

Statement of Strategic Intent

2021 - 2023



A community of creative professionals delivering sustainable solutions for society www.engineersireland.ie



Cover Images (Clockwise from Top)

- View of Dublin's quays, The Liffey and the pedestrian bridges, Millennium Bridge and the Ha'penny Bridge.
- We provide information and guidance to engineers who come from overseas to live and work in Ireland, through our "global engineers" events organised by our Membership Team. Pictured are engineers attending English language classes at our office at 22 Clyde Road, Dublin 4.
- STEPS is Engineers Ireland youth-focused STEM (science, technology, engineering and maths) outreach programme. The programme aims to inspire future generations of STEM talent, by providing meaningful, fun and practical insights into the diverse world of engineering. We appreciate the voluntary hours our members give to the programme each year. Pictured are 5th class pupils Corey Basnett, Ava Shannon, Daniel Farrell and Mahnoor Awais from Our Lady of Victories National School, Ballymun, Dublin. They were just some of the pupils who took part in STEPS Engineers Week 2020 activities organised by

Transport Infrastructure Ireland (TII). TII engaged with eight schools along the MetroLink route to showcase to students the role of engineers and to highlight the importance of site safety and the environment through activities, presentations and hands-on learning.

- Engineer Dr Andrew Dickson from I-Form, the SFI Research Centre for Advanced Manufacturing. I-Form's Rapid Response Digital Manufacturing Hub was a winner in our 2020 Engineering Excellence Digital Series held in association with ESB. The award recognised the work of I-Form in producing vital PPE (personal protective equipment) for healthcare professionals and frontline workers at the outbreak of COVID-19 in Ireland in spring 2020. The centre also worked on the production of ventilator aids, the creation of breathing devices and research into antiviral materials. (Picture courtesy of I-Form)
- We offer continuing professional development for engineers throughout the year including seminars, courses and conferences. Many of these events are organised in conjunction with our Sectors (i.e. our Regional branches, Engineering divisions and Societies).



Photo: Our members attending a Future Energy Forum held in association with our North East Regional branch at Dundalk Institute of Technology.

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"We have a vibrant community of members and volunteers in Ireland and overseas and a wide range of partners whose effort, expertise and influence significantly increase our reach and impact. They are the lifeblood of the institution and as such we recognise that their expertise, support and collaboration is vital to the success of the institution."

Marguerite Sayers, President 2019/20

Foreword from the President



Marguerite Sayers, BE CEng FIEI President of Engineers Ireland 2019/2020

At the heart of every successful organisation, there is a clear and well-defined purpose.

At Engineers Ireland, our purpose is to:

- Quality assure the Professional Formation of engineers
- Provide Continuing Professional Development to ensure high levels of competence
- Award Titles to indicate attainment of skills, experience and training
- Advocate for the Profession and its contribution to social, environmental and economic development
- Safeguard Professional Standards in the public interest

Best in class governance requires us to look to the future and prepare accordingly; particularly in the context of the pandemic. We have engaged in a detailed process of review, research and consultation; this included a consultation process open to all members of the institution. The result of this process is this Statement of Strategic Intent covering the period 2021 – 2023 and I am pleased that it has received the support of the Council of Engineers Ireland through a formal approval process. Our members are central to what we do and in planning for the next three years, it is our ambition to strengthen our role as their professional development body through five strategic themes:

- 1. Grow and diversify
- 2. Influence for impact
- 3. Drive standards and innovation
- 4. Champion sustainability
- 5. Strengthen our people, finance and technology

During my term as President, I have been struck by the sheer breadth and depth of our membership whose commitment and support over the next few years is critical as we build, develop and grow the organisation for the benefit of the engineering profession.

Yours sincerely

Parquente Ecyenes

champions of sustainability quality assurance national voice titles contributions CPD experience safeguarding standards

Introduction

This Statement of Strategic Intent, which was launched in January 2021 by An Taoiseach Micheál Martin T.D., is intended to guide and inspire our members and our staff as well as our partners in industry, academia and policy with whom we collaborate.

