

Ireland's New Draft National Adaptation Framework (NAF)

Public Consultation

Gas Networks Ireland Response

19th February 2024



Gas Networks Ireland (GNI) welcome Ireland's new draft National Adaptation Framework (NAF) and the opportunity to respond to the Department of the Environment, Climate and Communication's public consultation.

GNI is responsible for the safe, reliable and efficient transportation of Ireland's gas demand (representing 30% of Ireland's primary energy) through the €2.7bn, 14,664 km state-owned gas network, supplying over 720,000 Irish homes and businesses. GNI has developed a resilient gas network that plays a central role in Ireland's energy system, supporting a diversified and growing economy which is dependent on secure energy supply.

GNI is now actively working on replacing natural gas with renewable gases, such as biomethane and green hydrogen, to substantially reduce the country's carbon emissions while ensuring a secure energy supply.

Comment on the draft NAF

GNI agree with the draft National Adaptation Framework in relation to the role that the Commercial Semi-State Sector can “play in supporting the delivery of an enabling environment for adaptation and resilience through, for example, safeguarding its own operations and services as well as supporting the wider implementation of adaptation actions”. GNI is cognisant of the current and potential impact of climate change on the network and the implications of extreme weather conditions are carefully considered when operating and planning the network.

In addition, **GNI believe that the energy system as a whole needs to be considered to ensure that the right infrastructure is in place to meet future demand in all weather conditions.** Policy should reflect the fact that Ireland's future energy needs are likely to come from a number of sources. It is important to have a diversified approach that uses existing infrastructure efficiently, including all Commercial Semi-State companies. Having a long-term plan that considers the efficient use of the whole energy system could help prevent an energy crisis resulting from an extreme weather event.

GNI note the statement in the draft NAF that “*there was a heavy focus on the electricity sector and limited information on resilience issues facing the gas networks sector*”. **As the gas network operator, GNI is open to providing all relevant information that is required on resilience issues and to engage with all relevant departments on the finalisation and implementation of the National Adaptation Framework.**

The following provides some initial information on the gas network.

Gas Network Reliability

Transportation of energy through gas pipelines is the most efficient mode to transport energy and Ireland's gas network has proven its resilience for over 40 years, in particular withstanding extreme weather conditions in recent years. The gas network is made up of materials which are specified for an operating temperature range of -20°C to 60°. During periods of record sub-zero temperatures, the gas network has demonstrated resilience and robustness in maintaining energy security with record gas and electricity demands.

While the most recent winter events have been milder, other types of severe weather events have occurred, with storm force conditions resulting in the widespread loss of electricity supplies. Ireland's gas network consists of buried pipelines, which are not subject to the vulnerability of storms that can impact the delivery of oil or the transport of electricity through overhead wires.

The routing of the gas network is designed to take account of flood plains, avoiding areas prone to flooding wherever possible. Where laying pipes in flood plains cannot be avoided, additional precautions are taken to ensure the pipes are not adversely affected by flooding. Extreme rainfall in events over the last decade saw catchments and soils becoming increasingly saturated which led to widespread flooding. Despite millions of euros worth of damage to other infrastructure, the gas network remained resilient throughout, continuing to deliver gas to all customers.

In terms of mitigation, gas complements other renewable energy sources such as wind. Gas-fired power stations are a vital system component to accommodate sudden changes in electricity demand or supply. Ireland has one of the highest levels of wind penetration in Europe and requires the security of gas fired power plants and the gas network to back up this intermittent source of renewable energy.

Furthermore, GNI is committed to decarbonising the gas network and is working with many stakeholders to foster the development of renewable gas in Ireland. Renewable gas provides diversity of supply, enhancing energy security and increasing the penetration of renewables.