Section 4 - Gas

Key results show:

Gross UK production of natural gas in Q3 2016 was 10.8 per cent higher on Q3 2015, at 113 TWh **(Chart 4.1).** Within this production of associated gas was 25 per cent higher, whilst dry gas production was14.4 per cent lower **(Chart 4.2)**. The increase is due to a number of factors including production from the new Laggan gas field and continued strong production across much of the UK's continental shelf.

Net Imports decreased by 35 per cent in comparison to Q3 2015 **(Chart 4.4).** This decrease has been driven by strong production and a reduced stock build when compared to last year due to the closure of the Rough storage for maintenance.

Imports in Q3 2016 were down 14.9 per cent in comparison to the same quarter in 2015 **(Chart 4.5).** This fall has largely been driven by imports from Norway which are down 19.7 per cent. Exports increased by 4.6 per cent on Q3 2016, with exports to Belgium up 18.8 per cent **(Chart 4.4).**

UK demand for natural gas in Q3 2016 was up 3.5 per cent in comparison to Q3 2015. Within this there has been a significant increase in gas used for electricity generation up 23 per cent. In contrast final consumption has decreased by 13.0 per cent with domestic, other final users and other industry all decreasing by 21, 9.3 and 4.7 per cent respectively. These decreases were partly as a result of warmer temperatures, particularly in September. **(Chart 4.5)**

Relevant table

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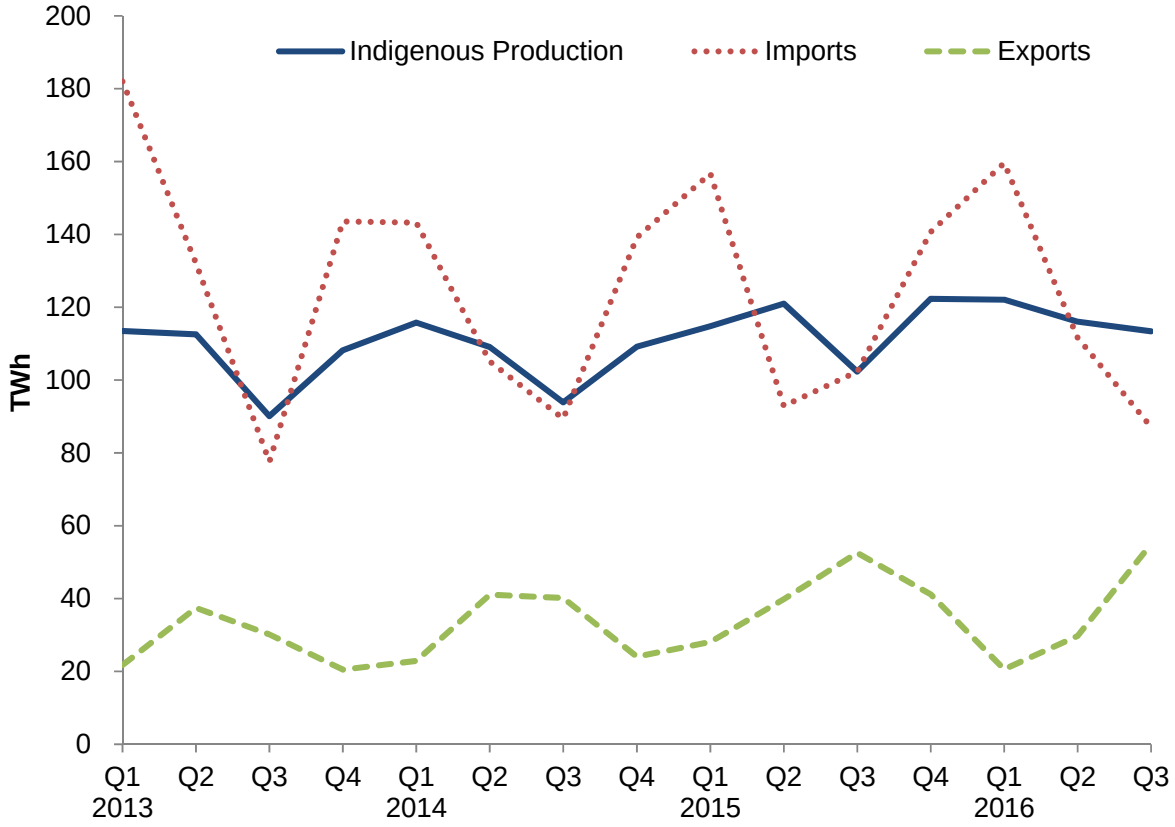
Chart 4.1 Production and imports and exports of natural gas

