

National Energy Security Framework

April 2022



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1 Overview

The Russian invasion of Ukraine in February 2022 is unprecedented in Europe in modern times. The resulting war has, and will continue to have, significant impacts for the world, for the European Union, and for Ireland. It has caused a humanitarian catastrophe, with millions of Ukrainian citizens displaced. Efforts have been consolidated across Government to address these emerging and urgent humanitarian issues.

The war has also impacted Europe's energy system. In particular, the invasion has triggered a decision by the European Union to phase out its dependency on Russian gas, oil, and coal imports as soon as possible. The immediate impacts include the price that we pay for energy. However, it will also impact where and how we source that energy and will change how we design energy policy to ensure the system's long-term resilience.

The war has highlighted key dependencies in our energy system which can no longer be relied on and has led to affordability issues for many consumers and businesses.

The International Energy Agency defines energy security as the uninterrupted availability of energy sources at an affordable price.¹ This National Energy Security Framework builds on this and is a response to the challenges of ensuring the ongoing and long-term security of affordable energy supply.

The Framework provides a single overarching and initial response to address Ireland's energy security needs in the context of the war in Ukraine. It coordinates work connected to energy security across the electricity, gas and oil sectors and sets out a 'whole-of-Government' response to the challenges posed to energy security and energy affordability.

The development of this Framework has taken account of the need to decarbonise our society and economy as set out in recent reports by the Intergovernmental Panel on Climate Change² and Ireland's targets to reduce emissions by 51% over the decade to 2030 and reach net zero emissions by 2050 as set out in the Climate Action Plan.³

The document is set out as follows:

 Section 2 considers the impacts from the war in Ukraine on Ireland's energy system including on prices and security

¹ https://www.iea.org/topics/energy-security

² https://report.ipcc.ch/ar6wg3/pdf/IPCC_AR6_WGIII_FinalDraft_FullReport.pdf

³ https://assets.gov.ie/203558/f06a924b-4773-4829-ba59-b0feec978e40.pdf

- Section 3 sets out the structures in place for emergency management in the energy sector and details the new Energy Security Emergency Group
- Section 4 sets out the international and national policy response to energy security and energy prices resulting from the war in Ukraine
- Section 5 sets out the responses identified to manage the impact on consumers and businesses
- Section 6 sets out the responses identified to ensure the security of our energy supply in the near term
- Section 7 sets out the responses identified to reduce our dependency on energy imports in the context of the phasing out of Russian energy imports across the EU
- Section 8 sets out the communications strategy associated with this Framework

This Framework will be kept under continued review and will be updated to reflect changing circumstances, and emerging developments.

2 Impacts on Ireland's Energy System

2.1 Overview of Ireland's Energy System

Energy security of supply is considered to be the uninterrupted availability of energy at an affordable price. A key method of ensuring energy security is to have significant levels of domestically produced energy, energy storage and diversified sources of energy imports. Ireland imports over 70% of the energy we use. This compares to a European Union total of almost 60%.

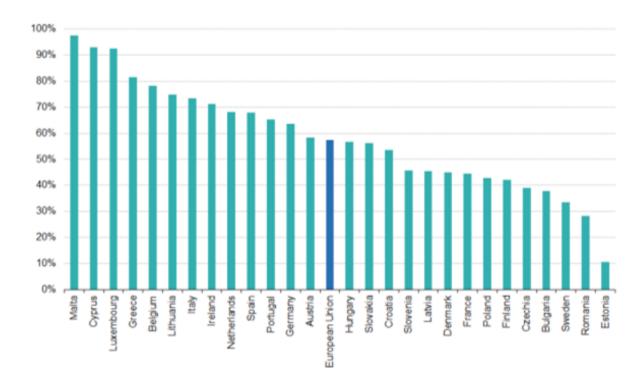


Figure 1 – Ireland's Energy Import Dependency (Source: Eurostat 2020)

The composition of Ireland's energy supply is shown below. Oil and gas represent around 80% of Ireland's primary energy requirement i.e., the energy needed to fuel transport, heat our homes and businesses, power our industry and generate the electricity we use.

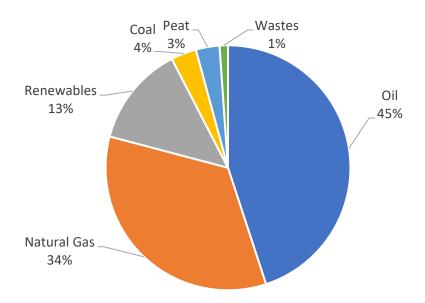


Figure 2 – Ireland's Primary Energy Requirements, (Source: SEAI – Energy in Ireland, 2020 data)

Oil (including crude oil and oil products such as petrol, diesel, and kerosene) accounts for 45%⁴ of Ireland's primary energy requirement making it one of the highest rates of oil dependency in the EU. Of this, the majority is used in transport. There is also significant oil use in residential and business heating, in industry and in electricity generation, including as a backup fuel for gas-fired plants. Natural gas, which accounts for 34% of Ireland's primary energy requirement is used in electricity generation, the industrial sector and for heating homes.

All the oil consumed in Ireland is imported with circa one-third being crude oil. Circa threequarters of Ireland's natural gas is imported via pipelines from the UK, with the Corrib gas field supplying the remainder. It should be noted that output from the Corrib gas field is in decline and so reliance on imports is expected to increase in the coming years.

Climate Action Plan 2021 sets out a range of actions which will increase indigenous renewable energy production, such as increasing the share of electricity consumption that comes from renewables to up to 80% and enhancing energy efficiency. These actions will make a significant contribution to lowering our import dependency.

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⁴ All data based on 2020 SEAI/Eurostat unless otherwise stated

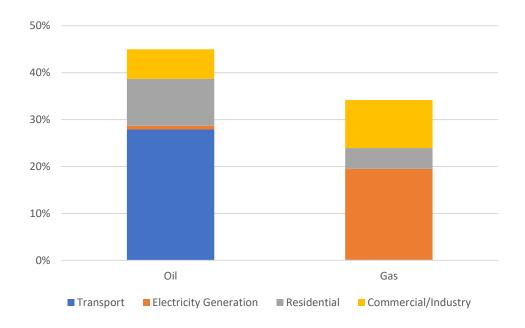


Figure 3 – Gas and oil use as a share of Ireland's Primary Energy Requirements by sector, (Source: SEAI – Energy in Ireland, 2020 data)

Oil and gas feature prominently in the heat sector in addition to electricity and solid fuels. A breakdown of Ireland's heat demand by sector and energy source is shown below.

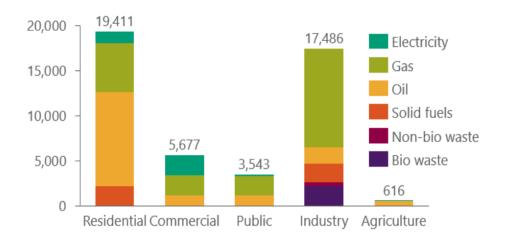


Figure 4 – Total annual heating demand GWh/annum (Source: SEAI National Heat Study)

2.1.1 Dependency on Russian Imports

In 2020 the European Union imported circa 24% of its total energy needs from Russia – 41% of natural gas needs, 37% of oil (including crude oil and oil products) needs and 19% of coal needs⁵. Ireland has one of the lowest levels of import dependency directly on Russia.

⁵ Source European Commission / Eurostat – all data 2020 unless otherwise stated

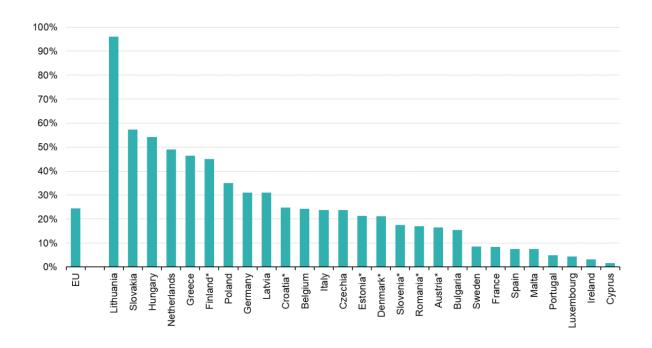


Figure 5 – Imports from Russia in gross available energy (Source: Eurostat, 2020 data)

In 2020 Ireland imported circa 3% of our energy needs direct from Russia. This included circa 6% of oil use. However, within that overall figure, the dependence on Russia for specific fuels, such as diesel, is more significant. While Ireland imports limited levels of oil directly from Russia, some of Ireland's imports of oil products may have originated in Russia prior to being refined (e.g., from crude oil into petrol or diesel) in other countries.

Ireland's imports of natural gas come from the UK and therefore not directly from Russia. However, the European gas market is an interconnected market from both a physical and wholesale price perspective. The physical supplies to, and the wholesale market price of natural gas in Ireland are therefore influenced by the supply of natural gas from Russia into the European market.

The flow of physical gas throughout Europe is closely inter-related with disruptions in one part of the network having the ability to spread elsewhere. However, this interconnectedness is also a strength as countries are able to avail themselves of multiple ways of obtaining gas.

There are four sources of gas supply potentially available to countries: indigenous production, imports via liquified natural gas terminals, imports via pipeline and prior gas production/imports held in storage facilities. Ireland has two of these: indigenous production and imports via pipeline. The UK by comparison has all four.

2.2 Energy Prices

The most immediate impact that the war in Ukraine has had on the energy system is on the price of energy. This includes international wholesale energy prices and retail prices paid by consumers and businesses.

2.2.1 International Energy Prices

The price of wholesale gas has been volatile and increasing since the middle of 2021⁶. From this base, international gas prices have risen to historically high levels with markets seeing extraordinary volatility due to the war in Ukraine.

At present (April 2022), UK wholesale gas is trading at circa £2.50 per therm⁷, which compares to a typical wholesale price of £0.50 per therm at the same point last year. Current market expectations are that significantly elevated wholesale gas prices will likely continue for 2022 and into 2023.

As shown below, wholesale gas prices began to increase in Q2/Q3 2021 due to the post-lockdown recovery, concerns over storage and high global demand for liquified natural gas. Further increases followed the Russian military build-up and invasion. Wholesale gas prices have since dropped to circa £2.50 per therm which remain exceptionally high when compared to historic levels.

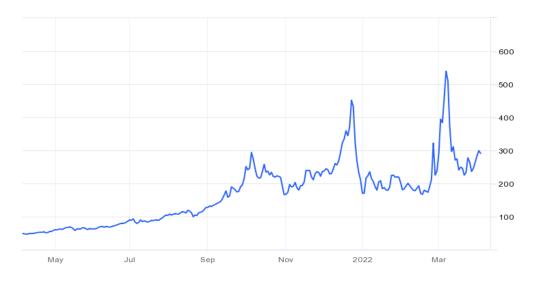


Figure 6 – Wholesale Natural Gas (GB Market) pence/therm (Source: Refinitiv Datastream)

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⁶ This was due to a variety of factors including strong post-Covid recovery in demand, lower supply and influences from fluctuations in weather

⁷ A therm is a unit of energy equivalent to 29.3 kWh

There has also been a sharp increase in the wholesale price of oil due to the war in Ukraine. Supplies of oil from Russia, which accounted for 37% of EU supplies in 2020⁸, are already reducing with suppliers seeking alternative sources.

This has caused a tightening of supply, and significant price increases. As shown below, the price of oil increased in the build up to the war before increasing significantly when the invasion happened. The price has since moderated but remains significantly higher and more volatile than in recent years.

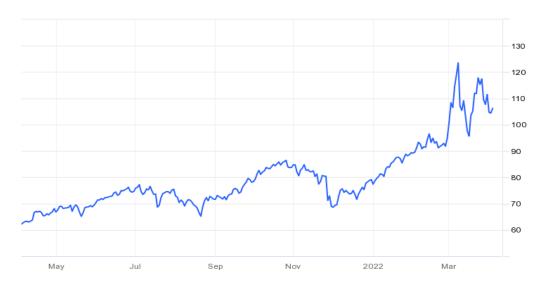


Figure 7 – International Oil Price, Brent Crude \$ per barrel (Source: Refinitiv Datastream)

⁸ Source European Commission / Eurostat

2.2.2 Retail Oil Price

The increases in wholesale prices have led to significant and immediate increases in retail prices. The retail price at the end of March 2022 was €1.91 per litre of diesel and €1.84 per litre of petrol which were equivalent to annual increases of 32% and 25% respectively. The price paid at the pump for both petrol and diesel is determined by the retailer, and is made up of various components, including a variable market price on the date of delivery, taxes, and levies. A typical breakdown of these costs is shown below.

