

NATURAL GAS STATISTICS: DATA SOURCES AND METHODOLOGIES

Introduction

The Department for Energy Security and Net Zero (henceforth referred to as the department) collect, analyse and publish natural gas data to produce Accredited official statistics (previously called National Statistics). The aim of this document is to provide users with information on the data sources and methodologies used to produce these statistics.

Substantial changes to this note were made in February 2024 to incorporate new data sources and changes resulting from [Updates to Energy Trends monthly gas tables](#), and as a result of feedback from users. Previous versions of Natural gas statistics: data sources and methodologies are available from the [National Archives](#).

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Table of acronyms

AG2	Annual Gas 2
CATS	Central Area Transmission System
CHP	Combined Heat and Power
CHPQA	Combined Heat and Power Quality Assurance
CNG	Compressed Natural Gas
DUKES	Digest of United Kingdom Energy Statistics
GB	Great Britain
GDNs	Gas Distribution Networks
GEM	Gas End use Monthly
GWh	Gigawatt hours
IEA	International Energy Agency
IoM	Isle of Man
ISSB	International Steel Statistics Bureau
ktoe	thousand tonnes of oil equivalent
LDZ	Local Distribution Zones
LNG	Liquefied Natural Gas
mcm	million cubic meters
MPP	Major Power Producers
NAEI	National Atmospheric Emissions Inventory
NNFCC	National Non-Food Crops Centre
NSTA	North Sea Transition Authority
NTS	National Transmission System
OFGEM	Office of Gas and Electricity Markets
PPRS	Petroleum Products Reporting System
RHI	Renewable Heat Incentive
ROI	Republic of Ireland
SIC	Standard Industrial Classification
UK	United Kingdom
UKCS	United Kingdom Continental Shelf

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1.0 Balances

1.1 Energy balances

Energy balances are an accounting framework for the compilation and reconciliation of energy data within a national territory over a defined time period. Energy balances show the relationship between inputs and outputs (or supply and demand). Energy balances are system level and express all forms of energy (in a common unit). Energy balances are based on the first law of thermodynamics which states that the amount of energy within a fixed system can neither increase nor decrease (for more information see [Energy balance: methodology note](#)).

1.2 Commodity balances

Energy balances are made up commodity balances. Commodity balances are fuel level; similar to energy balances they are an accounting tool which shows inputs (supply) compared to outputs (demand). Commodity balances are made up of a supply and demand section, the data for each are collected from different sources, which in addition to coverage and timing differences, amongst other complexities means they are often not identical. The difference between supply and demand is called a statistical difference (see [Methodologies](#)). In general, the department aims to produce commodity balances with a statistical difference of less than 0.5 per cent (for more information see [Energy balance: methodology note](#)).

1.3 Gas balance

This aim of this note is to introduce the data and methodologies used to produce the commodity balance for natural gas (henceforth referred to as the gas balance), in addition to the supplementary data produced alongside it. The gas balance shows data on supply and demand as described in table 1.0, each element of supply and demand is described in this note. The gas balance is published in Energy Trends and DUKES (see [Summary of publications](#)), note that the gas balances published in DUKES shows additional subsectors to those described in table 1.0 (see [Demand](#)).

Table 1.0 Elements of supply and demand in the gas balance

Supply	Production
	Imports
	Exports
	Stock change
	Transfers
	Supply
Statistical difference	
Demand	Demand
	Transformation
	Energy industry
	Industry
	Transport
	Domestic
	Services/ other
	Non-energy use
	Losses

2.0 Supply

Supply of natural gas refers to the amount of gas that is available to users. Supply, as considered in the gas balance is also called ‘net supply’ because it considers deductions. It is also possible to calculate gross supply, which is equal to production plus imports, and is the total amount of gas supplied into the UK (without considering deductions).

$$\text{Supply} = \text{production} + \text{imports} - \text{exports} + \text{stock changes} + \text{transfers}$$

2.1 Production

Natural gas production refers to the process of extracting natural gas from the earth. In the UK natural gas is produced on the UK Continental Shelf (UKCS). The vast majority of this is produced offshore in the North Sea; less than one per cent is produced onshore (DUKES Table F.2). Gas (and oil) production is regulated and licensed through the [North Sea Transition Authority \(NSTA\)](#). The [NSTA Interactive Map](#) can be used to visualise where UKCS production takes place.

Natural gas produced is either ‘dry gas’ where gas originates from fields producing hydrocarbons in only a gaseous state, or ‘associated gas’ where gas originates alongside other hydrocarbons namely crude oil. Natural gas can also be recovered from coal mines and produced in renewable processes (see [Transfers](#) and [Colliery methane](#)).