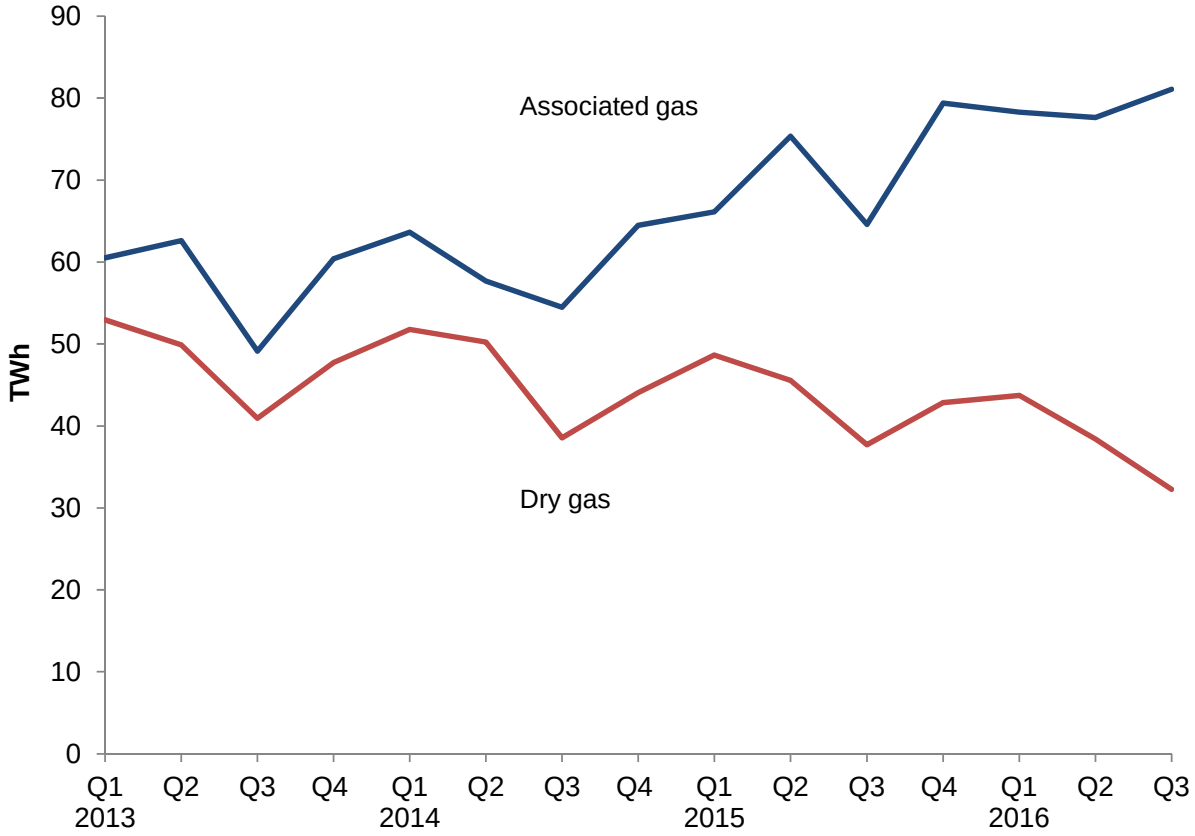


In the third quarter of 2016, gross production of natural gas was up 10.8 per cent on Q3 2015 with July's 18.8 per cent increase particularly notable as the largest month-on-month growth since 2010. The increase is due to a number of factors including production from the new Laggan field and the continued strong production across much of the UK's Continental Shelf.

