



UK Government

National Risk Assessment on Security of Gas Supply 2026

Report completed for the Gas (Security of
Supply) Regulation



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Executive Summary

The Secretary of State for the Department for Energy Security and Net Zero has prepared this risk assessment in relation to security of gas supply in the United Kingdom (UK) pursuant to assimilated [Regulation \(EU\) 2017/1938](#)¹.

This assessment concludes that the UK gas market remains resilient and is expected to continue to meet security of gas supply requirements. While our supply mix has been changing, the system continues to benefit from diverse sources of supply, including domestic production, pipeline imports from Norway and continental Europe, LNG imports, and commercially operated storage. In 2025, total UK gross gas supply was around 330TWh (72bcm), with domestic production and Norwegian imports each accounting for around 40 per cent of supply, LNG imports accounting for around 17 per cent, and interconnector imports from Belgium and the Netherlands accounting for less than one per cent.² GB also has eight storage sites, which provide an effective source of system flexibility when responding to short-term changes in supply and demand. These sites provided the equivalent of 5% of 2025/26 total winter gas demand³ and are reliant on being filled by the above four sources of supply.

The UK also continues to meet the statutory N-1 infrastructure standard, which is set out in assimilated Regulation (EU) 2017/1938, with the 2026 N-1 assessment in National Gas Winter Outlook indicating that the system could supply enough gas in a 1-in-20 peak demand scenario even with the loss of the single largest supply infrastructure⁴. We are also continuing to assess what policy actions may be required to ensure sufficient and resilient gas infrastructure in low-probability, high-stress scenarios into the 2030s and beyond through the recent Gas System in Transition: Security of Supply consultation.

This assessment identifies potential risks from geopolitical instability, global LNG competition, changing storage and interconnector economics, sudden peak demand, cyber threats and severe weather. These risks are not expected to undermine security of supply in the near term, but they will require continued monitoring and close coordination between government, regulators and industry to maintain resilience, affordability and flexibility as the system evolves.

Introduction

The UK gas market has a strong track record of resilience and has consistently demonstrated its ability to respond effectively to a wide range of supply and demand shocks. This resilience

¹ Following EU Exit, EU Regulation 2017/1938 concerning measures to safeguard the security of gas supply was assimilated into UK law, with technical amendments made to ensure it functions properly as UK domestic law.

² DESNZ (2026) [Digest of United Kingdom Statistics \(DUKES\) Chapter 4: Natural Gas](#) (viewed 8 Sept 2026)

³ DESNZ analysis using data from National Gas' data portal, available via: [Find gas data | National Gas Transmission Data Portal](#)

⁴ National Gas (2026) [Gas Winter Outlook 2026](#) (viewed 23 October 2026)

is underpinned by diverse sources of supply, flexible infrastructure and a robust regulatory framework, all of which support the market's ability to balance supply and demand under a broad range of conditions.

Over the longer-term, the role of the UK Continental Shelf (UKCS) is set to change as it continues to naturally deplete. In addition, as we transition to net zero, the nature of gas in the energy system is also shifting from providing baseload supply to being important for system flexibility.

During this evolution the government is committed to acting where there is a case for intervention to ensure a secure and resilient supply of gas that will help underpin our energy and national security. In November 2025 government launched a consultation on gas security of supply which explored policy actions to ensure sufficient and resilient gas infrastructure capacity in low-probability, high-stress scenarios. We published an interim response in August 2026⁵ and plan to provide a fuller, detailed response to the consultation in due course. In the meantime, Government, regulators and industry continue to work closely together to maintain security of supply and ensure that the gas system remains resilient as the role of gas evolves through the transition to Clean Power and Net Zero.

While this assessment concludes that the market is robust to the risks identified, no risk assessment can anticipate every future event or combination of circumstances. Accordingly, extreme, unprecedented or unforeseen developments outside the scope of this assessment could still affect market conditions, supply margins or wholesale gas prices.

Gas consumption

Natural gas is currently essential for heating homes and businesses, generating electricity, and powering industry and services. In 2025, natural gas demand accounted for 35 per cent of total energy demand.⁶ Annual gas consumption across the UK was 62bcm, with peak day demand at a high of 392mcm⁷.