Indigenous production is measured as all marketable gas produced within national boundaries. Other terms are often used as shorthand when referencing indigenous production in the UK including total production, UKCS production or even just production. In

general, these terms are referring to gross production which includes gas used within the natural gas production process (see [Energy Sector](#)). Net production describes total production minus gas used within the natural gas production process (an example of this is shown in table 2.1).

Table 2.1 Example of gross and net gas production

Indigenous production (gross production)	Of which natural gas producers own use	Net production
500,000	50,000	450,000

Production data is collected from the Petroleum Products Reporting System (PPRS) (see [Data sources](#)).

Gas production is calculated by aggregating gas produced by dry gas terminals, associated gas terminals, [direct export](#) gas fields and total producer own use. Terminal rather than field level production is used, as this is generally more accurate due to the use of measured rather than estimated [calorific values](#).

2.2 Trade

Natural gas is traded as a commodity in a global market. The gas market is influenced by external factors including supply and demand, geopolitical events and weather conditions. Historically, the gas market was heavily influenced by geography as gas was largely transported via pipelines. However, the introduction of liquefied natural gas (LNG) means gas can be shipped, sometimes over great distances.

The UK is part of the global gas market importing and exporting gas.

Trade data is collected from a number of sources including the Petroleum Products Reporting System (PPRS), data provided by interconnector operators and a survey of liquefied natural gas terminals (see [Data sources](#)).

Trade data are aggregated to provide figures for total imports and exports and published by country of origin/ destination.

2.2.1 Imports

The UK imports gas via pipelines with Norway, Belgium and the Netherlands as well as importing LNG. The UK has three LNG import terminals which is currently the second largest regasification infrastructure in Europe after Spain. UK import infrastructure is summarised in table 2.2.

Table 2.2 UK import infrastructure summary

Type	Name	Origin
Pipeline	Vesterled (St Fergus)	Norway
Pipeline	Statfjord, Gjoa/ Vega (St Fergus)	Norway
Pipeline	Langeled (Easington)	Norway
Pipeline	Alvheim, Edvard (St Fergus)	Norway
Pipeline	Rev, Gaupe (Central Area Transmission System (CATS))	Norway
Pipeline	Interconnector UK [note 1]	Belgium
Pipeline	Balgzand Bacton Line [note 1]	Netherlands
LNG	Dragon	Mixed
LNG	Grain	Mixed
LNG	South Hook	Mixed

Note 1 Interconnector UK and Balgzand Bacton Line are interconnectors which are pipelines which can be used to import or export gas.

2.2.2 Exports

The UK exports gas to Belgium, the Netherlands, the Republic of Ireland (ROI) and the Isle of Man (IoM). The UK does not have liquification capacity, so any exports of LNG are reloads, where imported LNG is re-exported (before being regasified). UK export infrastructure is summarised in table 2.3.

Table 2.3 UK export infrastructure summary

Name	Destination
Moffat interconnector [note 2]	ROI and IoM
Interconnector UK [note 1]	Belgium
Balgzand Bacton Line [note 1]	Netherlands
Direct exports	Netherlands and previously Norway

Note 2 Moffat interconnector currently only allows gas to flow from the UK to Ireland however can trade in both directions virtually.

Direct exports refer to exports where indigenously produced gas does not flow inland before being exported to another destination i.e. exports directly from gas fields. Direct exports tend to occur where gas is produced on a median line and two national territories share infrastructure. The UK directly exports gas to the Netherlands (from the Greater Markham Area Gas Fields) and has previously directly exported gas to Norway. The UK shares infrastructure with Norway and the Netherlands in the North Sea.

2.2.3 Net imports

Net imports refer to the difference between imports and exports of specific commodities. Where imports are greater than exports a country is a net importer of that commodity. Conversely where imports are less than exports a country is a net exporter.

2.3 Stock

Natural gas can be stored, often during periods of low demand for use during periods of high demand. In the UK gas stock is made up of stored LNG, medium range storage and one long range storage facility (Rough), which reopened in 2022. The UK has relatively little gas storage compared to some other European countries, tending to rely on trade rather than stock to balance supply.

Stock data is collected through GM10 and National Grid (see [Data sources](#)).

Stock change is equal to opening stock (the amount of stock held at the beginning of a time period) minus closing stock (the amount of stock held at the end of a time period). A positive stock change figure indicates gas being taken from storage (which is then available for demand) a negative figure indicates gas being put into storage.

The department is working with National Grid to improve the accuracy of stock change data.