It has been informed by a review of progress and performance against the outgoing Strategic Plan (2017 – 2020) as well as an internal organisational analysis and an examination of the significant external environmental factors which could impact the institution.

This research has been combined with findings from an in-depth consultation process involving the Council of Engineers Ireland, Executive Board, staff, members and important stakeholders, including the general public, which helped to test and refine the ideas. Sincere thanks are expressed to all of those who contributed.

We have a vibrant community of members and volunteers in Ireland and overseas and a wide range of partners whose effort, expertise and influence significantly increase our reach and impact. They are the lifeblood of the institution and as such we recognise that their expertise, support and collaboration is vital to the success of the institution. At all times, our choices are supported by a commitment to excellence in all areas of our work and to robust governance and strong financial controls. The Coronavirus disease (COVID-19) has caused an unprecedented external shock of unparalleled significance. The true impact of this pandemic, from a social and economic perspective, is yet unknown as is the impact on our members and on our institution. In devising this Statement of Strategic Intent, we have taken a careful approach – one which will see us focus on delivering on our core purpose and on renewing and rebuilding in the short term.

Taking all of this into account, and considering the findings from our research and consultation process, the following **five strategic themes** have been determined that we believe will guide and define our future success:

- 1. Grow and diversify
- 2. Influence for impact
- 3. Drive standards and innovation
- 4. Champion sustainability
- 5. Strengthen our people, finance and technology



The core purpose of the institution

Engineers Ireland is the voice of the engineering profession in Ireland. We have been representing the profession since 1835, making us one of the oldest and largest professional bodies in Ireland.

Our 25,500 members come from every discipline of engineering and range from students to Fellows of the profession. Our Charter and Bye-laws set out the core purpose of the institution which can be summarised as follows:

- Quality assurance of the Professional Formation of engineers
- Continuing Professional Development to ensure high levels of competence
- Award of Titles to indicate attainment of skills, experience and training
- Advocacy for the Profession and its contribution to social, environmental and economic development
- Safeguarding Professional Standards in the public interest



Maurice Buckley President of Engineers Ireland 2020/2021



Professor Orla Feely Vice-President of Engineers Ireland



John Power Vice-President of Engineers Ireland



Our **vision statement** is intended to guide and inspire Engineers Ireland into the future. It results from considerable consultation with diverse stakeholder groups and encapsulates a range of key themes that we believe will define our future success:

A community of creative professionals delivering sustainable solutions for society.



Our **mission statement** has been crafted to communicate the institution's purpose and direction to our members, staff and partners:

Engineers Ireland is an institution that enables the engineering community progress their professional development and make a sustainable impact on society, advocates for the profession, quality assures education and encourages the future generations of engineers.



Values

Our values represent a commitment to ensure that all our activities are underpinned by a promise to approach our work with specific behaviours.

Engineers Ireland's Council placed a significant focus on developing a set of values to apply to our wide network of volunteer members and our staff.



Community

We encourage participation, volunteering and teamwork.



Excellence

We are committed to excellence in everything that we do.



Innovation

We embrace new ideas and ways of working, particularly with technology.



Trust

We always act with integrity in our dealings with all stakeholders.

Our community

Our 25,500 members are the lifeblood of

the institution. We have a vibrant community of members and volunteers in Ireland and overseas whose effort, expertise and influence significantly increase our reach and impact. Their ideas, support and collaboration are vital to the success of our institution. Our key relationships are:

- Members of the engineering profession
- Engineering students, educators and researchers
- Employers of engineers and engineers in leadership roles across all sectors
- Government and policy-makers
- Membership and representative organisations with whom we have a shared agenda



Attendees at our "global engineers" event for Brazilian engineers on 2 March 2020. The event, hosted in Portuguese, was held at our office on 22 Clyde Road, Dublin 4 and was attended by 130 Brazilian engineers and recruiters from ORS, Callaghan Engineering, Entrego and Sigmar Recruitment.

Our community (continued)

One of the distinguishing features of Engineers Ireland is the commitment by our members to take a wide-ranging perspective and a willingness to balance short term needs with long term objectives. For this reason, our Statement of Strategic Intent contains a range of actions, the impact of which will only be realised in the longer term.