The recent growth contrasts strongly with the decreases since production peaked in 2000, which have averaged a 6.5 per cent decrease per year. Whilst the recent increases are notable, output in 2016 is down by around 40 per cent on the 2000 levels.

Imports in Q3 2016 were down 15 per cent in comparison to the same quarter in 2015, this fall has largely been driven by imports from Norway which are down 20 per cent. Exports increased by 4.6 per cent on Q3 2016, with exports to Belgium up 19 per cent. Reloads of Liquefied Natural Gas (LNG) have expanded substantially on last year, up over 300 per cent and accounted for around 7 per cent of total gas exports during the quarter.

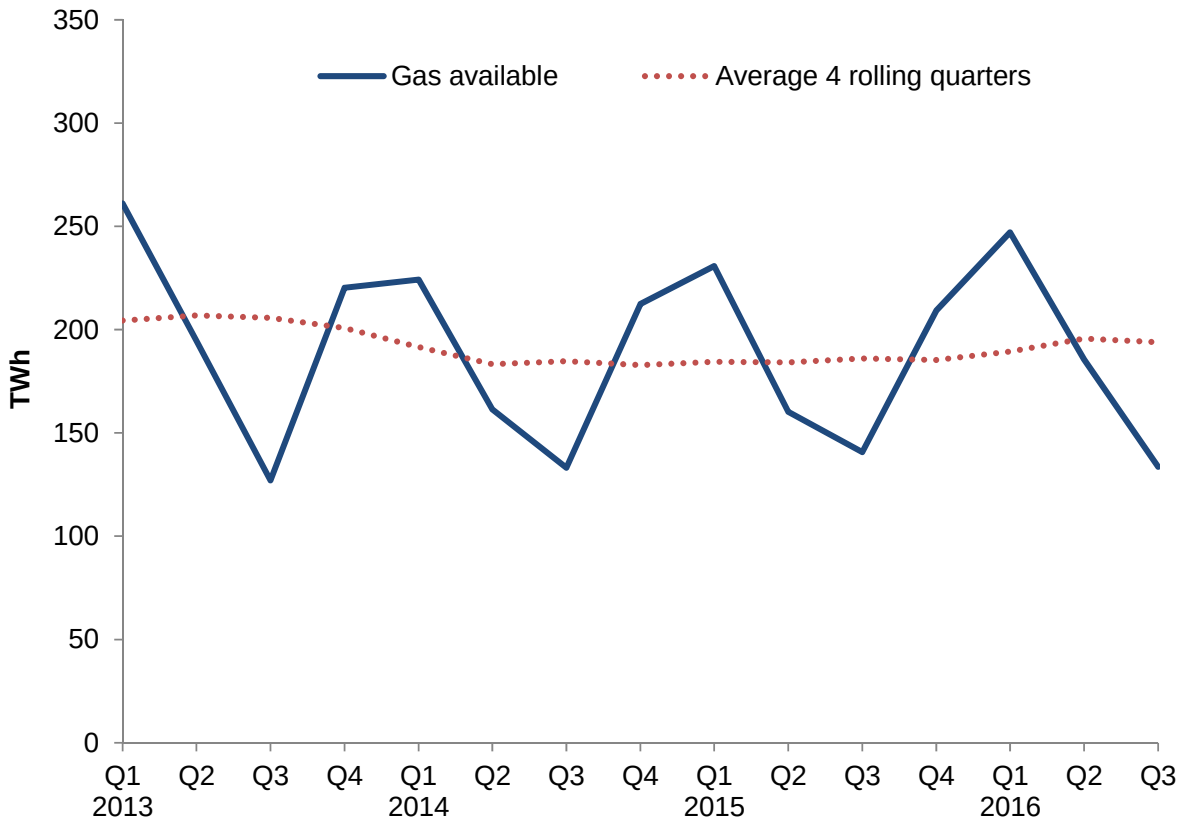
Chart 4.2 Production of dry gas and associated gas



In Q3 2016 associated gas production increased by 25 per cent versus Q3 2015, from 65 TWh to 81 TWh. This increase partly reflects production from a number of new, relatively large condensate fields in the North Sea.

