
CRU Energy Demand Strategy

Response from the American Chamber of Commerce Ireland (AmCham) to the Commission for Regulation of Utilities' public consultation.

August 2023

The American Chamber of Commerce Ireland

The Voice of US-Ireland Business

The American Chamber of Commerce Ireland (AmCham) is the collective voice of US companies in Ireland and the leading international business organisation supporting the Transatlantic business relationship. Our members are the Irish operations of all the major US companies in every sector present here, Irish companies with operations in the United States and organisations with close linkages to US-Ireland trade and investment.

AmCham recognises the unprecedented challenges that Ireland now faces in relation to renewable energy generation and availability. If Ireland is to meet its net-zero targets significant progress will have to be made in a relatively short space of time. In this regard, AmCham also acknowledges the complexity of the challenge in meeting renewable energy demand.

There are almost 950 US companies in Ireland who directly employ over 210,000 people and indirectly support a further 167,000 jobs in the Irish economy. A policy approach focused on attracting inward investment to Ireland has delivered FDI which supports over 80% of Ireland's current corporation tax receipts and over one-third of Ireland's current income tax receipts. The presence of multinationals in Ireland also significantly benefits our indigenous business environment, our local communities, and supports balanced regional development. As reported by the OECD in 2021, one of every four multinational employees who moved job either went to work for an existing Irish company or set up a new one. US companies in Ireland, each year, support over 7,300 community projects, contributing over 600,000 work supported volunteer hours.

Ireland is fortunate to have, right across the country, some of the largest and most advanced manufacturing facilities in the world in sectors including medical technology, biopharmaceuticals, semi-conductors, automotive technology, and food/beverage as well as significant data centre investments. These facilities are supplying key global supply chains and markets – for example, four out of every five medical stents, saving lives around the world, are created in Ireland; even though Ireland only has 0.06% of the world's population it was the fifth biggest responder to the demand for key products due to Covid. These facilities have already committed to their production/output targets – lives around the world literally depend on those targets being met. Many of these facilities operate on a 24/7 basis and very carefully plan their shifts to ensure the people needed have sufficient notice. Most already implement best-in-class energy efficiency as energy is one of the biggest costs they have to manage – Ireland is already cost uncompetitive for energy – some AmCham member companies saw their energy costs rise by up to 200% over the course of 2022.

Concurrently, AmCham companies are committed to climate action. A recent survey of AmCham members found that 42% have committed to reaching carbon neutrality by 2030, with this rising to 64% aiming to reach this goal by 2040. Despite the numerous challenges businesses have faced in recent years, our members remain committed to achieving a more sustainable future.

MNCs in Ireland are determined to deliver on ambitious goals in diverse areas such as renewable energy, waste reduction, and carbon neutrality. AmCham members are focused on how best we can ensure that all sectors of the Irish economy adapt and contribute to meeting Ireland's climate action goals, including through consideration of our renewable energy policy, the adoption of pro-innovation pilot programmes across potential technologies, focusing on achieving net zero, and identifying opportunities to improve energy efficiencies. AmCham and

our members closely engage with Government and State agencies to address the various requirements needed to ensure that Ireland meets its net zero ambitions.

It is key that every sector of the economy plays its part in ensuring that targets laid out in Ireland's carbon budgets are met. The power sector in particular should take a leading role in doing so. However, it is also important to note that flexibility when it comes to energy demand would be incredibly disruptive to the outputs of many of the MNCs that operate here. It is crucial that the CRU continues to engage closely with industry so that the realities of an energy demand side strategy are fully realised.

Question Q1. What are stakeholder's views on the stated aims of the project? Are there barriers to achieving a successful outcome of implementing an energy demand strategy to meet project climate objectives (viz. carbon emissions reduction)? Are there areas that could benefit from greater policy and regulatory clarity? Are there areas where further alignment between the relevant entities (e.g. state agencies, corporate obligations) to coordinate and enable the delivery of an energy demand strategy would be beneficial?

The importance of coordination, as stipulated in the first priority cannot be overestimated. Efforts should be made to ensure that a collaborative approach is adopted, and this will require engagement with industry so that their needs are heard, and that businesses fully understand what is to be expected of them upon the rollout of the project. In this regard, AmCham welcomes the CRU's acknowledgement that *"it is important that a coherent and collaborative approach to the EDS project is adopted across all relevant stakeholder groups."*

The final aim of the project, to *"support the delivery of Ireland's transition to reach net zero emissions by 2050"* is strongly supported by AmCham. As noted above, AmCham members' ambitions go beyond that of Government in terms of reaching net-zero in a timely manner. Meanwhile Ireland's progress towards net-zero by 2050 is lagging. The Environment Protection Agency (EPA) predicts that Ireland will achieve a reduction of 29 percent in Greenhouse Gas emissions by 2030 compared to a target of 51 percent, and that the first two carbon budgets (2021-2030) will not be met, and by a significant margin.¹ All possible efforts must now be accelerated to ensure that Ireland meets its climate commitments. However, whilst a demand side strategy is important, Ireland will only be able to decarbonise if significant progress is made on the development of renewable generation.

