	-	-	Transfers
832	17	412	108	3,275	Total supply
-	-	-	-	-	Statistical difference (2)
832	17	412	108	3,275	Total demand
706	-	412	108	2,593	Transformation
706	-	412	108	2,593	Electricity generation
90	-	338	-	613	Major power producers
616	-	74	108	1,981	Autogenerators
-	-	-	-	-	Heat generation
-	-	-	-	-	Petroleum refineries
-	-	-	-	-	Coke manufacture
-	-	-	-	-	Blast furnaces
-	-	-	-	-	Patent fuel manufacture
-	-	-	-	-	Other
-	-	-	-	-	Energy industry use
-	-	-	-	-	Electricity generation
-	-	-	-	-	Oil and gas extraction
-	-	-	-	-	Petroleum refineries
-	-	-	-	-	Coal extraction
-	-	-	-	-	Coke manufacture
-	-	-	-	-	Blast furnaces
-	-	-	-	-	Patent fuel manufacture
-	-	-	-	-	Pumped storage
-	-	-	-	-	Other
-	-	-	-	-	Losses
126	17	-	-	682	Final consumption
41	-	-	-	250	Industry
41	-	-	-	250	Unclassified
-	-	-	-	-	Iron and steel
-	-	-	-	-	Non-ferrous metals
-	-	-	-	-	Mineral products
-	-	-	-	-	Chemicals
-	-	-	-	-	Mechanical engineering, etc
-	-	-	-	-	Electrical engineering, etc
-	-	-	-	-	Vehicles
-	-	-	-	-	Food, beverages, etc
-	-	-	-	-	Textiles, leather, etc
-	-	-	-	-	Paper, printing, etc
-	-	-	-	-	Other industries
-	-	-	-	-	Construction
-	-	-	-	-	Transport
-	-	-	-	-	Air
-	-	-	-	-	Rail
-	-	-	-	-	Road
-	-	-	-	-	National navigation
-	-	-	-	-	Pipelines
85	17	-	-	432	Other
23	17	-	-	243	Domestic
43	-	-	-	97	Public administration
19	-	-	-	19	Commercial
-	-	-	-	72	Agriculture
-	-	-	-	-	Miscellaneous
-	-	-	-	-	Non energy use

Commodity balances 2001

Renewables and waste

Thousand tonnes of oil equivalent

	Wood waste	Wood	Poultry litter, meat and bone, straw, farm waste and SRC ⁽³⁾	Sewage gas	Landfill gas
Supply					
Production	196	204	354	168	836
Other sources	-	-	-	-	-
Imports	-	-	-	-	-
Exports	-	-	-	-	-
Marine bunkers	-	-	-	-	-
Stock change ⁽¹⁾	-	-	-	-	-
Transfers	-	-	-	-	-
Total supply	196	204	354	168	836
Statistical difference ⁽²⁾	-	-	-	-	-
Total demand	196	204	354	168	836
Transformation	-	-	282	119	822
Electricity generation	-	-	282	119	822
Major power producers	-	-	123	-	-
Autogenerators	-	-	159	119	822
Heat generation	-	-	-	-	-
Petroleum refineries	-	-	-	-	-
Coke manufacture	-	-	-	-	-
Blast furnaces	-	-	-	-	-
Patent fuel manufacture	-	-	-	-	-
Other	-	-	-	-	-
Energy industry use	-	-	-	-	-
Electricity generation	-	-	-	-	-
Oil and gas extraction	-	-	-	-	-
Petroleum refineries	-	-	-	-	-
Coal extraction	-	-	-	-	-
Coke manufacture	-	-	-	-	-
Blast furnaces	-	-	-	-	-
Patent fuel manufacture	-	-	-	-	-
Pumped storage	-	-	-	-	-
Other	-	-	-	-	-
Losses	-	-	-	-	-
Final consumption	196	204	72	49	14
Industry	196	-	-	-	14
Unclassified	196	-	-	-	14
Iron and steel	-	-	-	-	-
Non-ferrous metals	-	-	-	-	-
Mineral products	-	-	-	-	-
Chemicals	-	-	-	-	-
Mechanical engineering, etc	-	-	-	-	-
Electrical engineering, etc	-	-	-	-	-
Vehicles	-	-	-	-	-
Food, beverages, etc	-	-	-	-	-
Textiles, leather, etc	-	-	-	-	-
Paper, printing, etc	-	-	-	-	-
Other industries	-	-	-	-	-
Construction	-	-	-	-	-
Transport	-	-	-	-	-
Air	-	-	-	-	-
Rail	-	-	-	-	-
Road	-	-	-	-	-
National navigation	-	-	-	-	-
Pipelines	-	-	-	-	-
Other	-	204	72	49	-
Domestic	-	204	-	-	-
Public administration	-	-	-	49	-
Commercial	-	-	-	-	-
Agriculture	-	-	72	-	-
Miscellaneous	-	-	-	-	-
Non energy use	-	-	-	-	-

(1) Stock fall (+), stock rise (-).

(2) Total supply minus total demand.

(3) SRC is short rotation coppice and other energy crops.

(4) Municipal solid waste, general industrial waste and hospital waste.

(5) The amount of shoreline waste included is less than 0.05 ktoe.

Commodity balances 2001 (continued)

Renewables and waste

Thousand tonnes of oil equivalent

Waste(4) and tyres	Geothermal and active solar heat	Hydro	Wind and wave (5)	Total renewables	
					Supply
760	14	349	83	2,965	Production
-	-	-	-	-	Other sources
-	-	-	-	-	Imports
-	-	-	-	-	Exports
-	-	-	-	-	Marine bunkers
-	-	-	-	-	Stock change (1)
-	-	-	-	-	Transfers
760	14	349	83	2,965	Total supply
-	-	-	-	-	Statistical difference (2)
760	14	349	83	2,965	Total demand
653	-	349	83	2,309	Transformation
653	-	349	83	2,309	Electricity generation
530	-	276	-	930	Major power producers
123	-	72	83	1,378	Autogenerators
-	-	-	-	-	Heat generation
-	-	-	-	-	Petroleum refineries
-	-	-	-	-	Coke manufacture
-	-	-	-	-	Blast furnaces
-	-	-	-	-	Patent fuel manufacture
-	-	-	-	-	Other
-	-	-	-	-	Energy industry use
-	-	-	-	-	Electricity generation
-	-	-	-	-	Oil and gas extraction
-	-	-	-	-	Petroleum refineries
-	-	-	-	-	Coal extraction
-	-	-	-	-	Coke manufacture
-	-	-	-	-	Blast furnaces
-	-	-	-	-	Patent fuel manufacture
-	-	-	-	-	Pumped storage
-	-	-	-	-	Other
-	-	-	-	-	Losses
107	14	-	-	656	Final consumption
34	-	-	-	243	Industry
34	-	-	-	243	Unclassified
-	-	-	-	-	Iron and steel
-	-	-	-	-	Non-ferrous metals
-	-	-	-	-	Mineral products
-	-	-	-	-	Chemicals
-	-	-	-	-	Mechanical engineering, etc
-	-	-	-	-	Electrical engineering, etc
-	-	-	-	-	Vehicles
-	-	-	-	-	Food, beverages, etc
-	-	-	-	-	Textiles, leather, etc
-	-	-	-	-	Paper, printing, etc
-	-	-	-	-	Other industries
-	-	-	-	-	Construction
-	-	-	-	-	Transport
-	-	-	-	-	Air
-	-	-	-	-	Rail
-	-	-	-	-	Road
-	-	-	-	-	National navigation
-	-	-	-	-	Pipelines
73	14	-	-	413	Other
23	14	-	-	240	Domestic
40	-	-	-	90	Public administration
10	-	-	-	11	Commercial
-	-	-	-	72	Agriculture
-	-	-	-	-	Miscellaneous
-	-	-	-	-	Non energy use

Commodity balances 2000

Renewables and waste

Thousand tonnes of oil equivalent

	Wood waste	Wood	Poultry litter, meat and bone, straw, farm waste and SRC ⁽³⁾	Sewage gas	Landfill gas
Supply					
Production	221	204	265	169	731
Other sources	-	-	-	-	-
Imports	-	-	-	-	-
Exports	-	-	-	-	-
Marine bunkers	-	-	-	-	-
Stock change (1)	-	-	-	-	-
Transfers	-	-	-	-	-
Total supply	221	204	265	169	731
Statistical difference (2)	-	-	-	-	-
Total demand	221	204	265	169	731
Transformation	-	-	193	120	718
Electricity generation	-	-	193	120	718
Major power producers	-	-	131	-	-
Autogenerators	-	-	61	120	718
Heat generation	-	-	-	-	-
Petroleum refineries	-	-	-	-	-
Coke manufacture	-	-	-	-	-
Blast furnaces	-	-	-	-	-
Patent fuel manufacture	-	-	-	-	-
Other	-	-	-	-	-
Energy industry use	-	-	-	-	-
Electricity generation	-	-	-	-	-
Oil and gas extraction	-	-	-	-	-
Petroleum refineries	-	-	-	-	-
Coal extraction	-	-	-	-	-
Coke manufacture	-	-	-	-	-
Blast furnaces	-	-	-	-	-
Patent fuel manufacture	-	-	-	-	-
Pumped storage	-	-	-	-	-
Other	-	-	-	-	-
Losses	-	-	-	-	-
Final consumption	221	204	72	48	14
Industry	221	-	-	-	14
Unclassified	221	-	-	-	14
Iron and steel	-	-	-	-	-
Non-ferrous metals	-	-	-	-	-
Mineral products	-	-	-	-	-
Chemicals	-	-	-	-	-
Mechanical engineering, etc	-	-	-	-	-
Electrical engineering, etc	-	-	-	-	-
Vehicles	-	-	-	-	-
Food, beverages, etc	-	-	-	-	-
Textiles, leather, etc	-	-	-	-	-
Paper, printing, etc	-	-	-	-	-
Other industries	-	-	-	-	-
Construction	-	-	-	-	-
Transport	-	-	-	-	-
Air	-	-	-	-	-
Rail	-	-	-	-	-
Road	-	-	-	-	-
National navigation	-	-	-	-	-
Pipelines	-	-	-	-	-
Other	-	204	72	48	-
Domestic	-	204	-	-	-
Public administration	-	-	-	48	-
Commercial	-	-	-	-	-
Agriculture	-	-	72	-	-
Miscellaneous	-	-	-	-	-
Non energy use	-	-	-	-	-

(1) Stock fall (+), stock rise (-).

(2) Total supply minus total demand.

(3) SRC is short rotation coppice and other energy crops.

(4) Municipal solid waste, general industrial waste and hospital waste.

Commodity balances 2000 (continued)

Renewables and waste

Thousand tonnes of oil equivalent

Waste(4) and tyres	Geothermal & active solar heat	Hydro	Wind	Total renewables	
					Supply
704	12	437	81	2,825	Production
-	-	-	-	-	Other sources
-	-	-	-	-	Imports
-	-	-	-	-	Exports
-	-	-	-	-	Marine bunkers
-	-	-	-	-	Stock change (1)
-	-	-	-	-	Transfers
704	12	437	81	2,825	Total supply
-	-	-	-	-	Statistical difference (2)
704	12	437	81	2,825	Total demand
603	-	437	81	2,153	Transformation
603	-	437	81	2,153	Electricity generation
108	-	372	-	612	Major power producers
495	-	65	81	1,541	Autogenerators
-	-	-	-	-	Heat generation
-	-	-	-	-	Petroleum refineries
-	-	-	-	-	Coke manufacture
-	-	-	-	-	Blast furnaces
-	-	-	-	-	Patent fuel manufacture
-	-	-	-	-	Other
-	-	-	-	-	Energy industry use
-	-	-	-	-	Electricity generation
-	-	-	-	-	Oil and gas extraction
-	-	-	-	-	Petroleum refineries
-	-	-	-	-	Coal extraction
-	-	-	-	-	Coke manufacture
-	-	-	-	-	Blast furnaces
-	-	-	-	-	Patent fuel manufacture
-	-	-	-	-	Pumped storage
-	-	-	-	-	Other
-	-	-	-	-	Losses
100	12	-	-	672	Final consumption
30	-	-	-	264	Industry
30	-	-	-	264	Unclassified
-	-	-	-	-	Iron and steel
-	-	-	-	-	Non-ferrous metals
-	-	-	-	-	Mineral products
-	-	-	-	-	Chemicals
-	-	-	-	-	Mechanical engineering, etc
-	-	-	-	-	Electrical engineering, etc
-	-	-	-	-	Vehicles
-	-	-	-	-	Food, beverages, etc
-	-	-	-	-	Textiles, leather, etc
-	-	-	-	-	Paper, printing, etc
-	-	-	-	-	Other industries
-	-	-	-	-	Construction
-	-	-	-	-	Transport
-	-	-	-	-	Air
-	-	-	-	-	Rail
-	-	-	-	-	Road
-	-	-	-	-	National navigation
-	-	-	-	-	Pipelines
71	12	-	-	408	Other
21	12	-	-	236	Domestic
40	-	-	-	88	Public administration
11	-	-	-	11	Commercial
-	-	-	-	72	Agriculture
-	-	-	-	-	Miscellaneous
-	-	-	-	-	Non energy use

Commodity balances 1999

Renewables and waste

Thousand tonnes of oil equivalent

	Wood waste	Wood	Poultry litter, meat and bone, straw, farm waste and SRC ⁽³⁾	Sewage gas	Landfill gas
Supply					
Production	368	204	229	189	572
Other sources	-	-	-	-	-
Imports	-	-	-	-	-
Exports	-	-	-	-	-
Marine bunkers	-	-	-	-	-
Stock change (1)	-	-	-	-	-
Transfers	-	-	-	-	-
Total supply	368	204	229	189	572
Statistical difference (2)	-	-	-	-	-
Total demand	368	204	229	189	572
Transformation	104	-	157	135	558
Electricity generation	-	-	157	135	558
Major power producers	-	-	141	-	-
Autogenerators	-	-	17	135	558
Heat generation	104	-	-	-	-
Petroleum refineries	-	-	-	-	-
Coke manufacture	-	-	-	-	-
Blast furnaces	-	-	-	-	-
Patent fuel manufacture	-	-	-	-	-
Other	-	-	-	-	-
Energy industry use	-	-	-	-	-
Electricity generation	-	-	-	-	-
Oil and gas extraction	-	-	-	-	-
Petroleum refineries	-	-	-	-	-
Coal extraction	-	-	-	-	-
Coke manufacture	-	-	-	-	-
Blast furnaces	-	-	-	-	-
Patent fuel manufacture	-	-	-	-	-
Pumped storage	-	-	-	-	-
Other	-	-	-	-	-
Losses	-	-	-	-	-
Final consumption	264	204	72	54	14
Industry	264	-	-	-	14
Unclassified	264	-	-	-	14
Iron and steel	-	-	-	-	-
Non-ferrous metals	-	-	-	-	-
Mineral products	-	-	-	-	-
Chemicals	-	-	-	-	-
Mechanical engineering, etc	-	-	-	-	-
Electrical engineering, etc	-	-	-	-	-
Vehicles	-	-	-	-	-
Food, beverages, etc	-	-	-	-	-
Textiles, leather, etc	-	-	-	-	-
Paper, printing, etc	-	-	-	-	-
Other industries	-	-	-	-	-
Construction	-	-	-	-	-
Transport	-	-	-	-	-
Air	-	-	-	-	-
Rail	-	-	-	-	-
Road	-	-	-	-	-
National navigation	-	-	-	-	-
Pipelines	-	-	-	-	-
Other	-	204	72	54	-
	-	204	-	-	-
Public administration	-	-	-	54	-
Commercial	-	-	-	-	-
Agriculture	-	-	72	-	-
Miscellaneous	-	-	-	-	-
Non energy use	-	-	-	-	-

(1) Stock fall (+), stock rise (-).

(2) Total supply minus total demand.

(3) SRC is short rotation coppice and other energy crops.

(4) Municipal solid waste, general industrial waste and hospital waste.

Commodity balances 1999 (continued)

Renewables and waste

Thousand tonnes of oil equivalent

Waste(4) and tyres	Geothermal & active solar heat	Hydro	Wind	Total renewables	
					Supply
653	10	459	73	2,757	Production
-	-	-	-	-	Other sources
-	-	-	-	-	Imports
-	-	-	-	-	Exports
-	-	-	-	-	Marine bunkers
-	-	-	-	-	Stock change (1)
-	-	-	-	-	Transfers
653	10	459	73	2,757	Total supply
-	-	-	-	-	Statistical difference (2)
653	10	459	73	2,757	Total demand
					Transformation
584	-	459	73	2,069	Electricity generation
584	-	459	73	1,965	Major power producers
119	-	381	-	640	Autogenerators
465	-	78	73	1,325	Heat generation
-	-	-	-	104	Petroleum refineries
-	-	-	-	-	Coke manufacture
-	-	-	-	-	Blast furnaces
-	-	-	-	-	Patent fuel manufacture
-	-	-	-	-	Other
-	-	-	-	-	Energy industry use
-	-	-	-	-	Electricity generation
-	-	-	-	-	Oil and gas extraction
-	-	-	-	-	Petroleum refineries
-	-	-	-	-	Coal extraction
-	-	-	-	-	Coke manufacture
-	-	-	-	-	Blast furnaces
-	-	-	-	-	Patent fuel manufacture
-	-	-	-	-	Pumped storage
-	-	-	-	-	Other
-	-	-	-	-	Losses
70	10	-	-	687	Final consumption
6	-	-	-	283	Industry
6	-	-	-	283	Unclassified
-	-	-	-	-	Iron and steel
-	-	-	-	-	Non-ferrous metals
-	-	-	-	-	Mineral products
-	-	-	-	-	Chemicals
-	-	-	-	-	Mechanical engineering, etc
-	-	-	-	-	Electrical engineering, etc
-	-	-	-	-	Vehicles
-	-	-	-	-	Food, beverages, etc
-	-	-	-	-	Textiles, leather, etc
-	-	-	-	-	Paper, printing, etc
-	-	-	-	-	Other industries
-	-	-	-	-	Construction
-	-	-	-	-	Transport
-	-	-	-	-	Air
-	-	-	-	-	Rail
-	-	-	-	-	Road
-	-	-	-	-	National navigation
-	-	-	-	-	Pipelines
64	10	-	-	404	Other
..	..	-	-	..	Domestic
..	..	-	-	..	Public administration
..	..	-	-	..	Commercial
-	-	-	-	72	Agriculture
..	..	-	-	..	Miscellaneous
-	-	-	-	-	Non energy use

Commodity balances 1998

Renewables and waste

Thousand tonnes of oil equivalent

	Wood waste	Wood	Poultry litter, meat and bone, straw, farm waste and SRC ⁽³⁾	Sewage gas	Landfill gas
Supply					
Production	437	204	148	181	402
Other sources	-	-	-	-	-
Imports	-	-	-	-	-
Exports	-	-	-	-	-
Marine bunkers	-	-	-	-	-
Stock change (1)	-	-	-	-	-
Transfers	-	-	-	-	-
Total supply	437	204	148	181	402
Statistical difference (2)	-	-	-	-	-
Total demand	437	204	148	181	402
Transformation	-	-	76	127	389
Electricity generation	-	-	76	127	389
Major power producers	-	-	76	-	-
Autogenerators	-	-	-	127	389
Petroleum refineries	-	-	-	-	-
Coke manufacture	-	-	-	-	-
Blast furnaces	-	-	-	-	-
Patent fuel manufacture	-	-	-	-	-
Other	-	-	-	-	-
Energy industry use	-	-	-	-	-
Electricity generation	-	-	-	-	-
Oil and gas extraction	-	-	-	-	-
Petroleum refineries	-	-	-	-	-
Coal extraction	-	-	-	-	-
Coke manufacture	-	-	-	-	-
Blast furnaces	-	-	-	-	-
Patent fuel manufacture	-	-	-	-	-
Pumped storage	-	-	-	-	-
Other	-	-	-	-	-
Losses	-	-	-	-	-
Final consumption	437	204	72	54	14
Industry	437	-	-	-	14
Unclassified	437	-	-	-	14
Iron and steel	-	-	-	-	-
Non-ferrous metals	-	-	-	-	-
Mineral products	-	-	-	-	-
Chemicals	-	-	-	-	-
Mechanical engineering, etc	-	-	-	-	-
Electrical engineering, etc	-	-	-	-	-
Vehicles	-	-	-	-	-
Food, beverages, etc	-	-	-	-	-
Textiles, leather, etc	-	-	-	-	-
Paper, printing, etc	-	-	-	-	-
Other industries	-	-	-	-	-
Construction	-	-	-	-	-
Transport	-	-	-	-	-
Air	-	-	-	-	-
Rail	-	-	-	-	-
Road	-	-	-	-	-
National navigation	-	-	-	-	-
Pipelines	-	-	-	-	-
Other	-	204	72	54	-
Domestic	-	204	-	-	-
Public administration	-	-	-	54	-
Commercial	-	-	-	-	-
Agriculture	-	-	72	-	-
Miscellaneous	-	-	-	-	-
Non energy use	-	-	-	-	-

(1) Stock fall (+), stock rise (-).

(2) Total supply minus total demand.

(3) SRC is short rotation coppice and other energy crops.

(4) Municipal solid waste, general industrial waste and hospital waste.

Commodity balances 1998 (continued)

Renewables and waste

Thousand tonnes of oil equivalent

Waste(4) and tyres	Geothermal & active solar heat	Hydro	Wind	Total renewables	
					Supply
694	10	440	75	2,593	Production
-	-	-	-	-	Other sources
-	-	-	-	-	Imports
-	-	-	-	-	Exports
-	-	-	-	-	Marine bunkers
-	-	-	-	-	Stock change (1)
-	-	-	-	-	Transfers
694	10	440	75	2,593	Total supply
-	-	-	-	-	Statistical difference (2)
694	10	440	75	2,593	Total demand
620	-	440	75	1,727	Transformation
620	-	440	75	1,727	Electricity generation
70	-	364	-	511	Major power producers
550	-	76	75	1,216	Autogenerators
-	-	-	-	-	Petroleum refineries
-	-	-	-	-	Coke manufacture
-	-	-	-	-	Blast furnaces
-	-	-	-	-	Patent fuel manufacture
-	-	-	-	-	Other
-	-	-	-	-	Energy industry use
-	-	-	-	-	Electricity generation
-	-	-	-	-	Oil and gas extraction
-	-	-	-	-	Petroleum refineries
-	-	-	-	-	Coal extraction
-	-	-	-	-	Coke manufacture
-	-	-	-	-	Blast furnaces
-	-	-	-	-	Patent fuel manufacture
-	-	-	-	-	Pumped storage
-	-	-	-	-	Other
-	-	-	-	-	Losses
74	10	-	-	866	Final consumption
10	-	-	-	461	Industry
10	-	-	-	461	Unclassified
-	-	-	-	-	Iron and steel
-	-	-	-	-	Non-ferrous metals
-	-	-	-	-	Mineral products
-	-	-	-	-	Chemicals
-	-	-	-	-	Mechanical engineering, etc
-	-	-	-	-	Electrical engineering, etc
-	-	-	-	-	Vehicles
-	-	-	-	-	Food, beverages, etc
-	-	-	-	-	Textiles, leather, etc
-	-	-	-	-	Paper, printing, etc
-	-	-	-	-	Other industries
-	-	-	-	-	Construction
-	-	-	-	-	Transport
-	-	-	-	-	Air
-	-	-	-	-	Rail
-	-	-	-	-	Road
-	-	-	-	-	National navigation
-	-	-	-	-	Pipelines
64	10	-	-	404	Other
..	..	-	-	..	Domestic
..	..	-	-	..	Public administration
..	-	-	-	..	Commercial
-	-	-	-	72	Agriculture
-	..	-	-	..	Miscellaneous
-	-	-	-	-	Non energy use

Annex E

Energy and the environment

Carbon dioxide emissions

E.1 Provisional 2011 results for UK Greenhouse Gas emissions and progress towards targets were published on 29 March 2012. A copy of the statistical press release and associated data tables are available on the DECC website at:

www.decc.gov.uk/en/content/cms/statistics/climate_stats/gg_emissions/uk_emissions/uk_emissions.aspx

Oil pollution, oil spills and gas flaring

E.2 The amounts of oil spilled around the coasts of the United Kingdom and offshore (North Sea) are small in relation to total oil production, with the amounts discharged on drill cuttings, and with produced water generally much larger than from offshore installation spills. The total amount of oil spilled offshore during 2011 was 42 tonnes.

E.3 The number of oil spills recorded dropped from 436 in 2001 to 284 in 2011. Of those reported in 2011, 275 were for spills of less than 1 tonne.

E.4 The Offshore Petroleum Activities (Oil Pollution Prevention and Control) Regulations 2005 (OPPC) came into effect in August 2005. Under OPPC installations a granted a permit for activities discharging oil-contaminated water to sea, but the oil content must not exceed 30 milligrams per litre. The average content of oil in produced water for 2011, for the UKCS as a whole, was 14.3 milligrams per litre compared to 15.2 milligrams per litre in the previous year.

E.5 Under the terms of petroleum production licences, gas may be flared only with the consent of the Secretary of State. Flaring at offshore installations in 2010 was estimated to be 3.21 million cubic metres of gas per day, 2 per cent lower than in 2009..

Data sources

E.6 Figures for the total number of oil spills reported are collected by the Advisory Committee on Protection of the Sea Annual Surveys of Oil Pollution around the Coasts of the United Kingdom.

E.7 Further information on oil spills and discharges is available on the DECC oil and gas website at

www.oq.decc.gov.uk/information/bb_updates/chapters/Table_chart3_1.htm

www.oq.decc.gov.uk/information/bb_updates/chapters/Table3_2.htm

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Annex F

United Kingdom oil and gas resources

Introduction

F.1 This section provides background information on the United Kingdom's crude oil, natural gas liquid and natural gas production, disposal and operations. This information is intended as a supplement to that in the commodity balances included in Chapter 3. Most of the data (including those on gas) are obtained from the Department of Energy and Climate Change's Petroleum Production Reporting System (PPRS). Further information can be obtained from DECC's oil and gas website at <http://og.decc.gov.uk/>.

F.2 The annual statistics relate to calendar years, or the ends of calendar years, and the data cover the United Kingdom Continental Shelf [UKCS] (both onshore and offshore). Annual data for production, imports and exports of crude oil during the period 1970 to 2011 are given in Chapter 3, long term trends, Table 3.1.1 (www.decc.gov.uk/en/content/cms/statistics/energy_stats/source/oil/oil.aspx).

Oil and gas reserves

F.3 Information on oil and gas reserves can be found on DECC's oil and gas website in the statistics section at http://og.decc.gov.uk/en/olgs/cms/data_maps/field_data/uk_oil_gas_res/uk_oil_gas_res.aspx

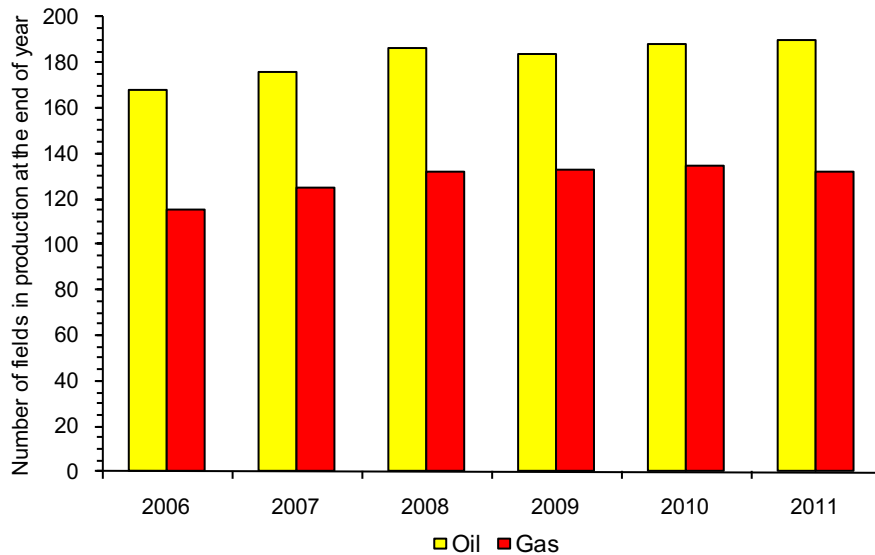
Offshore oil and gas fields and associated facilities

F.4 Table F.A below shows that the number of offshore oil fields in production and under development rose from 184 at the end of 2006 to 204 at the end of 2011. For offshore gas fields the equivalent increase between the end of 2006 and 2011 was from 123 to 137. Most oil fields also produce gas: these are not double-counted. The increases in fields in production are shown in Chart F.1 (offshore fields in production). Throughout the period since 2006 there have been 5 onshore oil terminals. In 2006 there were 5 onshore associated sub-gas terminals and 9 other (dry) sub-gas terminals. However, during 2010 the three (dry) sub-gas terminals at Easington were combined into a single terminal. In 2011 two (dry) sub-gas terminals at Bacton were combined into a single sub-gas terminal. While there are significant numbers of oil and gas fields onshore, total onshore production is less than 2 per cent of the UK total.

Table F.A: Offshore oil and gas fields and facilities

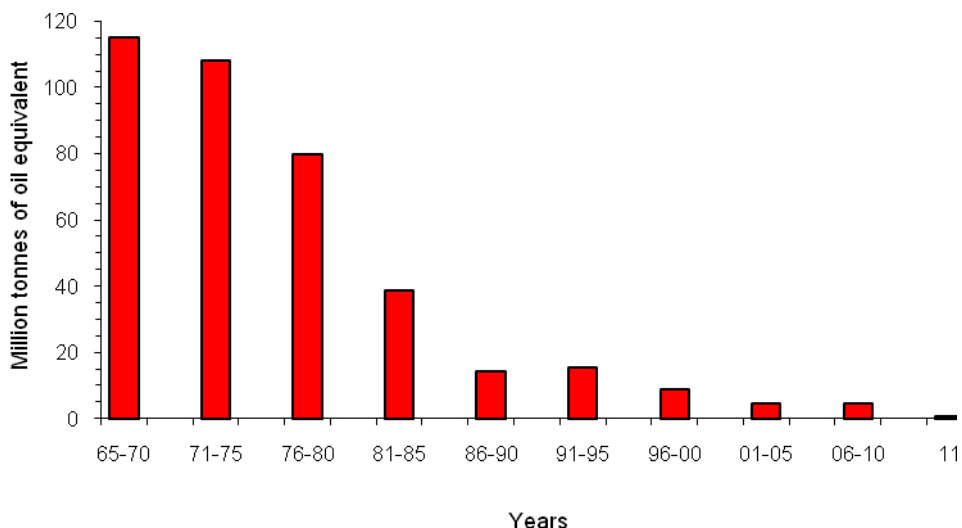
	2006	2007	2008	2009	2010	2011
Offshore oil fields in production	168	175	186	184	188	190
Offshore oil fields under development	16	13	9	6	10	14
Offshore gas fields in production	115	125	132	133	135	132
Offshore gas fields under development	8	4	3	4	2	5

Chart F.1: Offshore oil and gas fields in production, 2006 to 2011



The average size of fields commencing production in 2011 was 0.7 million tonnes of oil equivalent (see Chart F.2). The general fall in average field size reflects a decline in the size of fields discovered compared with the early period of the development of the North Sea and the effect of improved technology providing cost-effective means of extracting oil and gas from smaller fields and hitherto unpromising locations. The industry continues to face a range of challenges in order to realise fully the North Sea's potential. Government and industry are tackling these challenges via the joint Government and Industry task force, PILOT.

Chart F.2: Average size⁽¹⁾ of offshore oil and gas fields commencing production



(1) Recoverable reserves originally present based on the operators' best estimate at the time production commenced.

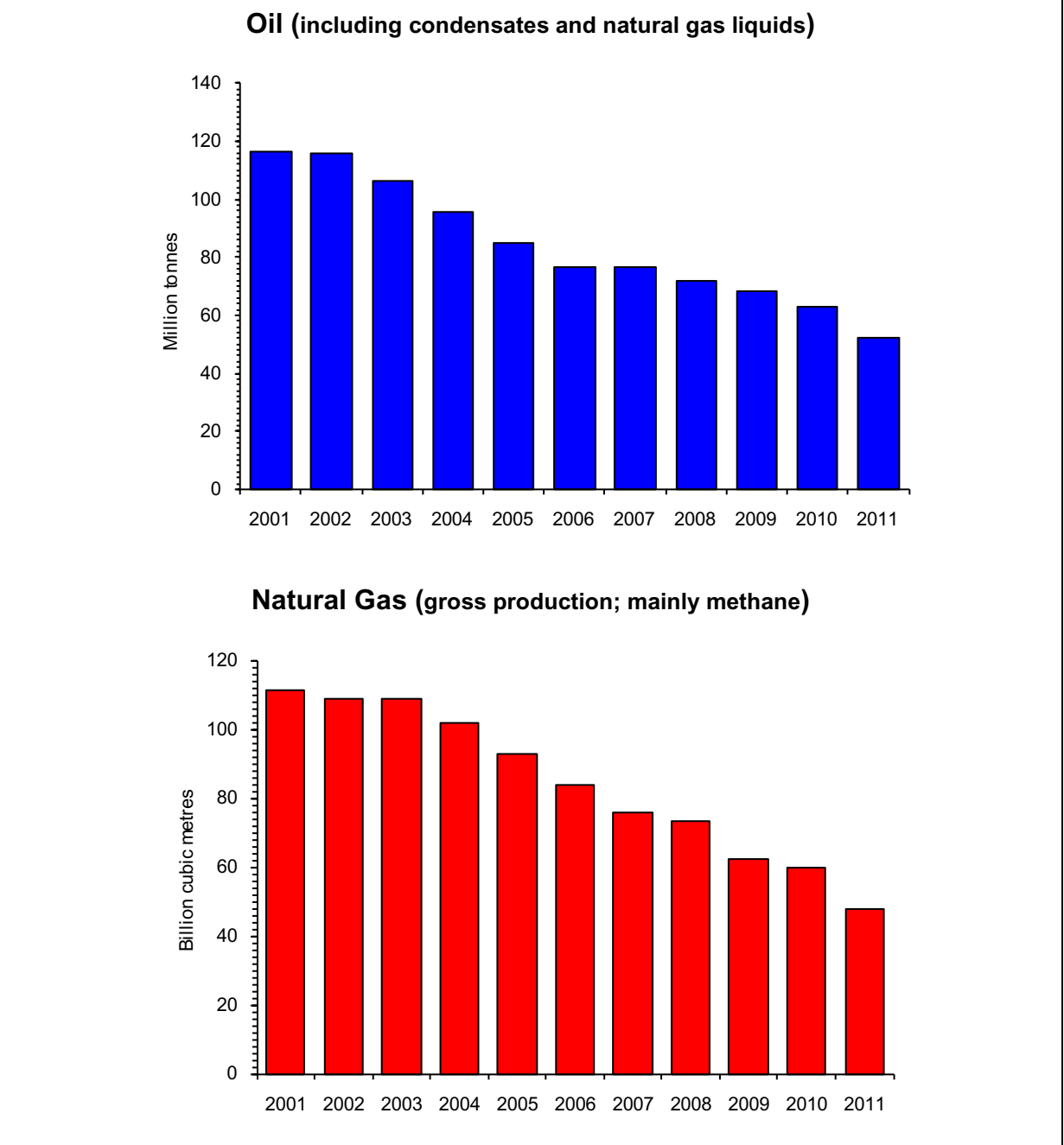
Production of oil and gas (Table F.1, F.2 and F.3)

F.6 These tables show production of crude oil, natural gas (mainly methane) and natural gas liquids. Before 2001, oil and gas production were shown by field but are now based on terminal receipts rather than well-head production following the introduction in January 2001 of a simplified

Petroleum Production Reporting System and subsequent in-house changes to the data collection system. These new data are more accurate measures of production because the oil that leaves a terminal has been stabilised (that is any water, natural gas liquids or other organic compounds have been removed from the crude oil). Gross gas production includes gas used at terminals but excludes any flaring or venting at the terminals (not available before 2001). Except for associated gas fields, field level data can still be found at DECC's oil and gas website at: http://og.decc.gov.uk/en/olgs/cms/data_maps/field_data/field_data.aspx.

F.7 Chart F.3 shows the recent trend in total oil production from 2001 to 2011. After reaching a record level of 137 million tonnes in 1999, production has generally declined each year to 52 million tonnes in 2011, 38 per cent of the peak level. Gross natural gas production (mainly methane) peaked in 2000 at 115 billion cubic metres but has declined to 48 billion cubic metres in 2011, 48 per cent of the peak level.

Chart F.3: Production of oil and gas, 2001 to 2011

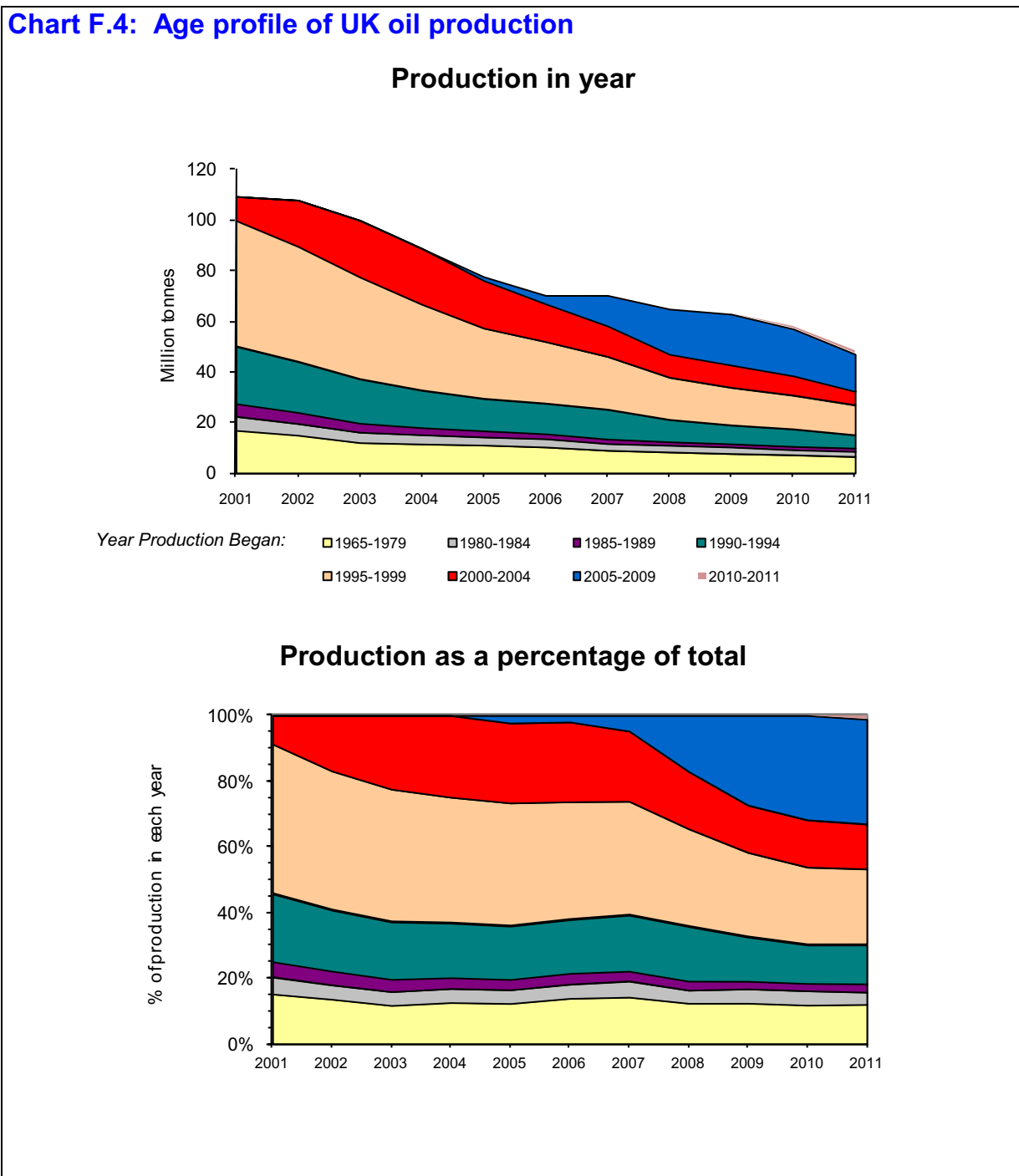


Production of crude oil

F.8 Production from established oil fields has been dropping in recent years. This is illustrated in Chart F.4 below, where oil production in each year from 2001 to 2011 is broken down by the age group of the fields in production during that year. Two charts are shown, the first with the actual amounts of crude oil produced during the year for each age group and the second with the same data transformed to show what percentage of total production each year comes from each field age group. The data used to produce these charts can be found on DECC's oil and gas website at www.og.decc.gov.uk/pprs/full_production.htm.

F.9 It can be seen from the production chart that during the 2000s the amount of oil produced from older established fields was in general decline. It is also noticeable that the decline for post 1994 developments is greater than for earlier developments. This is because later technology meant crude oil could be extracted at a relatively greater rate leading to a quicker exhaustion of the reserves. In 2011, these newer (post 1994) fields accounted for 68 per cent of the UK's oil production. The charts also clearly reflect the start up and prolonged plateau of the very large Buzzard field at the beginning of 2007.

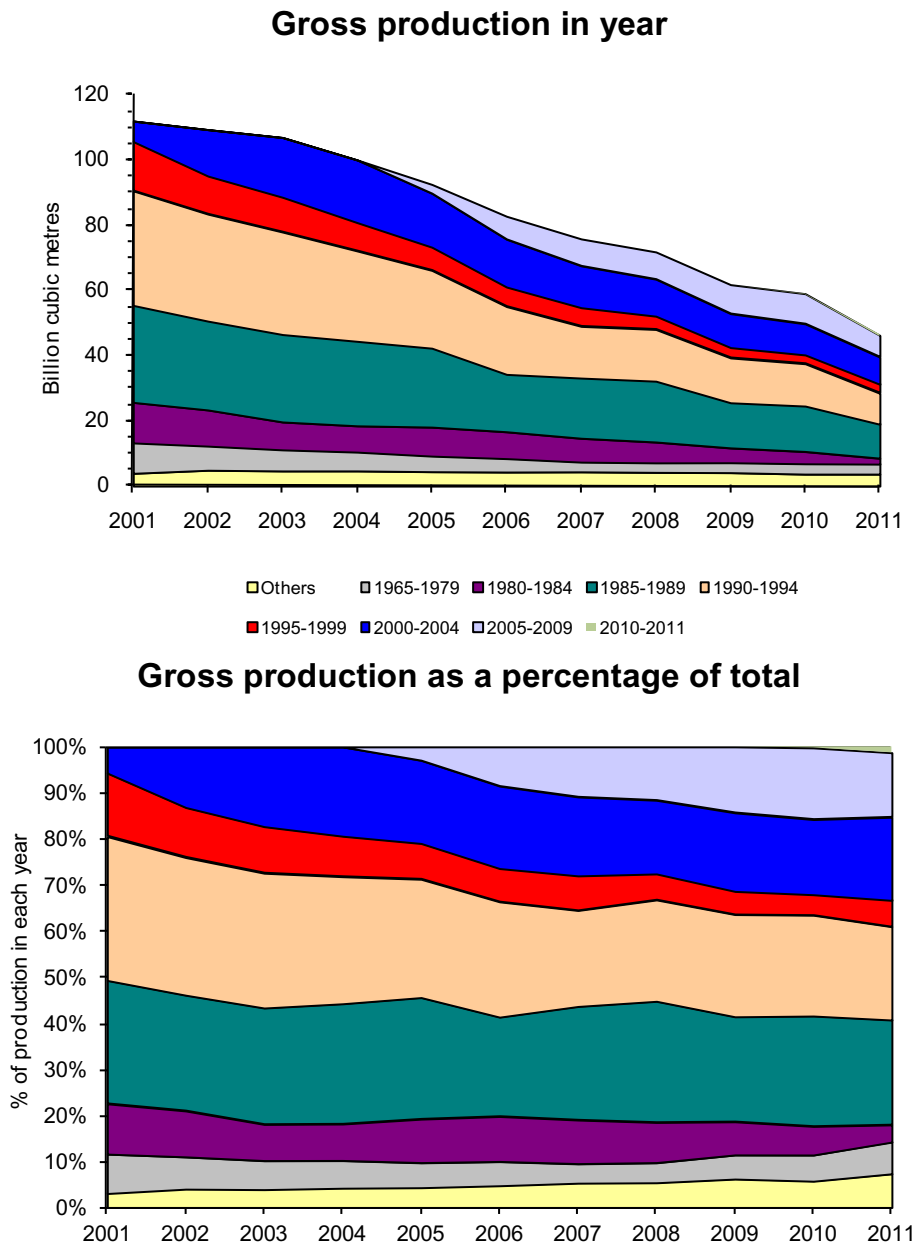
Chart F.4: Age profile of UK oil production



Production of gas

F.10 The charts below present gross gas production reported at field/system level and include gas used for drilling, production and pum ping operations, but exclude gas flared, vented and re-injected. The data used to produce these charts can be found on DECC's oil and gas website at www.og.decc.gov.uk/pprs/full_production.htm.

Chart F.5: Age profile of gross UK gas production

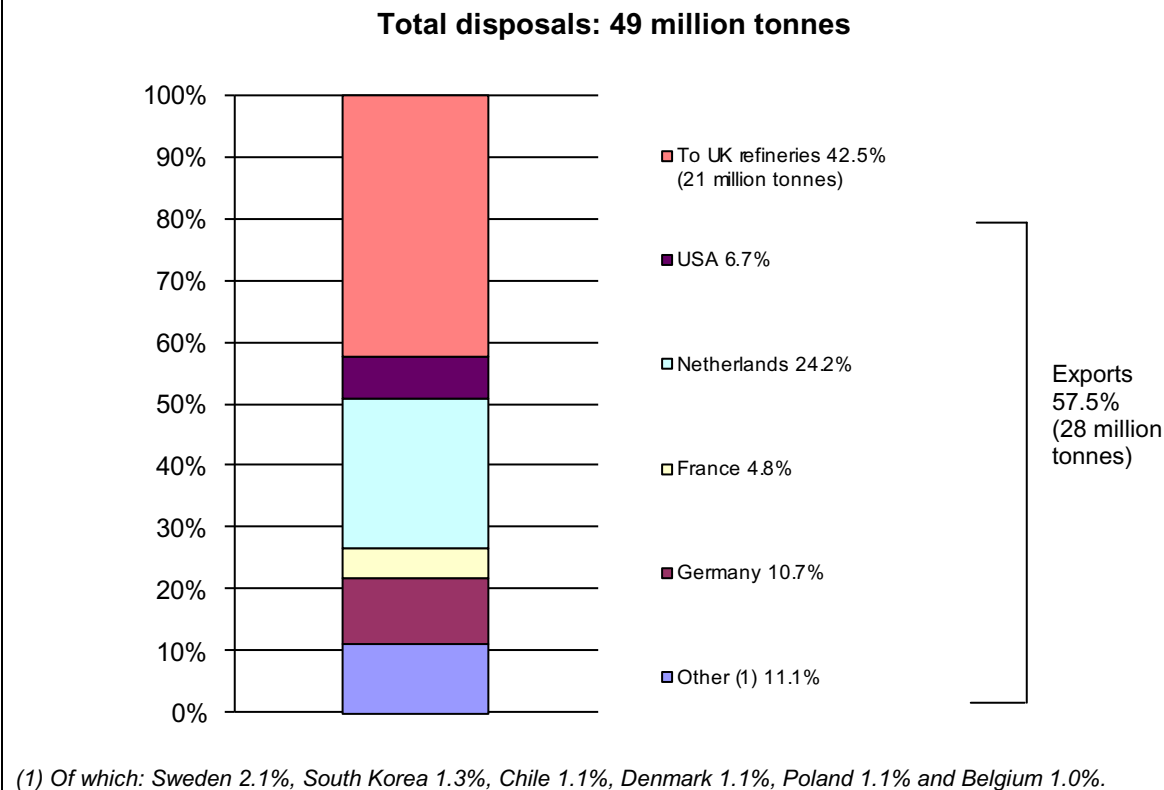


F.11 Gross gas production reached a peak in 2000. Since then production has fallen to 44 per cent of peak production (Chart F.5). As mentioned above (paragraph F.8) for older oil fields, production from the older gas fields that were discovered in the Southern North Sea has reduced in recent years as the reserves originally present in the fields become depleted. Chart F.5 illustrates this. The apparent extent of the decline in gas production from older fields is not as significant as that shown for oil fields (Chart F.4). This is partly because most associated gas production is not back allocated to individual fields and, therefore, the associated gas is based on terminal start date rather than field start date.

Disposals of crude oil (Table F.4)

F.12 Table F.4 and Chart F.6 show the destination of crude oil split between amounts to UK refineries and exports (see technical notes, paragraphs F.14 to F.21) by country of destination (from which it may be transhipped elsewhere). The figures are obtained from returns made to the Department of Energy and Climate Change by operators of oil fields and onshore terminals under the Petroleum Production Reporting System (see paragraphs F.16 to F.18).

Chart F.6: UKCS disposals of crude oil 2011



F.13 The exports figures in Table F.4 may differ from those compiled by the United Kingdom Petroleum Industry Association (UKPIA) and published in Chapter 3. UKPIA figures also include re-exports. These are products that have been imported into the UK and stored before being exported from the UK, and were never part of UK production.

Technical notes and definitions

Petroleum Production Reporting System

F.14 Licensees operating on the UK Continental Shelf are required to make monthly returns on their production of hydrocarbons to the Department of Energy and Climate Change (DECC). DECC compiles this information in the Petroleum Production Reporting System (PPRS). The PPRS is used to report flows, stocks and uses of hydrocarbon from the well-head through to final disposals from a pipeline or terminal and is the major source of the information presented in this chapter.

F.15 Returns are collected covering field and terminal data compiled by relevant reporting units. Each type of return is provided by a single operator, but usually covers the production of a number of companies, since frequently operations carried out on the Continental Shelf involve several companies working together in joint ventures.

F.16 Every production system has one or more sets of certified meters to measure oil, gas or condensate production. The flows measured by the meters are used to check the consistency of returns and are therefore used to assure the accuracy of the PPRS.

Exports

F.17 The term exports used in Table F.4 refers to figures recorded by producers of oil and gas for their exports. These figures may differ from the figures for exports compiled by HM Revenue and Customs (HMRC) and given in Annex G. In addition, HMRC now differentiate between EU and non-EU trade by using the term dispatches for trade going to other EU countries, with exports retained for trade going to non-EU countries. The differences can occur between results from the two sources of information because, whilst the trader's figures are a record of actual shipments in the period, for non-EU trade HMRC figures show the trade as declared by exporters on documents received during the period stated.

F.18 In addition, trade in oil frequently involves a "string" of transactions, which can result in the actual destination of the exports changing several times even after the goods have been dispatched. As such, differences can arise between the final country of destination of the exports as recorded by the producers themselves and in the HMRC figures. The HMRC figures also include re-exports. These are products that might originally have been imported into the UK and stored before being exported back out of the UK, as opposed to actually having been produced in the UK.

F.19 In editions of the Digest before 1997, these exports were called "shipments" in an attempt to highlight their difference from the other sources of trade data.

Units of measurement for gas

F.20 The basic unit of measurement for quantities of flows and stocks is volume in cubic metres at a temperature of 15°C and a pressure of 1.01325 bar.

Monthly and Quarterly data

F.21 Monthly and quarterly data on the production of crude oil and natural gas from the UKCS, along with details of imports and exports of oil, oil products and gas, are available. This information can be obtained free of charge by following the links given at the Energy Statistics section of the DECC web site at: www.decc.gov.uk/en/content/cms/statistics/energy_stats/source/source.aspx.

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F.1 Crude oil and Natural Gas Liquids production

Thousand tonnes

CRUDE OIL		Total to end 1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	Total to end 2011
Offshore production:	Offshore loaded (1)	379,268	30,312	34,169	37,317	31,268	29,976	28,315	25,481	21,977	18,875	18,679	16,007	15,753	15,327	13,141	715,865
Terminal receipts:	Flotta (2)	258,529	10,061	9,564	8,251	6,677	6,464	5,452	4,967	4,287	3,371	3,369	3,235	3,067	2,834	2,068	332,195
	Flotta West (3)	232	3,753	4,330	4,577	3,723	5,281	4,010	3,535	2,987	2,912	2,390	26	0	0	0	37,756
	Forties (4)	552,146	38,352	41,565	35,177	32,806	34,059	30,726	27,715	24,996	21,985	27,168	29,213	28,653	25,261	20,192	970,013
	Nigg Bay (5)	19,840	365	194	137	62	385	293	292	192	106	98	54	338	449	187	22,993
	Norpipe (6)	8,155	7,619	7,819	6,867	5,870	5,989	5,984	5,077	4,600	5,076	3,941	3,729	3,501	3,054	3,074	80,356
	Sullom Voe (7)	821,773	28,805	26,658	22,107	25,059	22,603	20,857	18,508	16,491	15,962	13,441	11,985	10,328	10,180	9,231	1,073,988
Total terminal receipts:		1,660,675	88,955	90,130	77,116	74,197	74,781	67,322	60,094	53,553	49,412	50,407	48,242	45,886	41,778	34,752	2,517,301
Onshore production:	Rail, road, terminals (8)	38,374	5,161	4,285	3,247	2,921	2,673	2,198	1,941	1,648	1,379	1,271	1,248	1,181	941	678	69,146
Other:	Extended well tests (9)	693	-	-	202	-	-	-	-	-	-	-	-	-	-	-	895
Total crude oil production:		2,079,010	124,428	128,584	117,882	108,386	107,430	97,835	87,516	77,178	69,666	70,357	65,497	62,820	58,047	48,571	3,303,206
Total natural gas liquids production:		96,155	8,205	8,515	8,363	8,292	8,514	8,238	7,858	7,543	6,913	6,218	6,168	5,378	4,915	3,401	194,677
Total crude oil and NGL production:		2,175,165	132,633	137,099	126,245	116,678	115,944	106,073	95,374	84,721	76,579	76,575	71,665	68,198	62,962	51,972	3,497,883

(1) Production from: Alba, Angus, Ardmore, Banff, Beryl, Bittern, Blackbird, Blake, Boa (UK), Buckland, Captain, Chestnut, Clapham, Cook, Curlew, Curlew C, Don South West, Donan (Maersk), Douglas, Douglas West, Ettrick, Fergus, Fife, Flora, Foinaven, Gryphon, Guillemot A, NW and W, Harding, Kyle, Leadon, Lennox, Lochranza, Loirston, Maclure, Ness, Nevis, Pict, Pierce, Ross, Saxon, Shelley, Skene, Statfjord (UK), Teal, Teal South, Tullich, West Don.

(2) Production from: Chanter, Claymore, Duart, Galley, Hamish, Highlander, Iona, Ivanhoe, MacCulloch, Petronella, Piper, Renee, Rob Roy, Rubie, Saltire, Scapa, Tartan, Tweedsmuir, Tweedsmuir South..

(3) Production from: Foinaven. The Flotta contract to process Foinaven crude expired in 2008. Direct disposals from Foinaven are included in the offshore loaded figure.

(4) Production from: Andrew, Arbroath, Arkwright, Balmoral, Bardolino, Beaulay, Beinn, Birch, Brae Area, Braemar, Brechin, Brenda, Brimmond, Britannia, Brodgar, Bruce, Buchan, Burghley, Buzzard, Caledonia, Callanish, Cyrus, Drake, Egret, Elgin, Enock (UK), Erskine, Everest, Farragon, Fleming, Forties, Franklin, Gadwall, Glamis, Glenelg, Goosander, Grouse, Hannay, Hawkins, Heron, Howe, Keith, Kingfisher, Larch, Lomond, Machar, Madoes, Mallard, Maria, Marnock, Maule, Merganser, Miller, Mirren, Monan, Montrose, Mungo, Nelson, Nicol, Rhum, Scoter, Scott, Seymour, Shearwater, Skua, Starling, Stirling, Sycamore, Telford, Thelma, Tiffany, Toni, Wood.

(5) Production from: Beatrice, Jacky.

(6) Production from: Affleck, Auk, Auk North, Blane (UK), Clyde, Fulmar, Gannet A- G, Halley, Jade, James, Janice, Joanne, Judy, Leven, Medwin, Nethan, Orion.

(7) Production from: Alwyn North, Brent, Broom, Claire, Columba B/D, Columba E, Conrie, Cormorant (North and South), Deveron, Don, Dunbar, Dunlin, Dunlin South West, Eider, Ellon, Falcon, Forvie, Grant, Heather, Hudson, Hutton, Hutton NW Jura, Kestrel, Loyal, Lyell, Magnus, Magnus South, Merlin, Murchison (UK), Ninian, Osprey, Otter, Pelican, Penguin, Playfair, Schiehallion, Strathspey, Tern, Thistle, West Don.

(8) Production from the Hamble and Holybourne terminals, plus other onshore oil fields.

(9) Extended well tests other than from established fields.

F.2 Gas production to 2011

		Million cubic metres														
		Total to end 1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	Total to end 2011
Offshore dry gas:																
Terminal receipts and production from direct export fields:	Bacton Perenco (1)	209,317	5,431	5,885	5,179	4,493	3,873	3,336	2,553	2,423	2,342	2,375	2,032	2,003	2,221	253,463
	Bacton ENI Hewett (2)	151,047	7,157	6,655	5,140	3,914	2,937	2,136	2,916	2,901	2,595	1,597	1,516	946	509	191,965
	Bacton Shell (3)	265,816	7,966	9,638	10,660	7,466	7,932	8,193	8,230	6,174	4,347	5,706	5,165	4,920	4,937	357,150
	Chiswick	-	-	-	-	-	-	-	-	-	-	542	569	549	842	2,502
	Dimlington (4)	43,858	2,892	4,700	4,367	3,484	4,174	4,049	3,478	2,630	2,387	2,078	1,782	1,700	2,436	84,016
	Easington (5)	62,876	2,486	2,412	1,216	2,249	2,158	2,018	1,799	1,644	1,529	1,681	1,025	432	0	83,525
	Frigg (FUKA Pipeline) (6)	-	-	-	-	-	2,198	2,170	1,812	1,536	1,421	992	791	605	243	11,767
	Grove (7)	-	-	-	-	-	-	-	-	-	238	184	409	622	506	1,959
	Markham (7)	4,460	485	463	350	304	207	192	377	295	257	144	118	82	47	7,780
	Minke (7)	-	-	-	-	-	-	-	-	-	138	24	1	1	0	165
	Morecambe North (8)	9,804	1,144	4,487	3,775	3,922	3,363	2,865	1,972	1,668	1,195	1,211	1,138	1,178	1,053	38,774
	Morecambe South (9)	67,936	9,971	8,436	8,224	7,480	7,853	8,181	5,906	2,410	3,692	4,222	1,918	3,489	2,014	141,731
	Point Of Ayr (10)	4,769	1,870	2,228	2,539	2,279	2,617	1,882	1,552	1,310	1,130	819	574	526	318	24,412
	Rough (11)	4,370	0	428	17	0	0	0	0	0	0	0	0	0	0	4,815
	Stamford (7)	-	-	-	-	-	-	-	-	-	-	-	132	24	3	159
	Theddlethorpe (12)	175,949	11,349	13,994	11,377	8,577	9,602	7,994	7,689	8,942	8,097	7,300	5,910	5,293	4,318	286,390
	Windermere (7)	714	320	273	223	174	149	91	54	44	48	31	16	15	17	2,170
	Offshore gas fields' own use (13)	14	-	-	1,026	897	861	912	872	788	684	724	675	803	678	8,933
Total offshore dry gas gross production:		1,000,928	51,071	59,599	54,092	45,239	47,924	44,019	39,210	32,765	30,102	29,629	23,769	23,188	20,143	1,501,676
Offshore associated gas:																
Terminal receipts:	Bacton SEAL Shell (14)	1	-	93	2,207	7,026	7,391	8,464	7,567	7,101	6,833	7,041	7,033	6,430	5,786	72,972
	Blane	-	-	-	-	-	-	-	-	-	14	38	37	24	23	136
	CATS (15)	21,756	13,605	13,618	13,038	14,213	14,972	13,812	11,660	11,125	7,819	8,243	7,757	7,440	5,397	164,456
	FLAGS (16)	108,821	9,700	10,307	11,651	10,578	7,890	7,720	8,482	7,755	6,659	5,934	4,176	3,569	1,357	204,598
	Frigg (FUKA Pipeline) (6)	150,261	9,900	10,315	9,713	11,611	9,719	7,501	7,474	7,996	7,833	6,685	5,647	6,306	3,948	254,909
	Miller (17)	13,631	1,109	624	256	233	100	174	144	51	3	0	0	0	0	16,325
	Point Of Ayr (10)	-	-	-	-	-	77	440	730	766	935	1,022	739	601	705	6,014
	SAGE (18)	40,302	15,459	16,802	15,350	15,138	15,704	14,827	13,075	11,998	11,570	11,034	9,486	8,507	6,970	206,224
	Offshore oil fields' own use	45,807	3,937	3,763	4,730	4,781	4,565	4,513	4,277	4,170	3,961	3,759	3,688	3,548	3,251	98,750
Total offshore associated gas gross production:		380,579	53,710	55,522	56,945	63,581	60,418	57,451	53,409	50,962	45,626	43,756	38,564	36,426	27,436	1,024,383
Total offshore gross gas production:		1,381,507	104,781	115,121	111,036	108,819	108,342	101,470	92,619	83,727	75,728	73,385	62,332	59,614	47,579	2,526,059
Onshore production:																
	Wytch Farm	1,402	149	111	115	108	82	73	61	46	34	44	40	21	3	2,288
	Other terminals / fields	1,434	140	106	91	65	90	49	56	44	77	52	53	71	25	2,354
Total onshore gas gross production:		2,836	289	217	205	173	172	122	117	90	111	97	93	92	28	4,642
Total gross gas production:		1,384,343	105,070	115,338	111,242	108,992	108,514	101,592	92,735	83,817	75,839	73,482	62,425	59,707	47,607	2,530,701
Own use: (19)		72,819	6,344	7,033	6,770	6,854	6,607	6,627	6,320	5,978	5,399	5,280	5,158	5,181	4,666	151,036
Total net gas production:		1,311,524	98,726	108,305	104,472	102,138	101,907	94,965	86,415	77,839	70,439	68,202	57,267	54,526	42,941	2,379,665

(1) Production from: Baird, Beaufort, Bell, Bessemer, Boyle, Brown, Camelot (Central, South and North), Davy, Davy East, Garrow, Indefatigable, Indefatigable South West, Kilmar, Leman (BP), North Davy, Trent, Tyne (North and South).

(2) Production from: Arthur, Bure, Bure West, Dawn, Deben, Delilah, Durango, Excalibur, Galahad, Goosander, Grouse, Guinevere, Hewett, Home, Lancelot, Malory, Mordred, Orwell, Thames, Thurne, Tristan, Waveney, Welland North West, Welland South, Wensum, Wissey, Wren, Yare.

(3) Production from: Barque, Barque South, Brigantine (A, B, C and D), Caravel, Carrack, Clipper, Corvette, Cutter, Galleon, Gawain, Indefatigable (Shell), Leman (Shell), Sean, Sean East, Shamrock, Skiff.

(4) Production from: Apollo, Babbage, Ceres, Cleeton, Eris, Johnston, Mercury, Minerva, Neptune, Ravenspurn North, Ravenspurn South, Whittle, Wollaston.

(5) Production from: Amethyst East, Amethyst West, Helvellyn, Hoton, Hyde, Newsham, Rose, West Sole.

(6) Production from: Alwyn North, Bruce, Captain, Duart, Dunbar, Ellon, Frigg (uk), Forvie, Galley, Grant, Ivanhoe/Rob Roy, Jura, Keith, NUGGETS, Piper/Tartan, Renee/Rubie, Rhum, Ross Tweedsmuir, Tweedsmuir South.

(7) Gas exported to the Netherlands.

(8) Production from: Bains, Calder, Dalton, Millom, Morecambe North.

(9) Production from: Morecambe South.

(10) Production from: Hamilton, Hamilton East, Hamilton North, Lennox.

(11) Converted for use as an off-peak storage unit with effect from 1985.

(12) Production from: Alison, Alison KX, Anglia, Ann, Audrey, Bell (Conoco), Boulton, Caister (B and C), Callisto, Callisto North, Cavendish, Europa,

Ganymede, Hawksley, Hunter, Ketch, Kelvin, McAdam, Mimas, Murdoch, Pickerill, Rita, Saturn (Annabel), Saturn (Atlas, etc), Saltfleetby,

Schooner, Sinope, Topaz, Valiant North, Valiant South, Valkyrie, Vampire, Vanguard, Victor, Viking, Viscount, Vixen, Vulcan, Watt.

(13) Prior to 2001, the own use figure is included within the terminal or field production figure.

(14) Production from: Elgin, Franklin, Glenelg, Halley, Scoter, Shearwater.

(15) Production from: Andrew, Banff, Drake, Egret, Erskine, Everest, Farragon, Fleming, Hawkins, Heron, Jade, James, Janice, Joanne, Judy, Lomond,

Machar, Madoes, Marmock, Mirren, Monan, Mungo, Seymour, Skua.

(16) Production from: Bittern, Brent, Clapham, Clyde, Cook, Cormorant (North and South), Curlew, Fulmar, Gannet (A, B, C, D, E, F and G),

Goldeneye, Guillemot A, Guillemot North West, Guillemot West, Howe, Kittiwake, Kyle, Leven, Magnus, Magnus South, Mallard, Medwin,

Murchison (UK), Nelson, Orion, Pelican, Penguin, Pict, Statfjord (UK), Strathspey, Teal, Teal South, Thistle.

(17) Gas delivered direct to Boddam (Peterhead) power station by dedicated pipeline.

(18) Production from: Atlantic, Beinn, Beryl, Boa, Brae Area, Braemar, Britannia, Brodgar, Caledonia, Callanish, Cromarty, Enoch (UK), Kingfisher, Larch, Maclure, Ness, Nevis, Scott, Skene, Thelma, Tiffany, Toni, Tullich.

(19) Includes gas used at onshore gas terminals

F.3 Natural Gas Liquids net production

	Thousand tonnes												
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Offshore oil pipeline terminals (1):													
Ethane	534	567	485	511	528	495	402	356	362	333	299	257	229
Propane	852	682	903	969	954	849	773	678	627	672	673	554	526
Butane	705	483	857	960	961	866	778	722	659	684	684	584	438
Condensate	424	439	422	532	532	500	469	419	411	412	406	393	328
Total offshore oil terminals:	2,516	2,171	2,667	2,972	2,975	2,710	2,422	2,175	2,058	2,101	2,062	1,788	1,521
Offshore associated gas terminals (2):													
Ethane	1,173	1,321	1,114	1,085	1,003	978	1,011	925	791	869	701	608	370
Propane	1,890	1,966	1,747	1,700	1,579	1,551	1,374	1,239	1,141	1,254	994	908	521
Butane	1,203	1,229	1,044	1,059	997	975	856	810	744	748	593	575	330
Condensate	950	1,025	1,033	1,086	1,050	1,062	1,380	1,311	1,057	798	651	592	285
Total offshore associated gas terminals:	5,217	5,541	4,938	4,930	4,629	4,566	4,621	4,285	3,733	3,670	2,938	2,683	1,505
Offshore dry gas terminals (3):													
Condensate	582	505	548	497	545	516	450	412	390	364	346	427	375
Total offshore dry gas terminals:	582	505	548	497	545	516	450	412	390	364	346	427	375
Onshore production (4):													
Ethane	-	-	-	-	-	-	-	-	-	1	0	0	0
Propane	104	76	68	59	45	40	34	29	28	25	26	17	0
Butane	96	70	61	52	41	23	15	11	10	7	6	0	0
Condensate	-	-	10	4	3	3	1	1	0	0	0	0	0
Total onshore production:	200	146	139	115	89	66	49	41	38	33	32	17	0
Total Ethane	1,707	1,888	1,599	1,596	1,531	1,473	1,414	1,281	1,153	1,203	999	866	599
Total Propane	2,846	2,724	2,718	2,728	2,578	2,440	2,181	1,946	1,796	1,952	1,692	1,479	1,047
Total Butane	2,004	1,782	1,962	2,071	1,999	1,864	1,648	1,543	1,412	1,439	1,284	1,159	768
Total Condensate	1,956	1,969	2,013	2,119	2,130	2,081	2,300	2,143	1,858	1,574	1,403	1,412	987
Total production:	8,515	8,363	8,292	8,514	8,238	7,858	7,543	6,913	6,218	6,168	5,378	4,915	3,401

(1) Production from: Flotta, Forties, Nigg, Norpipe, Sullom Voe.

(2) Production from: Bacton SEAL Shell, CATS, FLAGS, Frigg (UK), SAGE.

(3) Production from: Bacton Perenco, Tullow, Shell, Dimlington, Easington, Barrow, Point Of Ayr, Theddlethorpe.

(4) Production from: Hamble, Holybourne, Knapton, Wytch Farm.

F.4 Disposals of crude oil⁽¹⁾

	Thousand tonnes													
	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
UK refineries	46,887	47,170	38,335	32,770	32,060	29,960	27,692	27,971	24,484	25,878	24,574	23,797	21,328	20,789
Exports:	77,322	80,078	79,061	75,749	75,367	68,073	59,553	49,226	44,923	45,129	40,808	39,102	36,898	28,112
Albania	-	-	84	-	-	-	-	-	-	-	-	-	-	-
Bahamas (2)	257	143	65	-	-	-	-	67	88	-	84	-	-	-
Belgium	1,035	1,193	1,038	362	392	560	-	62	-	77	483	-	242	465
Canada	808	625	1,667	3,447	3,527	2,786	2,882	1,706	2,471	1,208	490	615	380	292
Chile	-	-	-	-	-	-	-	-	-	-	-	666	626	523
China	-	1,588	519	260	1,364	159	157	-	-	-	-	-	-	-
Denmark	-	-	-	79	64	57	-	-	104	-	240	424	589	551
Finland	788	929	690	1,674	184	245	236	552	790	1,626	250	-	-	-
France	15,261	15,177	11,975	11,725	10,019	9,842	8,528	4,685	7,249	5,154	3,501	2,540	3,322	2,354
Germany	17,406	11,879	10,732	11,043	8,058	8,854	9,521	11,000	10,251	10,271	10,542	6,382	7,186	5,210
Gibraltar	-	-	77	-	-	-	-	-	-	535	-	-	109	82
Greece	-	-	-	-	135	-	-	-	-	-	-	-	-	-
India	-	277	1,638	-	-	-	-	-	-	245	135	-	92	152
Italy	1,219	1,819	1,459	957	1,075	236	2,178	1,961	1,269	401	399	-	169	347
Lebanon	-	-	-	-	-	-	-	-	-	-	81	-	-	-
Lithuania	-	-	251	-	-	-	-	-	-	-	-	-	-	-
Martinique (2)	87	-	84	-	178	330	385	754	646	700	347	6	-	-
Morocco	-	-	163	-	-	-	-	-	-	-	-	-	-	-
Netherlands (3)	15,591	16,540	18,912	20,194	19,794	16,418	12,325	10,462	10,517	11,245	11,192	15,570	13,426	11,832
Norway	1,087	1,297	542	329	223	545	331	796	156	954	326	352	970	157
Poland	1,494	682	368	-	-	-	-	87	319	415	239	321	669	535
Portugal	1,157	1,394	714	413	1,078	1,054	563	250	606	85	-	14	80	86
Puerto Rico	-	-	-	-	-	212	103	-	60	-	-	-	-	-
Republic of Ireland	82	69	-	322	964	977	719	783	100	171	-	75	157	-
Singapore	-	-	-	-	-	-	-	-	38	117	83	-	165	226
South Africa	1,028	-	-	-	263	-	-	-	271	-	-	258	126	-
South Korea	-	260	-	-	-	480	85	-	-	81	605	886	78	619
Spain	3,403	4,040	2,107	2,025	1,062	589	808	575	389	612	1,211	475	339	159
St Lucia (2)	-	-	-	-	-	-	-	-	-	-	-	131	499	135
Sweden	1,266	1,024	636	1,313	1,596	992	1,025	588	455	630	671	362	171	1,004
Turkey	-	-	-	-	-	-	-	-	-	471	277	80	595	-
USA	15,017	21,142	25,340	21,496	24,288	22,259	17,801	13,817	9,056	9,774	9,651	9,868	6,905	3,299
Virgin Islands (2)	-	-	-	-	-	-	-	93	-	355	-	-	-	-
Unknown	-	-	-	110	1,103	1,478	1,906	988	88	-	-	78	-	84
Total disposals (4)	124,209	127,248	117,396	108,519	107,427	98,033	87,245	77,197	69,407	71,007	65,382	62,899	58,225	48,900

(1) Monthly data for aggregate disposals to refineries and exports are available - See paragraph F.21.

