

# Sustainable Energy: Powering Ireland into the Future

American Chamber of Commerce Ireland (AmCham) position paper on sustainable energy.



# **Key recommendations**

### A Sustainable Energy Roadmap:

- The development of a roadmap for business, building on the Climate Action Plan, with defined KPIs and concrete timeframes.
- Accelerated action to facilitate Ireland in reaching its sustainability goals.
- A more holistic approach to energy.
- Greater collaboration between industry, research, and Government.

# Energy Efficiency and Reduction:

- Clarity on Ireland's progress in meeting its climate targets, including a roadmap with periodic updates.
- A reinvigorated all-of-government, and all-agency communication campaign to build awareness of available supports, and further build public awareness of the importance of energy efficiency.

### Renewable Electricity:

- The Maritime Area Regulatory Authority and An Bord Pleanála are given sufficient resources to accelerate Ireland's planning process.
- Ireland's planning processes are streamlined so that the infrastructure required to meet Ireland's sustainability goals can be delivered in a timely manner.

### *Electrification of Heat:*

• Increased electrical import capacities for large industrial users and facilitating those large users with variable rather than fixed import capacities.

### Upgraded and Expanded Power Grid:

- An increase in capital spending on the power grid system, delivered in a timely manner.
- Alliances and collaboration between public, private and governmental agencies to work collectively towards a common energy goal.
- Enhanced interconnection and cross-border sharing of electricity.

### Hydrogen:

- The speedy delivery of a hydrogen strategy for Ireland in the short to medium term.
- Greater engagement with industry to examine feasible mitigation measures.
- The development of a long-term strategy focused on self-sufficiency and exports.
- Collaboration between industry, research, and Government.

### Biomethane:

• The development of a comprehensive strategy on the production of biomethane in Ireland.



# Green Finance:

• Greater visibility given to the initiatives in place to support the growth of green finance in Ireland.



# **Sustainable Energy – Meeting our Commitments**

Meeting our sustainability commitments is a core priority for AmCham members. AmCham supports Government's commitment to reach net zero by 2050, as well as the EU's target of reducing greenhouse gas emissions by at least 55 percent by 2030.

AmCham members are at the forefront of driving Ireland's sustainability transition. A recent survey of AmCham members found that over 40% have committed to reaching carbon neutrality by 2030, with an additional 20% 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.

In this position paper, AmCham will address the ever-pressing energy crisis, an issue that is of primary importance to AmCham members. 96% of members say that certainty with regard to energy cost and supply is important to maintaining FDI employment in Ireland. The current energy crisis has highlighted the urgent need to grow Ireland's indigenous renewable energy base. This paper will focus on the opportunities that exist to advance sustainable energy, with a particular emphasis on efficiency, electrification, biomethane, and hydrogen production.

# A Roadmap for a Sustainable Ireland

Businesses need certainty in order to successfully navigate Ireland's transition to net zero. There is an urgent need for clarity on Government strategy on energy security, affordability, and sustainability. In this regard, Government's commitment to annual climate action plans is very much welcome. Building on Government's Climate Action Plan, a concise roadmap for business with defined KPIs and concrete timeframes would be beneficial in supporting businesses given their need to plan ahead. AmCham therefore welcomes the 2023 Climate Action Plan's aim to "develop a monitoring and reporting system to track the KPIs set out", and looks forward to this coming into place in a timely manner.



Questions remain for industry in terms of the best ways in which to combat carbon emissions. There is a need for concrete guidance from Government on best practice going forward. Following on from this, there is a pressing need for meaningful action to accompany the Climate Action Plan and the various strategies that are already in place, as well as a holistic approach to address the energy issue in an efficient and integrated manner. The provision of a cohesive strategy and action from Government in this regard will be essential in ensuring resources are put to best use.

AmCham further notes that Ireland's ambitions should not be curtailed by the limitations of technology of today, but rather work towards new greener technologies needs to be supported and acknowledged by Government. There is need for greater collaboration between industry, research, and Government in order to make best use of the knowledge and opportunities that exist in this area.