Gas demand has fallen slightly over the last three years since peaking in 2022, owing to the Russia-Ukraine conflict, milder winters, and higher renewable output.⁸ Compared to gas demand in 2024, a small increase in demand for electricity generation in 2025 was offset by decreases in industrial and service sectors, with demand decreasing by one per cent overall.⁹ Domestic sector consumption made up approximately a third of the share of total gas demand seen in 2025 (37 per cent), which is in line with sectoral consumption trends seen over the last

⁵ DESNZ (2026) [Gas system in transition: security of supply – interim response](#) (viewed 17 September 2026)

⁶ DESNZ (2026) [Digest of United Kingdom Statistics \(DUKES\) Chapter 1: Energy](#) (viewed 8 Sept 2026)

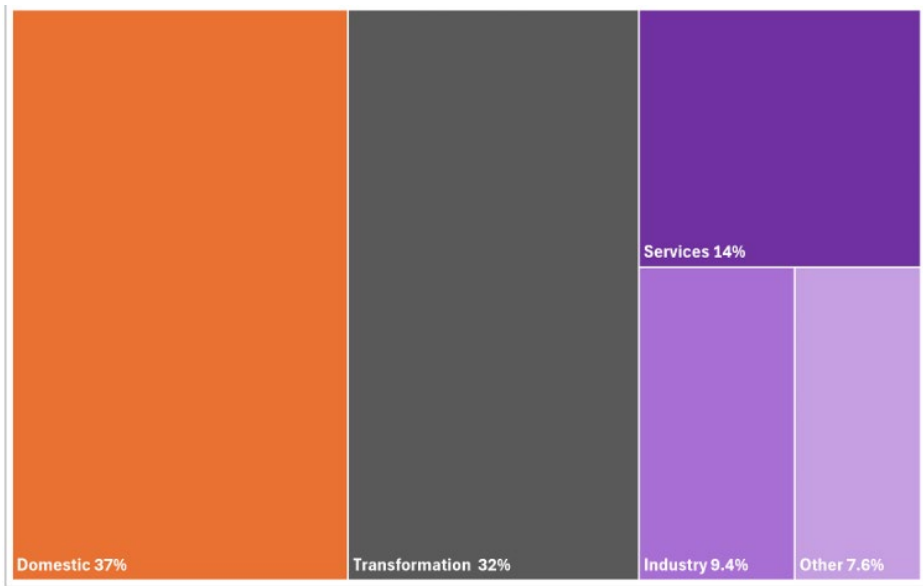
⁷ 2025 annual gas consumption data available [Digest of UK Energy Statistics \(DUKES\) Chapter 4: natural gas](#) (viewed 18 September 2026). 2025 peak day demand data (across the NTS) taken from NTS Actual Demand via [National Gas Transmission Data Portal](#) (viewed 18 September 2026)

⁸ DESNZ (2026) [Digest of United Kingdom Statistics \(DUKES\) Chapter 4: Natural Gas](#) (viewed 8 Sept 2026)

⁹ DESNZ (2026) [Digest of United Kingdom Statistics \(DUKES\) Chapter 4: Natural Gas](#) (viewed 8 Sept 2026)

decade.¹⁰ Figure 1 illustrates a breakdown of natural gas consumption by type of consumer for 2025.

Figure 1: Sectoral consumption of natural gas, 2025¹¹



Gas supply

The UK has a diverse and flexible range of gas supply sources. This includes indigenous production from the UK Continental Shelf, pipelines connecting the UK to the Norwegian Continental Shelf, two bi-directional interconnectors with continental Europe, and Liquefied Natural Gas (LNG) landing at three LNG terminals. Table 1 shows the total volume of UK gas supply per source and the percentage that those sources contribute to the overall supply mix.¹²

In 2025, UKCS production accounted for approximately 42 per cent of total gas supply. While indigenous production is the largest constituent of the UK gas supply mix, production of natural gas has continued to fall since peaking in 2000. UK gas production began in the 1970s and reached its peak in 2000, after which production has broadly steadily declined.¹³

Norway remains a large import source for the UK with shared North Sea infrastructure allowing us to benefit from its geographical proximity to Norway’s substantial gas reserves. Table 1 below shows pipeline imports from Norway made up approximately 40 per cent of the UK’s total gas supply mix in 2025. Our bi-directional interconnectors with Belgium and the Netherlands play an important flexibility role in the system: providing additional gas from the continent at times of system need. In 2025 this was less than 1% of the total supply mix.

Global LNG shipments are another important source of gas supply. Total LNG imports were over 17 per cent, with the largest portion of LNG coming from the US, making up around 13

¹⁰ DESNZ (2026) [Digest of United Kingdom Statistics \(DUKES\) Chapter 4: Natural Gas](#) (viewed 8 Sept 2026)

¹¹ Transformation refers to electricity and heat generation. It excludes domestic heating.

