

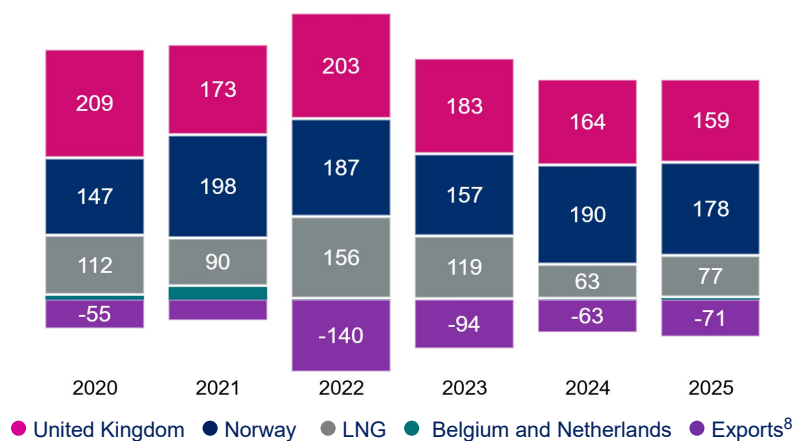
2025 Emissions Intensity of Gas

This factsheet summarises a comparison between estimates of the greenhouse gas (GHG) emissions intensity of producing UK gas, and the estimated emissions intensity of importing liquefied natural gas (LNG) or gas via pipeline in 2025. The GHG emissions intensity values⁶ shown are the estimate of emissions of carbon dioxide (CO₂) and methane (CH₄) per barrel of oil equivalent (boe) of natural gas. Note, these values do not include oil production, and the emissions do not include downstream combustion emissions.

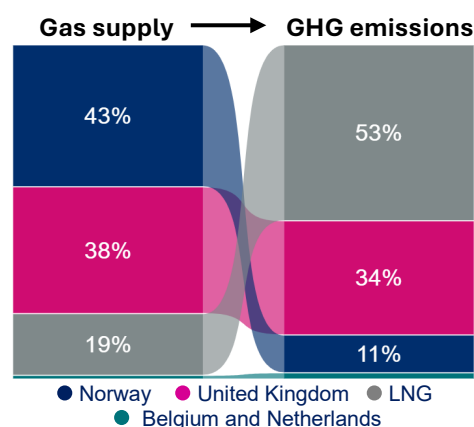
UK gas supply mix and GHG emissions

Gas imports accounted for 62% of the UK's total gas supply of 417 million boe in 2025 (up 1% on 2024). LNG imports made up 19% of the total UK gas supply and contributed the largest share of associated GHG emissions at 53%.

2020 – 2025 UK gas supply¹ (mmboe)



2025 UK gas supply and GHG emissions



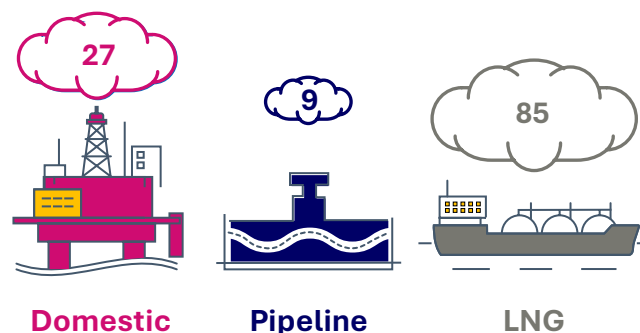
UK gas supply GHG intensities

The emissions intensity from the production, processing and transport of one barrel of oil equivalent of UK domestic gas was 27 kgCO₂e/boe. The emissions intensity is a combination of a CO₂ intensity of 25 kgCO₂/boe and a methane intensity of 2 kgCO₂e/boe.