These include our STEPS programme, which encourages primary and post-primary students to explore the world of STEM, while also promoting engineering as a career choice; the continued deepening engagement with new engineering students; our international alliances through such organisations as FEANI, ENAEE, IEA, WFE0¹ and our communications work to increase public awareness and appreciation of the role of engineering in society.

With digitalisation an integral part now of the engineering sector, today's engineers need to be all-rounders. Core IT skills are more important than ever and digital expertise on sensor networks, artificial intelligence, robotics, blockchain and virtual reality are becoming a basic prerequisite. The increased interdisciplinary exchange and more flexible collaboration models also require additional skills and qualifications. The Statement of Strategic Intent aims to respond to this need, particularly in commitments described under our continuing professional development (CPD) activities.

Engineers Ireland has declared a Climate and Biodiversity Emergency publicly recognising that climate breakdown and biodiversity collapse are the most serious issues of our time and immediate transformational action is required in all engineering sectors and disciplines.

Climate action and sustainability were a strong theme in the responses to the 2020 Engineers Ireland member survey. When asked whether engineers have an ethical obligation to tackle climate change and biodiversity loss, 88% agreed. In a guestion on the development of a future strategy, one of the priority themes raised by members was climate change. Members suggested a wide range of climate/ sustainability related projects for Engineers Ireland to profile in publications and events. In recognition of the critical role, and an ethical obligation to undertake this role, in the transition to a more sustainable society, Engineers Ireland is making a strategic commitment to sustainability and climate action in this Statement of Strategic Intent.

Separately the institution has developed a Sustainability Framework to translate this strategic commitment into actions as part of a whole-of-organisation approach. The Sustainability Framework outlines actions under the headings:

- Learn (professional formation and development)
- Live (operations)
- Lead (advocacy and regulation)
- Link (collaborate)

¹ FEANI, ENAEE, IEA, WFEO. These organisations respectively are: Fédération Européenne d'Associations Nationales d'Ingénieurs or European Federation of National Engineering Associations; European Network for the Accreditation of Engineering Education; International Engineering Alliance and the World Federation of Engineering Organisations.





Statement of Strategic Intent

The following section presents how the institution intends to progress its Core Work (as set out in our Bye-laws and Charter).

These work areas have been developed following consultation with:

- Our members
- The Council of Engineers Ireland and its Executive Board
- Our Liaison Committee
- Our Sectors Regional branches, Engineering divisions and Societies

Each of the following six areas have been informed by research and data generated from a review of our outgoing strategy, an internal organisational analysis and the examination of the significant external environmental factors which could impact the institution.

Photo: Sanofi Waterford is one of over 130 organisations who have achieved Engineers Ireland's CPD Accredited Employer Standard in recognition of their continuing professional development (CPD) strategy. The three-year accreditation was presented to the Waterford site team in 2020 by Caroline Spillane, Director General, Engineers Ireland who is pictured with (from left): Marc Sebastien Camacho, Process Engineer; Niamh Mitchell, Project Engineer; Dr Johannes Schweppenhäuser, Site Head and Cian O'Brien, Head of Innovation, Digital & Engineering (Pic: Colin Shanahan, Digicol).

Quality assurance of the Professional Formation of engineers

Engineering as a profession is changing rapidly; possessing technical expertise is just one aspect of an engineer's skill set. Increasingly, engineers need to be prepared to work with a wide range of technologies, operate in global teams, be recognised as innovators and as business managers. We will work with partners in academia and industry on a range of actions to support the development of well-rounded graduates.

We intend to fulfil this through the following actions:

- Conducting a programme of Higher Education Institutes (HEI) Accreditation which includes specific objectives to:
 - use quality assurance and quality improvement measures to safeguard continued compliance with the requirements of the International Accreditation Agreements that enable international mobility.
 - broaden the range and nature of programmes accredited, to ensure a healthy and diverse graduate pipeline including, for example, professional engineering apprenticeships.
- guide the development of outcomesbased education, including futureready graduate attributes and industry relevance.
- link accreditation to CPD and Initial Professional Development (IPD) in the years following graduation e.g. CPD Certificate in Professional Engineering.