Compared to the same quarter in 2015 dry gas production decreased by 14 per cent to 32 TWh.

Chart 4.3 Gas availability

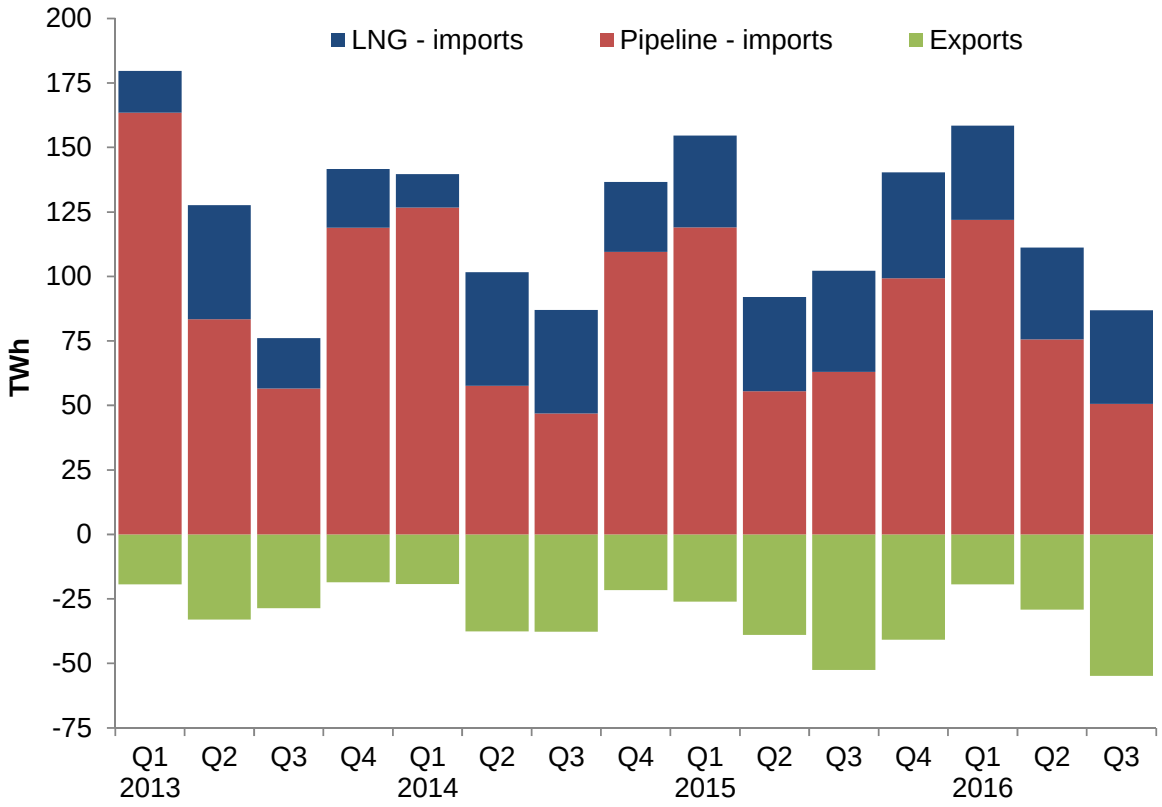


Gas available at terminals is equal to the gross gas production minus producers own use, plus net imports.

Gas availability is seasonal, mirroring gas demand, and peaks during Q1 and Q4 each year. Gas availability in Q3 2016 decreased by 5.0 per cent compared to Q3 2015 to 133.6 TWh. This was driven by a decrease in net imports.