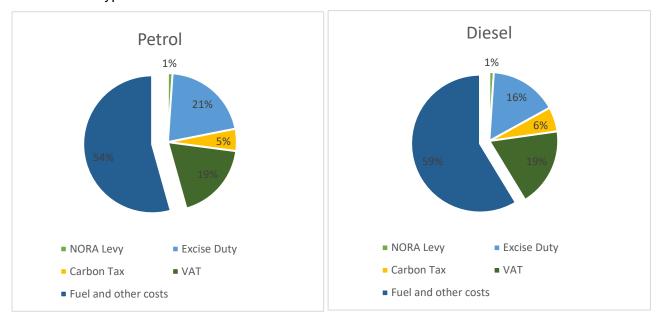


Figure 8 – Typical Breakdown of the Price of Petrol and Diesel (Source: <u>AA Motor Advice | Fuel Prices</u>) - Petrol & Diesel in Ireland & Europe (theaa.ie)

The retail price for oil products increased as the wholesale market adjusted and reacted to the war in Ukraine. The Government decision in March to reduce excise duties (20 cent a litre of petrol / 15 cent a litre of diesel until the end of August) has offset some of the increases (as shown below) but overall, prices remain considerably higher than historic norms. These prices are impacting consumers and businesses where the rising cost of transporting goods is also feeding into pressures across the economy.

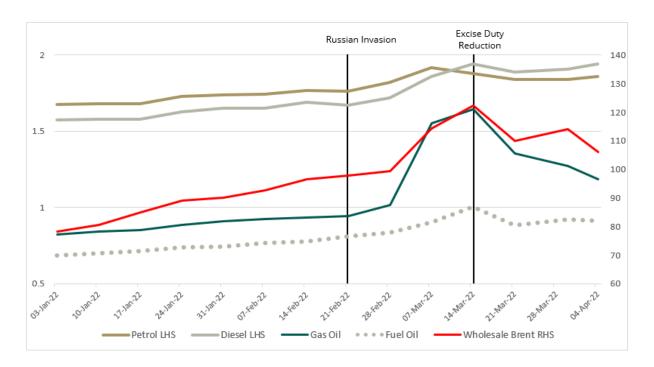


Figure 9 - Retail Oil Prices (Source: The Department of the Environment, Climate and Communications, based on market information)

2.2.3 Retail Natural Gas & Electricity Prices

The wholesale price of natural gas in Ireland, which is based on the price on the wholesale market in the UK, has seen significant increases. In Ireland, retail price increases for gas and electricity are driven primarily by wholesale gas price increases. While there is an immediate retail price reaction to wholesale prices in the oil sector, the hedging⁹ positions of gas and electricity suppliers generally leads to a lag in wholesale prices filtering through to retail consumers.

Data from the Commission for Regulation of Utilities indicates that from December 2020 to January 2022, the weighted-average increase for the Estimated Annual Bill of domestic electricity customers was 25%, while for gas it was 30%; yet in January 2022, wholesale prices were over 150% higher than the previous year.

In March and April 2022, several major energy suppliers further increased residential electricity and gas prices.

Recent price increases announced by electricity suppliers suggest that a household can expect their annual electricity bills, which typically ranged from €1,100-1,200 for 2021 and

⁹ **Hedging** is a term used to describe how energy can be secured and financed. Companies will often hedge their future energy supplies, meaning that they will utilise financial contracts to set the price they pay for energy in advance. It is a mechanism to protect investments against price volatility in the market.

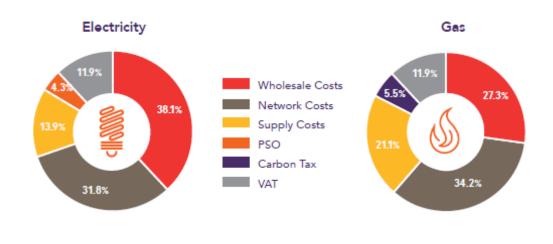
previous years and then increased to €1,300-1,600 for a full year (mitigated by the €200 electricity credit provided by the Government) for the first half of 2022, to increase further to €1,600-1,900 for a full year from the second half of 2022.

Similarly, recent price increases announced by gas suppliers suggest that a household can expect their annual gas bills, which typically ranged from €800-900 for 2021 and previous years and then increased to €900-1,200 for a full year for the first half of 2022, to increase further to €1,100-1,400 for a full year from the second half of 2022.

The costs set out above are indicative to demonstrate the level of increase that has been seen. The costs are based on standard tariffs and do not reflect discounts that may be available to consumers. They also do not take into account the likely lower use over winter 2021/22 due to relatively milder weather or the enhanced supports put in place by Government such as the €200 credit applied to all consumer electricity bills.

As gas use is relatively limited in the summer months and the electricity credit will help offset the increases in the first half of 2022, the main impacts of increased retail electricity and gas prices are likely to be seen in household bills in the second half of 2022.

The retail price for electricity and gas is made up of several varying costs. These are outlined in the charts below which are based on prices in place in mid-2021. It should be noted that current wholesale costs would likely now make up a larger element of the costs.



¹ VAT is applied at 13.5%. This shows up in the pie chart as 11.9% because the chart shows VAT as a percentage of the final bill.

Figure 10 - Breakdown of retail electricity and gas cost (based on costs prior to increases seen in 2021-2022) (Source: CRU)

The increased wholesale prices of oil and natural gas have impacted all consumers and businesses across our society and economy. Consumers have been directly supported by Government measures such as an increased fuel allowance (which was \in 735 per household last year and has risen to \in 1,039 when the \in 125 lump sum payment is also included), the implementation of a \in 200 credit to all residential electricity consumers, the reduction in public transport fares, reduced excise duties for transport fuels and supports to the road haulage sector.

The Fuel Allowance is a means-assessed payment to help householders receiving long-term social welfare payments who are unable to provide for their own heating needs. It is paid weekly through the winter fuel season or in the form of a lump sum. For winter 2021/22 the payment was made at the weekly rate of €28 for two weeks and €33 for 26 weeks.

With effect from 12 October 2021, the Fuel Allowance was increased in Budget 2022. It is a payment of €33 per week for 28 weeks (a total of €924 each full year, though an additional €125 was made to recipients in March 2022) from October to April, to over 370,000 low-income households at an estimated cost of €300 million in 2021.

While price increases are felt across both households and business, the greatest impacts will be on those on lower incomes as the proportion of their income spent on energy increases.

2.3 Energy Security

While the war in Ukraine has led to significant impact on energy prices, the impacts on energy security have not, to date, been as pronounced. However, security may be impacted depending on developments across the globe, in particular in the European Union and the United Kingdom. For that reason, we need to be adequately prepared to deal with supply issues, should they materialise.

2.3.1 Oil

The National Oil Reserve Agency maintains 90 days of strategic oil reserves. These stocks can be released in the event of a significant shortage of supplies. Ireland is required to hold such stocks under requirements of our membership of the International Energy Agency and EU law.

Member countries of the International Energy Agency, including Ireland, agreed on 1 March¹⁰ and again on 1 April¹¹ to a coordinated release of strategic oil stocks to help ensure stable international energy markets. The amounts agreed to be released represent a relatively small share of the overall international strategic oil stocks. In Ireland's case, the strategic oil stocks will expect to reduce from 90 days to 85 days as a result of these two releases.

Ireland imports all of its oil. Circa one-third of this imported oil comes into Ireland as crude oil, which is then refined in oil products at Whitegate in Cork. The remainder is imported as refined product, including petrol, diesel, and kerosene. In 2020, 37% of EU oil supplies were of Russian origin. In Ireland, this direct dependency was historically far lower, with roughly 5% of our oil coming from Russia. However, our dependence on Russia for specific fuels such as diesel, is more significant, and while Ireland imports small levels of oil directly from Russia, some of Ireland's imports of oil products may have originated in Russia prior to being refined (e.g. from crude oil into petrol or diesel) in other countries.

The commercial oil sector in Ireland generally operates on a just-in-time basis, with relatively limited supplies held by suppliers at any one time. While only limited supplies came directly from Russia, the overall market volatility across the globe, caused by the war and the voluntary move away from Russian oil by the private market in many countries is causing uncertainty and a degree of disruption to supplies. The overall market situation in relation to diesel is under considerable stress at EU and international levels. Across the continent, this has disrupted supply chains, and impacted the supply of oil.

2.3.2 Natural Gas

Ireland's natural gas security of supply is dependent on imports from a single source in the UK (Moffat in Scotland), while the Corrib gas field supplies circa one-quarter of our annual needs. The Corrib gas field will decline further in the coming years resulting in additional dependency on supplies from the UK. This high dependence on imports from a single source, along with the high and increasing reliance of the electricity system on natural gas supplies, is the subject of a review of security of supply which is being carried out by the Department of the Environment, Climate and Communications.

¹⁰https://www.iea.org/news/iea-member-countries-to-make-60-million-barrels-of-oil-available-following-russia-s-invasion-of-ukraine

¹¹https://www.iea.org/news/iea-member-countries-agree-to-new-emergency-oil-stock-release-in-response-to-market-turmoil

¹²https://www.iea.org/reports/oil-market-report-march-2022



Figure 11 – Ireland's Primary Energy Requirements (Source: Gas Networks Ireland - Network Map)

Gas supply from the UK is considered one of the most secure in Europe with diverse supplies of natural gas from indigenous production, pipeline connections to Norway, Belgium and the Netherlands, and substantial capacity for liquified natural gas imports. However, it should be noted that the UK's indigenous production is decreasing, resulting in increased imports of liquified natural gas.

In 2020, Russia supplied over 40% of the EU's natural gas. Reduced supplies of gas from Russia could have knock on effects for Ireland. The supply of natural gas to meet Ireland's needs has not, to date, been impacted by the war in Ukraine or the EU decision to move away from dependency on Russian oil and gas. Imports from the UK and the supply from the Corrib gas field have continued.

2.3.3 Electricity

Natural gas generates circa 50% of Ireland's electricity so impacts on gas security of supply will affect electricity supplies. Other sources including renewables, coal, oil, peat, and waste make up the remaining 50% of our energy needs with renewables becoming a far greater proportion of the fuel mix in recent years.

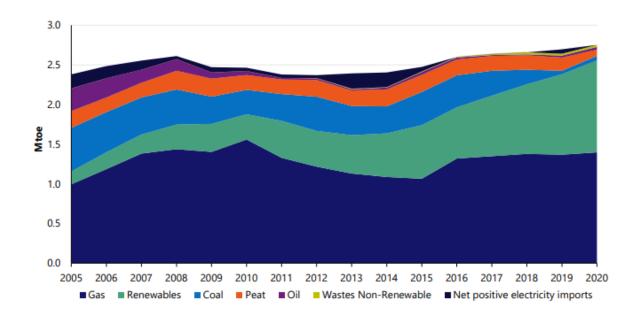


Figure 12 - Electricity Generated by Fuel Type (Source: SEAI)

All large gas-fired power stations are required to have secondary fuel capability along with stocks (generally oil) that would allow them to operate for up to three to five days without natural gas. This provides the electricity system a limited level of resilience to short-term issues with natural gas supplies.

Ireland's largest power station, Moneypoint in County Clare, uses coal which has, in recent times, been sourced from Russia. Moneypoint is currently well stocked and the ESB, which owns and operates Moneypoint, is identifying alternative sources for future coal deliveries in the context of the EU's ban on importing coal from Russia.

There are also challenges to electricity security of supply that are unrelated to the impacts of the war in Ukraine. As set out in EirGrid's All-Island Generation Capacity Statement¹³, the level of dispatchable electricity generation capacity (i.e. capacity that does not rely on wind or solar energy) needs to increase significantly over the coming years due to reduced reliability of existing plants, anticipated new power stations not being developed as planned, expected strong growth in demand for electricity, and the closure of existing generation.

