Section 1 – UK Total Energy
July to September 2019

Key results show:

Total energy production was 1.8 per cent lower than in the third quarter of 2018, with increases in oil and wind, solar and hydro output offset by falls from coal, gas, biomass and nuclear output. (Charts 1.1 & 1.2)

Total primary energy consumption for energy uses fell by 2.7 per cent to a record quarterly low. However, when adjusted to take account of weather differences between the third quarter of 2018 and the third quarter of 2019, primary energy consumption fell by 1.1 per cent. (Chart 1.3)

Final energy consumption (excluding non-energy use) fell by 1.5 per cent compared to the third quarter of 2018. Domestic consumption fell by 2.4 per cent in the quarter, industrial consumption fell by 2.2 per cent, transport consumption fell by 1.4 per cent and service consumption fell by 0.5 per cent. (Charts 1.4 & 1.5)

On a temperature adjusted basis, final energy consumption fell by 0.3 per cent. (Chart 1.5)

Net import dependency was 28.5 per cent, down 0.4 percentage points from the third quarter of 2018. (Chart 1.6)

Fossil fuel dependency was 76.7 per cent in the third quarter of 2019. (Chart 1.7)

Relevant tables

1.1: Indigenous production of primary fuels
1.2: Inland energy consumption: primary fuel input basis
1.3: Supply and use of fuels, and seasonally adjusted and temperature corrected final energy consumption

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Total production in the third quarter of 2019 at 30.0 million tonnes of oil equivalent was 1.8 per cent lower than in the third quarter of 2018.

Production of oil rose by 0.3 per cent, whilst production of gas fell by 0.8 per cent compared to the third quarter of 2018.

Primary electricity output in the third quarter of 2019 was 8.9 per cent lower than in the third quarter of 2018, within which nuclear electricity output was 21 per cent lower as a result of outages at several major reactors. Output from wind, solar and natural flow hydro was 24 per cent higher than the same period in 2018, due to increased renewable capacity, primarily from offshore wind (see section 6).

Production of bioenergy and waste was 0.5 per cent lower compared to the third quarter in 2018.

In the third quarter of 2019 production of coal and other solid fuels was 14 per cent lower than the corresponding period of 2018.
In the third quarter of 2019, the annual growth rate of UK production was -1.8 per cent, with the growth in oil, wind, solar and natural flow hydro production more than offset by the reductions in coal, gas, biomass and nuclear production.
Total inland consumption on a primary fuel input basis (temperature corrected, seasonally adjusted annualised rate), was 190.7 million tonnes of oil equivalent in the third quarter of 2019, 1.1 per cent lower than in the third quarter of 2018.

The average temperature in the third quarter of 2019 was 0.1 degrees Celsius cooler than the same period a year earlier.

Between the third quarter of 2018 and the third quarter of 2019 (on a seasonally adjusted and temperature corrected basis) coal consumption fell by 15 per cent driven by less coal use in electricity generation, as a result of high carbon prices for coal and strong performance from renewable sources.

On the same basis, oil consumption fell by 1.7 per cent, whilst gas consumption rose by 1.1 per cent.

Also, on a seasonally adjusted and temperature corrected basis there were rises in both bioenergy & waste and wind solar & hydro, up 5.8 per cent and 24 per cent respectively. Nuclear consumption fell by 21 per cent due to a series of maintenance outages.
Total final energy consumption fell by 2.4 per cent between the third quarter of 2018 and the third quarter of 2019.

Domestic sector energy consumption fell by 2.4 per cent compared to a year earlier. Average temperatures in the third quarter of 2019 were 0.1 degrees Celsius cooler than a year earlier, with the average temperature in July 2019 being 1.1 degrees Celsius cooler than a year earlier, whilst average temperatures in August and September were respectively 0.4 and 0.5 degrees Celsius warmer than a year earlier.

Industrial sector energy consumption fell by 2.2 per cent.

Transport sector energy consumption fell by 1.4 per cent.

Service sector energy consumption fell by 0.5 per cent.
Chart 1.5 Seasonally adjusted and temperature corrected final energy consumption (Table 1.3c)

Total unadjusted final energy consumption (excluding non-energy use) fell by 1.5 per cent between the third quarter of 2018 and the third quarter of 2019.

On a seasonally and temperature adjusted basis final energy consumption (excluding non-energy use) fell by 0.3 per cent between the third quarter of 2018 and the third quarter of 2019.

Unadjusted domestic consumption fell by 2.4 per cent over this same period but was up 1.3 per cent on a seasonally and temperature adjusted basis.
In the third quarter of 2019 net import dependency was 28.5 per cent, down 0.4 percentage points from the third quarter of 2018, due to falls in imports and exports of 10 and 13 per cent respectively, and at the lowest level since the third quarter of 2010.

The net import dependency of oil was 29.6 per cent in the third quarter of 2019, down 1.2 percentage points from the third quarter of 2018, whilst the net import dependency of gas was 29.8 per cent, up 3.0 percentage points.
In the third quarter of 2019 dependency on fossil fuels was 76.7 per cent, up 0.2 percentage points from the third quarter of 2018.