



THE IRISH ACADEMY OF
ENGINEERING
ENGINEERING & TECHNOLOGY

THOUGHT LEADERSHIP IN A TIME OF GREAT CHANGE

IRISH ACADEMY OF ENGINEERING

THOUGHT LEADERSHIP IN A TIME OF GREAT CHANGE

WWW.IAE.IE

IAE History

- ▲ The Irish Academy was founded in 1997 as a non-profit company limited by guarantee by a group of senior members of the Institution of Engineers of Ireland (now Engineers Ireland).
- ▲ It is distinct from and independent of Engineers Ireland and is an all-Ireland body. It is a registered charity and a CLG (CRA 20068455, CHY 18046 and CLG 439234).
- ▲ It has just celebrated its 25th Anniversary.
- ▲ Its Constitution was updated at AGM 2021 to ensure compliance with the provisions of the Companies Act 2014 and the Charities Act 2009. These changes were tabled and approved at the AGM 2021 and following submission by our external auditor and corporate governance specialist Mazars. Mazars have also received the approval of the Charities Regulator.

Worldwide perspective

Academies of Engineering and Technology throughout the world are a feature of all developed economies providing independent expert advice to governments and policy makers. The aim of the Irish Academy of Engineering is to advance the wellbeing of the country by marshalling the expertise and insights of eminent engineers to provide independent advice to policy makers on matters involving engineering and technology on a pro bono basis.

1. The Irish Academy of Engineering has been accepted into the European Council of Applied Sciences Technologies and Engineering (known as Euro-CASE) and, more recently, the Worldwide International Council of Academies of Engineering and Technological Sciences (CAETS). Such acceptance is only made following a peer review and provides important independent validation for the Irish academy and of the standards applied in its work.
2. The Irish Academy of Engineering is a respected and active member of the international fraternity of engineering academies.
3. It is unique in being an all island Academy with members from ROI and NI.

Our Vision

- ▲ The vision of the Academy is to contribute to the social, economic and technological development of the island of Ireland, using the unique collective experience and knowledge of its members.
- ▲ Our mission is to provide an expert and independent resource to key decision-makers and the public on important issues requiring technological-economic solutions and a platform for informed debate and discussion.
- ▲ The Academy is a registered charity that is governed by a member-elected Council and Standing Committees. Day-to-day activities of the Academy are managed by the Chief Executive and the Officer Board.

