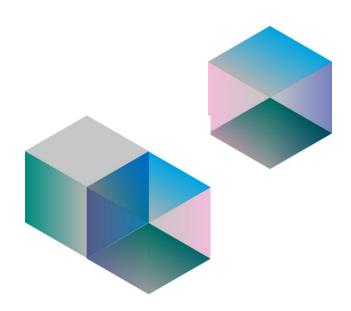


IDA Ireland Submission to the Department of the Environment, Climate and Communications' Consultation on the 'Review of the Security of Energy Supply of Ireland's Electricity and Natural Gas Systems'.



October 28, 2022



Introduction

IDA Ireland welcomes the opportunity to contribute to the Department of the Environment, Climate and Communications' consultation on the 'Review of the Security of Energy Supply of Ireland's Electricity and Natural Gas Systems (September 2022)'. IDA Ireland is the Government agency with statutory responsibility for promoting Foreign Direct Investment (FDI) and has a total client portfolio of approximately 1,700 companies. These companies employ over 275,000 people across the country, spend more than €30 billion in the economy each year (payroll, materials, services, capex), account for seventy percent of Irish export sales, and contribute more than €15 billion in annual corporate taxes to the exchequer.

The availability of ample, competitively priced energy (especially electricity and gas) is a key fundamental for both the establishment and continuation of FDI in Ireland, especially manufacturing based FDI (e.g. biopharmaceuticals, microelectronics, and medical technologies), of which a significant amount is located in regional Ireland. Over 115,000 people are employed in FDI based manufacturing.

IDA Energy Policy

Before commenting on the shortlisted options outlined in the consultation document, IDA Ireland would like to say that when assessing energy policy, the agency considers three elements, which are:

- 1. Security of Supply.
- 2. Cost of Energy.
- 3. Sustainability/Climate Action.

Security of Supply:

Security of supply underpins FDI. With respect to gas supply, it is notable that Ireland has just two sources, viz 1) UK imports (from one source) and 2) Corrib Gas Field, where supply is decreasing. There is also no strategic gas storage. This situation is high risk, from a security of supply perspective, and highlights the need to lower risk by diversifying sources of supply.

Having sufficient enduring gas fired electricity generation is of strategic importance, in order to meet increasing electricity demand and to facilitate the complete integration of wind power into the electricity generation system. As a country, to offset future risks, Ireland needs to reduce its dependency on imported energy, especially gas, and this can be achieved by building new indigenous sources of renewable energy (e.g. biomethane, green hydrogen, and offshore wind power).

Cost:

Cost of energy is very important and competitively priced energy is necessary to support high levels of FDI, particularly in manufacturing. Ireland's energy costs have traditionally been too high. The country's cost competitiveness within the EU, and with the main source of FDI, viz the US, needs to improve (at a minimum must not disimprove).

IDA Ireland's observation of the CEPA study is that cost, at least explicitly, did not appear to be a significant consideration. Ireland's future sources of energy cannot be at any cost; they need to be competitive. This needs to be taken into account when selecting future sources of energy for the country.

Sustainability/Climate Action:

Sustainability/climate action is a key pillar of the strategy of IDA Ireland. Sustainability and climate action are increasingly central to the strategies of FDI investors. They want renewable energy on a growing scale, with many having ambitious net zero targets for their respective businesses. Ireland's security of supply strategy needs to take into account the increasing requirement from enterprise for renewable energy technologies. Current prices for electricity and gas increase the opportunity for the country to expedite the process towards greater development of renewable electricity and gas (e.g. offshore wind electricity).



Supply Options – Electricity and Gas

The following summarises IDA Ireland's views on the mitigation options presented in the Department of the Environment, Climate and Communications' Security of Supply consultation paper (the views are presented on the basis that the full cost scenarios are not fully known):

Electricity:

The mitigation options on electricity all appear to be valid options worthy of further consideration and focus. These are additional interconnection, additional electricity storage – pumped hydro, additional generation capacity – dispatchable low carbon, increased secondary fuel storage at gas fired power stations, conversion of a gas fired power plant to hydrogen and use of batteries and DSR (Demand Side Response). Battery storage and biomass based generation would be positive from a sustainability perspective. IDA Ireland is supportive of an additional interconnector to France and advocates that it should be linked to the development of offshore wind power generation. More interconnectors should also be considered to support further offshore wind power generation.

With greater emphasis being placed on small users generating some of their own electricity (e.g. via solar panelling on roofs), there may be merit in exploring how 'end user generation of electricity' could be developed further, at larger scale, including the placing for sale of electricity on to the grid. Furthermore, IDA Ireland believes that there should be very serious consideration given to permitting the private wire supply of electricity, over reasonably short distances; here, third parties would be permitted to supply electricity to neighbouring intensive electricity users.

Gas:

With respect to the gas mitigation options, gas storage facility, onshore energy storage and the gas mitigation package (gas storage, renewable gas, green hydrogen and gas demand side response) appear reasonable options for further consideration and focus. However, cost of supply needs to be considered and options selected should be cost competitive.