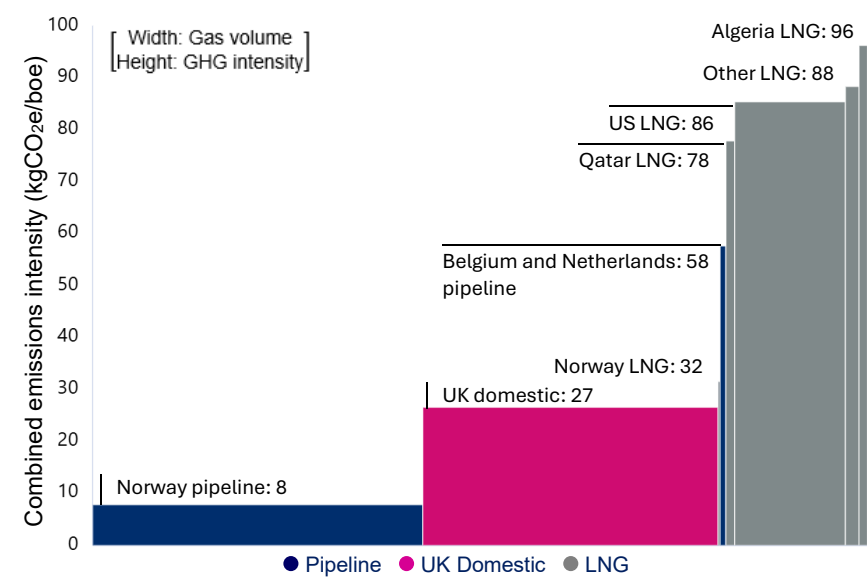
The emissions intensity of producing and processing pipeline gas imports was 9 kgCO₂e/boe.

The emissions intensity for LNG imports was 85 kgCO₂e/boe. For LNG imports to the UK, emissions are generated from the production, processing, liquefaction, shipping and regasification of gas.

2025 GHG emissions intensity (kgCO₂e/boe)



2025 GHG intensity⁶ (kgCO₂e/boe) and gas volume¹ (mmboe) by origin



In comparison with 2024, the emissions intensity for domestic gas production was estimated to have dropped by 1 kgCO₂e/boe, whilst both pipeline and LNG emissions intensities were each estimated to have increased 1 kgCO₂e/boe.

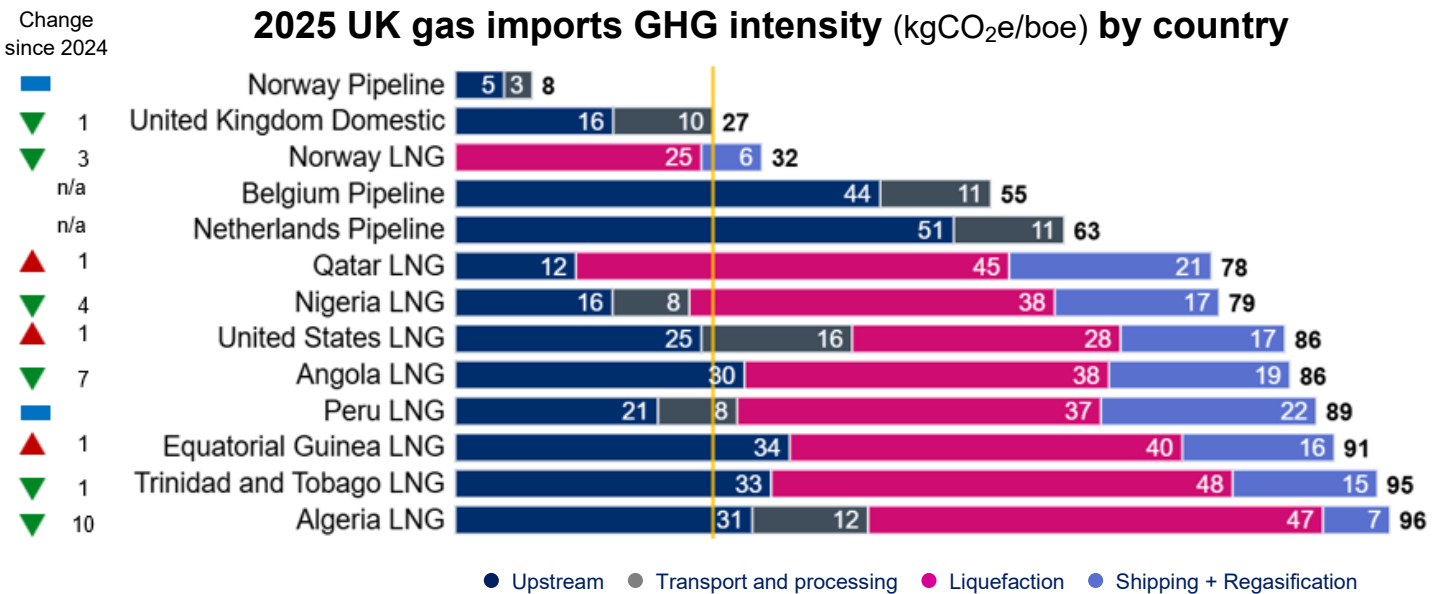
For the past two years Belgium and the Netherlands have contributed less than 0.5% (under 1 mmboe) of the gas imported to the UK via pipeline, but in 2025 this increased to nearly 2% (but less than 1% of UK gas supply).