2.4 Transfers

Transfers are used to indicate movement of fuels between other commodity balances. For gas this includes transfers out of gas used in the manufacture of synthetic coke oven gas and transfers in of biomethane. Synthetic coke oven gas is natural gas mixed with other derived gases (for more information see [Solid fuels and derived gases statistics: data sources and methodologies](#)). Biomethane is a renewable fuel created through the process of anaerobic digestion (for more information see [Renewable energy statistics: data sources and methodologies](#)).

2.4.1 Colliery methane

As well as transfers, colliery methane is another source of natural gas. Colliery methane is natural gas which has been extracted from coal beds during mining. Unlike transfers, rather than being blended with natural gas and therefore being counted within natural gas demand, colliery methane demand tends to be at or nearby production sites. This means colliery methane supply and demand can be identified separately within the gas balance and this is published as such on an annual basis (see [Summary of publications](#)). Colliery methane production has declined in line with that of coal production and is small compared to natural gas production.

3.0 Demand

Demand is the amount of gas required by users. Gas can be used to either generate other energy sources (through [transformation](#) or as a fuel for the [energy industry](#)), or consumed by final users (final consumption). These end uses can be defined as domestic or further disaggregated into different sectors of the economy. Sectors are defined using Standard Industrial Classification (SIC) codes (see the [Office for National Statistics](#) for more



information or [Energy balance: methodology note](#) table 1 for a complete list of classifications used in the balances). Demand is equal to the sum of gas required by all users, table 3.0 shows the categories of demand published in the gas balance.

Table 3.0 Demand sectors

Demand	Final consumption	Transformation	Electricity generation	<i>Major power producers</i>	
				<i>Autogenerators</i>	
		Energy industry use	Heat generation		
			Gas industry use [note 1]	Producers own use (oil and gas extraction)	
				Operators own use	
				LNG terminal own use	
				Storage own use	
			<i>Other energy industry use</i>		
		Losses			
		Industry	<i>Unclassified</i>		
	<i>Iron and steel</i>				
	<i>Non-ferrous metals</i>				
	<i>Mineral products</i>				
	<i>Chemicals</i>				
	<i>Mechanical engineering</i>				
	<i>Electrical engineering</i>				
	<i>Vehicles</i>				
	<i>Food, beverages</i>				
	<i>Textiles, leather</i>				
	<i>Paper, printing</i>				
<i>Other industries</i>					
<i>Construction</i>					
Transport					
Other	Domestic				
	<i>Public administration</i>				
	<i>Commercial</i>				
	<i>Agriculture</i>				
	<i>Miscellaneous</i>				
Non energy use					

Sectors that appear in *italics* are published on an annual basis, everything else is published on a quarterly basis (see [Summary of publications](#)).

Note 1 gas industry use is published in Table 4.2 (rather than the gas balance).

3.1 Transformation

Transformation is the process of ‘transforming’ a primary energy source into a secondary energy source (for more information see [Energy balance: methodology note](#)).

3.1.1 Electricity generation

When considering natural gas, the most common transformation is from gas (the primary energy source) which is burned to generate electricity (the secondary energy source).

Major power producers refers to electricity generated by companies whose primary purpose is to produce electricity. Autogenerators refers to electricity generated by companies who produce electricity as part of their industrial or commercial activities, but whose primary purpose is not to produce electricity (for more information see [Electricity statistics: data sources and methodologies](#)).

3.1.2 Heat generation

Natural gas may also be the primary energy source in the generation of heat, defined as heat that is sold to a third party (for more information see [Combined Heat and Power statistics: data sources and methodologies](#)).

3.2 Energy industry

The energy industry also uses gas as an energy source for its own operations. For the gas industry this is known as ‘own use’. Gas industry own use can be further disaggregated. Producers own use refers to gas used in the production of natural gas (see [Production](#)). Operators own use refers to gas used by the gas transmission and distribution network operators for their own operations (see [Transmission and distribution](#)). Liquefied natural gas (LNG) terminal own use refers to gas used by LNG terminals for their own operations. Storage own use refers to gas used by long range storage facilities (i.e. Rough).

In addition to the gas industry other energy industries use gas for their own operations including in petroleum refineries, for the extraction of coal and for blast furnaces.