The long-term picture shows that the average availability over 4 rolling quarters had remained fairly constant since the start of 2012 before increasing slightly since the start of 2015 and falling slightly in Q3 2016

Chart 4.4 Import and exports

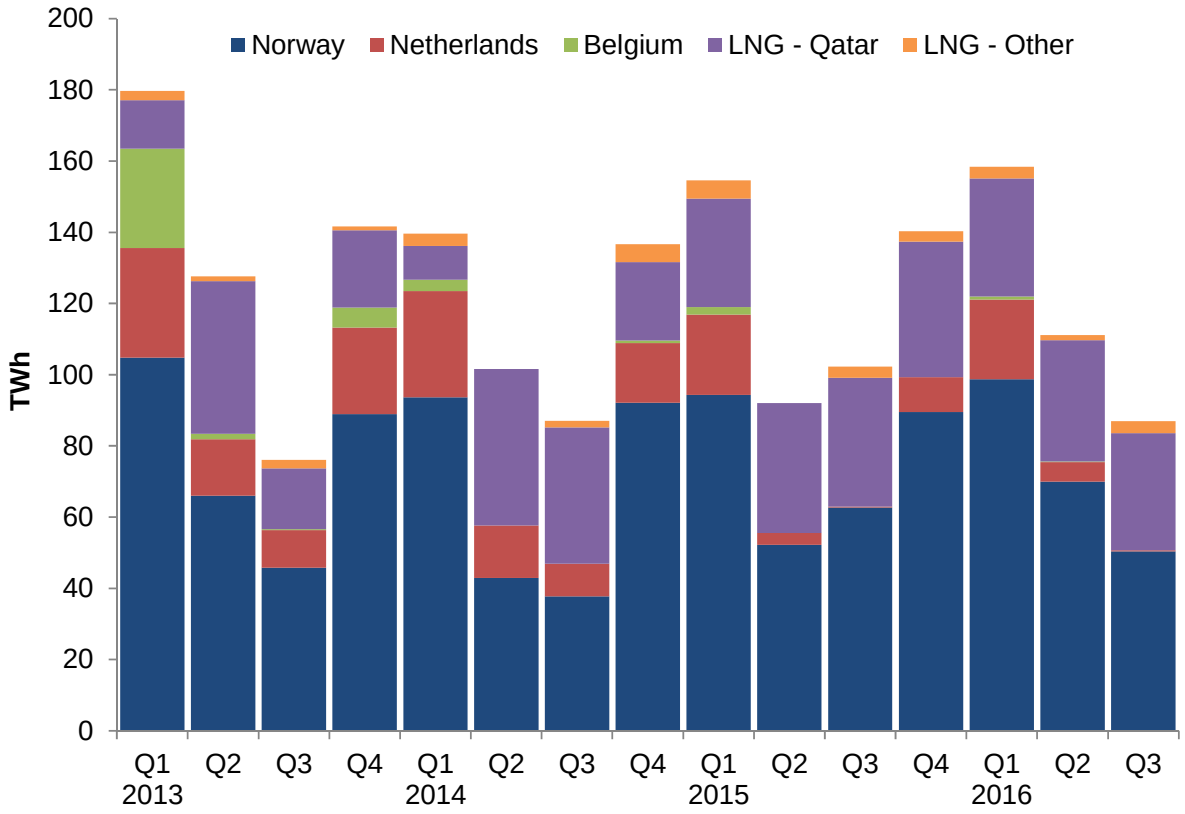


Net imports decreased by 35 per cent in comparison to Q3 2015**.** This decrease has been driven by strong production and a reduced stock build when compared to last year.

Imports in Q3 2016 were down 15 per cent in comparison to the same quarter in 2015. This reduction has been driven by imports from Norway which are down 20 per cent, which could partly be driven by annual maintenance on the Norwegian Continental Shelf, and imports of LNG which are down 7.6 per cent.

Exports increased by 4.6 per cent over the same time frame. This increase has been driven by a 19 per cent increase in exports to Belgium and a three-fold increase of LNG exports or 'reloads', which started in late 2014. Outside of those two increases, exports to the Republic of Ireland decreased by 41 per cent (largely due to the production from the Corrib gas field which is now supplying Ireland) and exports to the Netherlands decreased by 22 per cent.