### AmCham recommends:

- The development of a roadmap for business, building on the Climate Action Plan, with defined KPIs and concrete timeframes.
- Accelerated action to facilitate Ireland in reaching its sustainability goals.
- A more holistic approach to energy.
- Greater collaboration between industry, research, and Government.

# **Energy Efficiency and Reduction**

There is a pressing need to navigate and accelerate Ireland's indigenous renewable energy production. However, energy efficiency and reduction of consumption is equally important in reducing Ireland's emissions.

AmCham recognises the considerable progress achieved by Government and the relevant State agencies to date, including the introduction of new legislation for the Energy Efficiency Obligation Scheme, and the EXEED grant scheme which came into place last year. However more needs to be done, urgently.

AmCham would welcome a clear roadmap showing how the various energy efficiency initiatives will support Ireland on its journey to delivering a greener economy and society. For example, more regular updates on meeting targets in the National Energy Efficiency Action Plan (NEEAP) (last updated in January 2021) are needed. Meanwhile there is both a Public Sector Energy Efficiency Strategy and a Resource Efficiency Action Plan to guide public sector energy efficiency, however, updates in relation to the progress of these initiatives have not been available in recent months. Much greater clarity is therefore needed regarding roadmaps to the future, and evaluations of Ireland's progress. There is a need for information



on the supports available to both businesses and citizens to be more widely communicated and more easily accessible.

The SEAI recently announced that despite Ireland's need to reduce emissions by 4.8 percent, in 2021 there was a 5.4 percent increase in energy emissions. The provision of such metrics in a timelier manner would be greatly beneficial, given the need to examine past outcomes and the importance of that data in informing forthcoming actions. Increased urgency on receiving this data is essential: it will provide momentum to do more. It is therefore of the utmost importance that the 2023 Climate Action Plan's "annual climate action planning and reporting cycle" is introduced as is set out in the plan.

For Ireland to meet its climate targets there is a need for widespread societal change, and key to this is behavioural change. Noting the work undertaken in relation to communications, a redoubled focus on a dedicated communication strategy, to the same level we witnessed with Covid-19 messaging, at both a local and national level is one way to facilitate the change in attitudes which will be essential to driving Ireland's green transition. In this regard, AmCham appreciates the inclusion of a dedicated section in the 2023 Climate Action Plan on citizen engagement and the acknowledgement that "clear, coherent, and consistent communications from Government are viewed as essential to provide a trusted source of information about climate-related issues to all sectors of society. Communications must provide direction and quidance to all stakeholders on what responsibilities they have in delivering climate action."

### AmCham recommends:

- Clarity on Ireland's progress in meeting its climate targets, including a roadmap with periodic updates.
- A reinvigorated all-of-government, and all-agency communication campaign to build awareness of available supports, and further build public awareness of the importance of energy efficiency.

# **Renewable Electricity**

Whilst the acceleration of biomethane and hydrogen production will be essential in areas that are difficult to decarbonise, electrification will be key to Ireland's energy transition. Ireland's Climate Action Plan 2021 included a number of ambitious but necessary targets, including a legally binding commitment to net-zero greenhouse gas emissions no later than 2050, and a reduction of 51% by 2030, these were reaffirmed in the 2023 Climate Action Plan.

One key measure in the plan is to increase the proportion of renewable electricity to up to 80% by 2030, including an increased target of up to 7 Gigawatts of offshore wind. This will be

<sup>&</sup>lt;sup>1</sup> SEAI: Energy in Ireland 2022 Report



crucial if Ireland is to move away from fossil fuels and towards the electrification of transport, heat and other areas.<sup>2</sup>

Offshore wind development will be critical to assisting the electrification of Ireland. Ireland has a huge capacity for offshore wind production but lacks the vital infrastructure to make the most of its potential. Barriers in relation to the development of offshore wind must be removed urgently to accelerate the delivery of offshore projects that can dramatically increase renewable energy provision in this decade. Further, ensuring our ports have the necessary infrastructure to support the construction of offshore wind projects will be essential, given that just one port on the island is currently ready to support the development of offshore wind farms.<sup>3</sup>

Necessary wind farm development is not happening at scale due to the lack of a fit-forpurpose planning framework. The planning and permitting phase of an onshore wind farm and grid connection typically takes four years or more, not including appeal or judicial review. With Ireland's 2030 targets only seven years away, delays must be addressed. In this regard AmCham looks forward to the progression of planning reform legislation.