¹² Statistics derived from DESNZ (2026) [Energy Trends: UK gas](#) (viewed 8 September 2026)

¹³ DESNZ (2026) [Digest of United Kingdom Statistics \(DUKES\) Chapter 4: Natural Gas](#) (viewed 8 Sept 2026)

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per cent of the total supply mix. Qatari LNG has historically played a role in the UK market however its share of UK supply has declined in recent years which has largely been offset by cargoes from other suppliers, particularly the US.

Table 1: 2025 UK gas supply portfolio: total volume and percentage of gross supply mix.¹⁴

Source	Volume (TWh)	%
UK production	332	42
Norway pipeline	320	40
Belgium interconnector	4	0.5
Netherlands interconnector	2	0.3
Total pipeline imports	326	41
US LNG	106	13
Qatar LNG	8	1
Other LNG	23	3
Total LNG imports	137	17
Total supply	796	100

Import infrastructure

Outside of domestic production from the UK Continental Shelf, the UK benefits from access to a diverse range of import sources facilitated by robust infrastructure. Total import capacity is around 138bcm per year, split across three principal sources: LNG, Norwegian Continental Shelf imports, and Continental Europe (i.e. via interconnectors). Table 2 lists key import infrastructure and the total bcm/year capacity each provides.

¹⁴ DESNZ analysis of Energy Trends data, Table 4.2 [Energy Trends: UK gas](#) (viewed 8 September 2026) may not sum due to rounding.

Table 2 Key import infrastructure in the GB gas system¹⁵.

Facility	Operator / Developer	Type	Location	Capacity (bcm/year)	Imports in 2025 (bcm) ¹⁶
Interconnector	Interconnector	Pipeline	Bacton	21.2	0.4
BBL Pipeline	BBL Company	Pipeline	Bacton	8.0	0.2
Isle of Grain 1-3	Centrica, Energy Capital Partners	LNG	Kent	26.5	1.6
South Hook 1-2	Qatar Energy, Exxon Mobil and TotalEnergies	LNG	Milford Haven	21.0	7.2
Dragon 1	Shell / Petronas	LNG	Milford Haven	9.0	3.2
Langeled	Gassco	Pipeline	Easington	26.3	20.1
Vesterled	Gassco	Pipeline	St Fergus	14.2	1.5 ¹⁷
Tampen	Gassco	Pipeline	FLAGS/St Fergus	9.9	
Gjoa	Gassco	Pipeline	FLAGS/St Fergus	6.2	
			Total Capacity	138.2	34.7

Directional capacity of interconnectors

The UK has multiple interconnector pipelines which can transport gas between neighbouring countries. Two of these have bi-directional flow capacity which facilitate both imports and exports:

¹⁵ National Gas (2025) [Gas Ten-Year Statement \(GTYS\)](#) (viewed 8 Sept 2026)

¹⁶ Interconnector, LNG and Langeled data are from [National Gas Transmission Data Portal](#) (viewed 18 October 2026)

Vesterled, Tapan and Gjoa import data are calculated via GASSCO historical nomination data, available via: umm.gassco.no/ch/

¹⁷ Vesterled, Tampen and Gjøa pipelines cannot be disaggregated as they are delivered via shared infrastructure to the St. Fergus terminal.

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- Interconnector Limited, between Belgium and the UK (INT)
- Bacton-Balgzand Line interconnector, between the Netherlands and the UK (BBL)

In 2025, the UK exported 58TWh of gas to Belgium via INT and 28TWh to the Netherlands via BBL¹⁸. Both interconnectors can utilise the exit capacity at Bacton, which has a combined maximum exit capacity of approximately 652 GWh/day¹⁹.

The routes described below are uni-directional and support the onward transportation of gas from GB to the island of Ireland. Northern Ireland receives most of its natural gas from the GB system, primarily through the Moffat interconnection and the Scotland–Northern Ireland Pipeline.

- The Moffat interconnection connects the GB National Transmission System with the transmission system serving Ireland, Northern Ireland, and Isle of Man. In 2025, 47TWh of gas was exported via Moffat to the Republic of Ireland and Isle of Man²⁰. The Moffat interconnection has a maximum exit capacity of approximately 530 GWh/day.²¹ The Scotland-Northern Ireland Pipeline branches from the Moffat-Twynholm pipeline and transports gas to Ballylumford in Northern Ireland.
- The South-North Pipeline (SNP) connects the Northern Ireland transmission network with the gas network in Ireland and can provide an alternative route for gas flows into Northern Ireland, although it is not routinely used for this purpose at present.