Growing and diversifying membership

The primary focus of any membership body is to respond to the needs of its members. Through this Statement of Strategic Intent, we aim to achieve better diversity in our member profile, as well as delivering value to our members by supporting their career development at all stages from students and recent graduates to senior engineers and CEOs.

We intend to fulfil this through the following actions:

- Safeguarding the Register (of Engineers) by setting and maintaining regulations and guidelines governing access, while making the application process member-centric and inclusive.
- Achieving better diversity in membership; reflect the needs of students, graduates/ young engineers, technicians and engineers in a wider range of sectors including engineers in management.
- Increase interest among engineers and employers in attaining membership and supporting continued involvement in our institution.

Award of Titles signifying attainment of qualifications, skills, experience and training

Achieving a professional title signifies attainment of a standard of qualification, skills, experience and training. It can also advance and improve the career prospects of engineers and technicians. In response to member feedback, we aim to support a greater proportion of members to achieve these valued designations.

We intend to fulfil this though the following actions:

- Raising the overall standard of competence of those on the Register by increasing interest, among engineers and employers, for acquisition of registered professional titles.
- Streamline and improve our processes and guidance for acquisition of titles.



Photo: Thomas Adams, **Engineering Masters** Student, NUIG (far right) answers questions from the audience at the launch of our Engineering 2020 report. David Donoghue, former Permanent Representative of Ireland to the United Nations, Damien Owens, Registrar of Engineers Ireland and Una Beagon, Assistant Head of School, School of Civil and Structural Engineering, TU Dublin also participated in the panel discussion which focused on the Sustainable Development Goals.

Continuing Professional Development (CPD) to ensure competence

A key advantage of a career in engineering is the abundance of opportunities to develop and apply knowledge and skills. We will support the professional development of our members with focused, relevant and cost-effective training and development and we will continue to build and develop our range of partnerships, with a key focus on priority sectors.

We intend to fulfil this through the following actions:

- Developing a core programme of CPD courses to ensure maintenance of professional competence:
 - The principles and practices of sustainability and the UN Sustainable Development Goals (SDGs) to be embedded in programme development.
 - Online delivery prioritised.
 - Informed by research and member engagement.
- Positioning Engineers Ireland as a leading provider of Digitalisation and ICT skills for the engineering community either via direct programmes or via a partnership approach.
- Playing our role in the National Economic Plan and other policy initiatives arising from the Programme for Government 2020

 Our Shared Future, by:
 - Supporting employers via our CPD Accredited Employer standard.

- Developing specific programmes aimed at reskilling, upskilling.
- Creating relevance to younger engineers and "global engineers" via career planning/advisory services and promote mentor programmes for graduates for career progression.
- Supporting our Sectors (Regional branches, Engineering divisions and Societies) in the development of CPD for members.
- Providing leadership and management training for engineers.
- Supporting the competence of those on our specialist Registers and Panels by the development of CPD programmes to refresh, maintain and develop specialist competences.

Advocacy for the Profession; its contribution to social, environmental and economic development

Having a strong, independent, national voice that influences public policy and builds and maintains a strong reputation for the engineering profession will continue to be a distinctive feature of our work. Strategically managed communication is central to building a vibrant community of engaged and active members and can help to build genuine understanding and appreciation of the role of the profession and engineering as a career.

We intend to fulfil this through the following actions:

- Positioning the engineering profession's key role in the forthcoming National Economic Plan and other policy measures arising from the Programme for Government 2020 – Our Shared Future.
- Taking a whole-of-organisation approach to championing the UN SDGs by communicating the key role of engineering in achieving the UN SDGs, such those related to wellbeing (SDG 3), climate action (SDG 6, 7, 11, 13) and the economy (SDG 9, 12).
- Shaping public policy through independent study and engagement as an impartial adviser to Government on topics such as wellbeing, climate action and biodiversity loss and infrastructure investment.