(2) Some of the exports to the Caribbean area may have been for transshipment to the USA.

(3) Exports to the Netherlands include oil for transshipment or in transit to other destinations (e.g. Belgium and Germany).

(4) Includes disposals of onshore production. The difference between disposals and production as shown in

Table F.2 is accounted for by platform and other field stock changes and by terminal and transit stock changes.

Annex G

Foreign trade

Introduction

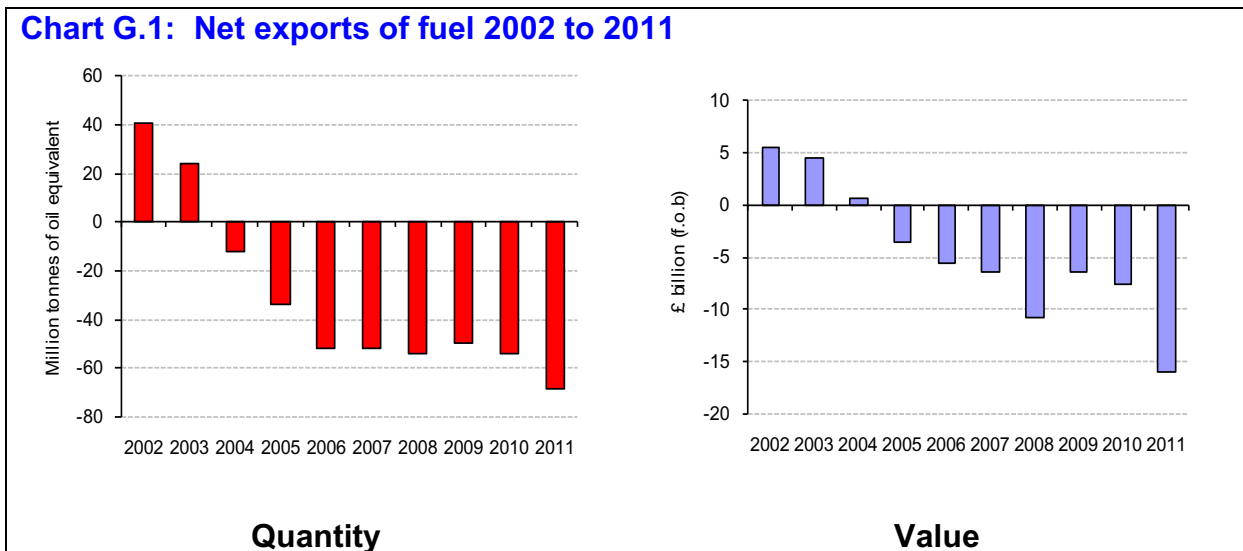
G.1 This section brings together detailed figures on imports and exports of fuels, generally, in terms of both quantity and value. Table G.1 gives an overall view for all fuels. Table G.2 presents a long term view of the value of imports and exports of fuels, from 1970 to 2011. Tables G.3 to G.6 present more detailed figures for crude oil, petroleum products, gas, and coal and other solid fuels.

G.2 The information in this section is largely derived from returns made to HM Revenue and Customs (HMRC), and corresponds to that published in the *Overseas Trade Statistics of the United Kingdom (O.T.S.)*¹. The figures for 2011 are provisional and there is continued effort to minimise the differences in the data reported by industry to HMRC (published in this annex) and that reported by industry to DECC (published in DUKES). The majority of the data published here are sourced directly from HMRC, however there are instances where DECC have used estimates based on other sources to improve on the accuracy of the reported trade data. Such estimates are highlighted in the tables.

Imports and exports of fuel and related materials (Table G.1)

G.3 This table presents the import, export and net export figures in quantity and value terms, broken down by the main fuel groups for the years 2001 to 2011.

G.4 To allow the values of imports and exports to be compared, additional series are included presenting import values on a "free on board" (f.o.b.) basis. Import values are normally recorded in "cost, insurance and freight" (c.i.f.) prices whereas f.o.b. prices are always used for export values. This approach is similar to that used by the Office for National Statistics in the overall trade figures when they compile the Balance of Payments. Paragraph G.29 of the Technical Notes briefly describes the c.i.f. and f.o.b. in valuing imports and exports.



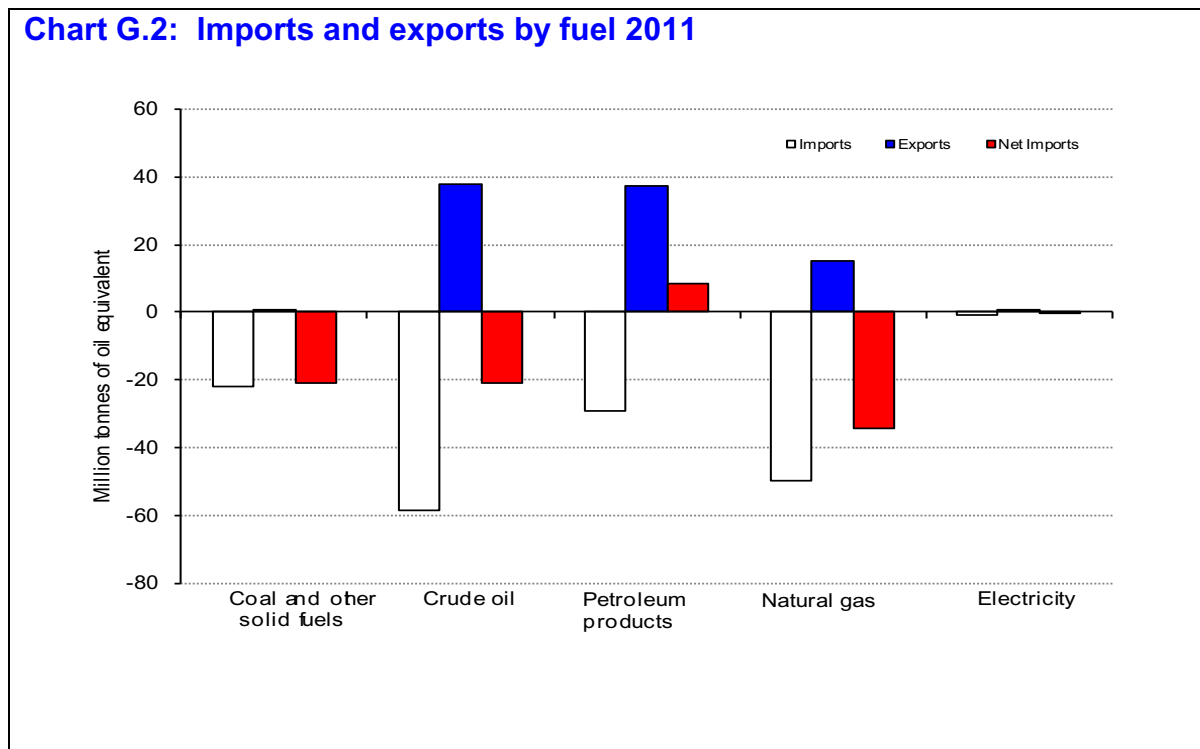
G.5 Chart G.1 above illustrates the recent trends in the trade balance in fuels, both in terms of quantity and value since 2002. It also illustrates the switch from the UK being a net exporter of energy to a net importer.

G.6 In 2011, the United Kingdom remained a net importer of fuels and in financial terms, had a deficit, on a balance of payments basis, of £18.7 billion. This compares to a £0.4 billion surplus in 2004. The deficit of crude oil and petroleum products in 2011 was £11.2 billion compared to a £0.9 billion surplus in 2004.

¹ www.hmrc.gov.uk/stats/trade-statistics.htm

G.7 In volume terms, the United Kingdom became a net importer of fuels in 2004 with imports exceeding exports by 12.4 million tonnes of oil equivalent (mtoe). In 2011, net imports at 68.6 mtoe exceeded the level in the previous five years which were broadly similar at around 50 mtoe.

G.8 In 2011, the United Kingdom was a net importer of all fuels except for petroleum products. Import of petroleum products decreased by 2 per cent over the previous year while export increased by 3 per cent, resulting in a net export of 8.2 mtoe for petroleum products in 2011. Chart G.2 illustrates the trade in individual fuels in 2011.



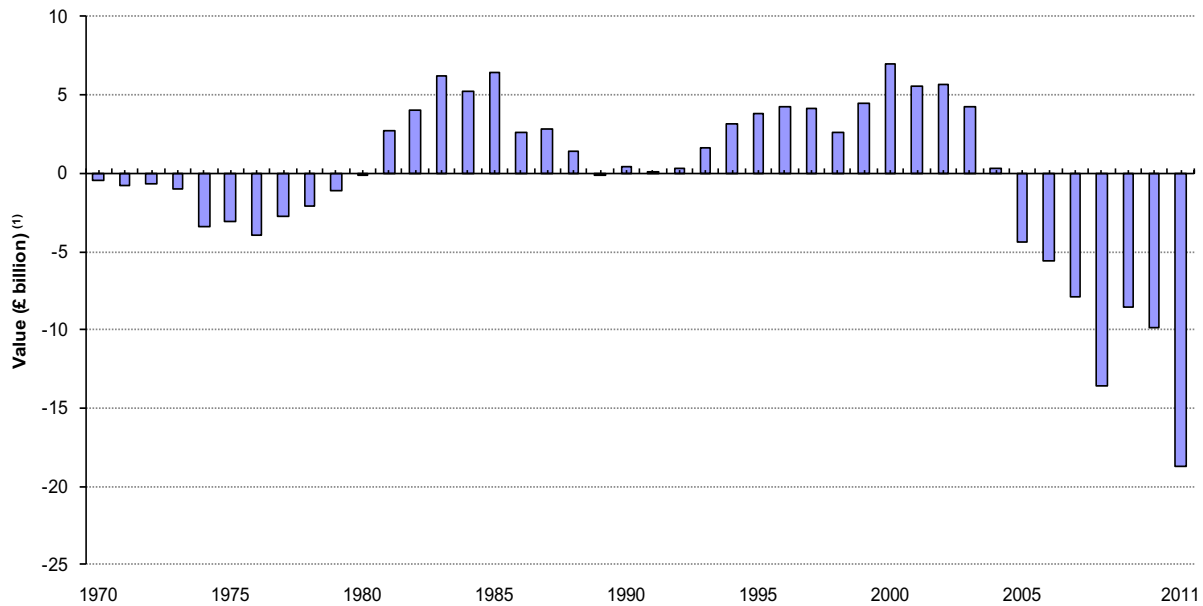
Value of imports and exports of fuels 1970 to 2011 (Table G.2)

G.9 Values of imports (c.i.f.) and exports (f.o.b.) broken down by the main fuel groups are given in Table G.2. This table is also an extension of the trading values in Table G.1, with the series extended back to 1970. Import values on a f.o.b. basis are also included, enabling net exports to be presented on a comparable f.o.b. basis over the same period.

G.10 In volume terms, production of oil and gas from the North Sea fell in the late 1980's following the Piper Alpha disaster and between 1989 and 1992 the United Kingdom became a net importer of fuels. In the mid-1990's, as a result of growth in production the United Kingdom again became a net exporter of fuels, however after the peak in 1999, North Sea production has continued to slow down and since 2004 the United Kingdom reverted back to become and remained a net importer of fuels with continuing trade deficit in fuels since 2005.

G.11 Chart G.3 shows the net exports of fuels in value terms since 1970. The United Kingdom's trade in fuels was dominated by imports until exports started to grow substantially in the mid-1970s, when production from the North Sea started, resulting in a trade surplus in 1981. This surplus was sustained between 1981 and 2004, except for a small deficit in 1989, and amounted to just under £80 billion over that period. However, these surpluses were reduced by the fall in oil prices in 1986, and then by the fall in North Sea production following the Piper Alpha accident in 1988 and the resulting safety work. Although the trade surplus increased steadily from 1992 to 1996, there were falls in 1997 and 1998 due to the fall in the price of crude oil. Prices of crude oil and petroleum products increased in 1999 and again in 2000 giving it, in current price terms, the highest net surplus. In 2001 the value of the trade surplus fell, reflecting falls in the price of crude oil and petroleum products; however, this was partly reversed by a 2 per cent increase in the net trade surplus during 2002. Since 2005 the UK has been a net importer of fuel with deficits recorded both for oil and for the other fuels series. In 2011, the deficit for oil was more than double that in the previous year while that for other fuels increased by 49 per cent, as the UK imported more coal and crude oil but less gas. The increased deficit on oil also reflected the rise in prices; the price of crude oil increased from an average of nearly \$80 per barrel in 2010 to around \$111 per barrel in 2011.

Chart G.3: Value of net exports of fuels⁽¹⁾ 1970 to 2011



(1) 'Free on board' basis and at current prices.

UK imports and exports of crude oil and petroleum products (Table G.3)

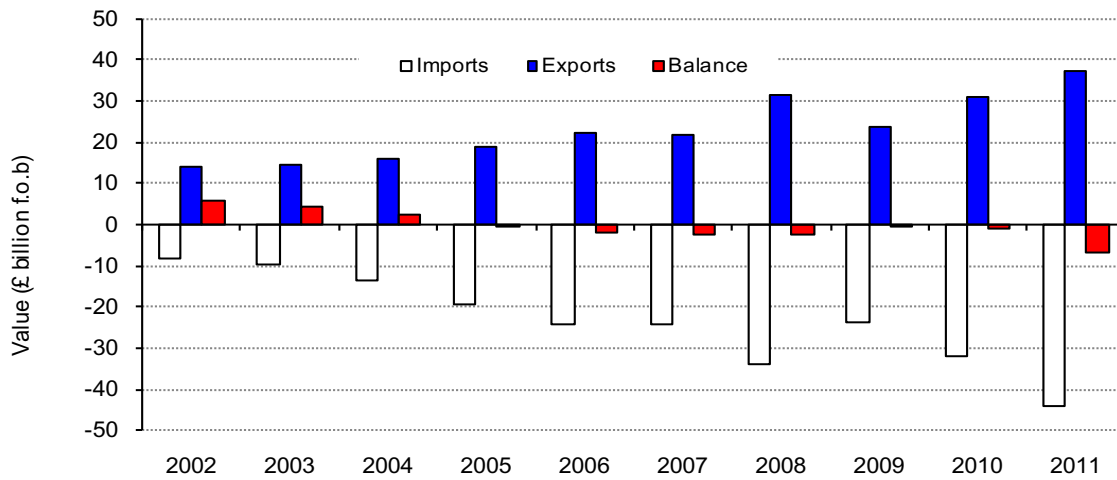
G.12 The data in this table outlines the pattern of trade in oil in the United Kingdom. Table G.3 shows quantities, in thousands of tonnes, of crude oil and refined petroleum products, and their unit values per tonne, with import values on a c.i.f. basis and export values on a f.o.b. basis. The total import values of crude oil and petroleum products, on a f.o.b. basis, are shown in Table G.1.

G.13 Between 1981 and 2004, the United Kingdom was generally a net exporter of total oil and petroleum products, with the level of crude oil exports reflecting North Sea production. Exports were reduced because the Piper Alpha accident reduced production from 1988 and then production levels remained lower until 1992, as higher levels of maintenance and safety work prolonged platform shutdowns. Chart G.4 shows the level of imports, exports and net exports in f.o.b. value terms of crude oil and petroleum products from 2002 to 2011.

G.14 The main refined petroleum products imported into the United Kingdom in 2011 were gas & diesel oil which accounted for 37 per cent of the total; followed by aviation turbine fuel (kerosene) 25 per cent. The main refined petroleum products exported in 2011 were motor and aviation spirits, which accounted for 30 per cent of the total; followed by gas & diesel oil which accounted for 25 per cent.

G.15 Net exports of refined petroleum products increased by 2.3 million tonnes in 2011 compared to 2010, with imports down by 1 per cent to 27.4 million tonnes and exports up by 6 per cent to 36.1 million tonnes.

Chart G.4: Annual oil⁽¹⁾ trade 2002 to 2011



(1) Crude oil and petroleum products

UK imports and exports of crude oil by country (Table G.4)

G.16 The data in Table G.4 show details of trade in crude oil by country. The import data, as far as possible, are on a 'country of origin' (or production) basis. Since the introduction of 'Intrastat' at the start of 1993, recording of country of origin for Intra-EU trade has been optional, so a small amount may be recorded as country of consignment i.e. the country from which the goods were consigned to the United Kingdom as opposed to the true country of origin. This change has had little impact, as virtually all of the UK's imported crude oil is supplied direct from countries outside the EU, in particular Norway.

G.17 Norway supplied 67 per cent of the United Kingdom's imports of crude oil in 2011, down from 72 per cent in 2010. The majority of the remaining imports came from Russia (8 per cent) and Nigeria (7 per cent). The Middle East accounted for 2 per cent of imports, down from their 5 per cent share in 2000. In 2011, 82 per cent of the United Kingdom exports of crude oil went to EU countries, up from the 78 per cent seen in 2010. Most of the non-EU export trade was with the United States of America. The UK's two largest markets in the EU are Germany and the Netherlands; the bulk of the exports to Germany are for refining and consumption there, whilst the exports to the Netherlands include oil destined for onward trade to other countries.

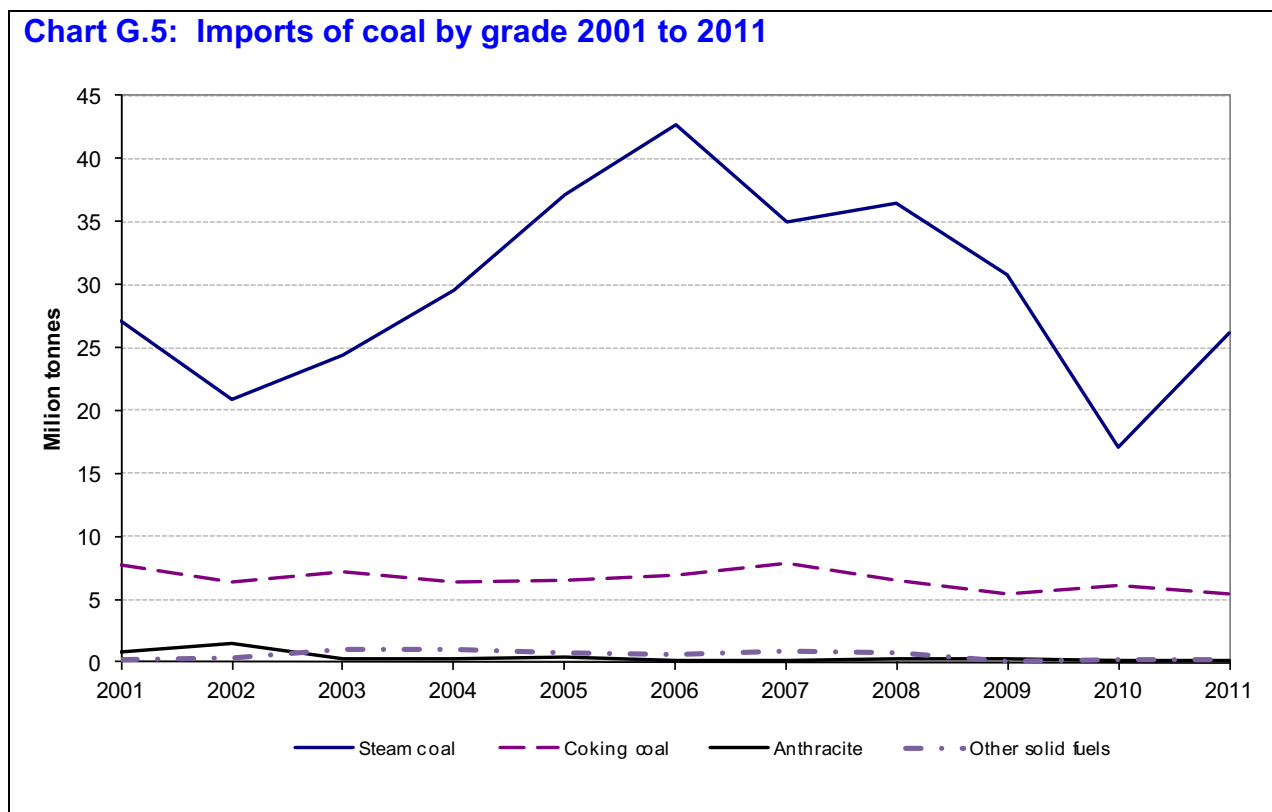
G.18 In 2011, the average value recorded by HM Revenue and Customs for crude oil exported from the UK was £498 per tonne compared to £523 per tonne for imported crude oil.

Imports and exports of solid fuels (Table G.5)

G.19 Table G.5 gives a breakdown of imports and exports of steam coal, coking coal, anthracite and other solid fuels by country of origin or destination. The imports and exports data are provided by HM Revenue and Customs, but where there have been apparent misclassifications by the importers of the types of coal (eg because the country of origin does not produce that type of coal), DECC has made adjustments.

G.20 In 2011, UK import levels increased for the first time since 2006. The UK imported 31.9 million tonnes of coal and other solid fuels, an increase of 35 per cent on 2010 (23.6 million tonnes), the lowest levels on record. Seventeen per cent of coal imports were of coking coal in 2011, of which only limited amounts are produced in the United Kingdom. The figures for imports of coal by grade and other solid fuels are illustrated in Chart G.5.

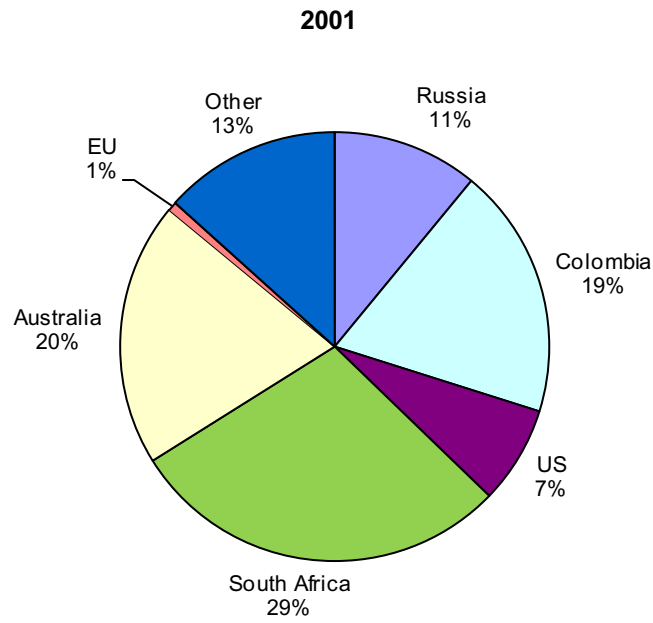
Chart G.5: Imports of coal by grade 2001 to 2011



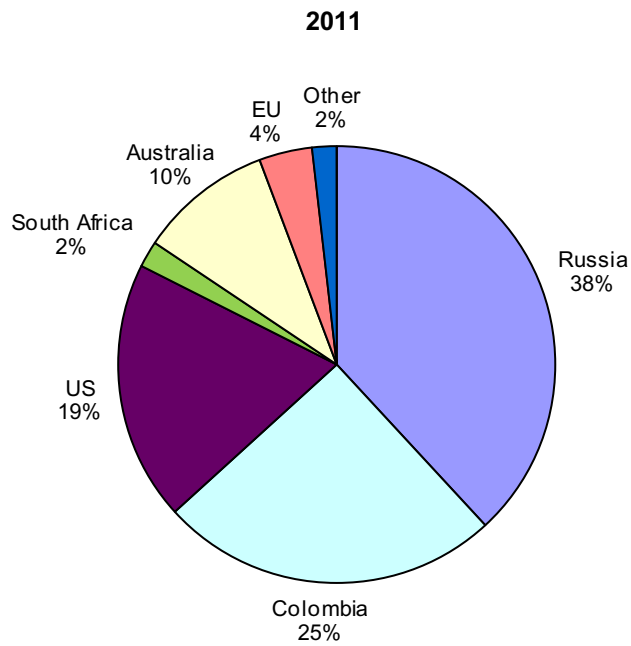
G.21 In 2011, 38 per cent of the United Kingdom's total imports of coal came from Russia, with 25 per cent from Colombia. A further 29 per cent of coal imports combined came from two additional countries: the USA and Australia. Steam coal imports came mainly from Russia (46 per cent), Colombia (31 per cent) and USA (17 per cent). Imports of steam coal from Russia in 2011 were up 52 per cent on 2010 levels. The majority of UK coking coal imports came from Australia (58 per cent), USA (32 per cent) and Canada (6 per cent). Imports of coal by country of origin are illustrated in Chart G.6.

G.22 Exports of coal and other solid fuels amounted to 1.1 million tonnes in 2011, down 0.2 million tonnes on 2010 volumes. Twenty-eight per cent UK coal exports and other solid fuels went to the Irish Republic.

Chart G.6: Imports of coal by country of origin 2001 and 2011



Total: 35.5 million tonnes



Total: 31.7 million tonnes

Imports and exports of natural gas (Table G.6)

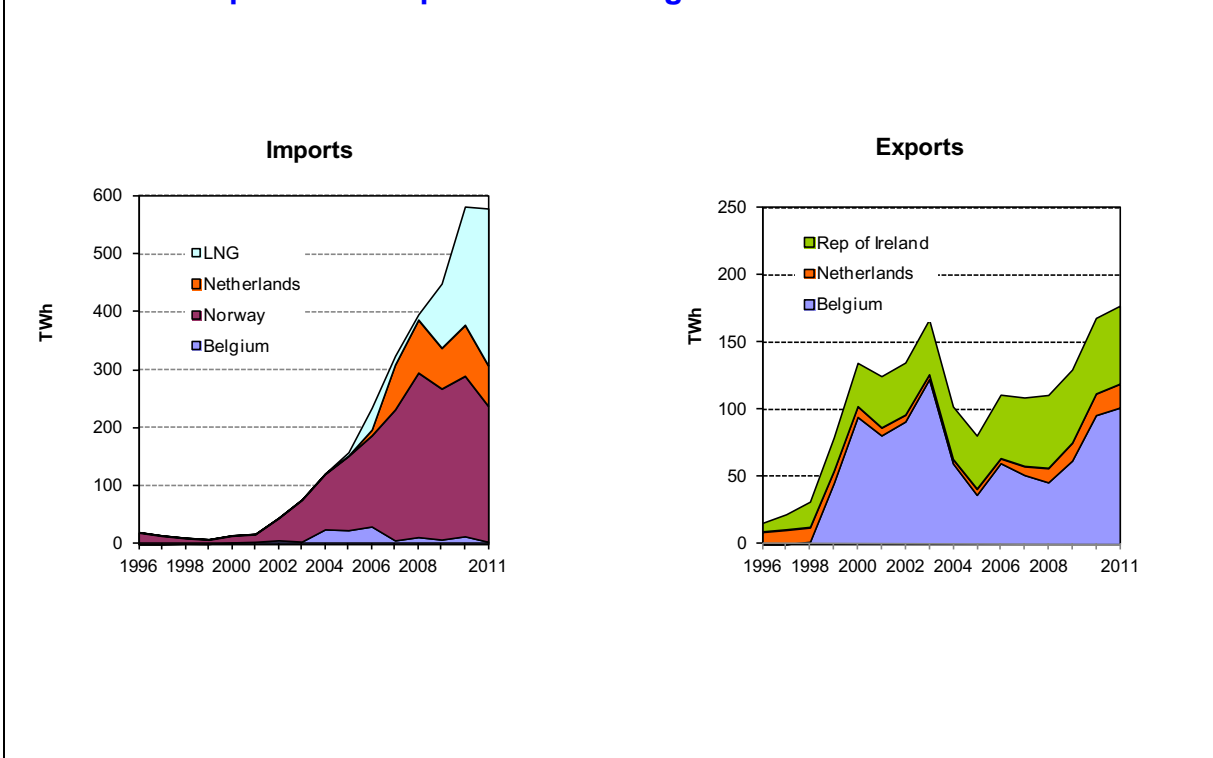
G.23 Table G.6 gives a breakdown of imports and exports of natural gas by country of origin or destination. The data are physical flows as reported by the pipeline or terminal operators to DECC. As such the data presented in this table differ from the nominated flows reported in Chapter 4 although the overall net flows (be they net imports or net exports) are essentially the same.

G.24 In 2011 the UK imported 578 TWh of gas, down 1 per cent on 2010. In 2011 41 per cent of gas imports came directly from the Norwegian Continental Shelf. LNG imports from various sources accounted for 47 per cent of total gas imports, with Qatar accounting for 85 per cent of total LNG imports. Supplies were also delivered to the UK from the European mainland via the Balgzand (Netherlands)-Bacton interconnector and from Zeebrugge (Belgium) via the interconnector with Belgium. The origin of the gas molecules from mainland Europe is not known so they are assigned to the Netherlands and Belgium. A time series of imports and exports of gas by country are shown in Chart G.7.

G.25 In 2011 the UK exported 177 TWh of gas, an increase of 5 per cent on 2010, and was at the highest ever level recorded. Belgium and the Republic of Ireland were the two main receivers of UK gas exports. The other main destination of UK exports was the Netherlands, from UK or UK share gas fields using the Dutch WGT pipeline system to Den Helder and Uithuizen.

G.26 Between 1997 and 2003 the UK was a net exporter of gas. UK gas production peaked in 2000 and has since been in general decline. As a result the UK has accessed additional supplies of gas from a range of sources that will play a significant part in bridging the gap between indigenous production and demand as reserves on the UK Continental Shelf deplete.

Chart G.7: Imports and exports of natural gas 1996 to 2011



Technical notes and definitions

G.27 The figures of imports and exports quoted are largely derived from notifications to HM Revenue and Customs, and may differ from those for actual arrivals and shipments, derived from alternative and/or additional sources, in the sections of the Digest dealing with individual fuels. Data in Table G.1 also include unpublished revisions to Customs data, which cannot be introduced into Tables G.3 to G.5.

G.28 All quantity figures in Table G.1 have been converted to million tonnes of oil equivalent to allow data to be compared and combined. This unit is a measure of the energy content of the individual fuels; it is also used in the Energy section of this Digest and is explained in Annex A, paragraphs A.45 to A.46. The quantities of imports and exports recorded in the Overseas Trade Statistics in their original units of measurement, are converted to tonnes of oil equivalent using weighted gross calorific values and standard conversion factors appropriate to each division of the Standard International Trade Classification (SITC). The electricity figures are expressed in terms of the energy content of the electricity traded.

G.29 Except as noted in Table G.1, values of imports are quoted "c.i.f." (cost, insurance and freight); briefly this value is the price that the goods would fetch at that time, on sale in the open market between buyer and seller independent of each other, with delivery to the buyer at the port of importation, the seller bearing freight, insurance, commission and all other costs, etc, incidental to the sale and delivery of the goods with the exception of any duty or tax chargeable in the United Kingdom. Values of exports are "f.o.b." (free on board), which is the cost of the goods to the purchaser abroad, including packing, inland and coastal transport in the United Kingdom, dock dues, loading charges and all other costs, charges and expenses accruing up to the point where the goods are deposited on board the exporting vessel or at the land boundary of Northern Ireland.

G.30 Figures of the value of net exports in Tables G.1 and G.2 are derived from exports and imports measured on a Balance of Payments (B.O.P) basis. The figures are consistent with the European System of Accounts 1995, the basis on which they are published by the Office for National Statistics. This means exports as recorded by HM Revenue and Customs, will differ from those recorded by the Office for National Statistics on a B.O.P basis. Table G.1 shows figures on both basis.

G.31 Figures correspond to the following items of SITC (Rev 3) at <http://unstats.un.org/unsd/cr/registry/regcst.asp?Cl=14&Lq=1>

Coal	321.1 and 321.2
Other solid fuels	322.1 and 325 (part)
Crude oil	333
Petroleum products	334, 335, 342 and 344 (plus Orimulsion reclassified to division 278 during 1994)
Natural gas	343
Electricity	351

G.32 In 1993, the Single European Market was created. At that time, a new system for recording the trade in goods between member states, called INTRASTAT, was introduced. As part of this system only obliges small traders to report their annual trade and as some trading supply returns are late, it is necessary to include adjustments for unrecorded trade. This is particularly true of 1993, the first year of the system and of coal imports in that year.

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G.1 Imports and exports of fuels ⁽¹⁾

Quantity	Million tonnes of oil equivalent										
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Imports											
Coal and other solid fuel	24.8	20.0	22.5	25.4	30.6	34.6	28.8	28.7	23.7	15.6	21.8
Crude oil	43.2	44.6	48.7	61.4	59.1	60.8	48.2	56.8	55.3	55.0	58.5
Petroleum products	23.2	23.1	25.0	28.9	31.1	34.5	41.6	29.1	28.2	29.9	29.3
Natural gas ⁵	2.6	5.2	7.4	11.4	14.9	21.0	29.1	35.0	39.2	50.7	49.7*
Electricity	0.9	0.8	0.4	0.8	1.0	0.9	0.7	1.1	0.6	0.6	0.7
Total imports	94.8	93.8	104.0	127.9	136.7	151.8	148.3	150.7	147.0	151.7	160.0
Exports											
Coal and other solid fuel	0.7	0.7	0.6	0.6	0.5	0.4	0.7	1.0	0.5	1.0	0.9
Crude oil	89.6	87.1	76.0	66.1	55.2	51.4	51.2	47.0	47.3	45.2	37.6
Petroleum products	30.1	33.5	35.7	38.7	38.5	37.6	33.6	38.2	37.6	36.2	37.5
Natural gas ⁵	11.9	13.0	15.2	9.8	8.3	10.4	10.6	10.5	11.8	15.2	15.2*
Electricity	0.0	0.1	0.3	0.2	0.2	0.2	0.3	0.1	0.3	0.4	0.2
Total exports	132.3	134.3	127.7	115.5	102.7	100.0	96.4	96.9	97.5	98.0	91.3
Net exports											
Coal and other solid fuel	-24.1	-19.3	-21.9	-24.8	-30.1	-34.2	-28.1	-27.6	-23.2	-14.6	-20.9
Crude oil	46.4	42.5	27.3	4.8	-3.9	-9.5	3.0	-9.9	-8.0	-9.8	-20.9
Petroleum products	6.9	10.4	10.6	9.9	7.4	3.1	-7.9	9.1	9.3	6.4	8.2
Natural gas	9.3	7.8	7.8	-1.6	-6.6	-10.6	-18.5	-24.5	-27.4	-35.5	-34.5
Electricity	-0.9	-0.7	-0.2	-0.6	-0.7	-0.6	-0.4	-0.9	-0.2	-0.2	-0.5
Total net exports	37.6	40.5	23.7	-12.4	-34.0	-51.9	-52.0	-53.8	-49.4	-53.7	-68.7

Source: HMRC

Value	£ million										
Imports - O.T.S basis (c.i.f.)											
Coal and other solid fuel	1,198	875	994	1,482	1,963	2,203	2,080	3,661	2,676	1,908	3,029
Crude oil	5,090	4,986	5,954	8,496	11,519	14,580	11,685	20,538	14,520	19,490	28,081
Petroleum products	3,693	3,244	3,876	5,194	7,852	9,788	12,568	13,256	9,468	12,307	16,128
Natural gas	187	260	135	670	1,731	2,512	2,883	6,426	4,773	6,849	9,051
Electricity	179	189	171	347	442	421	239	483	259	326	440
Total imports	10,347	9,554	11,131	16,189	23,507	29,504	29,454	44,364	31,696	40,880	56,729
Exports (f.o.b.)											
Coal and other solid fuel	61	62	53	60	65	49	73	156	108	228	185
Crude oil	10,486	9,802	9,240	9,338	10,733	12,760	12,630	16,586	12,499	15,796	17,183
Petroleum products	4,236	4,302	5,162	6,564	8,305	9,627	9,301	14,733	11,375	14,958	20,153
Natural gas	746	848	946	645	737	1,315	996	1,945	1,218	2,191	3,117
Electricity	3	101	181	151	102	105	108	110	161	204	138
Total exports	15,531	15,115	15,581	16,759	19,942	23,855	23,109	33,531	25,361	33,376	40,776
Net exports - O.T.S basis											
Coal and other solid fuel	-1,136	-813	-941	-1,422	-1,898	-2,155	-2,007	-3,505	-2,568	-1,680	-2,843
Crude oil	5,396	4,816	3,286	842	-786	-1,820	945	-3,952	-2,021	-3,694	-10,898
Petroleum products	543	1,058	1,285	1,370	453	-161	-3,266	1,478	1,906	2,651	4,025
Natural gas	559	588	811	-25	-995	-1,197	-1,887	-4,481	-3,554	-4,659	-5,934
Electricity	-176	-89	10	-195	-340	-316	-130	-373	-99	-121	-302
Total net exports	5,185	5,561	4,450	570	-3,566	-5,649	-6,345	-10,833	-6,336	-7,504	-15,952
Imports - B.O.P. basis (f.o.b.) ⁽⁴⁾											
Oil ⁽³⁾	9,528	9,213	11,232	15,307	22,050	26,052	27,153	38,449	28,087	36,049	49,416
Other fuels	1,270	1,066	1,079	2,240	3,932	4,921	5,160	10,602	7,444	8,875	12,233
Total imports	10,798	10,279	12,311	17,547	25,982	30,973	32,313	49,051	35,531	44,924	61,649
Net exports - B.O.P. basis ⁽⁴⁾											
Oil ⁽³⁾	5,308	5,109	3,365	912	-2,184	-2,829	-4,698	-6,474	-3,431	-4,741	-11,180
Other fuels	301	613	871	-555	-2,230	-2,793	-3,218	-7,051	-5,076	-5,062	-7,541
Total net exports	5,609	5,722	4,236	357	-4,414	-5,622	-7,916	-13,525	-8,507	-9,803	-18,721

Source: Office for National Statistics

(1) See Energy Trends on the internet for the latest quarterly figures

(2) Provisional.

(3) Crude oil and petroleum products.

(4) The Balance of Payments figures are on a ESA95 basis.

(5) Physical flow

*DECC estimates

G.2 Value of imports and exports of fuels, ⁽¹⁾⁽²⁾

		£ million				
		1970	1971	1972	1973	1974
Imports (c.i.f.)	Coal and other solid fuels	2	46	57	27	66
	Crude oil	687	930	914	1,296	3,726
	Petroleum products ⁽³⁾	242	259	257	389	823
	Natural gas	11	10	9	9	8
	Electricity	2	-	2	-	-
Total imports		944	1,245	1,239	1,721	4,623
Exports (f.o.b.)	Coal and other solid fuels	29	22	17	27	65
	Crude oil	8	10	21	23	29
	Petroleum products ⁽⁴⁾	170	204	201	320	681
Total exports		207	236	239	370	775
Imports (f.o.b.)	Oil ⁽⁵⁾	816	1,068	1,053	1,498	4,340
	Other fuels ⁽⁶⁾	17	48	63	34	77
Total imports		833	1,116	1,116	1,532	4,417
Net exports⁽⁸⁾	Oil ⁽⁵⁾	-503	-696	-660	-948	-3,372
(B.O.P basis)	Other fuels	+14	-24	-44	-4	-6
Total net exports		-489	-720	-704	-952	-3,378
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		1975	1976	1977	1978	1979
Imports (c.i.f.)	Coal and other solid fuels	110	86	84	82	148
	Crude oil	3,371	4,445	3,971	3,506	3,678
	Petroleum products ⁽³⁾	810	1,089	1,128	1,023	1,591
	Natural gas	14	21	44	188	356
	Electricity	1	-	-	-	-
Total imports		4,306	5,641	5,227	4,799	5,773
Exports (f.o.b.)	Coal and other solid fuels	84	72	80	90	100
	Crude oil	30	178	918	1,236	2,710
	Petroleum products ⁽⁴⁾	705	1,004	1,086	1,038	1,500
Total exports		819	1,254	2,084	2,364	4,310
Imports (f.o.b.)	Oil ⁽⁵⁾	4,043	5,407	5,051	4,504	5,242
	Other fuels ⁽⁶⁾	122	121	154	291	517
Total imports		4,165	5,528	5,205	4,795	5,759
Net exports⁽⁸⁾	Oil ⁽⁵⁾	-3,051	-3,922	-2,723	-1,930	-721
(B.O.P basis)	Other fuels	-29	-28	-41	-151	-351
Total net exports		-3,080	-3,950	-2,764	-2,081	-1,072
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		1980	1981	1982	1983	1984
Imports (c.i.f.)	Coal and other solid fuels	228	171	218	264	651
	Crude oil	4,292	4,112	3,951	3,308	3,993
	Petroleum products ⁽³⁾	1,856	2,173	2,413	2,506	4,360
	Natural gas	521	699	815	977	1,307
	Electricity	-	-	-	-	-
Total imports		6,897	7,155	7,397	7,055	10,311
Exports (f.o.b.)	Coal and other solid fuels	180	372	330	239	88
	Crude oil	4,220	7,096	8,542	10,111	12,173
	Petroleum products ⁽⁴⁾	2,017	2,148	2,365	2,776	3,047
Total exports		6,417	9,616	11,237	13,126	15,308
Imports (f.o.b.)	Oil ⁽⁵⁾	6,182	6,366	6,390	5,879	8,274
	Other fuels ⁽⁶⁾	742	883	1,081	1,274	2,029
Total imports		6,924	7,249	7,471	7,153	10,303
Net exports⁽⁸⁾	Oil ⁽⁵⁾	+280	+3,092	+4,607	+6,891	+6,860
(B.O.P basis)	Other fuels	-446	-375	-530	-672	-1,572
Total net exports		-166	+2,717	+4,077	+6,219	+5,288

G.2 Value of imports and exports of fuels, ⁽¹⁾⁽²⁾ (continued)

		£ million				
		1985	1986	1987	1988	1989
Imports (c.i.f.)	Coal and other solid fuels	716	456	390	472	513
	Crude oil	4,341	2,440	2,703	2,044	3,079
	Petroleum products ⁽³⁾	4,071	2,079	1,880	1,546	1,889
	Natural gas	1,511	1,320	878	692	615
	Electricity	-	80	242	268	305
Total imports		10,639	6,375	6,093	5,022	6,401
Exports (f.o.b.)	Coal and other solid fuels	178	190	109	96	109
	Crude oil	13,006	6,281	6,765	4,515	4,024
	Petroleum products ⁽⁴⁾	3,611	2,200	1,893	1,646	2,039
Total exports		16,795	8,671	8,767	6,257	6,172
Imports (f.o.b.)	Oil ⁽⁵⁾	8,385	4,547	4,751	3,645	5,102
	Other fuels	2,257	1,877	1,561	1,470	1,482
Total imports		10,642	6,424	6,312	5,115	6,584
Net exports⁽⁸⁾	Oil ⁽⁵⁾	+8,030	+4,012	+4,045	+2,685	+1,222
(B.O.P basis)	Other fuels	-1,595	-1,413	-1,258	-1,228	-1,226
Total net exports		+6,435	+2,599	+2,787	+1,457	-4
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		1990	1991	1992	1993	1994
Imports (c.i.f.)	Coal and other solid fuels	630	734	744	731	598
	Crude oil	4,033	3,887	3,745	4,078	3,241
	Petroleum products ⁽³⁾	2,427	2,063	1,711	1,766	1,689
	Natural gas	519	472	397	327	231
	Electricity	225	343	369	426	388
Total imports		7,834	7,499	6,966	7,328	6,148
Exports (f.o.b.)	Coal and other solid fuels	119	97	63	73	75
	Crude oil	5,172	4,370	4,413	5,147	6,095
	Petroleum products ⁽⁴⁾	2,455	2,640	2,401	3,149	2,776
	Natural gas	-	-	2	28	45
	Electricity	25	-	-	-	-
Total		7,771	7,107	6,879	8,397	8,991
Imports (f.o.b.)	Oil ⁽⁵⁾	6,443	6,010	5,562	6,012	5,142
	Other fuels	1,471	1,613	1,561	1,461	1,200
Total imports		7,914	7,623	7,123	7,473	6,342
Net exports⁽⁸⁾	Oil ⁽⁵⁾	+1,631	+1,274	+1,610	+2,612	+3,937
(B.O.P basis)	Other fuels	-1,147	-1,260	1,254	-1,010	-787
Total net exports		+484	+14	+356	+1,602	+3,150
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		1995	1996	1997	1998	1999
Imports (c.i.f.)	Coal and other solid fuels	601	694	714	687	599
	Crude oil	3,236	4,035	3,647	2,170	2,273
	Petroleum products ⁽³⁾	1,542	1,821	1,433	1,415	1,961
	Natural gas	105	117	103	43	27
	Electricity	408	391	406	374	396
Total imports		5,892	7,058	6,303	4,689	5,256
Exports (f.o.b.)	Coal and other solid fuels	70	82	82	69	61
	Crude oil	6,428	7,426	6,322	4,485	6,148
	Petroleum products ⁽⁴⁾	2,621	3,268	3,239	2,328	2,849
	Natural gas	54	65	80	80	230
	Electricity	-	2	1	3	8
Total exports		9,174	10,843	9,724	6,965	9,297
Imports (f.o.b.)	Oil ⁽⁵⁾	5,061	6,118	5,679	3,976	4,675
	Other fuels	1,100	1,166	1,145	916	753
Total imports		6,161	7,284	6,824	4,892	5,428
Net exports⁽⁸⁾	Oil ⁽⁵⁾	4,323	4,810	4,560	3,042	4,448
(B.O.P basis)	Other fuels	-542	-516	-368	-421	53
Total net exports		3,781	4,294	4,192	2,621	4,501

G.2 Value of imports and exports of fuels, ⁽¹⁾⁽²⁾ (continued)

		£ million				
		2000	2001	2002	2003	2004
Imports (c.i.f.)	Coal and other solid fuels	696	1,198	875	994	1,482
	Crude oil	5,095	5,090	4,986	5,954	8,496
	Petroleum products ⁽³⁾	3,430	3,693	3,244	3,876	5,194
	Natural gas	135	187	260	135	670
	Electricity	373	179	189	171	347
Total imports		9,729	10,347	9,554	11,131	16,189
Exports (f.o.b.)	Coal and other solid fuels	74	61	62	53	60
	Crude oil	10,177	10,486	9,802	9,240	9,338
	Petroleum products ⁽⁴⁾	4,867	4,236	4,302	5,162	6,564
	Natural gas	577	746	848	946	645
	Electricity	5	3	101	181	151
Total exports		15,699	15,531	15,115	15,581	16,759
Imports (f.o.b.)	Oil ⁽⁵⁾	9,048	9,528	9,213	11,232	15,307
	Other fuels	968	1,270	1,066	1,079	2,240
Total imports		10,016	10,798	10,279	12,311	17,547
Net exports⁽⁸⁾	Oil ⁽⁵⁾	6,536	5,308	5,109	3,365	912
(B.O.P basis)	Other fuels	505	301	613	871	-555
Total net exports		7,041	5,609	5,722	4,236	357
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		2005	2006	2007	2008	2009
Imports (c.i.f.)	Coal and other solid fuels	1,963	2,203	2,080	3,661	2,676
	Crude oil	11,519	14,580	11,685	20,538	14,520
	Petroleum products ⁽³⁾	7,852	9,788	12,568	13,256	9,468
	Natural gas	1,731	2,512	2,883	6,426	4,773
	Electricity	442	421	239	483	259
Total imports		23,507	29,504	29,454	44,364	31,696
Exports (f.o.b.)	Coal and other solid fuels	65	49	73	156	108
	Crude oil	10,733	12,760	12,630	16,586	12,499
	Petroleum products ⁽⁴⁾	8,305	9,627	9,301	14,733	11,375
	Natural gas	737	1,315	996	1,945	1,218
	Electricity	102	105	108	110	161
Total exports		19,942	23,855	23,109	33,531	25,361
Imports (f.o.b.)	Oil ⁽⁵⁾	22,050	26,052	27,153	38,449	28,087
	Other fuels	3,932	4,921	5,160	10,602	7,444
Total imports		25,982	30,973	32,313	49,051	35,531
Net exports⁽⁸⁾	Oil ⁽⁵⁾	-2,184	-2,829	-4,698	-6,474	-3,431
(B.O.P basis)	Other fuels	-2,230	-2,793	-3,218	-7,051	-5,076
Total net exports		-4,414	-5,622	-7,916	-13,525	-8,507
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		2010	2011 ⁽⁷⁾			
Imports (c.i.f.)	Coal and other solid fuels	1,908	3,029			
	Crude oil	19,490	28,081			
	Petroleum products ⁽³⁾	12,307	16,128			
	Natural gas	6,849	9,051			
	Electricity	326	440			
Total imports		40,880	56,729			
Exports (f.o.b.)	Coal and other solid fuels	228	185			
	Crude oil	15,796	17,183			
	Petroleum products ⁽⁴⁾	14,958	20,153			
	Natural gas	2,191	3,117			
	Electricity	204	138			
Total exports		33,376	40,776			
Imports (f.o.b.)	Oil ⁽⁵⁾	36,049	49,416			
	Other fuels	8,875	12,233			
Total imports		44,924	61,649			
Net exports⁽⁸⁾	Oil ⁽⁵⁾	-4,741	-11,180			
(B.O.P basis)	Other fuels	-5,062	-7,541			
Total net exports		-9,803	-18,721			

Source: Office for National Statistics

(1) See Energy Trends on the internet for the latest quarterly figures

(2) See notes in Foreign Trade section of this and earlier editions of the Digest

(3) Includes petroleum products not used as fuel, eg lubricants, and liquefied petroleum gases other than natural gas.

(4) Includes petroleum products not used as fuel, eg lubricants, and liquefied petroleum gases, and small quantities of natural gas.

(5) Crude oil and petroleum products.

(6) Data prior to 1985 include small quantities of non-fuel products (eg peat). These items are excluded from the c.i.f. import data and the export data.

(7) Provisional.

(8) Net exports are the difference between exports and imports on a Balance of Payments (B.O.P) basis – see Table G.1 for figures in the period 2001 to 2011.

G.3 Imports and exports of crude oil and petroleum products

	1999		2000		2001		2002		2003		2004	
	Quantity (Thousand tonnes)	Value per tonne (£)	Quantity (Thousand tonnes)	Value per tonne (£)	Quantity (Thousand tonnes)	Value per tonne (£)	Quantity (Thousand tonnes)	Value per tonne (£)	Quantity (Thousand tonnes)	Value per tonne (£)	Quantity (Thousand tonnes)	Value per tonne (£)
Imports (c.i.f.)												
Crude oil	33,151	76.0	36,898	138.2	37,696	128.0	40,913	122.0	44,379	133.9	56,095	151.4
Refined petroleum products (1)												
Petroleum gases (2)	845	120.5	1,119	131.8	1,156	119.7	709	140.9	549	250.2	818	203.9
Motor spirit and aviation spirit	1,947	119.5	1,971	210.0	3,440	200.4	2,280	168.8	1,828	178.1	2,215	227.4
Other light oils and spirit (3)	667	99.0	584	217.7	550	194.7	681	179.4	1,294	179.3	1,294	212.7
Aviation turbine fuel (kerosene)	4,163	109.5	5,761	193.0	6,716	174.4	7,156	156.1	6,073	173.1	7,687	215.8
Other kerosene	163	80.1	181	225.5	427	180.3	163	154.2	162	198.2	268	204.4
Gas oil/diesel oil	4,788	112.9	3,988	188.6	4,315	176.9	4,602	153.3	5,997	164.8	5,517	194.1
Fuel oil (4)	5,892	60.9	5,275	111.1	5,054	104.1	5,382	108.9	6,240	124.2	7,578	131.8
Lubricating oils	111	305.9	197	390.5	378	354.4	426	278.5	395	316.9	381	334.4
Petroleum coke	644	47.4	683	48.1	770	68.5	844	63.0	836	54.2	1,094	51.0
Other	198	147.5	44	454.6	67	341.8	39	484.9	79	287.3	77	316.0
Total refined petroleum products	19,418	95.9	19,802	167.1	22,874	161.0	22,284	145.0	23,456	159.2	26,929	183.3
Exports (f.o.b)												
Crude oil	68,114	81.3	71,615	135.6	82,269	128.0	79,951	123.0	69,031	133.0	61,386	154.0
Refined petroleum products (1)												
Petroleum gases (2)	5,564	100.2	5,398	149.4	3,713	170.4	4,759	140.4	4,645	165.0	3,814	216.1
Motor spirit and aviation spirit	5,922	108.2	4,625	194.5	4,335	167.5	4,467	165.6	4,057	191.0	6,600	218.4
Other light oils and spirit (3)	2,339	116.4	3,554	168.9	3,419	164.4	3,648	161.3	4,952	177.0	5,125	217.3
Aviation turbine fuel (kerosene)	722	103.1	521	184.1	440	172.6	634	153.6	590	173.0	983	221.4
Other kerosene	147	164.9	194	239.7	278	218.8	407	194.8	400	205.4	524	255.4
Gas oil/Diesel oil	5,550	98.6	6,936	162.6	5,699	147.1	7,718	134.2	7,345	153.1	6,995	186.8
Fuel oil (4)	5,326	64.0	6,205	108.5	6,238	94.5	7,039	95.3	7,859	109.6	10,623	103.7
Lubricating oils	252	215.5	337	299.4	824	300.3	705	276.1	880	265.2	788	272.4
Petroleum coke	641	153.6	502	233.3	504	228.4	588	188.5	482	198.2	520	188.9
Other	195	164.4	198	173.3	212	193.3	193	181.7	204	174.8	215	177.9
Total refined petroleum products	26,658	99.1	28,469	158.1	25,661	151.5	30,160	139.9	31,414	157.7	36,188	179.4

G.3 Imports and exports of crude oil and petroleum products (continued)

	2005		2006		2007		2008		2009		2010	
	Quantity (Thousand tonnes)	Value per tonne (£)	Quantity (Thousand tonnes)	Value per tonne (£)	Quantity (Thousand tonnes)	Value per tonne (£)	Quantity (Thousand tonnes)	Value per tonne (£)	Quantity (Thousand tonnes)	Value per tonne (£)	Quantity (Thousand tonnes)	Value per tonne (£)
Imports (c.i.f.)												
Crude oil	54,050	213.1	55,780	261.6	52,394	264.5	52,159	394.1	50,675	286.7	50,457	386.4
Refined petroleum products (1)												
Petroleum gases (2)	806	458.0	820	1,008.1	1,198	316.8	1,045	445.3	532	309.0	565	449.5
Motor spirit and aviation spirit	2,773	291.7	3,322	317.5	3,163	380.9	3,189*	495.00*	3,003	388.00*	3,489	502.2
Other light oils and spirit (3)	1,788	277.3	2,154	316.0	2,577	327.5	1,472	464.4	960	379.8	819	485.6
Aviation turbine fuel (kerosene)	9,551	306.6	7,341	354.3	7,114	342.0	7,527	541.4	7,325	353.1	6,739	461.4
Other kerosene	97	324.3	322	336.2	625	354.3	615	537.6	851	357.7	892	474.8
Gas oil/diesel oil	5,688	290.5	8,520	321.4	8,781	326.7	8,481	495.5	8,175	349.9	9,763	455.6
Fuel oil (4)	6,950	167.5	8,468	196.8	9,227	225.2	4,410	326.5	4,327	256.3	3,967	349.1
Lubricating oils	426	408.2	501	542.5	592	457.6	493	691.6	461	578.7	586	690.7
Petroleum coke	973	53.9	880	70.5	486	92.7	884	112.9	813	90.5	728	106.7
Other	133	281.7	154	355.4	376	253.6	371	328.1	368	293.8	154	493.3
Total refined petroleum products	29,187	264.3	32,483	309.9	34,138	305.8	28,487	468.2	26,815	335.8	27,701	445.0
Exports (f.o.b)												
Crude oil	52,634	213.9	49,320	268.9	46,779	269.3	43,192	385.4	43,350	287.0	42,084	380.3
Refined petroleum products (1)												
Petroleum gases (2)	3,729	245.5	2,499	299.6	2,422	316.5	3,270	400.2	2,795	309.5	2,611	456.8
Motor spirit and aviation spirit	7,250	273.1	7,060	329.9	7,676	316.9	8,096	445.5	9,326	358.6	9,989	487.2
Other light oils and spirit (3)	5,811	251.2	5,102	325.0	4,953	343.2	4,020	453.7	3,508	354.6	3,146	485.6
Aviation turbine fuel (kerosene)	1,268	317.0	1,491	362.8	1,765	350.8	2,297	556.1	2,510	366.2	2,039	483.0
Other kerosene	481	338.9	381	395.5	368	393.9	262	519.9	371	370.6	386	478.1
Gas oil/Diesel oil	6,382	265.0	5,976	300.5	5,335	301.3	6,615	458.0	7,229	317.8	7,837	426.2
Fuel oil (4)	10,684	140.8	9,945	167.8	8,894	187.9	9,599	284.8	8,393	239.1	6,638	303.2
Lubricating oils	750	357.8	858	420.7	642	478.9	572	757.9	623	611.8	717	664.2
Petroleum coke	544	214.5	486	261.4	529	322.1	496	473.2	491	406.6	647	539.4
Other	287	188.8	240	202.6	148	268.6	155	328.1	123	348.9	79	533.9
Total refined petroleum products	37,188	230.0	34,037	277.0	32,733	289.0	35,381	413.6	35,370	323.4	34,090	439.3

G.3 Imports and exports of crude oil and petroleum products (continued)

	2011	
	Quantity (Thousand tonnes)	Value per tonne (£)
Imports (c.i.f.)		
Crude oil	53,657	523.5
Refined petroleum products (1)		
Petroleum gases (2)	546	565.2
Motor spirit and aviation spirit	2,989	636.1
Other light oils and spirit (3)	924	624.7
Aviation turbine fuel (kerosene)	6,904	620.1
Other kerosene	701	620.9
Gas oil/diesel oil	10,049	612.8
Fuel oil (4)	4,087	462.5
Lubricating oils	516	908.2
Petroleum coke	519	192.6
Other	179	582.8
Total refined petroleum products	27,414	591.8
Exports (f.o.b)		
Crude oil	34,356	498.4
Refined petroleum products (1)		
Petroleum gases (2)	2,362	549.1
Motor spirit and aviation spirit	10,728	639.4
Other light oils and spirit (3)	2,639	619.7
Aviation turbine fuel (kerosene)	1,561	622.6
Other kerosene	770	637.3
Gas oil/Diesel oil	9,099	558.8
Fuel oil (4)	7,135	413.2
Lubricating oils	886	822.0
Petroleum coke	840	542.0
Other	81	593.4
Total refined petroleum products	36,100	568.4

Source: H.M. Revenue and Customs

(1) Excludes pitch, mineral tars and natural gas.

(2) Includes small quantities of unidentified non-petroleum gases.

(3) Includes wide-cut gasoline, white spirit and petroleum naphthas.

(4) Includes partly refined oil for further processing.

* DECC estimates

G.4 Imports and exports of crude oil by country

	1999			2000			2001			2002			2003			2004		
	Quantity (Thousand tonnes)	Value (£million)	Value per tonne (£)	Quantity (Thousand tonnes)	Value (£million)	Value per tonne (£)	Quantity (Thousand tonnes)	Value (£million)	Value per tonne (£)	Quantity (Thousand tonnes)	Value (£million)	Value per tonne (£)	Quantity (Thousand tonnes)	Value (£million)	Value per tonne (£)	Quantity (Thousand tonnes)	Value (£million)	Value per tonne (£)
Imports (c.i.f.)																		
Middle East																		
Abu Dhabi	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dubai	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iran	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Kuwait	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oman	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Saudi Arabia	1,026	65.1	63.47	1,573	220.0	139.90	623	72.3	116.05	324	41.7	128.68	762	89.7	117.73	1,363	190.7	139.91
Other countries	973	62.3	64.05	233	25.0	107.40	564	56.6	100.35	846	90.4	106.80	164	21.6	131.94	247	35.5	143.53
Total Middle East	1,999	127.4	63.76	1,806	245.0	135.71	1,187	128.9	108.59	1,170	132.1	112.85	926	111.3	120.24	1,611	226.2	140.47
Algeria	1,045	95.4	91.28	1,992	319.8	160.56	1,335	182.7	136.82	2,025	276.6	136.61	1,308	188.9	144.41	1,477	249.9	169.20
Angola	-	-	-	-	-	-	468	65.3	139.40	127	16.4	129.05	-	-	-	-	-	-
Latvia	342	27.7	80.96	27	2.9	105.49	80	9.7	121.08	49	6.6	134.58	16	2.5	151.26	-	-	-
Libya	-	-	-	155	27.8	179.19	-	-	-	-	-	-	129	16.4	127.15	155	23.5	151.63
Lithuania	26	2.5	93.36	-	-	-	-	-	-	86	10.2	119.46	100	11.5	114.72	-	-	-
Mexico	875	57.7	66.02	782	95.2	121.63	821	85.4	104.05	820	84.7	103.39	749	79.9	106.76	323	32.0	99.08
Netherlands	1,159	102.3	88.21	-	-	-	11	1.1	98.3	36	4.5	124.76	33	4.2	127.92	-	-	-
Nigeria	460	34.7	75.50	252	40.9	162.54	130	20.6	158.15	293	37.3	127.28	129	16.5	127.94	249	53.1	213.25
Norway	22,218	1,791.0	80.61	27,523	3,809.3	138.40	27,657	3,587.4	129.71	29,057	3,561.5	122.57	33,560	4,571.7	136.23	39,938	6,222.1	155.79
Russia	584	44.1	75.45	1,487	186.3	125.28	2,920	360.6	123.48	3,568	423.7	118.74	3,924	501.8	127.86	7,489	1,106.5	147.74
Venezuela	1,071	50.2	46.86	671	58.0	86.48	307	23.8	77.53	383	36.2	94.57	399	33.9	84.83	1,254	106.2	84.70
Other countries	3,372	186.2	55.21	2,204	314	142.6	2,780	361.2	129.93	3,301	403.3	122.18	3,106	402.0	129.43	3,599	474.0	131.70
Total Non Middle East	31,152	2,391.8	76.78	35,092	4,854	138.3	36,509	4,697.6	128.67	39,743	4,860.9	122.31	43,454	5,829.3	134.15	54,484	8,267.3	151.74
Total imports	33,151	2,519.2	75.99	36,898	5,099	138.2	37,696	4,826.5	128.04	40,913	4,993.0	122.04	44,379	5,940.6	133.86	56,095	8,493.5	151.41
Exports (f.o.b.)(1)																		
European Union																		
Belgium and Luxembourg	1,189	97.2	81.78	966	116.3	120.40	383	51.1	133.41	434	53.0	122.27	478	69.1	144.66	126	17.8	140.97
Denmark	-	-	-	-	-	-	70	9.9	140.00	64	8.0	124.00	57	7.2	128.00	-	-	-
Finland	701	52.7	75.19	816	105.0	128.76	1,058	139.2	131.58	343	44.7	130.60	328	41.8	127.49	240	41.9	174.68
France	11,326	881.9	77.87	10,330	1,376.4	133.24	12,637	1,640.6	129.82	11,018	1,353.0	122.80	11,139	1,501.8	134.83	9,454	1,461.2	154.56
Germany	11,661	977.4	83.82	11,531	1,560.9	135.37	14,550	1,892.8	130.09	9,468	1,172.4	123.82	9,354	1,250.2	133.65	11,472	1,807.7	157.57
Greece	74	6.2	83.63	-	-	-	-	-	-	134	15.6	116.15	-	-	-	-	-	-
Irish Republic	70	3.6	51.00	-	-	-	163	21.1	129.64	943	116.9	123.98	785	102.7	130.86	641	98.6	153.77
Italy	1,234	92.1	74.62	471	53.1	112.83	683	83.7	122.45	962	118.0	122.65	-	-	-	281	52.6	187.00
Netherlands	11,354	933.0	82.18	13,771	1,908.4	138.58	22,314	2,858.9	128.12	22,046	2,664.7	120.87	17,583	2,367.9	134.67	13,939	2,172.9	155.89
Portugal	1,403	106.5	75.90	694	87.2	125.61	757	98.2	129.74	998	122.3	122.55	1,071	136.7	127.63	574	86.1	150.09
Spain	3,655	286.4	78.35	2,090	277.9	132.94	2,037	262.6	128.95	911	104.3	114.54	837	115.9	138.47	177	24.9	140.87
Sweden	635	51.6	81.25	315	40.4	128.09	1,526	190.5	124.85	2,457	300.6	122.33	1,812	246.1	135.83	2,159	338.7	156.85
Poland(2)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total EU	43,302	3,488.5	80.56	40,984	5,525.6	134.82	56,177	7,248.4	129.03	49,777	6,073.5	122.01	43,443	5,839.7	134.42	39,064	6,102.5	156.22
Canada	623	42.1	67.58	1,577	199.3	126.44	3,816	452.3	118.55	4,950	594.9	120.17	3,136	397.9	126.87	2,405	340.5	141.57
Norway	99	5.6	56.39	85	7.9	92.58	385	53.0	137.64	77	9.7	127.12	287	37.8	131.69	648	94.4	145.76
U.S.A.	20,259	1,688.6	83.35	26,365	3,591.8	136.23	21,587	2,740.8	126.96	23,514	2,977.3	126.61	21,049	2,775.1	131.84	18,508	2,815.3	152.11
Other Non EU	3,832	311.7	81.36	2,604	383.1	147.15	303	39.6	130.61	1,632	178.3	109.28	1,114	132.7	119.07	760	101.4	133.46
Total exports	68,114	5,536.6	81.28	71,615	9,707.8	135.56	82,269	10,534.1	128.05	79,951	9,833.7	123.00	69,031	9,183.2	133.03	61,386	9,454.1	154.01

G.4 Imports and exports of crude oil by country (continued)

	2005			2006			2007			2008			2009			2010		
	Quantity (Thousand tonnes)	Value (£million)	Value per tonne (£)	Quantity (Thousand tonnes)	Value (£million)	Value per tonne (£)	Quantity (Thousand tonnes)	Value (£million)	Value per tonne (£)	Quantity (Thousand tonnes)	Value (£million)	Value per tonne (£)	Quantity (Thousand tonnes)	Value (£million)	Value per tonne (£)	Quantity (Thousand tonnes)	Value (£million)	Value per tonne (£)
Imports (c.i.f.)																		
Middle East																		
Abu Dhabi	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dubai	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iran	-	-	-	-	-	-	-	-	40	12.3	306.58	562	164.7	293.10	432	147.9	342.11	
Kuwait	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oman	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Saudi Arabia	1,358	293.0	215.85	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other countries	489	110.0	224.97	979	242.4	247.60	164	30.2	184.00	255	97.7	382.74	241	59.3	246.41	-	-	-
Total Middle East	1,847	403.0	218.26	979	242.4	247.60	164	30.2	184.00	295	110.0	372.39	803	224.0	279.10	432	147.9	342.11
Algeria	1,157	294.4	254.51	2,178	617.5	283.48	2,523	734.2	290.96	1,586	718.9	453.16	1,194	306.6	256.86	1,230	509.9	414.71
Angola	-	0.0	-	-	0.0	-	498	140.1	281.55	1,375	568.1	413.16	953	265.3	278.36	111	37.0	331.95
Latvia	-	0.0	-	-	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-
Libya	548	120.9	220.52	1,126	302.2	268.45	927	235.0	253.50	2,047	882.6	431.19	1,872	532.6	284.44	2,727	1,070.9	392.70
Lithuania	-	0.0	-	-	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-
Mexico	168	20.3	121.22	165	30.3	183.58	442	100.6	227.38	356	119.8	336.77	-	-	-	-	-	-
Netherlands	17	4.3	253.00	22	5.7	261.84	49	15.0	307.93	91	32.5	358.86	38	11.5	306.61	75	30.2	404.30
Nigeria	388	95.4	245.93	539	141.3	262.39	885	250.4	283.05	1,991	790.7	397.09	1,842	545.1	295.91	1,738	676.9	389.55
Norway	40,072	8,754.3	218.47	39,699	10,484.7	264.11	37,474	9,968.0	266.00	35,114	13,758.7	391.83	35,007	10,141.2	289.69	36,398	14,074.5	386.68
Russia	6,986	1,443.3	206.61	7,275	1,937.4	266.30	5,400	1,419.9	262.95	5,609	2,184.4	389.47	4,068	1,155.8	284.10	3,302	1,277.7	386.93
Venezuela	1,449	151.2	104.38	1,915	339.4	177.24	1,366	237.6	174.01	835	213.1	255.20	965	217.7	225.56	650	186.0	286.20
Other countries	1,419	228.2	160.81	1,883	488.5	259.35	2,667	729.8	273.68	2,859	1,178.0	411.98	3,933	1,128.0	286.80	3,794	1,483.3	390.93
Total Non Middle East	52,203	11,112.5	212.87	54,801	14,346.9	261.80	52,230	13,830.6	264.80	51,863	20,446.7	394.24	49,872	14,303.8	286.81	50,024	19,346.3	386.74
Total imports	54,050	11,515.5	213.05	55,780	14,589.3	261.55	52,394	13,860.8	264.55	52,159	20,556.8	394.12	50,675	14,527.8	286.69	50,457	19,494.2	386.35
Exports (f.o.b.)(1)																		
European Union																		
Belgium and Luxembourg	135	31.8	235.65	152	45.3	298.79	155	45.5	293.41	332	124.0	373.62	46	13.2	287.76	354	139.2	392.66
Denmark	-	-	-	93	23.6	254.00	-	-	-	254	102.9	405.22	505	148.4	293.90	678	255.7	377.21
Finland	560	139.3	248.75	892	232.8	261.11	1,568	401.7	256.25	253	101.3	400.09	-	-	-	-	-	-
France	5,409	1,148.2	212.29	7,336	1,966.5	268.06	5,461	1,416.3	259.33	3,171	1,201.3	378.86	2,757	799.1	289.87	3,613	1,385.6	383.51
Germany	13,150	2,869.8	218.23	11,095	3,002.2	270.60	9,226	2,530.7	274.29	11,662	4,470.9	383.38	7,786	2,219.2	285.04	9,190	3,513.7	382.32
Greece	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Irish Republic	798	169.4	212.24	102	25.6	252.11	208	54.2	261.32	170	37.2	219.01	236	60.9	257.93	477	179.6	376.61
Italy	1,577	341.5	216.59	1,251	337.5	269.83	650	175.0	269.13	537	196.3	365.42	-	-	-	263	104.7	398.56
Netherlands	12,302	2,668.0	216.87	11,644	3,154.2	270.89	13,093	3,536.0	270.06	12,218	4,827.4	395.12	17,192	4,971.4	289.17	15,737	5,967.0	379.17
Portugal	344	73.0	212.34	618	181.1	293.05	85	24.4	288.00	-	-	-	163	45.1	276.72	80	30.5	380.00
Spain	402	92.0	228.54	84	22.0	263.00	596	163.5	274.25	1,018	383.6	376.59	1,101	307.9	279.55	332	122.9	369.66
Sweden	1,131	235.0	207.88	1,113	300.3	269.77	769	207.7	270.29	713	281.7	395.11	574	157.8	275.08	1,484	558.6	376.40
Poland(2)	87	17.1	195.89	339	82.5	243.43	420	107.9	256.99	243	88.6	365.33	323	91.8	284.55	610	248.4	407.10
Total EU	35,896	7,785.3	216.89	34,718	9,373.9	270.00	32,231	8,662.9	268.78	30,570	11,815.3	386.49	30,682	8,814.9	287.30	32,820	12,506.2	381.06
Canada	1,711	318.4	186.15	2,404	651.0	270.76	1,239	300.3	242.38	584	250.7	429.49	570	172.5	302.57	611	221.0	362.00
Norway	948	208.1	219.40	301	78.2	259.80	1,222	359.5	294.27	407	119.6	293.83	355	102.4	288.36	344	130.7	380.03
U.S.A.	13,554	2,854.9	210.62	10,980	2,914.6	265.43	11,471	3,101.4	270.37	10,452	3,930.9	376.08	10,294	2,934.4	285.06	7,475	2,811.4	376.09
Other Non EU	525	90.9	173.10	916	245.0	267.37	617	173.9	282.05	1,179	531.2	450.69	1,448	418.7	289.07	835	336.4	402.98
Total exports	52,634	11,257.5	213.88	49,320	13,262.7	268.91	46,779	12,598.0	269.31	43,192	16,647.7	385.43	43,350	12,442.9	287.04	42,084	16,005.7	380.33

G.4 Imports and exports of crude oil by country (continued)

	2011		
	Quantity (Thousand tonnes)	Value (£million)	Value per tonne (£)
Imports (c.i.f.)			
Middle East			
Abu Dhabi	-	-	-
Dubai	-	-	-
Iran	692	330.2	476.93
Kuwait	-	-	-
Oman	-	-	-
Saudi Arabia	144	79.4	550.04
Other countries	269	141.7	526.95
Total Middle East	1,106	551.2	498.64
Algeria	2,514	1,364.5	542.65
Angola	465	236.2	507.48
Latvia	-	-	-
Libya	741	366.5	494.43
Lithuania	-	-	-
Mexico	-	-	-
Netherlands	73	36.4	501.88
Nigeria	3,494	1,865.9	533.96
Norway	35,790	18,808.5	525.52
Russia	4,399	2,316.1	526.51
Venezuela	672	242.8	361.14
Other countries	4,402	2,298.9	522.26
Total Non Middle East	52,552	27,535.8	523.98
Total imports	53,657	28,087.1	523.45
Exports (f.o.b.)(1)			
European Union			
Belgium and Luxembourg	581	298.9	513.99
Denmark	430	217.4	505.90
Finland	-	-	-
France	3,910	1,977.8	505.82
Germany	7,340	3,686.6	502.24
Greece	-	-	-
Irish Republic	753	420.0	557.44
Italy	1,111	559.8	503.75
Netherlands	11,563	5,664.7	489.89
Portugal	52	29.2	564.75
Spain	156	85.0	543.93
Sweden	1,135	577.5	509.03
Poland(2)	1,263	581.5	460.33
Total EU	28,295	14,098.5	498.27
Canada	376	196.4	521.92
Norway	158	75.4	477.52
U.S.A.	4,437	2,138.9	482.04
Other Non EU	1,090	613.8	563.23
Total exports	34,356	17,122.9	498.40

(1) Includes re-exports.