The emissions intensity for gas imported via pipeline from Norway remains similar to previous years, hence the higher intensities for Belgium and the Netherlands had an impact on the overall pipeline emissions intensity.

LNG import volumes of less than 1 mmboe are grouped and classified as ‘Other LNG’, comprising of: Algeria, Angola, Equatorial Guinea, Nigeria, Peru, Trinidad and Tobago.

UK LNG value chain

The emissions intensity for UK domestic gas was 27 kgCO₂e/boe in 2025, comprising of an emissions intensity of 16.3 kgCO₂e/boe for upstream operations and 10.3 kgCO₂e/boe for transport and processing; a reduction of approximately 1 kgCO₂e/boe on the 2024 intensity.



Notes

- ¹ Source: Department for Energy Security and Net Zero (DESNZ) Energy Trends: UK Gas <https://www.gov.uk/government/statistics/gas-section-4-energy-trends>
- ² The UK is a net gas importer but seasonally exports significant gas volumes to the Republic of Ireland, Belgium and the Netherlands.
- ³ UK domestic production volumes exclude direct exports to the Netherlands.
- ⁴ LNG supply between 2020 and 2025 consists of imports from Algeria, Angola, Belgium⁵, Chile, Egypt, Equatorial Guinea, France⁵, Netherlands⁵, Nigeria, Norway, Oman, Peru, Qatar, Spain⁵, Trinidad and Tobago, and the United States.
- ⁵ Data for countries that do not produce LNG, but reload LNG which is then transported to the UK, has been omitted from the analysis, except for the 2020 – 2025 UK gas supply chart.
- ⁶ Source: All estimates of emissions and intensities are sourced from Rystad Energy's Gas and LNG trade emission analysis dashboard (September 2026). Rystad Energy's EmissionsCube is a proprietary, field-by-field emissions inventory database combining asset-level reported data, quality aggregated reported data, methane satellite data, and flaring satellite data (VIIRS Nightfire, Colorado School of Mines).
- ⁷ GHG emissions intensity = carbon dioxide (CO₂) and methane (CH₄) emissions as CO₂ equivalent using GWP100 (Factor 28, 100-year perspective), created per barrel of produced oil equivalent (boe), assuming 5800 standard cubic feet of natural gas per boe.
- ⁸ The UK has the ability to act as an export hub, which means it also exports some its imports by pipeline or as LNG. It is not possible to identify the origin of the gas being exported from the UK.

Data

UK 2020 – 2025 gas volumes (mmboe)

Supply	Type	2020	2021	2022	2023	2024	2025
United Kingdom	Domestic	209	173	203	183	164	159
Norway	Pipeline	147	198	187	157	190	178
Belgium and Netherlands	Pipeline	8	25	1	0	1	3
LNG	LNG	112	90	156	119	63	77
Exports	Export	-55	-40	-140	-94	-63	-71

2025 GHG emissions, gas supply¹ and intensities⁶

Supply type	Supply country	GHG emissions (ktCO ₂ e)	Gas volumes (mmboe)	GHG emissions intensity (kgCO ₂ e/boe)
UK Domestic	United Kingdom	4284	159	27
Pipeline	Belgium	125	2	55
Pipeline	Netherlands	69	1	63
Pipeline	Norway	1419	178	8
LNG	Algeria	445	5	96
LNG	Angola	142	2	86
LNG	Equatorial Guinea	55	1	91
LNG	Nigeria	116	1	79
LNG	Norway	32	1	32
LNG	Peru	102	1	89
LNG	Qatar	361	5	78
LNG	Trinidad and Tobago	225	2	95
LNG	United States	5120	60	86
	Grouped countries			
Pipeline	Belgium and Netherlands pipeline	194	3	58
LNG	Other LNG	640	7	88