



SEAI ENERGISE FELLOWSHIP PROGRAMME

SEAI-BASED FELLOWSHIPS

2026 Call Document

Call for Submission of Applications

Key Dates	
Call Open Date	Wednesday 13 th May 2026
Deadline for Application Submission	Thursday 11 th June 2026 13:00 IST (UTC+1)

It is the responsibility of each applicant to SEAI's ENERGISE Fellowship Funding Programme Call to ensure that they have read and fully understand all documentation associated with this Call before making a submission, including: this Call Document (pdf); [Privacy Notice](#); [SEAI RD&D Budget Policy \(pdf\)](#).

SEAI is funded by the Government of Ireland through the Department of Climate, Energy and the Environment.

SEAI ENERGISE FELLOWSHIP Funding Programme

2026 Call Document

May 2026

Sustainable Energy Authority of Ireland

SEAI is Ireland's national energy authority investing in, and delivering, appropriate, effective and sustainable solutions to help Ireland's transition to a clean energy future. We work with the public, businesses, communities and the Government to achieve this, through expertise, funding, educational programmes, policy advice, research and the development of new technologies.

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Contents

Call for Submission of Applications.....	2
Programme Description and Objectives.....	4
SEAI-BASED Fellowships.....	5
Who Can Avail of the Programme.....	5
Definition of Project Roles.....	5
Fellowship Duration.....	6
Funding Available.....	6
Start Date.....	7
Evaluation Process and Criteria- SEAI-based Fellowships	7
SEAI-Based Fellowship Topics.....	8
SEAI-based Fellowship Topic Descriptions.....	10
Submitting Your Application.....	19
Application Form Template Instructions.....	19
Section 1: Contact Information	19
Section 2: Project Details	20
Section 3: Suitability	20
Section 4: Excellence and Innovation	22
Section 5: Relevance and Impact	22
Section 6: Declarations	23
Section 7: Work Plan	23
Section 8: Budget	23

Programme Description and Objectives

SEAI will be central to bringing about a low carbon economy through measures and activities focused on the transition to a smarter and more sustainable energy future. To achieve this mission, SEAI will continue to build an environment for positive change through our analysis, modelling, and support for policymaking. SEAI will catalyse direct action through our design and delivery of grant and incentive programmes and through our capacity-building processes with citizens, communities, and private and public sector organisations.

The Energise Fellowship Programme forms part of SEAI's National Energy Research Funding Programme. This supports innovative and targeted actions which assist in delivery of the [Climate Action Plan](#), the [Programme for Government](#), the [2030 Climate and Energy Framework](#), [Project 2040 Ireland](#), [Impact 2030: Ireland's Research and Innovation Strategy](#), [The DCEE Statement of Research and Innovation Needs 2026-2028](#), [DECC Research and Innovation Strategy 2030](#), [Ireland's National Energy & Climate Plan \(NECP\)](#), and [the Climate Action and Low Carbon Development Bill](#) (2021) such as it pertains to SEAI's remit.

The SEAI Energise Fellowship Programme for 2026 provides an opportunity for postdoctoral or experienced researchers to apply for **two categories of Fellowship awards**:

- **Academic Fellowships**
- **SEAI-Based Fellowships**

The Academic and SEAI-Based Fellowship streams are governed by separate but aligned call documents

This document refers to the SEAI-Based Fellowship stream.

The Energise Fellowship Programme aims to provide successful applicants with career development opportunities through researching areas of Irish energy policy priority. SEAI aims to provide an enabling mechanism for researchers to secure diverse career opportunities in academia and the energy sector, whilst also aiming to further develop and enhance national capabilities and capacities of relevance to the energy industry, public administration and government affairs. The Energise Fellowship Programme will support Fellows to develop key skills that may open up further opportunities at the energy research-policy interface.

The primary objectives of the Energise Fellowship Programme are to:

- Build capacity in the sustainable energy sector.
- Enhance national capabilities and capacities at the energy-policy interface.
- Build capacity in bridging the gap between policy and research.
- Strengthen knowledge to support the clean energy transition.
- Provide career development opportunities for participating fellows.
- Provide researchers considering a transition from academia to the private or public sector with relevant experience and skills.
- Provide researchers with funding in their own name to advance academic career progression, while rounding out professional experience during the Fellowship.
- Provide a development opportunity for experience in energy policy and strategic development and implementation.

SEAI-BASED Fellowships

These awards will support fellows to conduct research on a specified topic, within SEAI. Fellows will typically be based in the SEAI head office in Dublin or the SEAI Cork office (where specified as an option) for the duration of the award.