The role of gas storage

Gas storage supports security of supply by providing flexibility to the UK gas market when other sources are unavailable or market signals merit its use and is particularly used to respond to short-run changes in supply and demand. It is not a source of supply in its own right, but a flexibility tool that allows gas to be imported from other sources, stored and withdrawn when needed. It responds to price volatility, with shippers buying gas when it is cheaper and selling it to market when demand and prices are higher (in effect this means gas is injected when prices are lower and withdrawn when prices are higher).

The UK storage landscape is currently made up of eight sites, all of which are commercially driven. These sites have a maximum capacity of approximately 3.2bcm, and a maximum deliverability of 113 mcm/day²²(the volume per unit of time that can be withdrawn into the transmission network). This equates to 38% of average daily demand in January, or 23% of winter peak day demand²³.

¹⁸ Statistics from DESNZ (2026) [Energy Trends: UK gas](#) (viewed 22 October 2026)

¹⁹ Statistics from [National Gas Transmission Data Portal](#) (viewed 23 October 2026)

²⁰ Statistics from DESNZ (2026) [Energy Trends: UK gas](#) (viewed 22 October 2026)

²¹ Statistics from [National Gas Transmission Data Portal](#) (viewed 23 October 2026)

²² Capacity data for storage sites are taken from National Gas' (2025) [Gas Ten-Year Statement \(GTYS\)](#), usually published annually. Total storage deliverability figures are based on [National Gas 2026 Winter Outlook](#),

²³ DESNZ analysis of National Gas data. Historic January demand taken from [National Gas Transmission Data Portal](#), peak 1-in-20-day demand data were taken from [National Gas 2026 Winter Outlook](#),

Because of the diversity of UK supply, storage operates primarily a ‘top up’ role in the system - to supplement other sources of supply during cold spells or when prices favour storage withdrawals. This means that most UK storage sites are medium-range storage, meaning they can cycle gas regularly: some can empty and refill within days, while others take weeks, depending on pressure and facility age. One facility is a long-range storage site meaning it cycles on a seasonal basis. Long-range sites tend to have higher capacity but lower deliverability rates and are therefore less able to respond to “within-day” demand peaks. The table below outlines more information about each storage site’s capacity and deliverability.²⁴

Table 3 GB gas storage capacity and deliverability, broken down by site²⁵.

Facility and owner	Capacity (mcm)	Approximate max daily deliverability (mcm/d)	Gas withdrawals in 2025 (mcm)	Start date
Aldbrough (SSE Hornsea Limited/Equinor)	295	29.9	1,080	2009
Hornsea (SSE Hornsea Limited)	311	6.4	290	1979
Hatfield Moor (Scottish Power)	116	1.8	50	2000
Humbly Grove (Humbly Grove Energy)	283	7.2	280	2005
Holford (Uniper UK Limited)	239	21.9	530	2011
Hill Top Farm (Kistos Energy Storage Limited)	53	13.3	350	2011
Stublach (Storengy)	402	27.3	1,610	2014
Rough (Centrica Storage Limited)	1,509	8	770	Originally 1985, re-opened in 2022

Infrastructure standard

The UK gas system has been designed and developed to ensure we have sufficient technical capacity in our infrastructure to meet total gas demand in very rare scenarios, such as when

²⁴ Due to changes in methodology and site availability, the total deliverability in this table is different by 3 mcm/day from the figures provided in the latest Winter Outlook and used in N-1 calculations

²⁵ National Gas (2025) [Gas Ten-Year Statement \(GTYS\)](#) (viewed 18 Sept 2026)

we experience the single coldest day we could expect to see only once every twenty years, coinciding with an unprecedented level of infrastructure failure (the single largest piece of gas infrastructure in the system being disrupted).

The infrastructure standard is set out in Article 5 of assimilated Regulation (EU) 2017/1938).²⁶ Assessment of whether it is met is carried out using the N-1 formula. The formula compares the combined technical capacity of the UK's principal sources of supply, which includes pipeline imports, domestic production, storage and LNG, with 1-in-20 peak demand, after removing the capacity of the single largest piece of infrastructure. A result of 100% or more demonstrates the infrastructure standard is met.

Using the N-1 formula, this assessment concludes that the UK meets the infrastructure standard for winter 2026/2027. The N-1 result is 103.6% meaning that the gas system has sufficient technical capacity to meet demand even in a very unlikely scenario of exceptionally high demand driven by the coldest winter day we could expect to experience just once every 20 years, *and* if the largest single piece of gas supply infrastructure had been lost. This is consistent with National Gas' 2026/2027 Winter Outlook which calculates an N-1 supply margin of 18mcm/day and uses hydraulic modelling.²⁷

Calculation method of the N-1 formula

The calculation method and parameters of the N-1 formula are set out in Annex II of assimilated Regulation (EU) 2017/1938²⁸. Table 4 defines the parameters for calculating the N-1 formula and details the capacity and demand assumptions used.