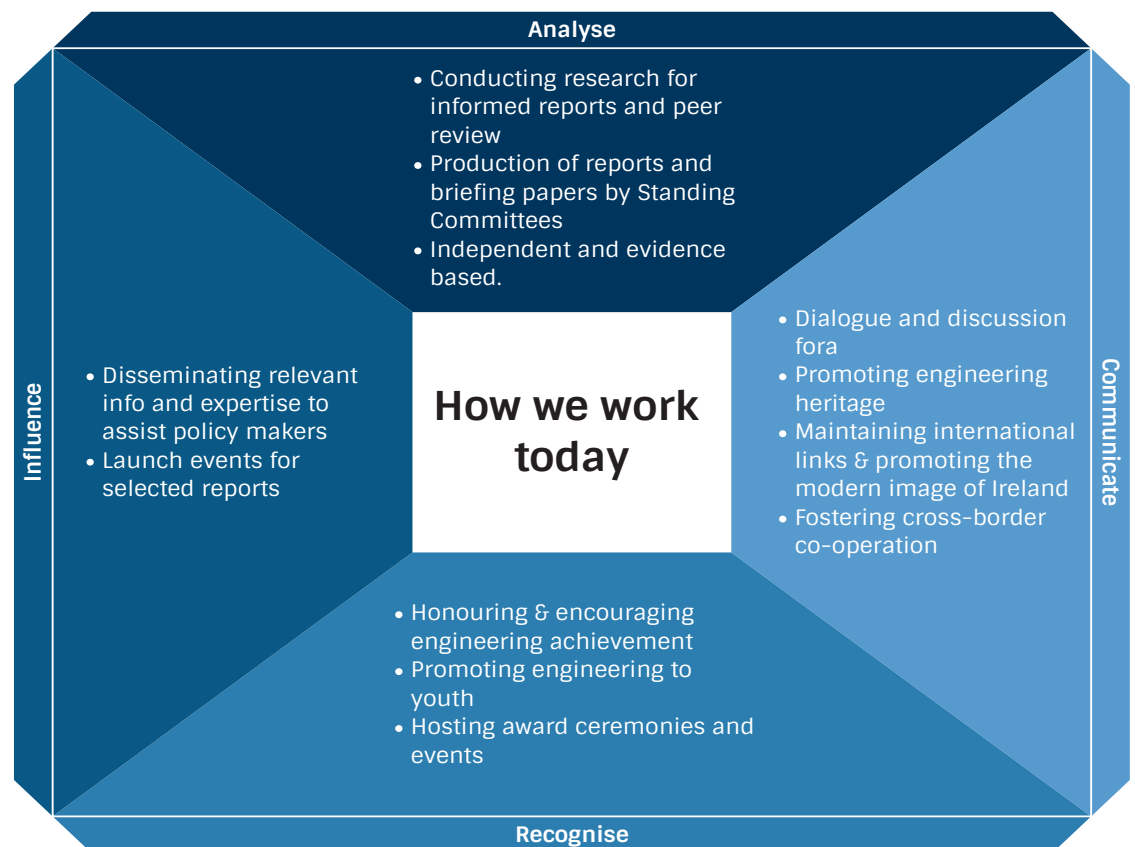
What we plan to do

- ▲ Output is largely voluntary to date and investment low, whereas most developed countries invest heavily in Engineering Academies.
- ▲ Now seeking to significantly increase scope of activity to meet a growing need from government and society generally for independent and expert guidance on solutions to engineering challenges.
- ▲ Plan to increase impact across the board by augmenting our research and hosting quality events that inform, encourage debate and honour engineering achievement.

How our Academy funds it's work

- ▲ Members Annual Subscriptions
- ▲ Corporate Patrons
- ▲ Philanthropy
- ▲ We have c. 20 Patrons/Philanthropists with one third funding in the range €3K-€5K, one third in the range €6K to €10K and one third in the range €11K-€15K

How we work today



Our Members

- Membership follows peer-election and currently stands at 180.
- Members, or Fellows, are Irish engineers of distinction, drawn from a wide range of disciplines and from all regions across the island of Ireland.
- All are, or have been, leaders in their field and give of their time and expertise on a pro bono and independent basis in the public interest.
- Academy members are drawn principally from Academia, the Public Sector, Industry and Engineering Consultancy
- In 2021, 50% of elected Fellows were female - addressing historic gender balance since Academy formation 25 Years ago
- The Academy's membership puts it in a unique place to provide thought leadership in the engineering and technology arenas.
- Diverse backgrounds and knowledge harnessed to support and inform evidence-based decision-making in the public interest
- Bilateral relations with other academies including USA, UK, China, Germany, Sweden and New Zealand

Key activities of the Academy

The Academy provides thought leadership on key challenges by stimulating debate on the issues and exploring possible solutions to the problems. That there is a need for such leadership cannot reasonably be in doubt - the Academy, in common with many others, is acutely conscious that we live in a time of great change, a critical time for the future of mankind and of the natural environment in many respects.

We aim to achieve our objectives by employing the unique resource that is our membership. By applying the accumulated knowledge and experience of our members the Academy aims to inform public debate on key engineering issues and to provide unbiased and independent expert advice to policy-formers and decision-makers in areas where technology plays a key or central role.

There is no other equivalent body undertaking

this function in the Irish context. The economic and social spheres are served by the ESRI and NESC while the Royal Irish Academy ably addresses the life and other sciences.

Unlike many of its sister academies, or indeed the ESRI or the RIA, the Irish Academy of Engineering receives no State funding and relies on a mix of subscriptions and patronage to finance its activities.

Amongst the key outputs of the Academy are its short reports and papers. These are designed to provide a succinct but well-researched briefing to the reader - whether technically trained or not.

The Academy is the awarding authority for the Parsons Medal. This is Ireland's leading award for engineering excellence named in honour of the great 19th century Irish engineer Sir Charles Parsons, inventor of the steam turbine.

Values

In producing its papers or other sources of information the Academy operates in accordance with a set of values:

- ▲ Independent and non-representational
- ▲ Input by members on a voluntary basis
- ▲ Committed to imparting information and know-how in the public interest
- ▲ Promotion of leading edge engineering solutions
- ▲ Enhancing Ireland's image abroad
- ▲ Adhering to the Academy's rules and principles.

Committees

- ▲ Each of the main committees has an active work programme.
 - 1. Infrastructure** is actively enquiring into the likely needs of an island of ten million people - water, transport, flood control etc;
 - 2. Energy and Climate Action** is focused on the looming need to decarbonise the economy and the equal imperative requirement to "keep the lights on".
 - 3. Enterprise, Innovation and Education** has live and ongoing programmes of work in the areas fundamental to a thriving economy including innovation, "the future of work" and engineering education.
- ▲ None of these areas of enquiry is "academic" in the sense of being of theoretical interest. They are all directly relevant to the very real needs of the people of Ireland in the coming years and decades.
- ▲ Hence work in these areas, which is work not being done anywhere else in Ireland, is not only necessary, it is, in many cases, urgently needed.
- ▲ The Academy, as stated above, seeks to stimulate debate on these issues and to explore possible solutions to the problems identified.