Who Can Avail of the Programme

The SEAI-based Fellowship opportunity is open to researchers who:

- Hold a relevant PhD or equivalent¹ and EITHER
- Have the support of a 3rd Level Educational Body based in the Republic of Ireland for their application but are not currently on contract with their Organisation Sponsor.
OR
- Faculty Researchers and Postdoctoral Researchers already contracted in a third level institution in Ireland (whether fixed-term or on a contract of indefinite duration)

Applications must be written and submitted by the individual intending to take up the proposed Fellowship. An Academic Sponsor should be identified within the application form and should be listed as such in line with Organisation Sponsor rules. Fellowships are awarded in the applicant's name. Please note that the Academic Sponsor is not eligible for funding.

The Programme also welcomes applicants wishing to return to research after a career break.

Definition of Project Roles

Fellowship Applicant: The Fellowship Applicant will be responsible for the research activities, reporting, dissemination and other duties associated with the proposed Fellowship in-line with SEAI policies.

Academic Sponsor: The Academic Sponsor is based within the Sponsor Organisation and will take administrative responsibility for the Fellow if the applicant is successful. Academic Sponsors must be core-funded members of academic staff with an employment contract that covers the entire duration of the Fellowship. The sponsor will have the responsibility of liaising with the HR dept of the 3rd level body in relation to any contractual and employment requirements, leave entitlements and other administrative duties for the Fellow with the 3rd Level Educational Body while the Fellow is participating in the Fellowship Programme. Note: For Faculty Member applicants, the academic sponsors must be the head of the relevant school or department where the applicant is employed.

A letter of support from the Academic Sponsor must be uploaded with the application

Organisation Sponsor: The 3rd Level Educational Body based in Republic of Ireland supporting the Fellowship application. The Fellowship application will need to be approved by the Organisation Sponsor's Approver on SmartSimple in advance of the deadline. The approver is the authorised individual and designated signatory for your organisation.

SEAI Supervisor: SEAI-based fellows will be assigned an SEAI supervisor who will provide support, guidance and study oversight for the duration of their Fellowship.

¹ SEAI defines PhD equivalent as 4 years' full time research experience after primary degree

Fellowship Duration

The SEAI Fellowship Programme provides funding for Fellowship projects of up to 24 months in duration. SEAI-based Fellowship projects can be offered on a full-time, continuous period basis or on a part-time basis, located in the SEAI office of the host team. For part-time Fellowships, a time commitment of approximately 50% is expected. The minimum time commitment allowed is 40%.

Funding Available

The maximum contribution to a Fellowship award is €300,000 to cover eligible costs for up to two years, inclusive of overheads.

For SEAI-based Fellowships, eligible requested costs include Staff Costs (and associated overheads) and a mobility allowance where applicable, only. Details in the following section

Eligible Direct Costs:

Salary

SEAI recognises that Fellowship applicants may fall into different employment categories, including:

1. Applicants that would be employed by the host institution through the Fellowship award

Eligible staff salary costs comprise actual salary plus social security contributions and other statutory costs included in the remuneration, provided that these costs are in line with the Organisation Sponsor's usual policy and processes. The salary costs should not exceed the rates corresponding to the Organisation Sponsor's usual policy on remuneration.

Applicants should outline relevant experience within the Application Form (Section 2). Please refer to <https://www.iua.ie/for-researchers/researcher-salary-scales-career-framework/> for further details. Applicants at an earlier career stage should apply for the appropriate point on the IUA PD scales, commensurate with experience.

Or

2. Faculty Members

The applicant's salary would continue to be paid by the employer. **Teaching Buyout** may be requested for **Faculty Members** when undertaking the Fellowships as a secondment in SEAI. Requests must be pro-rata and proportional to the time commitment.² Teaching buyout costs should be calculated on the basis of hiring a temporary lecturer (e.g. at point 1 on the Assistant Lecturer, or equivalent, institutional salary scale) *regardless of the seniority of the applicant*. No additional salary can be requested for the fellow who remains employed by their host institution.

Or

3. PostDoctoral Researchers

A **Salary Contribution** for the duration of the secondment may be requested by **Postdoctoral Researchers** already contracted in a third level institution in Ireland (whether fixed-term or on a contract of indefinite duration). Request must align with appropriate point on the Salary Scale. Please note:

² SEAI will only consider the request for % time and teaching buyout at the time of application. If the conditions of employment in the hosting institution change during the duration of Fellowship (for example, additional teaching time is required) the fellow will need to agree with their employer within their % working time. No additional budget will be allocated post-award to adjust for an increased teaching buyout.