Table 4 Parameters and inputs used to calculate the N-1 formula.

Parameter	Capacity (mcm/d)	Notes
Max domestic production (Pm)	88	Maximum technical production capability
Max pipeline imports (EPm)	217	Technical capacity of entry points (excluding domestic production) with continental Europe and Norway
Max storage (Sm)	113	The maximum daily technical capacity of storage
LNG (LNGm)	174	Maximum technical LNG facility capacity

²⁶ Regulation (EU) 2017/1938 legislation.gov.uk (viewed 5 August 2026)

²⁷ National Gas (2026) [Gas Winter Outlook 2026](#) (viewed 23 October 2026)

²⁸ Regulation (EU) 2017/1938 legislation.gov.uk (viewed 5 August 2026)

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Total supply capacity before loss of main infrastructure	592	EP _m + P _m + S _m + LNG _m
Main infrastructure (I _m)	81	Pipeline connecting the South Hook and Dragon LNG terminals at Milford Haven to the National Transmission System
Max demand (D _{max})	493	1-in-20 peak demand
Net position after loss of main infrastructure	18	Net capacity of 510mcm/d less maximum demand of 493mcm/d. ²⁹

The formula as set out in Annex II paragraph 2 of the legislation³⁰ is as follows:

$$N - 1[\%] = \frac{EP^m + P^m + S^m + LNG^m - I^m}{D_{max}} \times 100, N - 1 \geq 100 \%$$

Applying the inputs in Table 4 , the N-1 calculation for winter 2026/2027 for the UK is:

$$N-1 = ([217 + 88 + 113 + 174 - 81] / 493) \times 100 = 103.6\%.$$

The calculation therefore demonstrates that the UK meets the infrastructure standard for winter 2026/2027.

There is an alternative version of the formula (Annex II paragraph 4) which allows demand side measures to be deducted from peak demand. No demand-side measures have been included in this assessment, resulting in a lower and more cautious N-1 value. Although the system operator can utilise pre-emergency tools such as Operating Margins contracts to reduce demand, the volumes which could be accessed without unduly impacting the electricity system are dependent on conditions on the day. For this reason, we have not included these in the calculation.

If the 1-in-20 peak demand value considered UK-only demand, without factoring in any exports, then the value of the D_{max} parameter would be 464mcm/d. This would lead to an N-1 score of 109.9%.

²⁹ Numbers have been rounded and so do not sum

³⁰ Regulation (EU) 2017/1938 [legislation.gov.uk](https://eur-lex.europa.eu/eli/reg/2017/1938/oj) (viewed 5 August 2026)

Gas supply standard

Article 6 of assimilated Regulation (EU) 2017/1938 has requirements to ensure gas supply to protected customers (as defined in Article 2(5) of the Regulation) in specific cases: extreme temperatures during a seven-day peak period occurring once in 20 years; a 30-day period of exceptionally high gas demand occurring with a probability of once in 20 years; and a 30-day period following disruption of the single largest gas infrastructure under average winter conditions.

National Gas has estimated protected customer demand under these conditions for winter 2026/2027³¹, outlined in table 5. Their assessment uses 1-in-50 demand conditions for the seven-day and 30-day high-demand scenarios, representing a more severe demand assumption than the 1-in-20 provisions in Article 6.

Table 5 Projected demand levels for protected customers under demand conditions outlined in Article 6.

Demand condition	Households (mcm/d)	SMEs (mcm/d)	Essential social services (mcm/d)	Total protected demand (mcm/d)
Peak 1-in-20 conditions	252	68	4.9	325
Day 7, 1-in-50 conditions	241	60	4.4	305
Day 30, 1-in-50 conditions	203.5	52.5	4.0	260
Day 30, average winter conditions	169	46	3.8	219

National Gas estimates 478mcm/d of non-storage supply, which exceeds the estimated protected customer demand under each of the demand conditions above. For the third case under Article 6, National Gas estimates that following disruption of the single largest gas infrastructure, non-storage supply would reduce to 397mcm/d. This remains above the estimated protected customer demand of 219mcm/d under day-30 average winter conditions. The assessment therefore indicates that available non-storage supply is sufficient to meet estimated protected customer demand across the cases assessed.

³¹ Figures are based on NESO's [Ten-Year Outlook](#) and National Gas' [GasTen-Year Statement](#) which is due to be updated in December 2026. Adjustments were made by National Gas to be able to include figures for Northern Ireland and the Essential Social Services category.

