

28 October 2022

Wholesale electricity and Gas Policy Division
Department of the Environment, Climate and Communications
29-31 Adelaide Road
Dublin 2
D02 X285

**RE: Review of the security of energy supply of Ireland's electricity and natural gas systems
consultation**

To whom it may concern,

Cork Chamber represents 1,200 members together employing 100,000 people throughout the city, metropolitan area and county. Our vision is to be a world-leading Chamber of Commerce, delivering on a progressive economic, social and sustainability agenda at the heart of a vibrant business community. Our direction is guided by our formal pledge to uphold the United Nations Sustainable Development Goals.

Cork Chamber welcomes this review as Ireland's energy security, or lack thereof, becomes ever more pronounced in the context of the Russian war on Ukraine, price hikes in the market, climate change and extreme weather events, and increasing demand and pressure being placed on the electricity grid. Security, sustainability and affordability must be the overarching themes within Ireland's future energy security policy, while seeking a diverse supply of energy sources, and reducing demand from all users through energy efficiency and demand reduction measures. The transition to a decarbonised energy system must remain in focus throughout this and future reviews.

We would like to commend both Cambridge Economic Policy Associates (CEPA) and the Department of Environment, Climate and Communications in undertaking this strategically critical consultation. We would like to put forth a series of recommendations that we ask to be fully considered. We remain at your disposal to share any additional insights from our member businesses to support this consultation.

Sincerely,





Reliance on UK storage is not an option

The bottom line is that UK storage is not Irish storage. Ireland should have its own storage facilities for gas. This long running deficit in Irish energy policy, given our dependence on gas for power generation, is unsustainable especially with the need to balance increasing renewables on the grid.

Probability of a high impact event

The probability of a high impact event, such as a complete end to Russian gas supplies, has moved from being a “low probability event”, as treated in the consultation and technical study, to a much higher probability event with the continuing war. This kind of interruption is no longer a “low probability event” and the assessment of scenarios and options should be recast and re-examined to reflect that.

Gas and electricity demand rising

Previous forecasts of increases in both electricity and gas demand in Ireland have been inaccurate, underestimating the level of growth in demand. To assess Ireland’s energy security, there should be a wider range of scenarios of demand considered.

Demand reduction

Demand reduction measures should be considered the cornerstone of all energy security and net zero plans. Supply side challenges often grab the headlines, but energy efficiency is the first fuel and must be at the forefront of Irish energy policy. As increasing demand puts pressure on our energy system, efforts should focus on incentivising users to shift demand away from peak use.

At a household level, there are several challenges that exist in retrofitting Ireland’s building stock at scale. Information campaigns, one on one advice, access to finance and the availability of a skilled workforce are key to overcoming some of the main barriers to a more energy efficient housing stock.

Generation capacity

It is very concerning that the projections for generation capacity for all the years to 2030 show more capacity exiting than connecting, something that should have been foreseen at a strategic policy and regulatory level. This is situation that cannot be allowed to occur again. While the situation was exacerbated by the war in Ukraine, the threat to energy security would have materialised even without the impact of the conflict.

EU gas infrastructure standard

It is extremely concerning that since January 2021 Ireland was unable to meet the EU gas infrastructure standard in terms of being able to meet a 1 in 20 high demand gas day. That no action was taken to address this, but rather that an exemption from the standard was received, is irresponsible. This lack of action has left us in a far more precarious position than we should have been with the onset of the war in Ukraine.

That Ireland is exempted from the EU gas storage requirement because it is not connected directly to an EU member state post-Brexit should have rang alarm bells and driven action to put storage in place rather than seeking an exemption from a key plank of energy security.

2030 Climate targets assumption

Basing the study solely on the assumption that Ireland will meet its emission reduction and climate targets to 2030 undermines the study's outputs and conclusions given to date there is no sign that the overall cut in national emissions to 2030 will be achieved. A new assessment which includes the underachievement of emission reduction and climate targets as a key assumption needs to be carried out to get an accurate picture of both future challenges and options on energy security.