(2) Poland Joined the EU in May 2004, before this time any data for Poland is included in the Non EU category.

Source: HM Revenue and Customs

G.5 Imports and exports of solid fuel

Thousand tonnes

2001	Imports (1)				Exports			
	Steam coal	Coking coal	Anthracite	Other solid fuel	Steam coal	Coking coal	Anthracite	Other solid fuel
European Union								
Belgium/Luxembourg	6	-	-	56	-	-	68	1
Denmark	-	-	-	-	12	-	4	-
Finland	-	-	-	-	-	-	-	36
France	-	-	-	7	9	-	78	29
Germany	-	-	-	52	2	-	22	18
Irish Republic	64	-	9	-	210	4	24	25
Italy	-	-	-	-	-	-	-	5
Netherlands (2)	150	-	7	-	1	-	1	12
Portugal	-	-	-	-	-	-	-	-
Spain	-	-	-	1	-	-	12	-
Sweden	5	-	-	-	-	-	4	55
Other countries	-	-	-	-	-	-	-	-
Total European Union	224	-	16	116	234	4	213	181
Australia	2,283	4,777	16	-	-	-	-	-
Canada	-	1,182	-	-	-	-	-	-
Colombia	6,722	-	-	-	-	-	-	-
Indonesia	50	-	-	-	-	-	-	-
Norway	23	-	1	1	63	-	26	180
People's Republic of China	295	-	410	48	-	-	-	-
Poland	1,183	-	52	-	-	-	-	-
Republic of South Africa	10,139	29	91	-	-	-	1	-
Russia	3,894	-	1	-	-	-	-	-
United States of America	857	1,735	18	-	-	-	-	-
Venezuela	56	-	-	-	-	-	-	-
Vietnam	-	-	92	-	-	-	-	-
Other countries	1,315	-	81	-	5	-	4	33
Total all countries	27,041	7,723	778	165	301	4	244	394
Value of imports (cif)/export (fob) (£m) (3)	839	285	34	14	19	0	13	26
Value per tonne (£)	32	37	44	64	47	67	66	66
2002								
European Union								
Belgium/Luxembourg	-	-	2	86	1	-	58	1
Denmark	-	-	-	-	13	-	5	-
Finland	-	-	-	-	-	-	-	38
France	5	-	12	12	2	-	61	114
Germany	10	-	-	15	32	-	15	50
Irish Republic	32	-	14	12	214	2	27	34
Italy	-	-	-	-	-	-	1	1
Netherlands (2)	226	-	31	96	-	-	2	11
Portugal	-	-	-	-	-	-	-	1
Spain	9	-	-	-	-	-	-	-
Sweden	25	-	-	-	3	-	6	51
Other countries	-	-	-	-	-	-	-	-
Total European Union (5)	307	-	59	220	264	2	175	300
Australia	682	4,229	182	1	-	-	-	-
Canada	-	750	-	-	-	-	-	-
Colombia	3,518	-	29	-	-	-	-	-
Indonesia	45	-	-	-	-	-	-	-
Norway	163	-	1	-	74	-	14	153
People's Republic of China	208	-	80	41	-	-	-	-
Poland	1,558	1	38	25	-	-	-	-
Republic of South Africa	9,608	-	267	-	-	-	-	-
Russia	3,563	48	757	57	-	-	-	-
United States of America	252	1,286	29	-	-	-	-	-
Vietnam	-	-	86	-	-	-	-	-
Other countries	917	-	23	26	3	-	1	23
Total all countries	20,821	6,315	1,550	370	341	2	191	476
Value of imports (cif)/export (fob) (£m) (3)	588	240	53	24	19	0	11	31
Value per tonne (£)	27	38	34	64	56	87	59	66

G.5 Imports and exports of solid fuel (continued)

Thousand tonnes

2003	Imports (1)				Exports			
	Steam coal	Coking coal	Anthracite	Other solid fuel	Steam coal	Coking coal	Anthracite	Other solid fuel
European Union								
Belgium/Luxembourg	-	-	12	65	-	-	79	3
Denmark	-	-	-	-	13	-	-	-
Finland	-	-	-	-	-	-	-	41
France	5	-	14	14	-	-	52	37
Germany	-	-	2	14	1	-	-	1
Greece	-	-	-	-	-	-	2	-
Irish Republic	46	-	11	11	267	2	35	38
Italy	-	14	-	11	-	-	-	-
Netherlands (2)	243	-	3	41	-	-	-	2
Spain	21	-	-	-	-	-	-	-
Sweden	-	-	-	8	-	-	5	47
Other countries	-	-	-	-	-	-	1	1
Total European Union (5)	314	14	41	162	281	2	174	170
Australia	1,162	4,409	-	-	-	-	-	-
Canada	-	839	-	-	-	-	1	-
Colombia	3,006	158	-	8	-	-	-	-
Indonesia	402	-	-	-	-	-	-	-
Latvia	1,441	-	-	-	-	-	-	-
Norway	145	-	-	15	75	-	3	121
People's Republic of China	170	-	40	470	-	-	-	-
Poland	1,896	-	6	-	-	-	-	-
Republic of South Africa	11,649	433	110	-	-	-	-	-
Russia	3,288	98	14	181	-	-	-	-
United States of America	167	1,089	45	-	-	-	-	-
Venezuela	41	-	-	-	-	-	-	-
Vietnam	-	-	45	-	-	-	-	-
Other countries	772	80	17	150	3	-	2	-
Total all countries	24,452	7,120	319	986	359	2	181	291
Value of imports (cif)/export (fob) (£m) (3)	653	256	15	71	20	0	13	21
Value per tonne (£)	27	36	48	72	55	90	71	71
2004								
European Union								
Belgium/Luxembourg	6	-	5	18	-	-	65	2
Denmark	-	-	-	1	1	-	-	-
Estonia (4)	-	-	-	-	-	-	-	-
Finland	-	-	-	-	-	-	-	36
France	32	-	14	8	-	-	51	36
Germany	8	-	5	50	-	-	8	5
Irish Republic	34	-	6	8	346	5	25	33
Italy	-	-	-	37	-	-	-	3
Latvia (4)	-	-	-	5	-	-	-	-
Netherlands (2)	183	-	10	38	-	5	4	12
Poland (4)	636	-	-	18	-	-	-	-
Portugal	8	-	-	-	-	-	-	-
Spain	24	-	-	-	8	-	-	-
Sweden	-	-	-	19	7	-	-	47
Other countries	1	-	-	-	-	-	1	1
Total European Union (5)	932	-	40	199	362	9	154	175
Australia	2,035	4,140	-	25	-	-	-	-
Canada	25	715	-	18	-	-	1	-
Colombia	3,630	-	-	53	-	-	-	-
Indonesia	1,458	-	-	-	-	-	-	-
Norway	138	-	-	2	74	-	13	56
People's Republic of China	190	-	43	432	-	-	-	-
Republic of South Africa	10,039	-	105	-	-	-	-	-
Russia	9,711	148	73	142	-	-	-	-
United States of America	717	1,342	2	-	-	-	-	-
Venezuela	39	-	-	-	-	-	-	-
Vietnam	-	-	23	-	-	-	-	-
Other countries	569	-	-	179	3	-	2	6
Total all countries	29,483	6,345	320	1,050	440	9	170	237
Value of imports (cif)/export (fob) (£m) (3)	1,046	269	16	151	25	1	11	23
Value per tonne (£)	35	42	49	144	57	91	66	96

G.5 Imports and exports of solid fuel (continued)

Thousand tonnes

2005	Imports (1)				Exports			
	Steam coal	Coking coal	Anthracite	Other solid fuel	Steam coal	Coking coal	Anthracite	Other solid fuel
European Union								
Austria	-	-	-	-	-	-	-	5
Belgium/Luxembourg	-	-	14	20	-	-	84	2
Czech Republic	-	-	-	1	-	-	-	-
Denmark	-	-	-	-	4	-	-	-
Estonia (4)	15	-	-	-	-	-	-	-
Finland	-	-	-	-	-	-	-	36
France	-	-	4	-	1	-	32	20
Germany	12	-	4	41	1	-	-	5
Irish Republic	24	-	14	8	280	15	27	25
Italy	-	-	-	5	-	-	-	-
Latvia (4)	90	28	-	-	-	-	-	-
Netherlands (2)	197	-	-	70	-	-	3	14
Poland (4)	647	-	-	24	-	-	-	1
Spain	41	-	-	3	-	-	-	-
Sweden	-	-	-	36	3	-	2	53
Other countries	1	-	-	1	1	-	-	1
Total European Union (5)	1,027	28	37	209	290	15	148	162
Australia	808	3,499	156	-	-	-	-	-
Canada	-	1,084	-	-	-	-	1	-
Colombia	3,289	-	-	-	-	-	-	-
Indonesia	1,616	-	-	-	-	-	-	-
Norway	-	-	-	-	65	-	20	46
People's Republic of China	110	-	25	367	-	-	-	-
Republic of South Africa	12,980	-	49	-	-	-	-	-
Russia	16,748	697	76	125	-	-	-	-
United States of America	299	1,210	-	-	-	-	-	-
Other countries	225	-	-	27	8	-	3	1
Total all countries	37,101	6,519	343	728	363	15	172	209
Value of imports (cif)/export (fob) (£m) (3)	1,436	418	19	86	25	2	13	26
Value per tonne (£)	39	64	56	118	70	113	76	125
2006								
European Union								
Belgium/Luxembourg	-	-	2	26	3	-	65	1
Czech Republic	-	-	-	-	1	-	-	-
Denmark	10	-	-	-	5	-	-	-
Estonia (4)	37	-	-	-	-	-	-	-
Finland	-	-	-	-	-	-	-	20
France	3	-	2	-	-	-	24	23
Germany	44	-	6	35	-	-	4	11
Irish Republic	16	-	3	7	248	1	24	18
Latvia (4)	384	-	-	-	-	-	-	-
Netherlands (2)	188	-	-	42	-	-	3	22
Poland (4)	856	-	-	31	-	-	-	-
Spain	46	-	-	-	64	-	-	-
Sweden	-	-	-	29	-	-	-	3
Other countries	-	-	-	10	-	-	-	-
Total European Union (5)	1,584	-	13	180	320	1	121	97
Australia	143	3,914	-	-	-	-	-	-
Canada	-	1,282	-	-	-	-	1	-
Colombia	3,798	-	-	-	-	-	-	-
Iceland	-	-	-	-	17	-	-	-
Indonesia	1,895	-	-	-	-	-	-	-
Norway	-	20	-	2	9	-	7	24
People's Republic of China	34	-	10	226	-	-	-	-
Republic of South Africa	12,601	-	42	-	-	-	-	-
Russia	21,950	298	37	168	-	-	-	-
United States of America	692	1,332	-	-	-	-	-	-
Vietnam	-	-	19	-	-	-	-	-
Other countries	-	28	2	-	2	-	2	1
Total all countries	42,697	6,875	123	577	349	1	131	122
Value of imports (cif)/export (fob) (£m) (3)	1,616	481	9	52	24	-	10	14
Value per tonne (£)	38	70	75	90	70	127	78	115

G.5 Imports and exports of solid fuel (continued)

Thousand tonnes

2007	Imports (1)				Exports			
	Steam coal	Coking coal	Anthracite	Other solid fuel	Steam coal	Coking coal	Anthracite	Other solid fuel
European Union								
Belgium/Luxembourg	-	-	1	12	3	-	45	12
Czech Republic	-	-	-	-	1	-	-	-
Denmark	7	-	-	-	6	5	-	-
Estonia (4)	66	-	-	-	-	-	-	-
Finland	-	-	-	-	-	-	-	40
France	-	-	-	3	-	-	13	39
Germany	8	-	5	29	-	-	3	98
Irish Republic	22	-	1	6	283	-	23	13
Italy	-	7	-	-	-	-	-	-
Latvia (4)	69	61	-	-	-	-	-	-
Netherlands (2)	170	-	-	125	1	-	9	22
Poland (4)	130	-	-	2	-	-	-	-
Spain	11	-	-	-	117	-	-	-
Sweden	-	-	-	27	-	-	-	9
Other countries	-	-	-	-	-	-	-	-
Total European Union (5)	482	68	8	204	410	5	94	233
Australia	527	4,218	-	-	-	-	-	-
Canada	-	1,662	-	-	-	-	5	-
Colombia	3,800	-	72	-	-	-	-	-
Indonesia	1,455	-	-	-	-	-	-	-
Iceland	-	-	-	-	7	-	-	-
Norway	-	42	-	-	8	4	15	19
People's Republic of China	175	68	12	550	-	-	-	-
Republic of South Africa	7,706	-	23	-	-	-	-	-
Russia	19,692	393	21	159	-	-	-	-
United States of America	1,121	1,402	-	-	-	-	-	-
Other countries	-	29	-	21	2	3	2	22
Total all countries	34,957	7,884	137	933	428	13	116	274
Value of imports (cif)/export (fob) (£m) (3)	1,470	473	8	121	31	1	10	28
Value per tonne (£)	42	60	57	130	72	99	85	102
2008								
European Union								
Belgium/Luxembourg	24	-	2	13	22	123	66	3
Czech Republic	-	-	1	-	1	-	-	-
Denmark	8	-	-	-	2	18	-	-
Finland	-	-	-	-	-	-	-	37
France	-	-	-	-	1	-	57	93
Germany	15	-	3	32	-	-	3	93
Irish Republic	32	-	3	5	313	-	32	16
Latvia (4)	321	-	-	-	-	-	-	-
Netherlands (2)	146	-	2	142	103	37	9	-
Poland (4)	213	-	-	3	-	-	-	-
Spain	123	-	-	15	217	-	2	3
Sweden	-	-	-	33	-	-	-	6
Other countries	-	-	-	-	-	-	-	-
Total European Union (5)	882	-	11	244	658	178	168	251
Australia	638	3,303	-	-	-	-	-	-
Bosnia & Herz.	-	-	-	48	-	-	-	-
Canada	-	1,412	-	18	-	-	3	-
Colombia	5,270	-	-	38	-	-	-	-
Egypt	-	-	-	38	-	-	1	-
India	-	-	-	-	1	-	1	-
Indonesia	2,088	-	-	-	-	-	-	-
Norway	-	-	-	-	11	-	14	38
People's Republic of China	-	-	14	63	-	-	-	-
Republic of South Africa	4,185	-	12	-	-	-	-	-
Russia	20,641	300	160	148	-	-	-	-
Turkey	-	-	-	90	-	-	-	-
United States of America	2,741	1,527	16	-	-	-	-	-
Venezuela	8	-	-	-	-	-	-	-
Other countries	60	-	-	1	2	-	1	2
Total all countries	36,514	6,542	213	688	672	179	188	291
Value of imports (cif)/export (fob) (£m) (3)	2,791	690	28	152	65	12	17	44
Value per tonne (£)	76	105	130	222	96	67	88	153

G.5 Imports and exports of solid fuel (continued)

Thousand tonnes

2009	Imports (1)				Exports			
	Steam coal	Coking coal	Anthracite	Other solid fuel	Steam coal	Coking coal	Anthracite	Other solid fuel
European Union								
Belgium/Luxembourg	15	-	-	2	0	-	43	3
Denmark	6	-	-	6	0	-	-	-
Finland	-	-	-	-	0	-	-	24
France	-	-	-	-	0	-	7	58
Germany	14	-	5	8	8	-	0	11
Irish Republic	67	-	3	6	264	-	48	34
Latvia (4)	92	-	-	-	-	-	-	-
Netherlands (2)	99	-	3	27	0	-	3	1
Poland (4)	566	-	-	0	6	0	0	0
Portugal	1	-	0	-	0	-	-	-
Spain	276	-	-	7	189	-	2	-
Sweden	-	-	-	19	0	0	0	9
Other countries	-	-	0	-	0	-	0	0
Total European Union (5)	1,136	-	11	75	468	0	104	141
Australia	382	2,698	-	-	-	-	0	0
Canada	-	213	-	-	-	-	1	-
Colombia	4,883	-	-	3	-	-	-	-
Indonesia	694	-	-	-	-	-	-	-
Norway	-	55	-	-	22	5	8	57
People's Republic of China	597	-	3	0	-	-	0	-
Republic of South Africa	2,941	-	13	-	27	-	0	-
Russia	17,203	327	180	16	-	-	0	-
United States of America	2,896	1,691	0	-	-	-	0	-
Venezuela	-	490	-	-	-	-	-	-
Other countries	90	-	-	4	8	1	2	1
Total all countries	30,824	5,474	207	97	526	6	115	199
Value of imports (cif)/export (fob) (£m) (3)	1,907	702	26	17	61	1	14	35
Value per tonne (£)	62	128	124	177	117	203	122	177
2010								
European Union								
Belgium/Luxembourg	5	-	-	7	125	-	41	12
Denmark	-	0	-	-	4	-	0	-
Finland	-	-	-	0	5	-	-	32
France	-	-	-	3	0	-	4	55
Germany	18	-	3	47	9	0	0	55
Irish Republic	36	1	6	6	350	-	22	35
Latvia (4)	-	-	-	-	-	-	-	-
Netherlands (2)	127	-	-	24	4	-	0	0
Poland (4)	563	-	-	4	0	-	0	0
Portugal	-	-	0	-	0	-	0	-
Spain	132	-	4	12	9	-	1	-
Sweden	-	-	-	28	25	-	0	6
Other countries	-	0	0	-	0	-	0	0
Total European Union (5)	881	1	14	131	532	0	70	196
Australia	-	3,235	64	-	-	0	0	0
Canada	0	424	-	-	0	-	1	52
Colombia	5,446	51	6	-	-	-	-	-
Indonesia	239	-	-	-	-	-	-	-
Norway	69	-	-	-	65	-	15	43
People's Republic of China	-	-	7	0	-	-	-	-
Republic of South Africa	680	-	-	0	19	-	0	50
Russia	7,850	318	95	59	-	-	0	-
United States of America	1,974	2,031	0	0	-	-	0	0
Venezuela	-	-	-	-	-	-	-	-
Other countries	-	13	0	0	9	1	3	275
Total all countries	17,138	6,073	185	191	624	1	90	616
Value of imports (cif)/export (fob) (£m) (3)	1,104	723	22	29	74	0	12	134
Value per tonne (£)	64	119	121	155	119	272	129	217

G.5 Imports and exports of solid fuel (continued)

Thousand tonnes

2011	Imports (1)				Exports			
	Steam coal	Coking coal	Anthracite	Other solid fuel	Steam coal	Coking coal	Anthracite	Other solid fuel
European Union								
Belgium/Luxembourg	117	-	163	33	31	-	38	33
Denmark	-	-	0	-	8	-	-	-
Finland	-	-	-	-	-	-	6	49
France	-	-	-	-	13	-	2	38
Germany	21	-	0	57	85	-	0	192
Irish Republic	20	3	6	7	242	3	35	26
Latvia (4)	-	-	-	-	-	-	-	-
Netherlands (2)	163	-	-	6	2	-	3	0
Poland (4)	655	-	-	4	11	-	0	0
Portugal	0	-	-	-	0	-	-	-
Spain	81	-	14	14	7	-	1	0
Sweden	-	-	-	24	2	-	0	0
Other countries	-	-	1	3	33	-	0	0
Total European Union (5)	1,056	3	184	148	434	3	85	339
Australia	-	3,136	-	-	-	0	0	-
Canada	-	301	-	-	-	-	2	0
Colombia	7,972	-	-	-	-	-	0	-
Indonesia	-	-	-	0	-	-	-	-
Norway	196	-	-	-	49	-	8	48
People's Republic of China	-	-	9	0	-	-	-	-
Republic of South Africa	620	-	-	-	6	-	0	78
Russia	11,899	211	-	16	-	-	0	-
United States of America	4,355	1,739	0	0	0	-	0	0
Venezuela	-	-	-	-	-	-	-	-
Other countries	19	51	0	0	8	1	2	38
Total all countries	26,117	5,439	193	165	496	3	97	503
Value of imports (cif)/export (fob) (£m) (3)	2,047	883	21	36	62	1	13	100
Value per tonne (£)	78	162	109	216	126	291	137	199

(1) Country of origin basis.

Source : H.M. Revenue and Customs

(2) Includes extra-EU coal routed through the Netherlands.

(3) Value of imports are "cif" (cost, insurance and freight) and value of exports are "fob" (free on board).

See technical note for fuller definition.

(4) Joined the EU on 1 May 2004

(5) Includes a small quantity from other EU countries

G.6 Physical imports and exports of gas ⁽¹⁾

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
GWh																
Imports																
Interconnector via Belgium (2)	0	-	692	471	2,955	4,015	6,645	4,387	25,592	24,108	30,505	6,471	12,174	7,945	13,568	4,032
Netherlands (3)	0	-	-	-	-	-	-	-	-	-	9,135	76,602	90,563	69,529	87,120	69,001
Norway (by pipe) (4)	19,804	14,061	9,374	7,020	11,279	12,734	37,886	71,753	95,359	127,895	157,035	225,764	283,722	260,438	276,807	234,194
Liquefied Natural Gas (LNG) (5)	0	-	-	-	-	-	-	-	-	5,453	37,576	14,903	8,912	110,579	203,789	270,733
<i>of which from:</i>																
Algeria		-	-	-	-	-	-	-	-	4,575	20,718	6,605	3,113	19,392	11,524	2,647
Australia		-	-	-	-	-	-	-	-	-	-	-	-	812	0	0
Egypt		-	-	-	-	-	-	-	-	-	12,465	1,751	0	5,804	1,263	877
Nigeria		-	-	-	-	-	-	-	-	-	-	-	-	-	3,674	12,833
Norway		-	-	-	-	-	-	-	-	-	-	-	-	1,862	8,904	9,965
Qatar		-	-	-	-	-	-	-	-	-	779	2,693	0	61,159	159,984	230,618
Trinidad & Tobago		-	-	-	-	-	-	-	-	878	3,614	3,854	5,799	21,550	16,646	5,816
USA		-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,552
Yemen		-	-	-	-	-	-	-	-	-	-	-	-	-	1,794	6,425
Total Imports	19,804	14,061	10,066	7,491	14,234	16,749	44,531	76,140	120,951	157,456	234,251	323,740	395,371	448,491	581,284	577,960
Exports																
Interconnector via Belgium (2)	0	-	1,761	45,459	94,574	80,846	91,189	122,648	60,060	36,641	60,195	51,390	45,949	62,084	95,932	101,526
Netherlands (6)	8,936	10,481	10,550	8,816	7,723	5,640	4,837	3,424	2,887	4,261	3,371	6,358	10,389	13,094	15,830	17,544
Norway (7)		-	-	-	-	-	-	-	-	-	-	153	389	266	158	125
Republic of Ireland (8)	6,266	11,184	18,776	24,723	32,248	38,129	38,743	40,806	39,084	39,407	47,247	50,972	54,260	54,357	56,266	58,041
Total Exports	15,202	21,665	31,087	78,998	134,545	124,615	134,769	166,878	102,031	80,309	110,813	108,873	110,987	129,801	168,186	177,236
Net Imports (9)	-4,602	-7,604	-21,021	-71,507	-120,311	-107,866	-90,238	-90,738	+18,920	+77,147	+123,438	+214,867	+284,384	+318,690	+413,098	+400,724

Source: DECC

(1) See paragraph G23.

(2) Physical flows of gas through the Bacton-Zeebrugge Interconnector as opposed to the nominated flows used by National Grid.

(3) Via the Bacton-Balgzand (BBL) pipeline. Commissioned in November 2006.

(4) Currently via the Langeled and Vesterled pipelines, the Tampen Link (from Statfjord to the FLAGS pipeline and then to St Fergus) and Gjoa/Vega (to St Fergus via the FLAGS pipeline).

Prior to 2005 includes the Norwegian share of the Frigg field.

(5) From various sources to the Isle of Grain, Milford Haven (South Hook and Dragon) and Teesside Gasport.

(6) Direct exports from the Grove, Chiswick, Markham, Minke and Windermere offshore gas fields using the Dutch offshore gas pipeline infrastructure.

(7) With effect from September 2007, UK gas from the Blane field to the Norwegian Ula field for injection into the Ula reservoir.

(8) Includes gas to the Isle of Man for which separate figures are not available.

(9) A negative figure means the UK was a net exporter of gas.

Annex H

Flow charts

Introduction

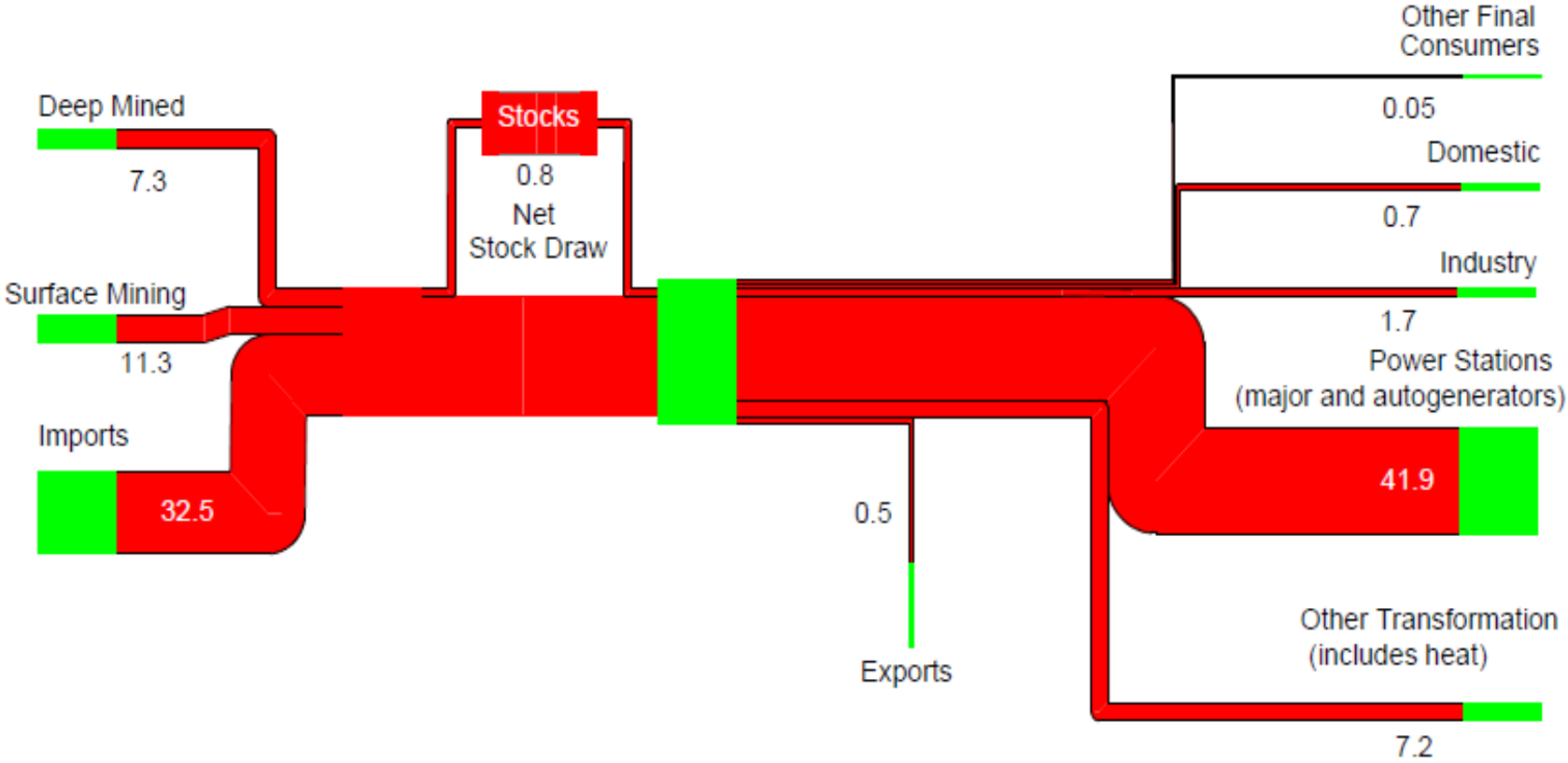
H.1 This section brings together the flow charts for individual fuels contained in the main Digest publication. Chart H.1 is for Coal, Chart H.2 is for Petroleum, Chart H.3 is for Natural Gas, Chart H.4 is for Electricity and Chart H.5 is for Renewables. Annual updates will appear in subsequent editions of the main Digest publication and in the Internet version of the Digest on the DECC website.

Summary flow chart

H.2 A summary flow chart, UK Energy Flow Chart 2011, is also available on the DECC website at: www.decc.gov.uk/en/content/cms/statistics/publications/flow/flow.aspx. The summary flow chart updates the last energy flow chart which showed data for 2010. It is based on statistics taken from the main Digest publication, Table 1.1 – Energy Balance 2011. The chart is a simplification of the energy balance figures, illustrating the flow of primary fuels from the point at which they become available from home production or imports (on the left) to their eventual final uses (on the right). They are shown in their original state and after being converted into different kinds of energy by the secondary fuel producers. The flows are measured in million tonnes of oil equivalent, with the widths of the bands approximately proportional to the size of the flow they represent. The flow charts for individual fuels have been produced on a similar basis.

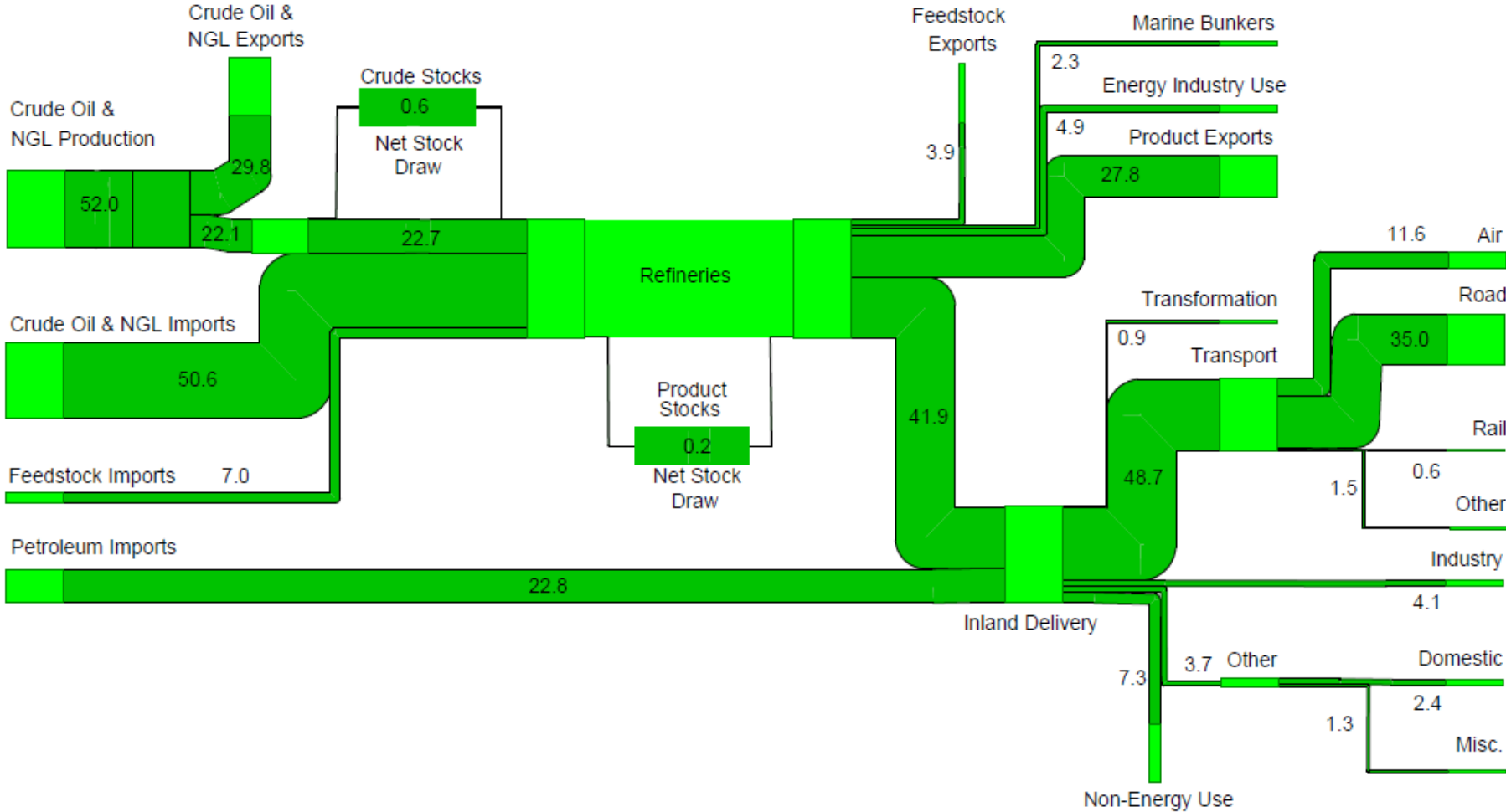
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Chart H.1: Coal flow chart 2011 (million tonnes of coal)



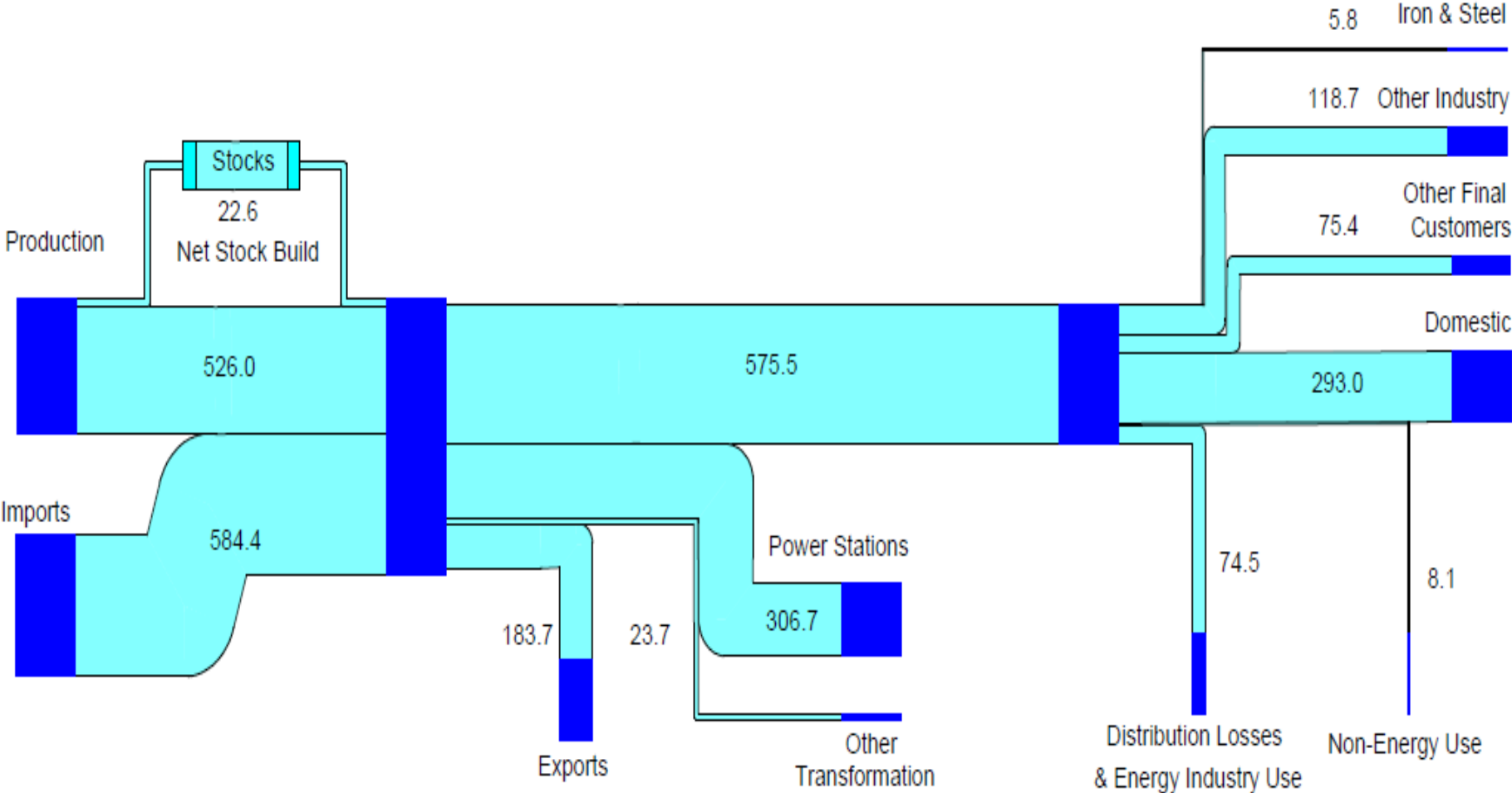
Notes:
 This flow chart is based on the data that appear in Tables 2.1 and 2.7.
 Surface mining includes slurry and recovered coal.

Chart H.2: Petroleum flow chart 2011 (million tonnes)



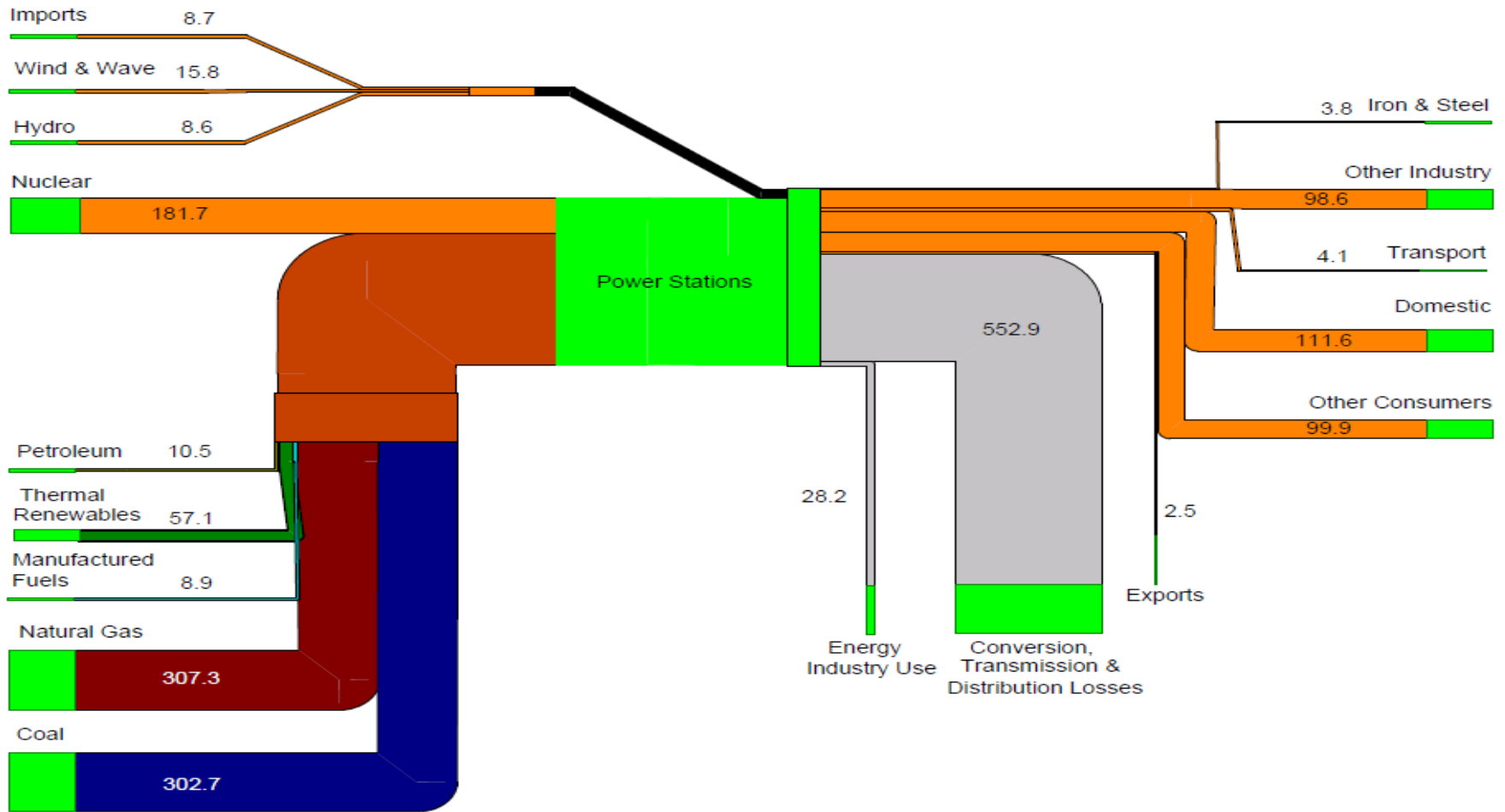
Notes:
 This flow chart is based on the data that appear in Tables 3.1 and 3.2.
 The numbers on either side of the flow chart will not match due to losses in transformation.
 Biofuels are not included.

Chart H.3: Natural gas flow chart 2011 (TWh)



Note:
This flow chart is based on the data that appear in Table 4.1, excluding colliery methane.

Chart H.4: Electricity flow chart 2011 (TWh)



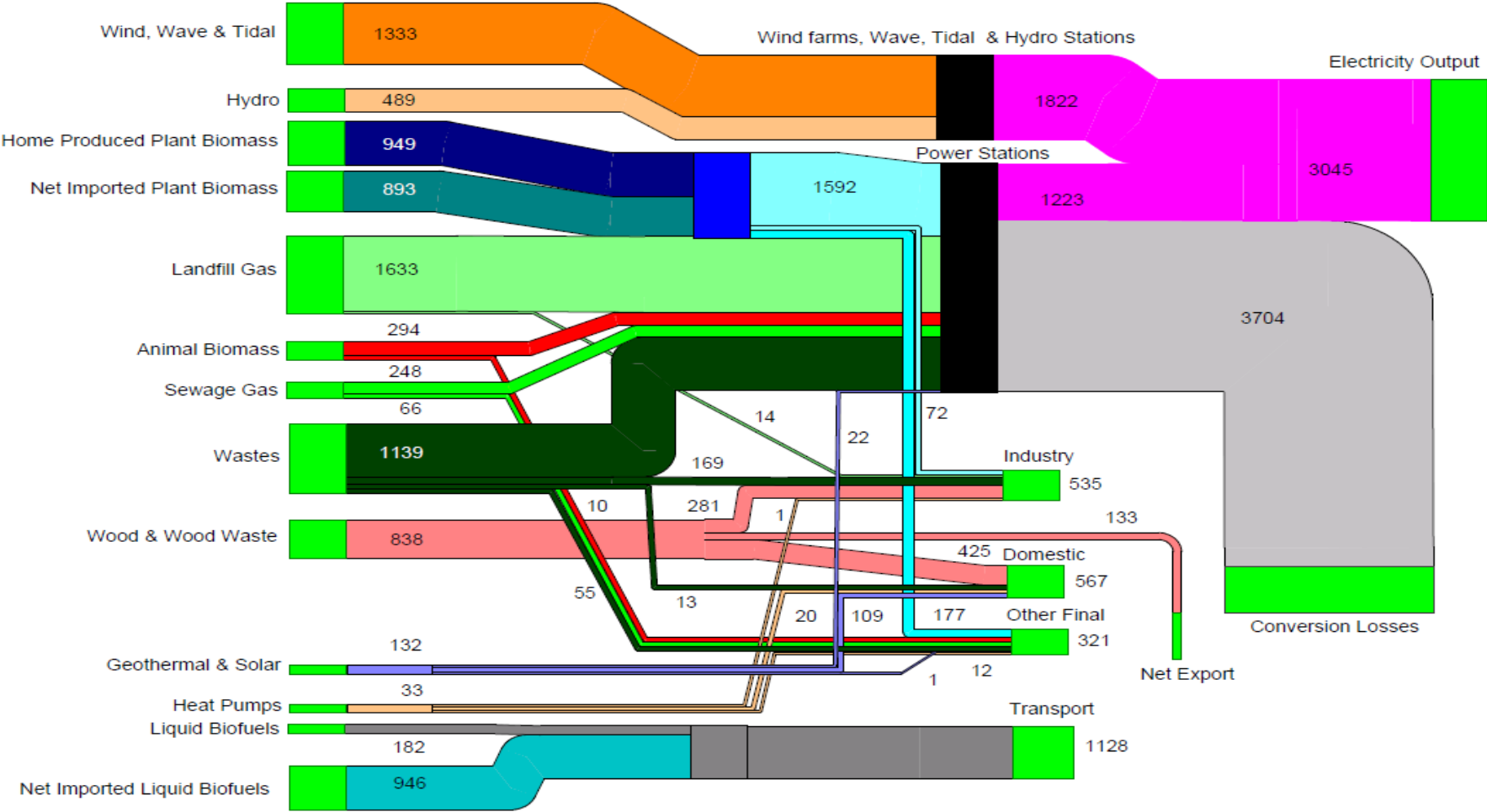
Notes:

This flow chart is based on the data in Tables 5.1(for imports, exports, use, losses and consumption) and 5.6 (fuel used).

(1) Solar photovoltaics included under wind & wave.

(2) Hydro includes generation from pumped storage while electricity used in pumping is included under Energy Industry Use.

Chart H.5: Renewables flow chart 2011 (thousand tonnes of oil equivalent)



Note:
This flow chart is based on data that appear in Tables 6.1 and 6.4.

Annex I

Energy balance: Net Calorific Values

Aggregate energy balance (Table I.1)

I.1 These tables show the flows of energy in the United Kingdom from production to final consumption through conversion into secondary fuels such as coke, petroleum products, secondary electricity and heat sold using Net Calorific Values (NCV). The NCVs used are detailed in annex A of DUKES.

I.2 A key reason for showing these balances on a NCV basis is to enable comparisons with EU statistics, which use this method. This approach has been used when comparing EU Member States' shares of renewables in final energy consumption, as set out on pages 78 to 88 of the December 2010 Energy Trends article, Renewable energy: Statistics used for the EU 2020 renewables target, available at:

www.decc.gov.uk/en/content/cms/statistics/publications/trends/articles_issue/articles_issue.a.spx

I.3 The principles behind the presentation used in the Digest are explained in Annex A. The figures are presented on an energy supplied basis, in tonnes of oil equivalent.

I.4 These energy balance tables have been used in the calculation of the percentage of energy derived from renewable sources, detailed in table 6B on page 167 of DUKES. The contribution of renewables has continued to grow in recent years, with the share reaching 3.8 per cent in 2011.

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I.1 Aggregate energy balance 2011

Net calorific values

Thousand tonnes of oil equivalent

	Coal	Manufactured fuel(1)	Primary oils	Petroleum products	Natural gas(2)	Bioenergy & waste(3)	Primary electricity	Electricity	Heat	Total
Supply										
Indigenous production	11,001	-	53,998	-	40,759	4,865	17,468	-	-	128,092
Imports	20,329	34	59,751	23,582	45,225	1,691	-	747	-	151,359
Exports	-351	-356	-35,042	-28,628	-14,215	-155	-	-212	-	-78,958
Marine bunkers	-	-	-	-2,268	-	-	-	-	-	-2,268
Stock change(4)	+508	-385	+634	+198	-1,751	-	-	-	-	-796
Primary supply	31,487	-707	79,341	-7,116	70,019	6,401	17,468	535	-	197,429
Statistical difference(5)	+24	-14	-298	-105	-131	-	-	-27	-	-552
Primary demand	31,463	-693	79,639	-7,011	70,150	6,401	17,468	562	-	197,980
Transfers	-	+5	-2,195	+2,181	-5	-	-1,843	+1,843	-	-14
Transformation	-29,855	2,266	-77,444	76,037	-25,610	-4,099	-15,625	29,532	1,365	-43,433
Electricity generation	-24,719	-618	-	-843	-23,778	-4,099	-15,625	29,532	-	-40,150
Major power producers	-23,960	-	-	-323	-21,327	-1,059	-15,625	26,839	-	-35,455
Autogenerators	-759	-618	-	-520	-2,451	-3,040	-	2,693	-	-4,694
Heat generation	-277	-48	-	-63	-1,832	-	-	-	1,365	-854
Petroleum refineries	-	-	-77,444	76,943	-	-	-	-	-	-502
Coke manufacture	-3,915	3,697	-	-	-	-	-	-	-	-217
Blast furnaces	-721	-980	-	-	-	-	-	-	-	-1,701
Patent fuel manufacture	-224	214	-	-	-	-	-	-	-	-10
Other	-	-	-	-	-	-	-	-	-	-
Energy industry use	2	623	-	4,871	4,645	-	-	2,171	94	12,407
Electricity generation	-	-	-	-	-	-	-	1,415	-	1,415
Oil and gas extraction	-	-	-	537	4,114	-	-	50	-	4,701
Petroleum refineries	-	-	-	4,334	338	-	-	387	94	5,153
Coal extraction	2	-	-	-	7	-	-	73	-	82
Coke manufacture	-	353	-	-	-	-	-	7	-	360
Blast furnaces	-	270	-	-	35	-	-	22	-	326
Patent fuel manufacture	-	-	-	-	-	-	-	-	-	-
Pumped storage	-	-	-	-	-	-	-	81	-	81
Other	-	-	-	-	151	-	-	138	-	289
Losses	-	144	-	-	1,126	-	-	2,423	-	3,693
Final consumption	1,605	811	-	66,336	38,763	2,302	-	27,344	1,271	138,433
Industry	1,055	605	-	4,263	9,631	465	-	8,804	839	25,663
Unclassified	-	169	-	2,268	2	465	-	-	-	2,903
Iron and steel	36	437	-	4	446	-	-	330	-	1,253
Non-ferrous metals	13	-	-	22	208	-	-	599	-	842
Mineral products	662	-	-	133	1,248	-	-	603	-	2,646
Chemicals	47	-	-	99	2,089	-	-	1,505	420	4,160
Mechanical engineering etc	7	-	-	63	514	-	-	634	-	1,217
Electrical engineering etc	3	-	-	30	268	-	-	550	-	852
Vehicles	35	-	-	73	600	-	-	446	-	1,154
Food, beverages etc	30	-	-	188	1,789	-	-	976	2	2,985
Textiles, leather etc	43	-	-	71	418	-	-	257	-	789
Paper, printing etc	67	-	-	34	1,181	-	-	938	1	2,222
Other industries	105	-	-	1,172	695	-	-	1,834	417	4,222
Construction	6	-	-	105	174	-	-	132	-	417
Transport (6)	11	-	-	50,758	-	1,063	-	351	-	52,182
Air	-	-	-	12,162	-	-	-	-	-	12,162
Rail	11	-	-	613	-	-	-	349	-	972
Road	-	-	-	36,481	-	1,063	-	2	-	37,546
National navigation	-	-	-	1,501	-	-	-	-	-	1,501
Pipelines	-	-	-	-	-	-	-	-	-	-
Other	539	206	-	3,812	28,509	775	-	18,189	431	52,461
Domestic	513	206	-	2,536	22,672	495	-	9,595	52	36,068
Public administration	17	-	-	344	2,412	101	-	1,591	376	4,842
Commercial	4	-	-	407	2,159	19	-	6,663	3	9,255
Agriculture	1	-	-	282	142	159	-	339	-	923
Miscellaneous	5	-	-	243	1,125	-	-	-	-	1,372
Non energy use	-	-	-	7,504	623	-	-	-	-	8,127

(1) Includes all manufactured solid fuels, benzole, tars, coke oven gas and blast furnace gas.

(2) Includes colliery methane.

(3) Includes geothermal and solar heat.

(4) Stock fall (+), stock rise (-).

(5) Primary supply minus primary demand.

(6) See paragraphs 5.11 regarding electricity use in transport and 6.24 regarding renewables use in transport.

I.1 Aggregate energy balance 2010

Net calorific values

Thousand tonnes of oil equivalent

	Coal	Manufactured fuel(1)	Primary oils	Petroleum products	Natural gas(2)	Bioenergy & waste(3)	Primary electricity	Electricity	Heat	Total
Supply										
Indigenous production	10,897	-	65,450	-	51,468	4,350r	15,117r	-	-	147,282r
Imports	16,243r	88r	56,620	24,731r	45,619	1,731r	-	614	-	145,645r
Exports	-511	-369r	-43,812	-26,822	-13,651	-164r	-	-385	-	-85,714r
Marine bunkers	-	-	-	-2,116	-	-	-	-	-	-2,116
Stock change(4)	+4,377r	-153r	-39	+621	+1,182	-	-	-	-	+5,988r
Primary supply	31,007r	-434r	78,219	-3,587r	84,618	5,917r	15,117r	229	-	211,085r
Statistical difference(5)	-12r	-14	+24	+176r	-5r	-	-	-33r	-	+136r
Primary demand	31,019r	-420r	78,194	-3,763r	84,623r	5,917r	15,117r	262r	-	210,949r
Transfers	-	+20r	-2,298	+2,293	-20	-	-1,192r	+1,192r	-	-5r
Transformation	-29,388r	2,103r	-75,897	74,074r	-30,745r	-3,648r	-13,925r	31,364r	1,361r	-44,702r
Electricity generation	-24,278r	-651	-	-1,099r	-28,910r	-3,648r	-13,925r	31,364r	-	-41,148r
Major power producers	-23,535r	-	-	-592	-26,478	-846	-13,925r	28,701	-	-36,676r
Autogenerators	-743r	-651	-	-507r	-2,433r	-	-	2,663r	-	-4,472r
Heat generation	-275r	-48	-	-63r	-1,835r	-	-	-	1,361r	-859r
Petroleum refineries	-	-	-75,897	75,239	-	-	-	-	-	-657
Coke manufacture	-3,918r	3,677r	-	-	-	-	-	-	-	-240r
Blast furnaces	-678	-1,110r	-	-4r	-	-	-	-	-	-1,793r
Patent fuel manufacture	-240	235	-	-	-	-	-	-	-	-5
Other	-	-	-	-	-	-	-	-	-	-
Energy industry use	3	644	-	4,934	5,383r	-	-	2,222r	94r	13,280r
Electricity generation	-	-	-	-	-	-	-	1,385r	-	1,385r
Oil and gas extraction	-	-	-	501r	4,730	-	-	48	-	5,279r
Petroleum refineries	-	-	-	4,433r	337r	-	-	433r	94r	5,297r
Coal extraction	3	-	-	-	7	-	-	82	-	92
Coke manufacture	-	362	-	-	-	-	-	8	-	369
Blast furnaces	-	282	-	-	50	-	-	25	-	357
Patent fuel manufacture	-	-	-	-	-	-	-	-	-	-
Pumped storage	-	-	-	-	-	-	-	91	-	91
Other	-	-	-	-	260	-	-	150r	-	409r
Losses	-	163	-	-	1,450	-	-	2,325	-	3,937r
Final consumption	1,627	897r	-	67,671r	47,025r	2,268r	-	28,270r	1,266r	149,025r
Industry	1,079	659r	-	4,806r	9,415r	415r	-	8,987r	822r	26,183r
Unclassified	-	184	-	2,262r	2	415r	-	-	-	2,863r
Iron and steel	41	475r	-	4r	451	-	-	330r	-	1,302r
Non-ferrous metals	14	-	-	32	203	-	-	578r	-	828r
Mineral products	667	-	-	154	1,220r	-	-	625r	-	2,665r
Chemicals	48	-	-	122	2,004r	-	-	1,587r	415r	4,176r
Mechanical engineering etc	8	-	-	74	524r	-	-	658r	-	1,264r
Electrical engineering etc	3	-	-	35	263	-	-	572r	-	874r
Vehicles	34	-	-	86	583r	-	-	454r	-	1,157r
Food, beverages etc	28	-	-	220	1,734r	-	-	991r	1	2,974r
Textiles, leather etc	45	-	-	80	409	-	-	262r	-	796r
Paper, printing etc	67	-	-	47r	1,160r	-	-	942r	1	2,217r
Other industries	121	-	-	1,568r	694r	-	-	1,848r	405r	4,635r
Construction	3	-	-	120	169	-	-	139r	-	432r
Transport (6)	13	-	-	50,645r	-	1,147	-	350r	-	52,156r
Air	-	-	-	11,673	-	-	-	-	-	11,673
Rail	13	-	-	619r	-	-	-	349r	-	981r
Road	-	-	-	36,971r	-	1,147	-	2	-	38,120r
National navigation	-	-	-	1,381	-	-	-	-	-	1,381
Pipelines	-	-	-	-	-	-	-	-	-	-
Other	536r	238	-	4,414r	36,980r	706r	-	18,933r	444r	62,250r
Domestic	509	238	-	3,241r	30,149	439r	-	10,217r	52	44,845r
Public administration	19	-	-	293r	2,966r	95r	-	1,642r	382r	5,397r
Commercial	2	-	-	357	2,459r	16r	-	6,727r	10r	9,572r
Agriculture	1	-	-	290r	152	156r	-	346	-	946r
Miscellaneous	4	-	-	233r	1,253r	-	-	-	-	1,491r
Non energy use	-	-	-	7,805r	630r	-	-	-	-	8,436r

(1) Includes all manufactured solid fuels, benzole, tars, coke oven gas and blast furnace gas.

(2) Includes colliery methane.

(3) Includes geothermal and solar heat.

(4) Stock fall (+), stock rise (-).

(5) Primary supply minus primary demand.

(6) See paragraphs 5.11 regarding electricity use in transport and 6.24 regarding renewables use in transport.

I.1 Aggregate energy balance 2009

Net calorific values

Thousand tonnes of oil equivalent

	Coal	Manufactured fuel(1)	Primary oils	Petroleum products	Natural gas(2)	Bioenergy & waste(3)	Primary electricity	Electricity	Heat	Total
Supply										
Indigenous production	10,487	-	70,905	-	53,763	4,150r	16,481r	-	-	155,787r
Imports	23,454r	131r	56,413	22,881r	35,272	1,197r	-	568	-	139,916r
Exports	-465	-127r	-46,943	-26,457	-10,610	-38r	-	-322	-	-84,961r
Marine bunkers	-	-	-	-2,458	-	-	-	-	-	-2,458
Stock change(4)	-3,998r	-	+565	+344	-377	-	-	-	-	-3,466r
Primary supply	29,478r	5	80,940	-5,689r	78,048	5,308r	16,481r	246	-	204,818r
Statistical difference(5)	-386r	-11	+83	-37r	+6	-	-	+13r	-	-332r
Primary demand	29,863r	16r	80,857	-5,651r	78,042	5,308r	16,481r	233r	-	205,150r
Transfers	-	+27r	-2,864	+2,866	-27	-	-1,252r	+1,252r	-	+2r
Transformation	-28,214r	1,489r	-77,993	75,728r	-29,566	-3,303r	-15,229	30,828r	1,301	-44,960r
Electricity generation	-23,413r	-749	-	-1,432r	-27,805	-3,303r	-15,229	30,828r	-	-41,105r
Major power producers	-22,588r	-	-	-965r	-25,402	-618	-15,229	28,159r	-	-36,641r
Autogenerators	-828	-749	-	-467	-2,403	-2,685r	-	2,668r	-	-4,464r
Heat generation	-281	-48	-	-61	-1,761	-	-	-	1,301	-851
Petroleum refineries	-	-	-77,993	77,284r	-	-	-	-	-	-709r
Coke manufacture	-3,654	3,363r	-	-	-	-	-	-	-	-292r
Blast furnaces	-631	-1,301r	-	-62r	-	-	-	-	-	-1,994r
Patent fuel manufacture	-235	224	-	-	-	-	-	-	-	-11
Other	-	-	-	-	-	-	-	-	-	-
Energy industry use	3	660	-	4,800	5,345	-	-	2,236r	94	13,139r
Electricity generation	-	-	-	-	-	-	-	1,425r	-	1,425r
Oil and gas extraction	-	-	-	457	4,729	-	-	51	-	5,237
Petroleum refineries	-	-	-	4,343	303	-	-	389	94	5,129
Coal extraction	3	-	-	-	7	-	-	80	-	90
Coke manufacture	-	344	-	-	-	-	-	8	-	352
Blast furnaces	-	316	-	-	35	-	-	40	-	391
Patent fuel manufacture	-	-	-	-	-	-	-	-	-	-
Pumped storage	-	-	-	-	-	-	-	100	-	100
Other	-	-	-	-	271	-	-	144	-	415
Losses	-	68	-	-	1,266	-	-	2,411r	-	3,745r
Final consumption	1,646	803r	-	68,142r	41,838	2,006	-	27,665r	1,206	143,307r
Industry	1,094	597r	-	4,741r	9,008	384r	-	8,576r	763	25,163r
Unclassified	-	192r	-	2,237	2	384r	-	-	-	2,815
Iron and steel	41	404r	-	51	390	-	-	311	-	1,197r
Non-ferrous metals	16	-	-	41	192	-	-	522r	-	772r
Mineral products	676	-	-	161	1,172	-	-	603	-	2,612
Chemicals	46	-	-	131	1,985	-	-	1,522r	347	4,031r
Mechanical engineering etc	9	-	-	82	497	-	-	661	-	1,249
Electrical engineering etc	3	-	-	38	253	-	-	555	-	849
Vehicles	31	-	-	96	561	-	-	431	-	1,119
Food, beverages etc	32	-	-	227	1,624	-	-	924	1	2,807
Textiles, leather etc	46	-	-	85	402	-	-	259r	-	793r
Paper, printing etc	67	-	-	55	1,115	-	-	952r	-	2,189r
Other industries	124	-	-	1,406r	651	-	-	1,700r	415	4,295r
Construction	3	-	-	130	165	-	-	136	-	434
Transport (6)	13	-	-	51,682r	-	988	-	347r	-	53,030r
Air	-	-	-	12,114	-	-	-	-	-	12,114
Rail	13	-	-	611r	-	-	-	346r	-	969r
Road	-	-	-	37,430r	-	988	-	2	-	38,420r
National navigation	-	-	-	1,527	-	-	-	-	-	1,527
Pipelines	-	-	-	-	-	-	-	-	-	-
Other	539	207	-	4,016	32,211	634	-	18,742	444	56,791
Domestic	488	207	-	2,850	25,731	402r	-	10,193	52	39,923r
Public administration	16	-	-	348	2,870	87	-	1,672	382	5,375
Commercial	33	-	-	338	2,268	11r	-	6,551	9	9,209r
Agriculture	-	-	-	265	144	133r	-	327	-	869r
Miscellaneous	2	-	-	214	1,198	0	-	-	-	1,415
Non energy use	-	-	-	7,704	619	-	-	-	-	8,323

(1) Includes all manufactured solid fuels, benzole, tars, coke oven gas and blast furnace gas.

(2) Includes colliery methane.

(3) Includes geothermal and solar heat.

(4) Stock fall (+), stock rise (-).

(5) Primary supply minus primary demand.

(6) See paragraphs 5.11 regarding electricity use in transport and 6.24 regarding renewables use in transport.

I.1 Aggregate energy balance 2008

Net calorific values

Thousand tonnes of oil equivalent

	Coal	Manufactured fuel(1)	Primary oils	Petroleum products	Natural gas(2)	Bioenergy & waste(3)	Primary electricity	Electricity	Heat	Total
Supply										
Indigenous production	10,740	-	74,538	-	62,713	3,838r	12,964r	-	-	164,792r
Imports	26,989	500	62,282	24,950	31,500	885r	-	1,057	-	148,164r
Exports	-434	-141	-50,286	-29,542	-9,493	-	-	-109	-	-90,006
Marine bunkers	-	-	-	-2,564	-	-	-	-	-	-2,564
Stock change(4)	-1,872	+162	+245	+129r	-239	-	-	-	-	-1,575r
Primary supply	35,423	520	86,779	-7,027r	84,481	4,723r	12,964r	948	-	218,811r
Statistical difference(5)	-192	-7	+198	+107r	+1	-	-	+29	-	+136r
Primary demand	35,615	527	86,581	-7,134r	84,480	4,723r	12,964r	919r	-	218,675r
Transfers	-	-127	-2,870	+2,879	-5	-	-1,055r	+1,055r	-	-123
Transformation	-33,859	1,586	-83,712	81,111r	-31,127	-2,954r	-11,909	32,041	1,537	-47,286r
Electricity generation	-28,446	-839	-	-1,501r	-29,160	-2,954r	-11,909	32,041	-	-42,768r
Major power producers	-27,524	-	-	-1,044r	-26,656	-668	-11,909	29,367r	-	-38,433r
Autogenerators	-923	-839	-	-458	-2,504	-2,286r	-	2,673r	-	-4,335r
Heat generation	-298	-48	-	-62	-1,968	-	-	-	1,537	-839
Petroleum refineries	-	-	-83,712	82,878	-	-	-	-	-	-833
Coke manufacture	-4,066	3,967	-	-	-	-	-	-	-	-99
Blast furnaces	-810	-1,718	-	-204	-	-	-	-	-	-2,732
Patent fuel manufacture	-238	223	-	-	-	-	-	-	-	-15
Other	-	-	-	-	-	-	-	-	-	-
Energy industry use	4	805	-	5,199	5,593	-	-	2,227r	72	13,900r
Electricity generation	-	-	-	-	-	-	-	1,405r	-	1,405r
Oil and gas extraction	-	-	-	479	4,743	-	-	51	-	5,274
Petroleum refineries	-	-	-	4,720	385	-	-	374	72	5,550
Coal extraction	4	-	-	-	7	-	-	84	-	95
Coke manufacture	-	391	-	-	-	-	-	7	-	398
Blast furnaces	-	414	-	-	56	-	-	39	-	508
Patent fuel manufacture	-	-	-	-	-	-	-	-	-	-
Pumped storage	-	-	-	-	-	-	-	110	-	110
Other	-	-	-	-	403	-	-	156	-	559
Losses	-	232	-	-	1,054	-	-	2,395r	-	3,682r
Final consumption	1,753	948	-	71,657r	46,699	1,769r	-	29,391r	1,465	153,684r
Industry	1,231	722	-	5,230r	10,733	387r	-	9,815r	1,021	29,139r
Unclassified	-	222	-	2,251	3	387r	-	-	-	2,863
Iron and steel	47	500	-	58	535	-	-	400r	-	1,541r
Non-ferrous metals	19	-	-	44	231	-	-	636	-	930
Mineral products	721	-	-	209	1,421	-	-	682	-	3,033
Chemicals	62	-	-	165	2,413	-	-	1,744r	592	4,976r
Mechanical engineering etc	9	-	-	92	596	-	-	741	4	1,442
Electrical engineering etc	4	-	-	44	301	-	-	636r	-	985r
Vehicles	33	-	-	108	667	-	-	500	-	1,308
Food, beverages etc	27	-	-	274	1,885	-	-	1,054	10	3,250
Textiles, leather etc	51	-	-	97	472	-	-	292r	-	912r
Paper, printing etc	99	-	-	61	1,285	-	-	1,106	1	2,552
Other industries	135	-	-	1,679r	733	-	-	1,868r	413	4,828r
Construction	25	-	-	149	190	-	-	156	-	520
Transport (6)	13	-	-	53,913r	-	806	-	339r	-	55,070r
Air	-	-	-	12,832	-	-	-	-	-	12,832
Rail	13	-	-	614r	-	-	-	337	-	964r
Road	-	-	-	38,815r	-	806	-	2	-	39,622r
National navigation	-	-	-	1,652	-	-	-	-	-	1,652
Pipelines	-	-	-	-	-	-	-	-	-	-
Other	509	227	-	4,195	35,225	576r	-	19,237	445	60,413r
Domestic	489	227	-	2,868	27,824	369	-	10,301	52	42,131r
Public administration	9	-	-	441	3,294	81	-	1,750	387	5,962
Commercial	7	-	-	375	2,581	9r	-	6,836	6	9,815r
Agriculture	3	-	-	283	167	116r	-	350	-	919r
Miscellaneous	1	-	-	227	1,358	-	-	-	-	1,586
Non energy use	-	-	-	8,319r	742	-	-	-	-	9,061r

(1) Includes all manufactured solid fuels, benzole, tars, coke oven gas and blast furnace gas.

(2) Includes colliery methane.

(3) Includes geothermal and solar heat.

(4) Stock fall (+), stock rise (-).

(5) Primary supply minus primary demand.

(6) See paragraphs 5.11 regarding electricity use in transport and 6.24 regarding renewables use in transport.