Patron Impact

- ▲ Financial support of the Academy can generate an impact for Patrons in a number of ways.
- ▲ At the strategic level a Patron has the satisfaction of helping to ensure that Ireland is amongst the very large group of developed countries that have a functioning academy dedicated to the vitally important areas of engineering and technology.
- ▲ As a non-profit making, civil society organisation devoted to the public good, support for the Academy can readily be viewed by a Patron as forming a key part of being a “good corporate citizen” and of advancing its corporate environmental, social and governance (ESG) agenda and policies.
- ▲ As noted above many of the areas of ongoing enquiry by the Academy have important implications for industry and the general well-being of the economy and of the environment. The Academy not only brings its unique perspective to these issues but is often the only body undertaking such work in the Irish context.
- ▲ The Academy has a programme of hosting lectures by keynote speakers on critical subjects. These have been temporarily suspended due to Covid restrictions but will be re-launched once circumstances permit. The last such event - scheduled for September 2020 - was due to be delivered by Mr. Bernard Looney, CEO of BP plc and a recently elected Fellow of the Academy. This event has been postponed and will be re-scheduled. Patrons are automatically included in the list of invitees to such events.
- ▲ The Academy also welcomes the opportunity to work in concert with Patrons on issues of particular concern to the Patron. By drawing on the broad and sophisticated expertise and knowledge of its membership and on its wide international connections the Academy is well positioned to undertake assignments across a very wide spectrum of subjects of interest to industry. Experts from the Patron’s organisation are welcome, indeed encouraged, to work in concert with the Academy on such projects. Any work of this nature would of course be undertaken in accordance with the Academy’s governing principles of independence and openness.
- ▲ The Academy has a very solid working relationship with the major commercial semi-state bodies and with central government. We have undertaken tasks for both in the past at their specific request and our output has been very well received. These long-standing relationships of mutual trust and respect may be, in appropriate circumstances, of value to Patrons.
- ▲ The Academy has a strong track record in facilitating and hosting invitation-only events where government ministers, senior civil servants and corporate and business leaders can speak openly and engage constructively with issues of mutual interest and of broad societal concern.

In summary as a Patron, you will:

- ▲ Support Ireland’s need for a functioning Academy of Engineering;
- ▲ Have the opportunity to be named as a Patron on Academy’s website and other marketing collateral or for your support to be confidential. It is your choice.
- ▲ Access the Academies network of relationships with Government and the Semi-State sector;
- ▲ Support the Academies “Thought Leadership”;
- ▲ Advance your ESG agenda;
- ▲ Receive copies, on date of publication, all the Academy’s reports and position papers.
- ▲ Be consulted on the work of the Academy and where a project is of particular interest or relevance to you you may be invited to contribute;
- ▲ Be invited to Academy networking opportunities, lectures, events and discussion fora, both virtual and in person;

Conclusion

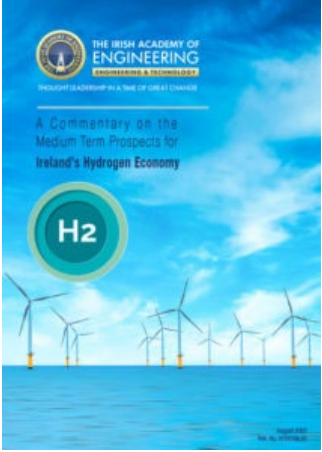
- ▲ The Irish Academy of Engineering has amply demonstrated its viability, relevance and usefulness over the past almost 25 years of its existence.
- ▲ It has proved itself the equal of sister academies across the world and been accepted by them as such. It is into its third decade and is ready and able to undertake ever-greater challenges.
- ▲ Its membership is more than keen to continue to deploy its singular commonwealth of skills, expertise and experiences in a broad range of engineering and technology endeavours on a voluntary, pro bono basis in the public interest.
- ▲ The Academy would like to invite patrons to engage in a conversation with us regarding our request for support. We are more than happy to provide greater detail on how we currently finance our operations and also to share with you our plans for growth - which are of course finance dependent. We greatly welcome the opportunity to engage with you in our mutual interest and in the interest of the betterment of all the Irish people.



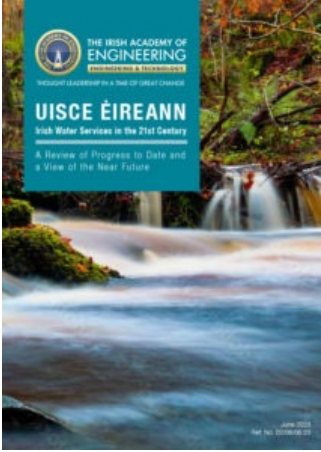
THE IRISH ACADEMY OF
ENGINEERING
ENGINEERING & TECHNOLOGY

THOUGHT LEADERSHIP IN A TIME OF GREAT CHANGE

Previous Publications



 **Ireland's Hydrogen Economy**



 **Uisce Éireann**



 **Megatrends**



 **Integrated Land Use & Transportation Strategy for Dublin published January 2023**



**THE IRISH ACADEMY OF
ENGINEERING**
ENGINEERING & TECHNOLOGY

THOUGHT LEADERSHIP IN A TIME OF GREAT CHANGE

The Irish Academy of Engineering
22 Clyde Road, Ballsbridge, Dublin D04 R3N2
Telephone: +353 1 665 1337
academy@iae.ie
www.iae.ie

Registered in Ireland: CRO 439234, CHY18046, RCN 20068455