Low demand scenario assumption gas

The technical study underlying the consultation founds its analysis on the assumption of a low demand scenario for gas to 2030 with some adjustments (*CEPA used the Low Demand scenario in Gas Network Ireland's 2020 Network Development Plan (NDP) as the baseline scenario for 2025 and extended this forecast by assuming the trend will remain the same to 2030.*) In contrast, for electricity CEPA used the median demand scenario. Given energy and gas demand have outstripped forecasts to date, it would seem sensible to consider a scenario that is beyond "low demand" as the business as usual scenario and consider more than one baseline scenario to reflect potentially higher demand outcomes. A new analysis should consider an assumption of a higher gas demand scenario before options are considered.

Capacity remuneration mechanism

Part of the reason why Ireland finds itself in an energy security crisis is because of the failure of capacity remuneration auctions to deliver additional new generating capacity. While this is under review by the CRU it should have formed part of this consultation given it is a core measure to ensure energy security.

Prolonged heatwave drought low wind risk

The range of risks considered appears unnecessarily narrow. An additional obvious risk not considered is a prolonged period of high temperatures, drought and low wind which would prevent proper cooling of power stations including gas and nuclear, with increased demand for industrial cooling/air conditioning and without renewable generation to fill the gap. This should be considered as a key risk scenario given recent prolonged heatwave, drought and low wind events affecting large parts of Northern Europe in recent years.

Future proofing options

Any energy security option considered should be future proofed given the level of investment involved. For gas storage facilities the government must ensure they are also hydrogen-ready and consider the role of ammonia in future decarbonisation and energy supply. It is clear that energy security will play a central role in Irish energy policy beyond 2030. While this review is focused on

the period up to 2030, it must also be developed in the context of the transition to a Net Zero 2050 future with a focus on energy system integration.

The development and deployment of green hydrogen and biomethane must be supported through proper infrastructure and financial measures including long-term support schemes such as feed-in tariffs. The forthcoming National Hydrogen Strategy is most welcome and support for developing this supply chain and the resultant activities must remain a priority. Similar support is needed for Anaerobic Digestion to develop the industry. A 'right to inject' policy that would grant biomethane plant operators the right to connect and inject biomethane directly into the gas grid should be introduced and would increase security of supply.

Policy integration

It is essential that this review and future energy security reviews progress in line with Ireland's climate and just transition, to avoid failure in meeting future targets and providing an affordable energy product to all communities. Therefore, energy security considerations should be integrated into the next Climate Action Plan and National Energy and Climate Plan, while also adhering to EU policy to avail of funding.

To further progress towards energy system integration, one government department should hold responsibility for energy, including for the both the gas network and electricity network operators. Currently Gas Networks Ireland is part of the Department of Housing, Local Government and Heritage, and Eirgrid is part of the Department of Environment, Climate and Communications.

REPowerEU funding and support

The Department's failure to apply for biomethane funding under REPowerEU, with a budget of €35 billion in funding, represents a loss and setback in the deployment of this industry, which is one piece of the puzzle in ensuring continuity of green energy supply in the long-term. Ireland is one of only two member states that did not apply for this funding. Deadlines for critical funding applications such as this cannot be missed in the future.

Expediting of options

The slow pace with which infrastructure projects in Ireland progress through the planning process to execution are inhibiting development of critical projects at the pace required to meet climate and security obligations. In this instance, considering the volatility of energy supply globally and the risk of threat of Russia cutting off energy supplies, planning and development of the chosen options must be expedited quickly. Reform of the planning system must reflect the urgent need to create a more sustainable and secure energy system.

Clarity on feasibility

The current language used within the consultation review document under feasibility of implementation of short-listen options includes 'possible', 'unlikely', 'likely', 'possible but uncertain', and so on. The consultation document would better inform the public if clarity was provided regarding the financial feasibility of the short-listed options.

Rating of options

The consultation would have been more useful if respondents were asked to rate the options both for favourability but also under a timescale of short, medium or long term. We have responded to in kind to the options below. Measures that can improve energy security and that can be deployed in the short to medium term have to be the priority at this point.