I.1 Aggregate energy balance 2007

Net calorific values

Thousand tonnes of oil equivalent

	Coal	Manufactured fuel(1)	Primary oils	Petroleum products	Natural gas(2)	Bioenergy & waste(3)	Primary electricity	Electricity	Heat	Total
Supply										
Indigenous production	10,162r	-	79,610	-	64,912	3,696r	14,927r	-	-	173,307r
Imports	26,785	732	59,475	26,043r	26,159	390	-	741	-	140,325r
Exports	-398	-170	-52,936	-30,822r	-9,531	-108	-	-292	-	-94,257r
Marine bunkers	-	-	-	-2,356	-	-	-	-	-	-2,356
Stock change(4)	+1,850	-22	+813	+1,114	+424	-	-	-	-	+4,180
Primary supply	38,399	540	86,963	-6,020r	81,964	3,977r	14,927r	448	-	221,198r
Statistical difference(5)	+12r	-14	+15	-190r	+14	-	-	-34	-	-196r
Primary demand	38,388	554	86,947	-5,831r	81,950	3,977r	14,927r	482r	-	221,394r
Transfers	-	-127	-2,462	+2,491	-6	-	-891r	+891r	-	-104
Transformation	-36,686	1,618	-84,485	82,357	-29,369	-2,877r	-14,036	32,898r	1,406	-49,175r
Electricity generation	-31,259	-942	-	-1,090	-27,540	-2,877r	-14,036	32,898r	-	-44,844r
Major power producers	-30,376	-	-	-663	-24,751	-559	-14,036	30,073r	-	-40,312r
Autogenerators	-883r	-942	-	-427	-2,789	-2,318r	-	2,825r	-	-4,532r
Heat generation	-289	-48	-	-61	-1,829	-	-	-	1,406	-822
Petroleum refineries	-	-	-84,485	83,704r	-	-	-	-	-	-781r
Coke manufacture	-4,103	4,072	-	-	-	-	-	-	-	-30
Blast furnaces	-859	-1,633	-	-197	-	-	-	-	-	-2,689
Patent fuel manufacture	-176	168	-	-	-	-	-	-	-	-9
Other	-	-	-	-	-	-	-	-	-	-
Energy industry use	3	837	-	5,019r	5,883	-	-	2,468r	68	14,278r
Electricity generation	-	-	-	-	-	-	-	1,521	-	1,521
Oil and gas extraction	-	-	-	411	4,970	-	-	48	-	5,429r
Petroleum refineries	-	-	-	4,608r	403	-	-	484	68	5,563r
Coal extraction	3	-	-	-	7	-	-	85	-	95
Coke manufacture	-	388	-	-	0	-	-	8	-	396
Blast furnaces	-	449	-	-	56	-	-	41	-	546
Patent fuel manufacture	-	-	-	-	-	-	-	-	-	-
Pumped storage	-	-	-	-	-	-	-	104	-	104
Other	-	-	-	-	447	-	-	176	-	623
Losses	-	213	-	-	935	-	-	2,427r	-	3,574r
Final consumption	1,698	995	-	73,998r	45,756	1,101r	-	29,377r	1,338	154,263r
Industry	1,205	811	-	5,714r	10,319	242	-	9,699r	896	28,887r
Unclassified	-	221	-	2,490	3	242	-	-	-	2,956
Iron and steel	52	590	-	63	567	-	-	425	-	1,696
Non-ferrous metals	21	-	-	45	222	-	-	635	-	923
Mineral products	721	-	-	223	1,306	-	-	672	-	2,922
Chemicals	72	-	-	180	2,332	-	-	1,737	480	4,801
Mechanical engineering etc	7	-	-	100	594	-	-	727	3	1,430
Electrical engineering etc	4	-	-	33	289	-	-	627	-	953
Vehicles	33	-	-	115	660	-	-	492	-	1,300
Food, beverages etc	23	-	-	265	1,778	-	-	1,039	2	3,106
Textiles, leather etc	49	-	-	111	470	-	-	288	-	919
Paper, printing etc	96	-	-	62r	1,200	-	-	1,096	1	2,455r
Other industries	127	-	-	1,869r	714	-	-	1,808r	411	4,929r
Construction	0	-	-	158	184	-	-	155	-	497
Transport (6)	13	-	-	55,836r	-	349	-	341	-	56,538r
Air	-	-	-	13,211	-	-	-	-	-	13,211
Rail	13	-	-	604r	-	-	-	339	-	956r
Road	-	-	-	40,507r	-	349	-	2	-	40,857r
National navigation	-	-	-	1,515	-	-	-	-	-	1,515
Pipelines	-	-	-	-	-	-	-	-	-	-
Other	480	184	-	4,123	34,645	510r	-	19,338	442	59,723r
Domestic	463	184	-	2,722	27,307	340	-	10,583	52	41,650
Public administration	9	-	-	456	3,285	80r	-	1,727	383	5,940r
Commercial	4	-	-	382	2,561	14	-	6,679	7	9,647
Agriculture	3	-	-	274	155	76r	-	349	-	855r
Miscellaneous	2	-	-	290	1,338	-	-	-	-	1,630
Non energy use	-	-	-	8,324	792	-	-	-	-	9,116

(1) Includes all manufactured solid fuels, benzole, tars, coke oven gas and blast furnace gas.

(2) Includes colliery methane.

(3) Includes geothermal and solar heat.

(4) Stock fall (+), stock rise (-).

(5) Primary supply minus primary demand.

(6) See paragraphs 5.11 regarding electricity use in transport and 6.24 regarding renewables use in transport.

I.1 Aggregate energy balance 2006

Net calorific values

Thousand tonnes of oil equivalent

	Coal	Manufactured fuel(1)	Primary oils	Petroleum products	Natural gas(2)	Bioenergy & waste(3)	Primary electricity	Electricity	Heat	Total
Supply										
Indigenous production	10,847	-	79,644	-	72,011	3,379	17,889	-	-	183,770
Imports	31,034	691	61,628	27,775r	18,884	470	-	884	-	141,367r
Exports	-325	-119	-52,099	-29,627r	-9,332	-96	-	-238	-	-91,835r
Marine bunkers	-	-	-	-2,331	-	-	-	-	-	-2,331
Stock change(4)	-768	-152	-370	-882r	-498	-	-	-	-	-2,670r
Primary supply	40,789	420	88,804	-5,065r	81,065	3,754	17,889	646	-	228,302r
Statistical difference(5)	-143r	-5	-107	+119r	+11	-	-	+9	-	-116r
Primary demand	40,932r	425	88,911	-5,185r	81,054	3,754	17,889	637	-	228,418r
Transfers	-	-105	-2,617	+2,661	-4	-	-759	+759	-	-65
Transformation	-39,384	1,705	-86,294	83,868r	-25,803	-2,919	-17,130	33,070	1,305	-51,583r
Electricity generation	-34,054	-948	-	-1,235r	-24,099	-2,919	-17,130	33,070	-	-47,314
Major power producers	-33,197	-	-	-792	-21,525	-648	-17,130	30,412	-	-42,880r
Autogenerators	-857	-948	-	-443	-2,574	-2,271	-	2,658	-	-4,435r
Heat generation	-272	-48	-	-61	-1,704	-	-	-	1,305	-780
Petroleum refineries	-	-	-86,294	85,388	-	-	-	-	-	-906
Coke manufacture	-4,099	4,150	-	-	-	-	-	-	-	51
Blast furnaces	-775	-1,642	-	-224	-	-	-	-	-	-2,640
Patent fuel manufacture	-184	192	-	-	-	-	-	-	-	8
Other	-	-	-	-	-	-	-	-	-	-
Energy industry use	3	826	-	5,274r	6,335	-	-	2,425	60	14,922r
Electricity generation	-	-	-	-	-	-	-	1,591	-	1,591
Oil and gas extraction	-	-	-	437	5,359	-	-	47	-	5,843
Petroleum refineries	-	-	-	4,837r	399	-	-	401	60	5,697r
Coal extraction	3	-	-	-	9	-	-	89	-	100
Coke manufacture	-	377	-	-	-	-	-	8	-	386
Blast furnaces	-	448	-	-	47	-	-	43	-	538
Patent fuel manufacture	-	-	-	-	-	-	-	-	-	-
Pumped storage	-	-	-	-	-	-	-	92	-	92
Other	-	-	-	-	520	-	-	155	-	675
Losses	-	173	-	-	930	-	-	2,357	-	3,460
Final consumption	1,546	1,026	-	76,070r	47,982	835	-	29,684	1,245	158,389r
Industry	1,105	820	-	5,716r	11,185	186	-	9,879	809	29,702r
Unclassified	-	213	-	2,625r	4	186	-	-	-	3,028r
Iron and steel	1	607	-	18	649	-	-	504	-	1,779
Non-ferrous metals	35	-	-	50	240	-	-	647	-	972
Mineral products	656	-	-	187	1,378	-	-	677	-	2,898
Chemicals	80	-	-	176	2,657	-	-	1,753	371	5,036
Mechanical engineering etc	9	-	-	99	633	-	-	730	2	1,473
Electrical engineering etc	4	-	-	79	304	-	-	631	-	1,018
Vehicles	35	-	-	116	733	-	-	494	-	1,378
Food, beverages etc	16	-	-	264	1,835	-	-	1,042	1	3,158
Textiles, leather etc	47	-	-	123	514	-	-	289	-	972
Paper, printing etc	94	-	-	55	1,278	-	-	1,110	22	2,560
Other industries	128	-	-	1,761r	763	-	-	1,844	414	4,911r
Construction	-	-	-	162	198	-	-	158	-	518
Transport (6)	13	-	-	55,747r	-	180	-	344	-	56,285r
Air	-	-	-	13,299	-	-	-	-	-	13,299
Rail	13	-	-	590	-	-	-	342	-	945
Road	-	-	-	40,162r	-	180	-	2	-	40,344r
National navigation	-	-	-	1,696	-	-	-	-	-	1,696
Pipelines	-	-	-	-	-	-	-	-	-	-
Other	427	206	-	4,502	36,184	469	-	19,461	436	61,686
Domestic	405	206	-	3,075	28,395	303	-	10,723	52	43,159
Public administration	12	-	-	458	3,545	75	-	1,721	376	6,187
Commercial	4	-	-	368	2,652	14	-	6,673	8	9,719
Agriculture	3	-	-	284	156	76	-	345	-	864
Miscellaneous	3	-	-	317	1,437	-	-	-	-	1,758
Non energy use	-	-	-	10,104	612	-	-	-	-	10,717

(1) Includes all manufactured solid fuels, benzole, tars, coke oven gas and blast furnace gas.

(2) Includes colliery methane.

(3) Includes geothermal and solar heat.

(4) Stock fall (+), stock rise (-).

(5) Primary supply minus primary demand.

(6) See paragraphs 5.11 regarding electricity use in transport and 6.24 regarding renewables use in transport.

I.1 Aggregate energy balance 2005

Net calorific values

Thousand tonnes of oil equivalent

	Coal	Manufactured fuel(1)	Primary oils	Petroleum products	Natural gas(2)	Bioenergy & waste(3)	Primary electricity	Electricity	Heat	Total
Supply										
Indigenous production	12,078	-	88,110	-	79,397	3,116	19,044	-	-	201,745
Imports	27,107	623	61,042	23,226r	13,413	419	-	960	-	126,791r
Exports	-399	-89	-56,175	-30,495	-7,443	-	-	-244	-	-94,845
Marine bunkers	-	-	-	-2,044	-	-	-	-	-	-2,044
Stock change(4)	-1,335	-98	-396	+1,976r	+102	-	-	-	-	249r
Primary supply	37,451	437	92,581	-7,337r	85,470	3,534	19,044	715	-	231,895r
Statistical difference(5)	+22	-7	-103	+448r	+9	-	-	+20	-	+388r
Primary demand	37,429	444	92,684	-7,785r	85,461	3,534	19,044	696	-	231,507r
Transfers	-	-114	-3,380	+3,389	-4	-	-674	+674	-	-109
Transformation	-35,815	1,654	-89,304	86,934r	-27,406	-2,843	-18,370	33,327	1,366	-50,458r
Electricity generation	-30,788	-971	-	-1,264	-25,666	-2,843	-18,370	33,327	-	-46,576
Major power producers	-29,952	-	-	-777	-22,879	-674	-18,370	30,564	-	-42,088
Autogenerators	-836	-971	-	-487	-2,787	-2,169	-	2,764	-	-4,488
Heat generation	-272	-48	-	-62r	-1,740	-	-	-	1,366	-756r
Petroleum refineries	-	-	-89,304	88,525r	-	-	-	-	-	-779r
Coke manufacture	-3,851	3,930	-	-	-	-	-	-	-	79
Blast furnaces	-718	-1,446	-	-265	-	-	-	-	-	-2,429
Patent fuel manufacture	-187	190	-	-	-	-	-	-	-	3
Other	-	-	-	-	-	-	-	-	-	-
Energy industry use	4	777	-	6,078	6,745	-	-	2,337	98	16,038r
Electricity generation	-	-	-	-	-	-	-	1,537	26	1,563
Oil and gas extraction	-	-	-	484	5,678	-	-	43	-	6,205
Petroleum refineries	-	-	-	5,594r	400	-	-	383	71	6,448r
Coal extraction	4	-	-	-	9	-	-	92	-	104
Coke manufacture	-	359	-	-	-	-	-	8	-	367
Blast furnaces	-	418	-	-	73	-	-	44	-	535
Patent fuel manufacture	-	-	-	-	-	-	-	-	-	-
Pumped storage	-	-	-	-	-	-	-	67	-	67
Other	-	-	-	-	586	-	-	162	-	748
Losses	-	207	-	-	848	-	-	2,380	-	3,435
Final consumption	1,610	1,001	-	76,460r	50,458	691	-	29,981	1,268	161,468r
Industry	1,121	787	-	5,887	11,719	176	-	9,976	831	30,496r
Unclassified	-	209	-	2,516	4	176	-	-	-	2,905
Iron and steel	-	578	-	16	654	-	-	432	-	1,679
Non-ferrous metals	23	-	-	50	245	-	-	661	-	980
Mineral products	702	-	-	206	1,416	-	-	686	-	3,010
Chemicals	80	-	-	191	2,792	-	-	1,816	392	5,271
Mechanical engineering etc	9	-	-	111	664	-	-	742	3	1,529
Electrical engineering etc	3	-	-	34	320	-	-	638	-	995
Vehicles	36	-	-	131	771	-	-	502	-	1,441
Food, beverages etc	18	-	-	307	1,929	-	-	1,055	1	3,309
Textiles, leather etc	47	-	-	104	544	-	-	292	-	987
Paper, printing etc	93	-	-	86	1,369	-	-	1,137	31	2,715
Other industries	110	-	-	1,956r	805	-	-	1,848	405	5,124r
Construction	-	-	-	177	207	-	-	166	-	551
Transport (6)	3	-	-	55,203r	-	69	-	349	-	55,624r
Air	-	-	-	13,163	-	-	-	-	-	13,163
Rail	3	-	-	592r	-	-	-	347	-	942r
Road	-	-	-	40,165r	-	69	-	2	-	40,236r
National navigation	-	-	-	1,283	-	-	-	-	-	1,283
Pipelines	-	-	-	-	-	-	-	-	-	-
Other	486	214	-	4,581	38,126	446	-	19,655	437	63,946
Domestic	450	214	-	2,926	29,552	269	-	10,809	52	44,272
Public administration	25	-	-	507	3,894	95	-	1,722	376	6,619
Commercial	4	-	-	363	2,956	14	-	6,780	10	10,126
Agriculture	6	-	-	355	175	69	-	344	-	948
Miscellaneous	1	-	-	430	1,549	-	-	-	-	1,980
Non energy use	-	-	-	10,790	612	-	-	-	-	11,402

(1) Includes all manufactured solid fuels, benzole, tars, coke oven gas and blast furnace gas.

(2) Includes colliery methane.

(3) Includes geothermal and solar heat.

(4) Stock fall (+), stock rise (-).

(5) Primary supply minus primary demand.

(6) See paragraphs 5.11 regarding electricity use in transport and 6.24 regarding renewables use in transport.

I.1 Aggregate energy balance 2004

Net calorific values

Thousand tonnes of oil equivalent

	Coal	Manufactured fuel(1)	Primary oils	Petroleum products	Natural gas(2)	Bioenergy & waste(3)	Primary electricity	Electricity	Heat	Total
Supply										
Indigenous production	14,814	-	99,180	-	86,770	2,525	18,746	-	-	222,035
Imports	22,285	724	64,803	19,109	10,295	337	-	841	-	118,396
Exports	-425	-123	-66,942	-31,265	-8,831	-	-	-197	-	-107,784
Marine bunkers	-	-	-	-2,088	-	-	-	-	-	-2,088
Stock change (4)	-53	-84	-140	-307	-483	-	-	-	-	-1,067
Primary supply	36,621	517	96,900	-14,551	87,751	2,862	18,746	644	-	229,492
Statistical difference (5)	+1	-52	-156	-46	+54	-	-	+211	-	+12
Primary demand	36,620	569	97,057	-14,505	87,697	2,862	18,746	433	-	229,480
Transfers	-	-118	-3,905	+3,894	-3	-	-583	+583	-	-132
Transformation	-34,727	1,617	-93,152	91,832	-28,065	-2,320	-18,163	33,061	1,273	-48,642
Electricity generation	-29,799	-908	-	-604	-26,375	-2,320	-18,163	33,061	-	-45,108
Major power producers	-28,948	-	-	-144	-23,564	-441	-18,163	30,246	-	-41,013
Autogenerators	-852	-908	-	-460	-2,811	-1,878	-	2,815	-	-4,095
Heat generation	-282	-48	-	-67	-1,690	-	-	-	1,273	-814
Petroleum refineries	-	-	-93,152	92,794	-	-	-	-	-	-358
Coke manufacture	-3,797	3,886	-	-	-	-	-	-	-	89
Blast furnaces	-619	-1,541	-	-290	-	-	-	-	-	-2,451
Patent fuel manufacture	-229	229	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-
Energy industry use	5	804	-	5,437	6,846	-	-	2,291	16	15,399
Electricity generation	-	-	-	-	-	-	-	1,464	2	1,466
Oil and gas extraction	-	-	-	-	5,957	-	-	48	-	6,005
Petroleum refineries	-	-	-	5,435	238	-	-	402	14	6,090
Coal extraction	5	-	-	-	12	-	-	88	-	105
Coke manufacture	-	360	-	1	-	-	-	8	-	369
Blast furnaces	-	441	-	-	56	-	-	40	-	537
Patent fuel manufacture	-	3	-	-	-	-	-	-	-	3
Pumped storage	-	-	-	-	-	-	-	73	-	73
Other	-	-	-	-	583	-	-	167	-	750
Losses	-	194	-	-	635	-	-	2,642	-	3,472
Final consumption	1,888	1,070	-	75,785	52,147	543	-	29,144	1,258	161,835
Industry	1,173	815	-	6,506	11,914	228	-	9,584	832	31,053
Unclassified	-	239	-	2,477	5	228	-	-	-	2,949
Iron and steel	-	575	-	33	752	-	-	465	-	1,825
Non-ferrous metals	7	-	-	49	248	-	-	642	-	946
Mineral products	713	-	-	189	1,037	-	-	648	-	2,587
Chemicals	89	-	-	191	3,250	-	-	1,714	394	5,637
Mechanical engineering etc.	10	-	-	110	666	-	-	723	2	1,511
Electrical engineering etc.	3	-	-	36	322	-	-	568	-	929
Vehicles	53	-	-	103	791	-	-	480	-	1,427
Food, beverages, etc.	25	-	-	324	2,185	-	-	1,036	2	3,572
Textiles, leather, etc.	55	-	-	69	551	-	-	287	-	962
Paper, printing etc.	92	-	-	55	1,074	-	-	1,132	27	2,380
Other industries	127	-	-	2,724	806	-	-	1,734	407	5,797
Construction	-	-	-	147	227	-	-	155	-	529
Transport (6)	-	-	-	53,950	-	-	-	349	-	54,298
Air	-	-	-	12,263	-	-	-	-	-	12,263
Rail	-	-	-	658	-	-	-	347	-	1,005
Road	-	-	-	39,904	-	-	-	2	-	39,906
National navigation	-	-	-	1,124	-	-	-	-	-	1,124
Pipelines	-	-	-	-	-	-	-	-	-	-
Other	715	255	-	4,439	39,458	314	-	19,211	425	64,818
Domestic	696	255	-	3,090	30,677	143	-	10,679	52	45,592
Public administration	9	-	-	474	4,019	95	-	1,733	368	6,698
Commercial	3	-	-	392	2,909	14	-	6,451	5	9,775
Agriculture	5	-	-	258	182	63	-	348	-	855
Miscellaneous	1	-	-	226	1,671	-	-	-	-	1,898
Non energy use	-	-	-	10,890	775	-	-	-	-	11,665

(1) Includes all manufactured solid fuels, benzole, tars, coke oven gas and blast furnace gas.

(2) Includes colliery methane.

(3) Includes geothermal and solar heat.

(4) Stock fall (+), stock rise (-).

(5) Primary supply minus primary demand.

(6) See paragraphs 5.11 regarding electricity use in transport and 6.24 regarding renewables use in transport.

Annex J

Heat reconciliation

Introduction

J.1 Heat sold has been separately identified in the energy balances since 1999. It is defined as heat that is produced and sold under the provision of a contract. The introduction of heat sold into the energy and commodity balances did not affect the individual fuel totals, since the energy used to generate the heat has been deducted from the final consumption section of the energy balances and transferred to the transformation section. The tables show the detailed analysis of the heat generation row of the main energy balances, by sector generating the heat.

Methodology

J.2 The heat data are derived from two sources covering CHP plants and heating schemes without CHP plants. Data for heat sold are supplied by CHP plants to the Combined Heat and Power Quality Assurance Programme and are processed by AEA. Data for heat consumption from other heating schemes were derived from the Building Research Establishment's "National Survey of Community Heating" that was carried out in 1997, a database of community heating schemes in social housing in 2000, and Community Heating Sales Surveys undertaken between 2003 and 2005. The estimates from these sources have been used to derive heat sold figures since 1999; it is recommended that the figures should be treated as indicative of the amount of heat sold.

J.3 To make the heat sold information more transparent, data on the quantity of fuel by consuming sector used to produce heat that is subsequently sold are being made available in the tables that accompany this annex. When producing the energy and commodity balances the quantities of fuel shown in the tables have been deducted from the final consumption section and moved to the transformation section.

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J.1 Heat sold reallocation 2011

	ktonnes	GWh	GWh	GWh	ktonnes	ktonnes	ktonnes	ktoe
	Coal	Coke oven gas	Blast furnace gas	Natural gas	Fuel oil	Gas oil	Propane	Solid waste and biomass
Supply	-	-	-	-	-	-	-	-
Indigenous production	-	-	-	-	-	-	-	-
Imports	-	-	-	-	-	-	-	-
Exports	-	-	-	-	-	-	-	-
Marine bunkers	-	-	-	-	-	-	-	-
Stock change	-	-	-	-	-	-	-	-
Primary supply	-	-	-	-	-	-	-	-
Statistical difference	-	-	-	-	-	-	-	-
Primary demand	-	-	-	-	-	-	-	-
Transfers	-	-	-	-	-	-	-	-
Transformation	-	-	-	-	-	-	-	-
Electricity generation	-	-	-	-	-	-	-	-
Major power producers	-	-	-	-	-	-	-	-
Autogenerators	-	-	-	-	-	-	-	-
Heat generation	-477	-418	-179	-23,672	-52	-5	-5	-84
Petroleum refineries	-	-	-	-	-	-	-	-
Coke manufacture	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-
Patent fuel manufacture	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-
Energy industry use	-	-	-	-	-	-	-	-
Electricity generation	-	-	-	-	-	-	-	-
Oil and gas extraction	-	-	-	-	-	-	-	-
Petroleum refineries	-	-	-	1,483	-	-	5	-
Coal extraction	-	-	-	-	-	-	-	-
Coke manufacture	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-
Patent fuel manufacture	-	-	-	-	-	-	-	-
Pumped storage	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-
Losses	-	-	-	-	-	-	-	-
Final consumption	-	-	-	-	-	-	-	-
Industry	-	-	-	-	-	-	-	-
Unclassified	-	62	-	-	-	-	-	-
Iron and steel	-	357	179	395	4	0	-	-
Non-ferrous metals	17	-	-	213	1	0	-	-
Mineral products	-	-	-	237	4	0	-	-
Chemicals	282	-	-	6,980	20	0	-	32
Mechanical engineering etc	1	-	-	234	2	0	-	-
Electrical engineering etc	0	-	-	61	1	0	-	-
Vehicles	7	-	-	474	3	0	-	-
Food, beverages etc	24	-	-	1,324	8	0	-	-
Textiles, leather etc	3	-	-	159	2	0	-	-
Paper, printing etc	7	-	-	1,465	4	0	-	-
Other industries	3	-	-	2,258	3	4	-	-
Construction	-	-	-	0	1	-	-	-
Transport	-	-	-	-	-	-	-	-
Air	-	-	-	-	-	-	-	-
Rail	-	-	-	-	-	-	-	-
Road	-	-	-	-	-	-	-	-
National navigation	-	-	-	-	-	-	-	-
Pipelines	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-
Domestic	-	-	-	-	-	-	-	-
Public administration	130	-	-	4,227	-	0	-	11
Commercial	2	-	-	4,165	-	0	-	41
Agriculture	-	-	-	-	-	-	-	-
Miscellaneous	-	-	-	-	-	-	-	-
Non energy use	-	-	-	-	-	-	-	-

J.1 Heat sold reallocation 2010

	ktonnes	GWh	GWh	GWh	ktonnes	ktonnes	ktonnes	ktoe
	Coal	Coke oven gas	Blast furnace gas	Natural gas	Fuel oil	Gas oil	Propane	Solid waste and biomass
Supply	-	-	-	-	-	-	-	-
Indigenous production	-	-	-	-	-	-	-	-
Imports	-	-	-	-	-	-	-	-
Exports	-	-	-	-	-	-	-	-
Marine bunkers	-	-	-	-	-	-	-	-
Stock change	-	-	-	-	-	-	-	-
Primary supply	-	-	-	-	-	-	-	-
Statistical difference	-	-	-	-	-	-	-	-
Primary demand	-	-	-	-	-	-	-	-
Transfers	-	-	-	-	-	-	-	-
Transformation	-	-	-	-	-	-	-	-
Electricity generation	-	-	-	-	-	-	-	-
Major power producers	-	-	-	-	-	-	-	-
Autogenerators	-	-	-	-	-	-	-	-
Heat generation	-477	-418	-179	-23,707	-52	-5	-5	-41
Petroleum refineries	-	-	-	-	-	-	-	-
Coke manufacture	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-
Patent fuel manufacture	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-
Energy industry use	-	-	-	-	-	-	-	-
Electricity generation	-	-	-	-	-	-	-	-
Oil and gas extraction	-	-	-	-	-	-	-	-
Petroleum refineries	-	-	-	1,483	-	-	5	-
Coal extraction	-	-	-	-	-	-	-	-
Coke manufacture	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-
Patent fuel manufacture	-	-	-	-	-	-	-	-
Pumped storage	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-
Losses	-	-	-	-	-	-	-	-
Final consumption	-	-	-	-	-	-	-	-
Industry	-	-	-	-	-	-	-	-
Unclassified	-	62	-	-	-	-	-	-
Iron and steel	-	357	179	395	4	0	-	-
Non-ferrous metals	17	-	-	213	1	0	-	-
Mineral products	-	-	-	237	4	0	-	-
Chemicals	284	-	-	6,935	20	0	-	32
Mechanical engineering etc	1	-	-	234	2	0	-	-
Electrical engineering etc	0	-	-	61	1	0	-	-
Vehicles	7	-	-	474	3	0	-	-
Food, beverages etc	24	-	-	1,317	8	0	-	-
Textiles, leather etc	3	-	-	159	2	0	-	-
Paper, printing etc	7	-	-	1,461	4	0	-	-
Other industries	3	-	-	2,258	3	4	-	-
Construction	-	-	-	0	1	-	-	-
Transport	-	-	-	-	-	-	-	-
Air	-	-	-	-	-	-	-	-
Rail	-	-	-	-	-	-	-	-
Road	-	-	-	-	-	-	-	-
National navigation	-	-	-	-	-	-	-	-
Pipelines	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-
Domestic	-	-	-	-	-	-	-	-
Public administration	130	-	-	4,296	-	0	-	2
Commercial	-	-	-	4,186	-	1	-	7
Agriculture	-	-	-	-	-	-	-	-
Miscellaneous	-	-	-	-	-	-	-	-
Non energy use	-	-	-	-	-	-	-	-

J.1 Heat sold reallocation 2009

	ktonnes	GWh	GWh	GWh	ktonnes	ktonnes	ktonnes	ktoe
	Coal	Coke oven gas	Blast furnace gas	Natural gas	Fuel oil	Gas oil	Propane	Solid waste and biomass
Supply	-	-	-	-	-	-	-	-
Indigenous production	-	-	-	-	-	-	-	-
Imports	-	-	-	-	-	-	-	-
Exports	-	-	-	-	-	-	-	-
Marine bunkers	-	-	-	-	-	-	-	-
Stock change	-	-	-	-	-	-	-	-
Primary supply	-	-	-	-	-	-	-	-
Statistical difference	-	-	-	-	-	-	-	-
Primary demand	-	-	-	-	-	-	-	-
Transfers	-	-	-	-	-	-	-	-
Transformation	-	-	-	-	-	-	-	-
Electricity generation	-	-	-	-	-	-	-	-
Major power producers	-	-	-	-	-	-	-	-
Autogenerators	-	-	-	-	-	-	-	-
Heat generation	-482	-418	-179	-22,758	-52	-5	-5	-79
Petroleum refineries	-	-	-	-	-	-	-	-
Coke manufacture	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-
Patent fuel manufacture	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-
Energy industry use	-	-	-	-	-	-	-	-
Electricity generation	-	-	-	-	-	-	-	-
Oil and gas extraction	-	-	-	-	-	-	-	-
Petroleum refineries	-	-	-	1,400	-	-	5	-
Coal extraction	-	-	-	-	-	-	-	-
Coke manufacture	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-
Patent fuel manufacture	-	-	-	-	-	-	-	-
Pumped storage	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-
Losses	-	-	-	-	-	-	-	-
Final consumption	-	-	-	-	-	-	-	-
Industry	-	-	-	-	-	-	-	-
Unclassified	-	62	-	-	-	-	-	-
Iron and steel	-	357	179	395	4	0	-	-
Non-ferrous metals	17	-	-	213	1	0	-	-
Mineral products	-	-	-	237	4	0	-	-
Chemicals	287	-	-	5,991	20	0	-	31
Mechanical engineering etc	1	-	-	274	2	0	-	-
Electrical engineering etc	0	-	-	61	1	0	-	-
Vehicles	7	-	-	474	3	0	-	-
Food, beverages etc	24	-	-	1,320	8	0	-	-
Textiles, leather etc	3	-	-	159	2	0	-	-
Paper, printing etc	7	-	-	1,441	4	0	-	-
Other industries	3	-	-	2,258	3	4	-	-
Construction	-	-	-	0	1	-	-	-
Transport	-	-	-	-	-	-	-	-
Air	-	-	-	-	-	-	-	-
Rail	-	-	-	-	-	-	-	-
Road	-	-	-	-	-	-	-	-
National navigation	-	-	-	-	-	-	-	-
Pipelines	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-
Domestic	-	-	-	-	-	-	-	-
Public administration	130	-	-	4,456	-	0	-	11
Commercial	2	-	-	4,080	-	0	-	36
Agriculture	-	-	-	-	-	-	-	-
Miscellaneous	-	-	-	-	-	-	-	-
Non energy use	-	-	-	-	-	-	-	-

J.1 Heat sold reallocation 2008

	ktonnes	GWh	GWh	GWh	ktonnes	ktonnes	ktonnes	ktoe
	Coal	Coke oven gas	Blast furnace gas	Natural gas	Fuel oil	Gas oil	Propane	Solid waste
Supply	-	-	-	-	-	-	-	-
Indigenous production	-	-	-	-	-	-	-	-
Imports	-	-	-	-	-	-	-	-
Exports	-	-	-	-	-	-	-	-
Marine bunkers	-	-	-	-	-	-	-	-
Stock change	-	-	-	-	-	-	-	-
Primary supply	-	-	-	-	-	-	-	-
Statistical difference	-	-	-	-	-	-	-	-
Primary demand	-	-	-	-	-	-	-	-
Transfers	-	-	-	-	-	-	-	-
Transformation	-	-	-	-	-	-	-	-
Electricity generation	-	-	-	-	-	-	-	-
Major power producers	-	-	-	-	-	-	-	-
Autogenerators	-	-	-	-	-	-	-	-
Heat generation	-503	-418	-179	-25,426	-52	-5	-5	-49
Petroleum refineries	-	-	-	-	-	-	-	-
Coke manufacture	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-
Patent fuel manufacture	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-
Energy industry use	-	-	-	-	-	-	-	-
Electricity generation	-	-	-	-	-	-	-	-
Oil and gas extraction	-	-	-	-	-	-	-	-
Petroleum refineries	-	-	-	804	-	-	5	-
Coal extraction	-	-	-	-	-	-	-	-
Coke manufacture	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-
Patent fuel manufacture	-	-	-	-	-	-	-	-
Pumped storage	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-
Losses	-	-	-	-	-	-	-	-
Final consumption	-	-	-	-	-	-	-	-
Industry	-	-	-	-	-	-	-	-
Unclassified	-	62	-	-	-	-	-	-
Iron and steel	-	357	179	395	4	0	-	-
Non-ferrous metals	17	-	-	213	1	0	-	-
Mineral products	-	-	-	237	4	0	-	-
Chemicals	309	-	-	9,159	20	0	-	31
Mechanical engineering etc	1	-	-	285	2	0	-	1
Electrical engineering etc	0	-	-	61	1	0	-	-
Vehicles	7	-	-	474	3	0	-	-
Food, beverages etc	24	-	-	1,400	8	0	-	-
Textiles, leather etc	3	-	-	159	2	0	-	-
Paper, printing etc	7	-	-	1,464	4	0	-	-
Other industries	3	-	-	2,258	3	4	-	-
Construction	-	-	-	0	1	-	-	-
Transport	-	-	-	-	-	-	-	-
Air	-	-	-	-	-	-	-	-
Rail	-	-	-	-	-	-	-	-
Road	-	-	-	-	-	-	-	-
National navigation	-	-	-	-	-	-	-	-
Pipelines	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-
Domestic	-	-	-	-	-	-	-	-
Public administration	130	-	-	4,327	-	0	-	2
Commercial	3	-	-	4,190	-	0	-	14
Agriculture	-	-	-	-	-	-	-	-
Miscellaneous	-	-	-	-	-	-	-	-
Non energy use	-	-	-	-	-	-	-	-

J.1 Heat sold reallocation 2007

	ktonnes	GWh	GWh	GWh	ktonnes	ktonnes	ktonnes	ktoe
	Coal	Coke oven gas	Blast furnace gas	Natural gas	Fuel oil	Gas oil	Propane	Solid waste
Supply	-	-	-	-	-	-	-	-
Indigenous production	-	-	-	-	-	-	-	-
Imports	-	-	-	-	-	-	-	-
Exports	-	-	-	-	-	-	-	-
Marine bunkers	-	-	-	-	-	-	-	-
Stock change	-	-	-	-	-	-	-	-
Primary supply	-	-	-	-	-	-	-	-
Statistical difference	-	-	-	-	-	-	-	-
Primary demand	-	-	-	-	-	-	-	-
Transfers	-	-	-	-	-	-	-	-
Transformation	-	-	-	-	-	-	-	-
Electricity generation	-	-	-	-	-	-	-	-
Major power producers	-	-	-	-	-	-	-	-
Autogenerators	-	-	-	-	-	-	-	-
Heat generation	-485	-418	-179	-23,640	-53	-5	-4	-48
Petroleum refineries	-	-	-	-	-	-	-	-
Coke manufacture	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-
Patent fuel manufacture	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-
Energy industry use	-	-	-	-	-	-	-	-
Electricity generation	-	-	-	-	-	-	-	-
Oil and gas extraction	-	-	-	-	-	-	-	-
Petroleum refineries	-	-	-	783	-	-	4	-
Coal extraction	-	-	-	-	-	-	-	-
Coke manufacture	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-
Patent fuel manufacture	-	-	-	-	-	-	-	-
Pumped storage	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-
Losses	-	-	-	-	-	-	-	-
Final consumption	-	-	-	-	-	-	-	-
Industry	-	-	-	-	-	-	-	-
Unclassified	-	62	-	-	-	-	-	31
Iron and steel	-	357	179	395	4	-	-	-
Non-ferrous metals	17	-	-	213	1	-	-	-
Mineral products	-	-	-	237	4	-	-	-
Chemicals	294	-	-	7,485	20	-	-	-
Mechanical engineering etc	1	-	-	277	2	-	-	-
Electrical engineering etc	-	-	-	61	1	-	-	-
Vehicles	7	-	-	474	3	-	-	-
Food, beverages etc	24	-	-	1,329	8	-	-	-
Textiles, leather etc	3	-	-	159	2	-	-	-
Paper, printing etc	7	-	-	1,506	4	-	-	-
Other industries	3	-	-	2,258	3	4	-	-
Construction	-	-	-	-	1	-	-	-
Transport	-	-	-	-	-	-	-	-
Air	-	-	-	-	-	-	-	-
Rail	-	-	-	-	-	-	-	-
Road	-	-	-	-	-	-	-	-
National navigation	-	-	-	-	-	-	-	-
Pipelines	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-
Domestic	-	-	-	-	-	-	-	-
Public administration	130	-	-	4,289	-	-	-	10
Commercial	-	-	-	4,175	-	1	-	6
Agriculture	-	-	-	-	-	-	-	-
Miscellaneous	-	-	-	-	-	-	-	-
Non energy use	-	-	-	-	-	-	-	-

J.1 Heat sold reallocation 2006

	ktonnes	GWh	GWh	GWh	ktonnes	ktonnes	ktonnes	ktoe
	Coal	Coke oven gas	Blast furnace gas	Natural gas	Fuel oil	Gas oil	Propane	Solid waste
Supply	-	-	-	-	-	-	-	-
Indigenous production	-	-	-	-	-	-	-	-
Imports	-	-	-	-	-	-	-	-
Exports	-	-	-	-	-	-	-	-
Marine bunkers	-	-	-	-	-	-	-	-
Stock change	-	-	-	-	-	-	-	-
Primary supply	-	-	-	-	-	-	-	-
Statistical difference	-	-	-	-	-	-	-	-
Primary demand	-	-	-	-	-	-	-	-
Transfers	-	-	-	-	-	-	-	-
Transformation	-	-	-	-	-	-	-	-
Electricity generation	-	-	-	-	-	-	-	-
Major power producers	-	-	-	-	-	-	-	-
Autogenerators	-	-	-	-	-	-	-	-
Heat generation	-457	-418	-179	-22,023	-53	-6	-4	-54
Petroleum refineries	-	-	-	-	-	-	-	-
Coke manufacture	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-
Patent fuel manufacture	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-
Energy industry use	-	-	-	-	-	-	-	-
Electricity generation	-	-	-	-	-	-	-	-
Oil and gas extraction	-	-	-	-	-	-	-	-
Petroleum refineries	-	-	-	683	-	-	4	-
Coal extraction	-	-	-	-	-	-	-	-
Coke manufacture	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-
Patent fuel manufacture	-	-	-	-	-	-	-	-
Pumped storage	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-
Losses	-	-	-	-	-	-	-	-
Final consumption	-	-	-	-	-	-	-	-
Industry	-	-	-	-	-	-	-	-
Unclassified	-	62	-	-	-	-	-	-
Iron and steel	-	357	179	395	4	-	-	-
Non-ferrous metals	17	-	-	213	1	-	-	-
Mineral products	-	-	-	237	4	-	-	-
Chemicals	266	-	-	5,816	20	-	-	31
Mechanical engineering etc	1	-	-	234	2	-	-	5
Electrical engineering etc	-	-	-	61	1	-	-	-
Vehicles	7	-	-	474	3	-	-	-
Food, beverages etc	24	-	-	1,312	8	-	-	-
Textiles, leather etc	3	-	-	159	2	-	-	-
Paper, printing etc	7	-	-	1,744	4	-	-	-
Other industries	3	-	-	2,258	3	4	-	1
Construction	-	-	-	-	1	-	-	-
Transport	-	-	-	-	-	-	-	-
Air	-	-	-	-	-	-	-	-
Rail	-	-	-	-	-	-	-	-
Road	-	-	-	-	-	-	-	-
National navigation	-	-	-	-	-	-	-	-
Pipelines	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-
Domestic	-	-	-	-	-	-	-	-
Public administration	130	-	-	4,270	-	-	-	11
Commercial	-	-	-	4,167	-	1	-	5
Agriculture	-	-	-	-	-	-	-	-
Miscellaneous	-	-	-	-	-	-	-	-
Non energy use	-	-	-	-	-	-	-	-

J.1 Heat sold reallocation 2005

	ktonnes	GWh	GWh	GWh	ktonnes	ktonnes	ktonnes	ktoe
	Coal	Coke oven gas	Blast furnace gas	Natural gas	Fuel oil	Gas oil	Propane	Solid waste
Supply	-	-	-	-	-	-	-	-
Indigenous production	-	-	-	-	-	-	-	-
Imports	-	-	-	-	-	-	-	-
Exports	-	-	-	-	-	-	-	-
Marine bunkers	-	-	-	-	-	-	-	-
Stock change	-	-	-	-	-	-	-	-
Primary supply	-	-	-	-	-	-	-	-
Statistical difference	-	-	-	-	-	-	-	-
Primary demand	-	-	-	-	-	-	-	-
Transfers	-	-	-	-	-	-	-	-
Transformation	-	-	-	-	-	-	-	-
Electricity generation	-	-	-	-	-	-	-	-
Major power producers	-	-	-	-	-	-	-	-
Autogenerators	-	-	-	-	-	-	-	-
Heat generation	-459	-418	-179	-22,488	-52	-6	-39	-36
Petroleum refineries	-	-	-	-	-	-	-	-
Coke manufacture	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-
Patent fuel manufacture	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-
Energy industry use	-	-	-	-	-	-	-	-
Electricity generation	-	-	-	-	-	-	-	-
Oil and gas extraction	-	-	-	-	-	-	-	-
Petroleum refineries	-	-	-	810	-	-	4	-
Coal extraction	-	-	-	-	-	-	-	-
Coke manufacture	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-
Patent fuel manufacture	-	-	-	-	-	-	-	-
Pumped storage	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-
Losses	-	-	-	-	-	-	-	-
Final consumption	-	-	-	-	-	-	-	-
Industry	-	-	-	-	-	-	-	-
Unclassified	-	62	-	-	-	-	-	-
Iron and steel	-	357	179	395	4	-	-	-
Non-ferrous metals	17	-	-	213	1	-	-	-
Mineral products	-	-	-	237	4	-	-	-
Chemicals	267	-	-	5,850	20	-	34	31
Mechanical engineering etc	1	-	-	246	2	-	-	5
Electrical engineering etc	-	-	-	61	1	-	-	-
Vehicles	7	-	-	474	3	-	-	-
Food, beverages etc	24	-	-	1,313	8	-	-	-
Textiles, leather etc	3	-	-	159	2	-	-	-
Paper, printing etc	7	-	-	1,960	4	-	-	-
Other industries	3	-	-	2,258	3	4	-	-
Construction	-	-	-	-	1	-	-	-
Transport	-	-	-	-	-	-	-	-
Air	-	-	-	-	-	-	-	-
Rail	-	-	-	-	-	-	-	-
Road	-	-	-	-	-	-	-	-
National navigation	-	-	-	-	-	-	-	-
Pipelines	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-
Domestic	-	-	-	-	-	-	-	-
Public administration	130	-	-	4,369	-	-	-	-
Commercial	-	-	-	4,145	-	1	-	-
Agriculture	-	-	-	-	-	-	-	-
Miscellaneous	-	-	-	-	-	-	-	-
Non energy use	-	-	-	-	-	-	-	-

J.1 Heat sold reallocation 2004

	ktonnes	GWh	GWh	GWh	ktonnes	ktonnes	ktonnes	ktoe
	Coal	Coke oven gas	Blast furnace gas	Natural gas	Fuel oil	Gas oil	Propane	Solid waste
Supply	-	-	-	-	-	-	-	-
Indigenous production	-	-	-	-	-	-	-	-
Imports	-	-	-	-	-	-	-	-
Exports	-	-	-	-	-	-	-	-
Marine bunkers	-	-	-	-	-	-	-	-
Stock change	-	-	-	-	-	-	-	-
Primary supply	-	-	-	-	-	-	-	-
Statistical difference	-	-	-	-	-	-	-	-
Primary demand	-	-	-	-	-	-	-	-
Transfers	-	-	-	-	-	-	-	-
Transformation	-	-	-	-	-	-	-	-
Electricity generation	-	-	-	-	-	-	-	-
Major power producers	-	-	-	-	-	-	-	-
Autogenerators	-	-	-	-	-	-	-	-
Heat generation	-473	-418	-179	-21,844	-52	-16	-1	-39
Petroleum refineries	-	-	-	-	-	-	-	-
Coke manufacture	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-
Patent fuel manufacture	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-
Energy industry use	-	-	-	-	-	-	-	-
Electricity generation	-	-	-	-	-	-	-	-
Oil and gas extraction	-	-	-	-	-	-	-	-
Petroleum refineries	-	-	-	162	-	-	1	-
Coal extraction	-	-	-	-	-	-	-	-
Coke manufacture	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-
Patent fuel manufacture	-	-	-	-	-	-	-	-
Pumped storage	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-
Losses	-	-	-	-	-	-	-	-
Final consumption	-	-	-	-	-	-	-	-
Industry	-	-	-	-	-	-	-	-
Unclassified	-	62	-	-	-	-	-	-
Iron and steel	-	357	179	395	4	-	-	-
Non-ferrous metals	37	-	-	213	1	-	-	-
Mineral products	-	-	-	237	4	-	-	-
Chemicals	209	-	-	6,080	20	2	-	31
Mechanical engineering etc	1	-	-	269	2	-	-	-
Electrical engineering etc	-	-	-	61	1	-	-	-
Vehicles	7	-	-	474	3	-	-	-
Food, beverages etc	27	-	-	1,314	8	-	-	-
Textiles, leather etc	3	-	-	159	2	-	-	-
Paper, printing etc	17	-	-	1,813	4	-	-	-
Other industries	43	-	-	2,296	3	4	-	-
Construction	-	-	-	-	1	-	-	-
Transport	-	-	-	-	-	-	-	-
Air	-	-	-	-	-	-	-	-
Rail	-	-	-	-	-	-	-	-
Road	-	-	-	-	-	-	-	-
National navigation	-	-	-	-	-	-	-	-
Pipelines	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-
Domestic	-	-	-	-	-	-	-	-
Public administration	130	-	-	4,281	-	8	-	-
Commercial	-	-	-	4,090	-	1	-	7
Agriculture	-	-	-	-	-	-	-	-
Miscellaneous	-	-	-	-	-	-	-	-
Non energy use	-	-	-	-	-	-	-	-

J.1 Heat sold reallocation 2003

	ktonnes	GWh	GWh	GWh	ktonnes	ktonnes	ktonnes	ktoe
	Coal	Coke oven gas	Blast furnace gas	Natural gas	Fuel oil	Gas oil	Propane	Solid waste
Supply	-	-	-	-	-	-	-	-
Indigenous production	-	-	-	-	-	-	-	-
Imports	-	-	-	-	-	-	-	-
Exports	-	-	-	-	-	-	-	-
Marine bunkers	-	-	-	-	-	-	-	-
Stock change	-	-	-	-	-	-	-	-
Primary supply	-	-	-	-	-	-	-	-
Statistical difference	-	-	-	-	-	-	-	-
Primary demand	-	-	-	-	-	-	-	-
Transfers	-	-	-	-	-	-	-	-
Transformation	-	-	-	-	-	-	-	-
Electricity generation	-	-	-	-	-	-	-	-
Major power producers	-	-	-	-	-	-	-	-
Autogenerators	-	-	-	-	-	-	-	-
Heat generation	-622	-1,055	-299	-19,830	-133	-18	-1	-64
Petroleum refineries	-	-	-	-	-	-	-	-
Coke manufacture	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-
Patent fuel manufacture	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-
Energy industry use	-	-	-	-	-	-	-	-
Electricity generation	-	-	-	-	-	-	-	-
Oil and gas extraction	-	-	-	-	-	-	-	-
Petroleum refineries	-	-	-	-	-	-	-	-
Coal extraction	-	-	-	-	-	-	-	-
Coke manufacture	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-
Patent fuel manufacture	-	-	-	-	-	-	-	-
Pumped storage	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-
Losses	-	-	-	-	-	-	-	-
Final consumption	-	-	-	-	-	-	-	-
Industry	-	-	-	-	-	-	-	-
Unclassified	-	201	-	-	-	-	1	64
Iron and steel	-	854	299	132	7	-	-	-
Non-ferrous metals	58	-	-	-	-	-	-	-
Mineral products	-	-	-	-	-	-	-	-
Chemicals	306	-	-	3,757	14	-	-	-
Mechanical engineering etc	2	-	-	239	6	1	-	-
Electrical engineering etc	1	-	-	-	3	-	-	-
Vehicles	18	-	-	-	2	-	-	-
Food, beverages etc	22	-	-	735	22	1	-	-
Textiles, leather etc	1	-	-	-	-	-	-	-
Paper, printing etc	25	-	-	1,662	6	-	-	-
Other industries	48	-	-	2,380	33	9	-	-
Construction	-	-	-	-	-	-	-	-
Transport	-	-	-	-	-	-	-	-
Air	-	-	-	-	-	-	-	-
Rail	-	-	-	-	-	-	-	-
Road	-	-	-	-	-	-	-	-
National navigation	-	-	-	-	-	-	-	-
Pipelines	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-
Domestic	-	-	-	-	-	-	-	-
Public administration	141	-	-	5,713	34	4	-	-
Commercial	-	-	-	5,212	6	3	-	-
Agriculture	-	-	-	-	-	-	-	-
Miscellaneous	-	-	-	-	-	-	-	-
Non energy use	-	-	-	-	-	-	-	-

J.1 Heat sold reallocation 2002

	ktonnes	GWh	GWh	GWh	ktonnes	ktonnes	ktonnes	ktoe
	Coal	Coke oven gas	Blast furnace gas	Natural gas	Fuel oil	Gas oil	Propane	Solid waste
Supply	-	-	-	-	-	-	-	-
Indigenous production	-	-	-	-	-	-	-	-
Imports	-	-	-	-	-	-	-	-
Exports	-	-	-	-	-	-	-	-
Marine bunkers	-	-	-	-	-	-	-	-
Stock change	-	-	-	-	-	-	-	-
Primary supply	-	-	-	-	-	-	-	-
Statistical difference	-	-	-	-	-	-	-	-
Primary demand	-	-	-	-	-	-	-	-
Transfers	-	-	-	-	-	-	-	-
Transformation	-	-	-	-	-	-	-	-
Electricity generation	-	-	-	-	-	-	-	-
Major power producers	-	-	-	-	-	-	-	-
Autogenerators	-	-	-	-	-	-	-	-
Heat generation	-717	-1,486	-422	-22,009	-227	-23	-	-63
Petroleum refineries	-	-	-	-	-	-	-	-
Coke manufacture	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-
Patent fuel manufacture	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-
Energy industry use	-	-	-	-	-	-	-	-
Electricity generation	-	-	-	-	-	-	-	-
Oil and gas extraction	-	-	-	-	-	-	-	-
Petroleum refineries	-	-	-	-	-	-	-	-
Coal extraction	-	-	-	-	-	-	-	-
Coke manufacture	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-
Patent fuel manufacture	-	-	-	-	-	-	-	-
Pumped storage	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-
Losses	-	-	-	-	-	-	-	-
Final consumption	-	-	-	-	-	-	-	-
Industry	-	-	-	-	-	-	-	-
Unclassified	-	283	-	-	-	-	-	63
Iron and steel	-	1,203	422	185	11	-	-	-
Non-ferrous metals	81	-	-	-	-	-	-	-
Mineral products	-	-	-	-	-	-	-	-
Chemicals	299	-	-	4,817	23	1	-	-
Mechanical engineering etc	2	-	-	268	11	1	-	-
Electrical engineering etc	2	-	-	-	4	-	-	-
Vehicles	25	-	-	-	4	-	-	-
Food, beverages etc	29	-	-	1,035	38	1	-	-
Textiles, leather etc	2	-	-	-	-	-	-	-
Paper, printing etc	45	-	-	2,076	11	-	-	-
Other industries	68	-	-	2,576	57	12	-	-
Construction	-	-	-	-	-	-	-	-
Transport	-	-	-	-	-	-	-	-
Air	-	-	-	-	-	-	-	-
Rail	-	-	-	-	-	-	-	-
Road	-	-	-	-	-	-	-	-
National navigation	-	-	-	-	-	-	-	-
Pipelines	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-
Domestic	-	-	-	-	-	-	-	-
Public administration	163	-	-	6,017	57	5	-	-
Commercial	-	-	-	5,035	10	2	-	-
Agriculture	-	-	-	-	-	-	-	-
Miscellaneous	-	-	-	-	-	-	-	-
Non energy use	-	-	-	-	-	-	-	-

J.1 Heat sold reallocation 2001

	ktonnes	GWh	GWh	GWh	ktonnes	ktonnes	ktonnes	ktoe
	Coal	Coke oven gas	Blast furnace gas	Natural gas	Fuel oil	Gas oil	Propane	Solid waste
Supply	-	-	-	-	-	-	-	-
Indigenous production	-	-	-	-	-	-	-	-
Imports	-	-	-	-	-	-	-	-
Exports	-	-	-	-	-	-	-	-
Marine bunkers	-	-	-	-	-	-	-	-
Stock change	-	-	-	-	-	-	-	-
Primary supply	-	-	-	-	-	-	-	-
Statistical difference	-	-	-	-	-	-	-	-
Primary demand	-	-	-	-	-	-	-	-
Transfers	-	-	-	-	-	-	-	-
Transformation	-	-	-	-	-	-	-	-
Electricity generation	-	-	-	-	-	-	-	-
Major power producers	-	-	-	-	-	-	-	-
Autogenerators	-	-	-	-	-	-	-	-
Heat generation	-750	-1,875	-532	-23,586	-640	-31	-1	-72
Petroleum refineries	-	-	-	-	-	-	-	-
Coke manufacture	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-
Patent fuel manufacture	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-
Energy industry use	-	-	-	-	-	-	-	-
Electricity generation	-	-	-	-	-	-	-	-
Oil and gas extraction	-	-	-	-	-	-	-	-
Petroleum refineries	-	-	-	-	-	-	-	-
Coal extraction	-	-	-	-	-	-	-	-
Coke manufacture	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-
Patent fuel manufacture	-	-	-	-	-	-	-	-
Pumped storage	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-
Losses	-	-	-	-	-	-	-	-
Final consumption	-	-	-	-	-	-	-	-
Industry	-	-	-	-	-	-	-	-
Unclassified	-	357	-	-	-	-	1	72
Iron and steel	-	1,518	532	200	33	-	-	-
Non-ferrous metals	59	-	-	-	-	-	-	-
Mineral products	-	-	-	-	-	-	-	-
Chemicals	298	-	-	3,977	51	1	-	-
Mechanical engineering etc	3	-	-	365	31	2	-	-
Electrical engineering etc	1	-	-	-	12	-	-	-
Vehicles	17	-	-	-	11	-	-	-
Food, beverages etc	58	-	-	923	111	1	-	-
Textiles, leather etc	12	-	-	-	-	-	-	-
Paper, printing etc	44	-	-	1,838	31	-	-	-
Other industries	35	-	-	2,380	165	16	-	-
Construction	-	-	-	-	-	-	-	-
Transport	-	-	-	-	-	-	-	-
Air	-	-	-	-	-	-	-	-
Rail	-	-	-	-	-	-	-	-
Road	-	-	-	-	-	-	-	-
National navigation	-	-	-	-	-	-	-	-
Pipelines	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-
Domestic	-	-	-	-	-	-	-	-
Public administration	223	-	-	7,649	166	7	-	-
Commercial	-	-	-	6,253	29	4	-	-
Agriculture	-	-	-	-	-	-	-	-
Miscellaneous	-	-	-	-	-	-	-	-
Non energy use	-	-	-	-	-	-	-	-

J.1 Heat sold reallocation 2000

	ktonnes	GWh	GWh	GWh	ktonnes	ktonnes	ktonnes	ktoe
	Coal	Coke oven gas	Blast furnace gas	Natural gas	Fuel oil	Gas oil	Propane	Solid waste
Supply	-	-	-	-	-	-	-	-
Indigenous production	-	-	-	-	-	-	-	-
Imports	-	-	-	-	-	-	-	-
Exports	-	-	-	-	-	-	-	-
Marine bunkers	-	-	-	-	-	-	-	-
Stock change	-	-	-	-	-	-	-	-
Primary supply	-	-	-	-	-	-	-	-
Statistical difference	-	-	-	-	-	-	-	-
Primary demand	-	-	-	-	-	-	-	-
Transfers	-	-	-	-	-	-	-	-
Transformation	-	-	-	-	-	-	-	-
Electricity generation	-	-	-	-	-	-	-	-
Major power producers	-	-	-	-	-	-	-	-
Autogenerators	-	-	-	-	-	-	-	-
Heat generation	-656	-1,810	-619	-24,891	-659	-33	-17	-95
Petroleum refineries	-	-	-	-	-	-	-	-
Coke manufacture	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-
Patent fuel manufacture	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-
Energy industry use	-	-	-	-	-	-	-	-
Electricity generation	-	-	-	-	-	-	-	-
Oil and gas extraction	-	-	-	-	-	-	-	-
Petroleum refineries	-	-	-	-	-	-	-	-
Coal extraction	-	-	-	-	-	-	-	-
Coke manufacture	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-
Patent fuel manufacture	-	-	-	-	-	-	-	-
Pumped storage	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-
Losses	-	-	-	-	-	-	-	-
Final consumption	-	-	-	-	-	-	-	-
Industry	-	-	-	-	-	-	-	-
Unclassified	-	141	-	-	-	-	17	95
Iron and steel	1	1,670	619	141	22	1	-	-
Non-ferrous metals	62	-	-	-	-	-	-	-
Mineral products	-	-	-	-	-	-	-	-
Chemicals	140	-	-	5,652	142	3	-	-
Mechanical engineering etc	5	-	-	211	21	2	-	-
Electrical engineering etc	1	-	-	-	14	-	-	-
Vehicles	34	-	-	-	11	-	-	-
Food, beverages etc	86	-	-	963	83	1	-	-
Textiles, leather etc	20	-	-	-	-	-	-	-
Paper, printing etc	44	-	-	2,525	27	-	-	-
Other industries	46	-	-	1,171	216	15	-	-
Construction	-	-	-	-	-	-	-	-
Transport	-	-	-	-	-	-	-	-
Air	-	-	-	-	-	-	-	-
Rail	-	-	-	-	-	-	-	-
Road	-	-	-	-	-	-	-	-
National navigation	-	-	-	-	-	-	-	-
Pipelines	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-
Domestic	-	-	-	-	-	-	-	-
Public administration	217	-	-	7,898	92	7	-	-
Commercial	-	-	-	6,330	30	3	-	-
Agriculture	-	-	-	-	-	-	-	-
Miscellaneous	-	-	-	-	-	-	-	-
Non energy use	-	-	-	-	-	-	-	-

J.1 Heat sold reallocation 1999

	ktonnes	GWh	GWh	GWh	ktonnes	ktonnes	ktonnes	ktoe
	Coal	Coke oven gas	Blast furnace gas	Natural gas	Fuel oil	Gas oil	Propane	Solid waste
Supply	-	-	-	-	-	-	-	-
Indigenous production	-	-	-	-	-	-	-	-
Imports	-	-	-	-	-	-	-	-
Exports	-	-	-	-	-	-	-	-
Marine bunkers	-	-	-	-	-	-	-	-
Stock change	-	-	-	-	-	-	-	-
Primary supply	-	-	-	-	-	-	-	-
Statistical difference	-	-	-	-	-	-	-	-
Primary demand	-	-	-	-	-	-	-	-
Transfers	-	-	-	-	-	-	-	-
Transformation	-	-	-	-	-	-	-	-
Electricity generation	-	-	-	-	-	-	-	-
Major power producers	-	-	-	-	-	-	-	-
Autogenerators	-	-	-	-	-	-	-	-
Heat generation	-649	-1,749	-1,109	-26,185	-657	-33	-16	-104
Petroleum refineries	-	-	-	-	-	-	-	-
Coke manufacture	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-
Patent fuel manufacture	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-
Energy industry use	-	-	-	-	-	-	-	-
Electricity generation	-	-	-	-	-	-	-	-
Oil and gas extraction	-	-	-	-	-	-	-	-
Petroleum refineries	-	-	-	-	-	-	-	-
Coal extraction	-	-	-	-	-	-	-	-
Coke manufacture	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-
Patent fuel manufacture	-	-	-	-	-	-	-	-
Pumped storage	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-
Losses	-	-	-	-	-	-	-	-
Final consumption	-	-	-	-	-	-	-	-
Industry	-	-	-	-	-	-	-	-
Unclassified	-	53	-	-	-	-	16	104
Iron and steel	5	1,696	1,109	142	31	-	-	-
Non-ferrous metals	10	-	-	-	-	-	-	-
Mineral products	-	-	-	-	-	-	-	-
Chemicals	297	-	-	4,488	98	3	-	-
Mechanical engineering etc	9	-	-	65	29	2	-	-
Electrical engineering etc	3	-	-	-	10	-	-	-
Vehicles	29	-	-	-	16	-	-	-
Food, beverages etc	85	-	-	1,000	104	1	-	-
Textiles, leather etc	21	-	-	-	-	-	-	-
Paper, printing etc	45	-	-	3,500	34	-	-	-
Other industries	4	-	-	988	149	16	-	-
Construction	-	-	-	-	-	-	-	-
Transport	-	-	-	-	-	-	-	-
Air	-	-	-	-	-	-	-	-
Rail	-	-	-	-	-	-	-	-
Road	-	-	-	-	-	-	-	-
National navigation	-	-	-	-	-	-	-	-
Pipelines	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-
Domestic	-	-	-	-	-	-	-	-
Public administration	142	-	-	8,903	155	7	-	-
Commercial	-	-	-	7,100	32	4	-	-
Agriculture	-	-	-	-	-	-	-	-
Miscellaneous	-	-	-	-	-	-	-	-
Non energy use	-	-	-	-	-	-	-	-

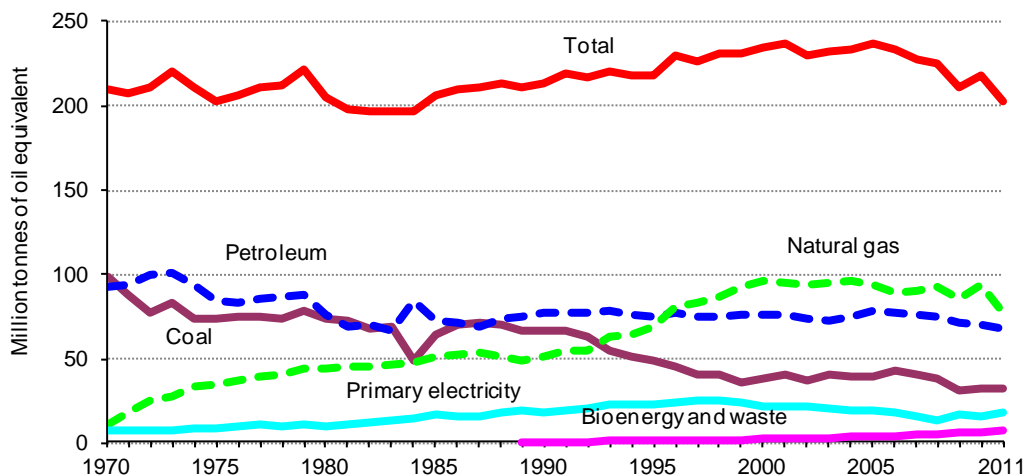
Chapter 1: Long term trends

Energy

Inland consumption of primary fuels (Table 1.1.1)

1.1.1 The trends in inland consumption of primary fuels for energy use are illustrated below in Chart 1.1.1. Overall consumption for energy use increased steadily up to 1973, when the oil price rose following the Arab-Israeli war of that year which led to a major change in patterns of fuel consumption. Having reached a level of over 220 million tonnes of oil equivalent in 1973, energy use subsequently fell, but by 1979 had returned to a similar level to that in 1973. After the outbreak of another Middle East war, consumption fell back to less than 200 million tonnes of oil equivalent in the years 1981 to 1984. It then grew again, and by 1996 had exceeded the peak levels of 1973 and 1979. In 2005 it had grown to 236.3 million tonnes, but has since fallen back by 14.1 per cent to 203.0 million tonnes in 2011. The last few years have been affected by a number of factors: the recession in 2009 reduced consumption; particularly cold weather in 2010 resulted in an increase in demand; whilst warm weather in 2011 caused consumption to fall back. Since 2005, consumption has fallen back by an average of 2.5 per cent per annum.

Chart 1.1.1: Inland consumption of primary fuels and equivalents for energy use 1970 to 2011



1.1.2 Petroleum consumption continued to grow in the period 1970 to 1973, despite strong growth in consumption of natural gas and primary electricity, mainly nuclear. After 1973, consumption of petroleum products declined for ten years, following much the same pattern as coal use. In 2003 petroleum consumption had fallen to its lowest level since 1987, but consumption has risen since then, peaking in 2005, though it has since fallen back by 13.0 per cent. Since 1970, coal consumption has continued to decline, although consumption grew in both 2006 and 2011 following increased demand for coal at power stations. Coal consumption has fallen back by 25.2 per cent since 2006. In 1970 coal accounted for 47 per cent of all fuels consumed. In 1980 this figure had fallen to 36 per cent, in 1990 31 per cent, and in 2011 it had declined further to 16 per cent.

1.1.3 Natural gas consumption, which accounted for only 5.4 per cent of all fuels consumed in 1970, grew steadily from this period, and exceeded petroleum consumption for the first time in 1996; by 2004 it accounted for 41 per cent of all fuels consumed. This fell back in 2006 to 38 per cent as the sharp rise in prices in that year resulted in generators switching some gas fired electricity production to coal fired generation. In 2010, its share had risen back to a record level of 43 per cent as a number of generators, early in the year, switched back some production from using coal to gas fired stations, and there was increased domestic demand due to the colder weather, but higher prices resulted in less use in generation in 2011, and its share fell back to 38 per cent.

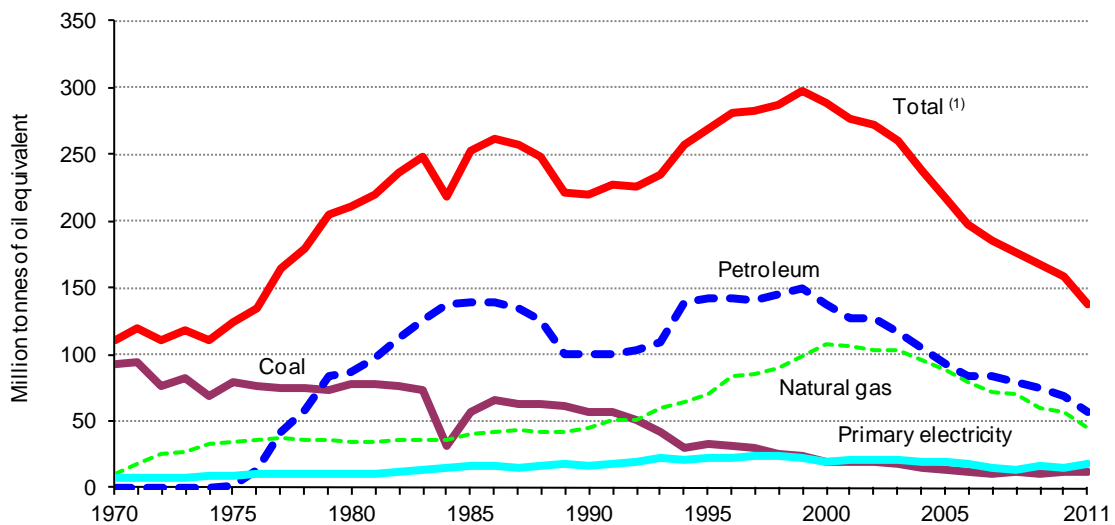
1.1.4 Consumption of bioenergy and waste continued to increase, accounting for 0.3 per cent of all fuels consumed in 1990, but increasing to 3.7 per cent in 2011¹. The share of primary electricity peaked at 11 per cent in 1997, before falling back to a low of 6.2 per cent in 2008. Its share has since grown to 8.9 per cent in 2011, due to a number of factors: increased nuclear availability following maintenance outages in previous years; and increased rainfall resulting in greater hydro-electric output; and increased wind production resulting from increased capacity and higher wind speeds during 2011.

Availability and consumption of primary fuels and equivalents (Table 1.1.2)

1.1.5 An overall view of energy presented in the form of energy balances is given in Table 1.1.2. It is based on Chapter 1, Tables 1.1 to 1.3, of the main Digest with the time series extended back to 1970. Supplies and uses of energy are expressed on an energy-supplied basis in tonnes of oil equivalent, and are balanced by fuel type and for total energy. More details on the derivation of these balances and on the calculation of energy contents are given in Chapter 1, paragraphs 1.30 to 1.31 and Annex A of the main Digest.

1.1.6 Trends in the production of primary fuels in the United Kingdom are illustrated in Chart 1.1.2. In 2011, total energy production was 137 million tonnes of oil equivalent, an increase of 24 per cent on production in 1970, but down by a record 13.2 per cent on 2010. Total energy production has fallen in each of the last 12 years since it peaked in 1999. In the last ten years, UK energy production has declined at a rate of 6.8 per cent per year; within this natural gas production has declined at the fastest rate, down 8.1 per cent per year, followed by petroleum down 7.8 per cent, coal down 5.3 per cent with primary electricity down 1.9 per cent per year. Bioenergy and waste has grown by an average 8.5 per cent per year over this same time period, though in 2011 accounted for only 4.2 per cent of the UK's energy production.

Chart 1.1.2: UK production of primary fuels 1970 to 2011



(1) Includes bioenergy & waste and heat.

1.1.7 From 1975, petroleum production grew rapidly to peak at over 139 million tonnes of oil equivalent in 1985 when it accounted for 55 per cent of the total energy production of 252.5 million tonnes of oil equivalent. By 1991, temporary production problems, following the Piper Alpha disaster of 1988, had reduced petroleum production to 100 million tonnes of oil equivalent. Since then petroleum production has steadily recovered, reaching a record level of 150 million tonnes of oil equivalent in 1999. Between 1999 and 2006 production of petroleum fell by 44 per cent. Production levels stabilised in 2007 as output from new fields (Buzzard) offset the general decline in production. However, output has since fallen by 32 per cent to leave it down 62 per cent from its peak in 1999. Petroleum production currently accounts for 42 per cent of total energy production.

¹ The renewables share was 3.8% in 2011 on the "target measure" – see chapter 6 of DUKES for more detail.

1.1.8 Natural gas from the North Sea started to be produced in substantial quantities from the early 1970s, accounting for 9.4 per cent of total production in 1970, and grew steadily to peak at 108.4 million tonnes in 2000. Since then natural gas production has eased and by 2011 had fallen by 58 per cent from this peak. In 2011 gas accounted for 33 per cent of total energy production.