Chart 4.5 Imports by origin

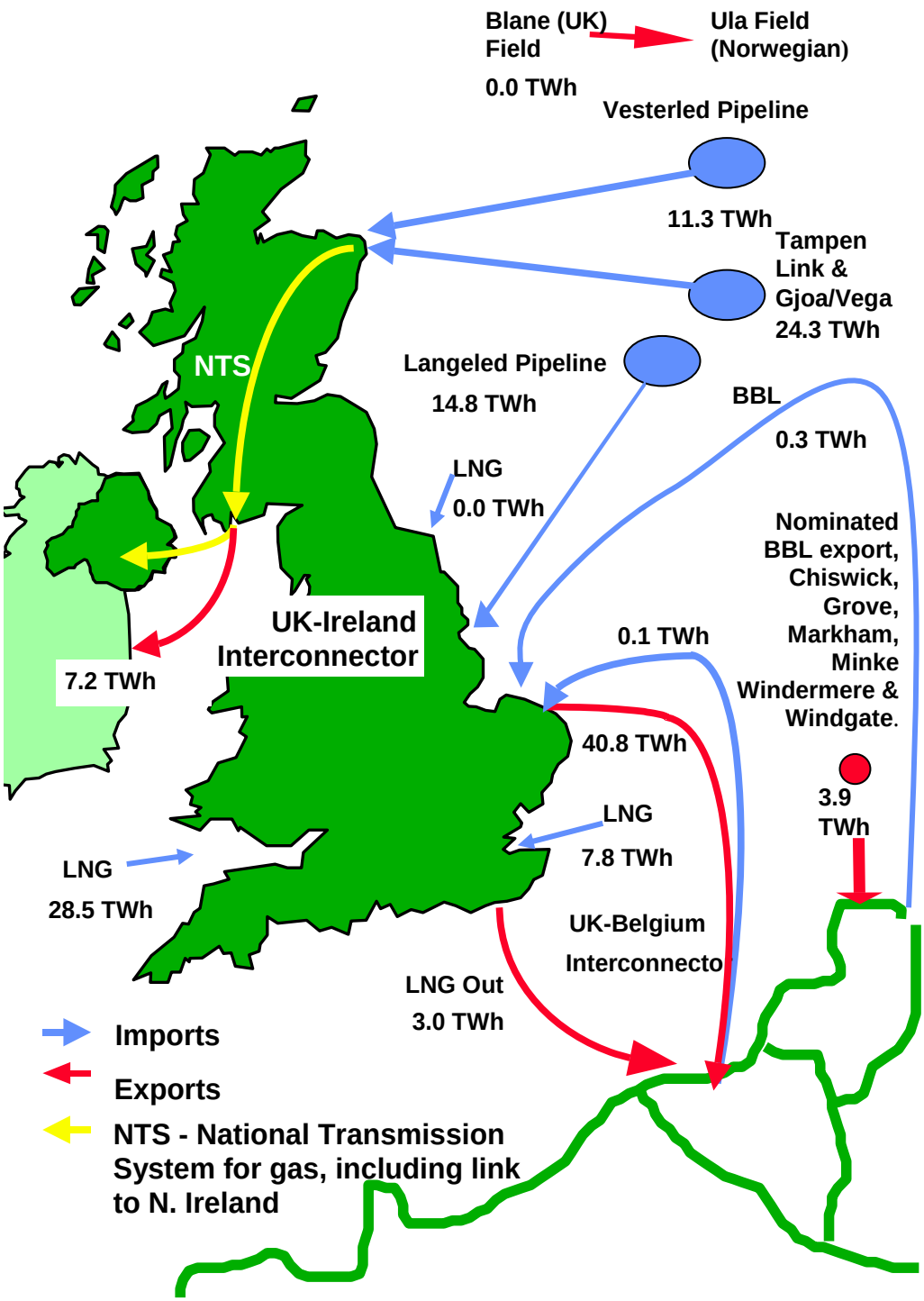


The majority of LNG imports are sourced from Qatar, around 91 per cent in Q3 2016. There was a decrease in the quantity of LNG imports from Qatar in Q3 2016, 14 per cent lower than the same quarter in 2015.

Pipeline imports from Norway were down 20 per cent on Q3 2015.