Energy industry data is collected from a number of different sources and includes some estimates as described below (also see [Data sources](#)):

Energy industry use	Data source/ methodology
Producers own use	Petroleum Products Reporting System (PPRS)
Operators own use	GM10
LNG own use	Estimated to be 1.5 per cent of total LNG imports
Storage own use	The department is working with industry to ensure accurate reporting of storage facility own use
Petroleum refineries	Combined Heat and Power Quality Assurance (CHPQA), the department is working with industry to ensure accurate reporting of petroleum refineries use of gas
Coal extraction	International Steel Statistics Bureau (ISSB)
Blast furnaces	International Steel Statistics Bureau (ISSB)
Other	Any other energy industry use reported by gas suppliers in GEM and AG2

3.3 Industry

Industrial gas demand is demand for gas by industries excluding the energy industry. This includes industries such as iron and steel, chemicals and food manufacturing. See [Demand](#) for the complete list of industrial sectors included in the gas balance or [Energy balance: methodology note](#) Table 1 for a list of classifications used to define the industrial sector and sub sectors.

Industry demand data is collected in GEM, AG2 and from the National Grid (see [Data sources](#)).

3.4 Transport

Some road transport vehicles can use gas as a fuel in the form of compressed natural gas (CNG) or LNG. Gas demand for the transport sector is de minimis in the UK compared to that for other fuels. See [Energy balance: methodology note](#) Table 1 for a list of classifications used to define the transport sector and sub sectors.

Transport demand data is no longer available, whilst new data is sourced it is estimated that gas demand remains stable.

3.5 Domestic

Domestic gas demand is demand for gas by households for space and water heating and for cooking.

Domestic demand data is collected in GEM and AG2

Domestic data can be impacted by estimated bills which are used by suppliers when meter readings are unavailable. However, because domestic demand is strongly correlated with temperature, regression analysis is undertaken which provides an estimate for domestic demand. Reported and estimated demand are then used to access domestic demand in the gas balance, and [adjustments](#) might be made where necessary.

3.6 Services

Services includes the public administration and commercial sectors as well as gas demand by other final users and miscellaneous sectors. See [Energy balance: methodology note](#) table 1 for a list of classifications used to define these sectors. Public administration gas demand is demand for gas by state run operations, such as for schools and hospitals. Commercial gas demand is demand for gas by businesses such as shops, restaurants and hotels. Other final users and miscellaneous are sectors defined by SIC codes, such as by arts, recreational and religious organisations, rather than categories for gas which has not been allocated to a sector.

Services demand data is collected in GEM and AG2 (see [Data sources](#)).

3.7 Non-energy use

Non-energy use is gas demand for purposes other than as a fuel. In the gas balance non-energy use refers to ammonia production where chemical reactions with natural gas, steam and water take place producing hydrogen and nitrogen (and byproducts). This hydrogen and nitrogen is then used as a feedstock for ammonia synthesis. Ammonia is then used in the production of fertilisers and other products.

Non-energy use data is collected from the National Atmospheric Emissions Inventory (NAEI).

3.8 Losses

Losses includes gas 'lost' during transportation, distribution and storage as well as gas losses due to theft.

Losses due to transportation, distribution and storage as well as theft are estimated as a proportion of gas supplied to local distribution zones (LDZ's) sourced from the [National Grid LDZ Shrinkage Assessment and Adjustment](#).

Losses also includes metering differences which occur because gas is measured at different points in the supply chain sometimes under different conditions (e.g. temperature, pressure). As part of ongoing work to improve data quality, metering differences will no longer be published separately from losses. For more information see [Updates to Energy Trends monthly gas tables](#).

The department is working with industry to ensure accurate reporting of gas losses.

4.0 Supplementary data

4.1 Trade by country of origin/ destination

As well as total [imports](#) and [exports](#) the department publish data on trade by country of origin/ destination (see [Summary of publications](#)). Wherever possible import data is published by country of ultimate origin i.e. the country where the gas was produced. Occasionally this is not possible, for example for LNG which was previously stored such that the origin of the gas is mixed, in which case these imports are reported based on the country of dispatch. For exports to Belgium and the Netherlands it is not normally possible to publish by country of ultimate destination i.e. the country where the gas will be consumed, due to a lack of onward data and the interconnected nature of the European gas network.

4.2 Transmission and distribution

The discovery of North Sea oil and gas led to the construction of a high-pressure gas grid system in Great Britain (GB) known as the National Transmission System (NTS). The NTS supplies gas to some major power producers and industrial sites in addition to Gas Distribution Networks (GDNs) (see [National Grid](#) for more information). GDNs transport gas via low pressure pipelines from the NTS to final consumers. GDNs sell the transportation of gas rather than gas itself. Gas is sold to final consumers by gas suppliers. Monopoly companies which run the gas network are regulated by OFGEM (see [OFGEM](#) for more information).

A similar system operates in Northern Ireland (see [Gas Networks Ireland](#) for more information), this is regulated by Utility Regulator (see [Utility Regulator](#) for more information).

