Irish Academy of Engineering Publications work plan 2026

Introduction

The Irish Academy of Engineering relies on the voluntary support of our Fellows(members). One of our main activities is the researching and publication of evidence- based reports delivering on our mission of providing thought leadership on matters where Engineering/Technology can play a major part in providing independent advice to policy makers on matters involving engineering and technology.

Organisation

This research and publication activity falls to our three main standing committees(SC's) and also our regional committees. The main Standing committees are:

- **Infrastructure Standing committee**- John T Murphy (interim).
- **Energy & Climate Action Standing committee** – Chair Eamonn O'Reilly
- **Enterprise, Innovation & Education Standing committee** – Chair Mark Gantly

Standing committees generally meet annually, identify topics of relevance/interest, identify working groups to carry out research and prepare reports for publication. The work is carried out in accordance with the Academy guidance document on publications and the Chair of the relevant standing committee ensures the draft is compliant with the guidance note and recommends publication to the Academy President/Executive.

It should be noted that not all working groups result in publications. At times the research may conclude that topics do not result in recommendations to advance the wellbeing of the Country.

Work Plan 2026

The following is a short summary of work currently in progress and potentially envisaged

Infrastructure Standing Committee(ISC)

ISC 1: Consenting issues associated with flood relief schemes. Currently in draft.

ISC 2: Port Facilities to support offshore wind turbine construction and maintenance Not currently being progressed as the topic has been well covered in the Nexsys Report "Missing the Boat: Port Infrastructure as a Critical Barrier to Offshore Wind Energy Development in Ireland" published in October 2025. Also, the Academy Publication "Rebalancing Ireland's Energy Policy" includes a section on "Port infrastructure for Offshore Renewable Energy (ORE) projects" (Section 4.3).

ISC 3: A Review of Critical Infrastructure Resilience. This topic resonates with the proposed Euro Case Conference at the end of 2026 in Belfast which has a main theme of Engineering Resilience, focussing on the European perspective. **A sub-committee has been set up under Chair John W. Flanagan and the programme is to deliver a report in Autumn 2026.**

ISC 4: Sustainable Freight transportation in Ireland. Under consideration. Not currently active.

ISC 5: Collaboration type contracts for smaller type public projects. Not in the current cycle.

ISC 6 Adopting innovation to infrastructure projects E.G. using more efficient methods for watermain renewal without major road works and traffic management. Not in the current cycle.

ISC 7 Supply chain for major infrastructure projects. Not in the current cycle.

ISC 8 Update on Regional Broadband. Ongoing monitoring and reporting.

Energy & Climate Action Standing Committee

Rebalancing Ireland's Energy Policy is intended to provide the framework for a future programme of issue specific papers to address - in greater detail - particular challenges identified in the report. The objective of this programme is to increase the influence of engineering considerations in energy policy and to promote the greater participation of engineers working in the energy sector in its development and delivery. The core message which has emerged from reports in recent years reflects recurring themes in reports from the Committee over the past decade and can be summarised as follows:

Energy policy is dominated by unachievable climate policy targets and needs to be recast to ensure national competitiveness,

•by meeting the energy security needs of the country,

• by not allowing energy prices to be inflated by inappropriate policy measures,

• by ensuring that policy responds to the constraints imposed by Ireland's particular circumstances, and

• by having emissions targets which are appropriate and achievable.

The issue-specific topics under consideration for 2026 include:

• **Energy security and the future of Moneypoint power - Report to be published in May 2026**

• **Worst every energy crisis? – Ireland to act decisively and relearn lessons from previous energy shocks** - **Report to be published in May 2026**

• **The future of gas in the Irish Energy Sector** - Likely October 2026 or November 2026

Other topics of interest include

• Is the State-led FSRU project sufficient to meet Ireland's needs?

• Interconnection and green electricity export realities

• Should Ireland have a National Hydrogen Strategy at all?

• The shape of a HV transmission system masterplan

• The particular challenges of the energy transition for rural Ireland

• Electricity pricing and cost recovery

• The appropriateness of using economic measures to achieve electrification targets

• Zero-based carbon budgeting

• The shape of an appropriate national energy policy to meet Ireland's needs

The above topics create a multi-annual programme of work for the Committee and highlight the need for the Committee to consider the recurring issue of the cost and economic viability of national energy policy. During 2026, the Committee will consider how best to approach this essential topic including the possibility of liaising with other organisations or institutions.

Enterprise, Innovation & Education (EIE) Standing committee

EIE 1 - Enterprise Policy Formation

A number of Academy fellows were involved in the Technology Foresight process (initiated in 1998) which paved the way for the creation of Science Foundation Ireland (SFI0, and also helped focus public investment in key growth sectors. The consensus is that this process had a major impact on our economic success over the last 25 years.