A complete country breakdown for physical pipeline and LNG imports is provided in Energy Trends table 4.4 - *Supplementary information on the origin of UK gas imports* at: www.gov.uk/government/statistics/gas-section-4-energy-trends

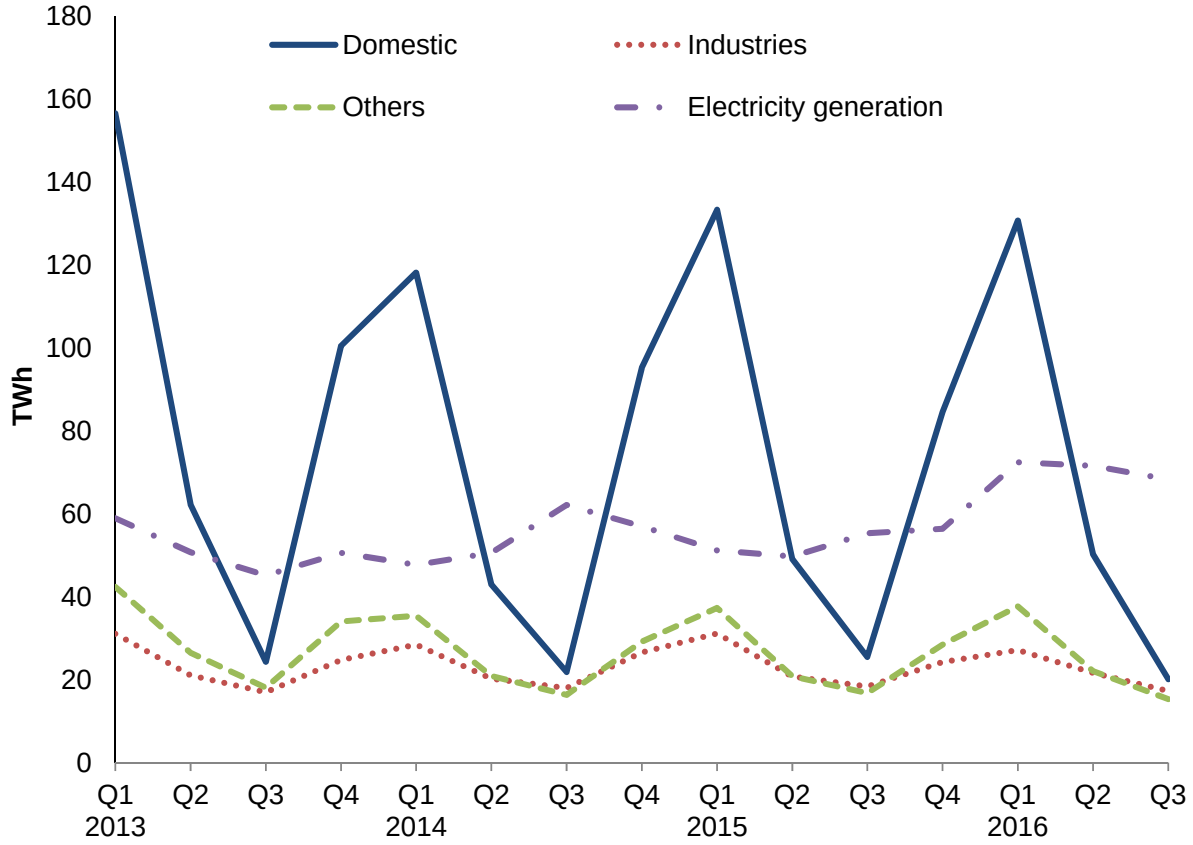
Map: UK imports and exports of gas Q3 2016*



*Please note that imports and exports in this map uses nominated flows through the UK-Belgium Interconnector and BBL pipeline as in table 4.1. The figures here will differ from those in ET Table 4.3 which uses actual physical flows through the Interconnector.

Gas

Chart 4.6 UK demand for natural gas



UK demand for natural gas in Q3 2016 was up 3.5 per cent in comparison to the same quarter last year.

The principal change this year was that gas use for electricity generation rose by 23 per cent in comparison to Q3 2015. This growth is smaller than the previous quarters of 2016, with Q1 and Q2 up 42 and 44 per cent, but does still follow the trend of substantial growth in gas use at the expense of coal generation.