IDA Ireland supports floating LNG. The agency believes that there should be opportunity for a privately owned, LNG business to operate on a commercial basis; this would provide more competition in the market, leading to lower pricing, lower risk, and access to private capital, knowhow, new technologies and innovation capabilities and resources. The LNG facility should be 'hydrogen adaptable' and capable of providing strategic storage for the State.

IDA Ireland does not agree with not supplying certain sectors with natural gas (as suggested under the Natural Gas Demand Management option), unless there is a viable alternative, or where there is a transition phase where natural gas is supplied until the new alternative is available, at competitive cost. Curtailing supply to specific areas of the enterprise sector would not be supportive of enterprise development.

Delivery of New Sources of Electricity and Gas

The speedy and timely delivery of new sources of energy will be important for underpinning both new and existing FDI. This is particularly significant now in the current energy environment, where there is an urgency to the security of supply of energy matter.

Planning Reform:

If Ireland is to deliver new sources of electricity and gas without undue delays, then it will be necessary that the Irish planning regime is urgently reformed, and the process of approving planning permissions speeded up. Planning permission, environmental licence, and Maritime Area Consent (MAC) applications for energy investments need to be processed faster. Planning authorities should have sufficient resources and expertise. The new Maritime Area Regulatory Authority (MARA) needs to be up and running as soon as possible, and adequately resourced. Ireland's planning regime needs to be brought into line with competitor countries for FDI.



Both the IMF and the European Commission have highlighted the need for reforms to the planning system in Ireland, with the latter recently noting the criticality of the planning and permits system to the deployment of renewable energy solutions. It makes a particular recommendation to reduce the duration of planning procedures:

'Accelerate the deployment of renewable energy, in particular offshore wind, including by introducing reforms to improve the efficiency of the planning and permit system, particularly by reducing the duration of procedures'.

It is notable that the German government, a strong proponent of sustainability/climate action, this summer, introduced emergency legislation (i.e. the LNG Acceleration Act) to expedite the establishment of new LNG facilities. Early in 2022, Germany had no LNG facilities, but five plus LNG facilities (primarily floating) are currently in the process of being established.

Investment:

If the country is to be successful in delivering new sources of electricity and gas, then it will be necessary that there is adequate public investment in infrastructure, to underpin the new sources. Significant new investment will be required in transmission and associated networks (e.g. electricity interconnectors, biomethane networks, adapting networks for green hydrogen, etc). The whole area of grant and financial supports for the new technologies will need to be considered and advanced.

As many of the source technologies are relatively new, there would be merit in increasing the amount of publicly funded research in those technologies; for example more research on building battery storage capacity, on reducing the cost of green hydrogen, on integrating green hydrogen into supply networks and end user applications, and hydrogen storage.

Offshore Wind Electricity and Green Hydrogen

IDA Ireland believes that the country needs to have a clear vision and comprehensive development and implementation plan with respect to the establishment of the country's offshore wind electricity generating industry. Ireland has huge potential in this area. Offshore wind electricity projects, which have lately received 'MAC's', offer most potential in the near term and all measures should be taken to ensure that the projects can become operational at the earliest stage possible. Associated with offshore wind electricity generation is the potential to develop green hydrogen (albeit it needs to be a cost competitive energy source). The country's green hydrogen strategy needs to be finalised at the earliest stage possible and measures put in place to drive the sector forward (e.g. piloting of end uses in enterprise).

The Government needs to approach its security of supply of energy strategy, and specifically offshore wind electricity generation, with the ultimate goal of making the country a huge exporter of green electricity (and associated green hydrogen) and having a very strong and vibrant, indigenous renewable energy sector. The country's ambition on green electricity and green gas must be more than national security of supply.

Conclusion

Ireland is at a critical juncture with respect to the security of supply of electricity and gas, where short to medium term challenges need to be bridged with long term potential (e.g. offshore wind electricity generation). The country's approach to energy security of supply needs to be built on the vision of Ireland becoming a large exporter of renewable electricity and associated green hydrogen, while at the same time having adequate security of supply nationally. Ample, competitively priced electricity and gas, increasingly renewably based, is required.

The mitigation options proposed on electricity in the consultation document appear to be valid options worthy of further consideration and focus. Equally for gas (i.e. gas storage facility, onshore energy



storage and the gas mitigation package (gas storage, renewable gas, green hydrogen, and gas demand side response), but cost of supply needs to be considered further. Energy sources must be cost competitive. Furthermore:

- Commercially operated and privately based floating LNG, 'adaptable for green hydrogen', with strategic State storage, merits support.
- IDA Ireland does not agree with not supplying certain sectors with natural gas, unless there is a viable alternative, or where there is a transition phase where natural gas is supplied until the new alternative is available, at competitive cost.
- 'End user generation of electricity' and private wire based supply offer opportunities and merit consideration.
- Additional electricity interconnection should be supported and should be linked with building Ireland's export oriented offshore electricity generation industry.

Ireland should work towards having a broad range of renewable energy technologies, to minimise security of supply risks. All necessary measures, including emergency legislation, should be implemented, as required, to ensure that there is sufficient availability of electricity and gas.

