

Strategic direction

Playing a pivotal role in securing energy for today and for the future

Natural gas is the largest primary source of energy in the UK, meeting a third of the country’s annual energy needs. Annually, we transport an average of 72 billion cubic metres (791TWh) of gas through our network. This is about three times the volume of energy transported through the country’s power networks.

While we are not responsible for the procurement of Britain’s gas supply, as the Gas System Operator we control the flow of gas from our National Control Centre (NCC), making sure it is moved safely and efficiently to more than half a million businesses, 24 million homes and more than 30 power stations. When demand is high or supply from wind and solar power is low, gas-fired power generators are needed to support the electricity system. These gas-fired power stations are directly supplied by our transmission system, and provide flexible and secure electricity generation to complement renewable power production.

Our role in the gas market

Infrastructure provider

We provide a reliable and secure network, efficiently transporting gas from supply points to our customers; heating homes, keeping businesses running and keeping the lights on.

Residual balancer

We balance supply and demand every gas day to minimise impacts on the gas market and our customers.

Market operator

We provide market services, including critical systems, information provision and market facilitation services.

Metering provider

We maintain and oversee millions of metering assets across Great Britain, from connection and installation to ongoing management and maintenance.

Emergency coordinator

We develop, coordinate and exercise emergency arrangements on behalf of the industry, whilst providing an independent authority via the Office of the Network Emergency Coordinator (NEC).

Engineering consultancy

We provide engineering consultancy and design management services for clients involved in the development and ownership of infrastructure projects in the energy sector.

Securing energy for today and for the future

The UK is committed to achieving net zero greenhouse gas emissions by 2050. While the destination is clear, the pathways, technologies and timelines remain uncertain. Delivering net zero will require transformational change across multiple sectors, including home heating, industry, power generation and transport. Given the complexity of the challenge, no single solution will be sufficient. A diverse mix of decarbonisation technologies will be required.

Clean power by 2030
This Government has set a milestone of ‘95% clean power by 2030’. This means that ‘unabated’ gas generation (where there is no technology installed to capture emissions) should make up a maximum of 5% of annual generation in an average year. The National Energy System Operator (NESO) has advised the Government on how to achieve this milestone. Delivering this level of infrastructure within the decade will be highly challenging.

NESO advice highlights the scale of change required by 2030			
Technology	Offshore wind	Onshore wind	Solar power
Current capacity	16.6 GW	16.4 GW	21.7 GW
Required capacity	43–50 GW	27–29 GW	45–47 GW

A clean but secure system
Alongside other organisations, such as the Climate Change Committee and the National Infrastructure Commission, NESO recognises that a clean power system must also be secure and resilient. In its advice, it states:

- Gas generation will reduce but remains essential as dispatchable power.
- Long duration energy storage is not yet available at sufficient scale.

As a result, during periods of low wind and solar generation, which are expected to remain a feature of the UK system, the gap between electricity demand and renewable output is likely to continue to be met by conventional, dispatchable generation, fuelled by natural gas today and potentially by hydrogen or natural gas with carbon capture and storage in the future. Over time, this generation will increasingly act as strategic reserve capacity, rather than a primary source of power.

Gas as an insurance policy
Gas generation is increasingly comparable to an insurance policy, used less often, but which must be available, reliable and fast-responding when needed. NESO states that the country will need similar levels of unabated gas capacity in 2030 as we have today, as it will continue to be of vital importance to the operation and security of the energy system. Crucially, NESO’s advice also recognises that the networks supplying these power stations, such as the NTS, must remain reliable and flexible in order for the system to operate securely.

Beyond 2030: pathways to net zero
There are a range of whole-energy-system pathways that the UK could take. Each will likely use combinations of gas, electricity, demand management services, biomethane and emerging technologies, such as hydrogen and carbon capture and storage. In all pathways, it will be essential that energy security is maintained, at an affordable price for consumers.

Our role and commitment
The reliable connectivity of the NTS will remain critical in every credible pathway to net zero. Achieving this requires:

- Continued investment in national energy infrastructure.
- Systems that support secure supplies today while enabling future decarbonisation.

We are committed to supporting the UK’s emissions targets while ensuring energy remains secure, reliable and affordable. This is reflected in our updated purpose of ‘Securing Britain’s Energy’.