It is essential that Maritime Area Regulatory Authority (MARA) and An Bord Pleanála are given sufficient resources to make the transition of responsibilities to MARA as smooth as possible and to successfully navigate new legislation. There is a need for funding, clarity, and streamlined planning processes to accelerate the development of infrastructure that is crucial for Ireland to meet both its general energy demands and climate action goals.

### AmCham recommends:

- The Maritime Area Regulatory Authority and An Bord Pleanála are given sufficient resources to accelerate Ireland's planning process.
- Ireland's planning processes are streamlined so that the infrastructure required to meet Ireland's sustainability goals can be delivered in a timely manner.

### **Electrification of Heat**

Heat demand in Ireland makes up about 40% of total Irish energy usage, and residential home heating accounts for 25% of energy-related CO2 emissions.<sup>4</sup> The electrification of heat is a key target in Ireland's Climate Action Plan, which calls for 600,000 heat pumps to be installed by 2030. Ireland's renewable energy share in the heat sector last year was 6.8%, compared to the European Union average of 22%. More urgently needs to be done to facilitate the

<sup>&</sup>lt;sup>2</sup> Climate Action Plan 2021: <a href="https://www.gov.ie/en/publication/6223e-climate-action-plan-2021/">https://www.gov.ie/en/publication/6223e-climate-action-plan-2021/</a>

<sup>&</sup>lt;sup>3</sup> Wind Energy Ireland: <u>National Ports Study, September 2022</u>

<sup>&</sup>lt;sup>4</sup> ESRI: https://www.esri.ie/system/files/publications/RB202213\_2.pdf



electrification of heat in Ireland. AmCham welcomed the announcement of a National Retrofit Programme in February of 2022, however yearly targets of the scheme have not been met.<sup>5</sup>

From an industry perspective, electrification of heat is a means for effective decarbonisation of manufacturing operations located in Ireland. Global corporations are increasingly setting more ambitious environmental sustainability goals, and Ireland must position itself to enable the achievement of those goals. Electrification of heat supported by the continual growth in indigenous renewable electricity is a clear path to achieving this. As noted in the above section, there is a need for urgent action to ensure that Ireland can produce enough electricity to drive the green energy transition. This is the first step in ensuring that the wide scale electrification of heat is possible.

Alongside availability, it is crucial that the tools necessary to assist this transition are affordable. In this regard, AmCham welcomes the recent announcement from Government that the support for heat pump installations for industry will be increased from 30% of costs to 40% of costs.

A third pillar that is crucial to the electrification of heat is the need for the electrical import capacities for large industrial users to be increased. Doing so would aid security of energy supply for the economy as it displaces imported fossil fuels, whilst further providing for a better environment through cleaner air with a sustainable energy source. Policy change is needed to enable the full realisation of this potential.

AmCham recommends:

• Increased electrical import capacities for large industrial users and facilitating those large users with variable rather than fixed import capacities.

# **Upgraded and Expanded Power Grid**

The backbone to facilitating Ireland's decarbonisation is an upgraded and expanded power grid. The Transmission System and Distribution Grid are critical elements in our sustainable transition. The traditional grid supports a one-way flow of power from centralised sources, such as coal and gas power stations to points of consumptions, such as industry. It offers limited flexibility and openness to support emerging renewable technologies and systems such as hydrogen valleys.