AmCham notes that the approach adopted by the CRU, that of obligating electricity users to deploy additional generation capacity, is different to that which is being implemented in Europe. In Europe, the regulatory model that has been established makes National Regulatory Authorities responsible for the provision of resource adequacy, and for upholding a market

¹ EPA, <https://www.epa.ie/news-releases/news-releases-2023/ireland-projected-to-fall-well-short-of-climate-targets-says-epa.php>

that is able to deliver the adequate resources. Ireland therefore risks undermining its competitiveness within Europe by following the approach as laid out by the CRU, in terms of the responsibility that is being placed on energy consumers. AmCham suggests that this is kept in mind by the CRU in how it plans to implement its strategy. In this regard, AmCham notes that collaboration with industry will be essential in ensuring that any change is both practical and manageable.

Q2. What are stakeholder's views on the proposed scope (focus areas) and approach (phasing) of the project?

AmCham welcomes the mention of microgeneration as it relates to small energy users and would advocate for similar recognition of the potential of large energy users (LEUs) to feed into the grid via microgeneration. Enhanced microgeneration is a means by which Ireland can decarbonise the electricity sector, particularly in the absence of sufficient electrical and gas transmission capacity. More needs to be done to incentivise businesses to engage in microgeneration projects. The Clean Export Guarantee tariff is limited in its remuneration, and so is more relevant for smaller scale microgeneration projects. A similar scheme, more targeted at large businesses would go some way in encouraging the development of more microgeneration projects in Ireland. AmCham suggests that this should be incorporated into the scope of the EDS.

There are several things to consider when approaching scope area 3, new demand connections, and AmCham welcomes the dedication of a separate consultation document to this area.

As noted above, there are a vast and diverse amount of LEUs operating in Ireland and contributing positively to the Irish economy. It will be crucial that the proposed net zero emissions requirement for new LEU connections takes into consideration this diversity. AmCham suggests that the CRU permits a number of different pathways to demonstrate that a business site will be net zero. There are many different ways that business can reduce their operational emissions, and this should be reflected by the CRU. Important to mention here also is that the net-zero requirement for new connections should apply only to new demand and not retroactively to existing LEU demand.

As noted above AmCham members are dedicated to sustainability, and many are actively engaging in projects that will considerably reduce their emissions whilst also benefitting Ireland as a whole in reaching its climate commitments. This should be recognised by the CRU. AmCham suggests that credit is given to consumers who develop energy storage resources or who implement demand response to help reduce emissions, and these actions should additionally be accounted for in the net zero emission assessments.

There needs to be a greater understanding of the practicalities of this initiative, for example smart metres and demand management by varying tariffs make sense in theory, but there is limited insight into how these will operate in practice. The document further mentions dynamic pricing and energy sharing, but again lacks substantial detail. The suggestion that industry could change production schedules fails to take into account the practicalities of operating large sites, with 24/7 shift patterns with many needing to maintain batches at strict temperatures. Power interruption may have lasting impact in terms of potential damage to industrial tools. Several industries need a minimum amount of gas for production continuity. If production is stopped, it cannot be easily restarted without significant delays, regulatory approval, and costs.

It is further unclear what is meant by “*transferring data processing to alternative facilities*”, whether this means to elsewhere in Ireland or to abroad. The suggestion that investment should be directed away from Ireland is something that AmCham members would question.

Q3. What are stakeholder’s views on energy demand profiles and the challenges arising from the associated carbon emissions? Considerations may include other information and data that should be included. Or challenges, such as new demand.

The energy demand profile notes largest growth in energy demand as coming from LEUs. As AmCham has outlined in previous submissions to the CRU, LEUs are most likely to have stable and predictable energy needs.²

In the context of security of supply, any increase in demand by LEUs is foreseen and, as such, should and can be planned for. When it comes to decarbonisation LEUs can be part of the solution. Several LEUs are working on technology that would allow the energy storage systems used for backup power to help address any variability within Ireland’s power grid. For example, innovation in relation to grid-interactive UPS technology would also allow for backup energy storage systems within facilities to send power back to the energy grid. The potential exists for such systems to significantly reduce Ireland’s carbon emissions whereby they could be utilised to reduce the dependence on fossil fuels, and therefore would contribute to reducing Ireland’s overall emissions. Whilst it is fair to point out the amount of energy that LEUs need, this shouldn’t be presented in isolation from the realities of how these users operate.

Q4. What are stakeholder’s views on the definition for demand flexibility? How should demand flexibility be measured and reported on an ongoing basis? What metric (annual peak system demand / total annual energy consumption / other?) should be used. How

² AmCham Ireland response to CRU Tariff consultation - August 2022.

should compliance with the CAP targets be assessed for demand flexibility in 2025 and 2030?