Strategic direction continued

Our strategy

Our strategy sets a clear, long-term direction, while retaining flexibility in the uncertain future energy landscape. Rather than relying on a single forecast for the future, we develop our strategy using a scenario-based approach, which considers a range of plausible energy-system outcomes, reflecting uncertainty in key ‘megatrends’.

These include the global economy and its impact on co-operation between countries, government policy, technology development, and consumer sentiment. In combination, these megatrends will influence the scale and pace of decarbonisation and the future role of gas.

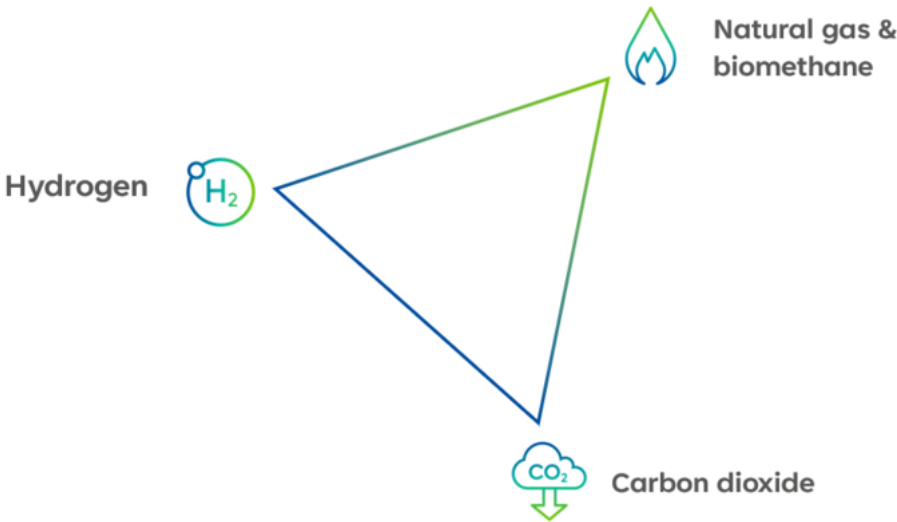
This approach enables us to identify strategic initiatives that are resilient across scenarios and to adapt our priorities as the UK’s pathway to net zero evolves. Using this framework, we continue to pursue a strategy focused on opportunities across three molecules, growing our business to transport green gases such as biomethane and hydrogen, as well as carbon dioxide, alongside natural gas.

Our scenarios

Increasing change compared to present day	
Status quo	Where the scaling back of energy transition pace leads to an energy system similar to today.
Hybrid	Where the role of electrification and molecules are balanced to secure supply and retain industrial competitiveness.
High electrification	Where electrons dominate and clean industry accelerates.
Decentralised	Where technology and consumer action reshape the UK energy system.

Three-molecule strategy

Delivering our ‘three-molecule strategy’ enables us to continue to provide a critical part of Britain’s energy needs today, and maintain reliable energy supplies for power stations, major industries (including data centres) and for the distribution networks that take gas into homes and businesses. It means working with our partners from across the energy landscape to create the policy, infrastructure and market conditions to develop the hydrogen and carbon dioxide transportation networks of tomorrow, connecting production sites, industrial clusters and storage facilities – supporting a whole-energy-system approach to decarbonisation.



By pursuing opportunities across all these molecules, we can continue to provide the secure energy the UK relies on today, while developing the infrastructure needed to enable a range of future decarbonisation pathways.

LOOKING AHEAD

For the financial year FY27 we will continue to adapt our priorities to ensure we deliver the key initiatives required to achieve our strategic goals. With this in mind, we will focus on a revised set of priorities for the coming year.

Strategic priorities 2026/27

- 1 Deliver energy security**
Ensure a safe, secure and resilient energy system and strengthen security.
- 2 Enable a low-carbon future**
Innovate and create the infrastructure needed for low-carbon molecules.
- 3 Champion an ambitious and inclusive culture**
Foster a culture that is purpose-led and enables everyone to thrive.
- 4 Embed a customer-first mindset**
Listen and understand our customers’ needs and shape our decisions around them.
- 5 Lead and influence as a trusted advisor**
Use our influence to shape the decisions that impact our work and the wider energy transition.