European Union's policy response to the current energy security issues in Europe, including the implications of EU energy security policy for Ireland.

Dr Paul Deane is a Senior Research Fellow, MaREI, University College Cork

MaREI is the SFI Research Centre for Energy, Climate and Marine research and innovation co-ordinated by the Environmental Research Institute (ERI) at University College Cork. The Centre comprises over 220 researchers focusing on defined global challenges such as the Energy Transition, Climate Action and the Blue Economy.

Opening Statement:

Ireland is one of the most fossil fuel reliant countries in Europe, with fossil fuels meeting 86% of Ireland's energy supply share in 2021 while 77% of this is imported.

We currently spend over €1 million every hour importing fossil fuels like oil and gas into the State. The cost of this massive reliance on imported fossil fuels is reflected in the prices we pay to heat our homes, fuel our cars, and power our appliances.

While Ireland's Energy and Climate policy is strongly influenced by European Policy, our delivery of fuels such as oil and gas are also impacted by the UK and decisions taken there.

Ireland's geographical position on the periphery of Europe with no direct physical infrastructure connecting to other EU member states means that while we look to the EU for policy, we must also look to the UK for partnership in energy related matters, especially in relation to natural gas.

Natural gas is an important fuel in Ireland, heating 700,000 homes and businesses and generating over half of our electricity. Over the next decade the implementation of the Government's climate action plan to reduce greenhouse gas pollution from fossil fuels will mean we will use less gas on aggregate over the year, about 40% less in 2030, but there will be individual days when we will use more, especially on days when heating and power demand is high and renewable generation from wind and solar are low.

To understand gas security, it is important to distinguish between a physical interruption, whereby an importing pipeline is cut off, and a price risk, whereby gas is available but becomes expensive. Given our reliance on gas for energy, a physical disruption in supply from the UK to Ireland for a long period would be catastrophic, whereas a price disruption, which we are experiencing now, results in extremely high prices of gas rather than physical shortages.

Today, Ireland is supplied by a combination of domestic natural gas production from the Corrib field and the remainder is from imports via two undersea pipelines from Scotland. Indigenous gas from Corrib currently provides 25% of Ireland's gas requirements, however

the Corrib gas field will substantially decline over the next decade leaving Ireland more reliant on imports.

While Ireland is not physically connected via pipelines to Russia, we are connected via prices and we do see the consequences of Russian actions in our heating and electricity bills which are passed through on global markets.

The challenge of building gas infrastructure with the objective of enhancing energy security while at the same time reducing gas consumption with the objective of meeting climate targets is a new paradigm for policy makers in Ireland and other EU member states.

Our analysis in UCC undertaken for the Electricity Association of Ireland shows that renewables such as wind and solar are the best way for Ireland to reduce our emissions and fossil fuel reliance. They do this because they reduce the use of fossil fuels in power stations, but they do not replace the need for conventional power stations which will remain for the next 10-15 years especially during calm periods of weather over Northwest Europe.

Decisions on building infrastructure to increase national energy security are complex because they involve value judgments of an uncertain future where large investment decisions must be made with imperfect information. What is clear is that all options to increase energy security in Ireland must be considered but it is not clear which is most appropriate and which options can be future proofed to align with decarbonisation goals.

All options for gas diversification and storage take time to deliver (2 to 3 years +) and in the short-term energy conservation is key to enhancing energy security in Ireland.

A 10% reduction in national energy consumption delivers the same supply benefit as building 4,500MW of wind. [today's ROI wind capacity)

While there are external dimensions and risk to energy security such as the war in the Ukraine, there are also internal challenges that must be acknowledged; chiefly the lack of agility in planning, permitting, and delivery of energy related projects in Ireland.

We have declared a climate emergency in Ireland, there is a war in Europe and an associated energy crisis yet the pace of energy infrastructure delivery and action in Ireland is at odds with these emergencies.

I acknowledge the large package of financial measures the government have put in place to protect families and firms to help manage this current energy crisis, but we have yet to deliver on a plan to mitigating against it.

We must take ownership and responsibility for our energy production in Ireland while being mindful of our European obligations and we must progress our continued cooperation with our neighbours in the UK.

Ireland should play to its strengths as a country with large renewable potential, address weaknesses in permitting, but acknowledge that it will take decades to deploy this resource

and we must prepare for an energy transition which is taking place against the backdrop of a volatile and uncertain energy future in Europe

We must not let long-term optimism on the real potential of offshore wind or hydrogen to blind us to the short-term vulnerabilities of our energy supply and action must be taken on national security option such as gas storage and demand conservation in parallel with a massive build out of renewables and implementation of energy efficiency measures. The challenge with Ireland energy security is not the future, it is the present ad this need the most political focus.

These will be our insurance policy as we transition away from fossil fuels towards the goal of a clean, sustainable energy future in Ireland.

Agreements on Gas Delivery with the UK

Sections of the policy related text below have been adopted from Ireland's consultation on Energy Security

The EU has competence in energy security of supply as part of their remit over energy policy as set out in Article 194 of the Treaty on the Functioning of the European Union. While the UK was a member of the EU, all security of supply arrangements were covered by EU regulations on security of supply which have changed and developed over time.

The most recent regulation on security of supply is Regulation (EU) 2017/1938 concerning measures to safeguard the security of gas supply. When the UK left the EU, a Trade and Cooperation Agreement was put in place and this agreement allows for the establishment of frameworks for cooperation with the UK related to security of supply.

REPower EU and 'Save Gas for a Safe Winter'
The REPowerEU Plan, published in May 2022, focuses on saving energy, producing clean energy and diversifying the EU's energy supplies. It is important to note that this is not an increase in Climate Ambition but rather a different pathway to achieve with less Russian gas. The plan outlines a series of measures to respond to rising energy prices in Europe and to replenish gas stocks.

Revisions to the security of supply regulation with regard to enabling more effective gas storage have been agreed and will help ensure a high filling level of gas storage at the beginning of the heating period in the EU to compensate for potential temporary shortages of gas supplies. Ireland has been granted an exemption from the gas storage requirement because it is not directly connected to another EU Member State.
.

National Policy

The Climate Action and Low Carbon Development (Amendment) Act 2021 makes Ireland's target of net zero emissions by no later than 2050 legally binding and placed the cessation of new oil and gas exploration licences on a statutory footing. This Act also embeds the process of carbon budgeting into law, requiring the Government to adopt a series of economy-wide five-year carbon budgets, including sectoral targets for each relevant sector, on a rolling 15-year basis. The economy-wide carbon budget programme took legal effect from April 2022. Sectoral emissions ceilings, which set the maximum amount of GHG emissions that are permitted in a given sector of the economy during each five-year carbon budgetary period, were published in September 2022

.