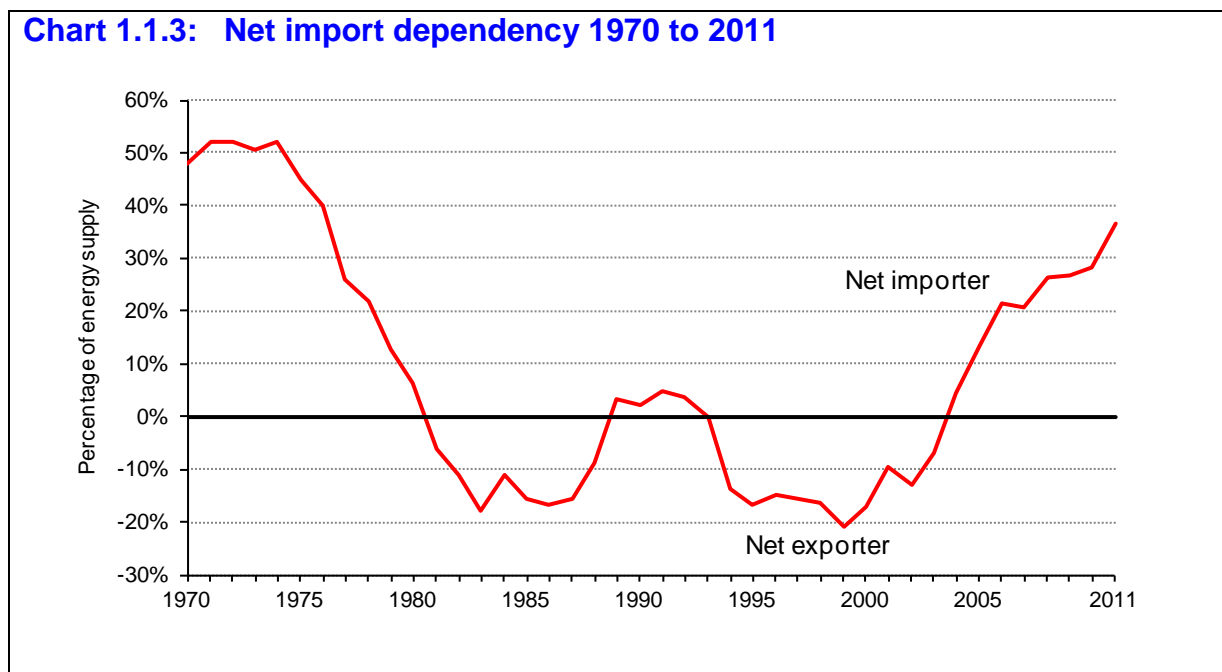
1.1.9 In 1970 coal accounted for 84 per cent of total energy production. In 1980, with the increase in petroleum and natural gas production, coal production fell to 37 per cent of total energy production, falling further to below 10 per cent in 1998. In 2011, coal accounted for 8.5 per cent of total energy production.

1.1.10 Primary electricity (nuclear, wind and hydro combined) accounted for a then record 9.9 per cent of production in 2009, as nuclear output recovered from the outages of 2008, allied with strong growth in output of wind generation. Its share fell back marginally in 2010 as nuclear outages, lower average wind speeds and lower rainfall more than offset the increased wind capacity available. However, in 2011 the share increased to a record 12.8 per cent, with increases in nuclear, hydro and wind. Output of primary electricity was down 27 per cent in 2011 from its peak in 1998.

Comparison of net imports of fuel with total consumption of primary fuels and equivalents (Table 1.1.3)

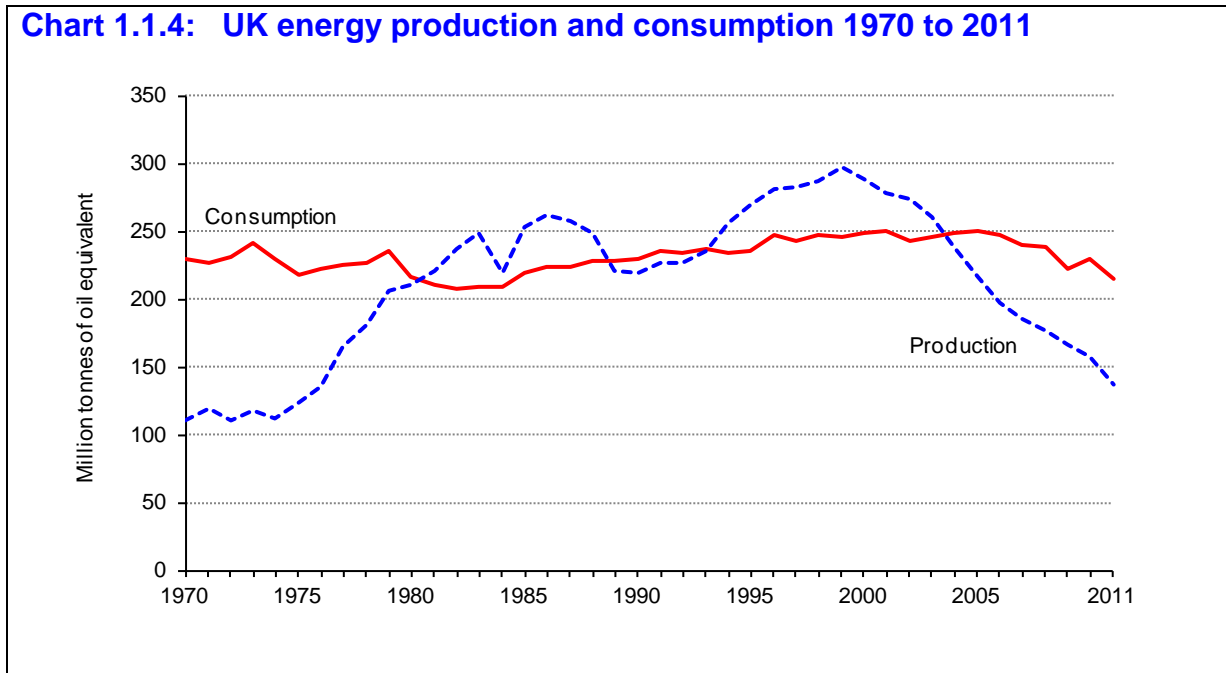
1.1.11 In Table 1.1.3 and Chart 1.1.3 gross fuel consumption in the United Kingdom, including non-energy use and international marine bunkers, is compared with net imports of fuel to show the UK's net import or net export dependency ratio. In the 1970's the UK was a net importer of energy. Following development of oil and gas production in the North Sea, the UK became a net exporter in 1981. Output fell back in the late 1980's following the Piper Alpha disaster, with the UK regaining a position as a net exporter in the mid 1990's. North Sea production peaked in 1999, and the UK returned to being an energy importer in 2004. The UK remains a net exporter of oil products, though the level of net imports of crude oil result in the UK being a net importer of oil. In 2011, 36.5% of energy used in the UK was imported, up sharply from the 2010 level as North Sea oil and gas output fell following adverse weather conditions as well as a number of maintenance issues. The import dependency ratio is at its highest level since 1976.

Chart 1.1.3: Net import dependency 1970 to 2011



1.1.12 Chart 1.1.4 shows United Kingdom primary energy production and consumption (from Tables 1.1.2 and 1.1.3) and also illustrates the degree to which the United Kingdom was dependent on energy imports prior to North Sea oil and gas becoming available.

Chart 1.1.4: UK energy production and consumption 1970 to 2011



Energy ratio (Table 1.1.4)

1.1.13 The relationship between energy consumption and economic activity at the aggregate level can be gauged by comparing a country's temperature corrected inland primary energy consumption with its gross domestic product (GDP). This approach is simple and comprehensive but it has a number of drawbacks which were discussed in the articles in the August 1976, May 1981 and May 1989 issues of *Economic Trends* (The Stationery Office). In September 2011 the methodology used by DECC was modified to move from using temperature deviations to a heating degree day methodology.

1.1.14 Heating degree days (HDD) are defined relative to a base temperature - the outside temperature above which a building needs no heating. DECC use 15.5° as the base data, as this seems the value most commonly used by other comparable countries, and a higher value did not produce appreciably better results. If the average outside air temperature on a given day is above this base temperature, you will not need to use any energy for heat; whilst if it is below, then your heat requirement that day will be in proportion to the temperature deficit in degrees. For example, using a base of 15.5°, if a day has an average temperature of 10°, then we calculate the HDD as 5.5. If the outside average temperature was minus 2°, then we would calculate the HDD as 17.5. The HDD's are summed for the month, and this value is then compared with the long term average. For example the long term average (from 1971 to 2000) for November is 257 HDD or 8.56 degrees per day. November 2009 and 2011 were mild, and the HDD was calculated as 212 and 179 HDD respectively, whilst the colder November 2010 had 304 HDD. The above numbers are calculated based on the average daily temperature (the average of the maximum and the minimum temperature) at each of 17 locations around the UK. More details of the methodology are detailed in an article in the June 2011 edition of *Energy Trends*.

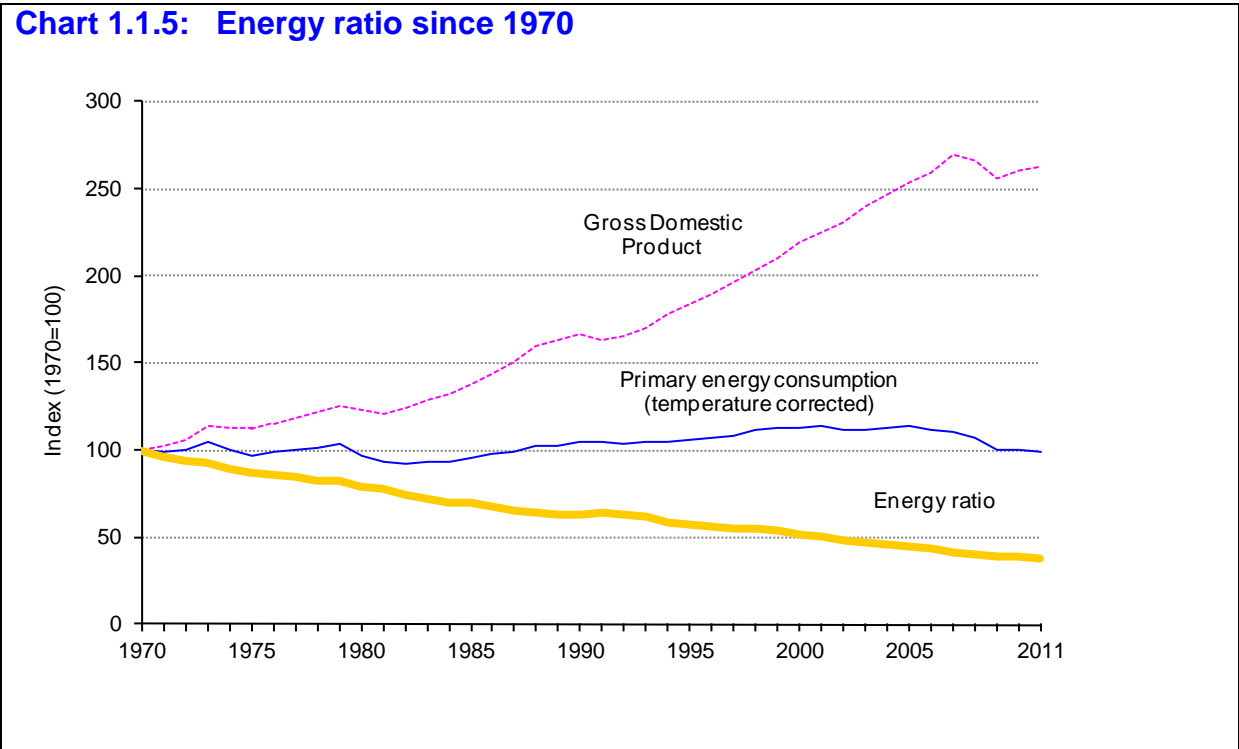
1.1.15 The temperature corrected series of total inland fuel consumption given in Table 1.1.4 indicates what annual consumption might have been if the number of heating degree days for a year had been the same as the average for the years 1971 to 2000. Different adjustment factors are then used for each month for each fuel. Research showed that temperature extremes had more effect on energy demand in the spring and autumn than that in winter and summer. In particular April, September and October showed the largest effects. In the summer, a 1 degree change may not be sufficient to result in additional heating being used. However, in October, a 1 degree difference may well be sufficient to result in heating being turned on or turned off, so resulting in a larger change.

1.1.16 Table 1.1.4 shows the United Kingdom's temperature corrected inland primary energy consumption in column B and GDP at constant prices since 1970 (column D), both expressed in absolute units (millions of tonnes of oil equivalent and billions of pounds sterling at 2009 prices respectively). Dividing energy consumption by GDP yields the energy ratio, which is expressed in

column F of the table as energy consumed per million pound of GDP and in column G as an index number based on 1970=100. For GDP at constant prices the published measure of GDP at market prices at 2009 prices has been used. The GDP figures used are on the European System of Accounts (ESA 95) basis, consistent with the UK national accounts.

1.1.17 Chart 1.1.5 illustrates trends in primary energy consumption, GDP and the energy ratio over the period 1970 to 2011. It shows that energy ratio fell steadily (with the exception of 1979 and 1991) from its 1970 level to 38 per cent of that level by 2011, an average decrease of around 2.4 per cent per annum. The pace of fall has increased in the last 10 years, averaging 2.9 per cent per annum. The strong downward trend since 1970 is explained by at least four factors: improvements in energy efficiency; saturation in the ownership levels and improved efficiency of the main domestic appliances; the unresponsiveness of certain industrial uses, like space heating, to long run output growth; and a structural shift away from energy intensive activities (such as steel making) towards low energy industries (such as services).

Chart 1.1.5: Energy ratio since 1970



Energy consumption by final user (Table 1.1.5)

1.1.18 Figures for energy consumption (excluding non-energy use) by category of final users are given in Table 1.1.5. Final users’ consumption is net of the fuel industries’ own use and conversion, transmission and distribution losses, but it includes conversion losses by final users. The user categories are industry (including iron and steel), transport (including coastal shipping), domestic and other final users (public administration, agriculture, commerce and other sectors), see Chapter 1, paragraphs 1.56 to 1.60 of the main Digest.

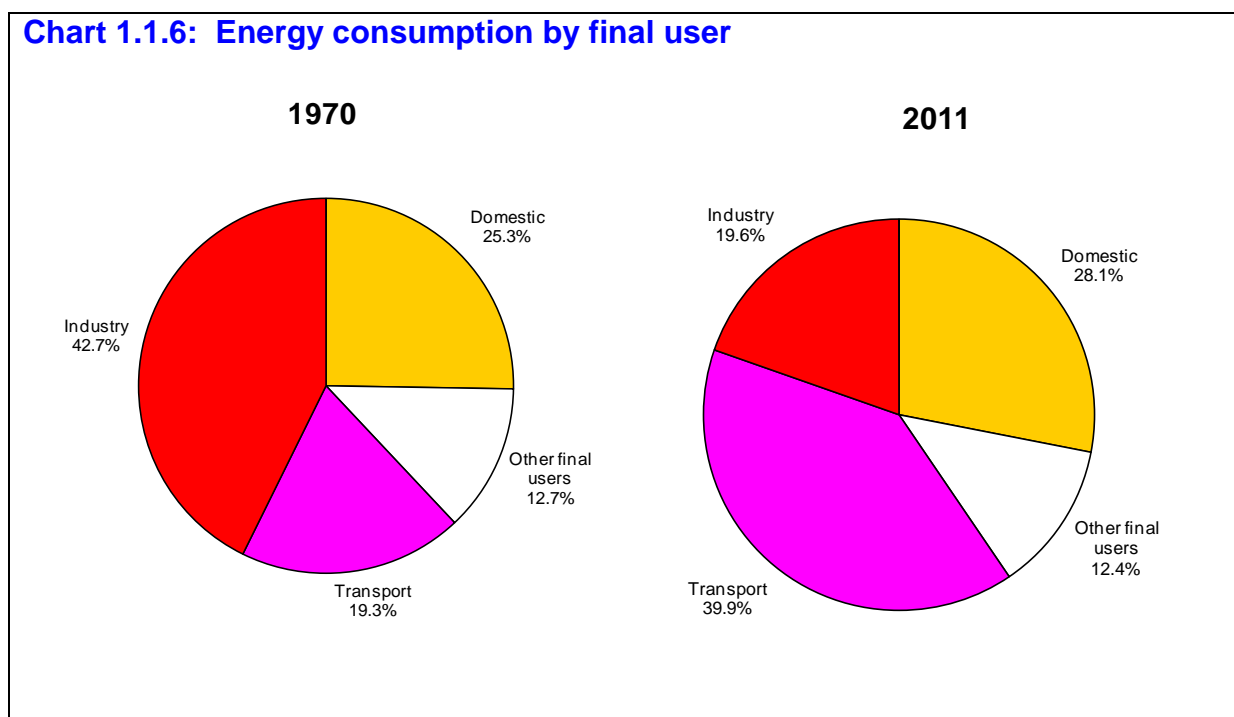
1.1.19 Up to 1986, data for final consumption of electricity include acquisitions from public supply, output of industrial nuclear stations, and amounts produced by transport undertakings and industrial hydropower for final consumption. From 1987 onwards, all consumption of electricity, whether produced by major power producers or by other generators, are included. There is a corresponding change in treatment, between 1986 and 1987, for other fuels used in electricity generation (see Chapter 1, paragraph 1.36 of the main Digest).

1.1.20 Overall consumption by final users has followed the same pattern as overall primary energy consumption since 1970, accounting for around 70 per cent of the total consumption throughout the period.

1.1.21 In 1970, the industry sector (including iron and steel) had the greatest level of consumption, with 43 per cent of total final consumption. However, since 1970 this sector has steadily reduced its consumption, falling to 34 per cent in 1980 and 26 per cent of total final consumption in 1990. It now stands at 20 per cent of total final consumption for energy use. This share is now less than that of the domestic sector which, has retained around the same share of 30 per cent since 1980. In 2011 the domestic share fell back to 28 per cent due to the warmer weather. In 2010, a much colder year, domestic's share increased to over 32 per cent. The greatest growth has been in the transport sector; this had a share of 19 per cent in 1970, before growing to 25 per cent in 1980, 33 per cent in 1990 and to just under 40 per cent in 2011. Service sector consumption has remained steady from 1970 to 2010 and was just over 12 per cent of total final consumption in 2011.

1.1.22 A comparison of energy consumption for energy purposes by final users in 1970 and 2011 is shown in Chart 1.1.6.

Chart 1.1.6: Energy consumption by final user

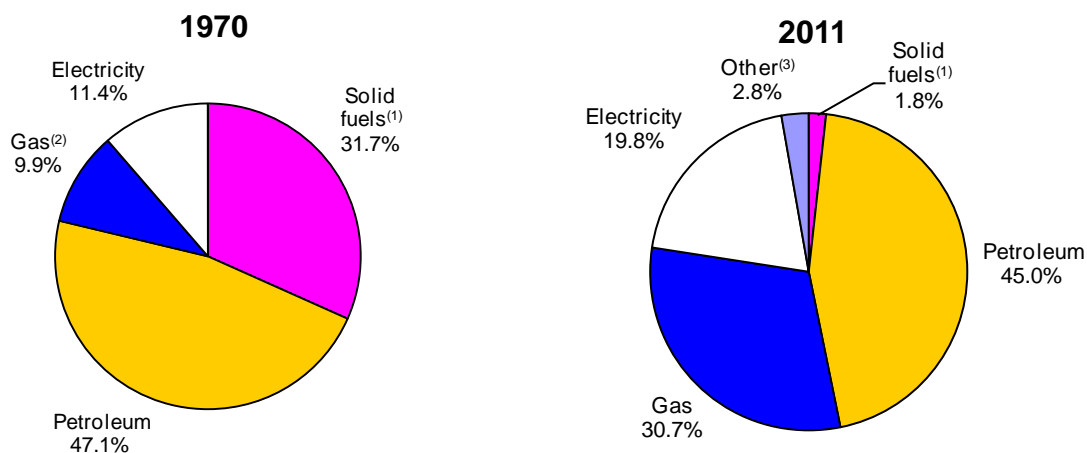


1.1.23 Table 1.1.5 also shows trends in final energy consumption for individual fuels. In 1970, consumption of coal and other solid fuels accounted for 32 per cent of final energy consumption, but this share has declined steadily to around 2 per cent in 2011. Over this period consumption of natural gas has increased rapidly, up from 10 per cent in 1970 to stand at 31 per cent in 2011. In 1970, town gas accounted for 7 per cent of consumption, however use of town gas was phased out in the mid 1970s. Electricity consumption has made steady progress over the last three decades, rising from 11 per cent of the total in 1970 to 20 per cent in 2011. Petroleum's share has remained broadly steady, with a 47 per cent share in 1970 falling back to 40 per cent in 1985, though this has since risen to 45 per cent in 2011. A comparison of final energy consumption for individual fuels in 1970 and 2011 is shown in Chart 1.1.7.

Expenditure on energy by final user (Table 1.1.6)

1.1.24 Total expenditure on fuels is presented in Table 1.1.6 from 1970, and figures for recent years are illustrated in Chapter 1, Chart 1.6 of the main Digest. Data for the latest years are taken from the value balances (Chapter 1, Tables 1.4 to 1.6 of the main Digest) whilst earlier years are taken from their forerunner tables of estimated values of energy purchases by sector. As before, coal purchased by the iron and steel sector and shown in the transformation section of the energy value balance table is included as a final purchase by the industry sector of coal.

Chart 1.1.7: Final energy consumption by type of fuel



- (1) includes manufactured fuels and coke oven gas
(2) includes town gas
(3) includes heat sold, bioenergy and waste

1.1.25 Overall final expenditure on energy was up by around £10 billion (8 per cent) in 2011 compared to 2010, as prices of fuels increased sharply for the second successive year. The level of £134 billion in 2011 is more than double that of 2000 and nearly three times than that in 1990. The change in the final expenditure for all fuels was driven by changes in the price of oil, which rose steadily throughout 2010 and into April 2011, before remaining at these elevated levels for the rest of the year. The value of spending on oil rose by 14 per cent on 2010 levels. Total expenditure on gas fell back by 8 per cent, due to reduced demand.

1.1.26 The makeup of total expenditure has changed through time, reflecting structural or long term changes in fuel mix and shorter term price and consumption effects. In 1970, expenditure on coal and coke accounted for around 15 per cent of total final expenditure, but was down to 1 per cent in 2011. By contrast, the general increase in the consumer price of petroleum (where duty is a major component) has meant that petroleum rose from 45 per cent of all expenditure in 1970 to 63 per cent in 2004. This percentage in 2009 declined to 54 per cent due to the rises in gas and electricity prices since 2004, but climbed to 61 per cent in 2011.

Mean air temperatures and heating degree days (Tables 1.1.7, 1.1.8 and 1.1.9)

1.1.27 Table 1.1.7 gives the average air temperatures in Great Britain between 1971 and 2000 by year, part year and month. Deviations from these means are presented for January 2000 to December 2011. Table 1.1.8 provides similar data, but for heating degree days rather than average temperatures. These heating degree deviations are used to provide the temperature corrected consumption series shown in Table 1.1.4.

1.1.28 Average monthly temperatures back to 1970 are also given in Table 1.1.9. The daily average temperature for 2011 was 1.0 degrees higher than the long term mean covering 1971 to 2000, and 1.8 degrees warmer than 2010. The year 2010 was the coldest since 1987 and included the coldest December for 100 years. The year 2011, according to the Met Office, was the second warmest on record and included the warmest April for over 100 years.

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1.1.1 Inland consumption of primary fuels and equivalents for energy use, 1970 to 2011

		1970	1971	1972	1973	1974
In original units of measurement						
	Unit					
Coal (1)	M.tonnes	156.9	139.3	122.4	133.0	117.9
Petroleum (2)	"	87.0	88.0	94.2	95.3	88.5
Natural gas (3)	GWh	131,472	212,037	300,808	325,455	389,286
Nuclear electricity (4)	"	26,039	27,418	29,275	27,757	33,377
Hydro electricity (4)(5)	"	4,539	3,397	3,429	3,874	4,095
Million tonnes of oil equivalent						
Coal (1)		99.0	87.7	76.8	83.2	73.3
Petroleum (2)		92.4	93.5	100.2	101.5	94.3
Natural gas (3)		11.3	18.2	25.9	28.0	33.5
Nuclear electricity (4)		7.0	7.4	7.9	7.5	9.0
Hydro electricity (5)		0.4	0.3	0.3	0.3	0.4
Total		210.1	207.1	211.0	220.5	210.4
Percentage shares (energy supplied basis)						
Coal		47.1	42.3	36.4	37.7	34.8
Petroleum		44.0	45.2	47.5	46.0	44.8
Natural gas		5.4	8.8	12.3	12.7	15.9
Nuclear electricity		3.3	3.6	3.7	3.4	4.3
Hydro electricity		0.2	0.1	0.1	0.2	0.2
Fossil fuel dependency (7)		96.5	96.3	96.2	96.4	95.5
In original units of measurement						
	Unit					
Coal (1)	M.tonnes	120.0	122.0	122.7	119.9	129.6
Petroleum (2)	"	79.4	77.8	79.3	81.2	81.6
Natural gas (3)	GWh	407,750	432,661	459,858	477,002	521,197
Nuclear electricity (4)	"	30,215	35,570	39,575	37,065	38,062
Hydro electricity (4)(5)	"	3,789	4,552	3,919	4,038	4,289
Million tonnes of oil equivalent						
Coal (1)		73.7	75.0	75.3	73.3	78.8
Petroleum (2)		85.0	83.5	85.1	87.2	87.7
Natural gas (3)		35.1	37.2	39.5	41.0	44.8
Nuclear electricity (4)		8.1	9.6	10.6	10.0	10.2
Hydro electricity (5)		0.3	0.4	0.3	0.3	0.4
Total		202.2	205.6	210.9	211.8	221.9
Percentage shares (energy supplied basis)						
Coal		36.5	36.5	35.7	34.6	35.5
Petroleum		42.0	40.6	40.4	41.2	39.5
Natural gas		17.3	18.1	18.7	19.4	20.2
Nuclear electricity		4.0	4.6	5.0	4.7	4.6
Hydro electricity		0.2	0.2	0.2	0.2	0.2
Fossil fuel dependency (7)		95.8	95.2	94.8	95.2	95.2
In original units of measurement						
	Unit					
Coal (1)	M.tonnes	120.8	118.2	110.7	111.5	79.0
Petroleum (2)	"	70.5	64.2	65.2	61.7	78.6
Natural gas (3)	GWh	521,051	528,114	525,476	547,750	560,410
Nuclear electricity (4)	"	36,870	37,897	44,212	50,138	53,957
Hydro electricity (4)(5)	"	3,934	4,383	4,558	4,563	4,005
Million tonnes of oil equivalent						
Coal (1)		73.3	72.9	68.0	68.6	48.7
Petroleum (2)		76.2	69.5	70.7	67.2	84.7
Natural gas (3)		44.8	45.4	45.2	47.1	48.2
Nuclear electricity (4)		9.9	10.2	11.9	13.5	14.5
Hydro electricity (4)(5)		0.3	0.4	0.4	0.4	0.3
Total (6)		204.5	198.4	196.1	196.8	196.4
Percentage shares (energy supplied basis)						
Coal		35.8	36.7	34.7	34.9	24.8
Petroleum		37.3	35.0	36.0	34.2	43.1
Natural gas		21.9	22.9	23.0	23.9	24.5
Nuclear electricity		4.8	5.1	6.1	6.8	7.4
Hydro electricity		0.2	0.2	0.2	0.2	0.2
Fossil fuel dependency (7)		95.0	94.6	93.7	93.0	92.4

1.1.1 Inland consumption of primary fuels and equivalents for energy use, 1970 to 2011 continued)

		1985	1986	1987	1988	1989
In original units of measurement						
	Unit					
Coal (1)	M.tonnes	105.3	113.5	116.2	112.0	108.1
Petroleum (2)	"	66.5	65.3	63.5	67.8	69.0
Natural gas (3)	GWh	602,701	612,724	629,311	597,220	571,187
Nuclear electricity (4)	"	61,391	59,079	55,238	63,456	71,734
Hydro electricity (4)(5)	"	4,093	4,780	4,198	4,919	4,758
Net electricity imports	"	..	4,255	11,635	12,830	12,631
Million tonnes of oil equivalent						
Coal (1)		64.8	70.0	71.7	70.0	67.0
Petroleum (2)		72.2	71.1	69.4	74.0	75.4
Natural gas (3)		51.8	52.7	54.1	51.4	49.1
Nuclear electricity (4)		16.5	15.4	14.4	16.6	17.7
Hydro electricity (4)(5)		0.4	0.4	0.4	0.4	0.4
Net electricity imports		..	0.4	1.0	1.1	1.1
Bioenergy & waste		..	..	..	..	0.7
Total (6)		205.7	210.0	211.0	213.5	211.4
Percentage shares (energy supplied basis)						
Coal		31.5	33.3	34.0	32.8	31.7
Petroleum		35.1	33.9	32.9	34.7	35.7
Natural gas		25.2	25.1	25.6	24.1	23.2
Nuclear electricity		8.0	7.4	6.8	7.8	8.4
Hydro electricity		0.2	0.2	0.2	0.2	0.2
Net electricity imports		..	0.2	0.5	0.5	0.5
Bioenergy & waste		0.3
Fossil fuel dependency (7)		91.8	92.3	92.5	91.6	90.6
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		1990	1991	1992	1993	1994
In original units of measurement						
	Unit					
Coal (1)	M.tonnes	108.4	107.6	101.1	87.4	82.1
Petroleum (2)	"	70.6	70.6	70.9	71.5	70.0
Natural gas (3)	GWh	595,131	643,863	640,459	732,090	754,284
Nuclear electricity (4)	"	65,749	70,543	76,807	76,807	89,353
Hydro electricity (4)(5)	"	5,216	4,635	5,465	5,465	4,521
Net electricity imports	"	11,943	16,408	16,694	16,716	16,887
Million tonnes of oil equivalent						
Coal (1)		66.9	67.1	63.0	55.0	51.3
Petroleum (2)		77.2	77.1	77.5	78.1	76.7
Natural gas (3)		51.2	55.4	55.1	62.9	64.9
Nuclear electricity		16.3	17.4	18.5	21.6	21.2
Hydro electricity (5)		0.4	0.4	0.5	0.5	0.4
Net electricity imports		1.0	1.4	1.4	1.4	1.5
Bioenergy & waste		0.7	0.7	0.8	1.2	1.6
Total (6)		213.6	219.5	216.7	220.7	217.5
Percentage shares (energy supplied basis)						
Coal		31.3	30.6	29.1	24.9	23.6
Petroleum		36.1	35.1	35.8	35.4	35.3
Natural gas		24.0	25.2	25.4	28.5	29.8
Nuclear electricity		7.6	7.9	8.5	9.8	9.7
Hydro electricity		0.2	0.2	0.2	0.2	0.2
Net electricity imports		0.5	0.6	0.7	0.7	0.7
Bioenergy & waste		0.3	0.3	0.4	0.5	0.7
Fossil fuel dependency (7)		91.4	90.9	90.2	88.8	88.7
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		1995	1996	1997	1998	1999
In original units of measurement						
	Unit					
Coal (1)	M.tonnes	77.2	72.1	63.5	63.2r	55.8r
Petroleum (2)	"	68.9	71.3	68.7	68.6r	69.7r
Natural gas (3)	GWh	805,058	941,841	971,503	1,015,486r	1,075,907r
Nuclear electricity (4)	"	88,282	94,671	98,146	99,486	95,133
Hydro electricity (4)(5)	"	5,438	3,879	4,836	5,994	6,187
Net electricity imports	"	16,313	16,755	16,574	12,468	14,244
Million tonnes of oil equivalent						
Coal (1)		48.9	45.7	40.8	41.0r	36.0r
Petroleum (2)		75.4	77.8	75.5	75.4r	76.4r
Natural gas (3)		69.2	81.0	83.5	87.3r	92.5
Nuclear electricity		21.3	22.1	23.1	23.4	22.4
Hydro electricity (5)		0.5	0.3	0.4	0.5	0.5
Net electricity imports		1.4	1.4	1.4	1.1	1.2
Bioenergy & waste		1.7	1.8	1.9	2.1	2.2
Total (6)		218.4	230.0	226.8	230.7r	231.3r
Percentage shares (energy supplied basis)						
Coal		22.4	19.9	18.0	17.8r	15.6r
Petroleum		34.5	33.8	33.3	32.7r	33.0r
Natural gas		31.7	35.2	36.8	37.8r	40.0r
Nuclear electricity		9.7	9.6	10.2	10.2	9.7
Hydro electricity		0.2	0.1	0.2	0.2	0.2
Net electricity imports		0.6	0.6	0.6	0.5	0.5
Bioenergy & waste		0.8	0.8	0.8	0.9	1.0
Fossil fuel dependency (7)		88.6	88.9	88.1	88.3	88.6

1.1.1 Inland consumption of primary fuels and equivalents for energy use, 1970 to 2011 (continued)

		2000	2001	2002	2003	2004
In original units of measurement						
	Unit					
Coal (1)	M.tonnes	59.7r	63.5r	58.8r	63.5r	61.3
Petroleum (2)	"	69.9r	69.1r	67.0r	66.5r	68.3r
Natural gas (3)	GWh	1,114,942r	1,111,363r	1,097,031r	1,100,616r	1,123,922r
Nuclear electricity (4)	"	85,063	90,093	87,848	88,686	79,999
Wind & Hydro electricity (4)(5)	"	6,032	5,020	6,047	4,516	6,783
Net electricity imports	"	14,174	10,399	8,414	2,160	7,490
Million tonnes of oil equivalent						
Coal (1)		38.5r	40.8r	37.7r	40.5r	39.1
Petroleum (2)		76.7r	75.9r	73.5r	73.0r	75.1r
Natural gas (3)		95.9r	95.6r	94.3r	94.6r	96.6
Nuclear electricity		19.6	20.8	20.1	20.0	18.2
Wind & Hydro electricity (5)		0.5	0.4	0.5	0.4	0.6
Net electricity imports		1.2	0.9	0.7	0.2	0.6
Bioenergy & waste		2.3	2.5	2.8	3.1	3.5
Total (6)		234.8r	236.9r	229.6r	231.9r	233.6
Percentage shares (energy supplied basis)						
Coal		16.4r	17.2r	16.4r	17.5	16.7
Petroleum		32.7r	32.0r	32.0r	31.5r	32.1r
Natural gas		40.8r	40.3r	41.1r	40.8r	41.4r
Nuclear electricity		8.4	8.8	8.8r	8.6	7.8
Wind & Hydro electricity		0.2	0.2	0.2	0.2	0.2
Net electricity imports		0.5	0.4	0.3	0.1	0.3
Bioenergy & waste		1.0	1.1	1.2	1.3r	1.5
Fossil fuel dependency (7)		89.9r	89.6	89.5	89.8r	90.2r
		2005	2006	2007	2008	2009
In original units of measurement						
	Unit					
Coal (1)	M.tonnes	62.4r	68.0r	63.7r	59.0r	48.8r
Petroleum (2)	"	71.3r	70.4	69.6r	68.4r	64.8r
Natural gas (3)	GWh	1,096,544r	1,039,629r	1,048,930r	1,082,099r	1,000,553r
Nuclear electricity (4)	"	81,618	75,451	63,028	52,486	69,098
Wind & Hydro electricity (4)(5)	"	7,834	8,829	10,365r	12,269r	14,565
Net electricity imports	"	8,321	7,517	5,215	11,022	2,861
Million tonnes of oil equivalent						
Coal (1)		39.9r	43.4r	41.0	37.8r	31.0r
Petroleum (2)		78.2r	77.4	76.3r	75.1	71.0r
Natural gas (3)		94.3	89.4	90.2	93.0	86.0
Nuclear electricity		18.4	17.1	14.0	11.9	15.2
Wind & Hydro electricity (5)		0.7	0.8	0.9	1.1	1.3
Net electricity imports		0.7	0.6	0.4	0.9	0.2
Bioenergy & waste		4.2	4.4	4.7	5.5	6.2
Total (6)		236.3r	233.1r	227.5r	225.3r	211.0r
Percentage shares (energy supplied basis)						
Coal		16.9	18.6r	18.0	16.8r	14.7r
Petroleum		33.1r	33.2	33.6	33.3	33.7r
Natural gas		39.9r	38.3	39.6	41.3r	40.8r
Nuclear electricity		7.8	7.3	6.2	5.3	7.2
Wind & Hydro electricity		0.3	0.3	0.4	0.5	0.6
Net electricity imports		0.3	0.3	0.2	0.4	0.1
Bioenergy & waste		1.8	1.9	2.0r	2.4	2.9
Fossil fuel dependency (7)		89.9	90.2	91.2	91.4	89.1r
		2010	2011			
In original units of measurement						
	Unit					
Coal (1)	M.tonnes	50.8r	50.5			
Petroleum (2)	"	64.2r	62.1			
Natural gas (3)	GWh	1,085,305r	896,746			
Nuclear electricity (4)	"	62,140	68,980			
Wind & Hydro electricity (4)(5)	"	13,859	21,437			
Net electricity imports	"	2,663	6,222			
Million tonnes of oil equivalent						
Coal (1)		32.2	32.4			
Petroleum (2)		70.3r	68.0			
Natural gas (3)		93.3r	77.1			
Nuclear electricity		13.9	15.6			
Wind & Hydro electricity (5)		1.2	1.8			
Net electricity imports		0.2	0.5			
Bioenergy & waste		6.9	7.5			
Total (6)		218.0r	203.0			
Percentage shares (energy supplied basis)						
Coal		14.8	16.0			
Petroleum		32.2r	33.5			
Natural gas		42.8r	38.0			
Nuclear electricity		6.4	7.7			
Wind & Hydro electricity		0.5	0.9			
Net electricity imports		0.1	0.3			
Bioenergy & waste		3.2	3.7			
Fossil fuel dependency (7)		89.8	87.5			

(1) Includes other solid fuels.

(2) Excludes petroleum for non-energy use and marine bunkers.

(3) Includes colliery methane, non-energy use of natural gas up to 1988.

(4) Electricity generated i.e. including own use.

(5) Excludes pumped storage. Includes generation at wind stations from 1988.

(6) Following the introduction of the energy balance presentation it has been possible to separately identify the losses from the statistical difference for gas and electricity, bringing them onto the same basis as other fuels. This has been accounted for in the total from 1994 onwards.

(7) Fossil fuel share of energy consumption

1.1.2 Availability and consumption of primary fuels and equivalents (energy supplied basis) 1970 to 2011

Thousand tonnes of oil equivalent

	Available supply												
	Production				Imports					Exports			
	Coal	Petroleum	Natural gas	Primary electricity	Total	Coal	Petroleum	Natural gas	Electricity	Total	Coal	Petroleum	Total
	(1)	(2)	(3)	(4)	(5)	(6)					(5)	(6)	(7)
1970	92,792	166	10,461	7,388	110,807	81	131,142	839	48	132,109	2,620	19,762	22,381
1971	94,178	227	17,384	7,661	119,450	2,887	136,359	836	10	140,092	2,048	20,024	22,071
1972	76,484	358	25,084	8,163	110,089	3,408	138,253	771	40	142,472	1,433	21,160	22,593
1973	82,636	400	27,235	7,793	118,064	1,214	144,117	738	5	146,074	2,131	22,026	24,157
1974	68,630	438	32,847	9,322	111,237	2,317	136,472	612	5	139,407	2,149	17,283	19,432
1975	79,172	1,675	34,203	8,446	123,496	3,209	111,703	844	8	115,763	1,975	16,517	18,492
1976	75,988	13,114	36,221	9,951	135,274	2,010	108,818	967	-	111,796	1,506	21,671	23,177
1977	74,769	41,186	37,845	10,973	164,773	1,761	90,004	1,680	-	93,445	1,753	33,112	34,865
1978	75,479	58,184	36,241	10,308	180,212	1,736	85,815	4,758	-	92,309	2,164	41,289	43,460
1979	74,028	83,966	36,596	10,598	205,188	3,169	77,903	8,323	-	89,394	2,025	57,607	59,632
1980	78,502	86,911	34,790	10,247	210,450	5,030	60,385	9,995	-	75,411	3,320	58,385	61,705
1981	78,008	96,941	34,712	10,562	220,223	3,192	50,040	10,681	-	63,912	6,884	69,615	76,500
1982	76,069	112,519	35,281	12,274	236,143	3,360	49,944	9,885	-	63,189	5,693	80,595	86,288
1983	72,696	125,482	36,379	13,866	248,423	3,713	43,543	10,701	-	57,957	4,844	90,608	95,452
1984	30,719	137,646	35,563	14,845	218,773	7,980	59,146	12,606	-	79,731	1,668	101,289	102,957
1985	56,572	139,404	39,679	16,851	252,506	9,482	52,577	12,645	-	74,703	2,441	106,602	109,043
1986	65,592	139,084	41,717	15,839	262,232	7,794	57,610	11,784	366	77,553	2,615	112,166	114,796
1987	63,189	135,071	43,674	14,797	256,731	7,363	54,305	11,079	1,000	73,746	1,872	107,108	108,980
1988	63,303	125,469	42,059	16,990	248,469	9,270	58,254	9,922	1,103	78,550	1,595	97,266	98,861
1989	60,882	100,373	41,188	18,150	221,320	8,840	64,153	9,784	1,163	83,941	1,738	74,434	76,249
1990	56,443	100,104	45,480	16,706	219,446	10,271	69,217	6,866	1,031	87,385	1,880	80,408	82,293
1991	57,555	99,890	50,638	17,830	226,669	13,493	72,942	6,193	1,412	94,040	1,526	81,105	82,632
1992	51,514	103,734	51,494	18,924	226,547	13,955	74,025	5,268	1,438	94,686	854	85,245	86,155
1993	41,588	109,613	60,542	21,969	234,882	13,103	77,612	4,173	1,438	96,326	954	95,312	96,854
1994	29,704	138,937	64,636	21,670	256,559	10,840	68,680	2,843	1,452	83,815	1,098	114,083	116,003
1995	32,751	142,746	70,807	21,735	269,738	11,615	63,341	1,673	1,405	78,034	889	116,001	117,859
1996	31,135	142,079	84,180	22,393	281,559	13,141	64,347	1,703	1,444	80,635	896	114,909	117,115
1997	30,303	140,443	85,887	23,535	282,082	14,400	63,813	1,209	1,429	80,850	1,061	115,815	118,743
1998	25,757	145,263	90,186	23,950	287,233	15,371	64,696	910	1,083	82,061	931	118,896	122,556
1999	23,219	150,160	99,109	22,942	297,655	14,039	64,085	1,106	1,247	80,476	774	123,920	131,976
2000	19,551	138,282	108,397	20,153	288,690	16,079	74,812	2,238	1,230	94,359	813	123,923	137,330
2001	19,969	127,828	105,870	21,227	277,426	23,565	77,235	2,619	917	104,337	679	115,680	128,277
2002	18,808	127,037	103,646	20,619	272,864	18,995	78,348	5,201	790	103,334	667	120,758	134,451
2003	17,636	116,242	102,996	20,428	260,310	21,396	77,062	7,420	440	106,430	530	107,201	123,208
2004	15,594	104,547	96,411	18,746	238,378	24,182	88,394	11,439	841	125,258	572	103,621	114,202
2005	12,714	92,883	88,219	19,044	216,541	29,157	88,791r	14,904	960	134,299r	509	91,470	100,494
2006	11,418	83,958	80,012	17,889	197,246	33,363	94,226	20,983	884	150,006r	462	86,244r	97,410r
2007	10,697	83,912	72,125	14,927r	185,970r	28,928	90,143r	29,065	741	149,331r	589	88,394r	99,975r
2008	11,305	78,580	69,681	12,964r	177,031r	28,910	91,949	35,000	1,057	157,892r	599	84,265	95,521
2009	11,039	74,739	59,737	16,481r	166,896r	24,819r	83,579r	39,191	568	149,468r	617r	77,450	90,223r
2010	11,470	68,983	57,187	15,117r	157,892r	17,186r	85,759r	50,688	614	156,173r	908r	74,534	91,184r
2011	11,580	56,902	45,288	17,468	136,990	21,434	87,859	50,251	747	162,180	727	67,210	84,127

(1) Crude oil plus all condensates and petroleum gases extracted at gas separation plants.

(2) Includes colliery methane.

(3) Nuclear and natural flow hydro electricity excluding generation of pumped storage stations. From 1988 includes generation at wind stations.

(4) Includes solar and geothermal heat, solid renewable sources (wood, waste, etc), and gaseous renewable sources (landfill gas, sewage gas) from 1988.

(5) Includes other solid fuels.

(6) Crude and process oils and petroleum products.

(7) Includes exports of natural gas and electricity.

1.1.2 Availability and consumption of primary fuels and equivalents (energy supplied basis) 1970 to 2011 (continued)

Thousand tonnes of oil equivalent

	Marine		Statistical				Gross			Inland consumption for energy use				
	Bunkers	Stock changes (8)		Difference (9)			Total	inland consumption	Non-energy use					Total
		Petro-leum	Coal	Petro-leum	Nat-ural gas	Coal				Petro-leum	Coal	Petro-leum	Natural gas		Primary electricity
	(5)	(6)	(5)	(6)	(7)	(13)	(14)	(10)	(5)	(6)	(2)(11)	(3)(12)	(4)	
1970	+5,721	+8,542	-680	..	+199	+466	+665	223,341	10,859	98,994	92,366	11,300	7,435	210,095
1971	+5,874	-7,046	-3,489	..	-239	-652	-891	220,170	10,839	87,732	93,543	18,220	7,672	207,167
1972	+5,265	-1,370	+2,904	..	-242	-887	-1,129	225,109	11,474	76,847	100,212	25,855	8,203	211,117
1973	+5,769	+1,456	+458	..	+60	-340	-280	235,847	12,635	83,235	101,501	27,974	7,797	220,507
1974	+4,922	+4,839	-5,139	..	-360	-514	-874	225,116	12,865	73,278	94,327	33,460	9,326	210,391
1975	+3,572	-6,489	+3,660	..	-202	-395	-597	213,769	10,255	73,716	84,963	35,060	8,453	202,192
1976	+3,698	-1,597	-348	..	+121	-254	-133	218,116	10,925	75,016	83,480	37,188	9,951	205,635
1977	+2,942	+600	+2,466	..	-113	-557	-670	222,806	10,517	75,263	85,110	39,526	10,973	210,872
1978	+2,733	-1,368	-814	..	-363	-569	-932	223,214	10,245	73,321	87,177	40,999	10,301	211,798
1979	+2,789	+3,600	-2,229	..	+43	-806	-763	232,768	10,232	78,814	87,681	44,919	10,597	222,011
1980	+2,562	-6,789	+40	..	-171	-1,567	-1,738	213,118	7,464	73,263	76,197	44,785	10,247	204,492
1981	+2,156	-2,013	+3,882	..	+562	-154	+408	207,756	8,111	72,865	69,539	45,392	10,564	198,360
1982	+2,715	-5,660	+2,305	..	-118	-2,315	-2,433	204,540	8,134	67,958	70,671	45,166	12,274	196,069
1983	+2,118	-3,209	+1,010	..	+234	-544	-310	206,290	8,625	68,590	67,228	47,080	13,866	196,764
1984	+2,370	+11,842	+922	..	-136	+247	+111	206,052	8,847	48,738	84,651	48,168	14,845	196,402
1985	+2,239	+1,461	+297	-521	-249	-731	-980	216,184	9,230	64,824	72,179	51,803	16,851	205,657
1986	+2,212	-1,889	+338	-836	+1,126	-83	+1,043	221,432	10,247	70,008	71,148	52,665	16,189	210,010
1987	+1,756	+3,396	+338	-662	-355	-146	-501	222,311	10,290	71,721	69,431	54,090	15,796	211,038
1988	+1,932	-1,547	+1,272	-637	+189	-111	+78	225,392	10,970	69,621	74,042	51,352	18,083	213,098
1989	+2,525	-1,787	-628	-281	+817	+159	+976	224,767	12,039	67,014	75,399	49,113	19,236	211,433
1990	+2,666	+891	+1,049	+108	+1,229	+990	+2,219	226,139	11,252	66,954	77,159	51,187	17,733	213,687
1991	+2,618	-3,402	-851	-273	+947	+448	+1,395	232,330	12,184	67,067	77,137	55,362	19,240	219,505
1992	+2,688	-2,439	+709	-348	+884	-647	+237	230,549	12,890	63,060	77,492	55,080	20,359	216,815
1993	+2,618	+766	-631	+84	+411	+1,597	+2,008	233,964	13,012	54,913	78,126	62,948	23,406	220,564
1994	+2,451	+11,055	+454	+233	+772	-1,668	-87	231,956	13,521	51,272	76,668	64,857	23,087	217,491
1995	+2,602	+5,088	+1,122	+820	+820	-426	+1,752	232,458	13,735	48,924	75,421	69,236	23,116	218,421
1996	+2,813	+2,521	-315	-236	+165	-1,814	+701	243,535	13,547	45,738	77,819	80,984	23,833	229,988
1997	+3,121	-2,389	+320	-354	+462	-1,784	-1,048	239,694	12,879	40,792	75,483	83,534	24,960	226,814
1998	+3,257	+773	-741	-32	+39	-692	-38	243,480r	12,737	40,970r	75,357r	87,316r	25,023	230,743r
1999	+2,471	-491	+428	+670	-669	+1,190	715	244,291r	12,963	35,993r	76,433r	92,511r	24,166	231,328r
2000	+2,208	+3,723	+807	-952	-234	+783	920	247,090r	12,283	38,541r	76,720r	95,868r	21,372	234,807r
2001	+2,433	-2,077	-1,333	-57	-196	+486	569	247,586r	10,732	40,778r	75,863r	95,560r	22,121	236,855r
2002	+2,044	+564	+1,514	-633	+154	-490	-99	241,149r	11,544	37,699r	73,480r	94,328r	21,342	229,605r
2003	+1,879	+1,979	+217	+304	-146	-451	-273r	244,152r	12,285	40,482r	73,017r	94,636r	20,614	231,867r
2004	+2,221	-139	-476	-536	-51	-227	-6	246,062r	12,429	39,065r	75,056r	96,640r	19,390	233,633r
2005	+2,174	-1,503	+1,674r	+114	+17	+348r	394r	248,457r	12,143	39,859r	78,241r	94,286r	19,760	236,313r
2006	+2,479	-961	-1,325r	-553	-156	-1r	-135r	244,524r	11,413	43,358r	77,403r	89,392r	18,536	233,111r
2007	+2,506	+1,926	+2,036	+471	-1r	-200r	-219r	237,252r	9,728r	40,961r	76,343r	90,192r	15,376	227,525r
2008	+2,728	-1,809	+397r	-265	-209	+309r	130	234,997r	9,679r	37,807r	75,078r	93,044r	13,912	225,318r
2009	+2,615	-4,208r	+959	-419	-418r	+33r	-365r	219,857r	8,890	31,032r	71,009r	86,032r	16,727r	210,967r
2010	+2,251	+4,456r	+614	+1,313	-28r	+197r	130r	227,012r	8,999r	32,204r	70,273r	93,319r	15,346r	218,013r
2011	+2,413	+149	+877	-1,945	+11	-437	-598	211,711	8,669	32,437	68,038	77,106	18,003	203,042

(8) Stock fall (+), stock rise (-).

(9) Recorded demand minus supply.

(10) Petroleum products for feedstock for petrochemical plants, industrial and white spirits, lubricants bitumen and wax. Also includes miscellaneous petroleum products mainly for inland consumption but excludes small quantities derived from coal. From 1989 also includes estimated quantities of natural gas used for non-energy purposes. Data for non-energy use of natural gas can be found in Chapter 1, Tables 1.1 to 1.3 and Chapter 4, Tables 4.1 and 4.2.

(11) Includes non-energy use of natural gas up to 1988. (See footnote 10).

(12) Includes net imports of electricity.

(13) As of 1994 this total includes the statistical differences for electricity and natural gas.

(14) Equivalent to primary demand as in Chapter 1, Tables 1.1 to 1.3.

1.1.3 Comparison of net imports of fuel with total consumption of primary fuels and equivalents, 1970 to 2011

	Gross inland consumption of primary fuels (1) plus marine bunkers	Net imports (+) /net exports (-) of fuels	Import dependency (2)	Export ratio (3)
	(A)	(B)	(C)	(D)
	Million tonnes of oil equivalent		Per cent	
1970	229.1	109.7	47.9	-
1971	226.0	118.0	52.2	-
1972	230.4	119.9	52.0	-
1973	241.6	121.9	50.5	-
1974	230.0	120.0	52.2	-
1975	217.3	97.3	44.8	-
1976	221.8	88.6	40.0	-
1977	225.7	58.6	25.9	-
1978	225.9	48.8	21.6	-
1979	235.6	29.8	12.6	-
1980	215.7	13.7	6.4	-
1981	209.9	-12.6	-	6.0
1982	207.3	-23.1	-	11.1
1983	208.4	-37.5	-	18.0
1984	208.4	-23.2	-	11.1
1985	218.4	-34.3	-	15.7
1986	223.6	-37.2	-	16.7
1987	224.1	-35.2	-	15.7
1988	227.3	-20.3	-	8.9
1989	227.3	7.7	3.4	-
1990	228.8	5.1	2.2	-
1991	234.9	11.4	4.9	-
1992	233.2	8.5	3.7	-
1993	236.6	-0.5	-	0.2
1994	234.4	-32.2	-	13.7
1995	235.1	-39.8	-	16.9
1996	246.3	-36.5	-	14.8
1997	242.8	-37.9	-	15.6
1998	246.7r	-40.5	-	16.4
1999	246.8r	-51.5	-	20.9
2000	249.3r	-43.0	-	17.2
2001	250.0r	-23.9	-	9.6
2002	243.2r	-31.1	-	12.8
2003	246.0r	-16.8	-	6.8
2004	248.3	11.1	4.5	-
2005	250.6r	33.8	13.5	-
2006	247.0r	52.6r	21.3r	-
2007	239.8r	49.4r	20.6r	-
2008	237.7r	62.4	26.2	-
2009	222.5r	59.2r	26.6r	-
2010	229.3r	65.0r	28.3r	-
2011	214.1	78.1	36.5	-

(1) Includes non-energy use. Equivalent to primary demand plus marine bunkers.

(2) Import dependency (C) = $\frac{\text{Net imports (B)}}{\text{(A)}} \times 100$

(3) Export ratio (D) = $\frac{\text{Net exports (B)}}{\text{(A)}} \times 100$

1.1.4 Primary energy consumption, gross domestic product and the energy ratio⁽¹⁾ 1970 to 2011

	Total inland consumption of primary energy (temperature corrected) (2)	Gross domestic product at market prices (2009 prices)	Energy ratio (3)	
	Million tonnes of oil equivalent (A)	£ billion (B)	Tonnes of oil equivalent per £1 million GDP (C)	Index 1970 = 100
1970	211.9	547.7	386.9	100.0
1971	209.7	560.4	374.2	96.7
1972	212.6	582.1	365.2	94.4
1973	223.1	625.4	356.7	92.2
1974	212.4	618.4	343.5	88.8
1975	206.0	615.3	334.8	86.5
1976	208.9	631.1	331.0	85.6
1977	213.1	646.3	329.7	85.2
1978	213.7	667.5	320.2	82.7
1979	220.0	686.5	320.5	82.8
1980	206.2	672.7	306.5	79.2
1981	198.7	664.2	299.1	77.3
1982	196.3	679.2	289.0	74.7
1983	197.5	705.2	280.1	72.4
1984	196.7	726.0	271.0	70.0
1985	203.1	754.0	269.3	69.6
1986	206.8	786.5	262.9	68.0
1987	210.0	827.0	253.9	65.6
1988	217.7	873.1	249.3	64.4
1989	217.8	895.7	243.2	62.8
1990	221.6	912.1	243.0	62.8
1991	221.4	895.8	247.1	63.9
1992	220.6	903.5	244.2	63.1
1993	222.5	931.5	238.9	61.7
1994	221.5	974.1	227.4	58.8
1995	223.6	1,005.1	222.5	57.5
1996	227.1	1,036.3	219.1	56.6
1997	229.2	1,076.3	212.9	55.0
1998	236.8	1,114.2	212.6	54.9
1999	238.0	1,149.5	207.1	53.5
2000	239.6	1,198.1	200.0	51.7
2001	240.5	1,232.7	195.1	50.4
2002	236.9r	1,262.7	187.6	48.5
2003	236.1r	1,310.9	180.1	46.5
2004	239.1r	1,349.0	177.3	45.8
2005	241.6r	1,386.4	174.3	45.0
2006	236.9r	1,422.5	166.5	43.0
2007	234.4r	1,474.2	159.0	41.1
2008	227.2r	1,459.9	155.6	40.2
2009	213.1r	1,401.9	152.0	39.3
2010	213.3r	1,427.1	149.4	38.6
2011	209.6	1,437.9	145.8	37.7

(1) See paragraphs 1.1.13 to 1.1.17.

(2) The methodology used to temperature correct gas consumption has been modified from 1990. See paragraph 1.1.15 onwards.

(3) Energy ratio (C) = (A)

(B)

1.1.5 Energy consumption by final user (energy supplied basis)⁽¹⁾ 1970 to 2011

Thousand tonnes of oil equivalent

Industry (2)											
	Coal	Coke and breeze (3)	Other solid fuels(4)	Coke oven gas	Town gas	Natural gas (5)	Electricity	Heat sold	Bioenergy & waste	Petroleum	Total (3)
1970	12,681	9,655	209	1,164	1,778	1,788	6,275	..	..	28,397	62,333
1971	10,232	8,298	176	1,118	1,038	5,194	6,313	..	..	28,130	60,746
1972	7,675	7,832	252	1,111	1,154	8,136	6,292	..	..	28,674	61,307
1973	7,950	8,340	226	1,290	788	10,791	6,884	..	..	28,691	65,149
1974	7,290	7,167	201	975	494	12,320	6,517	..	..	24,968	60,058
1975	6,373	6,338	199	1,038	222	12,555	6,479	..	..	22,145	55,444
1976	5,902	7,129	131	1,091	68	14,237	6,950	..	..	21,966	57,584
1977	5,947	6,368	158	1,010	30	14,940	7,053	..	..	21,978	57,574
1978	5,627	5,932	179	899	15	15,149	7,222	..	..	21,570	56,673
1979	6,081	6,512	148	977	18	15,663	7,527	..	..	21,590	58,564
1980	5,083	3,335	133	642	13	15,258	6,854	..	..	16,938	48,291
1981	4,534	4,564	116	665	13	14,489	6,622	..	..	14,761	45,776
1982	4,668	4,083	144	605	8	14,588	6,353	..	..	13,530	44,007
1983	4,708	4,307	126	635	5	14,021	6,376	..	..	11,988	42,191
1984	3,796	4,408	68	537	5	14,686	6,758	..	..	10,859	41,138
1985	4,708	4,655	151	768	3	14,865	6,837	..	..	9,701	41,702
1986(11)	5,242	4,144	98	778	3	13,542	6,884	..	..	10,240	40,931
1987	4,048	4,660	80	821	3	14,137	8,005	..	..	8,456	40,211
1988	4,166	5,041	55	771	-	12,883	8,350	..	100	9,441	40,807
1989	4,489	4,286	30	613	-	12,515	8,550	..	102	8,820	39,405
1990	4,172	3,951	42	602	-	12,889	8,655	..	107	8,242	38,660
1991	4,270	3,691	14	570	-	12,311	8,563	..	109	8,729	38,257
1992	4,375	3,601	14	534	-	11,380	8,194	..	279	8,334	36,711
1993	3,553	3,613	7	560	-	11,521	8,328	..	266	8,592	36,440
1994	3,402	3,818	194	590	-	12,885	8,082	..	487	8,253	37,711
1995	2,840	3,750	184	576	-	12,680	8,654	..	526	7,066	36,276
1996	1,959	855	233	439	-	14,081	9,004	..	533	7,058	34,470
1997	1,963	787	249	457	-	14,754	9,189	..	532	6,315	34,577
1998	1,607	803	243	385	-	15,140	9,216	..	461	6,379	34,512
1999	1,353	820	215	205	-	15,203	9,542	1,086	283	5,374	34,222
2000	1,228	753	225	216	-	15,773	9,812	1,099	264	6,039	35,506
2001	1,195	719	210	154	-	15,464	9,573	1,001	243	6,611	35,443
2002	1,186	610	170	78	-	14,202	9,473	1,321	250	6,248	33,764
2003	1,248	589	166	53	-	14,292	9,396	1,128	267	6,899	34,074
2004	1,235	559	180	67	-	13,238	9,584	832	265	6,918	32,912
2005	1,180	535	171	79	-	13,022	9,976	831	201	6,260r	32,281r
2006	1,164	488	178	106	-	12,428	9,879	809	213	6,079r	31,422r
2007	1,268	513	177	101	-	11,466	9,699r	896	276	6,077r	30,522r
2008	1,296	443	174	92	-	11,925	9,815r	1,021	449	5,552r	30,807r
2009	1,152	387r	152	49	-	10,009	8,576r	763	446r	5,032r	26,594r
2010	1,136r	339r	163	97	-	10,461r	8,987r	822r	482r	5,098r	27,671r
2011	1,111	306	160	65	-	10,701	8,804	839	535	4,526	27,144

(1) Excluding non-energy use of fuels.

(2) Includes the iron and steel industry, but from 1994 onwards excludes iron and steel use of fuels for transformation and energy industry own use purposes.

(3) Blast furnace gas is included in coke and breeze up to 1995 and covers electricity transformation, use by ovens and losses. From 1996 onwards, blast furnace gas is included in the total and covers just coke ovens and losses, which is consistent with the methodology used for compiling the energy balances.

(4) Includes, from 1994, manufactured liquid fuels.

(5) Includes colliery methane. Up to 1988 also includes non-energy use of natural gas.

1.1.5 Energy consumption by final user (energy supplied basis)⁽¹⁾ 1970 to 2011 (continued)

Thousand tonnes of oil equivalent

	Transport												Total (7)
	Rail			Road					Water		Air		
	Coal	Coke and breeze	Electricity (6)	Petroleum	Electricity	Petroleum	Bioenergy & waste	Coal derived fuel	Coal	Petroleum	Petroleum		
1970	88	35	234	1,254	3	21,406	..	15	88	1,184	3,869	28,174	
1971	68	13	237	1,186	-	22,412	..	-	63	1,081	4,247	29,306	
1972	53	5	229	1,121	-	23,535	..	-	23	962	4,514	30,442	
1973	58	-	224	1,123	-	25,125	..	-	10	1,088	4,806	32,435	
1974	50	-	234	1,048	-	24,465	..	-	10	1,239	4,219	31,266	
1975	40	-	249	1,000	-	23,948	..	-	8	1,300	4,340	30,885	
1976	43	3	247	945	-	24,994	..	-	8	1,317	4,476	32,032	
1977	40	3	252	950	-	25,633	..	-	8	1,312	4,678	32,875	
1978	45	3	254	967	-	26,946	..	-	5	1,300	5,051	34,571	
1979	43	3	254	947	-	27,520	..	-	5	1,363	5,224	35,359	
1980	38	3	262	919	-	27,815	..	-	5	1,257	5,242	35,541	
1981	38	-	259	877	-	27,009	..	-	-	1,101	5,020	34,304	
1982	35	-	229	793	-	27,797	..	-	3	1,186	4,993	35,037	
1983	15	-	247	849	-	28,646	..	-	3	1,207	5,093	36,059	
1984	3	-	247	816	-	30,006	..	-	-	1,328	5,383	37,782	
1985	3	-	254	821	-	30,586	..	-	-	1,254	5,582	38,500	
1986(11)	3	-	259	809	-	32,606	..	-	-	1,151	6,126	40,954	
1987	3	-	264	761	-	34,062	..	-	-	1,103	6,479	42,672	
1988	-	-	282	766	-	36,233	..	-	-	1,159	6,905	45,345	
1989	3	-	272	702	-	37,801	..	-	-	1,355	7,308	47,442	
1990	2	-	455	668	-	38,816	..	-	-	1,363	7,332	48,635	
1991	-	-	454	685	-	38,535	..	-	-	1,424	6,872	47,973	
1992	-	-	461	715	-	39,363	..	-	-	1,377	7,435	49,355	
1993	-	-	641	665	-	39,502	..	-	-	1,341	7,871	50,024	
1994	-	-	599	651	-	39,690	..	-	-	1,239	8,070	50,253	
1995	-	-	636	654	-	39,268	..	-	-	1,193	8,485	50,238	
1996	-	-	710	629	-	40,772	..	-	-	1,294	8,917	52,321	
1997	-	-	729	516	-	41,259	..	-	-	1,256	9,322	53,083	
1998	-	-	732	608	-	41,020	..	-	-	1,175	10,237	53,772	
1999	-	-	738	632	-	41,399	..	-	-	1,067	11,017	54,853	
2000	-	-	741	639	-	41,071	..	-	-	1,032	11,978	55,461	
2001	-	-	759	664	-	41,097	..	-	-	844	11,774	55,137	
2002	-	-	727	662	-	41,936	..	-	-	702	11,658	55,685	
2003	-	-	706	667	-	41,823	..	-	-	1,234	11,936	56,366	
2004	-	-	347	700	2	42,221	..	-	-	1,196	12,908	57,374	
2005	3	-	347	629r	2	42,507r	74	-	-	1,365	13,856	58,783r	
2006	14	-	342	627r	2	42,513r	188	-	-	1,805	13,999	59,489r	
2007	14	-	339	642r	2	42,884r	362	-	-	1,612	13,906	59,760r	
2008	14	-	337	653r	2	41,098r	845	-	-	1,757	13,507	58,212r	
2009	13	-	346r	650r	2	39,635r	1,038	-	-	1,625	12,751	56,060r	
2010	14	-	349r	659r	2	39,159r	1,214	-	-	1,469	12,288	55,154r	
2011	11	-	349	652	2	38,646	1,128	-	-	1,597	12,802	55,187	

(6) Includes, from 1990, electricity used at transport premises (see footnote 11).

(7) Includes small amounts of natural gas for road transport.

1.1.5 Energy consumption by final user (energy supplied basis)⁽¹⁾ 1970 to 2011 (continued)

Thousand tonnes of oil equivalent

Domestic									
	Coal	Coke and breeze	Other solid fuels	Natural gas (8)	Electricity	Heat sold	Bioenergy & waste	Petroleum	Total (4)
1970	14,242	1,761	1,975	8,922	6,622	..	..	3,363	36,884
1971	12,164	1,136	2,156	9,900	6,937	..	..	3,328	35,621
1972	10,602	849	2,144	11,359	7,471	..	..	3,836	36,261
1973	10,565	778	2,053	12,129	7,849	..	..	4,202	37,576
1974	9,968	821	1,955	13,562	7,963	..	..	3,733	38,002
1975	8,517	645	1,778	14,840	7,670	..	..	3,612	37,062
1976	7,910	549	1,640	15,602	7,318	..	..	3,615	36,634
1977	8,136	534	1,589	16,600	7,386	..	..	3,653	37,898
1978	7,476	471	1,464	18,291	7,378	..	..	3,610	38,689
1979	7,688	479	1,431	20,718	7,711	..	..	3,539	41,566
1980	6,575	401	1,370	21,258	7,403	..	..	2,834	39,841
1981	6,214	368	1,202	22,076	7,260	..	..	2,554	39,674
1982	6,242	365	1,146	21,963	7,116	..	..	2,385	39,218
1983	5,796	335	1,141	22,346	7,129	..	..	2,267	39,014
1984	4,733	335	728	22,502	7,212	..	..	2,385	37,896
1985	6,290	385	957	24,394	7,582	..	..	2,454	42,062
1986(11)	6,121	335	965	25,797	7,892	..	..	2,590	43,700
1987	5,189	315	1,018	26,450	8,015	..	..	2,474	43,460
1988	4,741	300	907	25,833	7,940	..	205	2,441	42,367
1989	3,719	239	815	24,988	7,935	..	207	2,355	40,258
1990	3,153	254	762	25,835	8,066	..	206	2,480	40,756
1991	3,582	210	785	28,721	8,436	..	209	2,825	44,768
1992	3,105	176	709	28,389	8,555	..	243	2,889	44,066
1993	3,498	147	751	29,254	8,639	..	241	3,019	45,549
1994	2,957	67	601	28,355	8,721	..	242	3,004	43,947
1995	2,077	78	470	28,037	8,790	..	242	2,997	42,691
1996	2,084	129	588	32,317	9,244	..	241	3,518	48,120
1997	1,992	59	419	29,710	8,982	..	225	3,389	44,775
1998	1,819	85	439	30,601	9,408	..	230	3,543	46,126
1999	1,916	86	410	30,788	9,485	44	230	3,162	46,121
2000	1,448	95	365	31,806	9,617	44	236	3,239	46,851
2001	1,461	48	328	32,625	9,917	32	240	3,527	48,178
2002	1,009	127	289	32,362	10,319	33	243	3,087	47,471
2003	813	92	255	33,232	10,576	11	247	3,068	48,293
2004	733	36	230	34,085	10,679	52	252	3,265	49,333
2005	474	24	199	32,836	10,809	52	318	3,092	47,804
2006	426	16	200	31,550	10,723	52	358	3,249	46,574
2007	487	11	182	30,341	10,583	52	400	2,876r	44,931
2008	515	9	229	30,916	10,301	52	431	3,032	45,485
2009	514	7	210	28,590	10,193	52	466	3,012	43,044r
2010	536	7	242	33,499	10,217r	52	506r	3,427r	48,486r
2011	540	6	210	25,191	9,595	52	567	2,681	38,842

(8) Includes town gas prior to 1989. (Separate figures maybe found in previous editions of this Digest).

1.1.5 Energy consumption by final user (energy supplied basis)⁽¹⁾ 1970 to 2011 (continued)

Thousand tonnes of oil equivalent

Other final users (9)								
	Coal	Coke and breeze	Natural gas (8)	Electricity	Heat sold	Bioenergy & waste	Petroleum	Total (4)
1970	2,723	1,499	1,919	3,408	..	..	9,038	18,586
1971	2,328	688	2,181	3,534	..	..	9,184	17,915
1972	2,013	537	2,509	3,650	..	..	9,487	18,195
1973	1,731	602	2,728	3,940	..	..	9,585	18,586
1974	1,685	567	3,197	3,642	..	..	8,401	17,492
1975	1,234	408	3,393	3,894	..	..	8,431	17,360
1976	1,300	335	3,831	4,023	..	..	8,668	18,157
1977	1,370	315	3,998	4,257	..	..	9,157	19,097
1978	1,300	275	4,393	4,481	..	..	8,764	19,213
1979	1,307	285	4,955	4,731	..	..	8,754	20,031
1980	1,154	237	5,194	4,733	..	..	7,403	18,721
1981	1,174	204	5,315	4,804	..	..	7,096	18,592
1982	1,222	212	5,486	4,867	..	..	6,678	18,464
1983	1,166	257	5,915	5,106	..	..	6,403	18,847
1984	1,141	252	6,101	5,063	..	..	6,381	18,938
1985	1,123	297	6,718	5,446	..	..	6,018	19,603
1986(11)	982	390	7,308	5,731	..	..	5,723	20,135
1987	935	368	7,534	5,965	..	..	4,988	19,790
1988	831	264	7,569	6,240	..	138	5,008	20,050
1989	698	119	7,278	6,497	..	138	4,345	19,075
1990	795	127	7,329	6,426	..	139	4,402	19,218
1991	753	105	8,640	6,717	..	149	4,456	20,820
1992	622	88	8,585	6,996	..	150	4,518	20,959
1993	566	74	8,504	6,999	..	146	4,446	20,735
1994	496	34	8,695	6,951	..	172	4,289	20,637
1995	362	39	9,374	7,199	..	189	4,016	21,179
1996	385	-	10,138	7,495	..	181	3,909	22,108
1997	375	-	9,697	7,859	..	174	3,362	21,467
1998	291	-	10,114	7,788	..	174	3,144	21,511
1999	189	-	9,156	7,986	1,368	174	2,464	21,338
2000	57	-	9,498	8,155	1,371	172	2,294	21,547
2001	47	-	9,726	8,359	1,294	173	2,568	22,167
2002	14	-	8,670	8,148	730	188	1,805	19,556
2003	17	-	9,177	8,231	648	196	1,145	19,414
2004	19	-	9,757	8,532	373	198	1,438	20,317
2005	38	-	9,526	8,846	386	205	1,763	20,764
2006	24	-	8,655	8,738	384	192	1,521	19,514
2007	19	-	8,154	8,755	390	198r	1,493	19,008r
2008	21	-	8,223	8,936	393	239r	1,414	19,226r
2009	53	-	7,200	8,549	392	268r	1,242	17,704r
2010	28r	-	7,589r	8,716r	392r	309r	1,251r	18,285r
2011	28	-	6,486	8,594	380	321	1,360	17,168

(9) Mainly agriculture, public administration and commerce. Prior to 1990, including electricity used at transport premises (see footnote 6).

