

Tom Leahy
Irish Academy of Engineering
President 2021-2023



# THOUGHT LEADERSHIP IN A TIME OF GREAT CHANGE



### About the Academy

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 decisionmakers and the public on important issues requiring technological-economic solutions and a platform for informed debate and discussion.

The Academy was founded in 1997 and 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.



## Academy Membership: 180 (2023)

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

Membership is drawn from all regions across the island.

The Academy's membership puts it in a unique place to provide thought leadership in the engineering and technology arenas.

#### **Elected Fellows include:**

Martin Curley Director HSE Digital transformation/ Intel VP

Bernard Looney, CEO BP plc

Bob Savage Dell/AmCham

Prof. Orla Feely President Engineers Ireland/ UCD

Mark Gantly, HP/AmCham

John Mullins Chair Cork Port/Amarenco

Dervilla Mitchell, Deputy Chair Arup Group

Danny McCoy Ibec CEO

Dave Murphy CEO PM Group



### The Academy

Independent, multidisciplinary expertise, leadership and experience of members

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

Engineering networking through the International Council of Academies of Engineering & Technological Sciences (CAETS) and Euro- CASE the European Council of Academies of Applied Science, Technologies and Engineering.

### How We Work Today

#### **Analyse**

- -Conducting research for informed reports and peer review
- -Production of reports and briefing papers by Standing Committees
- -Independent and evidence based.

#### Communicate

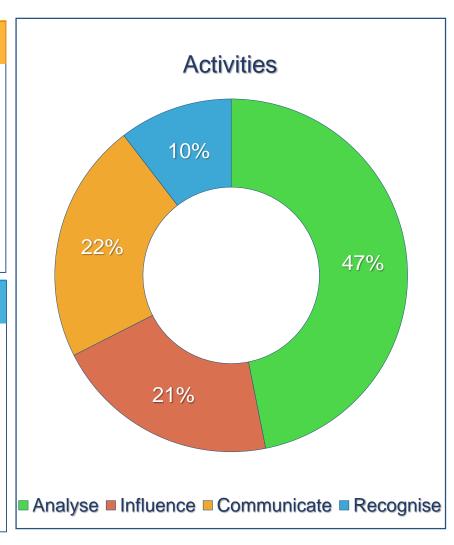
- -Dialogue and discussion fora
- -Promoting engineering heritage
- -Maintaining international links 8 promoting the modern image of Ireland
- -Fostering cross-border cooperation
- Website www.iae.ie

#### Influence

- -Disseminating relevant info and expertise to assist policy makers
- -Launch events for selected reports

#### Recognise

- -Honouring & encouraging engineering achievement
- -Promoting engineering to youth
- -Hosting award ceremonies and events





### How We Work Today

#### **Standing committees**

Infrastructure
Energy & Climate Change
Enterprise, Innovation and Education

#### **Regional committees**

Southern Committee Western Committee Northern Committee

#### **Networking**

6 year MoU with RAE Euro-CASE CAETS

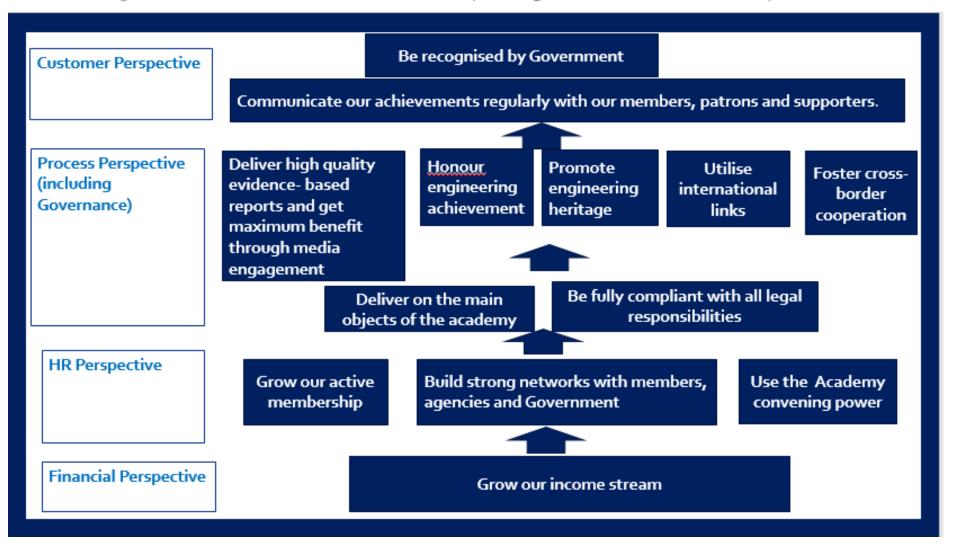
#### Recognise

Annual Award of Parsons Medal



### How We Work Today

5 - year Business Plan 2021-2026 (Using Balanced Scorecard)



### Recent Publications 2022/2023

Restoring Confidence in Irish Energy Supply (2022)

Review of Government Report on: Security of Ireland's Energy Supply (2022)

Ireland's 2030 Greenhouse Gas Emissions

Comments on the Government's White Paper on Enterprise Policy (2022)

Irelands Hydrogen Economy – medium term prospects (2023)

Atlantic Cities Corridor NPF 2040

Integrated Land Use and Transportation Strategy for the Greater Dublin Region (joint with RIAI, 2023)

Review of Irish Water services in the 21st Century (2023)

Megatrends – forces to shape work and employment and society to 2040 (2023)

### Recent Activities 2022/2023

6 year MoU with Royal Academy of Engineering (May, 2022)

Induction of Bernard Looney, CEO BP plc, as Fellow (September, 2022)

Site Visit to Portershed Galway (January, 2023)

Inaugural Technology Entrepreneur/VC Lunch (3 in 2023)

Site Visit to Dogpatch Dublin (March, 2023)

Site Visit to National Children's Hospital (March, 2023)



### 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 and heritage.



### Growing Influence

Working in conjunction with Department of Public Expenditure and Reform and Northern Ireland Department of Infrastructure

Implementation challenges for National Climate Action Plan in each of 5 main sectors: Electricity Generation, Transport, Built Environment, Agriculture and Industry.

Delivering the Infrastructure needs of a population of 10 million on the island in 2050

Impact from Excellence – joint with Royal Academy of Engineering, Royal Society and Royal Irish Academy.

Engaging with the Global Academy Network- Academy Fellow Barry O'Sullivan Chairing CAETS AI Group



# Challenges

Evidence based reporting V Fake news

Short term focus V long term perspective

Public perspective on Engineering V contribution of Engineering to society



# Discussion