AmCham sees no major issues relating to the CRU's definition of demand flexibility, as detailed in the consultation paper. However, the provision of a more in-depth definition, including clear examples would be beneficial to ensure that what the CRU means by demand flexibility is fully understood.

Q5. What should be the areas of focus for demand flexibility? Are there any policy or regulatory barriers to the introduction of technologies that could be useful in providing flexibility? What incentives should be considered?

Greater demand flexibility will be important in managing the variability of renewable power generation. With the right strategy and processes in place, LEUs can contribute substantially when it comes to grid reliability. As mentioned above, a nuanced approach must be taken in relation to LEUs, as they include a range of different business models.

In order to encourage demand flexibility from LEUs, incentives that will permit businesses to operate more flexibly need to be put in place. For example, it will be important that LEUs are not subject to imbalance charges.

AmCham further suggests the establishment of tailored demand response products that take the performance and reliability of LEUs into consideration. LEUs need considerable forewarning if they are to adjust their output. It will therefore be essential that measures to enable an activation notice of several hours, as much as 24 hours in some cases, are enacted. In doing so LEUs who need to change the level of available capacity and the number and duration of events must be accommodated for.

In establishing its EDS, AmCham suggests that best practice models used elsewhere are consulted. For example, Denmark operates a voluntary 'Limited Grid Access Tariff' for LEUs. In doing so, businesses willing to accept interruption would be compensated accordingly. By introducing such a scheme, maximum power levels to be included in grid dimensioning can be reduced, lessening the need for expansion and thereby costs.

Q6. What are stakeholder's views on the attached ESNB document, 'Scenarios for 15-20% Flexible System Demand (DOC-120423-HRS)', which has been published as part of this four document package?

ESNB's "Central Scenario" is heavily dependent on LEUs "making significant investments in the behind meter resources and operational changes", as well as "rapid" emissions reporting. The CRU is evidently asking a lot from LEUs, which may impact Ireland's competitiveness. At the same time, they note the importance of "continued investment by multinational technology

and pharmaceutical industries in Irish facilities". In order to continue to attract investment to Ireland, the CRU needs to better understand the impact that the implementation of this strategy will have on LEUs. A greater degree of clarity regarding what will be expected of LEUs, how much this will cost, and what incentives will be put in place, is needed.

Leading on from this, AmCham regards the "*Industry Led Scenario*" as misguided. Whilst evidence is cited for flexibility of peak demand, the document notes that this is "*pending the customer's investment and operational decisions*". As noted above, these statistics fail to take into account the realities of achieving such levels of flexibility and the disruption they may pose to operations.

AmCham appreciates the document's acknowledgement that there is "*a growing body of international research*" that supports the notion that MNCs can play a core role in "*accelerating the energy transition and, indeed, facilitating the wider decarbonisation of society*". AmCham members are very much reflective of this research and have shown a continued dedication to decarbonisation. Again, AmCham would stress the need for a greater dialogue between Government and industry so that the work they are doing, and the practicalities of the implementation of demand flexibility are fully understood.

Q7. Comments are invited from respondents on any other associated areas that they consider materially relevant to the project.

AmCham notes that electro-intensive industries require stable and predictable power in large quantities at all times. Many AmCham members have implemented measures to lessen their dependency on the grid whilst using renewable sources of energy. For example, many companies incorporate on-site generation through the likes of rooftop solar PV. These onsite projects do not provide the quantity of energy that is needed to facilitate full scale production, however. In order to produce the adequate amount of energy onsite, additional land would need to be developed. In this regard it would be beneficial for both the grid and LEUs if there was greater flexibility in terms of locating renewable and storage projects in sites where they are optimised for their output and the needs of the grid.

AmCham would further highlight the importance of Corporate Power Purchase Agreements (CPPAs) in helping LEUs to support additional renewable energy generation. There is significant room for improvement with regard to the procedures related to CPPAs in Ireland. The need to match annual demand with an equivalent volume of renewables, in the context of the variable generation of wind and solar projects, requires over procurement, which in turn creates price risks for consumers as they must sell excess generation on spot markets at uncertain prices. In order to avoid this, AmCham suggests the implementation of a more flexible approach to achieving net-zero which takes into consideration the contribution of other resources such as storage and flexibility.

Again, Ireland's CPPA market compares unfavourably to that in other EU countries, as it is not as developed. Ireland's high grid connection costs, uncertainty over connection timelines, restrictive planning guidelines, high business rates, limits on planning permission lifetime, high levels of renewable curtailment, and a complex and long development process result in a more expensive and timely process.

Finally, AmCham suggests that the CRU allow multisite customers with onsite renewable generation, and demand side flexibility, to trade energy at no cost across the grid between sites. At present, AmCham members who are producing surplus renewable energy are selling this to the grid cheaply, and then buying it again at other sites at full market price with no renewable element included. Steps should be taken to allow for a more direct and cheaper exchange of energy between sites of the same company.