Risk identification, analysis, and assessment

The UK has a highly resilient gas network with access to diverse range of gas supply sources and is therefore able to react swiftly and flexibly to disruptions. The Department works closely with National Gas, the gas system operator, NESO, the energy system planner, and Ofgem, the gas market regulator, to continually assess risks to supply and where required, put in place bespoke resilience plans to mitigate and respond to these.

The transition to Clean Power and Net Zero and accompanying shifting role of gas from providing baseload supply to system flexibility will come with changes and risks that will need to be monitored and, if necessary, managed to ensure ongoing energy resilience. In Gas in Transition: Security of Supply, the Department has already consulted on what measures it might need to take to manage these risks. The interim response was published in August 2026 and we will provide a full response in due course.

Pursuant to assimilated Regulation (EU) 2017/1938, this section identifies and assesses key risk factors which could negatively affect security of gas supply in the UK in the next few years. They reflect current evidence on political, market, commercial, technological, and natural risks relevant to the UK.

The assessment indicates that no individual risk is expected to undermine security of gas supply in isolation. The most challenging scenarios arise where multiple adverse conditions occur at the same time, such as unusually high demand coinciding with infrastructure outages or wider international market constraints. Our system's ability to continue to meet demand with enough supply in these rare scenarios is assessed with the N-1 Infrastructure Standard, which as demonstrated in the previous chapter and National Gas' Winter Outlook³², the UK passes for winter 2026/2027.

Political and market risks

Domestic production of gas from the UKCS is declining³³. As this happens and the system consequently relies more on imported gas, our gas security becomes increasingly linked to developments, challenges and threats that originate from outside the direct control of HMG, UK organisations and UK market participants. Recent geopolitical developments have demonstrated how international conflicts can affect energy markets even where direct impacts on UK gas supplies are limited.

The 2026 conflict in the Middle East tightened supply and disrupted global gas markets. The conflict restricted shipping routes in the Strait of Hormuz which is a strategically important route for global LNG trade and damaged gas processing and LNG export facilities in the region.

³² National Gas (2026) [Gas Winter Outlook 2026](#) (viewed 23 October 2026)

³³ DESNZ (2026), ['Digest of UK Energy Statistics' Chapter 1: Energy](#) Chart 1:1 (viewed 5 August 2026)

Given the UK only sources c1% of gas from the Middle East³⁴ it did not experience a physical interruption of gas supplies as a result of the conflict. However, the situation highlighted how geopolitical instability can reduce confidence in international energy markets, increase competition for internationally traded gas, and contribute to price volatility. These impacts have the potential to pose direct risks to the UK's gas security of supply as outlined below.

Potential storage risk:

Many European storage sites are going into winter with less gas in store than in recent years, because summer market conditions have weakened incentives to refill. This is unlikely to affect available supply of gas to Britain due to the LNG market being relatively well-supplied. Though an increase in competition for LNG imports during winter may mean the UK faces higher prices for gas supplies during periods of system stress, UK market participants have always shown willingness to pay this premium when needed, meaning the likelihood of interruption to supply is considered very low for this risk. We continue to monitor price going into winter, and this is why, in the longer term, we are moving towards clean energy to reduce exposure to fossil fuel markets and bring down bills.

Potential market participant risk:

Geopolitical events can increase wholesale gas prices and market volatility. In such circumstances, shippers may face higher procurement costs and increased collateral requirements in order to continue trading and to fulfil contractual obligations. While prolonged periods of volatility may increase financial pressures on some market participants and contribute to increased costs, the likelihood of widespread market disruption is low given existing market arrangements provide substantial protections. Existing protections include credit and collateral requirements under the Uniform Network Code; contractual default and termination provisions; daily balancing and cash-out arrangements that incentivise shippers to manage their positions; and National Gas' role as residual balancer. Together, these arrangements help contain the consequences of an individual participant's financial distress and maintain continuity of supply.

More broadly, changes in the global supply landscape mean that competition for LNG has increased. While the UK remains an attractive destination to land LNG, our ability to attract cargoes, particularly during periods of tighter supply, plays an important role in our gas system. Gas quality specifications, including the upper Wobbe Index limit, can affect GB's attractiveness as an import destination, particularly LNG. Government is therefore working with HSE, Ofgem and Industry to consider whether the current Wobbe Index range remains appropriate, while recognising that any change would need to maintain safety and manage potential operational impacts on downstream consumers.