The successful integration and deployment of clean-energy investment will depend heavily on the evolution of our traditional, large-scale grid infrastructure to a smarter one incorporating highly distributed grid edge intermittent loads, designed to act like traditional

<sup>&</sup>lt;sup>5</sup>Joint Committee on Environment and Climate Action debate -

Tuesday, 11 Oct 2022, Retrofitting Schemes: Sustainable Energy Authority of Ireland



loads. This innovation will not come cheaply, nor will it be done alone. The energy transition will require a dramatic increase in capital spending on the power grid system, delivered at an unprecedented pace.<sup>6</sup> It is estimated that European distribution power grids will require an investment of between €375-425bn in 2020-2030 to be fit for transformed power system.<sup>7</sup> In addition to investment, alliances and collaboration between public, private and governmental agencies will be required to work collectively towards a common energy goal. AmCham members are open and willing to act in this regard.

There is a need for more interconnection and cross-border sharing of electricity. AmCham therefore welcomes the progress that is being made on the Celtic Interconnector. It is through increased solidarity that clean renewable energy resources, where abundant, can be harnessed to their full potential and shared through electricity interconnectors across Europe ultimately facilitating the energy transition. The European Network of Transmission System Operators (ENTSO-E) has estimated that today's interconnection capacity must double by 2030 and REPowerEU plans to inject an additional €29 billion into power grids, but current plans only meet three-quarters of the growth needed between 2025 and 2030.8 Decarbonisation goals require significant efforts in electrification and there needs to be a clear roadmap to show how Ireland's interconnection will grow and develop to 2030 and beyond.

### AmCham recommends:

- An increase in capital spending on the power grid system, delivered in a timely manner.
- Alliances and collaboration between public, private and governmental agencies to work collectively towards a common energy goal.
- Enhanced interconnection and cross-border sharing of electricity.

# Hydrogen

Ireland has one of the best offshore wind resources in Europe, and therefore a huge potential for large scale hydrogen production. However, hydrogen development in Ireland has been notably slower than its European counterparts. Germany and Portugal both launched their hydrogen strategies in 2020. Meanwhile the UK launched its hydrogen strategy in August 2021 and has made considerable progress on sites such as the HyNet North-West hydrogen valley.

<sup>&</sup>lt;sup>6</sup> McKinsey: https://www.mckinsey.com/capabilities/operations/our-insights/global-infrastructure-initiative/voices/upgrade-the-grid-speed-is-of-the-essence-in-the-energy-transition

<sup>&</sup>lt;sup>7</sup> Balkan Green Energy News: https://balkangreenenergynews.com/distribution-grids-need-eur-375-425-billion-through-2030-to-be-fit-for-transformed-power-system/

<sup>&</sup>lt;sup>8</sup> Euractiv: https://www.euractiv.com/section/energy/opinion/doubling-electricity-interconnection-is-the-european-peace-project-for-this-decade/



Key to the successful rollout of hydrogen will be the generation of demand. There is a need for collaboration between business, research, and Government in this regard. One way such collaboration has proved impactful in Europe is the emergence of hydrogen valleys. Hydrogen valleys are localised ecosystems that link research, production, and distribution with various end-users such as transport and industry.

A report published by the European Union, along with The Fuel Cells and Hydrogen Joint Undertaking (FCH JU) notes how "Hydrogen Valleys are the pioneers of this market and ultimately the steppingstone towards the full rollout of a new hydrogen economy — and the industrialisation of the associated technologies simultaneously." AmCham believes that greater engagement between policymakers and industry, as well as with researchers, would be beneficial in examining this "steppingstone" as a potential feasible mitigation measure.

AmCham looks forward to the publishing of Ireland's Hydrogen Strategy in the months to come.

Looking beyond the immediate need to address energy security, Ireland should remain ambitious in its targets to decarbonise, but further still to reach its export potential. In the future Ireland could generate enough hydrogen to export to countries with less ability to produce the gas. This presents a real opportunity for Ireland to position itself as a leader on hydrogen, and moves should therefore be made to facilitate this. A long-term strategy focused on self-sufficiency and exports is needed to coincide with the short to medium-term strategy to establish security of supply. Key to ensuring that hydrogen is a viable option in the future is the acceleration of offshore wind development in Ireland, which as noted above depends on the reform of Ireland's planning processes.