A diversity of mitigation options for both gas and electricity are key to our future energy security. Below we have provided the options which we are most in favour of, additional suggested options, and key considerations in their development.

Proposed Gas Supply Mitigation Options

Gas storage facility

Timeframe: Short term

UK storage is not Irish storage. Ireland should have its own storage facilities for gas. This is a long running deficit in Irish energy policy given our dependence on gas for power generation and balancing of increasing renewables on the grid.

Floating LNG storage

Timeframe: Short term

The development of a floating LNG storage back-up facility can act as a temporary insurance policy as the gas network transitions to renewables. Once Ireland has gained greater energy security and the hydrogen industry has developed, the LNG facility should transition to hold green ammonia converted from green hydrogen.

Demand Response

Timeframe: Short term

Demand response is an obvious option for the short term. Large energy users should be incentivised to shift their energy use away from peak times.

Additional interconnection with other countries

Timeframe: Medium term

We wish to offer another option to gas supply mitigation, the development of additional interconnectors with other EU countries, which was included in the original. We can no longer rely solely on the UK in this regard and must diversify our sources of supply.

Indigenous green hydrogen gas production

Timeframe: Medium and long term

A holistic view of our energy systems to tackle the energy crisis is essential through harnessing our natural resources and reducing our dependence on imported fossil fuels. The production,

transportation, storage, and end-use of green hydrogen are critical elements of providing a stable baseload of energy.

Proposed Electricity Supply Mitigation Options

Secondary Fuel Storage

Timeframe: Short term

Given the level of risk in our energy system, this is a critical backup in the event of a shock. To better align with CAP, less carbon intensive fuels such as synfuels derived from bioplastics should be considered. Suppliers who use less carbon intensive fuels should be awarded a premium to compensate for the additional costs of avoiding fuel oil.

Additional DSR and Batteries

Timeframe: Short term

DSR combined with battery storage are critical in the short term to balancing the grid as we await the development of medium- and longer-term options. Studies have shown a strong appetite for battery storage from small to large businesses and the public sector¹.

Additional electricity interconnection

Timeframe: Medium term

We are in favour of developing additional interconnectors, in particular with countries beyond the UK and France to improve security. We must look to countries with reliable sources of electricity which are not at a high risk of interruption. For example, over half of France's nuclear power plants are offline at present².

Conversion of a gas fired plant to hydrogen

Timeframe: Medium and long term

This is a favourable option for the medium to long term as the supply of indigenous green renewable energy sources is the ultimate goal for the electricity network. To ensure green hydrogen market development and commercial investment in infrastructure, the placement of additional hydrogen fuel cell generators at existing thermal sites should be considered.

Additional electricity storage – pumped hydro (YES)

Timeframe: Long term

Pumped hydropower storage plants have a number of advantages including, low operating costs, long service life and of course their renewable and sustainable nature. This development will further

¹ <https://theenergyst.com/demand-side-response-battery-storage-report/>

² <https://www.reuters.com/markets/europe/maintenance-five-french-nuclear-reactors-delayed-over-strike-2022-10-12/>

contribute to balancing the grid as the flow and generation of electricity can be easily controlled. However, considerations must be given to potential threats on water quality, landscape and biodiversity. Further, pumped hydro is weather dependent and extreme weather conditions such as droughts can severely threaten their production capacity. This poses further long-term risks as prolonged heatwaves and droughts are occurring with greater frequency and will potentially pose even greater risks in the coming years.

Additional dispatchable generation capacity– Biomass

Timeframe: Medium to long term

The production and deployment of biogas is a key component to decarbonising the grid and can act as a stable baseload in the face of the intermittent wind and solar. Sustainable feedstocks, however, are key to ensuring this industry develops in a sustainable fashion. The use of woodchips is not a viable or sustainable option. There is an abundance of sustainable feedstocks available via the agricultural sector which should be used for biogas generation. However, policy and financial supports are still needed to realise the full potential of this industry. Please see Cork Chamber's Anaerobic Digestion report³, which extensively deals with this topic.

³ https://www.corkchamber.ie/wp-content/uploads/2022/03/10793-Anaerobic-Digestion-report_final.pdf