The department has previously published some limited data on gas transmission however, this has recently been updated (see [Updates to Energy Trends monthly gas tables](#) for more information). The [National Grid](#) and [Gas Networks Ireland](#) publish their own data on operation of the transmission systems.

4.3 Gas vented and flared

Gas producers may vent (release) or flare (burn) gas during the production process. Data on gas vented and flared is not included in the gas balance but is published as supplementary data annually (see [Summary of publications](#)).

Gas vented and flared are collected from the Petroleum Products Reporting System (PPRS) (see [Data sources](#)).

5.0 Data sources

The Natural Gas Statistics team undertake a number of primary data collections and collect data from additional source as listed in Table 6.

Table 6 Data sources

Name	Frequency	Description
Petroleum Production Reporting System (PPRS)	Monthly	Gas production is licensed by the NSTA; producers must provide data to the NSTA as a condition of their license. As such this data forms a census of all UKCS production. This data is provided to the department through statutory powers; it is used to determine total (on and offshore) UK gas production, some trade via North Sea infrastructure, producers own use of gas and gas flared and vented.
GM10	Monthly	The department carries out a primary data collection of gas network operators. This data shows gas supplied to Local Distribution Zones (LDZs). This data is collected from National Grid (who operate the national transmission system (NST) and the GBs four distribution network operators, see Annex 1 for a map of the network operators and major onshore gas pipelines.
Liquefied Natural Gas (LNG) Survey	Monthly	The department carries out a primary data collection of LNG terminals. This data shows LNG trade by country. This data is collected from UKs three LNG terminals, shown on the maps in Annex 1.
Other gas trade data	Monthly	Open data available from the Bacton-Balgzand Line (BBL) Company, Gas Networks Ireland (GNI) and Fluxys are used to collate additional data on trade.

Gas End use Monthly (GEM)	Monthly	In 2023, the department introduced a monthly primary data collection of large gas suppliers. This replaced the previous quarterly data collection. Large suppliers, defined as those supplying more than 1,750 GWh per year, provide data on supply by end use. End uses are categorised using Standard Industrial Classification (SIC) codes; there are 10 end use categories in the monthly data collection. On an annual basis data suppliers provide a further breakdown of more than 40 end use categories. There are around 30 large gas suppliers who provide GEM data, covering more than 95 per cent of the market.
Annual Gas 2 (AG2)	Annual	The department carries out a primary data collection of small gas suppliers, defined as those supplying less than 1,750 GWh per year. This survey is undertaken as a sample rather than a census. The sample is drawn at random from OFGEM and Utility Regulator's list of gas supply licenses. The data collection is similar to GEM. Any supplier who indicates supply greater than 1,750 GWh per year is moved across to GEM.
National Grid	Daily	The National Grid publish a substantial amount of data on the operation of the transmission system. This is used for stock data and to benchmark our own data collections.
National Atmospheric Emissions Inventory (NAEI)	Annual	Open-source data used for non-energy use of gas.

Gas statistics also utilise data collected by other teams. This includes data for biomethane injections to the grid which are sourced from the RHI and National Non-Food Crops Centre (NNFCC) (for more information see [Renewable energy statistics: data sources and methodologies](#)); data for gas used for electricity generation which are sourced from the Major Power Producers (MPP) and Autogenerators surveys (for more information see [Electricity statistics: data sources and methodologies](#)); data on heat generation is sourced from Combined Heat and Power Quality Assurance data (for more information see [Combined heat and power statistics: data sources and methodologies](#)) and data on gas used

for the production of synthetic coke oven gas, gas used by the iron and steel industry and in coke ovens and blast furnaces are sourced from the International Steel Statistics Bureau (ISSB) (for more information see [Solid fuels and derived gases statistics: data sources and methodologies](#)). Data from the Autogenerators survey and ISSB are used to calculate supply and use of colliery methane.

6.0 Statistical differences

[Supply](#) is the amount of gas available to end users and [demand](#) is the amount of gas required by end users. However, as seen supply and demand in [commodity balances](#) are not usually identical resulting in statistical differences. The statistical difference is published in the gas balance and is equal to the difference between supply and demand. Statistical differences are used as a quality assurance tool, whereby large differences can indicate data quality or other issues which can be investigated and resolved. In the first instance data quality issues are normally resolved by contacting data suppliers. However, in some cases corrections and/ or adjustments may be made to resolve these issues. The department aim to follow international guidance on the publication of energy statistics including of statistical differences (for more information see [International Energy Agency Energy Statistics Manual](#)).

