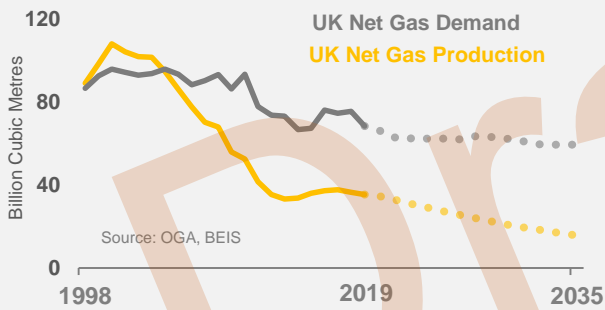




Context

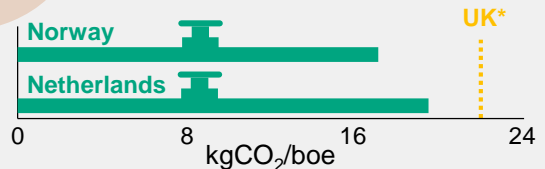


The UK is currently and will to continue to be a net natural gas importer, even under Net Zero scenarios¹. Present sources of natural gas for the UK include: domestic production, pipeline imports and liquefied natural gas (LNG) imports.

Findings

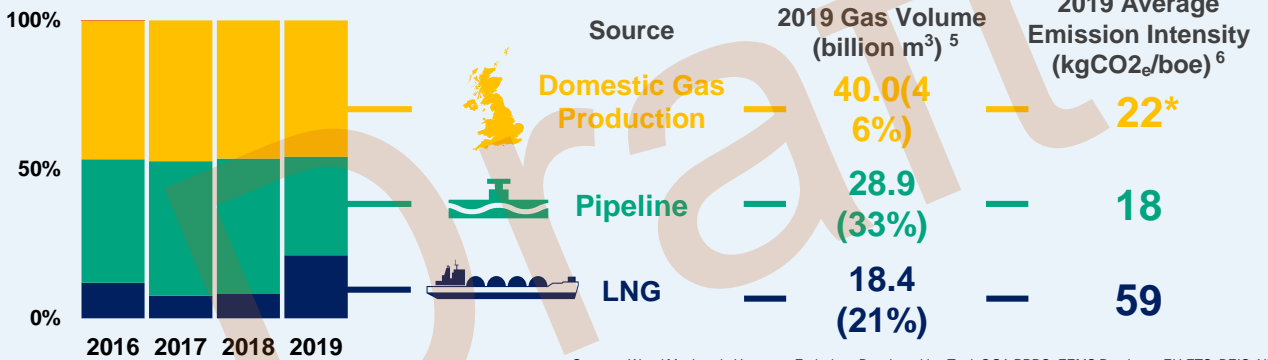


Per unit of gas, LNG imports are on average over double the emission intensity² (EI) of UK gas production



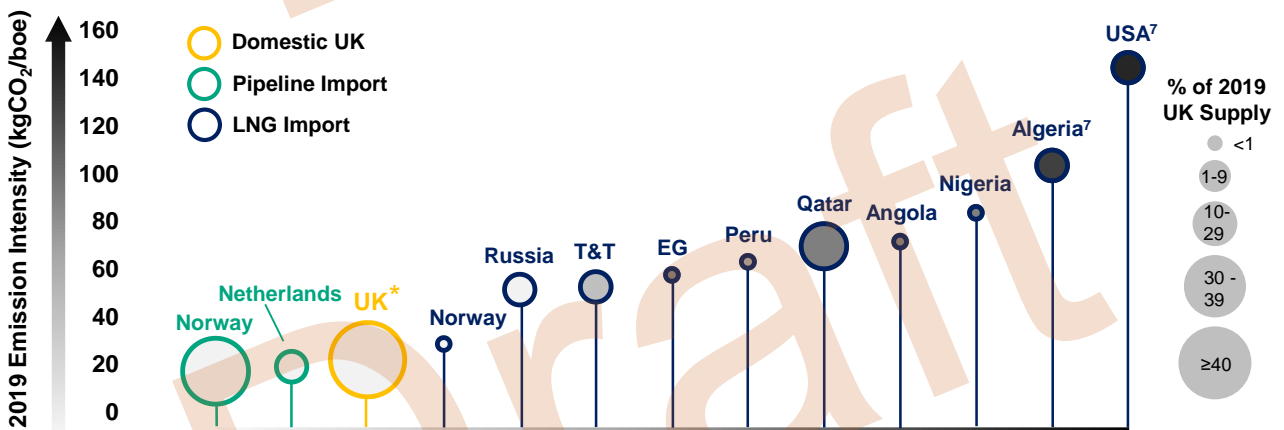
Pipeline imports from Norway³ and the Netherlands⁴ are estimated to have a slightly lower EI than UK gas

UK Gas Supply by Origin



Sources: Wood Mackenzie Upstream Emissions Benchmarking Tool, OGA PPRS, EEMS Database, EU ETS, BEIS, NPD

Emission Intensities of UK Gas Sources



T&T: Trinidad and Tobago, EG: Equatorial Guinea

Sources: Wood Mackenzie Upstream Emissions Benchmarking Tool, OGA PPRS, EEMS Database, EU ETS, BEIS, NPD, Thinkstep

¹ <https://www.theccc.org.uk/publication/net-zero-the-uks-contribution-to-stopping-global-warming/>
² Emission intensity = Greenhouse gas (GHG) emissions created per one barrel of oil equivalent (boe) produced. GHG emissions include carbon dioxide and methane. The latter has a GWP (Global Warming Potential) factor - inclusive of climate-carbon feedbacks - of 34 applied to convert to CO₂ equivalent. Source: IPCC Fifth Assessment Report <https://www.ipcc.ch/report/ar5/syr/>. Emission intensity values provided are best estimates, with a margin of error of +/- 20% due to uncertainties associated with upstream, midstream and transportation emissions.
³ Norwegian gas imports produced directly to UK upstream terminals.
⁴ The origin of Dutch and Belgian interconnector gas cannot be determined with certainty. For Dutch imports, Dutch gas fields were assumed to be the provenance of this gas.
⁵ Source: BEIS Energy Trends: UK Gas <https://www.gov.uk/government/statistics/gas-section-4-energy-trends>
⁶ Average emission intensity of country level pipeline system or LNG exports.
⁷ * 2018 emission intensity value. Awaiting verification of 2019 figures. This factsheet will be updated when these data become available.
⁷ Source: Thinkstep, 2017, GHG Intensity of Natural Gas Transport <https://www.thinkstep.com/content/resource-report-carbon-footprint-natural-gas-transport>
 EEMS: Environmental and Emissions Monitoring System; EU ETS: European Union Emissions Trading Scheme, BEIS: Department for Business, Energy and Industrial Strategy, NPD: Norwegian Petroleum Directorate, OGA PPRS: Oil and Gas Authority Petroleum Production Reporting System.