- Promoting and celebrating engineering excellence in all its forms including in the media and via publications.
- Growing and supporting our community (i.e. our Sectors, who are our Regional branches, Engineering divisions and Societies) to facilitate networking and connectivity, encourage continuing professional development and the exchange of knowledge and expertise, and informing public policy.
- Inspiring the future generation of engineers through engineering excellence, innovation, role models, public leadership and outreach through our STEPS programme. STEPS is our youth-focused STEM outreach initiative.

Safeguarding Professional Standards in the public interest

Engineers are regarded by the public as trustworthy and competent professionals. This Statement of Strategic Intent commits the organisation to review and revise our regulatory arrangements to ensure they both support the profession and safeguard the public.

We intend to fulfil this though the following actions:

- Continuing the development of a proportionate, evidence-led, regulatory model as recommended through our Regulation of the Profession project.
- Providing leadership to members on their professional conduct and ethical responsibilities via the Code of Ethics of Engineers Ireland and other professional guidance.
- Monitoring compliance with professional standards via the annual retention process, disciplinary and appeal processes and compliance with our CPD policy.
- Regulating the profession in the public interest through the operation and management of current Specialist Registers and Panels and the possible establishment of Special Areas of Practice Registers in line with our Regulation of the Profession project.

Collaboration across the institution

To deliver on our Statement of Strategic Intent it will be important that a high degree of co-operation and collaboration takes place across the institution. This is particularly important given the uncertainty surrounding the impact of the COVID-19 pandemic and the need to operate in a virtual environment - as a virtual community. Annual plans will set out how our core purpose can be delivered more effectively through specific cross-organisational projects with the involvement of the Council and the Executive Board and their committees; our Regional branches, Engineering divisions and Societies; volunteers and members. Some examples of this collaborative approach include:

 The engineering profession's key role in the national recovery, National Development Plan and Programme for Government: led by experts from our Regional branches, Engineering divisions and Societies, Council, Executive Board and Liaison Committee.

- Rolling out a programme of online CPD offerings: guided by our CPD Standing Committee and our members via the learning needs assessment.
- A new coordinated approach to 3rd level engagement involving our Academic Society, Young Engineers Society branches and our Third Level Advocates.
- STEPS: made possible by our trained volunteer members, our Regional branches, Engineering divisions and Societies, and our Academic partners.
- Sustainability Framework: involving the Ethics and Disciplinary Board, Finance Committee, Board of Examiners, CPD Standing Committee and members via the learning needs assessment.

Responding to member needs

In planning for the implementation of our new Statement of Strategic Intent we have acted on the feedback, including from our member survey, and embedded this within this plan.

Examples of how we plan to respond to member needs are as follows:

- Free high quality CPD: we will develop and offer a free training webinar series called 'Emerging Trends in Engineering' and we will continue to roll out the "Essential Skills" suite of free interactive webinars.
- **Professional Titles:** we will put in place a dedicated resource for our professional titles to increase the profile of our titles nationally,

increase our number of title holders and creating best-in-class supports for our members on their path to a title.

- Online self-managed/self-directed learning: we will run a pilot to test interest in, and effectiveness of, this new approach.
- Digitalisation and ICT skills: a partnership will be developed to ensure Engineers Ireland can offer low cost access to expert-created information covering skills for the future - including topics such as artificial intelligence, cyber security, Internet of Things etc.

- ICT support to our Regional branches, Engineering divisions and Societies: further investment will be made in infrastructure, licensing and support to help Committees capitalise on the significant increase in online engagement which they generated during 2020.
- Leadership on Climate Action: we will implement actions under our Sustainability Framework. This will be strengthened by a public-facing strategic communications plan, which includes *sustainability*, comprising our work and advocacy efforts in this regard, as one of our campaign themes.
- Benefits valued by members: research conducted with our members confirms that we should continue providing important existing services such as: sharing technical knowledge (e.g. the Engineers Journal), advocacy and recognition, CPD,

communications, career support and guidance, our STEPS programme and networking and engagement.

- Improving member services: we will continue to streamline our processes and introduce quality assurance measures to maintain standards. We will support the Benevolent fund and will actively offer reduced fees where members experience financial difficulties.
- **Structure:** we will make changes to our organisational structure to provide high-quality and responsive support to our members, ensure our structure is fit-for-purpose and reflects a new operating model.
- **Governance:** recommendations arising from our governance review process, supported by our members and approved by Council, will be implemented.