6.1 Corrections

Whilst every effort is taken to collect high quality data, on occasion, it is necessary to correct company level data. For example when this is missing or in case of erroneous data when it has not been possible for a data supplier to provide a correction in the required timeframe. In both cases, corrections may be made using estimates based on previous data, established statistical methodologies (such as averages and time series analysis) and taking current market and energy trends into consideration. In some cases, estimates are made using other data sources such as [National Grid](#). Revisions are published as soon as practicable, usually the following month (see [Revisions Policy](#) for more information).

6.2 Adjustments

In some cases where no data quality issue can be found adjustments to aggregate data might be made such that the gas balance more closely reflects 'real world' supply and demand. In general supply data is considered more accurate than demand data so adjustments are most commonly made to individual sectors within demand. Adjustments are made using established techniques (similar to those used for [corrections](#)) and are rarely substantial usually making up just a small proportion of overall demand data.

7.0 Publications

7.1 Summary of publications

Please see the [gas statistics collection](#) for the complete range of gas statistics published by the department. The department publishes energy statistics on a monthly, quarterly and

annual basis. Energy and commodity balances are produced on a quarterly and annual basis. The gas balance is published in the tables shown in table 7.1. Additional supplementary data is published alongside the balances as part of DUKES, Energy Trends and Energy in Brief.

Table 7.1 Gas commodity balances tables

Table	Description	Frequency
Energy Trends Table 4.1	Natural gas commodity balance with broad category sectoral demand (9 categories)	Quarterly
DUKES Table 4.1	Natural gas and colliery methane commodity balance (disaggregated) with sectoral demand (~40 categories)	Annual
DUKES Table 4.2	Natural gas and colliery methane commodity balance (aggregated) with sectoral demand (~40 categories)	Annual
DUKES Table 4.1.1	Historic data on sectoral gas demand (6 categories)	Annual

7.1.1 Digest of UK Energy Statistics (DUKES)

[DUKES](#) is an annual publication with [gas statistics included in chapter 4](#) alongside other fuels (total energy, solid fuels and derived gases, petroleum, electricity, renewables and combined heat and power (CHP)). DUKES is published in July with the most recent data included for the previous year i.e. in July 2024 data for 2023 will be published alongside any revisions for previous years. DUKES includes a chapter of written commentary on trends observed in the most recent year alongside the tables listed in Table 7.1.1.

Table 7.1.1 DUKES gas tables

Table	Name	Frequency
4.1	Natural gas: commodity balance	Annual
4.2	Supply and consumption of natural gas and colliery methane	Annual
4.3	UK continental shelf and onshore natural gas production and supply	Annual
4.4 [note 1]	Gas storage sites and import/export facilities in the United Kingdom, November YYYY	Annual
4.5	Natural gas imports and exports	Annual
4.6	Liquefied Natural Gas imports by terminal	Annual
4.1.1	Natural gas and colliery methane production and consumption, from 1970	Annual
E.1	Gas flared and vented by oil and gas fields and terminals	Annual
F.2	Gas production	Annual

Note 1 DUKES table 4.4 (gas storage capacity) data is sourced from the National Grid and as such is not covered in this note. For more information on storage capacity please see the [National grid website](#).

7.1.2 Energy Trends

[Energy Trends](#) is a monthly and quarterly publication with gas statistics included in chapter 4 alongside other fuels (total energy, solid fuels and derived gases, petroleum, electricity, renewables and weather). Energy Trends is published on the last Thursday of the month with the most recent monthly data published two months in arrears and most recent quarterly data published one quarter in arrears. Monthly Energy Trends includes written commentary within tables and quarterly Energy Trends includes a chapter of written commentary alongside the tables listed in Table 7.1.2.

Table 7.1.2 Energy Trends gas tables [note 1]

Table	Name	Frequency
4.1	Natural gas: commodity balance	Quarterly
4.2	Natural gas supply and demand	Monthly
4.3	Natural gas imports	Monthly
4.4	Natural gas exports	Monthly

Note 1 The Energy Trends tables listed are currently being published as Official Statistics in Development as part of ongoing work to improve data quality and dissemination. For more information see [Updates to Energy Trends monthly gas tables](#).

7.1.3 Energy in Brief

[Energy in Brief](#) is an annual publication with gas statistics published alongside other information on the UK energy system. Energy in Brief is published in July with the most recent data included for the previous year i.e. in July 2024 data for 2023 will be published alongside any revisions for previous years. Energy in Brief includes a chapter of written commentary on trends observed in the most recent year compared to historic trends alongside the tables listed in Table 7.1.3.