The Commission for Regulation of Utilities has statutory responsibility for ensuring security of electricity supply and is managing a programme of work to address this challenge which is

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¹³https://www.eirgridgroup.com/site-files/library/EirGrid/208281-All-Island-Generation-Capacity-Statement-LR13A.pdf

being delivered in conjunction with the Department of the Environment, Climate and Communications and EirGrid.¹⁴

The continued operation of businesses who operate within the energy sector, such as electricity and natural gas suppliers, is critical to ensure secure supplies of energy. Only one small electricity and gas supplier has exited the market, requiring other suppliers to take over its customers. This is much lower than the UK market, where multiple suppliers have exited the market. However, suppliers are paying much higher collateral and hedging costs due to the higher costs of energy which poses a potential risk to these businesses.

2.4 Economic Impacts

The war in Ukraine, and the associated imposition of economic and financial sanctions on Russia, will have short, medium, and long-term consequences for the Irish economy. The Department of Finance has published a study setting out these impacts. ¹⁵ Recently, the Irish economy had continued to recover strongly from the effects of the pandemic and strong economic growth is still forecast for 2022. ¹⁶

However, higher inflation, the result of sharply rising energy and higher food prices, as well as greater uncertainty and negative consumer confidence effects, all imply headwinds to growth, thus creating challenges for consumers and business in 2022. The conflict will also reduce growth in Ireland's trading partners. Estimates suggest that the conflict will reduce euro-area GDP by 1.5 per cent by the end of 2023. While Ireland's direct trade links with Ukraine and Russia are small, there will be an impact on demand in our main trading partners, and an increase in transport costs.

The Central Bank estimates that consumer price inflation is expected to average 6.5 per cent this year. Wholesale energy prices are the primary factor driving inflation at present, with financial markets expecting them to decline in the second half of the year but remain above 2021 levels over the course of our forecast horizon.¹⁷

Prior to the war in Ukraine, Irish businesses had been recovering from the negative effects of Brexit and Covid-19. With the onset of the war, further impacts on businesses in terms of energy prices and security of energy supply in particular are now compounding the already

¹⁴https://www.cru.ie/wp-content/uploads/2021/09/CRU21115-Security-of-Electricity-Supply-%E2%80%93-Programme-of-Actions.pdf

¹⁵ https://www.gov.ie/en/publication/698ea-economic-and-financial-impacts-of-war-in-ukraine/

¹⁶ https://www.esri.ie/news/growth-remains-strong-despite-ongoing-pandemic-uncertainty-and-greater-than-expected-rates-of

¹⁷ https://www.centralbank.ie/publication/quarterly-bulletins/quarterly-bulletin-q2-2022

existing difficulties, thus creating a far more challenging business environment in 2022, and beyond. For example, it is understood that the average small and medium enterprise has witnessed a 20% increase in their electricity charges, and it is estimated that if this rate of price increase continues, this could potentially result in an additional cost of €20,000 per year to average small and medium enterprises for electricity. Based on findings of an Enterprise Ireland Survey, it is likely that larger companies are also being impacted by rising energy costs. The impact is both direct and indirect, with other costs such as logistics, for example, also increasing as a result. The economic advice from the Central Bank of Ireland, the Economic and Social Research Institute (ESRI)¹⁸, the Organisation for Economic Cooperation and Development (OECD)¹⁹, the European Commission²⁰ and the European Central Bank (ECB)²¹ − is to adopt a principle of targeted and temporary measures, in order to address the impacts outlined above while avoiding increasing liquidity and/or demand in a capacity-constrained, high inflation economy.

¹⁸https://www.esri.ie/sites/default/files/media/file-uploads/2022-03/SLIDES_QECSPR2022_OTOOLE_MCQUINN.pdf

 $[\]frac{\text{19 https://www.oecd-ilibrary.org/sites/4181d61b-en/index.html?itemId=/content/publication/4181d61b-en/section-d1e25}{\text{en#section-d1e25}}$

²⁰ https://ec.europa.eu/commission/presscorner/detail/en/ip 22 1511

²¹ https://www.ecb.europa.eu/press/key/date/2022/html/ecb.sp220402~9af4336c23.en.html

3 Structures and Governance

3.1 National Structures & Roles

The Department of the Environment, Climate and Communications has overall policy responsibility for the energy sector including energy security and emergency response.

The Department's role in relation to energy emergency management is within the context of the overall Strategic Emergency Management National Structures and Framework.²²

Strategic Emergency Management National Structures and Framework

The Strategic Emergency Management National Structures and Framework sets out the national arrangements for the delivery of effective emergency management. This framework sets out the role of the **Government Task Force on Emergency Planning** which co-ordinates and oversees the emergency planning activities of all Government departments and public authorities.

The framework also sets out that each **Lead Government Department** has the mandate and responsibility to coordinate all national level activity for its assigned emergency types. The responsibility for an energy supply emergency (including oil, gas and electricity) is assigned to the Department of the Environment, Climate and Communications.

The Department evaluates on an on-going basis if a **National Emergency Coordination Group** meeting should be convened as provided for under the Strategic Emergency Management National Structures and Framework.

In addition to Department of the Environment, Climate and Communications, there are a number of State bodies that have statutory roles in relation to energy security and emergency management:

The National Oil Reserves Agency is responsible for maintaining Ireland's strategic
oil stocks. These stocks – equivalent to 90 days net imports for the entire country –
can be released in the event of a physical shortage of supplies. Ireland is required to
hold such stocks under requirements of our membership of the International Energy
Agency and EU law.

²² https://assets.gov.ie/30731/2d1793da304a4169a2ff307d73e8af0c.pdf

- The Commission for Regulation of Utilities regulates the electricity and natural gas sectors in Ireland. This role includes overseeing emergency planning along with having statutory responsibility to ensure security of electricity supply in Ireland.
- Gas Networks Ireland is the transmission and distribution system operator for natural gas. Its role includes owning and operating the natural gas interconnection system from the UK to Ireland. It is also responsible for emergency planning in its role as National Gas Emergency Manager.
- EirGrid has statutory responsibility for managing the electricity transmission system (the high-voltage network which transports electricity across Ireland). This role includes planning for, and managing, the system during emergencies. In this role, EirGrid works closely with ESB Networks which has statutory responsibility for managing the electricity distribution system (the low and medium-voltage network which connects the transmission system to the majority of consumers in Ireland).

The diagram below shows these State bodies along with the sectors they have responsibilities in.

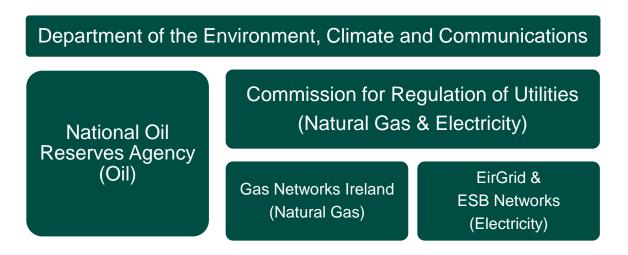


Figure 13 - Key State bodies involved in energy security and emergency planning in Ireland

The emergency management processes and procedures for the oil, natural gas and electricity sectors are set out below.

Oil Emergency Management

The Department of the Environment, Climate and Communications and the National Oil Reserves Agency work closely with the oil sector to plan and prepare for issues in relation to oil supply.

This includes the release of strategic oil stocks, which is done on the direction of the Minister for the Environment, Climate and Communications under powers assigned to him under the National Oil Reserves Agency Act 2007. The release of stocks may be done in conjunction with other member countries of the International Energy Agency, as was the case in early March and early April when Ireland participated in co-ordinated International Energy Agency releases as a response to pressures that arose from the onset, and continuation, of the war in Ukraine, particularly in relation to the supply of diesel.

There are a number of relevant plans in place which include:

- The National Oil Reserves Agency Oil Stocks Drawdown Plan which sets out how, in the event of a release of strategic oil stocks, the stock would be distributed to the oil sector
- The Oil Emergency Response Plan which sets out the procedures for responding to an oil emergency
- The Oil Emergency Allocation Schemes, which are a component of the Oil Emergency Response Plan, detail how Government can activate and implement appropriate measures to ensure the supply of oil products to critical, priority end-users

As the supply of electricity is heavily dependent on supplies of natural gas, emergency planning for the natural gas and electricity sectors are linked.

The Commission for Regulation of Utilities chairs the **Gas & Electricity Emergency Planning Group** which includes the Department of the Environment, Climate and

Communications, Gas Networks Ireland, EirGrid and ESB Networks. This group helps

coordinate emergency planning and preparedness across the two sectors.

In addition, there are two emergency response teams, which include the same organisations, that can be stood up at short notice to manage specific issues – such as a shortage in supplies. The **Gas Emergency Response Team** is chaired by Gas Networks Ireland and the **Electricity Emergency Response Team** is chaired by EirGrid.

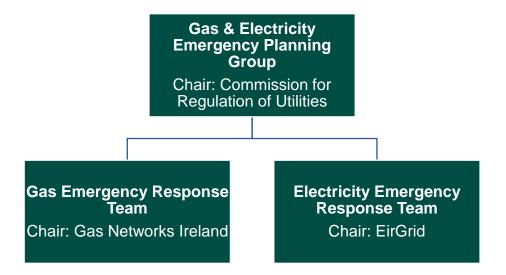


Figure 14 - Natural gas and electricity emergency planning and response structures

Natural Gas Emergency Management

The operational response to a natural gas emergency (e.g., a shortage in gas supply) is undertaken by the Gas Emergency Response Team.

The National Gas Emergency Plan is prepared by Gas Networks Ireland (in its role as National Gas Emergency Manager) and is approved by the Commission for Regulation of Utilities. The plan sets out the roles and responsibilities, and procedures, in the event of an emergency. It includes measures to minimise the impact on electricity generation, and measures to ensure that supplies for protected customers (which includes domestic customers) and, in so far as it is possible, other customers that cannot switch their gas consumption to other energy sources, are protected in the event of an emergency.

The four stages of a natural gas emergency are:

- Stage 1 Potential Emergency
- Stage 2 Emergency Declared and Load Shedding
- Stage 3 Allocation and Isolation
- Stage 4 Restoration

Gas Networks Ireland and EirGrid have in place a **Joint Procedure for the Control of Emergencies**. This procedure sets out how the two organisations work together to facilitate the timely switch over of gas-fired power generation to backup fuel (generally oil) to minimise the impact of a gas emergency on the electricity system.

Gas Networks Ireland and the National Grid, which operates the gas transmission system in Great Britain, have a **Joint Protocol for Load Shedding at the Moffat Interconnection Point in Gas Supply Emergencies**. This protocol sets out that, in the event of a shortage of natural gas supply in the UK that could affect supplies in Ireland, the overriding principal that will be applied is one of proportionality. This seeks to ensure that, in the event of a disruption to gas supplies, any reductions would be on a proportional basis across the UK and Ireland.

Electricity Emergency Management

EirGrid, working closely with ESB Networks, manages any disruptions to electricity supply in Ireland.

There are number of alert levels that EirGrid can declare on the electricity system:

- An **Alert State** occurs when the potential loss of a single generator/interconnector could lead to insufficient electricity generation to meet demand
- An **Emergency State** occurs when there is a high risk of failure in meeting system demand or when operational limits (such as voltage or frequency) are violated

The operational response to an electricity emergency, which is considered when the alert level reaches the Emergency State, is undertaken by the Electricity Emergency Response Team. It should be noted, however, that in the event of an emergency arising rapidly, EirGrid have the statutory powers and processes in place to act immediately.

In the event of an Emergency State, it may be necessary for EirGrid to reduce or cut off supplies of electricity to some consumers. EirGrid has detailed procedures in place including a **Mandatory Demand Curtailment** process which prioritises where possible, reducing demand of large energy consumers, including those who are able to operate on backup generators.

The processes and procedures in place for communications in the event of an energy emergency are set out in Section 8 below.

In addition to the emergency management practices, the Department of the Environment, Climate and Communications has also responsibility for managing cyber security risks.

Cyber Security Threats & Structure

Since the war in Ukraine, the National Cyber Security Centre have been actively sharing information with their European counterparts and have also briefed private and public sector constituents on the heightened threat landscape, the potential cyber risks, and protective measures that should be taken.