We have historically been able to attract the gas we require, because of the willingness of the market to pay more when needed (unlike other countries which lower gas demand by initiatives such as switching to other sources of energy, which come with higher emissions, like coal). The UK's high LNG import capacity also continues to make the country an attractive place to

³⁴ DESNZ analysis of Energy Trends data, Table 4.2 and 4.3 [Energy Trends: UK gas](#) (viewed 8 September 2026)

land gas, given the ability to also export the gas onwards to Europe through our interconnectors. Moreover, our diverse range of gas supply sources means the likelihood of interruption to supply is considered very low.

Commercial infrastructure capability:

As the gas system evolves through the energy transition, annual gas demand is expected to decline however peak day demand will remain proportionally higher as it declines. This means parts of the gas system are likely to be used less frequently, creating commercial pressures on infrastructure that provides flexibility to meet short-term fluctuations in demand, such as storage and interconnectors. Storage operators have also seen seasonal gas price spreads narrow, reducing revenue opportunities.

As set out in the gas security of supply consultation, government is concerned about how this might impact the long-term viability of the market. In the worst case, declining profitability could lead to the premature exit of operators whose infrastructure remains important ‘insurance’ for meeting demand in low probability, high-impact events. To manage this risk, the government has confirmed plans to explore potential commercial support for the sector³⁵ and continues to work with National Gas, Ofgem and NESO to develop options that could maintain critical infrastructure capability across a range of future demand scenarios.

Sudden, unexpected peak day demand

As gas demand declines overall, peak day demand is forecast to decline more slowly and less predictably. Maintaining sufficient infrastructure capability and operational flexibility to respond to periods of unexpectedly high demand will therefore remain important for security of supply.

Gas demand remains highly seasonal and can increase rapidly during periods of cold weather to support domestic heating. However, demand for gas may also increase during periods of extreme heat, where higher electricity demand for cooling can increase the need for power generation. New sources of electricity demand, including data centres, may also affect demand patterns and system flexibility requirements, although the implications for gas demand continue to be assessed.

Gas-fired generation remains an important source of flexibility for the electricity system. A severe cold spell combined with low wind generation could therefore result in a sudden increase in gas demand at short notice. If such conditions coincide with supply disruptions, infrastructure outages, reduced import capability or wider market constraints, supply margins could tighten and place additional pressure on the gas system, though the likelihood of this happening is very rare.

Nevertheless, the diversity and flexibility of the UK’s gas supply sources, including domestic production, pipeline imports, LNG imports, and storage, have enabled the system to respond effectively to periods of high demand and continue to support resilience during periods of

³⁵ DESNZ (2026) [Gas system in transition: security of supply – interim response](#) (viewed 9 October 2026)

system stress. The UK also continues to meet the N-1 Infrastructure Standard (as detailed in the Infrastructure Standard chapter of this document), demonstrating that the system would be able to meet a 1-in-20 demand scenario even with the loss of the single largest piece of gas infrastructure. We are also continuing to assess what policy actions may be required to ensure sufficient and resilient gas infrastructure in low-probability, high-stress scenarios throughout the transition through the gas security of supply consultation.

External interference

National Security is a key priority for Government, and a vital part of that is ensuring that energy infrastructure, including gas infrastructure, is protected against a range of external threats and hazards – both onshore, and subsea. DESNZ works closely with the National Protective Security Authority (NPSA), regulators, and other government and industrial partners to strengthen the security and resilience of energy infrastructure. This includes reducing vulnerabilities across networks and assets, and ensuring a robust, coordinated response to incidents.

Cyber threats continue to represent a risk to energy infrastructure and could have implications for security of gas supply if they affect the operation of critical assets or supporting services. As the energy system changes, a wider range of organisations are playing a role in energy services and system balancing. This may increase the number of potential points of vulnerability across the sector.

Current regulatory arrangements focus primarily on the largest operators that provide the majority of gas and electricity services to the UK. The most critical energy operators are subject to the Network and Information System Regulations 2018³⁶. Regulation 10 requires these operators to take appropriate and proportionate technical and organisational measures to manage risks to the security of the network and information systems on which their essential services rely, and to prevent and minimise the impact of incidents. Compliance is overseen by the relevant competent authority, including through sector guidance and associated assurance and reporting arrangements.

However, cyber-attacks affecting organisations outside these frameworks may also have consequences for energy system operation and resilience. This includes new market participants and third-party service providers that support critical energy functions.