1.1.5 Energy consumption by final user (energy supplied basis)⁽¹⁾ 1970 to 2011 (continued)

Thousand tonnes of oil equivalent

All final users											
	Coal	Coke and breeze	Other solid fuels (4)	Coke oven gas	Town gas	Natural gas (4)	Electricity	Heat sold	Bioenergy & waste	Petroleum	Total (3)(10)
1970	29,822	12,950	2,184	1,164	10,746	3,662	16,542	..	..	68,511	145,977
1971	24,855	10,134	2,333	1,118	8,882	9,431	17,021	..	..	69,568	143,589
1972	20,366	9,222	2,396	1,111	8,094	15,063	17,643	..	..	72,129	146,205
1973	20,313	9,721	2,280	1,290	5,852	20,584	18,898	..	..	74,620	153,744
1974	19,003	8,555	2,156	975	3,836	25,736	18,356	..	..	68,072	146,818
1975	16,172	7,391	1,977	1,038	1,796	29,212	18,293	..	..	64,776	140,751
1976	15,162	8,016	1,771	1,091	534	33,204	18,537	..	..	65,981	144,407
1977	15,502	7,220	1,748	1,010	174	35,393	18,948	..	..	67,361	147,444
1978	14,454	6,681	1,642	899	81	37,766	19,336	..	..	68,208	149,146
1979	15,124	7,279	1,579	977	91	42,262	20,223	..	..	68,937	155,521
1980	12,854	3,975	1,504	642	76	41,647	19,252	..	..	62,408	142,394
1981	11,960	5,136	1,317	665	65	41,828	18,945	..	..	58,420	138,346
1982	12,169	4,660	1,290	605	55	41,990	18,567	..	..	57,360	136,726
1983	11,688	4,899	1,267	635	45	42,242	18,856	..	..	56,453	136,111
1984	9,673	4,995	796	537	43	43,251	19,280	..	..	57,158	135,753
1985	12,124	5,338	1,108	768	40	45,940	20,118	..	..	56,416	141,867
1986(11)	12,348	4,869	1,063	778	28	46,622	20,763	..	..	59,245	145,719
1987	10,174	5,343	1,098	821	28	48,096	22,252	..	..	58,325	146,132
1988	9,738	5,605	962	771	8	46,277	22,811	..	443	61,952	148,569
1989	8,909	4,645	845	613	-	44,780	23,254	..	447	62,685	146,180
1990	8,122	4,333	804	602	-	46,052	23,601	..	451	63,302	147,268
1991	8,605	4,006	799	570	-	49,676	24,170	..	467	63,525	151,818
1992	8,101	3,866	723	534	-	48,357	24,206	..	672	64,632	151,091
1993	7,617	3,833	758	560	-	49,282	24,607	..	652	65,437	152,747
1994	6,855	3,919	795	590	-	49,935	24,353	..	901	65,196	152,548
1995	5,279	3,867	654	576	-	50,091r	25,279	..	956	63,679	150,384r
1996	4,429	984	821	439	-	56,536	26,453	..	954	66,096	157,019
1997	4,331	846	667	457	-	54,162	26,759	..	930	65,418	153,902
1998	3,716	889	682	385	-	55,856	27,143	..	865	66,107	155,921
1999	3,458	906	625	205	-	55,148	27,751	2,498	688	65,116	156,534
2000	2,733	848	590	216	-	57,077	28,325	2,515	672	66,293	159,365
2001	2,704	766	539	154	-	57,814	28,609	2,327	656	67,084	160,926
2002	2,209	737	459	78	-	55,234	28,667	2,084	682	66,099	156,476
2003	2,078	680	420	53	-	56,701	28,910	1,787	710	66,772	158,147
2004	1,988	595	411	67	-	57,080	29,144	1,258	715	68,647	159,936
2005	1,695	559	370	79	-	55,384	29,981	1,268	798	69,473r	159,633r
2006	1,627	504	378	106	-	52,633	29,684	1,245	952	69,793r	156,999r
2007	1,788	524	359	101	-	49,961	29,377r	1,338	1,235r	69,490r	154,222r
2008	1,845	452	403	92	-	51,064	29,391r	1,465	1,964r	67,014r	153,730r
2009	1,733	395r	362	49	-	45,799	27,665r	1,206	2,219r	63,947r	143,402r
2010	1,713r	346r	405	97	-	51,550r	28,270r	1,266r	2,511r	63,351r	149,596r
2011	1,690	312	370	65	-	42,378	27,344	1,271	2,551	62,264	138,341

(10) Before 1971 includes the use for transport of liquid fuel made from coal.

(11) See paragraph 1.1.19 about changed treatment of electricity produced, and fuel used by, companies other than major power producers.

1.1.6 Expenditure on energy by final user, ⁽¹⁾ 1970 to 2011

£million

Industry	Industry					Total	Domestic					Total
	Coal and solid fuels (3)	Natural gas (4)	Electricity	Petroleum products (5)	Heat and other fuels (6)		Coal and solid fuels (3)	Natural gas (4)	Electricity	Petroleum products (5)	Heat and other fuels (6)	
1970	285	70	475	300		1,130	395	385	645	85		1,510
1971	285	85	530	350		1,250	385	430	730	90		1,635
1972	280	120	540	345		1,285	360	505	830	110		1,805
1973	320	150	595	390		1,455	370	535	885	140		1,930
1974	410	195	775	880		2,260	405	605	1,070	200		2,280
1975	545	240	1,015	920		2,720	440	760	1,495	235		2,930
1976	720	380	1,260	1,065		3,425	500	1,000	1,825	295		3,620
1977	780	535	1,470	1,305		4,090	595	1,205	2,135	360		4,295
1978	800	695	1,670	1,255		4,420	620	1,365	2,380	370		4,735
1979	1,010	820	1,925	1,570		5,325	770	1,575	2,675	475		5,495
1980	675	1,060	2,185	1,815		5,735	920	1,875	3,310	510		6,615
1981	850	1,215	2,420	1,890		6,375	960	2,460	3,905	560		7,885
1982	860	1,335	2,560	1,870		6,625	995	3,070	4,200	610		8,875
1983	900	1,375	2,655	1,800		6,730	1,015	3,520	4,300	645		9,480
1984	845	1,555	2,695	1,810		6,905	830	3,655	4,495	640		9,620
1985	990	1,735	2,750	1,740		7,215	1,120	4,090	4,840	665		10,715
1986	1,000	1,350	2,765	1,065		6,180	1,135	4,385	5,105	460		11,085
1987	865	1,375	3,285	865		6,390	990	4,465	5,140	410		11,005
1988	880	1,225	3,590	785		6,480	830	4,385	5,340	365		10,920
1989	905	1,210	3,965	845		6,925	730	4,455	5,800	390		11,375
1990	930	1,260	3,985	900		7,075	700	4,865	6,255	485		12,305
1991	910	1,115	4,120	905		7,050	795	5,775	7,105	460		14,135
1992	775	970	4,180	790		6,715	710	5,685	7,460	460		14,315
1993	740	915	3,940	895		6,490	780	5,705	7,590	465		14,540
1994	650	1,010	3,855	865		6,380	685	6,020	7,870	455		15,030
1995	605	1,015	3,970	830		6,420	615	6,010	8,060	470		15,155
1996	590	755	3,900	965		6,210	640	6,510	8,380	630		16,165
1997	565	870	3,625	890		5,950	560	6,125	7,965	560		15,210
1998	545	990	3,535	715	40	5,825	525	6,015	7,595	465	30	14,630
1999	430	970	3,730	735	215	6,080	540	5,610	7,600	465	40	14,255
2000	430	1,115	3,435	1,145	205	6,330	465	5,485	7,475	735	40	14,200
2001	445	1,470	3,145	1,235	190	6,485	535	5,735	7,540	715	35	14,560
2002	365	1,280	2,995	1,065	265	5,970	465	6,090	7,510	645	35	14,745
2003	380	1,345	2,925	1,240	220	6,110	320	6,260	7,660	730	30	15,000
2004	525	1,480	3,255	1,485	90	6,835	285	8,285	9,120	805	40	18,535
2005	740	2,110	5,060	2,015	95	10,020	215	8,215	9,665	1,010	50	19,155
2006	815	2,635	6,775	2,420	100	12,745	205	10,100	11,340	1,225	50	22,920
2007	765	1,975	6,970	2,275	110	12,095	230	9,950	12,540	1,130	55	23,905
2008	1,185	2,945	8,750	2,735	310	15,925	300	12,070	14,245	1,695	65	28,375
2009	1,335r	2,290r	6,775r	2,020r	150	12,570r	350	12,605	14,535	1,245	60	28,795
2010	1,315r	2,185r	6,335r	2,440r	205r	12,480r	375	14,275r	14,085r	1,730	65	30,530r
2011	1,565	2,710	6,545	2,695	210	13,725	375	12,310	14,695	1,685	70	29,135

(1) All data is to the nearest £5 million. VAT is only included where not refundable. Methodology used to calculate the series has changed over the years, as such the data provides a guide to changing patterns of expenditure on energy, but not too much significance should be drawn from small changes.

(2) Includes commercial, public administration, agriculture and all fuels used for transport purposes.

(3) Includes coal, coke, breeze and other manufactured solid fuel. Prior to 1996, an estimate of the value of coke produced in coke ovens owned by the iron and steel industry was included, this has now been replaced by an estimate of the value of coal purchased for such ovens, which is the actual monetary trade.

(4) Includes town gas.

(5) Includes heating oils, LPG etc. Excludes motor transport fuels.

(6) Includes other fuels not listed eg coke oven gas, heat, biofuels etc. Heat data not available before 1999, and other fuels

1.1.6 Expenditure on energy by final user, ⁽¹⁾ 1970 to 2011 (continued)

£million

Other final users (2)						All final users							
Coal and solid fuels (3)	Natural gas (4)	Electricity	Petroleum products	Of which road transport	Heat and other fuels (6)	Total	Coal and solid fuels (3)	Natural gas (4)	Electricity	Petroleum products	Heat and other fuels (6)	Total	
60	70	390	1,910	1,720		2,430	740	525	1,510	2,295		5,070	1970
45	80	435	2,105	1,885		2,665	715	595	1,695	2,545		5,550	1971
45	80	480	2,305	2,070		2,910	685	705	1,850	2,760		6,000	1972
45	90	515	2,580	2,305		3,230	735	775	1,995	3,110		6,615	1973
60	105	590	3,885	3,150		4,640	875	905	2,435	4,965		9,180	1974
70	140	835	4,685	3,845		5,730	1,055	1,140	3,345	5,840		11,380	1975
90	200	1,030	5,305	4,325		6,625	1,310	1,580	4,115	6,665		13,670	1976
115	255	1,200	6,030	4,835		7,600	1,490	1,995	4,805	7,695		15,985	1977
115	310	1,375	6,075	4,890		7,875	1,535	2,370	5,425	7,700		17,030	1978
130	385	1,655	8,265	6,660		10,435	1,910	2,780	6,255	10,310		21,255	1979
115	520	1,985	10,735	8,650		13,355	1,710	3,455	7,480	13,060		25,705	1980
110	585	2,460	12,345	10,060		15,500	1,920	4,260	8,785	14,795		29,760	1981
135	655	2,690	13,470	10,950		16,950	1,990	5,060	9,450	15,950		32,450	1982
135	745	2,855	14,965	12,240		18,700	2,050	5,640	9,810	17,410		34,910	1983
135	795	2,980	16,140	13,250		20,050	1,810	6,005	10,170	18,590		36,575	1984
155	920	3,265	17,640	14,615		21,980	2,265	6,745	10,855	20,045		39,910	1985
140	1,045	3,485	15,845	13,745		20,515	2,275	6,780	11,355	17,370		37,780	1986
125	1,035	3,490	16,630	14,525		21,280	1,980	6,870	11,915	17,905		38,670	1987
95	1,025	3,810	16,855	14,960		21,785	1,805	6,635	12,740	18,005		39,185	1988
95	1,015	4,185	18,755	16,690		24,050	1,730	6,680	13,950	19,980		42,340	1989
105	1,085	4,465	21,120	19,020		26,775	1,735	7,210	14,705	22,505		46,155	1990
85	1,310	4,960	21,900	19,995		28,255	1,790	8,200	16,185	23,265		49,440	1991
95	1,245	5,495	22,455	20,825		29,290	1,580	7,900	17,135	23,705		50,320	1992
70	1,155	5,555	24,365	22,540		31,145	1,590	7,775	17,115	25,725		52,205	1993
50	1,125	5,380	25,190	23,515		31,745	1,385	8,155	17,140	26,510		53,190	1994
35	1,110	5,300	25,895	24,140		32,340	1,255	8,135	17,330	27,195		53,915	1995
30	975	5,405	28,240	26,145		34,650	1,260	8,240	17,685	29,835		57,020	1996
35	855	5,420	30,645	28,685		36,955	1,165	7,850	17,010	32,095		58,120	1997
25	885	5,200	31,375	29,810	-	37,485	1,095	7,885	16,335	32,555	70	57,940	1998
10	780	4,990	38,435	36,680	235	44,450	980	7,355	16,330	39,640	490	64,795	1999
5	850	4,950	38,860	35,635	235	44,900	890	7,445	15,860	40,740	485	65,425	2000
5	1,110	4,330	37,195	34,320	225	42,865	985	8,310	15,020	39,145	445	63,905	2001
-	1,025	4,050	36,355	34,020	140	41,570	830	8,395	14,550	38,065	440	62,285	2002
5	1,120	3,830	38,160	35,055	125	43,240	695	8,720	14,415	40,135	375	64,345	2003
5	1,320	4,355	46,560	42,975	70	52,310	815	11,085	16,730	48,850	195	77,680	2004
-	1,655	5,405	49,480	44,535	70	56,610	960	11,980	20,135	52,505	215	85,795	2005
5	2,155	6,720	52,905	46,880	320	62,105	1,025	14,890	24,835	56,550	470	97,770	2006
-	1,980	7,055	54,955	49,120	555	64,545	995	13,905	26,565	58,360	720	100,545	2007
-	2,290	8,225	66,730	57,115	1,365	78,610	1,485	17,305	31,220	71,160	1,740	122,910	2008
-	2,130	10,020r	56,595r	50,630r	1,470	70,215r	1,685r	17,025r	31,330r	59,860r	1,680	111,580r	2009
5	1,990r	9,750r	67,370r	59,645r	2,075r	81,190r	1,695r	18,450r	30,165r	71,535r	2,345r	124,190r	2010
10	1,880	9,770	77,320	67,355	2,235	91,215	1,950	16,900	31,010	81,700	2,510	134,070	2011

1.1.7 Mean air temperatures (deviations) ⁽¹⁾⁽²⁾ 2000 to 2011 Great Britain

Degrees Celsius

	Average 1971-2000	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Calendar year	9.7	+0.8	+0.5	+1.1	+0.9	+0.9	+0.8	+1.1	+0.8	+0.3	+0.4	-0.7	+1.0
First half year	8.0	+1.0	+0.1	+1.5	+1.2	+1.1	+1.0	+0.3	+1.7	+0.8	+0.6	-0.4	+1.2
Second half year	11.4	+0.5	+0.8	+0.7	+0.6	+0.6	+0.6	+1.8	-0.0	-0.3	+0.3	-1.1	+0.9
First quarter	5.0	+1.5	-0.3	+2.0	+0.7	+0.9	+1.1	-0.5	+1.7	+0.9	-0.2	-1.6	+0.6
Second quarter	10.9	+0.6	+0.5	+1.0	+1.7	+1.4	+0.9	+1.1	+1.8	+0.8	+1.2	+0.7	+1.7
Third quarter	15.3	+0.6	+0.5	+0.5	+1.3	+0.6	+0.6	+2.0	-0.4	+0.0	+0.3	+0.1	-0.0
Fourth quarter	7.5	+0.4	+1.1	+0.9	-0.0	+0.6	+0.6	+1.6	+0.4	-0.7	+0.2	-2.3	+1.8
Summer (3)	13.1	+0.6	+0.5	+0.7	+1.5	+1.0	+0.7	+1.5	+0.7	+0.4	+0.8	+0.4	+0.8
Winter (3)	6.3	+0.0	+1.5	+0.8	+0.4	+0.8	+0.1	+1.6	+0.6	-0.4	-0.7	-0.9	+1.4
January	4.3	+1.2	-0.4	+1.8	+0.5	+1.2	+2.0	+0.2	+2.6	+2.1	-1.0	-2.8	-0.5
February	4.5	+1.9	+0.3	+2.7	-0.1	+1.1	-0.0	-0.4	+1.5	+0.8	-0.2	-1.8	+1.8
March	6.2	+1.3	-0.7	+1.4	+1.6	+0.4	+1.0	-1.2	+0.9	-0.1	+0.7	-0.1	+0.6
April	7.9	-0.0	-0.1	+1.4	+2.0	+1.6	+0.9	+0.6	+3.2	+0.0	+1.8	+0.9	+3.7
May	11.0	+1.0	+1.4	+0.9	+1.0	+1.1	+0.2	+0.8	+0.8	+2.0	+0.9	-0.3	+1.2
June	13.7	+1.0	+0.3	+0.6	+2.2	+1.6	+1.6	+2.0	+1.2	+0.3	+1.1	+1.6	+0.3
July	16.2	-1.0	+0.5	-0.3	+1.3	-0.5	+0.4	+3.0	-1.0	+0.0	-0.1	+0.8	-0.9
August	16.0	+0.7	+0.7	+0.9	+2.0	+1.3	+0.1	+0.1	-0.5	+0.2	+0.5	-0.7	-0.6
September	13.6	+2.3	+0.4	+0.8	+0.7	+1.1	+1.4	+2.8	+0.2	-0.1	+0.5	+0.3	+1.5
October	10.3	+0.2	+3.2	-0.1	-1.3	+0.2	+2.7	+2.4	+0.7	-0.6	+1.1	+0.1	+2.0
November	7.0	+0.2	+1.0	+1.8	+1.4	+1.0	-0.6	+1.1	+0.6	+0.0	+1.5	-1.6	+2.6
December	5.1	+0.7	-1.0	+0.8	-0.1	+0.6	-0.3	+1.3	-0.1	-1.4	-2.0	-5.4	+0.8

(1) Latest monthly figures available at http://www.decc.gov.uk/en/content/cms/statistics/energy_stats/source/temperatures/temperatures.aspx

(2) Average mean air temperatures calculated from the maximum and minimum daily temperature as recorded at 17 meteorological stations, selected as representative of fuel consumption in Great Britain, 2 in Scotland, 2 in Wales and 13 in England, 4 of which are counted twice. Data on temperatures recorded are provided by the Meteorological Office.

(3) The summer period is from April to September inclusive, and the winter period is the six months beginning in October and ending with March of the following year.

1.1.8 Mean heating degree days, 2002 to 2011, Great Britain

	January	February	March	April	May	June	July	August	September	October	November	December	Total heating degrees days temperature	Year
Long-term mean (1971-2000)	11.2	11.0	9.3	7.6	4.6	2.3	0.8	0.9	2.3	5.2	8.6	10.4	2,243.5	6.1
2002	9.5	8.3	7.8	6.1	3.6	1.4	0.6	0.1	1.2	5.2	6.7	9.5	1,823.3	5.0
2003	10.6	11.1	7.7	5.6	3.6	0.3	0.0	0.3	1.5	6.1	7.1	10.5	1,948.8	5.3
2004	10.0	9.9	8.9	5.9	3.4	1.0	0.7	0.2	1.2	4.9	7.5	9.8	1,931.9	5.3
2005	9.1	11.0	8.2	6.7	4.3	1.3	0.3	0.3	1.2	2.6	9.1	10.7	1,953.8	5.4
2006	11.0	11.3	10.5	7.0	3.7	0.6	0.0	0.3	0.3	2.7	7.4	9.1	1,932.3	5.3
2007	8.6	9.5	8.4	4.3	3.7	0.9	0.5	0.5	2.1	4.5	8.0	10.5	1,860.3	5.1
2008	9.1	10.1	9.4	7.6	2.6	1.6	0.5	0.2	2.0	5.8	8.5	11.8	2,101.8	5.7
2009	12.2	11.1	8.6	5.8	3.6	1.6	0.2	0.2	1.5	4.0	7.1	12.4	2,067.2	5.7
2010	14.0	12.7	9.4	6.6	4.9	1.0	0.1	0.7	1.8	5.1	10.1	15.8	2,489.0	6.8
2011	11.6	9.2	8.7	3.8	3.3	1.9	0.5	0.8	1.0	3.4	6.0	9.6	1,815.3	5.0
2012	10.0	11.1	7.0	8.2	4.2	2.1								

(1) Latest monthly figures available at www.decc.gov.uk/en/content/cms/statistics/source/temperatures/temperatures.aspx

(2) Degree days calculated from the maximum and minimum daily temperature as recorded at 17 meteorological stations, selected as representative of fuel consumption in Great Britain with 2 in Scotland, 2 in Wales and 13 in England, 4 of which are counted twice. Data on temperatures recorded are provided by the Meteorological Office.

1.1.9 Mean air temperatures (averages) ⁽¹⁾⁽²⁾, 1970 to 2011 Great Britain

Degrees Celsius													
	January	February	March	April	May	June	July	August	September	October	November	December	Year
1970	4.0	3.2	4.0	6.8	12.7	16.1	15.4	16.1	14.5	10.9	7.9	4.5	9.7
1971	4.7	5.0	5.4	7.8	11.5	12.5	16.9	15.6	14.3	11.6	6.4	7.1	9.9
1972	4.2	4.6	6.5	8.6	10.6	11.9	15.5	15.2	11.9	10.7	6.4	5.8	9.3
1973	4.7	4.7	6.5	7.2	11.3	14.9	15.7	16.5	14.3	9.4	6.2	5.1	9.7
1974	6.1	5.8	5.8	8.0	10.9	13.7	15.1	15.2	12.1	7.9	6.7	8.0	9.6
1975	6.7	4.7	5.0	8.3	9.7	14.5	17.2	18.2	13.4	10.2	6.3	5.3	10.0
1976	5.9	4.8	5.0	8.0	11.8	16.7	18.3	17.3	13.4	10.7	6.2	2.2	10.0
1977	3.0	5.1	7.0	7.3	10.4	12.4	15.9	15.3	13.1	11.7	6.4	6.2	9.5
1978	3.4	3.6	6.8	6.4	11.3	13.6	14.7	14.9	14.0	11.9	8.6	4.3	9.5
1979	0.5	1.4	4.8	7.6	9.7	14.1	16.2	14.9	13.2	11.2	7.0	5.5	8.9
1980	2.4	6.0	4.9	8.7	11.0	13.8	14.5	15.7	14.6	9.0	6.6	5.8	9.4
1981	4.8	3.3	6.6	7.8	10.5	13.3	15.6	16.2	14.6	7.6	7.7	0.8	9.1
1982	2.8	4.8	5.8	8.2	11.1	11.2	16.2	15.4	13.8	9.8	7.4	4.1	9.2
1983	6.2	1.9	6.1	6.3	9.6	13.6	18.4	16.8	13.2	10.0	7.3	5.5	9.6
1984	3.3	3.5	4.5	7.7	9.5	13.9	16.2	17.0	13.2	10.7	7.7	5.0	9.4
1985	1.0	2.5	4.4	8.0	10.4	12.2	15.6	14.2	14.1	10.7	4.0	6.1	8.6
1986	3.2	-0.5	4.9	5.4	10.6	14.1	15.4	13.2	11.0	10.6	7.3	5.8	8.5
1987	1.1	3.7	4.1	9.4	9.7	12.2	15.5	15.2	13.3	9.3	6.4	4.7	8.7
1988	4.9	4.5	5.8	7.8	11.2	14.0	14.4	14.9	13.2	9.4	5.3	7.1	9.4
1989	6.1	5.8	7.0	6.1	12.5	14.0	17.4	16.1	14.1	11.5	6.4	4.5	10.2
1990	6.3	7.0	8.0	7.7	12.1	13.3	16.3	17.6	13.1	12.0	7.2	5.1	10.5
1991	3.7	2.4	7.8	8.0	11.0	12.2	17.1	17.0	14.7	10.3	7.0	5.0	9.7
1992	4.0	5.9	7.4	8.6	13.1	15.5	16.1	15.3	13.2	7.8	7.5	4.1	9.9
1993	6.0	5.4	6.6	9.3	11.2	14.4	15.1	14.4	12.5	8.5	5.0	5.3	9.5
1994	5.2	3.5	7.6	8.1	10.4	14.3	17.6	15.9	12.7	10.2	10.1	6.4	10.2
1995	4.9	6.7	5.6	8.9	11.6	14.0	18.4	18.9	13.8	13.2	8.1	2.8	10.6
1996	4.8	3.1	4.6	8.7	9.3	14.4	16.4	16.7	13.7	11.8	6.2	3.5	9.4
1997	2.9	6.9	8.4	9.1	11.5	14.0	16.9	18.6	14.5	10.5	8.9	6.1	10.7
1998	5.5	7.7	8.0	7.8	12.9	14.1	15.5	15.9	14.8	10.6	7.3	5.9	10.5
1999	5.8	5.6	7.4	9.4	12.8	13.7	17.5	16.3	15.7	11.0	8.1	5.0	10.7
2000	5.5	6.4	7.5	7.9	12.1	14.7	15.2	16.7	15.9	10.5	7.1	5.8	10.5
2001	3.9	4.8	5.5	7.8	12.4	14.0	16.7	16.7	14.1	13.6	7.9	4.1	10.2
2002	6.1	7.2	7.6	9.4	11.9	14.3	15.9	17.0	14.5	10.3	8.8	6.0	10.8
2003	4.9	4.5	7.8	9.9	12.1	15.9	17.5	18.0	14.3	9.0	8.4	5.0	10.6
2004	5.5	5.6	6.6	9.6	12.1	15.3	15.7	17.4	14.8	10.6	8.0	5.7	10.6
2005	6.4	4.5	7.2	8.8	11.2	15.4	16.6	16.1	15.0	13.0	6.4	4.8	10.5
2006	4.5	4.2	5.0	8.5	11.8	15.8	19.3	16.2	16.4	12.8	8.1	6.4	10.8
2007	6.9	6.0	7.1	11.2	11.9	14.9	15.2	15.5	13.9	11.0	7.5	5.0	10.5
2008	6.4	5.4	6.1	7.9	13.0	14.0	16.3	16.2	13.5	9.8	7.0	3.7	10.0
2009	3.3	4.4	6.9	9.7	11.9	14.8	16.2	16.6	14.2	11.5	8.4	3.1	10.1
2010	1.5	2.8	6.1	8.9	10.8	15.3	17.0	15.3	14.0	10.4	5.4	-0.3	9.0
2011	3.9	6.3	6.8	11.7	12.3	14.0	15.3	15.4	15.1	12.4	9.5	5.9	10.7
2012	5.5	4.4	8.5	7.3	11.6	13.6							

(1) Latest monthly figures available at www.decc.gov.uk/en/content/cms/statistics/energy_stats/source/temperatures/temperatures.aspx

(2) Average mean air temperatures calculated from the maximum and minimum daily temperature as recorded at 17 meteorological stations, selected as representative of fuel consumption in Great Britain, 2 in Scotland, 2 in Wales and 13 in England, 4 of which are counted twice. Data on temperatures recorded are provided by the Meteorological Office.

Chapter 2: Long term trends

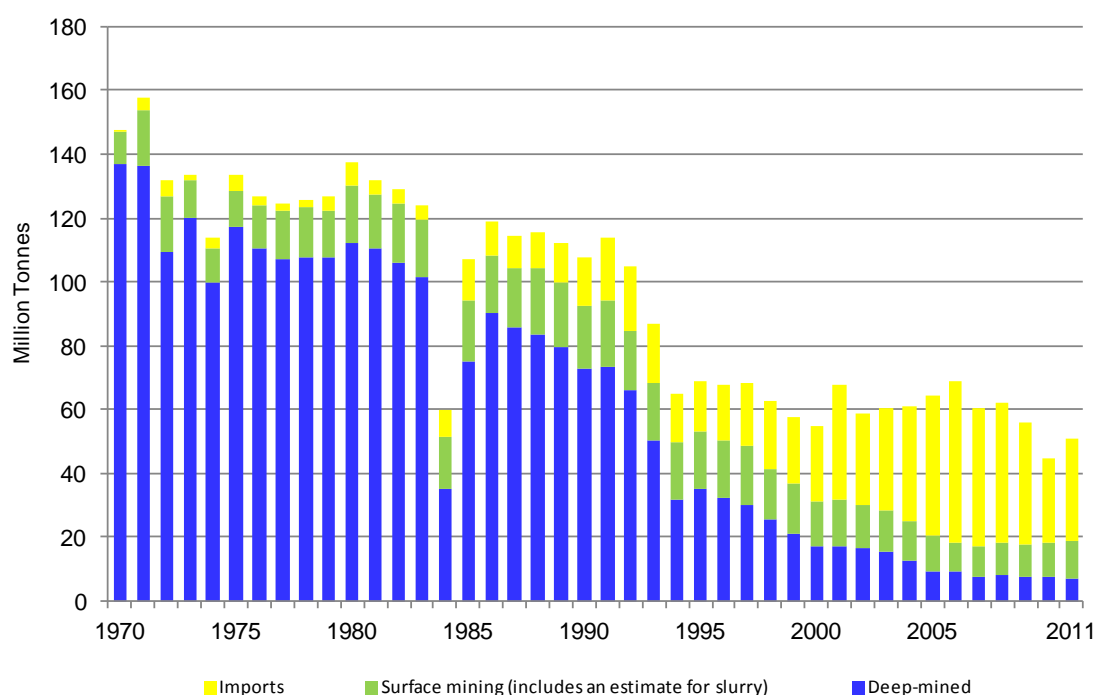
Solid fuels and derived gases

Coal production, trade and stocks (Table 2.1.1)

2.1.1 Figures for coal production, imports, overseas shipments and stocks are given in Table 2.1.1, which is based on Table 2.7 of Chapter 2 of the main Digest. The table series extends back to 1970.

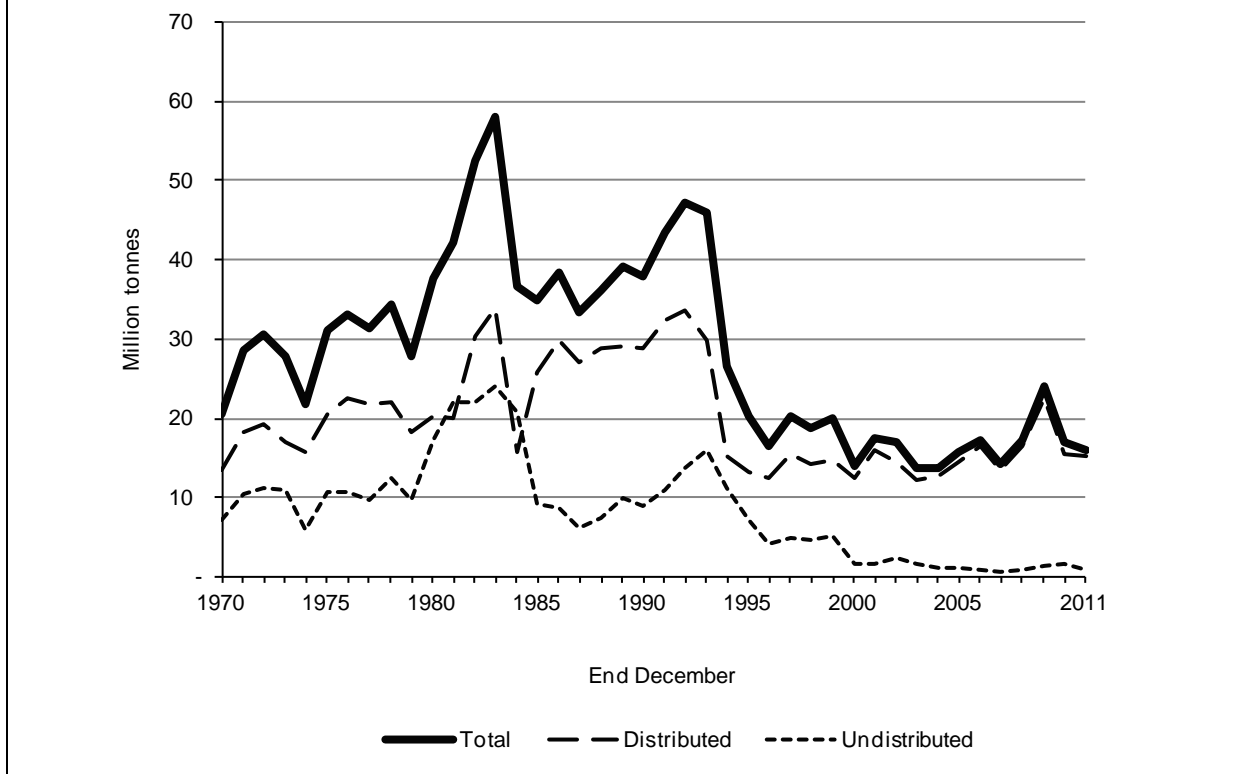
2.1.2 Table 2.1.1 shows a decline in deep-mined production of 95 per cent since the highest level shown in this table in 1970 (137 million tonnes). Production plummeted in 1984 as a result of the miners' strike before recovering fairly quickly to levels recorded pre-1984, and fell again in the early 1990's. Figures for 2011 show that coal production (including an estimate for slurry) increased by a small amount on 2010 (1.1 per cent) to 19 million tonnes. Surface mine production (including an estimate for slurry) in 2011 was around the same as the levels shown in 1970 (11 million tonnes). Since 1970, UK coal imports have grown steadily. This growth increased more rapidly over a short period of time in the early 2000s. This meant in 2001 UK imports (36 million tonnes) exceeded UK production (32 million tonnes) for the first time. This rapid growth in imports continued and in 2006 imports reached a new record of 51 million tonnes. Since then, levels have declined. However, in 2011 UK imports were 33 million tonnes, an increase of 23 per cent on 2010 (27 million tonnes) but a decrease of 36 per cent on the 2006 record. These trends are illustrated in Chart 2.1.1.

Chart 2.1.1: Coal production and imports 1970 to 2011



2.1.3 Total coal stocks were around 20 million tonnes in 1970. Since then distributed stocks increased substantially (mainly due to growth at electricity generators) and in 1983, total stocks, reached a record high of 58 million tonnes, of which 59 per cent was distributed. Thereafter, although there have been year-on-year fluctuations, stock levels have declined back to under 20 million tonnes a year, with the exception of 2009, where total stocks were 24 million tonnes (Chart 2.3), the highest since 1994 (27 million tonnes). Total stocks at the end of 2011 (16 million tonnes) were nearly a third of the year's coal consumption and 0.8 million tonnes less than total stocks held at the end of 2010. Trends in coal stocks are shown in Chart 2.1.2.

Chart 2.1.2: Coal stocks 1970 to 2011



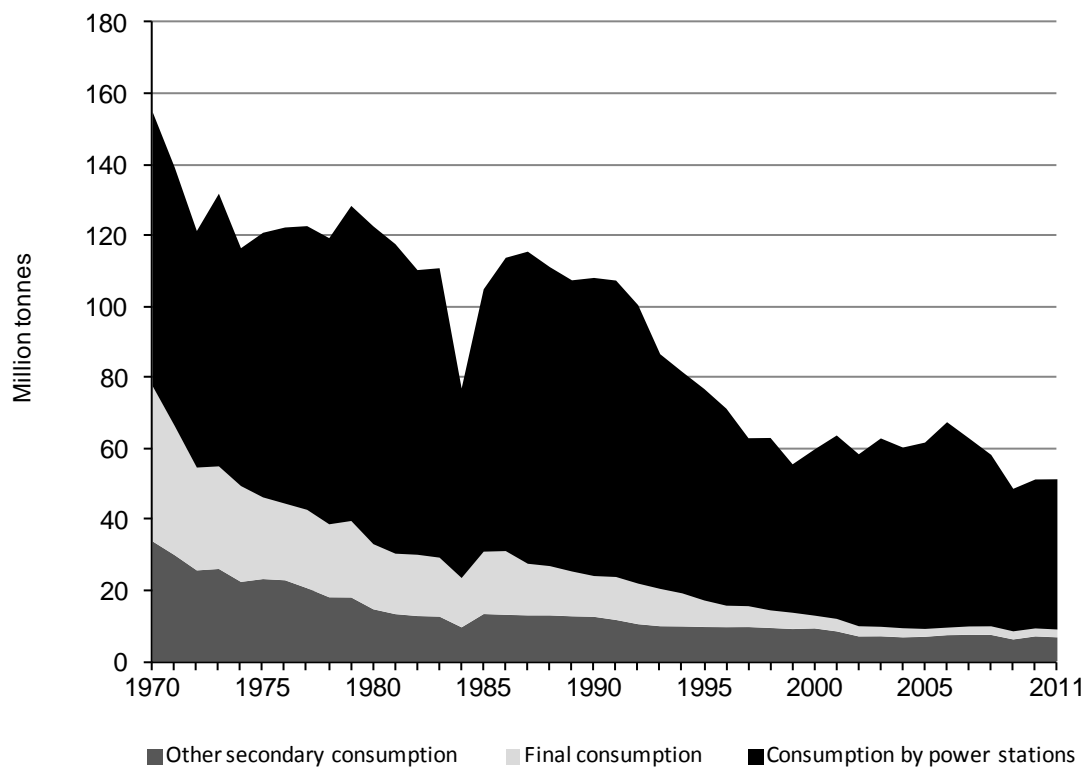
Inland consumption of solid fuels (Table 2.1.2)

2.1.4 Figures for inland consumption of coal by fuel producers and final users are given in Table 2.1.2, which are based on Table 2.7 of Chapter 2 of the main Digest. The table also shows final consumption figures for coke and breeze, and other solid fuels based on Table 2.8 of Chapter 2. These products are mainly supplied from the conversion of coal, supplemented by a small amount of foreign trade. Where possible the series have been extended back to 1970.

2.1.5 Trends in inland consumption of coal, in total and by power stations, coke ovens and final consumers, are illustrated in Chart 2.1.3 below.

2.1.6 Total inland consumption of coal fell by 67 per cent from 157 million tonnes in 1970 to 52 million tonnes in 2011. Consumption by the electricity generators increased from 77 million tonnes in 1970 to a peak of 90 million tonnes in 1980 and continued in the 80-90 million tonnes range until 1991, with the exception of the miners' strike years. Coal consumed by generators fell steadily after 1991 until 1999, as the UK's energy mix became more diverse, environmental regulations and high coal prices made natural gas more attractive to purchase for generation use. In 2011, coal use by generators showed little change from 2010 at 42 million tonnes and accounted for 82 per cent of total consumption compared with only 49 per cent in 1970.

Chart 2.1.3: Inland consumption of coal, 1970 to 2011



Power stations only include all generators from 1987 (see footnote (1) to Table 2.1.2).

2.1.7 A more detailed examination of historical coal statistics was published in the September 2001 issue of Energy Trends. This looked at trends in coal production, consumption and employment in the coal mining industry over the last 150 years. The updated data set on which the article is based is available on the Department of Energy and Climate Change (DECC) website at: www.decc.gov.uk/en/content/cms/statistics/energy_stats/source/coal/coal.aspx.

The original article is to be found at: <http://webarchive.nationalarchives.gov.uk/+http://www.berr.gov.uk/files/file30455.pdf> (on page 15).

Additionally, an article on coal statistics trends spanning the last 60 years were published in a special 60th anniversary edition of the Digest of United Kingdom Energy Statistics. This publication is also available on the DECC website at: www.decc.gov.uk/en/content/cms/statistics/publications/dukes/dukes.aspx.

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2.1.1 Coal production and stocks ⁽¹⁾

Thousand tonnes

	Coal production					Coal stocks (at year end) (5)		
	Total	Deep-mined	Surface mining (2,3)	Imports (4)	Exports	Total	Distributed	Undistributed
1970	147,195	136,686	10,509	79	3,191	20,630	13,414	7,216
1971	153,683	136,478	17,205	4,241	2,667	28,664	18,271	10,393
1972	126,834	109,086	17,748	4,998	1,796	30,460	19,351	11,110
1973	131,984	120,030	11,954	1,675	2,693	27,886	17,035	10,850
1974	110,452	99,993	10,459	3,547	1,865	21,807	15,827	5,979
1975	128,683	117,412	11,271	5,083	2,182	31,159	20,541	10,618
1976	123,801	110,265	13,536	2,837	1,436	33,115	22,457	10,658
1977	122,150	107,123	15,027	2,439	1,835	31,444	21,704	9,740
1978	123,577	107,528	16,049	2,352	2,253	34,475	22,038	12,437
1979	122,369	107,775	14,594	4,375	2,175	27,908	18,339	9,569
1980	130,097	112,430	17,667	7,334	3,809	37,687	20,370	17,317
1981	127,469	110,473	16,996	4,290	9,113	42,253	20,136	22,117
1982	124,711	106,161	18,550	4,063	7,447	52,377	30,422	21,955
1983	119,254	101,742	17,512	4,456	6,561	57,960	33,964	23,996
1984	51,182	35,243	15,939	8,894	2,293	36,548	15,794	20,753
1985	94,111	75,289	18,822	12,732	2,432	34,979	25,752	9,228
1986	108,099	90,366	17,733	10,554	2,677	38,481	29,776	8,704
1987	104,533	85,957	18,576	9,781	2,353	33,246	27,104	6,142
1988	104,066	83,762	20,304	11,685	1,822	36,166	28,834	7,332
1989	99,820	79,628	20,192	12,137	2,049	39,244	29,191	10,053
1990	92,762	72,899	19,863	14,783	2,307	37,760	28,747	9,013
1991	94,202	73,357	20,845	19,611	1,824	43,321	32,343	10,977
1992	84,493	65,800	18,693	20,339	973	47,207	33,493	13,714
1993	68,199	50,457	17,742	18,400	1,114	45,860	29,872	15,989
1994	49,785	31,854	17,931	15,088	1,236	26,572	15,301	11,271
1995	53,037	35,150	17,887	15,896	859	20,330	13,226	7,104
1996	50,197	32,223	17,974	17,799	988	16,505	12,352	4,153
1997	48,495	30,281	18,214	19,757	1,146	20,188	15,385	4,803
1998	41,177	25,731	15,446	21,244	971	18,767	14,202	4,565
1999	37,077	20,888	16,189	20,293	761	19,931	14,774	5,157
2000	31,198	17,188	14,010	23,446	660	14,077	12,431	1,646
2001	31,930	17,347	14,583	35,542	550	17,468	15,885	1,583
2002	29,989	16,391	13,598	28,686	537	16,968	14,486	2,482
2003	28,279	15,633	12,646	31,891	542	13,731	12,107	1,624
2004	25,096	12,542	12,554	36,153	622	13,791	12,598	1,192
2005	20,498	9,563	10,935	43,968	536	15,628	14,527	1,101
2006	18,517	9,444	9,073	50,528	443	17,210	16,427	783
2007	17,007	7,674	9,333	43,364	544	14,155	13,420	734
2008	18,053	8,096	9,958	43,875	599	17,246	16,392	854
2009	17,874	7,520	10,354	38,167r	646	24,090r	22,640r	1,450
2010	18,417	7,390	11,026	26,541r	715	16,883	15,366	1,517
2011	18,627	7,312	11,315	32,527	491	16,039	15,113	926

(1) 2008 is 4 days longer than the standard 52 week statistical reporting period (SRP) for January to December 2008. This is to enable a smooth transition to publishing data on a calendar month basis from January 2009 rather than 4 and 5 week SRPs used for previous years.

(2) Includes estimates for slurry etc recovered from dumps, ponds, rivers etc.

(3) The term 'surface mining' has now replaced opencast production. Opencast production is a surface mining technique.

(4) The 1993 import figure includes an additional estimate for unrecorded trade.

(5) Excludes distributed stocks held in merchants' yards, etc, mainly for the domestic market and stocks held by the industrial sector.

2.1.2 Inland consumption of solid fuels ⁽⁴⁾

Thousand tonnes

	Coal consumption by fuel producers							Final consumption					
	Primary		Secondary				Coal (1)			Coke and breeze (2)	Other solid fuel (3)		
	Total inland consumption of coal	Collieries	Power stations (1)	Coke ovens and blast furnaces	Other solid fuel plants (3)	Gas works	Total	Industry	Domestic			Other	Total
1970	156,885	1,916	77,237	25,340	4,150	4,280	111,007	19,613	20,190	4,159	43,962	18,090	3,203
1971	140,931	1,581	72,847	23,554	4,477	1,855	102,733	16,105	17,185	3,327	36,617	15,100	3,456
1972	122,883	1,405	66,664	20,476	4,547	575	92,262	11,663	14,554	2,999	29,216	14,090	3,514
1973	133,371	1,381	76,838	21,888	3,607	512	102,845	12,062	14,502	2,581	29,145	15,000	3,375
1974	117,887	1,256	67,026	18,461	3,788	107	89,382	11,077	13,667	2,505	27,249	13,220	3,184
1975	122,213	1,238	74,569	19,085	4,063	9	97,726	9,685	11,616	1,948	23,249	11,640	2,919
1976	123,604	1,132	77,819	19,402	3,405	8	100,634	8,970	10,823	2,045	21,838	12,460	2,647
1977	123,977	1,124	79,956	17,406	3,173	-	100,535	9,033	11,136	2,149	22,318	11,310	2,609
1978	120,477	1,010	80,643	14,946	3,070	-	98,659	8,550	10,217	2,041	20,808	10,484	2,453
1979	129,379	834	88,790	15,081	2,883	-	106,754	9,232	10,508	2,051	21,791	11,361	2,364
1980	123,460	663	89,569	11,610	3,022	-	104,201	7,898	8,946	1,752	18,596	6,221	2,252
1981	118,386	616	87,226	10,805	2,458	-	100,489	7,046	8,454	1,781	17,281	7,952	1,975
1982	110,998	534	80,228	10,406	2,326	-	92,960	7,175	8,474	1,855	17,504	7,248	1,921
1983	111,475	486	81,565	10,448	2,114	-	94,127	7,218	7,872	1,772	16,862	7,600	1,889
1984	77,309	209	53,411	8,246	1,300	-	62,957	7,006	5,406	1,731	14,143	7,653	1,186
1985	105,386	332	73,940	11,122	2,176	-	87,238	8,313	7,799	1,704	17,816	8,230	1,658
1986	114,234	306	82,652	11,122	1,959	-	95,733	9,278	7,421	1,496	18,195	7,558	1,601
1987	115,894	235	87,960	10,859	2,052	-	100,871	6,827	6,536	1,425	14,788	8,233	1,652
1988	111,499	196	84,258	10,902	2,006	-	97,166	7,131	5,741	1,265	14,137	8,591	1,443
1989	107,581	146	82,053	10,792	1,717	-	94,562	6,763	5,048	1,062	12,873	8,159	1,253
1990	108,257	117	84,014	10,852	1,544	-	96,410	6,280	4,239	1,211	11,730	7,637	1,214
1991	107,514	112	83,542	10,011	1,501	-	95,054	6,426	4,778	1,144	12,348	7,136	1,200
1992	100,580	79	78,469	9,031	1,319	-	88,819	6,581	4,156	945	11,682	6,887	1,089
1993	86,756	48	66,136	8,479	1,329	-	75,944	5,300	4,638	826	10,764	6,638	1,138
1994	81,767	22	62,406	8,581	1,190	-	72,177	4,946	3,901	721	9,568	6,578	949
1995	76,942	8	59,588	8,657	982	-	69,227	4,494	2,690	523	7,707	6,541	742
1996	71,400	8	55,511	8,632	946	-	65,089	3,076	2,705	523	6,303	6,993	868
1997	63,080	8	47,333	8,750	864	-	56,947	2,993	2,587	545	6,125	6,866	645
1998	63,152	5	48,588	8,728	635	-	57,951	2,414	2,366	416	5,196	6,622	644
1999	55,724	10	41,178	8,413	646	-	50,237	2,040	2,517	271	4,828	6,749	585
2000	59,931	12	46,197	8,685	540	-	55,422	1,876	1,883	82	3,841	6,352	532
2001	63,850	10	50,931	7,895	496	-	59,323	1,826	1,874	68	3,768	5,514	495
2002	58,553	9	47,741	6,533	436	-	54,710	1,809	1,286	22	3,117	4,732	424
2003	63,024	6	52,464	6,611	396	-	59,471	1,857	1,043	25	2,925	5,336	363
2004	60,451	8	50,444	6,382	327	-	57,153	1,848	941	28	2,817	5,082	320
2005	61,852	6	52,058	6,609	266	-	58,933	1,781	614	59	2,455	5,003	256
2006	67,594	4	57,438	7,049	276	-	64,763	1,756	561	54	2,370	5,263	257
2007	63,029	5	52,511	7,174	265	-	59,950	1,896	648	45	2,590	5,253	235
2008	58,385	5	47,808	7,045	352	-	55,205	1,940	683	49	2,672	5,104	294
2009	48,821r	5	39,681r	5,787	341r	-	45,809r	1,742r	689r	94r	2,525r	3,735	269
2010	51,455r	5r	41,498r	6,632r	351r	-	48,480r	1,716r	718r	58r	2,492r	3,424	311
2011	51,514	4	41,857	6,393	331	-	48,580	1,681	717	55	2,453	3,084	270

(1) Up to 1986 power stations include those in the public electricity supply, railways and transport industries. Consumption by other generators is included in final coal consumption. From 1987, coal consumption at power stations also includes other generators' consumption, which is therefore excluded from final coal consumption (see also Table 2.7). From 1999 includes coal consumption for heat sold to third parties.

(2) This series comprises final consumption and consumption at blast furnaces which can now be separated following production of energy balances in Tables 2.4 to 2.6 of the main Digest.

(3) Low temperature carbonisation and patent fuel plants and their products.

(4) 2008 is 4 days longer than the standard 52 week statistical reporting period (SRP) for January to December 2008. This is to enable a smooth transition to publishing data on a calendar month basis from January 2009 rather than 4 and 5 week SRPs used for previous years.

Chapter 3: Long term trends

Petroleum

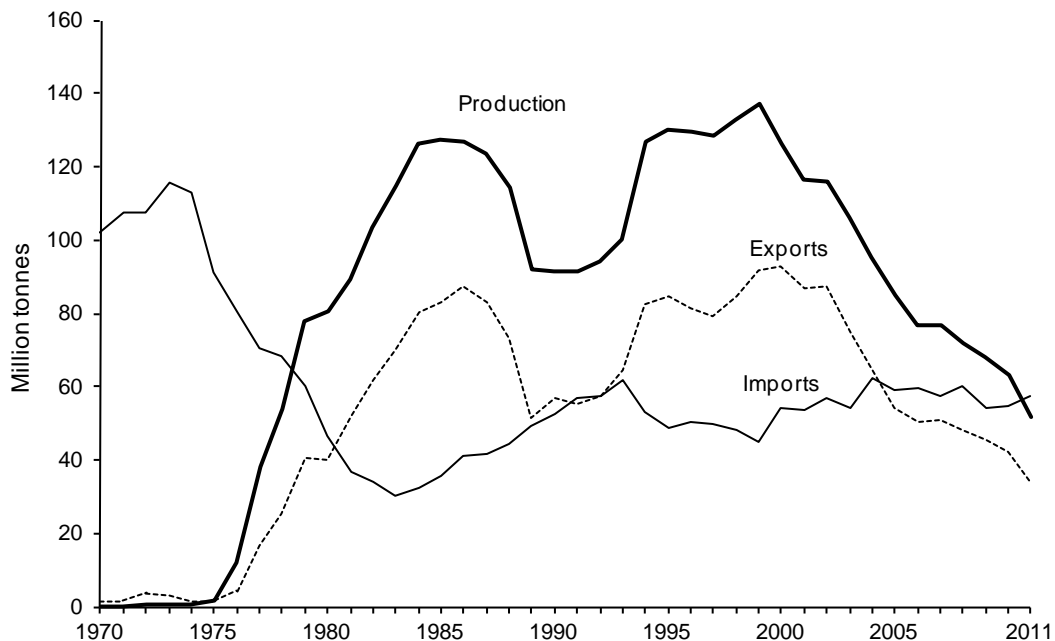
3.1.1 Tables 3.1.1 and 3.1.2 present extended time series of selected, more aggregated data, from the tables in Chapter 3 of the main Digest. They give additional background on the historic development of the crude oil and petroleum sectors.

Crude oil and petroleum products: production, imports and exports (Table 3.1.1)

3.1.2 The left-hand side of Table 3.1.1 shows data from 1970 to 2011 for production, imports and exports of crude oil (including natural gas liquids and feedstocks) and oil products. This part of the table also shows United Kingdom refinery throughput of crude oil, and the inland deliveries of oil products. Indigenous production of crude oil is shown in total with landward production shown separately.

3.1.3 The first three columns of the right-hand side of Table 3.1.1 consist of time series showing net exports of crude oil and products. It should be noted that exports of crude oil include some imports that have been re-exported. In years of significant indigenous production these have little effect on exports as a proportion of indigenous production, but in the earlier years (approximately pre-1975) the re-exports exceeded indigenous production and thus the ratio of exports to indigenous production was greater than one.

Chart 3.1.1: Production, exports and imports of oil⁽¹⁾ 1970 to 2011



(1) Includes crude oil, natural gas liquids and process oils.

3.1.4 Chart 3.1.1 illustrates the trends in the production, exports and imports of crude oil. It shows that indigenous production of crude oil was negligible up to 1974 and then increased rapidly as North Sea production came on stream. Imports peaked in 1973, immediately prior to the first OPEC price 'hike'. The chart shows the rapid decline of net imports thereafter as indigenous production rose, until 1981 when the surplus turned from net imports to net exports. Net exports first peaked in 1986, one year after the first peak for North Sea production in 1985.

3.1.5 The large fall in production in 1988 and particularly 1989 reflects the effects of the Piper Alpha disaster and subsequent incidents, and the continued 'low' production in 1990 and 1991 reflects the consequent safety work. Production has been declining since the peak production of 137 million tonnes in 1999. In 2011 production was 11 million tonnes lower, decreasing by a nearly a fifth compared with 2010. This was largest decrease since large scale oil extraction began. More information on the reasons behind this reduction can be found in Annex F, paragraph F.8.

3.1.6 Table 3.1.1 also shows that the import share of refinery throughput of crude oil fell from nearly 100 per cent, prior to North Sea oil production starting, to a low of 39 per cent in 1983 (the lowest year for imports), before rising to 64 per cent in 1993. Since then, indigenous production has increased significantly leading to the import share falling to 51 per cent in 1999, the year of record UK production of crude oil. The imports' share of refinery throughput was 77 per cent in 2011 due to the lower levels of production mentioned above. These developments are mirrored by the changes in the ratio of indigenous production to refinery throughput. Ignoring pre-1976 figures, the proportion of indigenous production exported increased from 35 per cent in 1976 to around two-thirds towards the end of the 1980s. Although the decreases in production in the late 1980s did lead to some reduction in the level of exports, the proportion of production exported continued at roughly this level during the 1990s. Since 2000, however, the proportion has risen to about two thirds.

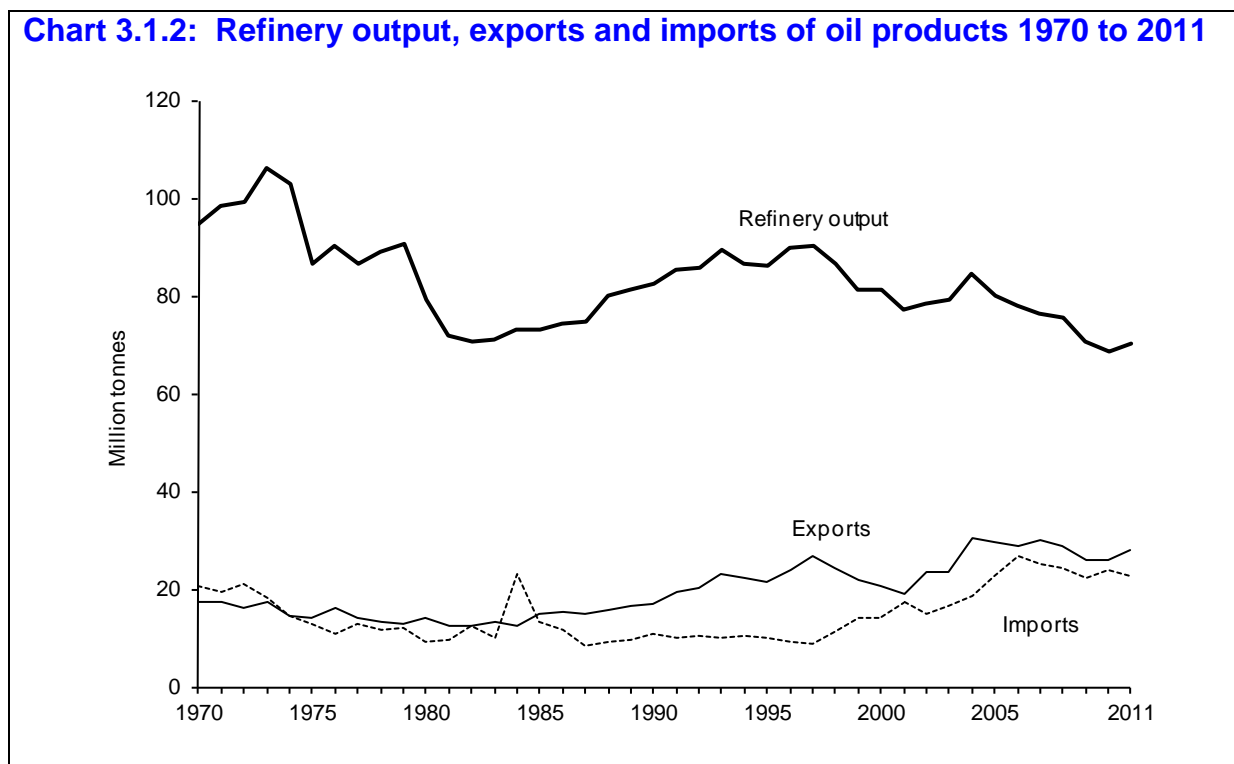
3.1.7 Imports of crude oil in 1991 (and marginally again in 1992) exceeded exports for the first time since 1980. Net exports of crude oil resumed in 1993, and continued to rise until 1999. In 1999 net exports of crude oil were 47 million tonnes at their highest since 1984 with overall net exports of crude oil and oil products at a record level of almost 55 million tonnes. However, the decreased level of crude oil production since 1999 has seen net exports of crude oil falling over the last six years and the UK becoming a net-importer of primary oils in 2005 for the first time since 1992. In 2011, the UK was a net-importer of primary oils and a net-exporter of oil products, however, the extent of importing was on a large enough scale that overall, for both primary oils and oil products combined the UK was a net-importer. In 2011, imports of primary oil also marginally exceeding production for the first time, as shown in chart 3.1.1.

3.1.8 Refinery throughput peaked in 1973 but subsequently fell to pre-1970 levels together with refinery output. (The difference between refinery throughput and output is refinery use of fuel and gains/losses). Since the low point of 1983 (throughput 77 million tonnes), both refinery throughput and output increased to a new peak in 1997. However, with the closure of the Gulf Oil refinery in late 1997, refinery output fell by 4 per cent in 1998 and then by another 6 per cent in 1999 to the lowest level seen since 1989. The remaining refineries in the UK worked to increase their capacity and utilisation rates and to a large extent offset the closures of the Gulf Oil and Shell Haven refineries. The fall in refinery output in 2001 is the result of the shutdowns mentioned above. In 2010 refinery output and throughput were both lower by 3 per cent than in 2009 and were the lowest since the 1960's. The principal driver for this reduction was the cessation of refinery operations at Petroplus Teesside in 2009. Citing prevailing economic circumstances, the Petroplus refinery was mothballed and converted to a storage site. In 2011 refinery output stood at 70 million tonnes, 2 per cent higher than in 2010. In 2011, refinery throughput stood at 75 million tonnes, 2 per cent higher than in 2010.

3.1.9. In 1984 the UK was a net importer of oil products due to the increased demand for oil products as a result of the miners strike. Since 1984 the UK has been a net exporter of oil products with increases in exports during the 1990s leading to a record high in 1997. The increases in net exports of products in the 1990s reflect the increased throughput from refineries mainly feeding through to increased exports of oil products, rather than increases in deliveries to the domestic market. Net exports of products decreased in both 1998 and 1999, (following the closure of the Gulf Oil refinery from December 1997). The closure of the Shell Haven refinery was the main reason for the decline in net exports of products in 2000. The sharp fall in 2001 occurred due to a number of prolonged shutdowns and slowdowns at refineries in the first half of the year to allow upgrade work for the introduction of ultra low sulphur petrol. Exports of oil products increased from 1991 to 1993 (comfortably exceeding the earlier peak at the beginning of the 1970s), fell in 1994 and 1995 before climbing again to reach a new peak in 1997 at 26.8 million tonnes. Imports of oil products were at their highest in 1967 (24 million tonnes) and, apart from a 'blip' in 1984 as a result of the miners' strike, were less than half this peak until 1999. As a result, 1984 apart, exports of oil products have exceeded imports in every year since 1974. In 2011, imports made up 36 per cent of inland deliveries, a higher level than the last 40 years, including the 1984 miners strike. In 2011, imports made up 35

per cent of inland deliveries. Chart 3.1.2 summarises the trend in refinery output, exports and imports of oil products over the period.

Chart 3.1.2: Refinery output, exports and imports of oil products 1970 to 2011



Inland deliveries of petroleum products (Table 3.1.2)

3.1.10 Table 3.1.2 shows data for deliveries of petroleum products from 1970 to 2011, split between non-energy uses in total and the major products delivered for energy use. While data for deliveries are considered to be a good proxy for consumption, differences can occur mainly due to stock changes along the chain of consumption. Total deliveries for energy use shown in the first (left-hand) half of the table and include 'own use' by refineries that are separately identified in the right-hand part of the table.

3.1.11 Deliveries of petroleum products peaked in 1973, in common with other aggregate oil figures (see Table 3.1.1). The 'blip' in 1984 reflects the increased deliveries (of fuel oil in particular) during the miners' strike. Fuel oil deliveries are now 6 per cent of their level in 1970 while gas oil deliveries (excluding DERV fuel) are half their 1970 level. In contrast, deliveries of aviation turbine fuel have more than tripled during the period. After limited growth during the 1970s and early 1980s, deliveries of DERV fuel resumed the high growth rates apparent in the 1960s, and have increased by over a quarter over the last 10 years. The upward surge of deliveries of transport fuels slowed in 1990 and ceased in 1991 with the twin impacts of the Gulf crisis and recession, with some recovery being seen in 1992.

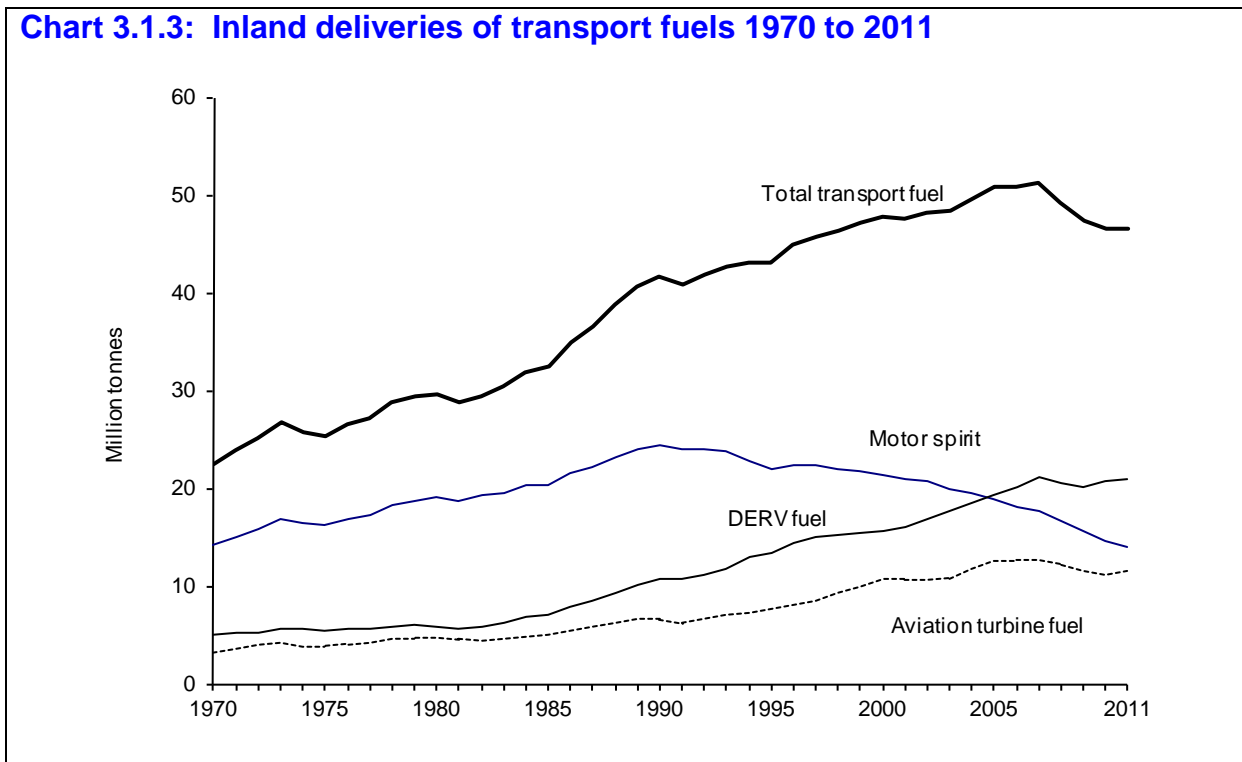
3.1.12 Since 1992, motor spirit deliveries have generally declined each year. In 2010 deliveries of motor spirit were a third lower than in 2000. These changes reflect the switch to diesel-engine cars and are mirrored by the pattern of increases in deliveries of DERV fuel since 1990. Consumption of motor spirit is also lowered by a more efficient road fleet. In 2005, deliveries of DERV fuel exceeded motor spirit in mass terms for the first time, and in 2007 DERV deliveries surpassed motor spirit in terms of both mass and volume, which has continued into 2011. Deliveries of aviation turbine fuel also increased each year from 1992 to 2000. However deliveries of aviation turbine fuel fell in 2001 due to the terrorist attacks on the United States on 11th September 2001 that caused a downturn in the global aviation industry. Developments in Afghanistan and Iraq during 2002 also impacted on the aviation industry with deliveries of aviation turbine fuel in 2002 being 1 per cent lower than in 2001. Deliveries of aviation turbine fuel increased by two thirds between 1990 and 2010. Deliveries increased year on year between 2003 and 2006, but fell year on year between 2007 and 2010. These recent falls in consumption reflect the impacts of the economic downturn, and specific drops in aviation fuel

consumption as a result of poor weather and the ash eruption from the Eyjafjallajökull volcano in 2010. In 2011, consumption of aviation turbine was 4 per cent higher than in 2010. Chart 3.1.3 shows the trends in deliveries of all transport fuels from 1970 to 2011.

3.1.13 By the end of the 1980s and during the 1990s deliveries for non-energy uses were not far off their peak of the early to mid-1970s. Non-energy use has declined steadily in recent years, and is down a third on the most recent peak, in 2004.

3.1.14 The right hand columns of Table 3.1.2 (headed “Energy industry use” and “Final users”) show a sector-by-sector breakdown of the total deliveries for energy use given in the left hand columns. Fuels used in blast furnaces are included in the “other energy industry uses” column rather than in the iron and steel column. Total uses by the transport sector are now roughly double the amount delivered in 1970 as Chart 3.1.3 shows. Deliveries to every other major sector are below 1973 levels - well below for electricity generators, iron and steel and ‘other industries’, and other final users (mainly agriculture, public administration and commerce).

Chart 3.1.3: Inland deliveries of transport fuels 1970 to 2011



3.1.15 Additional analysis to that presented in this publication has been conducted on the information provided in Tables 3.1.1 and 3.1.2. The main purpose of this analysis was to extend the information provided back as far as possible, which has meant back to 1870 for some information. The tables are at the link below and an article containing this analysis was published in the March 2007 edition of Energy Trends which is available on request from DECC:

www.decc.gov.uk/en/content/cms/statistics/blue_stats/source/oil/oil.aspx

A publication marking the 60th anniversary of the Digest of UK Energy Statistics is also available:

www.decc.gov.uk/en/content/cms/statistics/publications/dukes/dukes.aspx

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3.1.1 Crude oil and petroleum products: production, imports and exports⁽¹⁾⁽²⁾

	Thousand tonnes								
	Crude oil (3)					Oil products			
	Imports	Indigenous production		Exports	Refinery throughput	Refinery output (4)	Exports	Imports	Inland deliveries (4)
		Total	Landward						
1970	102,155	156	83	1,182	101,911	94,696	17,424	20,428	91,151
1971	107,736	212	85	1,569	105,342	98,245	17,166	19,369	91,991
1972	107,706	333	85	3,558	106,980	99,368	15,979	20,827	98,469
1973	115,472	372	88	3,235	114,338	105,954	17,404	18,300	99,786
1974	112,822	410	107	1,404	111,217	103,060	14,631	14,537	93,409
1975	91,366	1,564	99	1,524	93,597	86,647	13,924	12,786	82,824
1976	80,466	12,169	99	4,285	97,784	90,284	15,988	10,709	81,579
1977	70,697	38,265	99	16,793	93,615	86,338	14,160	13,050	82,759
1978	68,144	54,006	88	25,200	96,390	89,156	13,194	11,586	84,141
1979	60,380	77,748	121	40,569	97,806	90,583	12,988	12,035	84,554
1980	46,717	80,467	237	40,180	86,341	79,227	14,110	9,245	71,177
1981	36,855	89,454	232	52,206	78,287	72,006	12,256	9,402	66,256
1982	33,754	103,211	253	61,670	77,130	70,747	12,637	12,524	67,246
1983	30,324	114,960	316	69,923	76,876	70,927	13,331	9,907	64,464
1984	32,272	126,065	345	80,143	79,117	73,187	12,478	23,082	81,435
1985	35,576	127,611	380	82,980	78,431	72,904	14,828	13,101	69,781
1986	41,209	127,068	504	87,437	80,155	74,089	15,283	11,767	69,227
1987	41,541	123,351	578	83,220	80,449	74,656	14,980	8,570	67,701
1988	44,272	114,459	761	73,330	85,662	79,837	15,802	9,219	72,317
1989	49,500	91,710	722	51,664	87,669	81,392	16,683	9,479	73,028
1990	52,710	91,604	1,758	56,999	88,692	82,286	16,899	11,005	73,943
1991	57,084	91,261	3,703	55,131	92,001	85,476	19,351	10,140	74,506
1992	57,683	94,251	3,962	57,627	92,334	85,783	20,250	10,567	75,470
1993	61,701	100,189	3,737	64,415	96,273	89,584	23,031	10,064	75,790
1994	53,096	126,542	4,649	82,393	93,161	86,644	22,156	10,441	74,957
1995	48,749	129,894	5,051	84,577	92,743	86,133	21,614	9,878	73,694
1996	50,099	129,742	5,251	81,563	96,660	89,885	23,681	9,315	75,390
1997	49,994	128,234	4,981	79,400	97,023	90,366	26,755	8,706	72,501
1998	47,958	132,633	5,161	84,610	93,797	86,615	24,375	11,418	72,261
1999	44,869	137,099	4,285	91,797	88,286	81,195	21,730	13,896	72,436
2000	54,386	126,245	3,247	92,917	88,013	81,130	20,677	14,212	71,944
2001	53,551	116,678	2,921	86,930	83,343	77,051	19,088	17,234	71,354
2002	56,968	115,944	2,673	87,144	84,784	78,319	23,444	14,900	70,557
2003	54,177	106,073	2,198	74,898	84,585	79,073	23,323	16,472	71,697
2004	62,517	95,374	1,938	64,504	89,821	84,411	30,495	18,545	73,649
2005	58,885	84,721	1,648	54,099	86,134	80,145	29,722	22,481	75,496
2006	59,443	76,578	1,380	50,195	83,213	77,960	28,945	26,836	74,895
2007	57,357	76,575	1,271	50,999	81,477	76,503	29,983	25,110	72,742
2008	60,041	71,665	1,248	48,401	80,740	75,673	28,791	24,186	71,118
2009	54,387	68,199	1,181	45,202	75,225	70,496	25,733	22,172	67,469
2010	54,587	62,962	941	42,196	73,200	68,397	26,065	23,979	66,699
2011	57,586	51,972	678	33,745	74,709	70,104	27,800	22,804	65,095

(1) Aggregate monthly data on crude oil production and trade in oil and oil products are available - see Chapter 3 paragraph 3.73 and Annex C.