A government-wide risk assessment has been carried out for cyber security. The direct risk for Ireland is considered low but there is a medium risk for "second order" effects. Scenario analysis published in March 2022 by the EU's CyCLONe initiative highlights cyber risks that may impact on Irish energy security. One scenario may be the effects from an attack on operators based in Ukraine who have digital connections with EU Member States' companies. Another scenario involves a cyberattack against EU critical infrastructure operators who are providing support to Ukraine. While this is the scenario that would have the largest impacts across the EU, it is currently deemed unlikely.

3.2 European & International Structures

The European Union and international organisations, such as the International Energy Agency, have a number of groups which help share information and coordinate responses to energy emergencies. These include:

- The International Energy Agency Governing Board which can hold Extraordinary Meetings to deal with situations as they arise (convened on 1 March and 1 April to agree co-ordinated releases of oil stocks).
- The International Energy Agency Standing Group on Emergency Questions is responsible for all aspects of oil emergency preparedness and collective responses to supply disruptions.
- The International Energy Agency Standing Group on the Oil Market monitors and analyses short and medium-term developments in the international oil market to help member countries react promptly and effectively to market changes.
- The **European Union's Oil Coordination Group**, which provides a platform for exchange of information between Member States, examines security of supply for oil, and facilitates the coordination and implementation of relevant measures.

- The European Union's Electricity Coordination Group provides a platform for exchange of information between Member States, national regulators, the European Union's Agency for the Cooperation of Energy Regulators, the European Network of Transmission System Operators for Electricity, and the European Commission on electricity policy.
- The European Union's Gas Coordination Group monitors the adequacy and appropriateness of measures to be taken to ensure security of gas supply at national, regional, and Union levels and facilitates the coordination of security of supply measures in the event of a Union or regional emergency. It includes Member States, national regulators, the European Union's Agency for the Cooperation of Energy Regulators, the European Network of Transmission System Operators for Gas, and the European Commission.

The national gas and electricity system operators (Gas Networks Ireland, EirGrid and ESB Networks) engage directly with their UK counterparts in planning for, the event of an emergency.

In relation to natural gas, there is a **UK & Ireland Gas Emergency Planning Group** which meets regularly. The group includes the Department of the Environment, Climate and Communications, the UK's Department of Business, Energy and Industrial Strategy, Northern Ireland's Department for the Economy, along with regulators and gas transmission system operators from Ireland and the UK.

3.3 Energy Security Emergency Group

In order to assist the development and implementation of this Framework, and related work in the context of impacts of war in Ukraine on the energy sector, a new Energy Security Emergency Group has been established.

The Energy Security Emergency Group is chaired by the Secretary General of the Department of the Environment, Climate and Communications and includes:

- senior management from the Department of the Environment, Climate and Communications;
- the Department of Enterprise, Trade and Employment;
- · the Commission for Regulation of Utilities;
- Gas Networks Ireland;
- EirGrid;

- the National Oil Reserves Agency; and
- the Sustainable Energy Authority of Ireland.

Other departments, agencies and stakeholders are represented on the sub-groups set out further below.

The role of the Energy Security Emergency Group is to:

- Coordinate, oversee and provide advice to the Minister for the Environment, Climate and Communications on the development, implementation and updating of the National Energy Security Framework.
- Consider the most up to date national and international risk assessments, guidance, and expert advice, and consider any implications for the national response.
- Direct the development of a data infrastructure to enable evidence-based planning and policy decision. This includes examining the impact of the war in Ukraine on energy security, availability, and prices paid by the consumer, specifically households at risk of energy poverty, and business.
- Direct and oversee the development of an effective communications system, including the preparation of a communications strategy.
- Receive and consider assurances that the National and Sectoral plans are up-to-date and implemented, and that the structures, project management process, and level of resources and competence applied are appropriate.

In order to assist in its roles, the group has established subgroups to focus on specific issues including:

- electricity and gas security of supply;
- oil security of supply;
- data & modelling;
- consumer impacts;
- business energy users;
- policy response; and
- communications.

The Energy Security Emergency Group does not replace the statutory and operational functions of State bodies and industry organisations in relation to energy security of supply, energy prices, market, regulation, or related matters.

4 International & National Response

This section sets out the international energy policy response to the impacts of the war in Ukraine and how the national policy response is being developed.

4.1 European Union

The European Council conclusions of 24-25 March 2022²³:

- set out that the European Union will phase out its dependency on Russian gas, oil, and coal imports as soon as possible (as set out in the Versailles Declaration²⁴) and that the European Commission will develop a comprehensive and ambitious plan, on a phased basis, by end of May;
- issued an invitation to Member States and the European Commission to continue to make best use of the Toolbox²⁵ (see below) including the new State Aid temporary crisis framework;
- tasked the Council and the European Commission to consider the short-term options in the European Commission's REPowerEU communication²⁶ (see below) and how they would contribute to reducing gas prices and addressing contagion effect on electricity markets;
- called on the European Commission to submit proposals that effectively
 address the problem of excessive electricity prices while preserving the integrity
 of the Single Market, maintaining incentives for the green transition, preserving the
 security of supply, and avoiding disproportionate budgetary costs;
- tasked the Council to examine the proposals by the European Commission on
 EU gas storage policy duly taking into account and addressing the interests of the
 Member States with significant storage capacity in order to ensure a fair balance and
 in relation to next winter Member States and the Commission will urgently:
 - establish the necessary solidarity and compensation mechanisms;

²³ https://www.consilium.europa.eu/media/55082/2022-03-2425-euco-conclusions-en.pdf

²⁴ https://www.consilium.europa.eu/media/54773/20220311-versailles-declaration-en.pdf

²⁵ https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52021DC0660&from=EN

 $[\]frac{^{26}\text{https://eur-lex.europa.eu/resource.html?uri=cellar:71767319-9f0a-11ec-83e1-01aa75ed71a1.0001.02/DOC_1\&format=PDF}{}$

- work together on voluntary common purchase of gas, liquified natural gas and hydrogen;
- complete and improve our gas and electricity interconnections throughout the European Union; and
- work on ensuring the security of supplies for all Member States.
- the European Commission to take any necessary initiatives by May 2022, also taking into account the final ACER²⁷ and ESMA²⁸ reports to ensure a robust and fully interconnected internal electricity market and a well-functioning carbon market.

European Toolbox

In October 2021, the European Commission published the "Tackling rising energy prices: a toolbox for action and support" (the Toolbox). The purpose of the Toolbox is to help Member States support consumers and industry.

It set out how Member States can:

- make social payments to those most at risk to help them pay their energy bills (which can be financed with EU Emissions Trading System revenues)
- put in place safeguards to avoid disconnections from the energy grid or authorise deferrals of bill payments temporarily
- under the Energy Taxation Directive, temporarily exempt or apply a reduced tax rate for households at risk of energy poverty on electricity, natural gas, coal and solid fuels
- take measures to help all energy consumers, such as direct support for a defined minimum consumption per household or inhabitant
- take targeted support measures to help industries to adapt
- support consumer empowerment, providing consumers with information and options on how they can participate in the energy market, for example with faster and easier switching of suppliers

²⁷ Agency for the Cooperation of Energy Regulators (ACER)

²⁸ European Securities and Markets Authority (ESMA)

 further boost the role of consumers in the energy market, by empowering them to switch suppliers, receive advice about how to reduce energy consumption and bills, generate their own electricity, and join energy communities.

The Toolbox also set out a range of actions that the European Commission would take to enhance security of supply and help reduce prices (such as exploring the potential benefits and design of voluntary joint procurement by Member States of gas stocks).

The Toolbox recommended that Members States should step up investments in renewable energy, renovations and energy efficiency and speed up renewables auctions and permitting.

In order to support Member States in implementing options under the Toolbox, the European Commission published a Temporary Crisis Framework for State Aid measures to support the economy, following the aggression against Ukraine by Russia.²⁹ This will enable Member States to use the flexibility foreseen under State Aid rules to tackle this unprecedented situation, while protecting the level playing field in the Single Market.

It should be noted that Ireland has already introduced a number of the measures set out in the Toolbox including increased social payments through the fuel allowance, direct support to all domestic electricity consumers through the €200 electricity credit, the reduction in public transport fares, reduced excise duties and supports to the road haulage sector.

These are in addition to measures already in place including safeguards to avoid disconnections and communications in relation to switching suppliers.

REPowerEU

In March 2022, the European Commission published REPowerEU – a Joint European Action for more affordable, secure and sustainable energy.

The plan outlined a series of measures including:

- Mitigating the impact of high retail prices and supporting heavily exposed companies
- Preparing for next winter by ensuring sufficient gas storage is available

The plan also aimed to phase out dependence on Russian fossil fuels within the EU through two pillars:

²⁹ https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52022XC0324(10)&from=EN

- Diversifying gas supplies, via higher liquified natural gas and pipeline imports from non-Russian suppliers, and larger volumes of biomethane and renewable hydrogen production and imports;
- Accelerating the reduction of the use of fossil fuels in our homes, buildings, industry, and power system, by boosting energy efficiency, increasing renewables and electrification, and addressing infrastructure bottlenecks.

Following the publication of REPowerEU, the European Commission also published:

- a legislative proposal which includes a minimum 80% gas storage level obligation for next winter to ensure security of energy supply, rising to 90% for the following years; and
- a communication on security of supply and affordable energy prices including options for immediate measures and preparing for next winter.

The potential options identified in the European Commission's communication include:

- interventions at retail level i.e. direct support to consumers through vouchers, tax rebates or through an aggregator model (where a State-controlled entity purchases electricity on the market and makes it available to certain consumer categories – directly or through suppliers – at prices below current market prices);
- wholesale intervention on the fuel price for fossil generators;
- wholesale intervention introducing a price cap on the wholesale electricity market (where financial compensation would be required to cover the difference between the market price for the generated electricity and the pre-established cap);
- regulatory intervention on the electricity market: limiting returns of certain market players;
- price limits for trading gas in the EU (which relies on defining an EU-wide maximum price at which gas can be traded between operators in all EU Member States); and
- negotiated volume and price with international suppliers (which would require a common approach at European level).

4.2 International Energy Agency

The International Energy Agency, of which Ireland is one of 31 member countries, provides advice to assist in the development of appropriate policies. In this regard, the agency has

published two plans to help inform member countries as they seek to reduce reliance on imports of Russian oil, natural gas and coal.

The two plans are:

- A 10-Point Plan to Cut Oil Use³⁰
- A 10-Point Plan to Reduce the European Union's Reliance on Russian Natural Gas³¹

Overviews of the two plans, which are informing the development of Ireland's response to the impacts of the war in Ukraine on the energy system, are shown below.

International Energy Agency 10-Point Plan to Cut Oil Use		
1	Reduce Speed limits on highways by at least 10 km/h	
2	Work from home up to three days a week where possible	
3	Car-free Sundays in large cities	
4	Make the use of public transport cheaper and incentivise micro-mobility, walking and cycling	
5	Alternative private car access to roads in large cities	
6	Increase car sharing and adopt practices to reduce fuel use	
7	Promote efficient driving for freight trucks and delivery of goods	
8	Using high-speed and night trains instead of planes where possible	
9	Avoid businesses air travel where alternative options exist	
10	Reinforce the adoption of electric and more efficient vehicles	

Figure 15 – A 10-Point Plan to Cut Oil Use (Source: International Energy Agency)

	national Energy Agency 10-Point Plan to Reduce the European Union's nce on Russian Natural Gas	
1	No new gas supply contracts with Russia	
2	Replace Russian supplies with gas from alternative sources	
3	Introduce minimum gas storage obligations to enhance market resilience	

³⁰ https://www.iea.org/reports/a-10-point-plan-to-cut-oil-use

 $^{^{31}}$ $\underline{\text{https://www.iea.org/reports/a-10-point-plan-to-reduce-the-european-unions-reliance-on-russian-natural-gas}$

4	Accelerate the deployment of new wind and solar projects
5	Maximise generation from existing dispatchable low-emission sources such as bioenergy and nuclear
6	Enact short-term measures to shelter electricity consumers at risk of energy poverty from high prices
7	Speed up the replacement of gas boilers with heat pumps
8	Accelerate energy efficiency improvements in buildings and industry
9	Encourage a temporary thermostat adjustment by consumers
10	Step up efforts to diversify and decarbonise sources of power system flexibility

Figure 16 – 10-Point Plan to Reduce the European Union's Reliance on Russian Natural Gas (Source: International Energy Agency)

4.3 Ireland's Response

The structure of Ireland's response to the impacts of the war in Ukraine on the energy system is based on the European Union's approach, which focusses on phasing out the dependency on Russian gas, oil and coal imports as soon as possible, while seeking to ensure security of energy supply and to protect consumers and businesses.