Strategic enablers - People, Finance and Technology

People

Our people – staff, members, Council, Board and Committee members – are our biggest asset. We will continue to place a focus on developing our people's skills, fostering a culture of inclusive leadership, innovation and professionalism among colleagues. We renew our commitment to be a responsible institution, both socially and environmentally. We are committed to becoming a more inclusive institution; with this comes a deeply held commitment to create a culture where everyone feels valued and included. We will continue the process of structuring the institution to ensure it supports the realisation of our Statement of Strategic Intent. This will involve the determination of resources (including financial, technological and personnel) required to deliver on our objectives, while maintaining member satisfaction, efficiency, standards and quality.

Finance

In devising this Statement of Strategic Intent, we have taken a careful approach – one which will see us focus on delivering on our core purpose. We will maintain the financial integrity of Engineers Ireland and aim to be financially sustainable. Financial oversight will be provided by the Finance Committee, Executive Board and Council. Financial oversight is contingent on a robust review of the annual budget, business plan, monthly management accounts and external audit.

Technology

We aim to be an agile, technology-enabled, modern institution, with innovative and secure digital solutions which aid the effective delivery of our work and improve the way we support, engage and interact with our members and partners. Over the lifetime of our Statement of Strategic Intent, we aim to invest in ICT infrastructure and licensing particularly to support delivery of services to members and to our Regional branches, Engineering divisions and Societies, and to improve video, webinar and online learning platforms.

Implementation and monitoring

The implementation of the Statement of Strategic Intent will be monitored and reviewed by the Council and Executive Board on an ongoing basis. The activities set out in this plan, together with member feedback on identified priorities and external challenges, will inform annual business plans and annual budgets. The implementation of these business plans will ensure that our core purpose is delivered upon over the life span of this plan. A midterm review at 18 months has been built into our planning framework which will enable any refinement and revision.

Strategic theme	Metric/measure to monitor implementation of the Statement of Strategic Intent
Grow and diversify	Metrics relating to new members, reinstated members, graduate members, student members and applications for professional titles.
Influence for impact	Metric/measure relating to volunteer engagement and sectoral activities (e.g. events, policy activities, webcasts), policy publications (reports, submissions, briefs), positive national press coverage (broadcast/print/digital) and social media reach.
Drive standards and innovation	Metric/measure relating to number of accredited programmes and volunteer participation, successful external reviews: IPEA (of CEng), Sydney Accord (of AEng accreditation), Dublin Accord (of EngTech accreditation), partnerships/ agreements to increase quality CPD offering and CPD events delivered.
Champion sustainability	Metric/measure relating to sustainability events, sustainability- related communications and sustainability subject matter webpage views.
Strengthen our people, finance and technology	Metric/measure relating to wellbeing, employee engagement scores, Excellence through People Standard, capital investment programme in IT infrastructure, annual approved budget and web-site performance.

Managing risk

We recognise that to successfully deliver this ambitious plan, we must understand and manage the associated risks. We are committed to implementing a plan whereby the risk is minimised by prudent financial management and business planning. The risks highlighted below relate to the short to medium-term and correspond to the main corporate risks identified via our risk management framework.

Short to Medium-term Risk

- The Coronavirus (COVID-19) pandemic continues, leading to major disruption of the operation of our institution and impacting the health, safety and wellbeing of all our people (staff and volunteers).
- 2. An economic recession impacts the financial
- wellbeing of the institution and our members, resulting in reduced resources leading to a reduction in the services we can provide to members.
- The voice of the engineering profession in key Government policies and in the media is not adequately recognised, leading to a loss of recognition for the expert role of the engineer, engineering excellence and interest in engineering as a career.
- Progressive change within the institution is constrained due to outmoded governance arrangements and limited organisational resilience (including systems resilience), leading to poor quality support to our members.

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5. There is an increased exposure to cyber-attack with full online presence leading to potential data breaches, financial loss and reputational damage.



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