Finally, the country must be effective in its delivery of new sources of energy, and speedy delivery is imperative. In this context, reform of the country's planning permission laws is urgently required, in order to bring forward start dates of new energy production investments. EU policy advocates Ireland expediting renewable energy projects. More investment is required in infrastructure and R&D.

Success in the timely delivery of energy supply projects (gas and electricity) is imperative for increasing and maintaining FDI in the country, especially manufacturing based investment, much of which is regionally based. IDA Ireland would welcome the opportunity to discuss its views further.



Appendix 1 - IDA Ireland Response to Consultation Questions (only selected questions are answered and responses are in blue font)

Consultation Questions

The Department of Environment, Climate and Communications would welcome your feedback on the Electricity and Gas Security of Supply Review. Respondents are requested to consider the questions asked in this consultation when submitting a response, but it is not necessary to provide responses to all questions. Please supplement your response with any relevant supporting information, evidence and/or analysis.

Risks

- 1. Are there any other security of supply risks that you can identify in addition to those set out in section 6?
- 2. If there are other risks that you have identified, could you outline some mitigation options to address the risk(s)?
- 3. Are the five shock scenarios that were considered, and the additional scenarios related to the Russian invasion of Ukraine, sufficiently broad?

Mitigation Options

4. Do you have any additional mitigation options that you think should be considered?

IDA Ireland supports floating LNG. The agency believes that there should be opportunity for a privately owned LNG business to operate on a commercial basis; this would provide more competition in the market, leading to lower pricing, lower risk, and access to private capital, knowhow, new technologies and innovation capabilities and resources. The LNG facility should be 'hydrogen adaptable' and capable of providing strategic storage for the State.

There may be merit in exploring how 'end user generation of electricity' could be developed further, at larger scale, including the placing for sale of electricity on to the grid. IDA Ireland believes that there should be very serious consideration given to permitting the private wire supply of electricity, over reasonably short distances; here, third parties would be permitted to supply electricity to neighbouring electricity intensive users.

5. Which gas supply mitigation options, if any, should be considered for implementation?

With respect to the gas mitigation options, gas storage facility, onshore energy storage and the gas mitigation package (gas storage, renewable gas, green hydrogen, and gas demand side response) appear reasonable options for further consideration and focus. However, cost of supply needs to be considered and options selected should be cost competitive.

IDA Ireland does not agree with not supplying certain sectors with natural gas (as suggested under the Natural Gas Demand Management option), unless there is a viable alternative, or where there is a transition phase where natural gas is supplied until the new alternative is available, at competitive cost. Curtailing supply to specific areas of the enterprise sector would not be supportive of enterprise development.

6. Which electricity supply mitigation options, if any, should be considered for implementation?

The mitigation options on electricity in the consultation document all appear to be valid options worthy of further consideration and focus. IDA Ireland is supportive of an additional interconnector to France and advocates that it should be linked to the development of offshore wind power generation. Battery storage and biomass based generation would be positive from a sustainability perspective.



7. What measures should be considered on the demand side to support security of supply of electricity and gas?

It is acknowledged that the current challenges on security of supply of energy are heavily supply based (e.g. planned new electricity generation has failed to materialise). Demand reduction does have a role to play in building security of supply, but it is important that it would be 'incentive driven' rather than 'penalty based'. There should be adequate financial resources and expertise available to support demand reduction and energy efficient programmes. Large Energy Users (LEU's) are contributing to demand reduction programmes through having Mandatory Demand Curtailment (MDC) agreements in place.

8. Do you have any views on how the mitigation options should be implemented?

If Ireland is to deliver new sources of electricity and gas without undue delays, then it will be necessary that the Irish planning regime is urgently reformed, and the process of approving planning permissions speeded up. Planning permission, environmental licence, and Maritime Area Consent (MAC) applications for energy investments need to be processed faster. Planning authorities should have sufficient resources and expertise. The new Maritime Area Regulatory Authority (MARA) needs to be up and running as soon as possible, and adequately resourced. Ireland's planning regime needs to be brought into line with competitor countries for FDI.

It will also be important that there is adequate public investment in infrastructure, to underpin the new sources. Significant new investment will be required in transmission and associated networks (e.g. electricity interconnectors, biomethane networks, adapting networks for green hydrogen, etc). The whole area of grant and financial supports for the new technologies will need to be considered and advanced.

As many of the source technologies are relatively new, there would be merit in increasing the amount of publicly funded research in those technologies; for example more research on building battery storage capacity, on reducing the cost of green hydrogen, on integrating green hydrogen into supply networks and end user applications, and hydrogen storage.

Policy Measures

- 9. Do you support the policy measures proposed in section 8 of the consultation paper? Yes. The proposed measures appear reasonable.
- 10. What further tools and measures do you think would contribute the most to Ireland's energy security of supply?

Security of supply must be treated as a national priority and all necessary measures, including emergency legislation, should be implemented, as required, to ensure that there is sufficient availability of electricity and gas. Adequate resources, financial and human, need to be present to underpin security of supply activity. All government bodies involved with building and advancing the country's future electricity and gas sectors should have ample resources and expertise (e.g. planning authorities).