The structure is set out in more detail below, with each of the three key themes being the focus of subsequent sections. While some of the responses are new, others are existing measures which are being addressed with greater urgency; for example, building on an ambitious programme of measures to move away from fossil fuels as set out in the Climate Action Plan,³² and consistent with national, EU and international climate objectives.

The national response includes measures that will all commence immediately but will have impacts over different timeframes. The key themes of Ireland's response are set out below.

Structure of Ireland's Response

Theme 1: Managing the impact on consumers and businesses

Managing the impact on consumers and businesses with a specific focus on financially vulnerable residential consumers in the short-term

· Theme 2: Ensuring security of energy supply in the near-term

³² https://assets.gov.ie/203558/f06a924b-4773-4829-ba59-b0feec978e40.pdf

Ensuring secure supplies of oil, gas and coal with a focus on the period up to, and including the coming winter

 Theme 3: Reducing our dependency on imported fossil fuels in the context of the phasing out of Russian energy imports across the EU

Reducing demand for fossil fuels by sector (with a focus over the short and medium-term):

- Heat
- Transport
- Electricity

Replacing fossil fuels with renewables (with a focus over the medium and long-term)

Diversifying sources of remaining fossil fuel supplies (with a focus over the medium and long-term)

5 Theme 1: Managing the Impact on Consumers and Businesses

For those people living in, or at risk of, energy poverty, rising energy prices are putting pressure on their ability to access sufficient energy to meet their needs, as the proportion of their income required to meet those energy needs increases. Rising energy prices also creates direct and indirect difficulties for businesses – especially those where energy is a high proportion of their costs, such as the haulage sector.

5.1 Government Measures to Date

The Government has put in place a number of measures to address the increasing cost of energy including:

- Budget 2022 built on Budget 2021, by increasing the weekly rate of the Fuel Allowance by €5 to €33 a week so that €914 was paid to eligible households over the course of the winter. An additional lump-sum payment of €125 was paid to the 370,000 households receiving the fuel allowance in mid-March 2022.
- Following the enactment of legislation in early March, from the beginning of April all
 residential electricity customers will see the Electricity Costs Emergency Benefit
 Payment of €200 (incl. VAT) credited to their accounts. This measure is expected to
 cost circa €400 million.
- The National Retrofit Scheme includes specific measures to support householders in taking actions to reduce energy bills, including **up to 80% grant funding** for low-cost, high-impact measures such as attic insulation.
- In March, a €320 million measure was agreed by Government, to temporarily reduce
 excise duties on petrol, diesel and marked gas oil, which cut excise by 20 cent per
 litre of petrol and 15 cent per litre of diesel until the end of August.
- In March, the Government announced a €100 a week for heavy goods vehicles payment lasting eight weeks, to help the haulage sector cope with rising prices.

Additional measures that are being put in place are detailed below in Section 5.4.

5.2 Supports for Consumers

For those who may already be experiencing, or at risk of poverty, increasing electricity and gas prices can mean they can no longer heat their homes adequately, and they can get into

debt on their energy bills. If a consumer stops engaging with their energy supplier, the risk is that they will ultimately be disconnected. They may even self-disconnect, which has serious consequences for their health and wellbeing.

This is often described as energy poverty, or fuel poverty, which is influenced by a person's income, the energy efficiency of their home, and the cost of the energy they use in their home. In 2020, the ESRI estimated that 17.5% of households in Ireland could be at risk of energy poverty.

Where a consumer does not pay their bill, after a period of engagement with their supplier, they can be disconnected. The number of disconnections in 2022 is low in comparison to previous years. In February 2022, there were 111 electricity disconnections and 24 gas disconnections for non-payment of accounts.

In 2020/2021, the Commission for Regulation of Utilities introduced a moratorium on disconnection. However, during this time, they found debt levels rose and that prolonged use of a moratorium can actually act against the interest of consumers at risk of energy poverty.

There is a range of social and consumer protections already in place to support people in this situation. Ultimately, the level of disconnections of electricity and gas customers is an indicator of the impacts of price rises.

That is why it is critical that there is a range of interventions available, ranging from the annual winter moratorium on disconnections for all, to mechanisms to avoid disconnection or protect against it for people at particular risk. The electricity and gas markets, which are overseen by the Commission for Regulation of Utilities, have a range of protections in place for consumers.

- As set out in the Electricity and Gas Supplier Handbook³³ there are special
 protections in place for customers that are considered vulnerable (such as those who
 need vital electrical medical equipment on a daily basis), most notably relating to
 disconnections, but also regarding billing.
- There is a moratorium on all electricity and gas disconnections each year during the peak winter months from early December to early January.
- There are formal procedures to avoid disconnection and, under the voluntary Energy Engage Code, suppliers will not disconnect a customer that is engaging with them.

³³ CRU21111b-Electricity-and-Gas-Suppliers-Handbook-Review-Decision-Paper-2021.pdf

In addition, the following social protection measures are available:

- The Fuel Allowance is a payment of €33 per week for 28 weeks (a total of €924 for a full year) from October to April, which is supporting up to an estimated 400,000 households in 2022, at an estimated cost of €366 million in 2022. The purpose of this payment is to assist these households with their energy costs. The allowance represents a contribution towards the energy costs of a household. It is not intended to meet those costs in full. Only one allowance is paid per household. An additional lump sum payment of €125 was paid to all households in receipt of the Fuel Allowance payment. This additional lump sum will have cost €49 million in 2022.
- The **Household Benefits package** comprises the electricity or gas allowance, and the free television licence. In 2022, the estimated cost of the gas and electricity element of the package is €203 million and will benefit over 479,000 households. The gas and electricity element is paid at a rate of €35 per month, 12 months of the year.
- The Living Alone Increase is paid to people aged 66 and over, who live alone and are in receipt of state pension and certain other social welfare payments. Budget 2022 provided for a €3 per week increase to the Living Alone Allowance Increase from €19 to €22 per week with effect from January 2022. The estimated cost for the Living Alone Increase in 2022 is €36 million. It is also estimated that there will be 230,000 recipients of this payment in 2021. The CSO Survey of Income and Living Conditions (SILC) indicates that those who are aged 65 years and over are more likely to be at risk of poverty, deprivation and consistent poverty if they live alone.

The Government is also providing free energy efficiency upgrades through the Sustainable Energy Authority of Ireland schemes and the Social Housing retrofitting programme. Improving the energy efficiency of a home will result in a permanent reduction in the property's energy needs. This can help to shield a household against future increases in energy costs, or decreases in income. Since 2000, over 146,000 households have received upgrades through SEAI's free energy upgrade schemes. The energy savings achieved are enduring and continue to benefit these households. This year, 58% (€203 million) of the total Government retrofit budget of €352 million will be spent on dedicated energy poverty retrofit supports and local authority retrofits.

The **National Retrofit Plan**, which was published as part of Climate Action Plan 2021, sets out how the government will deliver on our retrofit targets. The Plan is designed to address barriers to retrofit across four key pillars: driving demand and activity; financing and funding;

supply chain, skills and standards; and governance. The overall financial allocation for residential retrofit will be approximately €8 billion to 2030.

An important step in the delivery of the National Retrofit Plan was the recent Government approval of a package of supports to make it easier and more affordable for homeowners to undertake home energy upgrades, for warmer, healthier and more comfortable homes, with lower energy bills.

The **Better Energy Warmer Homes Scheme** administered by the SEAI delivers free energy upgrades for eligible homeowners in low-income households who are most at risk of energy poverty. Since the start of the scheme in 2000, over 146,000 free upgrades have been supported by the scheme. In 2021, the average cost of the energy efficiency measures provided per household had increased significantly to €17,100.

The recent package of retrofit measures announced by Government included a commitment to target the worst performing properties, by prioritising homes that were built and occupied before 1993 and have a pre-works Building Energy Rating (BER) of E, F or G under the Warmer Homes Scheme. These homes are more expensive to heat and, as such, the occupants are more likely to be at risk of energy poverty.

This year's budget allocation of €109 million (nearly three times the 2021 outturn) will support an increase in the number of free home upgrades, from an average of 177 per month in 2021 to 400 per month this year.

Under the retrofit programme for social housing over 75,000 local authority owned homes have undergone some level of energy efficiency works since 2013. A revised Energy Efficiency Retrofit Programme for Social Housing in place since 2021 aims to retrofit local authority homes to a Building Energy Rating (BER) of B2 or the cost optimal equivalent. It is expected that 36,500 local authority owned homes will be retrofitted under this programme out to 2030. A budget of €85m has been made available for the programme in 2022.

In response to increasing energy costs, new grant rates have been introduced that will cover approximately 80% of the typical cost of attic and wall insulation. These are very cost-effective upgrade measures that can be deployed this year; rapidly, and at scale. The typical cost savings from cavity wall insulation is €300 per year on a home heating bill.

5.3 Businesses

In terms of specific policy interventions, Government departments are consulting with key stakeholders on specific measures that could be considered to ameliorate the short to medium-term challenges for businesses.

The Department of Enterprise, Trade and Employment is leading consultations with business and industry to learn about the specific impacts on business in Ireland, and to hear their concerns and perspectives on the appropriate and most effective tools for policy action.

The European Commission recently launched its Temporary State Aid Crisis Framework for businesses affected by the Russian invasion of Ukraine. This opens the way for Member States to consider what specific instruments might be needed in the near-term in order to help financially vulnerable but viable businesses to overcome the acute impacts of the current crisis, in particular with liquidity, and to gear up for meeting their longer-term investment and transition requirements. As part of the Temporary State Aid Crisis Framework, access to low-cost loans and grants may be made available in order to meet liquidity needs and to facilitate the necessary investment.

The SEAI estimates that energy cost savings of between 20-30% are achievable by businesses through behaviour changes, and it has a range of toolkits, case studies, and advisory and financial and grant schemes available for firms. All enterprises are encouraged to use the Climate Toolkit 4 Business,³⁴ and to begin their transition to a lower carbon footprint. The Toolkit promotes an understanding of enterprises' current carbon footprint, and provides information on State resources available to reduce emissions and achieve increased energy efficiency.

Funding for technical and advisory assistance to business for energy efficiency projects is now available through the Local Enterprise Offices and Enterprise Ireland, ranging from €1,800 to €5,000. Enterprises should consider accelerating the decarbonisation of their processes and availing of the current SEAI energy efficiency assistance supports, including the SEAI Excellence in Energy Efficiency Design (EXEED) programme (which provides grants of up to €1 million for energy efficiency projects). An additional €10 million was allocated in Budget 2022 to the Department of Enterprise, Trade and Employment from the Climate Transition Fund to support businesses in accelerating their de-carbonisation plans.

In the near-term, businesses will be looking for signals and reassurance that underlying capacity and security of supply issues are being tackled in a strategic manner, and in

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³⁴ https://www.climatetoolkit4business.gov.ie/

collaboration with authorities across the EU and the UK in particular. The Government will provide clear and practical guidance to business users on ways of maximising their energy efficiency, thus helping to manage overall levels of demand across our energy networks.

Under the Climate Action Plan, Irish businesses and industry have already embarked on an ambitious plan of action to transition away from fossil fuels, reduce energy demand and make their operations more efficient and sustainable. This has required a strategic, medium and longer-term approach to business positioning and investment, and the pace of such investment will now need to be accelerated as this can also address Ireland's relative dependency on imported energy and, in doing so, secure our energy future. The rollout of the National Recovery and Resilience Fund package by the Department of Enterprise, Trade and Employment and its agencies (IDA and Enterprise Ireland) for the decarbonisation of the enterprise sector will address the imperative for decarbonisation across all businesses and get accelerated action on potential cost savings and emissions abatement.

5.4 Additional Measures for Consumers and Businesses

In addition to the measures already in place, which are set out above, the Government is introducing additional supports for consumers and businesses.

In the transport sector excise duty has been reduced (20 cent per litre of petrol and 15 cent per litre of diesel) until the end of August. This measure will be extended until the Budget in October.