(2) See paragraphs 3.1.2 to 3.1.9.

(3) Includes natural gas liquids and feedstocks.

(4) Excludes products used as fuels within refinery processes.

3.1.1 Crude oil and petroleum products: production, imports and exports⁽¹⁾⁽²⁾ (continued)

Net exports			Crude oil			Oil products	
Crude oil (5)	Oil products (5)	Total (5)	Ratio of imports to ref. throughput	Ratio of indigenous production to ref. throughput	Ratio of exports to indigenous production	Imports: Share of inland deliveries	
Thousand tonnes			Ratio			Percentage	
-100,973	-3,004	-103,977	1.002	0.001	7.577	22.4	1970
-106,167	-2,203	-108,370	1.023	0.001	7.401	21.1	1971
-104,148	-4,848	-108,996	1.007	0.002	10.685	21.2	1972
-112,237	-896	-113,133	1.010	0.002	8.696	18.3	1973
-111,418	94	-111,324	1.014	0.002	3.424	15.6	1974
-89,842	1,138	-88,704	0.976	0.012	0.974	15.4	1975
-86,181	5,279	-80,902	0.925	0.118	0.352	13.1	1976
-53,904	1,110	-52,794	0.755	0.409	0.439	15.8	1977
-42,944	1,608	-41,336	0.707	0.560	0.467	13.8	1978
-19,811	953	-18,858	0.617	0.796	0.522	14.2	1979
-6,537	4,865	-1,672	0.541	0.932	0.499	13.0	1980
15,351	2,854	18,205	0.471	1.143	0.583	14.2	1981
27,916	113	28,029	0.438	1.338	0.597	18.6	1982
39,599	3,424	43,023	0.394	1.497	0.608	15.4	1983
48,141	-10,604	37,537	0.408	1.593	0.638	28.3	1984
47,404	1,727	49,131	0.454	1.627	0.650	18.8	1985
46,228	3,516	49,744	0.514	1.585	0.688	17.0	1986
41,679	6,410	48,089	0.516	1.533	0.675	12.7	1987
29,057	6,583	35,640	0.517	1.336	0.641	12.7	1988
2,164	7,204	9,368	0.565	1.046	0.563	13.0	1989
4,289	5,894	10,183	0.594	1.033	0.622	14.9	1990
-1,953	9,211	7,258	0.620	0.992	0.604	13.6	1991
-56	9,683	9,627	0.625	1.021	0.611	14.0	1992
2,714	12,967	15,681	0.641	1.041	0.643	13.3	1993
29,297	11,715	41,012	0.570	1.359	0.651	13.9	1994
35,828	11,736	47,564	0.526	1.401	0.651	13.4	1995
31,464	14,366	45,830	0.518	1.342	0.629	12.1	1996
29,406	18,037	47,443	0.515	1.322	0.619	12.0	1997
36,652	12,957	49,609	0.511	1.414	0.638	15.8	1998
46,928	7,834	54,762	0.508	1.553	0.670	19.2	1999
38,531	6,464	44,995	0.618	1.434	0.736	19.8	2000
33,378	1,854	35,232	0.643	1.400	0.745	24.2	2001
30,176	8,544	38,720	0.672	1.368	0.752	21.1	2002
20,720	6,851	27,571	0.641	1.254	0.706	23.0	2003
1,987	11,950	13,937	0.696	1.062	0.676	25.2	2004
-4,786	7,241	2,455	0.684	0.984	0.639	29.8	2005
-9,249	2,109	-7,140	0.714	0.920	0.655	35.8	2006
-6,357	4,874	-1,484	0.704	0.940	0.666	34.5	2007
-11,640	4,604	-7,036	0.744	0.888	0.675	34.0	2008
-9,185	3,561	-5,624	0.723	0.907	0.663	32.9	2009
-12,391	2,087	-10,304	0.746	0.860	0.670	36.0	2010
-23,841	4,996	-18,845	0.771	0.696	0.649	35.0	2011

(5) A minus (-) signifies that in that particular year imports were greater than exports.

3.1.2 Inland deliveries of petroleum ⁽¹⁾⁽²⁾

Million tonnes										
	Total	Deliveries for energy uses							Total for energy uses (5)	Deliveries for non-energy uses
		Motor spirit	DERV fuel	Aviation turbine fuel	Burning oil	Gas oil (3)	Fuel oils (4)	Petroleum gases		
1970	97.18	14.24	5.04	3.25	2.48	11.56	42.12	3.54	87.05	10.13
1971	98.17	14.96	5.19	3.67	2.57	12.13	42.74	3.84	88.04	10.13
1972	104.89	15.90	5.25	3.93	2.93	14.56	44.85	4.08	94.21	10.68
1973	106.84	16.93	5.66	4.20	3.18	14.60	43.40	4.43	95.25	11.59
1974	100.39	16.48	5.52	3.69	2.78	13.12	40.71	3.80	88.53	11.86
1975	88.85	16.13	5.41	3.83	2.63	12.61	33.81	3.51	79.41	9.44
1976	87.92	16.88	5.59	3.99	2.62	12.53	30.90	3.85	77.81	10.11
1977	89.00	17.34	5.71	4.17	2.62	13.38	30.74	3.88	79.28	9.72
1978	90.56	18.35	5.88	4.51	2.65	13.19	31.50	3.84	81.16	9.40
1979	91.09	18.69	6.06	4.67	2.70	13.49	30.95	3.88	81.56	9.53
1980	77.50	19.15	5.85	4.69	2.10	11.62	22.69	3.52	70.50	7.00
1981	71.70	18.72	5.55	4.50	1.91	10.93	18.64	3.15	64.15	7.55
1982	72.79	19.25	5.73	4.47	1.75	10.50	19.16	3.45	65.19	7.60
1983	69.77	19.57	6.18	4.57	1.66	9.88	15.03	3.84	61.75	8.02
1984	86.79	20.23	6.76	4.83	1.71	9.92	30.26	3.79	78.61	8.18
1985	74.96	20.40	7.11	5.01	1.87	9.71	18.19	3.15	66.48	8.48
1986	74.62	21.47	7.87	5.50	2.02	9.22	14.64	3.46	65.26	9.36
1987	72.92	22.18	8.47	5.82	2.03	8.51	11.90	3.45	63.52	9.40
1988	77.80	23.25	9.37	6.20	1.99	8.39	13.83	3.62	67.80	10.00
1989	78.85	23.92	10.12	6.56	1.94	8.26	13.14	3.88	68.97	9.88
1990	79.78	24.31	10.65	6.59	2.06	8.03	14.02	3.88	70.61	9.17
1991	80.56	24.02	10.69	6.18	2.38	8.02	14.17	4.00	70.61	9.95
1992	81.55	24.04	11.13	6.67	2.47	7.86	13.74	3.84	70.92	10.63
1993	82.18	23.77	11.81	7.11	2.63	7.78	13.13	4.05	71.45	10.73
1994	81.22	22.84	12.91	7.28	2.66	7.51	11.73	4.06	70.04	11.18
1995	80.17	21.95	13.46	7.66	2.77	7.25	10.30	4.26	68.85	11.32
1996	82.01	22.41	14.37	8.05	3.34	7.65	9.15	4.55	70.72	11.29
1997	79.25	22.25	14.98	8.41	3.34	7.38	6.25	4.22	68.30	10.95
1998	78.44	21.85	15.14	9.24	3.57	7.31	5.35	4.05	67.75	10.69
1999	77.97	21.79	15.51	9.94	3.63	6.73	4.45	3.97	67.24	10.73
2000	77.20	21.40	15.63	10.81	3.84	6.81	3.35	3.99	67.14	10.05
2001	76.41	20.94	16.06	10.61	4.24	6.60	4.26	3.76	67.53	8.89
2002	76.23	20.81	16.93	10.52	3.58	5.94	3.77	3.84	66.56	9.67
2003	77.15	19.92	17.71	10.76	3.57	6.24	3.56	3.90	66.74	10.41
2004	79.07	19.48	18.51	11.64	3.95	5.97	3.74	4.11	68.48	10.58
2005	81.10	18.85	19.38	12.50	3.87	6.83	3.78	4.19	70.66	10.44
2006	79.77	18.09	20.16	12.64	4.02	6.31	3.25	4.15	70.02	9.76
2007	77.42	17.61	21.04	12.57	3.63	6.12	3.23	3.88	69.46	7.97
2008	75.87	16.54	20.50	12.22	3.69	5.97	3.31	4.11	67.84	8.03
2009	71.87	15.61	20.11	11.53	3.73	5.35	2.60	3.77	64.50	7.37
2010	71.17	14.60	20.74	11.12	4.01	5.23	2.40	4.05	63.64	7.53
2011	69.49	13.89	20.99	11.57	3.29	5.09	2.07	3.96	62.23	7.25

(1) Aggregate monthly and quarterly data on inland deliveries of oil products are available - see Chapter 3, paragraph 3.73 and Annex C.

(2) This table has been revised from previous editions to be fully compliant with the commodity balances format used in Chapter 3, Tables 3.2 to 3.4. This has involved adding in the refinery fuel elements into the above product totals, and an adjustment to the data for fuels used by the iron and steel industry as detailed in footnote (6) below.

(3) Other than DERV fuel. From 1999 includes marine diesel oil.

3.1.2 Inland deliveries of petroleum ⁽¹⁾⁽²⁾ (continued)

Million tonnes

Energy industry use				Final users					
Electricity generators	Gas works	Refineries	Other energy industry uses	Iron & steel	Other industries	Transport	Domestic	Other final users (7)	
			(6)					(7)	
12.60	4.56	6.03	4.25	1.42	21.55	25.00	3.05	8.59	1970
14.68	2.59	6.18	3.97	1.32	21.55	26.07	3.01	8.67	1971
18.87	2.21	6.42	3.78	1.26	22.14	27.14	3.48	8.91	1972
16.95	2.32	7.05	3.74	1.25	22.18	28.96	3.80	9.00	1973
17.21	1.28	6.95	3.02	1.01	19.82	27.92	3.38	7.95	1974
12.82	0.59	6.03	2.48	0.83	17.89	27.57	3.27	7.93	1975
10.18	0.25	6.34	2.48	0.83	18.06	28.60	3.27	7.80	1976
10.60	0.16	6.24	2.21	0.74	18.06	29.37	3.31	8.60	1977
11.64	0.35	6.42	2.12	0.71	17.55	30.87	3.26	8.24	1978
11.12	0.42	6.49	2.14	0.71	17.62	31.58	3.21	8.27	1979
6.52	0.31	6.27	1.19	0.40	14.51	31.74	2.55	7.01	1980
4.86	0.25	5.45	1.00	0.33	12.67	30.63	2.31	6.65	1981
6.87	0.21	5.55	0.89	0.30	11.64	31.31	2.15	6.28	1982
4.65	0.16	5.30	0.77	0.26	10.23	32.25	2.14	6.00	1983
20.91	0.16	5.35	0.63	0.21	9.39	33.82	2.14	6.00	1984
9.72	0.15	5.18	0.52	0.17	8.43	34.46	2.20	5.65	1985
5.66	0.17	5.40	0.50	0.17	9.02	36.66	2.32	5.36	1986
5.36	0.09	5.05	0.42	0.14	7.36	38.22	2.21	4.67	1987
6.07	0.06	5.29	0.55	0.18	8.23	40.62	2.13	4.67	1988
6.17	0.05	5.62	0.56	0.19	7.52	42.54	2.11	4.21	1989
7.98	0.05	5.07	0.53	0.18	7.03	43.45	2.22	4.11	1990
7.56	0.05	5.26	0.53	0.18	7.49	42.86	2.52	4.17	1991
8.32	0.04	4.16	0.51	0.17	7.13	43.79	2.58	4.22	1992
6.02	0.04	5.89	0.64	0.21	7.17	44.56	2.71	4.21	1993
4.04	0.05	6.04	0.67	0.22	7.47	44.82	2.70	4.03	1994
4.37	0.05	5.99	0.62	0.21	6.41	44.81	2.70	3.69	1995
3.57	0.05	6.50	0.65	0.09	6.41	46.64	3.17	3.65	1996
2.24	0.05	6.16	0.57	0.11	5.68	47.32	3.06	3.12	1997
1.40	0.05	6.18	0.27	0.08	5.75	47.92	3.20	2.92	1998
1.17	0.05	5.54	0.98	0.06	5.28	48.85	2.85	2.47	1999
0.98	0.04	5.25	0.90	0.14	5.35	49.45	2.92	2.11	2000
0.97	-	5.06	0.82	0.08	5.98	49.11	3.18	2.32	2001
0.67	-	5.68	0.44	0.08	5.62	49.64	2.78	1.66	2002
0.54	-	5.46	0.38	0.02	6.25	50.29	2.76	1.05	2003
0.59	-	5.42	0.36	0.03	6.27	51.55	2.94	1.32	2004
1.26	-	5.60	0.33	0.02	5.92	52.77	2.78	1.62	2005
1.24	-	4.88	0.29	0.02	5.50	53.33	2.93	1.40	2006
1.13	-	4.68	0.26	0.06	5.43	53.49	2.59	1.41	2007
1.57	-	4.75	0.27	0.06	5.01	51.67	2.73	1.30	2008
1.57	-	4.40	0.13	0.05	4.53	49.52	2.71	1.14	2009
1.14	-	4.47	0.07	0.00	4.65	48.58	3.08	1.15	2010
0.83	-	4.39	0.06	0.00	4.08	48.68	2.40	1.25	2011

(4) Includes Orimulsion from 1989. Imports / deliveries of Orimulsion ceased in February 1997.

(5) Includes aviation spirit, naphtha (LDF) for gasworks and wide cut gasoline.

(6) Use of gas oil & fuel oil by iron & steel industry in blast furnaces. Data from 1999 provided by the Iron & Steel Statistics Bureau and include estimates of fuel used to generate heat that is sold to third parties.

(7) Mainly agriculture, public administration, commerce and other services.

Chapter 4: Long term trends

Gas

Natural gas and colliery methane production and consumption (Table 4.1.1)

4.1.1 Table 4.1.1 shows data for production, imports, exports, and the consumption of natural gas and colliery methane by major sector in each year from 1970 to 2011. Separate figures are shown for consumption of town gas and methane.

4.1.2 Total consumption in Table 4.1.1 is defined to match the definition of gas consumption used in the gas tables before the 1999 Digest. This enables a consistent long term series to be presented. In 2011, total consumption of natural gas and colliery methane in this table is related to total UK consumption of natural gas in Table 4.3 of Chapter 4 of the main Digest as follows:

Total consumption (Table 4.1.1)	GWh 891,874
<i>less</i> Colliery methane	<u>- 669</u>
<i>equals</i>	
Total consumption of natural gas	891,205
<i>less</i> Producers' own use	- 53,163
<i>less</i> Operators' own use	<u>- 1,791</u>
<i>equals</i>	
Total UK consumption (Table 4.3)	836,252

Paragraph 4.10 of Chapter 4 of the main Digest shows how natural gas consumption in Table 4.3 relates to total demand in the balances Tables 4.1 and 4.2.

4.1.3 Chart 4.1.1 illustrates the data in Table 4.1.1. It shows how the supply of natural gas became established during the first part of the 1970s. Thereafter, the supply of natural gas continued to grow less rapidly, with indigenous production bolstered from 1977 by increasing imports from the Norwegian sector of the North Sea. By 1998 imports had fallen to only 7 per cent of their peak in the mid-1980s. This was not only due to the depletion of the (mainly Norwegian) Frigg field (which ceased production in October 2004), but also resulted from the resurgence of UK production, which achieved a new record each year from 1989 to 2000. Since 2000, UK production has fallen by almost 50 per cent, as UK reserves deplete. In 2011 production was almost 21 per cent lower than in 2010. This was the largest fall in production since production peaked in 2000 and reflected a number of unexpected problems on the UK Continental Shelf (UKCS). As a result, imports exceeded production for the first time since large scale gas extraction began.

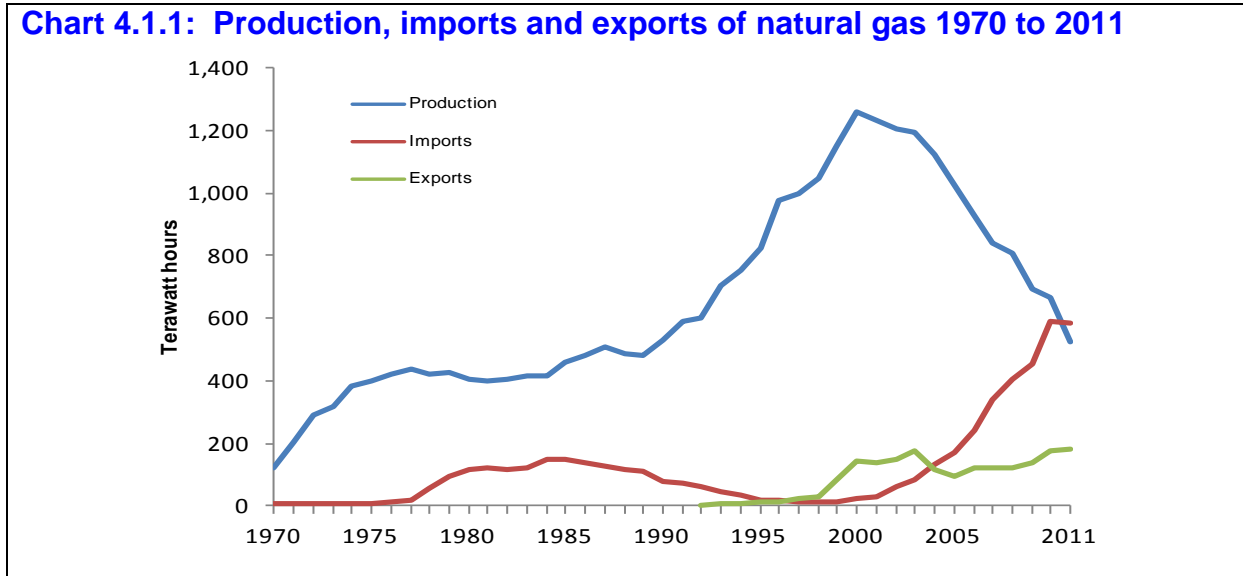
4.1.4 The first exports of natural gas were seen in 1992 from the United Kingdom's share of the Markham gas field to the Netherlands. In 1995, these were supplemented by the first exports to the Republic of Ireland, followed by the start of gas exports from the Windermere field via the Markham field during 1997, and exports via the UK-Belgium interconnector during 1998. By 2000, exports were almost six times the volume of imports. The total volumes of gas traded in 2011 was at its highest ever level. This was a small increase on 2010 record high figure, and some five times larger than 2000.

4.1.5 In October 2001, new gas supplies began to arrive from the Norwegian sector of the North Sea via the newly commissioned Vesterled pipeline. In December 2003 imports re-commenced from the UK/Norway trans-median line Staffjord field. These additional supplies of gas from the Norwegian sector of the North Sea saw the UK become a net importer of gas in 2004 for the first time since 1996. In 2005, imports of liquefied natural gas (LNG) via the Isle of Grain import/storage facility began increasing UK net imports. In October 2006, the first gas flowed through the Langeled pipeline giving the UK additional access to Norwegian gas fields. Also in October 2006, the compressors at Zeebrugge were upgraded increasing the import capacity through UK-Belgium interconnector. In December 2006, a second interconnector from Balgzand in the Netherlands to Bacton gave the UK access to the Dutch Continental Shelf. In 2007 three new fields, Chiswick, Grove and Minke, joined

Markham and Windermere in exporting gas directly to the Netherlands. 2007 also saw gas exports to Norway, ie UK gas from the Blane field to the Norwegian Ula field for injection into the Ula reservoir. In 2008 additional direct exports of gas to the Netherlands began from the new Stamford field.

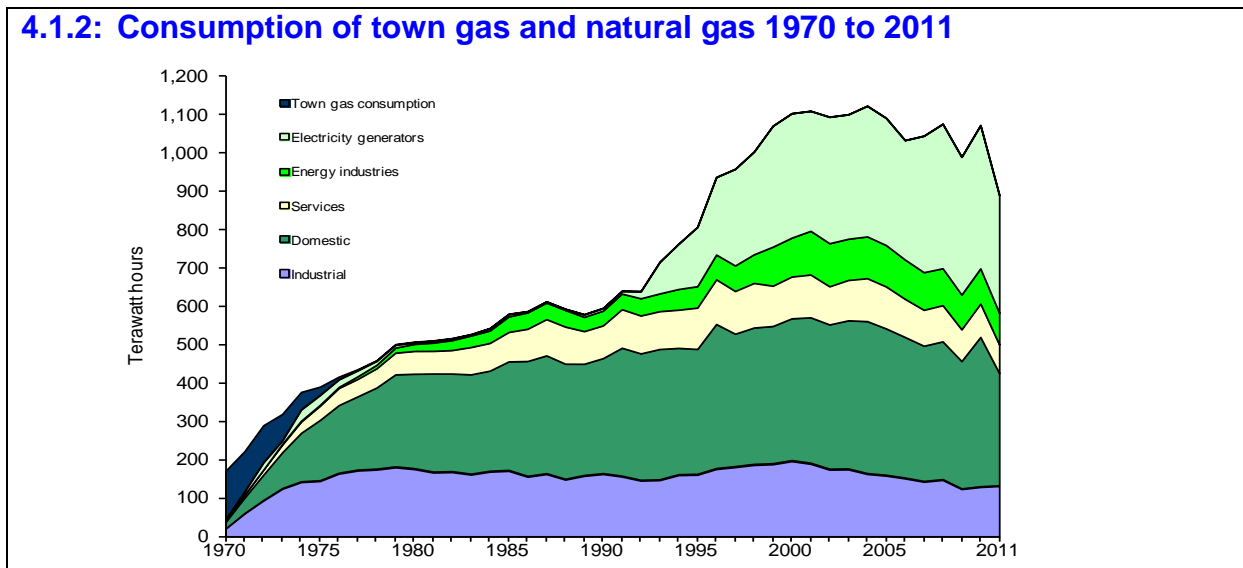
4.1.6 In 2009 two new LNG import facilities became operational. As a result, LNG’s share of total gas imports rose from 25 per cent in 2009 to 35 per cent in 2010, and to 47 per cent in 2011.

Chart 4.1.1: Production, imports and exports of natural gas 1970 to 2011



4.1.7 Chart 4.1.2 shows where natural gas has been consumed. The bulk of the rapid growth in consumption in the 1970s was in the domestic and industrial sectors. In the 1980s and early 1990s, there was a fall in industrial use. However, gas consumption by industry was on an upward trend from 1992 to 2000, when it exceeded the previous peak of 1985 by 14 per cent. Since then, industrial use of gas has fallen back, and in 2011 was a third lower than in 2000. The biggest fall occurred between 2008 and 2009 when industrial consumption fell 16 per cent due to adverse economic conditions. Between 1980 and 2004, gas consumption by the service sector¹ increased by almost 90 per cent. Since 2004 gas consumption in this sector has decreased steadily. Domestic gas consumption was 25 per cent lower in 2011 than in 2010, as a result of the warm weather conditions in 2011 – contrasting with a colder 2010.

4.1.2: Consumption of town gas and natural gas 1970 to 2011



¹ 'Services' is defined in table 4.1.1 as including public administration, commercial activities and agriculture,

4.1.8 The largest increase in gas consumption occurred in the 1990s with the growth of gas fired generation (see Chart 4.1.2). Gas use for generation grew from 6.5 TWh in 1990 to 324.6 TWh in 2000. Since then, its level has fluctuated but has remained around a third of gas use. In 2011, gas use for electricity generation was 18 per cent lower than in 2010. However, even if consumption by electricity generators is excluded, consumption of natural gas grew by 56 per cent from 1980 to its peak in 2004. Since then, it has fallen, and in 2011 was 25 per cent below the peak.

4.1.9 A more detailed examination of historical gas statistics was published in the December 2001 issue of Energy Trends. This looked at trends since 1882 in gas production, gas consumption and fuel used in the past to manufacture gas. The updated data set on which the article is based is available on the DECC web site at:

www.decc.gov.uk/en/content/cms/statistics/energy_stats/source/gas/gas.aspx

The original article is to be found at:

<http://webarchive.nationalarchives.gov.uk/+http://www.berr.gov.uk/files/file30456.pdf> (on page 34).

4.1.10 Analysis of gas statistics from 1948 to 2008 can also be found in chapter 4 of the DUKES: 60th anniversary article, available at:

www.decc.gov.uk/en/content/cms/statistics/publications/dukes/dukes.aspx.

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4.1.1 Natural gas and colliery methane production and consumption

GWh									
	Production		Imports	Exports	Total for consumption			Domestic	
	Town gas (1)	Methane (2)	Methane (3)	Methane	Total	Town gas	Methane (2)	Town gas	Methane
1970	49,617	121,712	9,759	-	171,564	125,933	45,631	85,430	18,376
1971	24,882	201,721	9,730	-	222,616	104,245	118,371	73,502	41,675
1972	17,848	291,078	8,968	-	290,287	95,834	194,453	64,974	67,172
1973	21,336	317,132	8,587	-	319,917	68,286	251,631	46,598	94,515
1974	12,221	382,253	7,122	-	377,388	44,840	332,548	30,450	127,339
1975	5,393	397,932	9,818	-	391,250	20,984	370,237	14,507	158,141
1976	1,700	421,700	11,254	-	417,655	6,272	411,120	4,250	177,279
1977	762	440,544	19,548	-	436,793	2,051	434,742	1,290	191,844
1978	615	422,257	55,361	-	460,297	938	459,359	557	212,242
1979	674	425,832	95,424	-	502,382	1,055	501,327	586	240,465
1980	586	404,760	116,291	-	508,684	909	507,775	557	246,766
1981	557	401,742	124,262	-	512,112	791	511,321	469	256,379
1982	557	405,815	115,001	-	518,149	674	517,475	410	255,118
1983	586	416,454	124,497	-	528,642	528	528,114	322	259,661
1984	557	414,314	147,415	-	544,584	498	544,086	293	261,507
1985	498	461,851	147,122	-	581,717	469	581,248	293	283,517
1986	440	483,040	137,099	-	588,691	410	588,281	234	299,929
1987 (4)	322	508,126	128,893	-	614,247	322	613,925	147	307,578
1988	88	489,133	115,441	-	594,766	88	594,678	29	300,515
1989	-	478,931	113,770	-	580,522	-	580,522	-	290,557
1990	-	528,843	79,833	-	597,046	-	597,046	-	300,410
1991	-	588,822	72,007	-	641,763	-	641,763	-	333,963
1992	-	598,761	61,255	620	640,818	-	640,818	-	330,101
1993	-	703,971	48,528	6,824	717,357	-	717,357	-	340,162
1994	-	751,588	33,053	9,557	764,667	-	764,667	-	329,710
1995	-	823,336	19,457	11,232	808,786	-	808,786	-	326,010
1996	-	979,019	19,804	15,203	938,848	-	938,848	-	375,841
1997	-	998,871	14,062	21,666	960,243	-	960,243	-	345,532
1998	-	1,048,859	10,582	31,604	1,005,306	-	1,005,306	-	355,895
1999	-	1,152,635	12,862	84,433	1,072,963	-	1,072,963	-	358,066
2000	-	1,260,656	26,032	146,342	1,105,537	-	1,105,537	-	369,909
2001	-	1,231,263	30,464	138,330	1,111,729	-	1,111,729	-	379,426
2002	-	1,205,405	60,493	150,731	1,096,267	-	1,096,267	-	376,372
2003	-	1,197,846	86,298	177,039	1,102,774	-	1,102,774	-	386,486
2004	-	1,121,257	133,033	114,112	1,124,996	-	1,124,996	-	396,411
2005	-	1,025,989	173,328	96,181	1,093,331	-	1,093,331	-	381,879
2006	-	930,538	244,029	120,591	1,035,325	-	1,035,325	-	366,928
2007	-	838,809	338,026	123,158	1,046,817	-	1,046,817	-	352,868
2008	-	810,385	407,054	122,670	1,077,977	-	1,077,977	-	359,554
2009	-	694,740	455,789	137,100	991,769	-	991,769	-	332,499
2010	-	665,083	589,497	176,399	1,074,523	-	1,074,523	-	389,595
2011	-	526,699	584,414	183,689	891,874	-	891,874	-	292,971

(1) In most years production of town gas is less than consumption because of transfers into town gas of North Sea and imported methane.

(2) Includes colliery methane.

(3) Before 1977 imports were of liquefied natural gas. These imports continued until the early 1980s.

(4) From 1987 data for industrial use of gas exclude gas used for electricity generation within industry (see Chapter 1, paragraph 1.27).

4.1.1 Natural gas and colliery methane production and consumption (continued)

							GWh
Analysis of consumption							
Industrial (5)		Electricity generators	Other energy industries (6)		Services (7)		
Town gas	Methane (2)	Methane (2)	Town gas (8)	Methane (2)	Town gas	Methane	
20,691	20,808	1,858	-	1,160	19,812	3,428	1970
12,075	60,431	7,808	-	926	18,669	7,531	1971
13,423	94,662	18,563	-	633	17,438	13,423	1972
9,173	125,552	8,453	-	2,743	12,514	20,369	1973
5,744	143,341	28,967	-	3,094	8,646	29,806	1974
2,579	146,067	25,245	-	3,241	3,898	37,542	1975
791	165,644	19,501	-	3,563	1,231	45,132	1976
352	173,820	15,310	-	7,637	410	46,131	1977
176	176,253	10,006	-	9,952	205	50,906	1978
205	182,232	7,104	-	14,143	264	57,382	1979
147	177,513	4,027	-	19,096	205	60,373	1980
147	168,574	4,174	-	22,320	176	59,874	1981
88	169,717	3,793	-	26,657	176	62,190	1982
59	163,123	2,357	-	30,819	147	72,154	1983
59	170,831	5,317	-	33,193	147	73,238	1984
29	172,941	5,873	-	41,135	147	77,781	1985
29	157,496	2,269	-	43,421	147	85,166	1986
29	164,442	2,415	-	43,743	147	95,746	1987 (4)
-	149,935	2,407	-	44,109	59	97,712	1988
-	159,701	6,210	-	37,850	-	86,204	1989
-	164,595	6,513	-	39,159	-	86,369	1990
-	157,932	6,650	-	41,472	-	101,746	1991
-	147,218	17,969	-	45,660	-	99,871	1992
-	148,522	81,848	-	47,006	-	99,819	1993
-	161,815	117,606	-	54,700	-	100,836	1994
-	162,797	154,393	-	56,565	-	109,020	1995
-	177,794	201,969	-	65,336	-	117,908	1996
-	182,867	251,822	-	67,245	-	112,777	1997
-	188,595	267,733	-	75,459	-	117,624	1998
-	190,415	315,493	-	102,502	-	106,487	1999
-	198,506	324,563	-	102,103	-	110,456	2000
-	191,600	312,939	-	114,653	-	113,111	2001
-	176,168	329,847	-	113,047	-	100,833	2002
-	176,778	324,580	-	108,197	-	106,733	2003
-	164,702	340,824	-	109,584	-	113,475	2004
-	160,295	331,658	-	108,709	-	110,791	2005
-	153,065	311,408	-	103,270	-	100,654	2006
-	144,298	355,878	-	98,946	-	94,827	2007
-	148,989	376,810	-	96,988	-	95,636	2008
-	124,860	359,303	-	91,372	-	83,735	2009
-	130,451	373,586	-	92,627	-	88,264	2010
-	132,960	307,265	-	83,246	-	75,433	2011

(5) Industrial consumption in Chapter 4, Tables 4.1 and 4.2 plus use in coke manufacture and blast furnaces and non energy gas use.

(6) Energy industry use in Chapter 4, Tables 4.1 and 4.2 less use in coke manufacture and blast furnaces plus gas transferred to heat for sale.

(7) Public administration, commercial, agriculture and miscellaneous in Chapter 4, Tables 4.1 and 4.2.

(8) Town gas consumption by the energy industries is included with the industrial sector.

Chapter 5: Long term trends

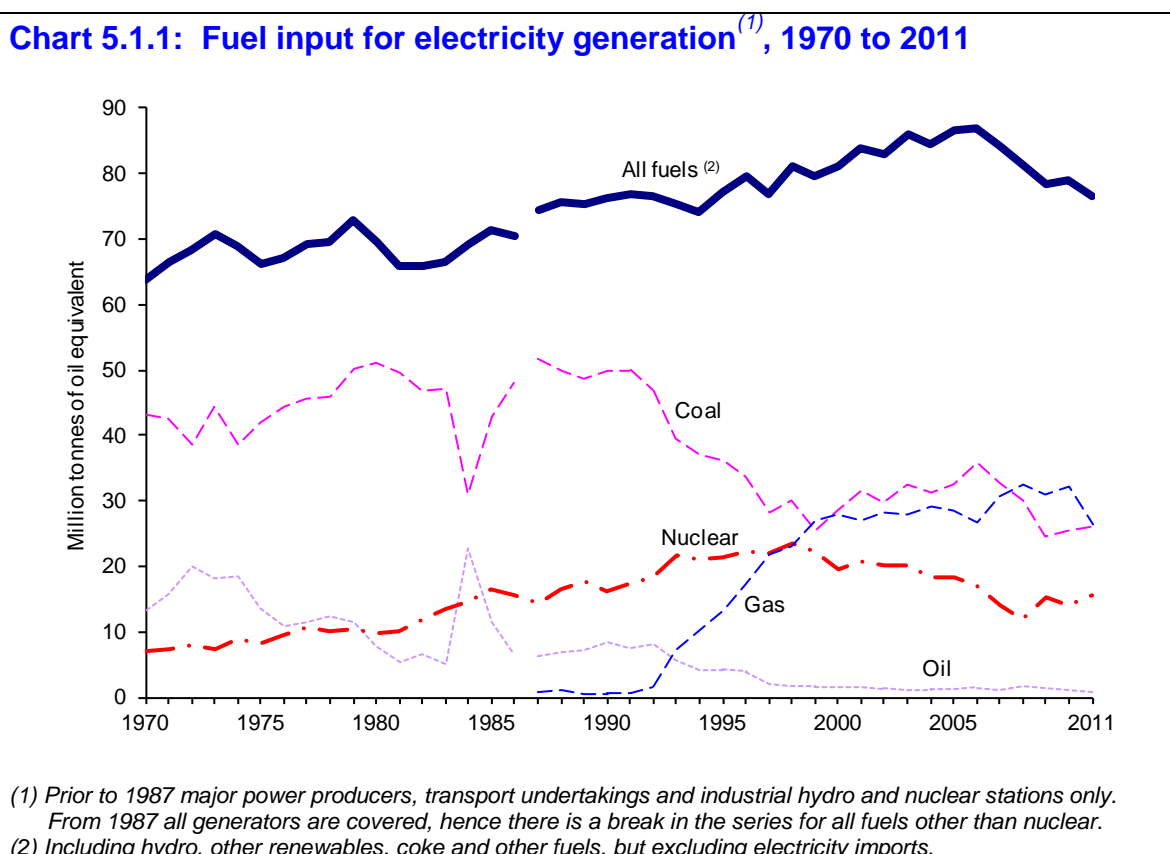
Electricity

Fuel input for electricity generation (Table 5.1.1)

5.1.1 This table extends the series shown in Table 5.4 of Chapter 5 of the main Digest back to 1970. For the period up to 1987, only fuel inputs for electricity generation at stations owned by the major power producers, transport undertakings, and industrial hydro-electric and nuclear power stations are given; data for conventional thermal electricity generated by industrial producers are not available for this period. From 1987 onwards the table covers **all** generating companies.

5.1.2 The unit of measurement used in this table is the tonne of oil equivalent. An outline of the method used for converting both fossil and non-fossil fuel energy sources to this unit is given in paragraph 5.74 of Chapter 5 of the main Digest.

5.1.3 Trends in fuel input for electricity generation are shown in Chart 5.1.1 and trends in percentage shares in Chart 5.1.2.



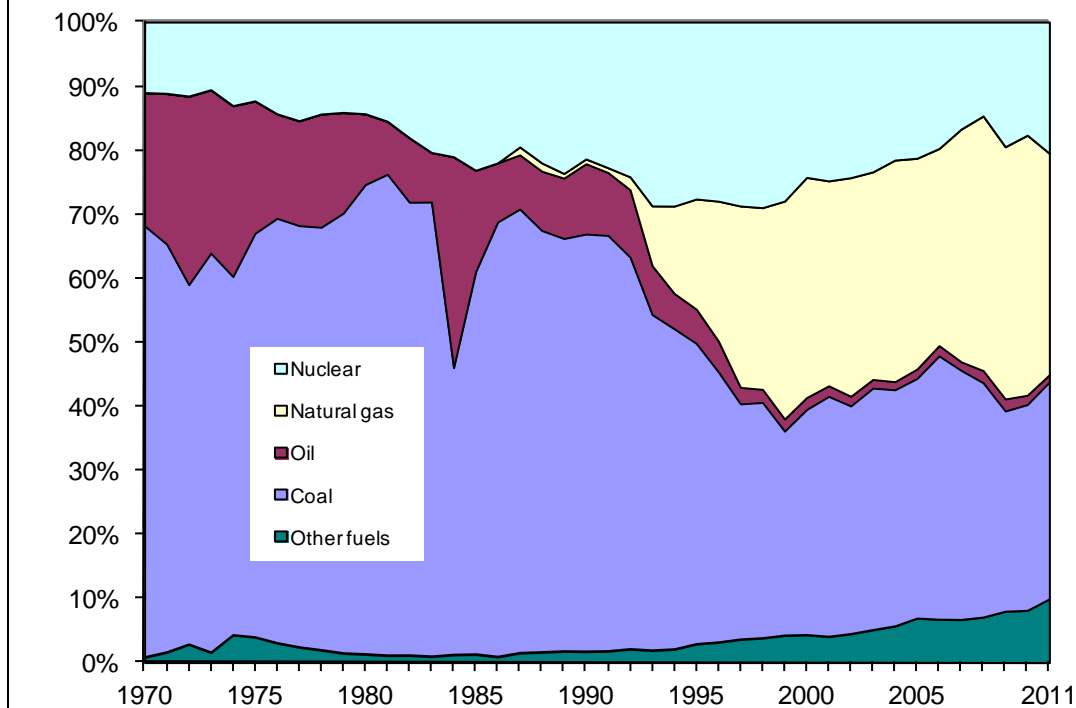
5.1.4 In 1970, coal provided over two thirds of the fuel input for electricity generation, with oil making up two thirds of the rest. Oil use reached a peak in 1972 when it accounted for 29 per cent of fuel input, but after the oil supply crisis in the following year, its use declined, apart from a temporary increase, to 33 per cent of fuel input, during the 1984/85 coal miners' dispute. Oil fell from 11 per cent of fuel input in 1990 to a record low of 1.3 per cent in 2004. However, between 2004 and 2009, with the exception of 2007, oil's share increased to between 1.5 and 1.9 per cent, due to several stations co-firing petroleum coke with coal. Since then, petroleum coke use has declined, with oil's share falling to a new low of 1.2 per cent in 2011.

5.1.5 Nuclear generation grew steadily from 11 per cent in 1970 until 1998 when it reached a peak when its oil equivalent input amounted to 29 per cent of total fuel input. In subsequent years, higher levels of outages for maintenance, repair and safety case work reduced this proportion, as did the closure of some older stations. After stabilizing at around 24 per cent in 2000 to 2003, nuclear declined to 14 per cent in 2008, with maintenance outages again impacting significantly, but increased back to 19 per cent in 2009 as stations returned to operation. In 2010, however, extensive maintenance outages again reduced the share,

to 18 per cent, before increased availability in 2011 resulted in an increase to 20 per cent, its highest share of the fuel input since 2005.

5.1.6 Between 1975 and 1990, a European Community directive limited the use of natural gas in public supply power stations. After 1991, the role of gas in electricity generation grew rapidly, its share rising from 2 per cent in 1992 to 17 per cent in 1995, and 28 per cent in 1998, before exceeding coal and nuclear in 1999, at 34 per cent.

Chart 5.1.2 Percentage shares of fuel input for electricity generation, 1970 to 2011



5.1.7 Between 2000 and 2005, gas's share remained between 32 and 35 per cent, but in 2006 high gas prices paid by generators reduced the share to 31 per cent, the lowest level since 1998. Since 2006, gas's share has generally increased, and in 2010 hit a record high share of fuel use of 41 per cent. In 2011, with high prices and increased nuclear availability, the share fell back again to 35 per cent.

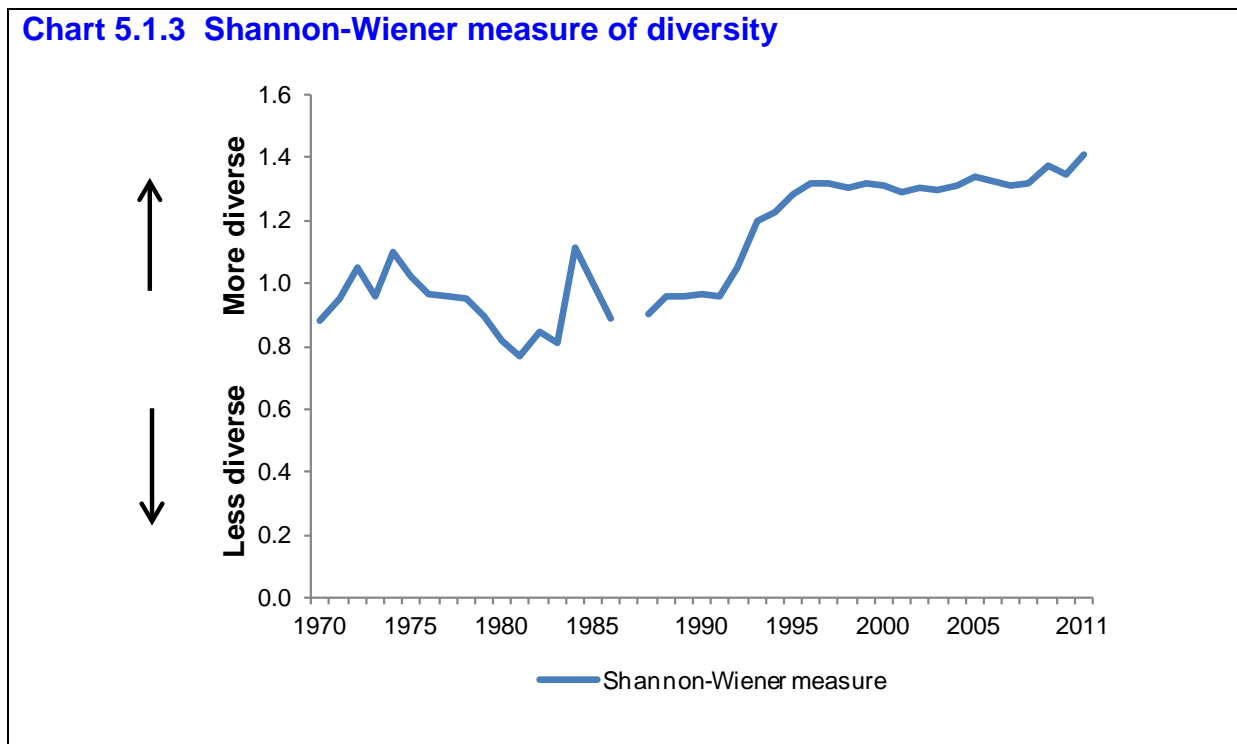
5.1.8 Throughout the 1970s, 1980s and early 1990s, coal provided the largest input to generation, but by 1999 its share had fallen to 32 per cent, having been 50 per cent as recently as 5 years earlier, and 65 per cent 10 years earlier. Since 2000, coal has been called upon to make up for unavailable nuclear and gas fired stations and then as a substitute for high priced gas, so its share recovered to 38 per cent of fuel input in 2001, remaining at between 36 and 38 per cent for the next four years. Coal's share rose further in 2006 to 41 per cent as gas prices rose significantly higher, before falling back over the next three years to stand at 31 per cent in 2009. In 2010, maintenance outages at nuclear stations, as well as high final quarter electricity demand, led to a rise in coal's share, to 32 per cent. In 2011, with high gas prices making coal generation more favourable, the share rose again to 34 per cent.

5.1.9 Since the early 1990s, the share of other fuels in the overall fuel input for generation has gradually increased, from 1.7 per cent in 1990 to 9.2 per cent in 2011. This is largely as a result of an increasing use of renewables, particularly thermal sources such as landfill gas, co-firing with fossil fuels and waste combustion. Almost half of the growth since 2000, however, has been due to a substantial increase in generation from wind.¹ Further information on the increase in the use of renewables since 1990 can be found in Chapter 6 of the Digest's Long Term Trends section.

¹ The impact from increased generation from wind is lessened, compared with thermal fuels, which, due to conversion losses, use more fuel per unit of generation (for primary sources, such as wind and hydro, the amount of fuel used is assumed to be the same as the amount of generation).

5.1.10 The changes in fuel shares are represented in the Shannon-Wiener measure of diversity (see chart 5.1.3). The diversity index is affected by the number of fuels used in the mix and the evenness of their distribution, so at the beginning of the 1990's fuel diversity was low as the generation mix was dominated by two fuels (coal and nuclear). The increase in use of gas during the 1990's meant that by the late 1990's coal, gas and nuclear had a roughly equal share in the generation mix which is reflected in the higher diversity index. The measure remained around the 1.3 value for most of the 2000s as the three main fuels continued to dominate. However, despite fluctuations, the measure of diversity over the last three years has been on an upward trend, reaching 1.4 in 2011, as wind and other renewables' shares of fuel use have begun to increase, at the expense of the combined three major fuels. If all fuels currently used for electricity generation had an even contribution to the mix the diversity index would be 1.9.

Chart 5.1.3 Shannon-Wiener measure of diversity



Electricity supply, availability and consumption (Table 5.1.2)

5.1.11 Figures for the supply, availability and consumption of electricity are given in Table 5.1.2. This table retains the nomenclature of electricity chapters in the 1999 and earlier Digests, whereas the balance methodology has introduced a new nomenclature (see Chapter 5 of the main Digest, paragraph 5.33 and Table 5.5). The series in Table 5.1.2 are extended back to 1970.

5.1.12 For the period up to 1986, the data for electricity supplied covered major power producers, transport undertakings and industrial hydro and nuclear stations only. Purchases from other electricity producers are also included, along with net imports, to give electricity available. Losses are deducted from electricity available to give consumption, which is shown by type of consumer. Availability and consumption before 1986 exclude electricity consumed or sold by other generators without passing through the public distribution system.

5.1.13 The table shows that virtually all electricity available came from home supply until 1986 when the interconnector between France and England commenced operations. At their peak in 1994, net imports from France contributed over 5 per cent of total electricity available in the UK. Net imports remained at this high level (supplemented with net imports into Northern Ireland from the Irish Republic over the interconnector reinstated in 1996) until 1997 but then declined. By 2002 the proportion of electricity available had fallen to 2 per cent mainly because, under NETA, electricity prices fell, removing the cost advantages previously enjoyed by French electricity. In 2003, exports of electricity to continental Europe, fostered by higher electricity prices there, became a more prominent feature, reducing net imports to only 0.6 per cent of electricity available. Between 2004 and 2006, the share of net imports returned to 2 per cent, but in 2007 fell back to 1.4 per cent with higher exports to continental Europe. After doubling in 2008, to stand at 2.9 per cent of electricity available, net imports fell to less than one per cent 2009 and 2010, with imports in 2010 falling to almost half of 2008's level and exports more than trebling. In 2011, a new interconnector was opened, linking England with the Netherlands. As with the France interconnector, in 2011, the Netherlands

was mainly used for imports, with total imports to the UK increasing by 20 per cent on 2010's levels, and exports almost halving. This resulted in net imports increasing once more, to 1.8 per cent of electricity available, with imports.

5.1.14 Consumption of electricity by industry accounted for around a third of total consumption in 1975 and the current proportion is still around a third, despite the growth of the service sector in the economy. There was a 55 per cent increase in electricity consumption by industry in the 30 years to 2005. In each of 2006 and 2007, industrial electricity consumption fell by between one and two per cent, before a small increase of around 1 per cent in 2008. The economic slowdown in 2009 resulted in a 13 per cent fall, to 100.3 TWh, the lowest level since 1994, and 14 per cent below 2005's record high level. Consumption increased by 4.6 per cent in 2010, as the sector recovered, but fell again in 2011, to 102.8 TWh, still 10 per cent below 2008's level.

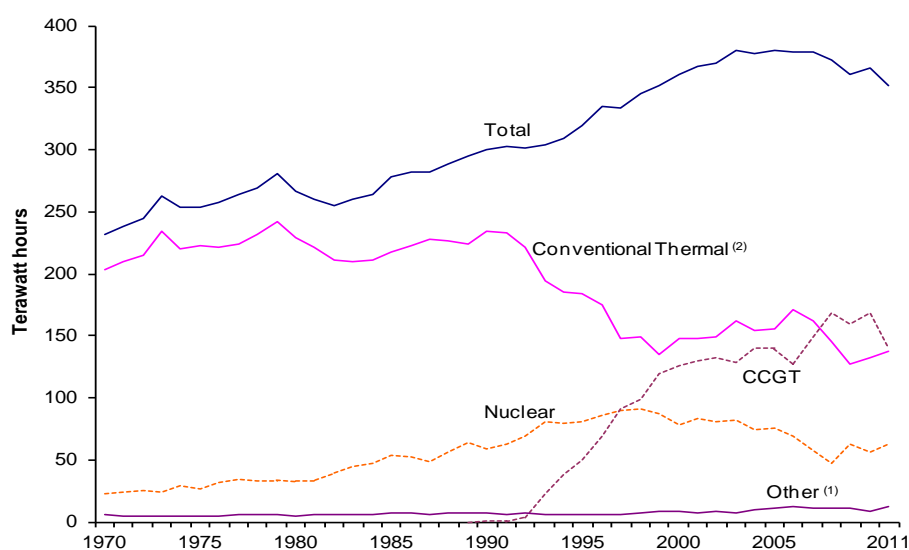
5.1.15 The domestic sector's share of total consumption was around 40 per cent during the 1970's, before declining to just over one third in the 1980's. Domestic's share remained around one third, increasing slightly over the early 2000s (at the expense of industrial consumption) to reach an 18 year high share in 2004 of 36 per cent. Since then, it has remained around 34 to 35 per cent, with the exception of an increase in 2009 to 36 per cent, as industrial consumption was hit by the recession. In 2011, despite falling to its lowest level in 12 years, the volume of electricity consumed in the domestic sector has increased by 30 per cent since 1980. The biggest growth in consumption has been in the services sector which, in 2011, was 78 per cent higher than in 1980. Services' share of consumption rose from 25 per cent in 1980 to 31 per cent in 1998, and has remained around 30 to 31 per cent since, with 2011 showing a new high share of 32 per cent.

Electricity generated and supplied (Table 5.1.3)

5.1.16 Figures for the generation and supply of electricity are given in Table 5.1.3. This table retains the nomenclature of electricity chapters in the 1999 Digest and earlier, whereas the balance methodology has introduced a new nomenclature (see Chapter 5 of the main Digest, paragraph 5.33 and Table 5.5). Data are given for major power producers, for other generators and for all generators in total, with separate series for the different types of power station.

5.1.17 Over the whole period 1970 to 2011, total gross electricity supplied by all generating companies has increased at an average annual rate of 1.0 per cent. However, within these 42 years, there was growth at 2.3 per cent a year in the early 1970s, 2.0 per cent a year in the late 1970s, a decline of 0.9 per cent a year on average during the early 1980s, 1.4 per cent growth in the late 1980s, and 1.8 per cent growth in the 1990s. Between 2000 and 2005, growth slowed to 1.1 per cent a year, before falling to a decline of 1.4 per cent between 2005 and 2009. As demand from an improving economy increased in 2010, electricity supplied increased by 1.5 per cent, before falling by 3.9 per cent in 2011.

Chart 5.1.4: Gross electricity supplied by all generating companies by type of plant, 1970 to 2011



(1) Other is hydro, wind and other non-thermal renewable sources

(2) Includes electricity supplied by gas turbines, oil engines and thermal renewable sources.

5.1.18 In the period between 1970 and 1994 electricity output by generators other than the major producers fluctuated between 11,000 and 18,000 GWh, but moved up to over 20,000 GWh in 1995. Subsequently, it increased every year to reach almost 34,000 GWh in 2000, mainly as a result of the greater capacity of combined heat and power (CHP) schemes now in use (see main Digest, Chapter 7). However, in 2001 electricity supplied by other generators fell back to 30,400 GWh, mainly because high gas prices discouraged generation, but since then it increased in most years to 34,600 GWh in 2006, aided by growth in generation from renewables. The contribution of other generators to total supply was under 7 per cent in 1970 and fell to just over 5 per cent in 1990, but then increased again to reach 9.4 per cent in 2000. In 2001, it fell back to 8.3 per cent, before increasing again and reaching just over 9 per cent in 2006. From 2007, major wind farm companies are included under Major Power Producers, so these are no longer included under 'other generators' (see paragraph 5.67 in the main Digest). Despite this, other generators' share has remained at around the 9 per cent mark. In 2011, other generators' supplied 33,517 GWh, around one per cent less than in 2007 (on account of less generation from CHP and non-renewable schemes), but, with 7.3 per cent less total supply, this represented a record 9.5 per cent share.

5.1.19 Trends in electricity supplied by all generators by type of plant are illustrated in Chart 5.1.4. In 1970, conventional thermal power stations produced 88 per cent of the gross electricity supplied. Output from these stations reached a peak in 1990 before falling back because of the development of new generating technologies. Firstly there was the development of nuclear generation, which supplied only 10 per cent of total gross electricity supplied by United Kingdom generators in 1970 but by 1997 accounted for 27 per cent. Subsequently, nuclear's share has been on a downward trend and its 13 per cent share in 2008 was the lowest since 1981. However, nuclear's share grew again in 2009 to 17 per cent as stations returned from outages for repairs and maintenance, before falling to 15 per cent in 2010, again due to maintenance outages. In 2011, the share increased to 18 per cent, a five year high, as availability once again improved. Secondly there was the growth of combined cycle gas turbine stations (CCGTs), which overtook nuclear in 1997 and in 2002, supplied 36 per cent, falling back in 2003 and 2006 because of high gas prices, but climbing to a record 39 per cent share in 2007, and then to 46 per cent in 2010. In 2011, with high gas prices and increased nuclear availability, the share fell to a four year low of 40 per cent. In recent years, there has been high growth in the share of non-thermal renewables (including hydro and wind). Between 1970 and 2005, non-thermal renewables' share of electricity supplied was between one and two per cent each year. However, since then, driven by a large expansion in wind generation capacity, this has increased each year (except for 2010, due to especially low rainfall reducing hydro output), to stand at 6.1 per cent of electricity supplied in 2011.²

5.1.20 A more detailed examination of historical electricity statistics was published in the September 2002 issue of Energy Trends. This looked at trends in the generation, supply and consumption of electricity over the last 80 years. The updated data set on which the article is based is available on the DECC energy statistics website at:

www.decc.gov.uk/en/content/cms/statistics/energy_stats/source/electricity/electricity.aspx

The original article is to be found at:

<http://webarchive.nationalarchives.gov.uk/+http://www.berr.gov.uk/files/file11864.pdf> (on page 20).

5.1.21 Analysis of electricity statistics from 1948 to 2008 can also be found in chapter 5 of the DUKES: 60th anniversary article, available at:

www.decc.gov.uk/en/content/cms/statistics/publications/dukes/dukes.aspx.

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² Thermal renewables, such as biomass, landfill gas, sewage gas, wastes and co-firing with fossil fuels, is included in conventional thermal.

5.1.1 Fuel input for electricity generation

Million tonnes of oil equivalent

	Total all fuels	Coal	Oil (1)	Natural gas (2)	Electricity			Coke and breeze	Other fuels (4)	Shannon-Weiner measure of diversity
					Nuclear	Natural flow hydro (3)	Wind (3)			
1970	63.84	43.07	13.27	0.11	7.00	0.39	-	-	-	0.88
1971	66.46	42.42	15.63	0.64	7.37	0.29	-	0.11	-	0.95
1972	68.37	38.47	20.13	1.61	7.87	0.29	-	-	-	1.05
1973	70.93	44.30	18.09	0.64	7.46	0.33	-	0.11	-	0.96
1974	69.01	38.71	18.41	2.46	8.97	0.35	-	0.11	-	1.10
1975	66.25	41.85	13.70	2.14	8.12	0.33	-	0.11	-	1.02
1976	66.97	44.49	10.92	1.61	9.56	0.39	-	-	-	0.96
1977	69.32	45.71	11.35	1.28	10.64	0.34	-	-	-	0.96
1978	69.64	46.05	12.31	0.86	9.96	0.35	-	0.11	-	0.95
1979	72.80	50.10	11.45	0.54	10.23	0.37	-	0.11	-	0.90
1980	69.46	51.01	7.67	0.42	9.91	0.34	-	0.11	-	0.81
1981	65.98	49.64	5.46	0.21	10.18	0.38	-	0.11	-	0.77
1982	65.98	46.75	6.64	0.21	11.88	0.39	-	0.11	-	0.84
1983	66.37	47.16	5.14	0.21	13.47	0.39	-	-	-	0.81
1984	69.18	31.07	22.80	0.42	14.50	0.39	-	-	-	1.11
1985	71.54	42.81	11.35	0.54	16.50	0.34	-	-	-	1.00
1986	70.46	47.91	6.51	0.18	15.44	0.41	-	-	-	0.89
1987 (5)	70.50	50.37	5.14	0.19	14.44	0.36	-	-	-	0.80
1987 (5)	74.31	51.58	6.30	0.91	14.44	0.36	-	-	0.72	0.91
1988	75.57	49.83	7.01	0.97	16.57	0.42	-	-	0.77	0.96
1989	75.27	48.59	7.11	0.54	17.74	0.41	-	-	0.88	0.96
1990	76.34	49.84	8.40	0.56	16.26	0.44	-	-	0.84	0.97
1991	76.87	49.98	7.56	0.57	17.43	0.39	-	-	0.94	0.96
1992	76.57	46.94	8.07	1.54	18.45	0.46	-	-	1.09	1.05
1993	75.40	39.61	5.78	7.04	21.58	0.37	-	-	1.02	1.20
1994	74.01	37.10	4.11	10.10	21.20	0.44	-	-	1.06	1.23
1995	77.15	36.29	4.15	13.27	21.25	0.40	-	-	1.79	1.28
1996	79.56	33.67	3.87	17.37	22.18	0.29	0.04	-	2.14	1.32
1997	76.76	28.30	2.01	21.74	21.98	0.38	0.06	-	2.29	1.32
1998	81.14	29.94	1.69	23.02	23.44	0.44	0.08	-	2.52	1.31
1999	79.72	25.51	1.54	27.13	22.22	0.46	0.07	-	2.79	1.32
2000	81.21	28.67	1.55	27.91	19.64	0.44	0.08	-	2.93	1.31
2001	84.01	31.61	1.42	26.87	20.77	0.35	0.08	-	2.91	1.29
2002	83.00	29.63	1.29	28.33	20.10	0.41	0.11	-	3.13	1.30
2003	85.95	32.54	1.19	27.85	20.04	0.28	0.11	-	3.93	1.30
2004	84.57	31.31	1.10	29.25	18.16	0.42	0.17	-	4.15	1.31
2005	86.68	32.58	1.31	28.52	18.37	0.42	0.25	-	5.23	1.34
2006	87.06	35.94	1.43	26.78	17.13	0.39	0.36	-	5.02	1.33
2007	84.28	32.92	1.16	30.60	14.04	0.44	0.46	-	4.67	1.31
2008	81.54	29.96	1.58	32.40	11.91	0.44	0.61	-	4.64	1.32
2009	78.49	24.66	1.51	30.89	15.23	0.45	0.80	-	4.94	1.38
2010	79.14	25.56	1.18	32.12	13.93	0.31	0.88	-	5.16	1.35
2011	76.50	26.03	0.90	26.42	15.63	0.49	1.35	-	5.67	1.41

(1) Includes oil used in gas turbine and diesel plant or for lighting up coal fired boilers, Orimulsion (until 1997), and refinery gas (from 1987).

(2) Includes colliery methane from 1987 onwards.

(3) Fuel inputs have been calculated on an energy supplied basis - see explanatory notes at Chapter 5, paragraph 5.74.

(4) Main fuels included are coke oven gas, blast furnace gas, waste products from chemical processes, refuse derived fuels and other renewable sources.

(5) Data for all generating companies are only available from 1987 onwards, and the figures for 1987 to 1989 include a high degree of estimation. Before 1987 the data are for major power producers, transport undertakings and industrial hydro and nuclear stations only.

5.1.2 Electricity supply, availability and consumption

TWh

	Electricity supplied (net)	Purchases from other producers	Net imports (1)	Electricity available	Losses in transmission etc (2)	Electricity consumption					
						Total	Fuel industries	Final users (5)			Total
								Industrial	Domestic	Other (3)	
1970	215.76	0.19	0.55	216.50	17.50	199.00	6.59	72.99	77.04	42.38	192.41
1971	222.92	0.53	0.12	223.57	19.01	204.56	6.60	73.43	80.67	43.86	197.96
1972	229.45	0.53	0.48	230.46	18.91	211.55	6.37	73.16	86.89	45.13	205.18
1973	245.42	0.59	0.06	246.07	19.59	226.48	6.67	80.07	91.30	48.44	219.81
1974	237.21	0.60	0.05	237.86	18.22	219.64	6.12	75.81	92.63	45.08	213.52
1975	237.76	0.70	0.08	238.54	19.47	219.07	6.29	75.36	89.21	48.21	212.78
1976	240.22	0.61	-0.10	240.73	18.73	222.00	6.39	80.84	85.12	49.65	215.61
1977	246.82	0.74	-	247.56	20.76	226.80	6.41	82.06	85.90	52.43	220.39
1978	252.65	0.66	-0.08	253.23	21.81	231.42	6.52	84.00	85.80	55.10	224.90
1979	264.34	0.63	-	264.97	22.97	242.00	6.78	87.55	89.67	58.00	235.22
1980	252.02	0.61	-	252.63	21.53	231.11	6.86	79.73	86.11	58.41	224.25
1981	246.60	0.74	-	247.34	20.13	227.21	6.86	77.03	84.44	58.88	220.35
1982	242.48	0.82	-	243.30	20.48	222.82	6.81	73.91	82.79	59.31	216.01
1983	246.15	1.15	-	247.30	21.21	226.09	6.69	74.17	82.95	62.28	219.40
1984	251.47	0.55	-	252.02	21.06	230.96	6.64	78.64	83.90	61.78	224.32
1985	263.56	0.92	-	264.48	22.63	241.85	7.76	79.53	88.23	66.33	234.09
1986(4)	266.81	1.10	4.26	272.17	22.83	249.34	7.68	80.15	91.83	69.68	241.66
1986(4)	278.48	-	4.26	282.73	22.91	259.82	9.51	88.80	91.83	69.68	250.31
1987	279.71	-	11.64	291.34	22.96	268.38	9.49	93.14	93.25	72.50	258.89
1988	285.71	-	12.14	297.85	23.35	274.50	9.16	97.14	92.36	75.84	265.34
1989	291.75	-	12.63	304.38	24.98	279.40	9.00	99.42	92.27	78.71	270.40
1990	297.50	-	11.91	309.41	24.99	284.42	9.99	100.64	93.79	80.00	274.43
1991	300.65	-	16.41	317.06	26.22	290.84	9.79	99.57	98.10	83.38	281.05
1992	298.55	-	16.69	315.24	23.79	291.45	9.98	95.28	99.48	86.71	281.47
1993	301.87	-	16.72	318.59	22.84	295.75	9.62	96.84	100.46	88.83	286.13
1994	306.94	-	16.89	323.83	31.00	292.83	7.52	96.12	101.41	87.78	285.31
1995	317.63	-	16.61	334.24	30.32	303.92	8.07	101.78	102.21	91.86	295.85
1996	332.36	-	16.76	349.11	29.34	319.78	9.21	107.63	107.51	95.42	310.57
1997	331.63	-	16.57	348.20	27.14	321.07	8.62	108.10	104.46	99.88	312.44
1998	342.70	-	12.47	355.17	29.82	325.35	8.41	108.44	109.41	99.09	316.94
1999	347.67	-	14.24	361.92	29.86	332.05	8.04	112.25	110.31	101.46	324.02
2000	357.27	-	14.17	371.44	31.14	340.30	9.70	115.29	111.84	103.47	330.59
2001	364.17	-	10.40	374.57	32.07	342.50	8.63	112.50	115.34	106.05	333.88
2002	366.66	-	8.41	375.07	30.96	344.11	10.06	110.82	120.01	103.22	334.05
2003	376.53	-	2.16	378.69	32.07	346.62	9.75	109.93	123.00	103.94	336.87
2004	373.40	-	7.49	380.89	33.18	347.71	8.14	112.09	124.20	103.28	339.57
2005	376.78	-	8.32	385.10	27.90	357.20	7.85	116.70	125.71	106.94	349.35
2006	373.86	-	7.52	381.38	27.52	353.86	8.00	115.53	124.70	105.63	345.87
2007	374.06	-	5.22	379.28	27.83	351.45	9.19	113.41	123.08	105.78	342.26
2008	367.27	-	11.02	378.29	28.20	350.10	7.71	114.72	119.80	107.87	342.39
2009	355.36	-	2.86	358.22	28.20	330.02	7.67	100.34	118.54	103.47	322.35
2010	361.45	-	2.66	364.12	26.66	337.46	8.25	104.94	118.82	105.44	329.20
2011	347.51	-	6.22	353.73	27.86	325.86	7.49	102.77	111.59	104.03	318.38

(1) Net transfers between the Irish Republic and Northern Ireland (ceased in 1981 and recommenced in 1996), between France and England (from 1986), and the Netherlands and England (from 2011)

(2) Losses on the public distribution system (grid system and local networks) and other differences between data collected on sales and data collected on availability.

(3) Public administration, transport, agricultural and commercial sectors.

(4) Data for all generating companies are only available from 1986 onwards. Before 1986 the data are for major power producers, transport undertakings and industrial hydro and nuclear stations only.

(5) Industry includes iron and steel consumption counted as energy industry use in the main DUKES tables

5.1.3 Electricity generated and supplied

GWh

Major power producers (1)											
Year	Electricity generated	Electricity used on works	Electricity supplied (gross) (2)							Electricity used in pumping at pumped storage stations	Electricity Supplied (net) (4)
			Total	Conventional thermal and other (3)	CCGT	Nuclear	Hydro		Wind		
							Natural flow	Pumped storage			
1970	232,378	16,429	215,949	188,175	-	22,805	3,846	1,123	-	1,487	214,462
1971	240,080	17,143	222,937	195,181	-	24,013	2,835	908	-	1,209	221,728
1972	246,843	17,439	229,404	200,048	-	25,639	2,847	870	-	1,184	228,220
1973	263,140	18,157	244,983	216,796	-	24,310	3,214	663	-	882	244,101
1974	254,688	17,763	236,925	203,478	-	29,232	3,520	695	-	896	236,029
1975	255,084	17,136	237,948	207,159	-	26,463	3,186	1,140	-	1,430	236,518
1976	258,656	17,962	240,694	205,048	-	31,153	3,128	1,365	-	1,729	238,965
1977	265,649	18,468	247,181	207,904	-	34,660	3,320	1,297	-	1,608	245,573
1978	270,677	17,907	252,770	215,761	-	32,462	3,378	1,169	-	1,429	251,341
1979	283,186	18,744	264,442	226,329	-	33,335	3,617	1,161	-	1,424	263,018
1980	269,945	17,765	252,180	215,418	-	32,291	3,298	1,173	-	1,453	250,727
1981	263,658	16,983	246,675	208,589	-	33,191	3,906	989	-	1,196	245,479
1982	259,410	16,940	242,470	198,822	-	38,721	3,873	1,054	-	1,272	241,198
1983	264,589	17,380	247,209	197,600	-	43,911	3,882	1,816	-	2,337	244,872
1984	270,471	17,643	252,828	200,240	-	47,256	3,358	1,974	-	2,613	250,215
1985	284,712	18,903	265,809	205,906	-	53,767	3,435	2,701	-	3,494	262,315
1986	287,330	18,819	268,511	210,452	-	51,843	4,087	2,129	-	2,993	265,518
1987	287,701	18,740	268,961	215,290	-	48,205	3,460	2,006	-	2,804	266,157
1988	293,100	19,341	273,759	211,932	-	55,642	4,160	2,025	-	2,888	270,871
1989	297,890	19,315	278,575	209,169	-	63,602	3,992	1,812	-	2,572	276,003
1990	302,936	18,632	284,304	219,364	-	58,664	4,384	1,892	-	2,626	281,678
1991	305,704	19,142	286,562	218,260	309	62,761	3,767	1,465	-	2,109	284,453
1992	303,715	19,157	284,558	206,245	2,964	69,135	4,579	1,635	-	2,257	282,301
1993	305,433	18,170	287,264	178,773	22,611	80,979	3,513	1,388	-	1,948	285,316
1994	307,476	16,696	290,780	168,321	36,815	79,962	4,265	1,417	-	2,051	288,729
1995	315,510	16,510	299,000	164,324	48,525	80,598	4,051	1,502	-	2,282	296,718
1996	326,235	14,967	311,268	155,574	65,604	85,820	2,763	1,507	-	2,430	308,838
1997	324,133	15,411	308,722	127,961	86,682	89,341	3,299	1,439	-	2,477	306,245
1998	333,764	16,140	317,624	128,235	93,005	90,590	4,225	1,569	-	2,594	315,030
1999	336,608	15,461	321,147	113,493	112,768	87,672	4,409	2,804	-	3,774	317,373
2000	341,783	14,952	326,831	125,468	116,110	78,334	4,316	2,603	-	3,499	323,332
2001	353,057	16,066	336,991	127,119	121,344	82,985	3,203	2,340	-	3,210	333,781
2002	353,994	15,746	338,248	128,795	121,886	81,090	3,914	2,562	-	3,463	334,785
2003	362,600	16,747	345,853	140,196	118,546	81,911	2,559	2,641	-	3,546	342,308
2004	358,313	15,582	342,732	133,607	128,983	73,682	3,901	2,559	-	3,497	339,235
2005	362,212	16,265	345,947	135,999	128,179	75,173	3,821	2,776	-	3,707	342,240
2006	361,232	17,031	344,201	151,866	115,695	69,237	3,680	3,722	-	4,918	339,283
2007	361,317	16,090	345,227	138,793	137,657	57,249	4,114	3,846	3,569	5,071	340,156
2008	355,209	14,662	340,547	121,816	157,417	47,673	4,209	4,075	5,357	5,371	335,175
2009	342,374	14,750	327,624	101,100	148,907	62,762	4,279	3,672	6,904	4,843	322,781
2010	347,649	14,403	333,246	105,148	157,818	56,442	2,748	3,139	7,950	4,212	329,034
2011	332,312	14,480	317,832	105,359	129,669	62,655	4,578	2,895	12,675	3,843	313,988

(1) From 2007, major wind farm companies are included under Major Power Producers, see paragraph 5.67 in the main Digest, previously all wind was covered under other generatots.