- The current salary should be indicated in the application. Based on this information, successful applicants will be awarded a contribution to salary on subsequent points on the IUA salary scale as appropriate.
- Salary requests must be pro-rata and proportional to the time commitment.

Mobility Allowance (max. €10,000 over 2 years). This allowance is for those in categories 2 and 3 above only i.e. those on existing contracts with their organisation sponsor. The mobility allowance is a contribution towards vouched travel and vouched accommodation costs directly related to the progress of the Fellowship. It may be requested to support:

- Travel to and from SEAI or other required locations throughout the secondment. This is available to subsidise the difference between the Fellow's current cost of commute and any additional costs incurred for travel to SEAI offices or other locations in Ireland. These travel costs must be required and justified, and by default calculated as the cheapest available public transport option. This does not include short distance daily commuting where the SEAI office is in the same county as the academic institution.
- Accommodation costs related to relocation of the Fellow during the secondment, where this is relevant and justified. Accommodation costs may be supported where a Fellow is required to temporarily **relocate** for the purposes of the secondment. Costs must be necessary, reasonable, and supported by a clear justification outlining why relocation is required to deliver the fellowship. Maximum nightly accommodation, and domestic subsistence rates will follow the applicable Civil Service Travel and Subsistence Rates, as published by Revenue (<https://www.revenue.ie/en/employing-people/employee-expenses/travel-and-subsistence/civil-service-rates.aspx>).

Successful Fellows will be recognised as an employee of their Organisation Sponsor 3rd Level Educational Body for the duration of the Fellowship. The application must therefore be supported by the Organisation Sponsor's Vice President for Research (or equivalent). Successful applicants not already covered by a contract will have a Specific Purpose Contract/Research Funded Contract with their Organisation Sponsor and will be paid by their Organisation Sponsor in accordance with their contract. All terms and conditions associated with the Fellow's Contract of Employment with their Organisation Sponsor will apply.

SEAI-based Fellows will be assigned an SEAI supervisor who will provide support and guidance for the duration of their Fellowship. Fellows shall comply with all relevant SEAI workplace policies, as notified by SEAI. Fellows will be provided with an appropriate workspace and the necessary IT equipment to fulfil their duties. Currently SEAI is operating a hybrid working model and it is expected that fellows would be in the office at least two days per week in 2026, however, this is subject to change.

Start Date.

Successful applicants will be expected to start the Fellowship within 6 months following notification of funding from SEAI. In the case of maternity, paternity or adoptive leave or other justified circumstances, the start date of the Fellowship may be further delayed, subject to prior approval from SEAI and the Host Organisation.

Evaluation Process and Criteria- SEAI-based Fellowships

Only fully complete applications received prior to the application deadline will be considered for evaluation. The evaluation process consists of three stages:

Stage 1 – Eligibility Assessment: Applications will be assessed to ensure complete submission and compliance with programme requirements, objectives, and remit.

Stage 2 – Technical Evaluation: Applications passing the eligibility assessment will be technically evaluated under the criteria outlined below.

Stage 3 – Interview: Following technical evaluation, highly ranked applicants will be invited to participate in an online interview.

The evaluation criteria under which SEAI-Based Fellowship applications will be assessed, and the proportion of marks awarded to each criterion are outlined below:

Fellowship Suitability (50%)

- Relevance of qualifications and experience
- Scientific outputs appropriate to career stage
- Research Excellence in career to date
- Motivation to undertake Fellowship
- Other communications and public engagement record
- Overall suitability for proposed project

Excellence and Innovation (30%)

- Understanding of the state of the art and the challenge to be addressed
- Quality of the proposed approach and ambition related to state of the art in Ireland and beyond
- The validity and reliability of the prospective approach
- Relevance of the project objectives

Relevance and Impact (20%)






- Relevance to the needs of the Irish energy sector with particular reference to national policy such as it pertains to SEAI's remit
- Builds and/or maintains national capacity, capability and critical mass to carry out internationally leading research activities underpinning the energy sector
- Relevance of enterprise, scientific, policy and social impact of project outputs

SEAI-Based Fellowship Topics

For the SEAI-Based Fellowship category, applications are to be submitted to defined topics. Each topic description below outlines suggested project objectives and expected outputs. Please note that proposals submitted to these topics **are not necessarily expected to address every objective and output listed** in all cases. All proposals should build upon existing research and information available. Please note the actual work programme and detailed implementation plan will be designed following award in collaboration with the host team at SEAI, in alignment with relevant available data and emerging national energy policy priorities related to the fellow's specific area of research.

Fellows will be involved in research work undertaken across the programmatic or directorate teams they join, which will likely be broader than the topic proposal they submit.