Response 1: Continuation of the excise duty reduction on petrol, diesel and marked gas oil until the Budget in October 2022

- Led by Department of Finance
- Due for implementation: Q2 2022

In the electricity and natural gas sectors, a temporary reduction in value added tax (VAT) will be introduced. This will reduce the VAT on electricity and gas bills from 13.5% to 9% reducing the cost of electricity and natural gas bills.

Response 2: VAT will be reduced from 13.5% to 9% on gas and electricity bills from the start of May until the end of October

- Led by Department of Finance
- Due for implementation: Q2 2022

The Fuel Allowance for winter 2021/22 consisted of a payment of €28 for two weeks and, following an increase in Budget 2022, a payment of €33 per week for 26 weeks. An additional €125 payment was also made to recipients in March 2022.

In order to further support the households most a risk of energy poverty, an additional payment will be made to all recipients of the Fuel Allowance.

Response 3: An additional payment of €100 will be made to all recipients of Fuel Allowance

Led by: Department of Social Protection

Due for implementation: Q2 2022

There is a need to examine all the drivers behind increasing energy costs within the market. A review of energy prices, to be completed and implemented in advance of winter 2022/23, will consider the various components of energy costs (including network charges) and consider how these could be reduced. This includes adjusting the Public Service Obligation (PSO) levy to zero.

Response 4: Reduce Public Service Obligation Levy to zero by October 2022 and review the price drivers behind electricity and natural gas bills (including network costs) with a view to mitigating cost increases for consumers and businesses in the near term

- Led by the Commission for Regulation of Utilities
- Due for implementation: Q3 2022

A new nationwide communications campaign to encourage lower energy consumption will start immediately. The campaign includes advice and support on how consumers and businesses can save energy and what actions they can take to improve energy efficiency and save money. The campaign will support households and businesses in reducing their energy bills, enhance Ireland's energy security, and accelerate delivery of Ireland's climate ambitions.

A key part of the campaign will be to set out what supports are available across Government; in particular, it will address the responses below relating to consumers at risk of energy poverty.

Response 5: Introduce a programme of communications which will inform consumers and businesses what actions they can take to reduce their energy demand, how they could lower energy bills and what supports are available to them

- Led by the Department of the Environment, Climate and Communications and the SEAI
- Due for implementation: Q2 2022

In order to protect consumers who are considered vulnerable (such as those who need vital electrical medical equipment on a daily basis) and those at risk of energy poverty (i.e. not being able to afford to heat their homes) from the increasing cost of energy, a package of customer support and protection measures will be developed by the Commission for Regulation of Utilities and implemented in advance of the coming winter.

Response 6: Implement a package of measures to enhance protections for financially vulnerable customers and customers in debt including:

- Ensuring more manageable payment/debt repayment plans by extending the time for repayment
- Ensuring more manageable payment/debt repayment for customers on financial hardship prepayment meters
- Enhancing protection for financial hardship prepayment meter customers
- Ensuring customers in debt are on a metering/payment plan that is suitable for them
- Ensuring suppliers proactively identify customers in debt who should not be on prepayment meters and help them find other options
- Optimising the involvement of NGOs by ensuring all suppliers nominate specific contacts to support customers in debt
- Improving protection from disconnection for all domestic customers
- Promoting greater awareness and uptake of supplier procedures for dealing with customers in, or at risk of energy debt
- Enhancing vulnerable customer protections
 - Led by the Commission for Regulation of Utilities

Due for implementation: Q3 2022

Consumers who do not actively engage with their suppliers, or switch to other suppliers, may not be on the most appropriate tariff, or may not get discounts that are available (e.g. for committing to stay with a supplier for set period of time). It is important that existing customers are supported in accessing competitive rates.

Response 7: Supporting existing customers to access a competitive rate for their energy

- Led by the Commission for Regulation of Utilities
- Due for implementation: Q3 2022

There are consumers who are considered vulnerable (for instance, those who rely on electrical medical equipment in their homes) and may have limited opportunity to reduce their demand. A specific scheme to support the provision of solar photovoltaic (PV) panels will be established for these consumers.

Response 8: Introduce a targeted scheme for installation of PV panels for vulnerable customers/households with a budget of €20m

- Led by the SEAI
- Due for implementation: Q2 2022

In addition to the measures set out above, a number of potential measures have been set out by the European Commission under their REPowerEU initiative. Some of these require a coordinated approach at European level such as:

- introducing a price cap on the on the wholesale electricity market;
- price limits for trading gas in the EU; and
- negotiated volume and price with international suppliers.

Such interventions may have the potential to reduce the energy costs for consumers, though they may also in themselves be drivers of cost, and therefore require careful consideration.

Response 9: Work with the European Commission and other Member States to consider the policy proposals outlined under REPowerEU designed to aid consumers and businesses deal with the increasing costs of energy

- Led by the Commission for Regulation of Utilities, Department of the Environment,
 Climate and Communications
- Due for implementation: Q3 2022

As outlined above, a number of supports have been put in place to help consumers and businesses meet the increasing costs of energy. Additional measures which could be considered include targeted supports (such as the Fuel Allowance increase that was put in place for winter 2021/22), targeted supports for the households at risk of energy poverty, or more general supports (such as the time-bound excise duty reduction which was put in place for transport fuels). The consideration of such measures should continue on an ongoing basis and take into account the impacts of the war in Ukraine on energy prices. Any such measures would need to take into account available resources, the timeframe over which they should be implemented, the distributional impact on consumers, and the costs of responding to the humanitarian crisis the war in Ukraine is giving rise to.

Response 10: Government will continue to examine supports for consumers and businesses, including taxation measures, subsidies and welfare supports

- Led by the Department of the Environment, Climate and Communications, the Department of Finance, the Department of Enterprise Trade and Employment the Department of Social Protection and the Department of Transport
- Due for implementation: Ongoing

6 Theme 2: Ensuring Security of Supply in the Nearterm

The responses set out in the following section will enhance security of energy supply in the medium to long-term. There is a need to ensure secure supplies of energy in the near-term – in particular up to and including the coming winter.

6.1 Review of Emergency Plans

The plans, processes and procedures set out in Section 3 are being reviewed and tested to ensure they are appropriate for the potential impacts of the war in Ukraine.

While there is already a significant price impact and a level of disruption to some supplies being seen, it is considered prudent to examine a number of additional scenarios including:

- a continuation of elevated international oil and natural gas prices;
- a limited reduction in supplies of oil and/or natural gas to Ireland in conjunction with a continuation of elevated international oil and natural gas prices;
- a significant reduction in oil and/or natural gas supplies to Ireland in conjunction with a continuation of elevated international oil and natural gas prices; and
- a significant supply disruption in the electricity sector with generation unable to meet demand.

Response 11: Review and test oil, natural gas and electricity emergency plans and procedures against scenarios of escalating severity in the context of the war in Ukraine and its impacts

- Led by:
 - The National Oil Reserves Agency & the Department of the Environment, Climate and Communications (Oil)
 - The Commission for Regulation of Utilities & Gas Networks Ireland (Gas)
 - The Commission for Regulation of Utilities & EirGrid (Electricity)
- Due for implementation: Q2 2022

6.2 Oil Supply

The Department of the Environment, Climate and Communications and the National Oil Reserves Agency work closely with the oil supply sector to plan and prepare for issues in relation to oil supply.

At the onset of the war in Ukraine, existing lines of communications enabled a timely engagement with the industry, through their representative body (Fuels for Ireland) and regular meetings continue to be held. The National Oil Reserves Agency's emergency response data collection model (its Emergency Response Model) was activated, which ensured supply chain data was collected from industry on a daily basis.

Using this data, updated assessments are made on any threat to oil supply both in the short-term and on a longer time horizon. The oil supply system in Ireland operates on a month-in-advance order system, and the supply situation for each month ahead is being monitored closely by the Department of the Environment, Climate and Communications and the National Oil Reserves Agency.

Russia is a significant supplier of oil to Europe and, while there have only been limited sanctions on the supply of oil to date (such as the UK's plans to phase out oil imports from Russia), many companies have opted not to purchase oil from Russia. This, coupled with existing constraints in relation to European refining capacity, has disrupted supply chains and impacted the supply of oil – particularly diesel – to Ireland.

Ireland, as a member country of the International Energy Agency, receives oil market reports on a regular basis. The Department of the Environment, Climate and Communications and the National Oil Reserves Agency Ireland also attend regular meetings of the International Energy Agency and the EU's Oil Co-Ordination Group. This ensures international developments are well understood.

As oil supplies are disrupted, the Department of the Environment, Climate and Communications and the National Oil Reserves Agency Ireland will continue to work with industry to monitor the situation and, if appropriate, consider the release of strategic oil stocks.

The release of stocks may be done in conjunction with other member countries of the International Energy Agency as was the case on 1 March and 1 April.

Response 12: Continue to work closely with the oil industry to monitor the supplies of oil in Ireland on an ongoing basis and keep under review the need to release strategic oil stocks to the market

- Led by the National Oil Reserves Agency & the Department of the Environment,
 Climate and Communications
- Due for implementation: Ongoing

6.3 Natural Gas Supply

The continued supply of natural gas to Ireland has not, to date, been reduced or interrupted by the war in Ukraine. However, the situation is being monitored on a daily basis by Gas Networks Ireland.

Ireland has no natural gas storage and is dependent on imports from the UK for circa 75% of our natural gas needs. As a result, the level of natural gas storage in the EU and UK, and the framework under which countries cooperate, is vital for ensuring continued secure supplies of natural gas over the coming winter.

Response 13: Ensure frameworks for cooperation on natural gas supplies to Ireland are reviewed and updated as required in the context of the EU's gas market and security of supply legislative proposals

- Led by the Department of the Environment, Climate and Communications
- Due for implementation: Q3 2022

6.4 Electricity Supply

The continued supply of electricity to consumers in Ireland has not, to date, been impacted by the war in Ukraine. However, the situation is being monitored on a continuing basis by EirGrid.

Any disruption to natural gas or oil supplies has the potential to disrupt the generation and supply of electricity – particularly during times of high electricity demand and low wind generation. All large gas-fired power stations of scale can operate using oil as a secondary fuel which provides a level of resilience from a reduction in supplies of natural gas. Supplies of secondary fuel are held by generators to cover relatively short periods for this purpose. It is therefore important that a specific focus is placed on ensuring the electricity system is as resilient as possible to any disruptions in natural gas supplies.

Response 14: Prepare the electricity system and plan for potential disruptions to supplies of natural gas and manage potential impacts on final electricity consumers

- Led by the Commission for Regulation of Utilities & EirGrid
- Due for implementation: Q2 2022

Prior to the war in Ukraine, there were challenges to security of energy supply in Ireland – in particular the security of electricity supply. The level of dispatchable electricity generation capacity needs to increase significantly over the coming years in order to reliably meet the expected demand for electricity. The Commission for Regulation of Utilities, which has statutory responsibility for ensuring security of electricity supply, is managing a programme of work to address this challenge³⁵. EirGrid and the Department of the Environment, Climate and Communications are working closely with the Commission for Regulation of Utilities to implement this programme for work. The war in Ukraine and the potential for supply constraints has highlighted the need to urgently progress this work as a priority.

Response 15: Implement as a priority the programme of work set out by the Commission for Regulation of Utilities to ensure security of electricity supply

- Led by the Commission for Regulation of Utilities
- Due for implementation: Ongoing

³⁵ https://www.cru.ie/wp-content/uploads/2021/09/CRU21115-Security-of-Electricity-Supply-%E2%80%93-Programme-of-Actions.pdf

7 Theme 3: Reducing our Dependency on Imported Fossil Fuels

As set in the European Council conclusions of March 2022,³⁶ the European Union has committed to phasing out its dependency on Russian gas, oil and coal imports as soon as possible. Since then, the importation of coal from Russia has been banned.

While Ireland relies on imports for over 70% of our energy needs, a relatively limited share of these imports come directly from Russia. In 2020, only 6% of oil used in Ireland was imported directly from Russia³⁷. While no natural gas was imported directly, supplies of natural gas from the UK, and supplies of oil which have been refined in other countries, includes energy which originated in Russia. There is therefore an indirect dependency on Russian energy. In addition, as other European countries move away from Russian energy sources, existing supplies to Ireland may divert to those countries, putting pressure on Ireland's energy supplies.