Final consumption of gas is down 13 per cent. Within this consumption by domestic, other final users and other industries were all down by 21, 9.3 and 4.7 per cent respectively. These decreases reflect the warmer temperatures, particularly in September.

4 GAS

Table 4.1. Natural gas supply and consumption

GWh

	2014	2015	per cent change	2014 3rd quarter	2014 4th quarter	2015 1st quarter	2015 2nd quarter	2015 3rd quarter	2015 4th quarter	2016 1st quarter	2016 2nd quarter	2016 3rd quarter p	per cent change [1]
SUPPLY													
Indigenous production	427,784	460,268	*+7.6*	93,850	109,116	114,776	120,931	102,315	122,246	122,011r	116,013r	113,366	*+10.8*
Imports	476,837	492,382	*+3.3*	89,405	139,141	156,690	92,828	102,270	140,594	159,542r	111,624	87,036	*-14.9*
of which LNG	*124,081*	*152,397*	*+22.8*	*40,151*	*27,046*	*35,602*	*36,565*	*39,242*	*40,988*	*36,466*	*35,523*	*36,245*	*-7.6*
Exports	128,076	161,575	*+26.2*	40,102	24,049	28,105	39,789	52,520	41,161	20,518r	29,692r	54,938	*+4.6*
Stock change[2]	-2,383	+3,515		-7,057	5,754	34,500	-11,042	-15,919	-4,024	31,688	-8,669	-5,563	
Transfers	-140	-420		-40	-66	-92	-96	-99	-132	-127	-106	-64	
Total supply	774,022	794,170	*+2.6*	136,056	229,896	277,768	162,832	136,047	217,523	292,596r	189,171r	139,838	*+2.8*
Statistical difference	-1,269	1,823		-496	-422	649	170	258	746	-913r	619r	-685	
Total demand	775,291	792,346	*+2.2*	136,552	230,318	277,119	162,661	135,789	216,777	293,509r	188,551r	140,523	*+3.5*
TRANSFORMATION	243,022	237,957	*-2.1*	67,012	64,173	59,266	55,370	60,259	63,063	80,537r	77,211r	73,166	*+21.4*
Electricity generation	217,392	212,556	*-2.2*	62,105	56,961	51,144	49,713	55,338	56,361	72,415r	71,555r	68,245	*+23.3*
Heat generation3	25,631	25,401	*-0.9*	4,906	7,212	8,122	5,656	4,921	6,702	8,122	5,656	4,921	-
Energy industry use	52,172	57,580	*+10.4*	11,694	13,482	14,651	15,534	13,079	14,315	16,273r	16,029r	12,966	*-0.9*
Losses	6,856	6,500	*-5.2*	1,656	1,667	1,438	1,115	1,834	2,114	1,148r	1,387r	1,632	*-11.0*
FINAL CONSUMPTION	473,241	490,309	*+3.6*	56,190	150,995	201,763	90,643	60,618	137,285	195,551r	93,924r	52,759	*-13.0*
Iron & steel	5,454	5,374	*-1.5*	1,270	1,375	1,589	1,454	1,224	1,108	1,191	1,016	998	*-18.5*
Other industries	87,878	89,088	*+1.4*	16,764	25,204	29,532	19,291	17,118	23,146	25,941r	20,637r	16,319	*-4.7*
Domestic	278,101	292,417	*+5.1*	21,842	95,204	133,307	49,034	25,510	84,565	130,714	50,208r	20,118	*-21.1*
Other final users	96,378	98,163	*+1.9*	14,956	27,854	36,019	19,547	15,448	27,149	36,388r	20,747r	14,008	*-9.3*
Non energy use[3]	5,430	5,267	*-3.0*	1,357	1,357	1,317	1,317	1,317	1,317	1,317	1,317	1,317	-

1. Percentage change between the most recent quarter and the same quarter a year earlier.
2. Stock change + = stock draw, - = stock build.
3. For heat generation and non energy use, the 2016 figures currently shown are the 2015 figures carried forward - these will be updated in July 2017.