The interconnectedness of the energy sectors means that cyber incidents affecting operators, supporting organisations or critical suppliers could have wider impacts across the gas and electricity systems. Government continues to work closely with regulators and industry to maintain and strengthen cyber resilience across the sector. The Department and Ofgem consulted on introducing baseline cyber requirements for all Ofgem licensees in early 2026 and will be consulting further on the exact design and implementation of these measures. Additionally, the upcoming Cyber Security Resilience Bill will include expanding the remit of the

³⁶ The Network and Information Systems Regulations 2018 (S.I. 2018/506), [legislation.gov.uk](https://www.legislation.gov.uk) (viewed 21 October 2026)

existing regulations to protect supply chains, putting regulators on a stronger footing to ensure essential cyber safety measures are being implemented efficiently and effectively.

Natural

Current seasonal guidance for winter 2026/2027 indicates the developing El Niño could become a very strong event, although forecasts remain uncertain. Its impacts on the UK and Europe are typically indirect, but it can increase the likelihood of wetter and stormier autumn and early winter conditions and may be associated with colder, stiller conditions later in winter, which could in turn increase gas demand in the UK for both heating and electricity generation. If these conditions coincide with elevated demand elsewhere in Europe or other disruptions affecting international gas markets, competition for available gas supplies could increase.

Severe storms affecting the US Gulf Coast can also disrupt LNG production, shipping and export infrastructure. The US currently provides the largest share of LNG imports into the UK and therefore prolonged disruption to LNG production or exports could reduce the availability of LNG cargoes and contribute to tighter international gas markets.

However, as with other risks presented in this assessment, individual weather events are most likely to present a challenge to security of supply if they coincide with periods of unusually high demand, infrastructure disruption, or wider international market constraints. The likelihood that these events would result in a physical interruption of gas supply is significantly reduced by existing operational planning, resilience arrangements, and the UK's diverse supply portfolio. Government continues to closely monitor weather risks to the gas system in collaboration with the Met Office.

Supply and demand scenario analysis

National Gas, as Gas System Operator, undertakes scenario analysis to assess the ability of the gas system to balance supply and demand under a range of severe winter conditions³⁷. Their annual Winter Outlook considers scenarios based on historical weather events, including a typical winter, a cold winter and an extreme cold snap.

For winter 2026/2027, National Gas models a typical winter based on the weather experienced in 2019/20; a cold winter based on 2010/11, which included the highest daily gas demand recorded on the NTS; and a cold-snap scenario based on the 2018 'Beast from the East'. The analysis considers how different sources of supply, including UKCS production, Norwegian imports, LNG, GB storage and interconnectors with Europe, could respond as demand changes across these scenarios.

National Gas also applies sensitivities to the extreme cold-snap scenario to test more challenging supply conditions. These include restricted LNG availability and low GB storage stocks. In both sensitivities, National Gas' modelling indicates that there is sufficient flexibility to balance the market, although greater reliance on continental European imports would be required.

³⁷ National Gas (2026) [Gas Winter Outlook 2026](#) (viewed 23 October 2026)

This ongoing scenario analysis complements the risks considered in this National Risk Assessment by testing how the GB gas system could respond to exceptionally high demand and disruptions or constraints affecting key sources of supply. National Gas also facilitates the annual Network Emergency Coordinator industry assurance exercise to demonstrate industry preparedness in the event of a gas emergency. This year's exercise was supplemented by multiple smaller events to target learning points from the previous exercise³⁸ and the post exercise report, including progress from last year, is expected to be published by the end of the 2026.

Conclusions

Overall, this National Risk Assessment concludes that the UK gas market remains resilient and continues to be supported by diverse sources of supply, flexible infrastructure, well-established market arrangements and close coordination between Government, regulators and industry. It demonstrates that the UK continues to meet the infrastructure standard set out in assimilated Regulation (EU) 2017/1938 for winter 2026/2027, which means the system would be able to meet demand in a 1-in-20 peak demand scenario even with the loss of the single largest piece of supply infrastructure.

This assessment identifies potential risks that could affect the UK gas market but it does not indicate that any individual risk is expected to undermine security of gas supply. Rather, it shows that the most challenging scenarios are those in which multiple adverse conditions occur simultaneously, such as unusually high demand coinciding with infrastructure outages, constrained international gas markets or reduced supply flexibility, and this has a very low chance of occurring.

The risks identified do not indicate an immediate security of supply concern, but they will require continued monitoring and timely action where necessary. The resilience of the UK gas system remains supported by diverse sources of supply, well-established operational arrangements and existing emergency response measures. Government, regulators and industry will continue to work together to maintain a secure and resilient gas system as the role of gas evolves through the transition.

³⁸ National Gas (2026) [Gas Winter Outlook 2026](#) (viewed 23 October 2026)

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