This section sets out how Ireland is seeking to phase out our dependency on Russian gas, oil and coal imports as soon as possible. It is focussed on three areas of work:

- Reducing demand for fossil fuels, which would seek to reduce overall demand for
 oil, natural gas and coal in Ireland. This can be done through demand reduction
 measures (such as using public transport instead of driving), or energy efficiency
 measures (such as retrofitting buildings). Reducing demand for fossil fuels is being
 considered across the heat, transport and electricity sectors.
- Replacing fossil fuels with renewables, which would seek to reduce the use of gas, oil and coal in Ireland by replacing it with renewable energy sources such as wind energy, solar energy or bioenergy.
- Diversifying fossil fuel supplies, which would seek to replace any Russian supplies of gas, oil and coal (direct or indirect) with supplies from other sources.

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³⁶ https://www.consilium.europa.eu/media/55082/2022-03-2425-euco-conclusions-en.pdf

³⁷ Eurostat, 2020

7.1 Reducing Demand for Fossil Fuels

Reducing demand for fossil fuels is being considered across the heat, transport and electricity sectors.

7.1.1 Heat

More energy is used in the heat sector in Ireland (44% of total energy use³⁸) than either transport or electricity.

The Climate Action Plan includes a range of measures to address the use of fossil fuel heating systems in buildings. The National Heat Study examines how Ireland's net zero emission target could be reached by 2050 in the heat sector. It identifies the need for greater use of electrification (including the use of heat pumps) and district heating to provide the heat needed in building.

It is intended to develop a National Policy Statement on Heat based on the findings of the National Heat Study. A new Delivery Taskforce is being established to focus on the heat sector including retrofitting, renewable heat and district heating. This is one of a number of cross Government/agency taskforces created to accelerate all aspects of delivery. The work of the Delivery Taskforce will include a key focus on the decarbonisation of our building stock. A Steering Group has also been established to oversee the development of district heating which was identified in the National Heat Study as a key enabler to reach net zero by 2050.

Response 16: Develop a National Policy Statement on Heat based on the outcomes of the National Heat Study including a key focus on the decarbonisation of our building stock and the development of district heating

- Led by the Department of the Environment, Climate and Communications
- Due for implementation: Q4 2022

The measures set out in the Climate Action Plan will be reviewed in the context of the publication of the recent National Heat Study with a view to accelerating the measures and reducing demand for fossil fuels in the heat sector. This will include consideration of the study of the Heat Loss Indicator criteria for the installation of heat pumps which is being carried out under the Climate Action Plan. The Heat Loss Indicator determines the suitability

³⁸ Source: SEAI, (Ireland's Energy Statistics)

of buildings for the use of a heat pump. Adjustments to the level of Heat Loss Indicator at which it is considered appropriate to install a heat pump could help accelerate the phase-out of fossil fuel heating systems.

Response 17: Building on the detailed sectoral analysis of the National Heat Study, we will develop proposals for regulatory options to accelerate the phase-out of fossil fuel heating throughout our building stock including effectively ending the use of fossil fuels for space and water heating in all new buildings with limited exemptions for specific applications such as for example industrial structures, building on our ambitions set out in the Climate Action Plan 2021

- Led by the Department of the Environment, Climate and Communications in conjunction with the Department of Housing, Local Government and Heritage
- Due for implementation: Q3 2022

Retrofitting buildings is a key measure that has the capacity to reduce heat energy demand. While there are support programmes in place for the residential, commercial and public sectors, there is potential to accelerate these plans further.

Response 18: Accelerate the delivery of home retrofits by implementing the National Retrofit Plan, including by providing supports to homeowners in the private rental and Approved Housing Body sectors and continuing to deliver the Local Authority Retrofit Programme

- Led by the Department of the Environment, Climate and Communications and SEAI
- Due for implementation: Q2 2022

A number of supports are under review, with the objective to improve their impact and efficiency in the public and commercial sectors. These include the Excellence in Energy Efficiency Design (EXEED), the Support Scheme for Renewable Heat (SSRH), and the Public Sector Pathfinder retrofit programme.

Consideration is also being given to the development of a new grant support scheme within SEAI aimed at small to medium enterprises and commercial building retrofit. This support will be designed to complement SEAI and other agencies' business supports and will aim to incentivise investment, to support those businesses in optimising their existing systems to

minimise energy usage, to guide them in retrofitting their buildings to make further efficiencies and, ultimately, to move away from fossil fuel-based heating solutions. The potential for increasing the focus on developing the pipeline for public sector Pathfinder projects is also being examined.

Response 19: Review existing business & public sector retrofit supports to accelerate delivery

- Led by the Department of the Environment, Climate and Communications and SEAI in conjunction with the Department of Enterprise, Trade and Employment
- Due: Q2 2022

Using structures already put in place by the SEAI and Office of Public Works (OPW), communications campaign across public sector bodies will be developed, focusing on the steps and actions that can be taken to reduce demand and save energy.

The OPW's existing network of energy advisors and the SEAI's 'Energy Link' can be utilised to deliver the communications to the wider public sector, and the establishment of the SEAI's Green Teams could be accelerated, with an initial aim of focussing on energy use, energy efficiency, and energy consumption. Consideration will also be given to expanding the SEAI's Support Scheme for Energy Audits to also encompass the public sector.

Response 20: To enable the public sector to lead by example in reducing energy demand, a coordinated programme of communications will be delivered to the sector, identifying the actions it could take to save energy

- Led by: Department of the Environment, Climate and Communications, the SEAI and OPW
- Due for implementation: Q2 2022

7.1.2 Transport

Transport energy use decreased significantly in 2020 as a result of various measures introduced during the Covid-19 lockdown, including increased levels of the population working from home. This demonstrated the potential for behavioural changes in the transport sector, which could have an immediate impact on energy demand.

The International Energy Agency's 10-point plan sets out how this could be achieved through measures such as reduced speed limits and reduced public transport fares. It could

also be assisted through increased use of sustainable travel such as walking and cycling. Remote work can also play a role in reducing fuel use associated with commuting and in turn lower emissions (although these benefits may be slightly offset by increased gas and electricity usage in the home). Considerable progress has been made in implementing the Government's "Making Remote Work" strategy which provides a framework for making remote work a permanent feature of the workplace in Ireland in a way that maximises economic, social and environmental benefits.

The Department of Transport has developed a National Sustainable Mobility Policy.³⁹ This Policy, and accompanying five-year action plan, aims to support significant modal shift towards more sustainable modes such as public transport and active travel between now and 2030, and includes expanding behavioural change measures, including the Smarter Travel Workplaces.

The plan includes commencing delivery of the BusConnects programmes in our five cities which will be complemented by expanded public transport services, including in regional and rural areas under the Connecting Ireland programme.

Under the action plan, a public engagement strategy will be developed to promote modal shift and raise public awareness of sustainable transport options along with the development of a demand management toolkit, to be implemented at a regional and local level, as appropriate. The Department of Transport is establishing a Leadership Group to drive implementation of the policy and action plan. This Group will be asked to identify energy efficiency measures that can be implemented over the short to medium term and in a graduated way, identifying how and when they are best deployed.

In addition to this, the Department of Transport will continue to engage on sector-specific and Government-wide communications initiatives to inform individuals and businesses what they can do to lower their fuel usage, such as switching to public transport and active travel, rethinking driving patterns, and driving more economically.

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³⁹ https://www.gov.ie/en/publication/848df-national-sustainable-mobility-policy/

Response 21: Implement the National Sustainable Mobility Policy as a priority including establishment of a Leadership Group to drive implementation and devise a programme of measures for the transport sector to increase energy efficiency and reduce reliance on fossil fuels

Led by Department of Transport

• Due for implementation: Q2 2022

7.1.3 Electricity

Citizen participation in the clean energy transition is essential to meeting our ambitious climate targets. This is now even more important with the urgent need to accelerate that transition. The infrastructure needed to empower citizens to become active energy consumers is smart metering. With 750,000 smart meters already installed, and 1.1 million due to be reached by end 2022, Ireland has now achieved a critical mass. The next step is to ensure that we maximise the benefits of this critical public infrastructure for consumers and for the resilience of our energy system as we accelerate its decarbonisation.

Smart meters are set up to record consumption in day, night and peak time periods, as well as in shorter half-hour intervals. This in turn allows for electricity to be charged, based on the time of day it is used – known as Time of Use, or smart tariffs. Smart meters are also configured to record any electricity feeding into the grid, thereby facilitating payments under the Micro-generation Support Scheme.

Smart metering provides the information consumers need to make more informed choices about their consumption and the best tariff option for them. It also makes the switching process easier. Accurate energy usage information across the day enables consumers to be more efficient in their use of electricity and save money (e.g. by using appliances at off peak tariffs). In this way, smart metering is also enabling the development of the smart grid and will facilitate better network planning, improving the network resilience, reducing the need for less efficient and more costly generation at peak times and facilitating the increase in renewable power on the electricity system.

The National Smart Metering Programme will roll out and install 2.3 million meters by 2025 and in the process make available new products and services to energy consumers. In addition, over 20,000 customers with registered micro-generation installations have smart meters that have enabled them to measure the electricity they export to the grid so that they can benefit from a micro-generation tariff from their electricity supplier. While the smart

meter installation project has been progressing successfully to date, the take up of smart tariffs has so far been more limited, with only 30,000 availing of the opportunity.

In February 2021, the Commission for Regulation of Utilities (CRU) made it an obligation on electricity suppliers to provide Time of Use tariffs to their customers. Building on this, work is underway to put in place a smart meter data access code, which will provide the framework for consumers to access much more detailed data on their historical energy usage, empowering them to engage with suppliers to find the smart tariff offering most suitable for them. This will in turn drive consumer demand for an increased range of more sophisticated smart tariff offerings from suppliers.

Response 22: Leverage the successful roll out of the National Smart Meter Programme by providing electricity customers with access to their data and greater insight into their consumption patterns thus enabling them to select the most appropriate tariff. The Commission for Regulation of Utilities will also examine the charges within its remit to ensure that the differential between peak and off-peak tariffs provides the opportunity for electricity customers to save money by moving some consumption to off peak times

- Led by the Commission for Regulation of Utilities & ESB Networks
- Due for implementation: Q4 2022

The Department of Enterprise, Trade and Employment is currently reviewing the Government Statement on the Role of Data Centres in Ireland's Enterprise Strategy in conjunction with the Department of the Environment, Climate and Communications, the Commission for the Regulation of Utilities, EirGrid, and other stakeholders. The review will consider and signal the required policy direction and strategic approach that will reduce the demands on the electricity system from new and existing data centres and provide demand flexibility at peak times.

This will be complemented by the delivery of actions under the Climate Action Plan including the delivery by CRU of an Electricity Demand Side Strategy and by EirGrid and ESB Networks of market and technological measures, including those relevant specifically to data centres and other very large users, required to enable and incentivise demand side flexibility.

Response 23: Ensure the review of the Government Statement on the Role of Data Centres in Ireland's Enterprise Strategy provides a strategic policy direction for data centres to reduce their burden on the grid and provide demand flexibility at peak times.

- Led by the Department of Enterprise, Trade and Employment
- Due for implementation: Q2 2022

Members of SEAI's Large Industry Energy Network have significant potential to reduce demand and therefore reduce security of supply risks. In order to bring about any change in behaviour, it is important the correct signals are in place. These could include additional incentives such as higher peak network charges.

Response 24: Work with SEAI's Large Industry Energy Network to assess additional demand reduction and flexibility options, including consideration of peak demand reduction incentives and higher peak time network charges

- Led by the Commission for Regulation of Utilities
- Due for implementation: Q3 2022

7.2 Replacing Fossil Fuels with Renewables

The replacement of fossil fuels (such as gas used in electricity generation) with renewable energy (such as onshore wind, offshore and solar power) is a key method of reducing Ireland's reliance on imported fossil fuels. The process of moving away from fossil fuels is well underway. The Climate Action Plan commits to increasing the share of electricity demand generated from renewable sources in Ireland to up to 80%, without compromising security of electricity supply, reflecting the national target to reduce emissions by 51% by 2030, and to achieve climate neutrality by 2050 at the latest.

A key focus in this area is the development of offshore wind. In this regard a new Delivery Taskforce has been established to accelerate the development of offshore wind. This is one of a number of cross Government/agency taskforces created to manage all aspects of delivery. The Delivery Taskforce on offshore wind includes a range of workstreams seeking to ensure the planning, grid connection, financial support mechanisms and supporting polices are in place.

