

Sector plan for health and safety: **Gas and pipelines**

This sector covers natural gas transmission and distribution networks together with chemical, hydrocarbon and petrochemical pipelines. Also covered are sub-sea pipelines associated with crude oil and gas production and storage on the UK continental shelf, as well as those pipelines used for importing and exporting gas to and from Europe and Norway.

Great Britain's pipeline infrastructure is crucial to ensuring the country's energy needs are met. Pipeline supply failures have the potential to leave industry without energy and essential raw materials, and the public without heating. The sector is characterised by significant quantities of hazardous substances with the potential for major hazard incidents affecting workers, the public and the environment.

Current position

There is a high level of control of the major accident hazards in the sector. Non-major hazards, including occupational health issues, continue to be addressed by the industry in a proportionate manner.

The majority of dutyholders are national and multinational companies with highly trained managers and staff. The sector has strong leadership through a number of trade associations with a good range of technical support organisations.

The sector has made good progress on tackling the risks associated with ageing infrastructure, such as

virtually eliminating the use of ageing gasholders. The iron mains risk reduction programme has also driven the targeted decommissioning of iron gas pipes and their replacement with safer polyethylene pipes.

Contracting out of pipeline management requires effective corporate oversight to ensure continuing competence investment and safety.

The use of the existing pipeline infrastructure offers the potential for emerging energy technologies and fuels to be exploited.

Outcomes and priorities

Continuing to control major accident hazards will be the focus for this sector, in particular to

achieve the following outcomes:

- Prevent major incidents associated with the loss of containment of gas or volatile fluids
- Manage the risks associated with ageing infrastructure and the failure of asset integrity
- Ensure that emerging energy technologies and fuels can be incorporated safely



What HSE will do to #HelpGBworkwell

We will reduce the likelihood of low-frequency, high-impact catastrophic incidents by:

- ensuring long-term asset integrity in the onshore gas distribution networks by continuing to oversee the iron mains risk reduction programme;
- delivering targeted interventions at major accident hazard pipelines.

We will lead and engage with others to improve workplace health and safety by:

- engaging with the Gas Transporters' Operational Safety Group to influence senior gas industry managers and directors to deliver improved leadership and informed decision making for controlling and mitigating major accident hazards;
- improving the management of any large-scale gas supply emergency by closely working with other government departments, devolved governments, gas industry stakeholders and trade unions.

We will provide an effective regulatory framework by:

- ensuring that the regulatory framework supports the safe adoption of new technology and introducing renewable and unconventional gases in the distribution networks, such as hydrogen, biomethane and shale gas;
- assessing the potential for safely introducing new sources of gas through supporting trials using out-of-specification natural gas and hydrogen blends.