(2) Electricity generated less electricity used on works.

(3) Includes electricity supplied by gas turbines and oil engines. From 1988 also includes electricity produced by plants using thermal renewable sources.

5.1.3 Electricity generated and supplied

GWh

Other generators (1)				All generating companies							
Electricity supplied (gross) (2)				Electricity supplied (gross)							
Total	Conventional thermal and other (3)	CCGT	Non-thermal renewables (5)	Total	Conventional thermal and other (3)	CCGT	Nuclear	Non-thermal renewables (5)	Pumped storage	Electricity supplied (net) (4)	
15,674	14,996	-	678	231,623	203,171	-	22,805	4,524	1,123	230,136	1970
15,388	14,837	-	551	238,325	210,018	-	24,013	3,386	908	237,116	1971
15,746	15,175	-	571	245,150	215,223	-	25,639	3,418	870	243,966	1972
17,655	17,008	-	647	262,638	233,804	-	24,310	3,861	663	261,756	1973
17,222	16,660	-	562	254,147	220,138	-	29,232	4,082	695	253,251	1974
15,766	15,175	-	591	253,714	222,334	-	26,463	3,777	1,140	252,284	1975
17,013	16,414	-	599	257,707	221,462	-	31,153	3,727	1,365	255,978	1976
16,434	15,848	-	586	263,615	223,752	-	34,660	3,906	1,297	262,007	1977
16,034	15,387	-	647	268,804	231,148	-	32,462	4,025	1,169	267,375	1978
15,720	15,062	-	658	280,162	241,391	-	33,335	4,275	1,161	278,738	1979
14,132	13,509	-	623	266,312	228,927	-	32,291	3,921	1,173	264,859	1980
13,264	12,801	-	463	259,939	221,390	-	33,191	4,369	989	258,743	1981
12,613	11,943	-	670	255,083	210,765	-	38,721	4,543	1,054	253,811	1982
12,152	11,486	-	666	259,361	209,086	-	43,911	4,548	1,816	257,024	1983
11,319	10,685	-	634	264,147	210,925	-	47,256	3,992	1,974	261,534	1984
12,112	11,467	-	645	277,921	217,373	-	53,767	4,080	2,701	274,427	1985
12,957	12,278	-	679	281,468	222,730	-	51,843	4,766	2,129	278,475	1986
13,551	12,831	-	720	282,512	228,121	-	48,205	4,180	2,006	279,708	1987
14,840	14,085	-	755	288,599	226,017	-	55,642	4,915	2,025	285,711	1988
15,747	15,007	-	740	294,322	224,176	-	63,602	4,732	1,812	291,750	1989
15,824	14,729	280	815	300,128	234,093	280	58,664	5,199	1,892	297,502	1990
16,202	15,056	298	848	302,764	233,316	607	62,761	4,615	1,465	300,655	1991
16,246	14,987	394	865	300,804	221,232	3,358	69,135	5,444	1,635	298,547	1992
16,552	14,979	584	989	303,816	193,752	23,195	80,979	4,502	1,388	301,868	1993
18,207	16,356	738	1,113	308,987	184,677	37,553	79,962	5,378	1,417	306,936	1994
20,909	18,851	933	1,125	319,909	183,175	49,458	80,598	5,176	1,502	317,627	1995
23,519	19,091	3,358	1,070	334,786	174,664	68,962	85,820	3,833	1,507	332,356	1996
25,384	19,703	4,192	1,489	334,107	147,665	90,874	89,341	4,788	1,439	331,630	1997
27,669	20,766	5,157	1,746	345,293	149,001	98,162	90,590	5,971	1,569	342,699	1998
30,299	21,769	6,785	1,745	351,446	135,263	119,553	87,672	6,154	2,804	347,672	1999
33,934	21,926	10,318	1,690	360,765	147,394	126,428	78,334	6,006	2,603	357,266	2000
30,391	20,066	8,531	1,794	367,382	147,185	129,875	82,985	4,997	2,340	364,173	2001
31,873	19,716	10,049	2,108	370,120	148,511	131,935	81,090	6,022	2,562	366,657	2002
34,220	21,942	10,336	1,941	380,073	162,138	128,882	81,911	4,500	2,641	376,528	2003
34,165	20,046	11,260	2,859	376,896	153,653	140,243	73,682	6,760	2,559	373,399	2004
34,539	19,494	11,204	3,842	380,486	155,493	139,382	75,173	7,662	2,776	376,780	2005
34,578	18,598	10,859	5,121	378,779	170,464	126,554	69,237	8,802	3,722	373,861	2006
33,908	19,801	11,471	2,637	379,136	158,594	149,127	57,249	10,320	3,846	374,064	2007
32,097	18,478	10,947	2,672	372,643	140,294	168,364	47,673	12,238	4,075	367,272	2008
32,578	18,976	10,251	3,350	360,202	120,076	159,159	62,762	14,533	3,672	355,359	2009
32,420	19,205	10,079	3,135	365,666	124,353	167,898	56,442	13,834	3,139	361,454	2010
33,517	19,374	9,997	4,146	351,349	124,733	139,666	62,655	21,400	2,895	347,506	2011

(4) Electricity supplied (gross) less electricity used in pumping at pumped storage stations.

(5) Natural flow hydro, wind, wave and solar photovoltaics.

Chapter 6: Long term trends

Renewables

Renewables sources used to generate electricity, heat and for transport; and electricity generated from renewable sources (Table 6.1.1)

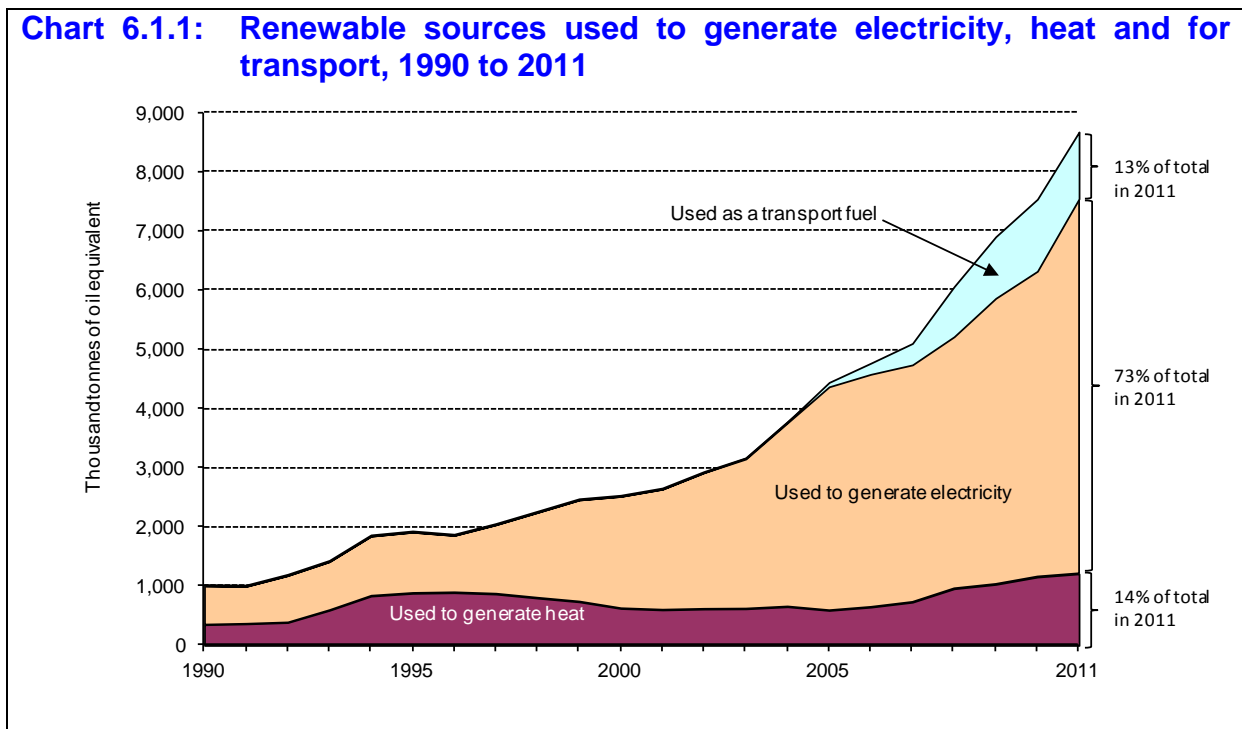
6.1.1 This table extends the series shown in Tables 6.4 and 6.6 of Chapter 6 of the main Digest back to 1990, the earliest year for which comprehensive data on renewables and wastes are available.

6.1.2 Between 1990 and 1996 the volume of renewables used to generate electricity grew at an average rate of 6½ per cent a year. After 1996 the rate of increase quickened and over the seven years to 2003 it averaged 14½ per cent a year. Between 2003 and 2010 it fell back slightly to an average of 12 per cent a year. The rate of increase in the volume of renewables used is influenced by how fuels are used. Use of primary sources (mainly wind and hydro) are assumed to be equal to the electricity produced whereas biomass sources lose energy during their transformation into electricity. As a result in years where biomass was increasing, the volume of fuel used would increase by more than in years when wind increased.

6.1.3 Chart 6.1.1 shows the amount of primary renewable sources used for generating electricity, for heat, and as a transport fuel, whilst chart 6.1.2 shows how much electricity was generated from 5 main renewable categories.

6.1.4 Since 2000, the main contributors to the growth in electricity generated from renewables have been wind (+29 per cent a year on average), small scale hydro schemes (+11 per cent a year), landfill gas (+8 per cent a year), municipal solid waste (+7 per cent a year), and sewage sludge digestion (+7 per cent a year). Co-firing of biomass with fossil fuels was zero until 2002, but more than doubled each year between 2002 and 2005 before levelling off in 2006 and despite a decline until 2008, they co-firing exceeded the 2005 levels again in 2011. When combined, electricity generated from all forms of bioenergy increased by an average of 12 per cent a year since 2000. Between 2000 and 2011 the rate of growth in electricity generated from all renewables averaged 12 per cent a year, which incorporates a smaller (2 per cent) rise between 2009 and 2010, reflecting lower rainfall and wind speeds, and a larger (33 per cent) increase in the most recent year.

Chart 6.1.1: Renewable sources used to generate electricity, heat and for transport, 1990 to 2011

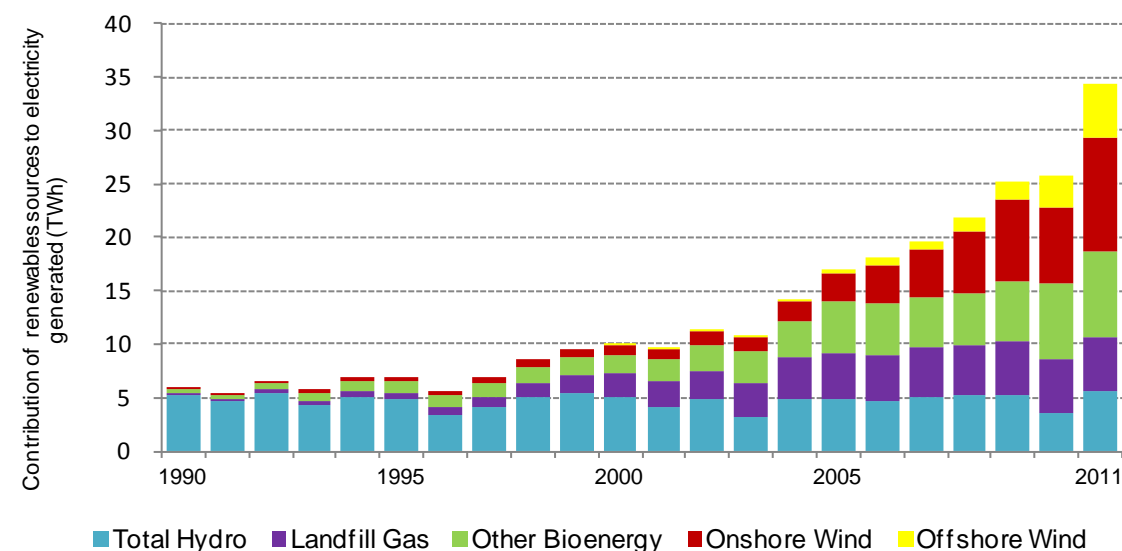


6.1.5 The use of renewables to generate heat reached a peak in 1996 having more than doubled over the previous 6 years. Over the next five years the use of renewables for heat generation

declined by one third, mainly because the use of industrial wood declined by over one-half due to the introduction of more stringent emission controls. More recently there has been an increase in renewable heat, due to policy incentives, and since 2000 it increased at an average annual rate of over 6 per cent. Since 2008 there has been more renewable heat than in the previous local peak during 1996.

6.1.6 Liquid biofuels for transport were first included in the energy mix through blending with fossil fuels in 2002. Since then there has been a steady increase, and over 1.1 million tonnes of oil equivalent was used during 2011.

Chart 6.1.2: Electricity generated from renewable sources, 1990 to 2011



Note: Onshore Wind bar includes solar PV (0.25 TWh in 2011);
Hydro bar includes shoreline wave/tidal (0.001TWh in 2011)

Renewable orders and operational capacity (Table 6.1.2)

6.1.7 Table 6.1.2 brings together the information on contracted and live projects and their capacities contracted within the Non Fossil Fuel Orders in England, Wales and Northern Ireland and under the Scottish Renewables Orders. This information is no longer shown in the printed and bound Digest.

(a) Non Fossil Fuel Obligation (NFFO)

6.1.8 The 1989 Electricity Act empowered the Secretary of State to make orders requiring the Regional Electricity Companies in England and Wales (the RECs) to secure specified amounts of electricity from renewable energy sources.

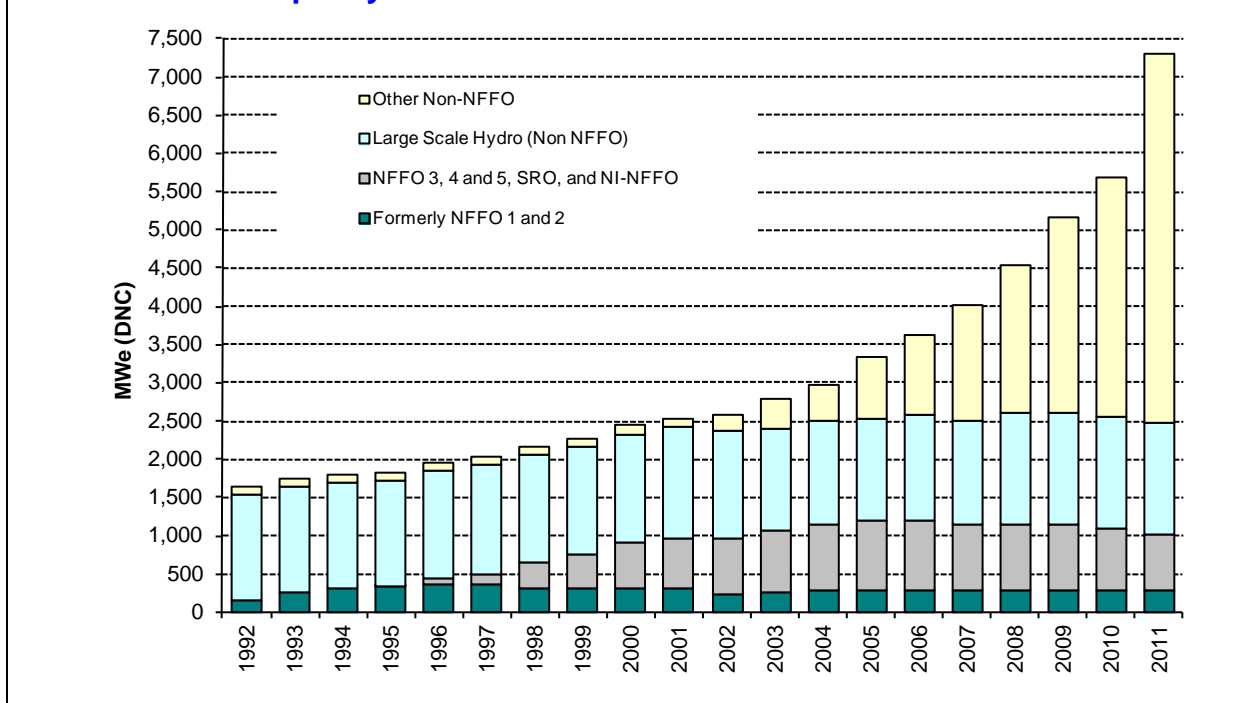
6.1.9 Five NFFO Orders were made, of which the first in 1990 was set for a total of 102 MW Declared Net Capacity (DNC). This first order actually resulted in contracts for 75 projects for 152 MW DNC and provided a premium price for the electricity produced which was funded from a levy on electricity sales in England and Wales. (The bulk of this levy was used to support electricity from nuclear stations).

6.1.10 The second Order, made in late 1991, was set for 457 MW DNC. This resulted in 122 separate contracts (for a total of 472 MW DNC) between the generators and the Non-Fossil Purchasing Agency (NFPA), which acted on behalf of the RECs. For landfill gas, sewage gas and waste-derived generation contracts were awarded at around 6p/kWh, while for wind-based generation a price of 11p/kWh was established. These prices reflected the limited period for the recovery of capital costs.

6.1.11 The third Order covers the period 1995 to 2014; this was for 627 MW DNC of contracted capacity at an average price of 4.35 p/kWh. The lower bid prices reflect the longer-term contracts, which are now available together with further developments that have led to improvements in the technologies. Taking into account factors such as the failure to gain planning permission, it is

estimated that around half the contracted DNC are likely to go forward for commissioning – the actual capacity at the end of 2011 for these projects was 255 MW DNC.

Chart 6.1.3: Renewable generating capacity from NFFO and former NFFO contracts (including equivalents in Scotland and Northern Ireland) and capacity outside of NFFO



6.1.12 The fourth Order was announced in February 1997. Contracts have been let to 195 projects with a total DNC of 843 MW, at an average price of 3.46 p/kWh. In the fifth and largest Order, which was announced in September 1998, contracts have been let to 261 projects with a total DNC of 1,177.2 MW, at an average price of 2.71 p/kWh.

6.1.13 Since the expiry of the NFFO 1 and 2 contracts on 31 December 1998, these projects are no longer included in the monitoring of NFFO Orders and DECC no longer receives any status/output data on them from the NFFPA. For some of these projects operational data have been obtained from other sources, while for the others estimates have been made based on output in 1998. From 2002 another source of information became available in the form of the Renewables Obligation data. This enabled AEA to identify which former NFFO 1 and 2 schemes were applying for ROCs and therefore were still running. Of the 114 NFFO 1 and 2 projects identified in this way as still live, 42 were contracted under the first order and 72 under the second order. It is appreciated that there may be some ex NFFO 1 and 2 schemes that are continuing to operate but whose output is too small to qualify for ROCs or which may need to re-furbish in order to qualify for ROCs. To that extent the estimates of NFFO capacity may be an underestimate.

6.1.14 As at the end of December 2011, 69 projects in the third Order were operational, with total capacities of 255 MW DNC. There were also 81 schemes with a capacity of 232 MW DNC commissioned from the fourth Order projects and 78 schemes totalling 169 MW DNC from the fifth Order. Table 6.1.2 sets out the technologies and capacities of schemes in all five Orders.

(b) Scottish Renewable Order (SRO)

6.1.15 In Scotland, the first Renewables Order was made in 1994 for approximately 76 MW DNC of new capacity and comprising 30 schemes. At the end of December 2011, 12 schemes were commissioned with a capacity of 21 MW DNC.

6.1.16 A second SRO was launched in 1995 and was made in March 1997 for 114 MW DNC of new capacity comprising 26 schemes. Under this Order, at the end of 2011 there were 9 commissioned schemes with a capacity of 34 MW DNC.

6.1.17 A third SRO was laid before Parliament in February 1999 for 145 MW DNC of new capacity comprising 53 schemes. Under this Order, at the end of 2011 there were 12 commissioned schemes with a capacity 19 MW DNC. Table 6.1.2 sets out the technologies and capacities of schemes in all three Scottish Orders.

(c) Northern Ireland Non Fossil Fuel Obligation (NI NFFO)

6.1.18 In Northern Ireland, a first Order was made in March 1994 for approximately 16 MW DNC comprising 20 schemes. The contracted schemes were spread throughout Northern Ireland and were divided into three technology bands. During 2010 all 15 schemes that had been operating in 2009 under the Obligation became out of contract, and remained so in 2011.

6.1.19 A second NI Order was made in 1996 for 10 schemes, totalling 16 MW DNC. At the end of 2010, 5 schemes were commissioned with a capacity of 3 MW DNC.

(d) Summary

6.1.20 In 1990, the first year of NFFO, projects contracted within NFFO accounted for about 32 per cent of the total capacity (excluding large-scale hydro). This percentage rose to a peak in 2001 of 91 per cent. Following the introduction of the Renewables Obligation it fell back as new capacity eligible for the RO outweighed the growth in NFFO 3, 4 and 5 and SRO and NI-NFFO projects, so that the NFFO capacity proportion (excluding large scale hydro) had more than halved, to account for 43 per cent in 2007, and has continued to fall, to 18 per cent during 2011.

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6.1.1 Renewable sources used to generate electricity and heat; electricity generated from renewable sources

	Thousand tonnes of oil equivalent														Total	Wastes (7)	
	Wind (1)		Wave and Tidal (1)	Solar photo- voltaics	Hydro (1)		Bioenergy							Total			
	Onshore	Offshore			Small scale	Large scale (2)	Landfill gas	Sewage sludge digestion	Municipal solid waste combustion (3)	Animal Biomass (4)	Plant Biomass (5)	Anaerobic Digestion with fossil bioenergy (6)	Co-firing fuels				
Used to generate electricity																	
1990	0.8	-	-	-	10.9	436.8	45.6	103.6	69.8	-	-	0.0	-	219.0	667.5	41.0	
1991	0.7	-	-	-	12.2	385.4	68.2	107.6	70.5	0.5	-	0.1	-	246.9	645.2	41.4	
1992	2.8	-	-	-	12.8	454.1	123.6	107.6	85.9	17.4	-	0.2	-	334.6	804.4	50.4	
1993	18.7	-	-	-	13.6	356.2	146.6	123.8	119.1	52.3	-	0.2	-	442.0	830.5	76.4	
1994	29.5	-	-	-	13.6	424.3	169.5	118.3	192.0	70.8	-	0.1	-	550.8	1,018.3	156.3	
1995	33.7	-	-	-	14.2	401.7	184.3	134.6	198.6	71.2	-	0.1	-	588.7	1,038.4	178.6	
1996	41.9	-	-	-	10.1	281.6	232.1	134.6	205.3	67.0	-	0.1	-	639.1	972.7	184.8	
1997	57.4	-	-	-	14.1	344.4	301.1	133.7	258.2	67.8	-	0.0	-	760.8	1,176.6	236.0	
1998	75.4	-	-	-	17.7	422.3	388.8	126.5	346.5	76.2	0.1	-	-	938.0	1,453.4	302.8	
1999	73.1	-	-	-	17.8	441.0	558.4	134.6	345.0	156.8	0.2	-	-	1,195.0	1,726.9	272.5	
2000	81.3	0.1	-	0.1	18.4	418.8	717.6	120.4	350.1	182.5	10.8	-	-	1,381.3	1,900.0	253.3	
2001	82.5	0.4	0.0	0.2	18.1	330.7	822.2	119.0	387.1	205.3	80.7	-	-	1,614.4	2,046.3	266.2	
2002	107.6	0.4	0.0	0.2	17.5	394.2	878.5	120.6	420.2	184.4	92.4	-	94.0	1,790.0	2,309.9	286.1	
2003	109.7	0.8	0.0	0.3	12.9	256.9	1,074.5	129.3	445.8	169.4	136.7	3.0	197.3	2,156.1	2,536.7	273.8	
2004	149.3	17.1	0.0	0.3	24.3	392.2	1,313.1	144.3	429.5	179.4	123.1	2.9	335.1	2,527.4	3,110.6	263.9	
2005	215.1	34.6	0.0	0.7	38.2	385.0	1,407.2	152.8	426.3	158.9	129.4	2.6	830.7	3,107.8	3,781.4	262.0	
2006	307.3	56.0	0.0	0.9	41.1	353.9	1,451.1	145.9	479.0	144.8	122.9	3.8	829.0	3,176.4	3,935.6	293.7	
2007	386.2	67.3	0.0	1.2	45.0	391.6	1,533.9	161.9	486.8	217.6	137.8	4.9	576.4	3,119.2	4,010.4	298.3	
2008	498.0	112.2	0.0	1.5	47.7	395.5	1,560.3	174.4	506.8	249.1	189.5	4.2	516.7	3,200.9	4,255.9	310.3	
2009	650.4	149.6	0.1	1.7	49.6	401.0	1,624.2	196.1	624.5	222.2	367.3	9.7	533.0	3,576.9	4,829.3	368.6	
2010	613.7	261.7	0.2	2.9	42.7	270.6	1,644.5	228.8	659.0	229.0	412.3	30.3	765.0	3,968.8	5,160.5	388.4	
2011	891.8	440.7	0.1	21.6	60.0	429.0	1,633.1	247.6	717.3	215.3	620.3	78.5	972.0	4,484.1	6,327.4	422.0	

	Active solar heating		Landfill gas	Sewage sludge digestion	Bioenergy					Geo-thermal aquifers	Heat pumps (11)	Total	Wastes (12)		
					Wood combustion - domestic	Wood combustion - industrial	Animal Biomass (8)	Plant Biomass (9)	Anaerobic Digestion (10)					Municipal solid waste combustion	Total bioenergy
Used to generate heat															
1990	6.4	34.2	-	34.6	174.1	-	-	71.7	0.2	31.1	345.8	0.8	-	353.1	41.1
1991	6.8	36.3	-	43.5	174.1	-	-	71.7	0.2	33.5	359.3	0.8	-	366.9	42.9
1992	7.1	31.5	-	43.5	204.2	-	-	71.7	0.3	30.8	381.9	0.8	-	389.9	49.1
1993	7.4	15.0	-	34.0	204.2	236.8	-	71.7	0.3	28.2	590.1	0.8	-	598.3	53.6
1994	7.7	18.9	-	52.1	204.2	455.1	-	71.7	0.3	29.5	831.8	0.8	-	840.3	60.6
1995	8.1	15.1	-	58.5	204.2	498.1	-	71.7	0.3	30.5	878.4	0.8	-	887.3	68.3
1996	8.7	16.6	-	58.5	204.2	505.5	-	71.7	0.3	31.9	888.6	0.8	-	898.1	63.1
1997	8.9	15.5	-	58.2	204.2	506.1	-	71.7	0.3	9.0	864.9	0.8	-	874.6	52.3
1998	9.1	13.6	-	54.1	204.2	436.9	-	71.7	0.3	15.2	796.0	0.8	-	805.9	49.6
1999	9.4	13.6	-	54.2	204.2	367.7	-	71.9	0.3	20.2	732.1	0.8	-	742.3	49.3
2000	11.1	13.6	-	48.3	204.2	254.2	-	71.9	0.3	24.7	617.1	0.8	-	629.0	76.4
2001	13.2	13.6	-	49.4	204.2	225.2	-	71.9	0.3	26.2	590.7	0.8	-	604.8	80.7
2002	16.1	13.6	-	53.4	204.2	225.2	-	71.9	0.3	33.7	602.4	0.8	-	619.3	92.2
2003	19.8	13.6	-	52.4	205.8	225.2	-	71.9	0.3	33.7	602.9	0.8	-	623.5	117.1
2004	24.6	13.6	-	54.8	232.4	225.2	-	71.9	2.0	33.7	633.6	0.8	-	659.0	115.7
2005	29.4	13.6	-	52.9	265.6	93.1	12.4	92.4	2.0	33.7	565.8	0.8	-	596.0	127.5
2006	36.3	13.6	-	44.1	298.8	97.0	22.9	103.0	2.0	33.7	615.1	0.8	-	652.2	111.6
2007	44.9	13.6	-	49.5	332.0	101.2	45.8	112.9	2.0	33.7	690.7	0.8	-	736.4	137.3
2008	55.7	13.6	-	49.8	358.6	220.3	40.4	190.3	2.0	31.5	906.4	0.8	2.7	965.6	153.7
2009	69.5	13.6	-	51.0	375.2	223.4	38.3	223.8	2.0	31.3	958.5	0.8	10.9	1,039.7	140.4
2010	87.0	13.6	-	57.8	391.8	255.7	40.3	266.4	4.8	25.6	1,055.9	0.8	21.2	1,165.0	131.5
2011	109.3	13.6	-	66.1	425.0	280.6	-	249.1	9.8	32.7	1,076.8	0.8	32.5	1,219.5	204.0

	Solar heating and photovoltaics		Wind		Wave and Tidal	Hydro	Bioenergy	Geothermal aquifers	Heat pumps	Transport biofuels (13)	Total	Wastes
	Onshore	Offshore										
Total use of renewable sources												
1990	6.4	0.8	-	-	-	447.7	564.8	0.8	-	-	1,020.5	82.1
1991	6.8	0.7	-	-	-	397.6	606.2	0.8	-	-	1,012.1	84.3
1992	7.1	2.8	-	-	-	467.0	716.6	0.8	-	-	1,194.3	99.6
1993	7.4	18.7	-	-	-	369.9	1,032.1	0.8	-	-	1,428.9	130.0
1994	7.7	29.5	-	-	-	438.0	1,382.6	0.8	-	-	1,858.6	217.0
1995	8.1	33.7	-	-	-	415.9	1,467.1	0.8	-	-	1,925.7	247.0
1996	8.7	41.9	-	-	-	291.7	1,527.7	0.8	-	-	1,870.8	247.9
1997	8.9	57.4	-	-	-	358.4	1,625.7	0.8	-	-	2,051.2	288.3
1998	9.1	75.4	-	-	-	440.0	1,734.0	0.8	-	-	2,259.3	352.4
1999	9.4	73.1	-	-	-	458.8	1,927.1	0.8	-	-	2,469.2	321.8
2000	11.2	81.3	0.1	-	-	437.3	1,998.4	0.8	-	-	2,529.0	329.7
2001	13.4	82.5	0.4	0.0	-	348.7	2,205.1	0.8	-	-	2,651.1	347.0
2002	16.3	107.6	0.4	0.0	-	411.7	2,392.4	0.8	-	2.4	2,931.6	378.3
2003	20.0	109.7	0.8	0.0	-	269.8	2,759.0	0.8	-	15.1	3,175.3	390.9
2004	24.9	149.3	17.1	0.0	-	416.5	3,161.0	0.8	-	16.7	3,786.3	379.6
2005	30.1	215.1	34.6	0.0	-	423.2	3,673.6	0.8	-	74.1	4,451.4	389.5
2006	37.2	307.3	56.0	0.0	-	394.9	3,791.6	0.8	-	187.8	4,775.6	405.3
2007	46.1	386.2	67.3	0.0	-	436.6	3,809.9	0.8	-	361.7	5,108.5	435.6
2008	57.2	498.0	112.2	0.0	-	443.2	4,107.3	0.8	2.7	844.5	6,066.0	464.1
2009	71.2	650.4	149.6	0.1	-	450.6	4,535.4	0.8	10.9	1,038.5	6,907.5	509.0
2010	89.8	613.7	261.7	0.2	-	313.3	5,024.8	0.8	21.2	1,214.4	7,539.9	520.0
2011	131.0	891.8	440.7	0.1	-	489.0	5,561.0	0.8	32.5	1,127.5	8,674.4	626.0

6.1.1 Renewable sources used to generate electricity and heat⁽¹⁾; electricity generated from renewable sources (continued)

														GWh		
	Wind (1)		Wave and Tidal (1)	Solar photo-voltaics	Hydro (1)		Bioenergy						Total	Wastes (7)		
	Onshore	Offshore			Small scale	Large scale (2)	Landfill gas	Sewage sludge digestion	Municipal solid waste combustion (3)	Animal Biomass (4)	Plant Biomass (5)	Anaerobic Digestion with fossil bioenergy (6)			Co-firing fuels	
Electricity generated																
1990	9	-	-	-	127	5,080	139	316	141	-	-	0	-	596	5,812	83
1991	9	-	-	-	142	4,482	208	328	150	-	1	0	-	688	5,320	88
1992	33	-	-	-	149	5,282	377	328	177	-	52	1	-	934	6,398	104
1993	217	-	-	-	159	4,143	447	378	252	-	121	1	-	1,198	5,717	165
1994	344	-	-	-	159	4,935	517	361	449	-	192	0	-	1,518	6,956	352
1995	392	-	-	0	166	4,672	562	410	471	-	198	0	-	1,642	6,872	412
1996	488	-	-	0	118	3,275	708	410	489	-	197	0	-	1,805	5,685	417
1997	667	-	-	0	164	4,005	918	408	585	-	199	0	0	2,110	6,946	483
1998	877	-	-	0	206	4,911	1,185	386	849	-	234	-	0	2,654	8,649	583
1999	850	-	-	1	207	5,128	1,703	410	856	-	459	-	1	3,429	9,616	559
2000	945	1	-	1	214	4,871	2,188	367	840	-	456	-	31	3,882	9,914	519
2001	960	5	0	2	210	3,845	2,507	363	880	-	542	-	234	4,526	9,549	528
2002	1,251	5	0	3	204	4,584	2,679	368	907	286	568	-	272	5,080	11,127	545
2003	1,276	10	0	3	150	2,987	3,276	394	965	602	525	9	402	6,174	10,600	579
2004	1,736	199	0	4	283	4,561	4,004	440	971	1,022	556	9	362	7,364	14,147	583
2005	2,501	403	0	8	444	4,478	4,290	466	964	2,533	460	8	382	9,102	16,936	578
2006	3,574	651	0	11	478	4,115	4,424	445	1,083	2,528	423	12	363	9,277	18,106	651
2007	4,491	783	0	14	523	4,554	4,677	494	1,189	1,757	585	15	607	9,325	19,690	714
2008	5,792	1,305	0	17	555	4,600	4,757	532	1,239	1,575	620	13	912	9,649	21,918	744
2009	7,564	1,740	1	20	577	4,664	4,952	598	1,509	1,625	637	30	1,343	10,694	25,259	873
2010	7,137	3,044	2	33	497	3,147	5,014	698	1,597	2,332	627	92	1,624	11,986	25,845	924
2011	10,372	5,126	1	252	697	4,989	4,979	755	1,739	2,964	614	239	1,683	12,973	34,410	1,005

	Wind		Wave and Tidal	Solar photo-voltaics	Hydro		Bioenergy and wastes						Total	
	Onshore	Offshore			Small scale	Large scale (3)	Landfill gas	Sewage sludge digestion	Municipal solid waste (14)	Animal Biomass (15)	Plant Biomass (16)	Anaerobic Digestion and bioenergy wastes		
	Declared net capacity													
1990	4.3	-	-	-	26.3	1,084.0	16.5	72.7	30.9	-	-	0.1	120.3	1,234.8
1991	6.3	-	-	-	37.9	1,377.1	28.7	91.4	30.9	0.2	-	0.1	151.3	1,572.7
1992	21.3	-	-	-	40.3	1,383.0	51.1	91.4	44.6	12.8	-	0.1	200.0	1,644.5
1993	55.2	-	-	-	42.2	1,383.0	78.7	88.4	69.8	25.5	-	0.1	262.5	1,743.0
1994	65.7	-	-	-	42.2	1,383.0	84.9	87.1	106.8	25.5	-	0.1	304.4	1,795.3
1995	85.1	-	-	0.2	48.6	1,383.0	94.7	87.2	106.8	25.4	-	0.1	314.2	1,831.1
1996	113.0	-	-	0.3	49.1	1,405.8	145.7	87.2	135.0	25.4	-	0.1	393.4	1,961.6
1997	135.4	-	-	0.5	58.5	1,428.8	169.4	86.8	135.0	25.4	0.1	0.1	416.8	2,039.9
1998	139.4	-	-	0.6	61.6	1,413.0	220.6	89.8	182.1	63.9	0.3	-	556.7	2,171.3
1999	150.5	-	-	1.2	63.6	1,413.0	309.0	91.3	180.6	63.9	0.3	-	645.1	2,273.4
2000	175.0	1.6	0.2	2.0	66.1	1,419.0	382.6	85.3	204.0	73.7	39.3	-	784.9	2,448.7
2001	181.7	1.6	0.2	2.8	67.9	1,440.0	418.3	85.0	208.9	73.7	39.3	-	825.2	2,519.5
2002	223.4	1.6	0.2	0.7	70.3	1,388.8	439.2	96.0	217.8	76.7	58.5	-	888.1	2,573.0
2003	285.6	26.6	0.2	1.0	47.1	1,354.5	575.1	123.7	237.2	76.7	64.5	1.4	1,078.6	2,793.7
2004	340.8	51.6	0.2	1.4	51.7	1,355.9	670.9	131.9	238.5	70.3	64.8	1.5	1,178.0	2,979.6
2005	569.0	89.2	0.2	1.9	57.2	1,343.2	759.7	137.8	248.7	70.3	74.5	1.6	1,292.7	3,353.2
2006	695.0	126.7	0.2	2.4	55.5	1,361.4	795.4	143.8	257.3	70.3	107.3	3.9	1,377.9	3,619.2
2007	877.2	164.2	0.2	3.1	59.0	1,358.7	836.7	150.2	257.3	94.3	211.3	3.9	1,553.6	4,015.9
2008	1,187.6	244.4	0.2	3.8	61.4	1,456.5	843.8	147.6	293.3	94.3	219.5	3.9	1,602.3	4,556.2
2009	1,466.7	392.5	1.0	4.5	64.7	1,458.5	914.9	156.9	305.0	94.3	299.8	8.8	1,779.7	5,167.5
2010	1,699.9	559.3	1.0	13.1	68.0	1,452.9	951.9	185.7	336.5	94.3	330.2	28.1	1,926.5	5,720.6
2011	1,959.0	766.4	1.2	165.9	74.1	1,470.9	991.0	197.5	421.1	94.3	1,159.5	55.2	2,918.5	7,356.1

- (1) For wind, wave, tidal and hydro, the figures represent the energy content of the electricity supplied, but for biofuels the figures represent the energy content of the fuel used.
- (2) Excluding pumped storage stations.
- (3) Biodegradable part only.
- (4) Includes electricity from poultry litter combustion, and meat & bone combustion.
- (5) Includes electricity from straw and energy crops.
- (6) Includes electricity from farm waste digestion and other AD.
- (7) Non-biodegradable part of municipal solid waste plus waste tyres, hospital waste, and general industrial waste.
- (8) Includes heat from meat & bone combustion and sewage sludge combustion.
- (9) Includes heat from straw, energy crops and paper & packaging.
- (10) Includes heat from farm waste digestion and other non-farm AD.
- (11) Data on heat pumps were included in this table for the first time in 2011. It is understood that there was a negligible contribution prior to 2008.
- (12) Includes heat from waste tyre combustion, hospital waste combustion, and general industrial waste combustion.
- (13) Liquid biofuels are generally blended for use in transport.
- (14) Includes the use of waste tyres and hospital waste.
- (15) Includes the use of poultry litter and meat & bone.
- (16) Includes the use of straw combustion and short rotation coppice.

6.1.2 Renewable orders and operational capacity

Technology band	Contracted projects		1998 Live projects operational at 31 December 1998 (1)		1999 Live projects operational at 31 December 1999 (1)		2000 Live projects operational at 31 December 2000 (1)		
	Number	Capacity MW	Number	Capacity MW	Number	Capacity MW	Number	Capacity MW	
England and Wales									
NFFO - 1 (1990)	Hydro	26	11.85	21	10.00	21	10.00	19	8.75
	Landfill gas	25	35.50	19	30.78	19	30.78	19	30.78
	Municipal and industrial waste	4	40.63	4	40.63	4	40.63	3	37.08
	Other	4	45.48	4	45.48	4	45.48	4	45.48
	Sewage gas	7	6.45	6	5.98	6	5.98	6	5.98
	Wind	9	12.21	7	11.66	7	11.66	7	11.66
	Total (2)	75	152.12	61	144.53	61	144.53	58	139.73
NFFO - 2 (late 1991)	Hydro	12	10.86	10	10.46	10	10.46	10	10.46
	Landfill gas	28	48.45	26	46.39	26	46.39	26	46.39
	Municipal and industrial waste	10	271.48	2	31.50	2	31.50	2	31.50
	Other	4	30.15	1	12.50	1	12.50	1	12.50
	Sewage gas	19	26.86	18	19.06	18	19.06	18	19.06
	Wind	49	84.43	25	53.83	25	53.83	24	52.53
	Total (2)	122	472.23	82	173.74	82	173.74	81	172.44
NFFO - 3 (1995)	Energy crops and agricultural and forestry waste - gasification	3	19.06	-	-	-	-	1	8.00
	Energy crops and agricultural and forestry waste - other	6	103.81	1	38.50	1	38.50	2	69.50
	Hydro	15	14.48	6	9.72	7	10.08	8	11.74
	Landfill gas	42	82.07	40	78.96	42	82.07	42	82.07
	Municipal and industrial waste	20	241.87	5	75.32	6	77.42	6	77.42
	Wind - large	31	145.92	7	32.46	8	34.76	9	36.81
	Wind - small	24	19.71	7	5.38	9	7.93	9	7.93
	Total	141	626.92	66	240.34	73	250.76	77	293.47
NFFO - 4 (1997)	Hydro	31	13.22	3	0.70	5	1.42	5	1.42
	Landfill gas	70	173.68	21	45.93	43	103.30	51	135.71
	Municipal and industrial waste - CHP	10	115.29	-	-	-	-	2	14.98
	Municipal and industrial waste - fluidised bed combustion	6	125.93	-	-	-	-	-	-
	Wind - large	48	330.36	-	-	-	-	1	2.53
	Wind - small	17	10.33	-	-	1	0.63	3	2.03
	Anaerobic digestion of agricultural waste	6	6.58	-	-	-	-	-	-
	Energy crops and forestry waste gasification	7	67.34	-	-	-	-	-	-
	Total	195	842.73	24	46.63	49	105.35	62	156.67
NFFO - 5 (1998)	Hydro	22	8.87	-	-	-	-	-	-
	Landfill gas	141	313.73	1	1.78	11	16.58	23	53.88
	Municipal and industrial waste	22	415.75	-	-	-	-	-	-
	Municipal and industrial waste - CHP	7	69.97	-	-	-	-	-	-
	Wind - large	33	340.16	-	-	-	-	-	-
	Wind - small	36	28.67	-	-	2	1.69	2	1.69
	Total	261	1,177.15	1	1.78	13	18.27	25	55.57
NFFO Total		794	3,271.15	234	607.02	278	692.64	303	817.88
Scotland									
SRO - 1 (1994)	Biomass	1	9.8	-	-	-	-	1	9.80
	Hydro	15	17.25	3	2.27	4	3.22	6	4.04
	Waste to Energy	2	3.78	2	3.78	2	3.78	2	3.78
	Wind	12	45.6	6	21.76	7	25.13	7	25.13
	Total	30	76.43	11	27.81	13	32.13	16	42.75
SRO - 2 (1997)	Biomass	1	2	-	-	-	-	-	-
	Hydro	9	12.36	-	-	-	-	-	-
	Waste to Energy	9	56.05	-	-	3	6.7	4	15.00
	Wind	7	43.36	-	-	-	-	-	-
	Total	26	114.04	-	-	3	6.7	4	15.00
SRO - 3 (1999)	Biomass	1	12.9	-	-	-	-	-	-
	Hydro	5	3.9	-	-	-	-	-	-
	Waste to Energy	16	49.11	-	-	-	-	1	3.94
	Wave	3	2	-	-	-	-	-	-
	Wind - large	11	63.43	-	-	-	-	1	8.29
	Wind - small	17	14.06	-	-	-	-	2	1.62
	Total	53	145.40	-	-	-	-	4	13.85
SRO Total		109	335.87	11	14.55	16	38.83	24	71.60
Northern Ireland									
NI NFFO - 1 (1994)	Hydro	9	2.37	7	1.89	7	1.89	7	1.89
	Sewage gas	5	0.56	-	-	-	-	-	-
	Wind	6	12.66	6	12.66	6	12.66	6	12.66
	Total	20	15.59	13	14.55	13	14.55	13	14.55
NI NFFO - 2 (1996)	Biogas	1	0.25	-	-	-	-	-	-
	Biomass	2	0.3	2	0.30	2	0.30	2	0.30
	Hydro	2	0.25	1	0.08	1	0.08	1	0.08
	Landfill gas	2	6.25	-	-	-	-	-	-
	Municipal and industrial waste	1	6.65	-	-	-	-	-	-
	Wind	2	2.57	-	-	1	0.43	2	2.57
	Total	10	16.27	3	0.38	4	0.81	5	2.95
NI NFFO Total		30	31.86	16	14.93	17	15.36	18	17.50
All NFFO and equivalents (2)		933	3,638.88	261	649.76	311	746.83	345	907.00

(1) Sites that have closed, sites that are not currently using renewables as fuel and those that are no longer under contract have been excluded.

(2) The NFFO database has reported that at the end of December 2011 487 sites totalling 1,275.56 MW had gone live under NFFO, but this includes a number of sites which have closed or are not currently using renewables as fuels.

The following table compares the totals for live projects, above, with the overall NFFO total:

	Number	MW
All live NFFO and equivalents	380	1020.56
NFFO-1 no longer classed as live and operational	17	12.85
NFFO-2 no longer classed as live and operational	8	12.76
NFFO-3 no longer classed as live and operational	25	104.65
NFFO-4 no longer classed as live and operational	10	29.01
NFFO-5 no longer classed as live and operational	15	19.42
SRO-1 no longer classed as live and operational	8	28.84
SRO-2 no longer classed as live and operational	4	16.70
SRO-3 no longer classed as live and operational	5	15.74
NI-NFFO-1 no longer classed as live and operational	15	15.04
NI-NFFO-2 no longer classed as live and operational	0	0.00
All NFFO and equivalents	487	1275.56

6.1.2 Renewable orders and operational capacity (continued)

2001		2002		2003		2004		2005		2006	
Live projects operational at 31 December 2001 (1)		Live projects operational at 31 December 2002 (1)		Live projects operational at 31 December 2003 (1)		Live projects operational at 31 December 2004 (1)		Live projects operational at 31 December 2005 (1)		Live projects operational at 31 December 2006 (1)	
Number	Capacity MW	Number	Capacity MW	Number	Capacity MW	Number	Capacity MW	Number	Capacity MW	Number	Capacity MW
21	10.00	9	2.95	9	7.63	13	8.19	13	4.83	13	4.83
19	30.78	8	16.56	17	29.32	13	25.09	13	25.09	13	25.09
4	40.63	4	44.62	4	40.63	4	40.63	4	40.63	4	40.63
4	45.48	2	25.38	2	25.38	3	45.38	3	45.38	3	45.38
6	5.98	2	8.67	6	5.98	4	1.55	4	4.08	4	4.08
5	8.14	1	2.06	2	5.81	3	7.53	5	8.14	5	8.14
59	141.01	26	100.24	40	114.74	40	128.37	42	128.16	42	128.16
10	10.46	1	0.07	2	2.78	8	10.16	9	10.43	9	10.43
26	46.39	13	22.33	26	46.39	22	35.67	21	34.64	21	34.64
2	31.50	2	31.50	2	31.50	2	31.50	2	31.50	2	31.50
1	12.50	1	12.50	-	-	1	12.50	1	12.50	1	12.50
18	19.06	16	14.22	17	18.39	17	25.69	17	18.56	17	18.56
23	52.45	23	52.45	21	52.20	23	52.45	22	51.97	22	51.97
80	172.36	56	133.07	68	151.26	73	167.97	72	159.60	72	159.60
1	8.00	-	-	-	-	-	-	-	-	-	-
2	69.50	2	69.50	2	69.50	2	69.50	2	69.50	2	69.50
8	11.74	8	11.74	8	11.74	8	11.74	8	11.74	8	11.74
42	82.07	42	82.07	42	82.07	42	82.07	41	80.55	40	79.03
6	77.42	6	77.42	7	89.12	8	102.92	9	114.62	9	126.32
10	41.02	10	41.02	10	41.02	10	41.02	12	50.50	12	50.50
10	9.47	11	10.84	13	11.86	13	11.86	15	13.52	15	13.52
79	299.22	79	292.58	82	305.31	83	319.11	87	340.43	86	350.61
7	2.10	8	2.30	9	2.49	9	2.49	9	2.49	9	2.49
51	135.71	55	141.73	57	146.00	60	148.36	62	161.46	62	160.51
2	14.98	4	33.48	4	33.48	4	33.48	4	33.48	4	33.48
-	-	-	-	-	-	-	-	-	-	-	-
1	2.53	4	12.97	4	12.97	4	12.97	6	38.67	6	38.67
4	2.76	5	3.27	5	3.27	5	3.27	6	4.03	6	4.03
-	-	1	1.43	1	1.43	1	1.43	1	1.43	1	1.43
-	-	-	-	-	-	-	-	-	-	-	-
65	158.08	77	195.18	80	199.64	83	202.00	88	241.57	88	240.62
3	0.64	3	0.64	3	0.64	-	-	-	-	-	-
45	89.60	58	114.50	67	137.26	77	164.32	80	170.41	84	180.49
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
4	3.65	4	3.65	6	4.85	9	7.45	9	7.45	9	7.45
52	93.89	65	118.79	76	142.75	86	171.77	89	177.86	93	187.94
335	864.55	303	839.86	346	913.70	365	989.21	378	1,047.61	381	1,066.92
1	9.80	1	9.80	1	9.80	1	9.80	1	9.80	-	-
6	4.04	8	7.82	9	8.81	9	8.81	10	10.75	10	10.75
2	3.78	2	3.78	2	3.78	2	3.78	2	3.78	2	3.78
7	25.13	7	25.13	7	25.13	7	25.13	7	25.13	7	25.13
16	42.75	18	46.53	19	47.52	19	47.52	20	49.46	19	39.66
-	-	-	-	-	-	-	-	-	-	-	-
2	1.46	2	1.46	2	1.46	2	1.46	2	1.46	2	1.46
4	15.00	4	15.00	6	17.65	6	17.65	6	17.65	6	17.65
3	18.95	5	31.29	5	31.29	5	31.29	5	31.29	5	31.29
9	35.41	11	47.75	13	50.40	13	50.40	13	50.40	13	50.40
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
2	6.12	4	10.30	7	16.04	10	22.36	10	22.36	10	22.36
1	0.20	1	0.20	1	0.20	1	0.20	1	0.20	1	0.20
1	8.29	1	8.29	1	8.29	1	8.29	1	8.29	1	8.29
3	2.47	3	2.47	5	4.28	5	4.28	5	4.28	4	3.43
7	17.08	9	21.26	14	28.81	17	35.13	17	35.13	16	34.28
32	95.24	38	115.54	46	126.73	49	133.05	50	134.99	48	124.34
7	1.89	8	2.33	8	2.33	8	2.33	9	2.37	9	2.37
-	-	-	-	-	-	-	-	-	-	-	-
6	12.66	6	12.66	6	12.66	6	12.66	6	12.66	6	12.66
13	14.55	14	14.99	14	14.99	14	14.99	15	15.03	15	15.03
-	-	-	-	-	-	-	-	-	-	-	-
2	0.30	2	0.30	2	0.30	2	0.30	2	0.30	2	0.30
1	0.08	1	0.08	1	0.08	1	0.08	1	0.08	1	0.08
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
2	2.57	2	2.57	2	2.57	2	2.57	2	2.57	2	2.57
5	2.95	5	2.95	5	2.95	5	2.95	5	2.95	5	2.95
18	17.5	19	17.94	19	17.94	19	17.94	20	17.98	20	17.98
385	977.29	360	973.34	411	1,058.37	433	1,140.20	448	1,200.59	449	1,209.24

6.1.2 Renewable orders and operational capacity (continued)

Technology band	2007		2008		2009		2010		
	Live projects operational at 31 December 2007 (1)		Live projects operational at 31 December 2008 (1)		Live projects operational at 31 December 2009 (1)		Live projects operational at 31 December 2010 (1)		
	Number	Capacity MW	Number	Capacity MW	Number	Capacity MW	Number	Capacity MW	
England and Wales									
NFFO - 1 (1990)	Hydro	13	4.83	13	4.83	13	4.83	13	4.83
	Landfill gas	13	25.09	13	25.09	13	25.09	13	25.09
	Municipal and industrial waste	4	40.63	4	40.63	4	40.63	4	40.63
	Other	3	45.38	3	45.38	3	45.38	3	45.38
	Sewage gas	4	4.08	4	4.08	4	4.08	4	4.08
	Wind	5	8.14	5	8.14	5	8.14	5	8.14
	Total (2)	42	128.16	42	128.16	42	128.16	42	128.16
NFFO - 2 (late 1991)	Hydro	9	10.43	9	10.43	9	10.43	9	10.43
	Landfill gas	21	34.64	21	34.64	21	34.64	21	34.64
	Municipal and industrial waste	2	31.50	2	31.50	2	31.50	2	31.50
	Other	1	12.50	1	12.50	1	12.50	1	12.50
	Sewage gas	17	18.56	17	18.56	17	18.56	17	18.56
	Wind	22	51.97	22	51.97	22	51.97	22	51.97
	Total (2)	72	159.60	72	159.60	72	159.60	72	159.60
NFFO - 3 (1995)	Energy crops and agricultural and forestry waste - gasification	-	-	-	-	-	-	-	-
	Energy crops and agricultural and forestry waste - other	1	31.00	1	31.00	1	31.00	1	31.00
	Hydro	8	11.74	8	11.74	8	11.74	8	11.74
	Landfill gas	35	71.08	35	71.08	35	71.08	30	60.27
	Municipal and industrial waste	9	126.32	9	126.32	9	126.32	10	169.32
	Wind - large	12	50.50	12	50.50	12	50.50	12	50.50
	Wind - small	15	13.52	15	13.52	15	13.52	15	13.52
	Total	80	304.16	80	304.16	80	304.16	76	336.35
NFFO - 4 (1997)	Hydro	9	2.49	9	2.49	9	2.49	7	1.94
	Landfill gas	60	158.95	60	158.95	58	156.04	50	130.69
	Municipal and industrial waste - CHP	4	33.48	4	33.48	4	33.48	4	33.48
	Municipal and industrial waste - fluidised bed combustion	-	-	-	-	-	-	-	-
	Wind - large	7	42.72	7	42.72	7	42.72	7	42.72
	Wind - small	6	4.03	6	4.03	6	4.03	6	4.03
	Anaerobic digestion of agricultural waste	-	-	-	-	-	-	-	-
	Energy crops and forestry waste gasification	-	-	-	-	-	-	-	-
	Total	86	241.67	86	241.67	84	238.76	74	212.85
NFFO - 5 (1998)	Hydro	-	-	-	-	2	1.00	2	1.00
	Landfill gas	79	168.04	79	168.04	75	163.35	63	130.38
	Municipal and industrial waste	-	-	-	-	1	9.90	1	9.90
	Municipal and industrial waste - CHP	-	-	-	-	-	-	-	-
	Wind - large	-	-	-	-	-	-	-	-
	Wind - small	9	7.45	9	7.45	9	7.45	9	7.45
	Total	88	175.49	88	175.49	87	181.69	75	148.73
NFFO Total		368	1,009.07	368	1,009.07	365	1,012.37	339	985.69
Scotland									
SRO - 1 (1994)	Biomass	-	-	-	-	-	-	-	-
	Hydro	9	10.09	9	10.09	9	10.09	9	10.09
	Waste to Energy	2	3.78	2	3.78	2	3.78	2	3.78
	Wind	7	25.13	7	25.13	7	25.13	7	25.13
	Total	18	39.00	18	39.00	18	39.00	18	39.00
SRO - 2 (1997)	Biomass	-	-	-	-	-	-	-	-
	Hydro	2	1.46	2	1.46	2	1.46	2	1.46
	Waste to Energy	6	17.65	6	17.65	6	17.65	6	17.65
	Wind	5	31.29	5	31.29	5	31.29	3	18.51
	Total	13	50.40	13	50.40	13	50.40	11	37.62
SRO - 3 (1999)	Biomass	-	-	-	-	-	-	-	-
	Hydro	-	-	-	-	-	-	-	-
	Waste to Energy	10	22.36	10	22.36	10	22.36	10	22.36
	Wave	1	0.20	1	0.20	1	0.20	1	0.20
	Wind - large	-	-	-	-	-	-	-	-
	Wind - small	4	3.43	4	3.43	4	3.43	4	3.43
	Total	15	25.99	15	25.99	15	25.99	15	25.99
SRO Total		46	115.39	46	115.39	46	115.39	44	102.61
Northern Ireland									
NI NFFO - 1 (1994)	Hydro	9	2.37	9	2.37	9	2.37	-	-
	Sewage gas	-	-	-	-	-	-	-	-
	Wind	6	12.66	6	12.66	6	12.66	-	-
	Total	15	15.04	15	15.04	15	15.04	-	-
NI NFFO - 2 (1996)	Biogas	-	-	-	-	-	-	-	-
	Biomass	2	0.30	2	0.30	2	0.30	2	0.30
	Hydro	1	0.08	1	0.08	1	0.08	1	0.08
	Landfill gas	-	-	-	-	-	-	-	-
	Municipal and industrial waste	-	-	-	-	-	-	-	-
	Wind	2	2.57	2	2.57	2	2.57	2	2.57
	Total	5	2.95	5	2.95	5	2.95	5	2.95
NI NFFO Total		20	17.98	20	17.98	20	17.98	5	2.95
All NFFO and equivalents (2)		434	1,142.44	434	1,142.44	431	1,145.74	388	1,091.24

6.1.2 Renewable orders and operational capacity (continued)

		2011	
		Live projects operational at 31 December 2011 (1)	
Technology band		Number	Capacity MW
England and Wales			
NFFO - 1 (1990)	Hydro	13	4.83
	Landfill gas	13	25.09
	Municipal and industrial waste	4	40.63
	Other	3	45.38
	Sewage gas	4	4.08
	Wind	5	8.14
	Total (2)	42	128.16
NFFO - 2 (late 1991)	Hydro	9	10.43
	Landfill gas	21	34.64
	Municipal and industrial waste	2	31.50
	Other	1	12.50
	Sewage gas	17	18.56
	Wind	22	51.97
	Total (2)	72	159.60
NFFO - 3 (1995)	Energy crops and agricultural and forestry waste - gasification	1	31.00
	Energy crops and agricultural and forestry waste - other		
	Hydro	8	11.74
	Landfill gas	26	52.76
	Municipal and industrial waste	8	98.12
	Wind - large	11	48.14
	Wind - small	15	13.52
	Total	69	255.27
NFFO - 4 (1997)	Hydro	9	2.49
	Landfill gas	55	149.63
	Municipal and industrial waste - CHP	4	33.48
	Municipal and industrial waste - fluidised bed combustion		
	Wind - large	7	42.72
	Wind - small	6	4.03
	Anaerobic digestion of agricultural waste		
	Energy crops and forestry waste gasification		
	Total	81	232.35
NFFO - 5 (1998)	Hydro	2	1.00
	Landfill gas	66	150.17
	Municipal and industrial waste	1	9.90
	Municipal and industrial waste - CHP		
	Wind - large		
	Wind - small	9	7.45
	Total	78	168.52
NFFO Total		342	943.90
Scotland			
SRO - 1 (1994)	Biomass		
	Hydro	9	10.09
	Waste to Energy		
	Wind	3	10.53
	Total	12	20.62
SRO - 2 (1997)	Biomass		
	Hydro	2	1.46
	Waste to Energy	4	13.73
	Wind	3	18.51
	Total	9	33.70
SRO - 3 (1999)	Biomass		
	Hydro		
	Waste to Energy	7	15.76
	Wave	1	0.20
	Wind - large		
	Wind - small	4	3.43
	Total	12	19.39
SRO Total		33	73.71
Northern Ireland			
NI NFFO - 1 (1994)	Hydro		
	Sewage gas		
	Wind		
	Total	-	-
NI NFFO - 2 (1996)	Biogas		
	Biomass	2	0.30
	Hydro	1	0.08
	Landfill gas		
	Municipal and industrial waste		
	Wind	2	2.57
	Total	5	2.95
NI NFFO Total		5	2.95
All NFFO and equivalents (2)		380	1,020.56

Chapter 7: Long term trends

Combined Heat and Power

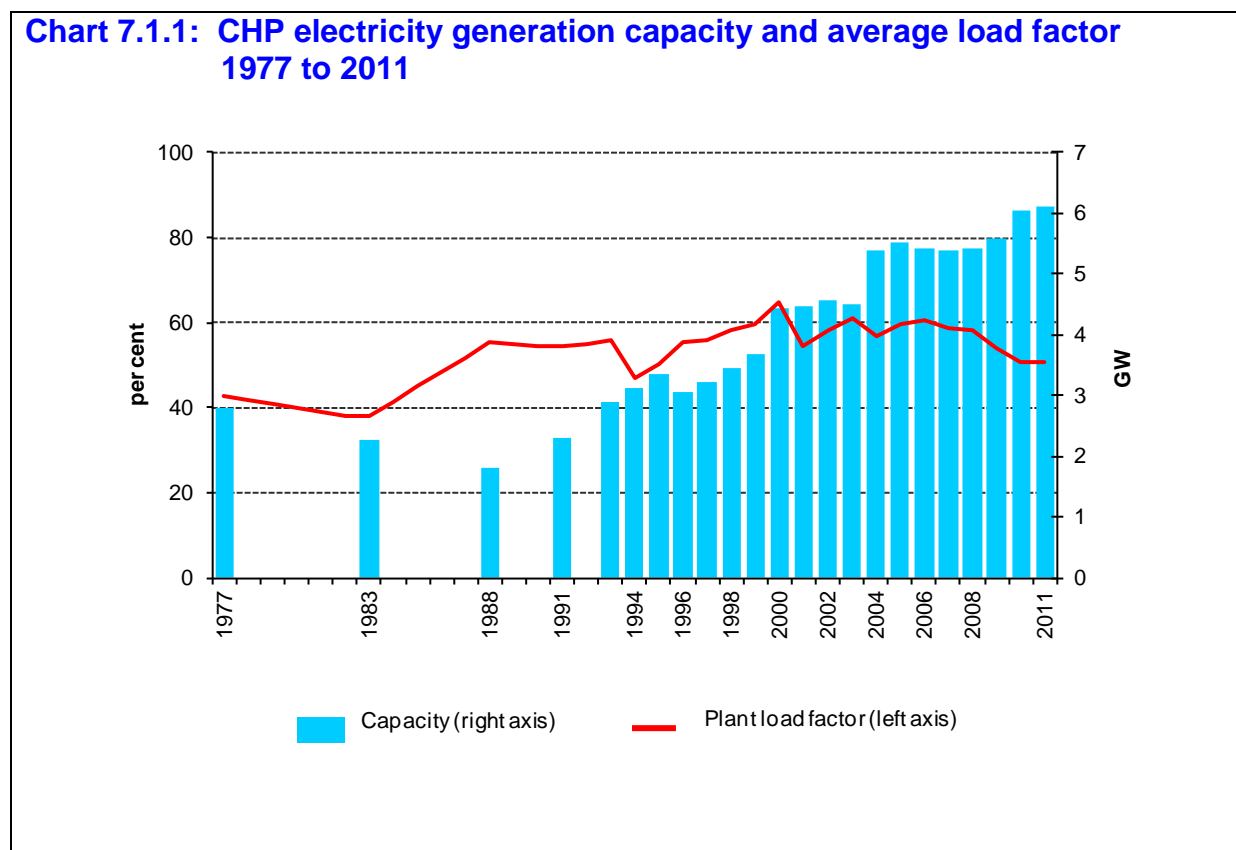
Combined Heat and Power: capacity, generation and fuel use (Table 7.1.1)

7.1.1 This table extends the summary series shown in Table 7A of Chapter 7 of the main Digest back to 1977, the earliest year for which data on Combined Heat and Power (CHP) are available. CHP data have been collected on an annual basis since 1993, but before that the data were collected on an occasional basis.

7.1.2 As Chart 7.1.1 shows, between 1993 and 2005 the electricity generating capacity of CHP increased by over 90 per cent, at an average rate of around 5½ per cent a year. Between 2005 and 2009 capacity levelled off before increasing again in 2010 due to increases within the oil refinery sector.

7.1.3 The plant load factor measures how intensively the CHP plants are used. The average load factor peaked in 2000 at around 65 per cent but fell sharply in 2001 to around 54 per cent following a fall in the electricity price. Between 2002 and 2008 the load factor fluctuated between 56 and 61 per cent, before falling in 2009 and again in 2010, remaining at around 50 per cent in 2011.

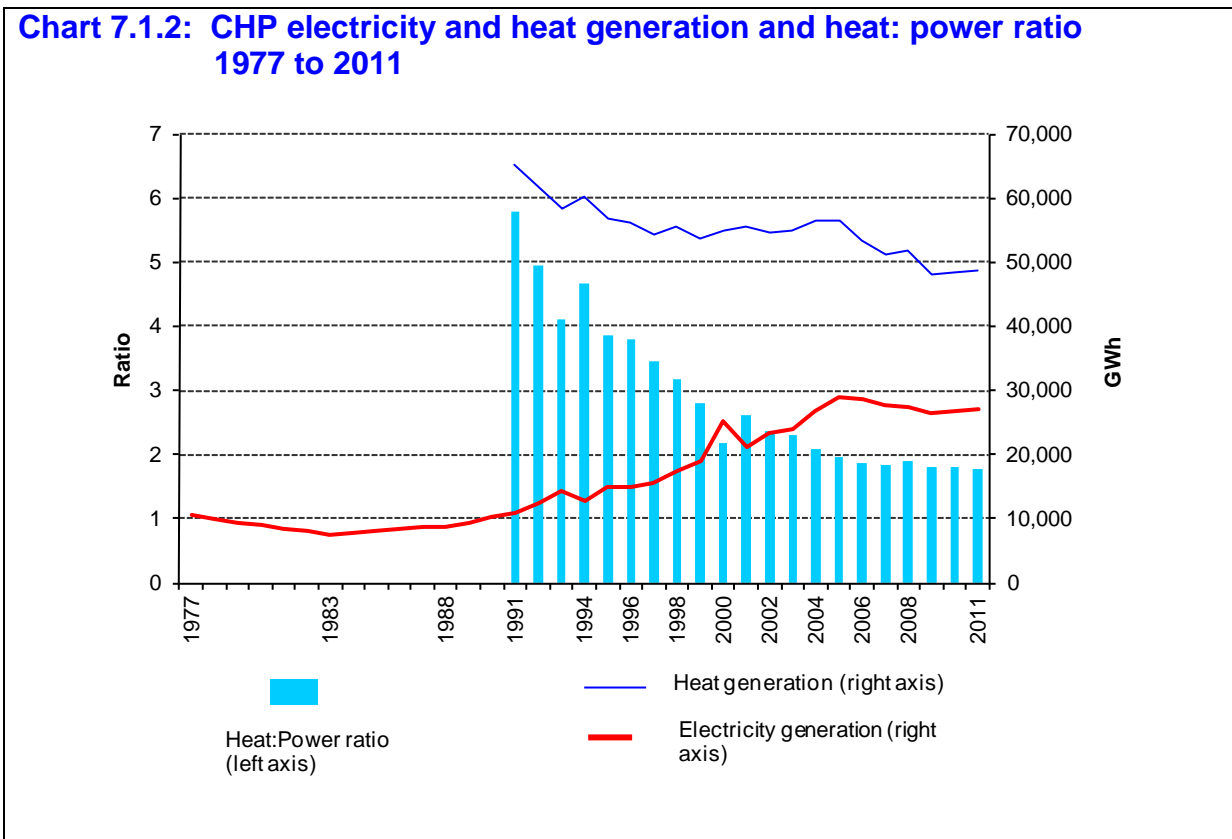
Chart 7.1.1: CHP electricity generation capacity and average load factor 1977 to 2011



7.1.4 Between 1995 and 2006 heat generation at CHP plants showed a fairly stable pattern remaining within the 53,000 to 57,000 GWh band, before falling in 2007 and again in 2009 such that the heat generated in 2011 was around 48,500 GWh.

7.15 Over the same period (1995-2006), electricity generation from CHP almost doubled, equivalent to a growth rate of around 5½ per cent a year. The rise in generation up to 2000 reflected the liberalisation of the electricity markets which gave a strong incentive to design schemes to maximise the electricity generation for a given heat load since the electricity could be sold on to suppliers. Newer CHP schemes thus tended to have lower heat to power ratios as Chart 7.1.2 shows. One of the effects of the introduction of the New Electricity Trading Arrangements (NETA) in March 2001 was a fall in the price of electricity, including the price of electricity exported from CHP plants. This led to a decline in investment in new plants and also a decline in the electrical output of existing CHP plants between 2000 and 2001. Following the sharp decline in 2001, electricity generation at CHP plants rose again to its peak in 2005, exceeding the 2000 level by 14 per cent. However, between 2006 and 2009, electricity generation decreased before levelling out between 2009 and 2011.

Chart 7.1.2: CHP electricity and heat generation and heat: power ratio 1977 to 2011



Heat to power ratios and heat generation data are not available before 1991

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7.1.1 Combined Heat and Power: capacity, generation and fuel use

	Number of schemes	Electricity capacity (1) MWe	Heat capacity MWth	Heat to power ratio (2)	Fuel input GWh	Electricity generation (3) GWh	Heat generation (4) GWh	Overall efficiency (3) Per cent	Load factor Per cent
1977	..	2,793	..	..	..	10,450	..	..	43
1983	..	2,254	..	..	..	7,500	..	..	38
1988	..	1,793	..	..	..	8,700	..	..	55
1991	266	2,293	13,361	5.80	113,537	10,917	65,174	67	54
1993	996	2,893	14,442	4.12	101,650	14,171	58,418	71.4	55.9
1994	1,139	3,117	15,704	4.67	97,468	12,853	60,079	74.8	47.1
1995	1,220	3,355	15,698	3.85	106,504	14,778	56,833	67.2	50.3
1996	1,299	3,041	15,382	3.81	97,994	14,782	56,285	72.5	55.5
1997	1,319	3,204	15,025	3.46	97,881	15,699	54,329	71.5	55.9
1998	1,329	3,439	15,111	3.16	100,878	17,569	55,579	72.5	58.3
1999	1,353	3,669	14,644	2.81	100,551	19,104	53,755	72.5	59.4
2000	1,340	4,451	11,606	2.17	106,230	25,246	54,877	75.4	64.7
2001	1,369	4,454	11,616	2.61	109,349	21,232	55,411	70.1	54.4
2002	1,348	4,565	11,271	2.35	112,669	23,222	54,565	69.0	58.1
2003	1,348	4,494	10,933	2.30	113,086	23,933	54,978	69.8	60.8
2004	1,335	5,396	11,772	2.10	120,181	26,853	56,520	69.4	56.8
2005	1,364	5,533	11,499	1.96	124,605	28,828	56,442	68.4	59.5
2006	1,362r	5,431	11,207r	1.86	122,342r	28,729r	53,407r	67.1	60.4
2007	1,407r	5,398r	11,065r	1.84	118,601r	27,833r	51,298r	66.7	58.9r
2008	1,427r	5,410r	10,880r	1.89	118,689r	27,529r	51,913r	66.9	58.1r
2009	1,485r	5,573r	10,738r	1.82	111,298r	26,428r	48,096r	67.0r	54.1r
2010	1,577r	6,053r	10,496r	1.80r	112,570r	26,772r	48,273r	66.7r	50.5r
2011	1,880	6,111	10,405	1.79	112,858	27,191	48,627	67.2	50.8

(1) (CHP_{QPO}) basis from 1995 onwards

(2) Heat to power ratios are calculated from the qualifying heat output (QHO) and the qualifying power output (QPO) (and their equivalents in the years before the CHPQA scheme was used for CHP statistics).

(3) These are calculated using gross calorific values; overall net efficiencies are some 5 percentage points higher.

(4) (CHP_{QHO}) basis from 1995 onwards