At the time in 1998, this process was managed by Forfas, with key stakeholders from industry and education coopted to contribute.

Today the process for investment in technology appears less coherent. The proposed workstream would document the existing process and then comment on its efficacy. Beyond some basic desk research, the workstream will involve consultation with policy maker and executives from government departments (DETE and DFHERIS) and state agencies (IDA and Enterprise Ireland (EI)).

EIE 2 - Research Ireland

(This workstream is related to the previous EIE 2 project)

Over the last year, SFI has gone through a substantial transformation. It has been renamed as Research Ireland (Taighde Eireann) and, with the integration of the Irish Research Council, its brief has been extended to include research in humanities.

A number of Academy fellows have expressed concern at both changes – the elimination of what was seen as a strong, internationally recognised brand (SFI) and the weakening of its focus – away from the scientific domains that will drive future economic success.

This workstream will build an accurate understanding of the agenda for the new Research Ireland, including consideration of the two concerns expressed by fellows. With this understanding, we will prepare a commentary and recommendations.

The workstream will involve direct engagement with the CEO of Research Ireland and with selected board members.

In relation to EIE 1 and EIE 2 the Academy attended the launch of **Taighde Éireann – Research Ireland** new strategy, *Curiosity Capability Competitiveness: Charting Ireland's Research and Innovation Future*. We were delighted to have had the Taoiseach, Micheál Martin TD, and Minister James Lawless TD join us to mark this important milestone for Ireland's research and innovation system.

Taighde Éireann – Research Ireland greatly appreciated the engagement and support shown by those who took part in our consultation process and by everyone who attended the launch event.

Taighde Éireann – Research Ireland confirmed that the Academy insights and perspective were invaluable in helping to shape the final Strategy.

The Strategy is now available on the website: **www.researchireland.ie/strategy/**

As Taighde Éireann – Research Ireland move into implementation, we would very much welcome continued engagement with our Academy.

EIE 3 - Scaling

Over the last 20 years, Ireland has established effective supports for creating startups. There has been a cultural shift in your younger generation with startup creation now seen as a natural career choice.

The challenge is now how to scale high potential startups to be successful enterprises. Anecdotally we hear that access to financing, scaling beyond direct ' founder sales' and attracting/ retaining top talent are impediments to this. This workstream would explore the supports that we have in place for scaling, how effective these are in practice, and further measures that could be taken.

The workstream will involve discussion with innovation hubs focussed on scaling (e.g. Platform94 in Galway), startups with scaling potential, policy makers (DETE) and state agencies (Enterprise Ireland(EI)).

EIE 4 - Placemaking

It is widely accepted that innovation thrives in locations with a strong lifestyle proposition. Top talent (including homegrown talent) is mobile and will seek out those locations which best meet their needs for housing, education, healthcare, leisure etc.

While Ireland has many of the intrinsic natural amenities that will attract talent, we have serious deficits in almost of all of the other attributes that are essential to a complete lifestyle proposition.

Work is underway to address the deficits - in transport, energy , water and waste water, housing etc. Some of these are the subject of scrutiny and comment by other Academy committees. This workstream will examine how well these elements are being integrated to deliver towns and cities that will attract and retain top talent.

The workstream will focus in particular on the work being done by the RIAI's Irish Cities group(supported by IAE Fellows) – which has proposed a detailed plan for the development of Galway city to 2070. It will also look at how this study is impacting spatial planning in the city in a real way.

A ½ day seminar is proposed, which will present the Irish Cities Galway 2070 project, also presentations from planners in the city on current 'live' projects and produce summary conclusions and recommendations for action.

EIE 5 - Development of Technological Universities – Research Agenda

Our technological universities are now up and running for about 5 years . Much of that time has been consumed with integration of the legacy entities and the formation of new leadership teams and governance structures – while continue to operate education and research activities day-to-day.

In order to justify their status as Technical Universities (TU), there is an expectation that they will substantially increase their research activity. What is not clear is if there is a strong theme to this new research activity. Will the TUs compete directly with the existing universities?

A related question – is there a risk that raising their game on research will have a negative impact on the TUs where they have been traditionally very strong in educating industry-ready talent?

Now is a good time to answer those questions - through dialog with TU leaders, with policy makers (DFHERIS) and with those stakeholders (IDA, Enterprise Ireland (EI)) who depend on TUs.

How you can help our Academy

We are always looking for volunteers and subject matter experts for our working groups. If you can help us, please let us know by contacting our Administrator Fiona McCarron at Academy@iae.ie.