Table 7.1.3 Energy in Brief gas tables

Name	Frequency
Reliability - gas and electricity capacity margins - maximum supply and maximum demand	Annual
UK Continental Shelf production	Annual
Oil and gas production and reserves	Annual
Natural gas demand	Annual
Trade in natural gas	Annual



7.2 Units

Gas Statistics are published in Gigawatt hours (GWh) and/ or million cubic meters (mcm). Wherever possible data are collected in both energy and volume units. When this is not possible, where available, calorific values are used to convert between energy and volume units. If calorific values are unavailable standard conversions may be used. Calorific values are published monthly in [Energy Trends Table 4.2](#) and annually in [DUKES Annex A](#). See [Energy balance: methodology note](#) for more information on calorific values and standard conversions. Some gas data is published in thousand tonnes of oil equivalent (ktoe) as part of DUKES and Energy Trends 'Total Energy' sections (see [Summary of Publications](#) for more information).

7.3 Revisions Policy

All of the statistics published are produced to high professional standards as set out in the [Code of Practise for Statistics](#). It is sometimes necessary to revise published data, for example on receipt of data which were unavailable at the point of initial publication or to correct errors. All revisions are carried out in line with the [Statistical Revisions Policy](#).

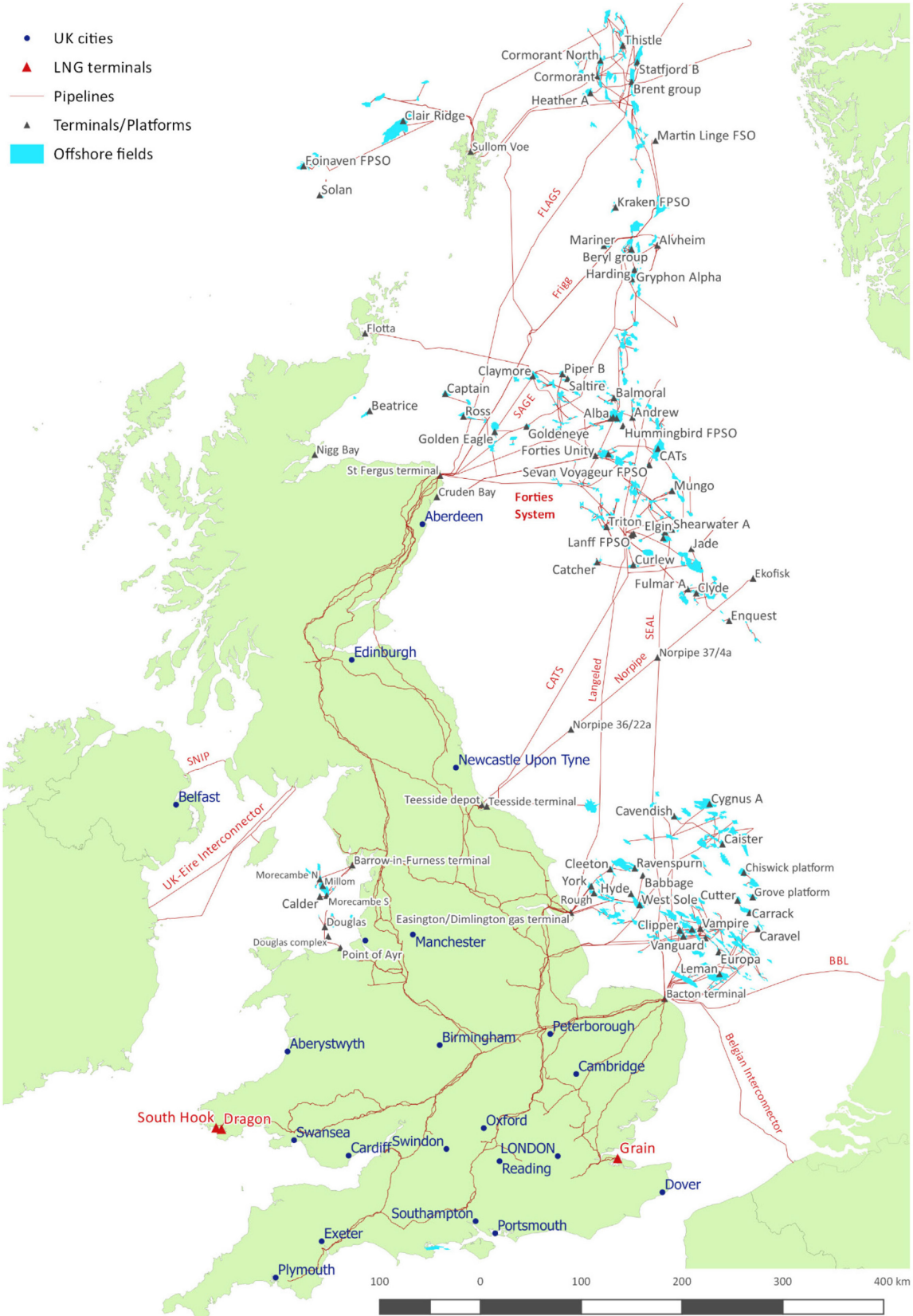
7.4 International reporting

The department are required to provide the International Energy Agency (IEA) with data on the gas balance alongside some supplementary data as a member state (for more information see [IEA Data and Statistics](#)).