### AmCham recommends:

- The speedy delivery of a hydrogen strategy for Ireland in the short to medium term.
- Greater engagement with industry to examine potential, feasible mitigation measures.
- The development of a long-term strategy focused on self-sufficiency and exports.
- Collaboration between industry, research, and Government to advance the rollout of hydrogen.

### **Biomethane**

Ireland's energy policy, up to very recently, has not had a focus on the development of a biogas industry, a position that is almost unique in Europe. Ireland is one of just two European

<sup>&</sup>lt;sup>9</sup> Fuel Cells and Hydrogen 2 Joint Undertaking: https://www.clean-

 $hydrogen. europa. eu/media/publications/hydrogen-valleys-insights-emerging-hydrogen-economies-around-world\_en$ 



countries which did not apply to a €210bn funding programme aimed at reducing the EU's dependency on Russian gas, including a €37bn segment allocated to biomethane. <sup>10</sup> Ireland lags behind the rest of Europe in producing biomethane, for example, Denmark, with a population similar to Ireland and a large agricultural industry, derived 25% of its 2021 gas needs from biogas, and has set targets of 75% by 2030 and 100% by 2034. <sup>11</sup>

Industry experts note the significant sources of suitable biomaterial in the region and the competitive advantage that Ireland has in growing grass but there is an absence of national measures in place to support this compared to elsewhere in Europe. Up to 11% of current natural gas demand in Ireland could be substituted with sustainably produced biomethane by 2030, with the correct policy supports in place. Indeed Ireland, with its grass-based agricultural systems, has the highest potential for biomethane production per capita in the EU, and a proven business case.

AmCham welcomes the announcement that the renewable fuel obligation scheme for the heat sector is set to commence by 2024, along with the increased 2030 target for indigenous biomethane production to 5.7 TWh. <sup>12</sup> Government now needs to bring forward a concrete strategy for the production of biomethane in Ireland in order to facilitate the renewable fuel obligation scheme and to aid Ireland in meeting its 2030 targets. Guidelines for biomethane production are essential, as the climate change performance of biomethane varies considerably depending on feedstock, technology, and system boundaries.

### AmCham recommends:

• The development of a comprehensive strategy on the production of biomethane in Ireland.

### **Green Finance**

Green finance goes hand in hand with technological innovation in reducing carbon emissions and mitigating climate change.

The work that can be done via innovation to increase renewable energy production is inevitably enhanced by higher levels of green finance. In this regard, AmCham welcomed Government's identification of sustainable finance as one of its priorities within its Ireland for Finance 2025 roadmap, and the establishment of Ireland's sustainable finance centre of excellence in 2022.

<sup>&</sup>lt;sup>10</sup> Dáil Éireann debate -Thursday, 20 Oct 2022 Vol. 1028 No. 2

<sup>&</sup>lt;sup>11</sup> Bioenergy News: <a href="https://www.bioenergy-news.com/news/denmark-celebrates-record-amount-of-biogas-ingas-system/">https://www.bioenergy-news.com/news/denmark-celebrates-record-amount-of-biogas-ingas-system/</a>

 $<sup>^{12}</sup>$  Farmers Journal: <a href="https://www.farmersjournal.ie/renewable-heat-obligation-confirmed-for-2024-722577#:~:text=A%20new%20renewable%20fuel%20obligation,production%20to%205.7%20terawatt%20hours.">https://www.farmersjournal.ie/renewable-heat-obligation-confirmed-for-2024-722577#:~:text=A%20new%20renewable%20fuel%20obligation,production%20to%205.7%20terawatt%20hours.



AmCham encourages the further development of Ireland's work in this space. Similarly, to the energy supports piece, AmCham asks that more is done to promote this initiative to ensure businesses can make the most of the resources that are already being provided by Government agencies.

# AmCham recommends:

• Greater visibility is given to the initiatives in place to support the growth of green finance in Ireland.