Supportive polices across Government and State agencies can reduce barriers and fast track permitting for renewable energy generation projects. Similarly, renewable energy

developers need to match this through taking a leadership role in delivering high quality applications to relevant consenting authorities, meeting project milestones on time, and minimising delays.

A number of potential measures under the planning system could better support the timely delivery of additional renewable energy sources and the required supporting infrastructure such as:

- Providing greater regulatory certainty, including timeframes, in relation to decarbonised generation:
 - through clearly articulated, formal Government policy on relevant aspects of energy supply;
 - by ensuring that the local planning policy framework fully supports the national objectives;
 - by ensuring An Bord Pleanála and the Maritime Area Regulatory Authority have sufficient and appropriate expert resources to meet the State's needs in this area;
 and
 - by establishing a specific division of the High Court to deal with planning and environment cases to deal with these cases, where they arise, as expeditiously as possible.
- Supporting the continued use or reuse of existing renewable generation sites.

The above could also include exploring options for exempted development provisions under planning regulations to ensure that, at an appropriate scale and having full regard to environmental protection, renewable generation (such as rooftop solar PV) can be facilitated without coming within the reach of the planning system – all in a manner that is consistent with the State's commitment to good environmental decision making and public participation in the planning process. In this regard, a public consultation on enhanced planning exemptions for small scale solar PV will be launched in the coming weeks.

Prioritising renewables in this way is in line with the requirements of the recast Renewable Energy Directive and the European Commission's REPowerEU action statement, where the Commission has committed to publishing recommendations on fast permitting for renewable energy projects by May 2022.

In that context, the Commission has also called on Member States to ensure that renewable energy generation projects and associated infrastructure are considered to be in the

overriding public interest, and the interest of public safety, and the Government supports this request.

Response 25: Align all elements of the planning system to fully support accelerated renewable energy development

- Led by the Department of the Environment, Climate and Communications in conjunction with the Department of Housing, Local Government and Heritage
- Due for implementation: Q4 2022

New renewable energy generation including solar, onshore wind and offshore wind projects require timely connections to the electricity grid. The system for allocating and delivering these connections must be designed and resourced to operate efficiently. Policy should prioritise projects with the highest chance of early delivery and greatest impact on carbon emissions through the connection arrangements and the Renewable Electricity Support Scheme. The potential for privately funded and hybrid connections also needs to be realised. Speedy delivery of market arrangements for zero carbon system services and system flexibility (e.g. batteries) to support higher levels of renewables output is also critical.

International cooperation is also a key focus for the development of offshore wind and interconnection. In this regard, Ireland will continue to actively work with the North Seas Energy Cooperation, of which Ireland holds the rotating Presidency during 2022.

Response 26: Review grid connection arrangements for renewable electricity projects and the development of system services to accelerate the growth in renewable electricity

- Led by the Commission for Regulation of Utilities
- Due for implementation: Q3 2022

As outlined in EirGrid's *Shaping Our Electricity Future* roadmap⁴⁰, increased levels of renewable power require the electricity network and associated systems to be reinforced and expanded. Power has to be transmitted from the new sources of generation to the centres of demand, so as to enable a rapid switch from replacing fossil fuels with renewable technologies. Operating the grid with higher levels of renewables requires additional system services and flexibilities. In addition, storage projects can play a new role in balancing supply and demand for renewable power. It is therefore important to accelerate and prioritise the

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⁴⁰ https://www.eirgridgroup.com/the-grid/shaping-our-electricity-f/

investments in the electricity grid to maximise renewable penetration and urgently update grid, operational and market studies to facilitate renewable electricity penetration of up to 80%.

Response 27: Accelerate investment in the electricity grid and the development of storage technologies

- Led by the Department of the Environment, Climate and Communications, the Commission for Regulation of Utilities & EirGrid
- Due for implementation: Ongoing

Micro-generation and small-scale generation create opportunities for domestic, community, farming, and small commercial customers to take the first steps towards investment in renewable technologies, which can play a role in shaping electricity demand and decarbonising energy used by homes and businesses. The Department is increasing the deployment of renewables through a number of measures under a framework for microgeneration:

In February, the Minister for the Environment, Climate and Communications signed Regulations into Irish law that provide an obligation on suppliers to remunerate renewables self-consumers for residual electricity they export to the grid, called the Clean Export Guarantee tariff. Some suppliers have published their tariffs and they currently range between 13.5 cents per kWh and 17.5 cents per kWh. This market remuneration will accelerate deployment of solar PV systems.

The Department of the Environment, Climate and Commutations also commenced the rollout of the Microgeneration Support Scheme in February through a new domestic capital grant towards the cost of installing solar PV equipment. Grant amounts up to a maximum of €2,400 are available.

Non-domestic applicants (businesses, farms, community buildings such as schools, sports clubs, etc.) generating up to 6kW of electricity will be eligible for an SEAI capital grant at the same level as domestic customers from July 2022.

Larger non-domestic applicants generating between 6 kW and 50kW can access a Clean Export Premium tariff per kWh exported for a period of 15 years from Q3 2022. The Clean Export Premium tariff rate will be 13. 5 cents per kWh in 2022.

Response 28: Expand the rollout of renewable microgeneration including the implementation plan for the Clean Export Premium

- Led by the Commission for Regulation of Utilities
- Due for completion: Q3 2022

Alternatives to natural gas, such as biomethane, provide additional diversification for Ireland's energy mix. The Climate Action Plan has set a target of 1.6 TWh (around 3% of Ireland's natural gas use) to be replaced by biomethane by 2030.

Over €8.4 million in funding from the Climate Action Fund will be released shortly for the Green Renewable Agricultural Zero Emissions Gas project, led by Gas Networks Ireland. This project will deliver the first large-scale central grid injection facility in the State and will collect renewable gas from anaerobic digestion plants in the catchment area, transport it by road to the facility, and inject it into Ireland's gas network. This project has the potential to become an exemplar for other similar initiatives.

While no support is currently in place, the changed outlook for natural gas prices means it is now a more financially viable alternative. Existing supports for biogas and biomass in the heat sector (such as the Support Scheme for Renewable Heat) will be reviewed to accelerate uptake and new supports (such as a Renewable Heat Obligation) will be considered.

It should be noted that any support for biomethane production or use must take due account of the level that can be produced from indigenous sustainable feedstocks as set out in the National Heat Study.

Response 29: Appraise the introduction of supports for biomethane as a replacement for natural gas in the context of the changed outlook for natural gas supply and prices, and review supports for biomass/biogas in the heat sector under the Support Scheme for Renewable Heat

- Led by the Department of the Environment, Climate and Communications
- Due for implementation: Q3 2022

In 2020, the EU developed a hydrogen strategy, recognising the potential of the fuel source as playing a part in the Union's target of achieving a climate-neutral society by 2050. The development of an integrated hydrogen strategy for Ireland is to be prioritised, in line with the Climate Action Plan, including the possibility of setting clear national targets for hydrogen.

The work underway for the security of supply review of Ireland's electricity and natural gas systems will be done in parallel with the development of the hydrogen strategy to ensure the long-term security needs take account of future hydrogen technologies

Response 30: Prioritise the development of a hydrogen strategy

- Led by the Department of the Environment, Climate and Communications
- Due for implementation: Q3 2022

7.3 Diversifying Fossil Fuel Supplies

While the supply of natural gas required to meet Ireland's energy needs has not, to date, been impacted by the war in Ukraine, there are security of supply risks. Ireland's high dependence on imports from a single source in the UK, along with the high and growing reliance of the electricity system on natural gas supplies, has necessitated a review of security of supply, which is being carried out by the Department of the Environment, Climate and Communications.

The review is considering the risks to both natural gas and electricity supplies, and a range of measures, including the need for additional capacity to import energy (such as liquified natural gas), energy storage, fuel diversification and renewable gases (such as hydrogen). The completion of the review is a key priority.

Response 31: Prioritise the review of security of supply of Ireland's electricity and natural gas systems

- Led by the Department of the Environment, Climate and Communications
- Due for implementation: Q3 2022

8 Communications

Clear, timely, and helpful information is vital to the public as we deal with the challenge of greater fuel and electricity price increases.

An inter-Departmental, inter-Agency Energy Security Communications Subgroup has been established to consider communications needs for the coming months and to provide for:

- collection and collation of relevant information and data from across the key sectoral agencies and departments;
- coordination of all public information and media actions with the lead energy agencies, Government Information Services, other Government departments and agencies at the national level and international levels, including the EU, where appropriate; and
- sharing of information with the public and the media using all appropriate channels

The subgroup is made up of representatives from the lead energy agencies, Government departments, Government Information Services, and the energy regulator to ensure clear and consistent communications on all aspects of energy security and affordability.

8.1 Supports

The impact of higher energy costs on low-income households is a matter of particular concern for the Government and it will continue to examine what measures may be taken to manage this. As noted in Section 5 several steps have been taken to help ease the impact, especially on households with lower incomes. It is important that the public and businesses know what supports are available to them and how to access them.

The Energy Security Communications Subgroup will ensure consistent and clear information is available on existing government supports and as additional supports and measures are announced. Particular attention will be paid to identifying the most appropriate channels for sharing information depending on the audience: website, social media, leaflets, media campaigns, communications campaigns, through relevant energy, business, transport and industry agency channels, and via partner organisations.

The Commission for the Regulation of Utilities has a current information campaign to inform the public of the protection measures in place for those who may experience financial hardship or who are vulnerable customers that need more supports. These measures address billing, disconnections and a supplier code of conduct (for dealing with customers). The Commission for the Regulation of Utilities also advise on switching suppliers to get the

best value for reduced energy bills. The Communications Subgroup will coordinate with the Commission for the Regulation of Utilities to ensure these supports are amplified. As measures under the National Energy Security Framework to further protect customers are developed, the Subgroup will support and amplify communications for maximum reach, in particular in advance of the next heating season.

8.2 Energy Efficiency

The Government is committed to accelerating the transition away from fossil fuels to more reliable and less harmful renewable sources of energy. This will benefit us individually in our energy bills, nationally in our energy security, and globally in our climate ambitions.

While the transition is underway, Government, homeowners, motorists, communities, and businesses, must all work together to overcome the immediate energy security challenges resulting from the current exceptional circumstances.

The Government cannot fully insulate against the uncertainties and impacts of the war, and there will be a need for collective action to conserve our energy resources.

A public information campaign is in development to inform the public about the actions they can take to contribute to the national effort. The campaign will empower people to reduce their energy use and encourage long-term sustainable behaviour. The campaign will take account of seasonal demands on energy consumption to ensure information and advice is relevant and timely.

8.3 Communications in the Event of an Emergency

As set out in Section 3, the Department of the Environment, Climate and Communications has overall policy responsibility for the energy sector including energy security and emergency response however several State Bodies in the energy sector also play crucial roles in emergency planning, management and coordination.

Messaging is aligned and publication is co-ordinated via multiple channels. The relevant State bodies in the energy sector have aligned emergency communications plans which provide clarity on respective roles and responsibilities, draft statements and messaging.

Press Officers from each organisation work closely together to inform the public, media and other stakeholders. The Department of the Environment, Climate and Communications, the Commission for Regulation of Utilities and State bodies such as Gas Networks Ireland, EirGrid and ESB Networks attend regular meetings to ensure they are aligned and kept up to date in real time. This group is known as the Emergency Press Officers Network.

These Emergency Communication Plans are stress tested annually as part of a wider exercise where an event is simulated and worked on from system, operational and communications perspectives.

The National Oil Reserves Agency has an Oil Stocks Drawdown Implementation Plan which is tested with the oil industry on a routine basis. In an oil supply emergency, at the direction of the Minister for the Environment, Climate and Communications, the National Oil Reserves Agency will release oil to oil companies who in turn will maintain supply to consumers.

The Department of the Environment, Climate and Communications, the National Oil Reserves Agency and representatives of the oil sector in Ireland manage ongoing communications and updates to relevant parties, including the industry, public and the media.

In an unforeseen disruption to supply of oil, gas or electricity, the Department of the Environment, Climate and Communications provides the link between the energy sector and the Government of Ireland. This enables the collection and collation of relevant information and data from across the key State bodies in real time.

In the event of an energy security emergency, the Department of the Environment, Climate and Communications leads the coordination of Government communications.