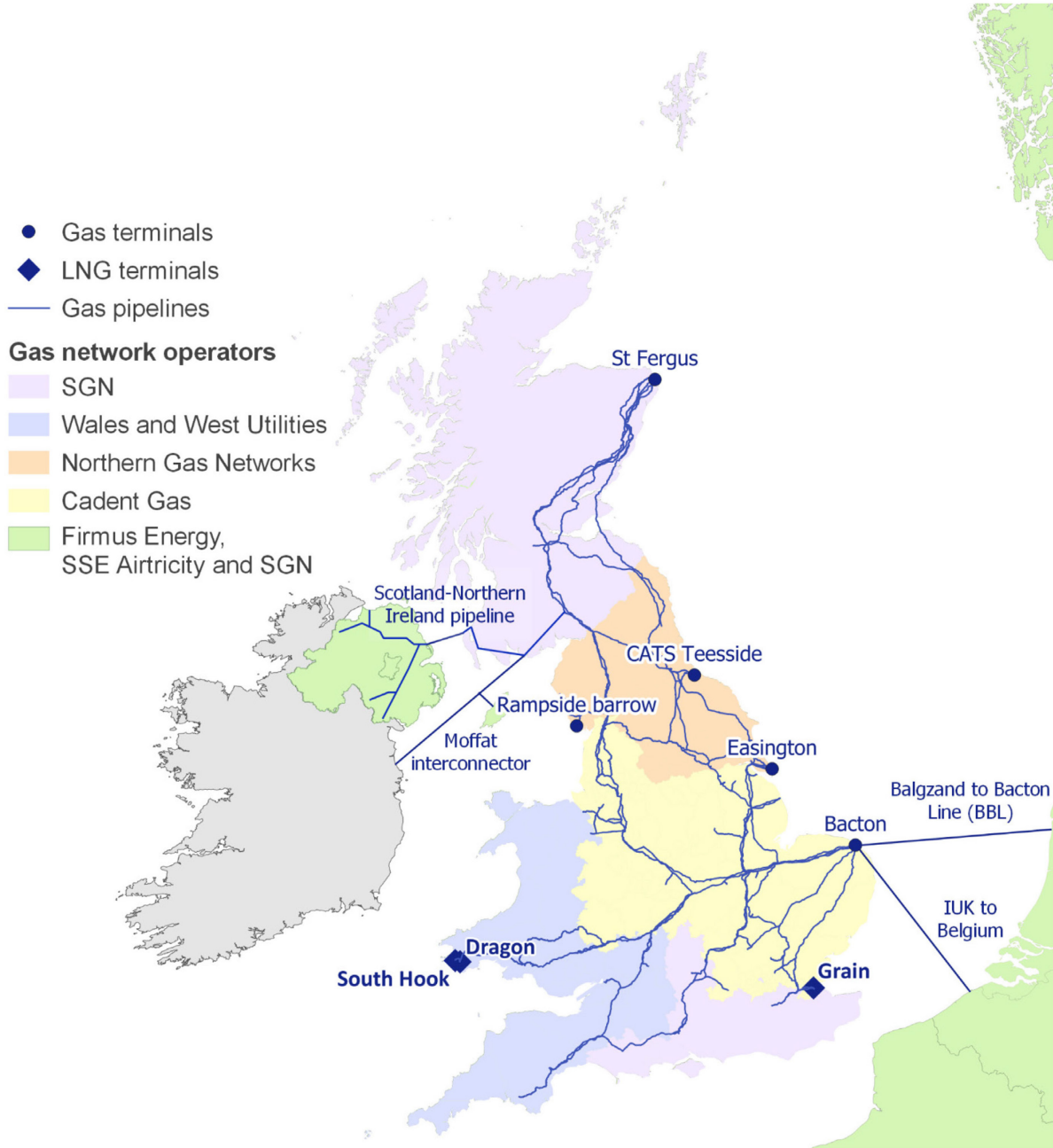
Annex 1 Maps

Map 1 Offshore oil and gas infrastructure and major onshore gas pipelines





Map 2 Gas and LNG terminals and regions of gas network operators





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