As this is a competitive call, SEAI cannot provide feedback on draft proposals, or provide additional information on the Fellowship topics, other than the detail included within this Call Document. Full Topic descriptions can be reviewed in the next section (linked in the Table below). Each application can apply to only one topic.

SEAI – Based Fellowship Topics		
1	Future Visioning: Ireland’s Sustainable Energy System and Society	
2	Integration of Environmental Impacts (Beyond Scope 1 Emissions) into Long-Term Strategic Electricity Sector Scenario Planning	
3	Developing National Electric Vehicle Fleet Charging Profiles in Ireland	
4	Developing a Methodology for Projecting Long-Term Drivers of Energy Demand in Industry and Services Sectors	
5	Securing the Clean-Power Supply Chain for a Renewable Energy-Based Electricity System: Critical Materials, Components, and Strategic Dependencies	

SEAI-based Fellowship Topic Descriptions

Fellowship Topic 1	Future Visioning: Ireland's Sustainable Energy System and Society
SEAI Programme and Department	Research and Policy Insights Directorate Data and Insights Department
SEAI Office	Dublin

Background:

Ambitious, long-term transformation of energy systems requires more than technical pathways and targets. International experience shows that compelling, credible visions play a critical role in aligning policy, investment, institutions, and societal action around shared goals. Effective visioning can help build consensus, clarify direction under uncertainty, and make abstract transition goals tangible and motivating for government, and wider society.

While Ireland has strong policy ambition and analytical capacity, there is an opportunity to strengthen how long-term energy visions are developed, governed, and communicated. This includes learning from leading international visioning and foresight exercises, understanding what gives visions legitimacy and impact, and identifying approaches that actively engage society and decision-makers in shaping and owning the future energy system. This fellowship will support SEAI in exploring how future energy visions can best be designed to inform policy, enable coordination, and generate durable buy-in across sectors and stakeholders.

Project Description:

The Research Fellow will undertake research focused on visioning as a strategic and social process for Ireland's future energy system. The work will examine how impactful energy visions are created, governed, and communicated, with a particular focus on their role in building alignment and momentum across government and wider society.

Key elements of the project may include:

- Reviewing and synthesising international examples of system visioning and transition foresight (e.g. national, regional, or sectoral visions)
- Analysing what makes visions influential, including governance models, deliberative processes, stakeholder involvement, narrative framing, shared generation, use of evidence, and visualisation
- Exploring different visioning approaches (e.g. economy-wide vs sectoral visions for population cohorts (householders, business owners, industrial organisations) or energy modalities (e.g. electricity, heat, transport, industry) - and their respective strengths
- Designing and testing elements of an effective energy vision for Ireland, such as narratives, framing, formats, or engagement approaches
- Examining how visions are communicated and maintained over time to influence policy, decision-making, and public understanding
- Creating recommendations for future vision creation and engagement pathway for Ireland

The fellowship will combine desk-based research, engagement with international best practice, and structured testing of visioning approaches in an Irish context, working closely with SEAI and stakeholders throughout

Skills/Expertise Required: (optional)

- Strong understanding of policy processes, public governance, or societal change
- Experience with qualitative research, comparative analysis, and synthesis of international practice

- Ability to translate complex ideas into clear, compelling narratives and visual concepts
- Experience in futures studies, strategic foresight, systems thinking, or transition studies (desired)
- Excellent writing and communication skills

SEAI welcomes applications from candidates with backgrounds beyond traditional energy or engineering disciplines. Relevant experience may include social sciences, design, humanities, communications, public policy, or related fields where there is demonstrated expertise in futures thinking, narrative development, participatory processes, or societal change. Interdisciplinary approaches and diverse perspectives are seen as a strength for this fellowship.

Fellowship Objectives and Expected Outputs: (high level)

- Identify best practices and lessons from global visioning and transition foresight exercises (energy and other)
- Develop insights into what makes (energy) visions credible, legitimate, and impactful
- Propose design principles for effective energy system visioning in Ireland
- Undertake stakeholder consultation, experimentation and collaborations as may be needed
- Produce practical outputs such as briefing papers, frameworks, narrative concepts, or prototype visioning elements to inform SEAI and government actions supporting vision creation

Fellowship Topic 2	Integration of Environmental Impacts (Beyond Scope 1 Emissions) into Long-Term Strategic Electricity Sector Scenario Planning
SEAI-Based Department	Electricity and Wind Programme - Research Innovation and Electricity Department
SEAI Office	Dublin

Background

Ireland's decarbonisation pathway for the power sector will be delivered through a portfolio of electricity generation, storage and grid investments that emerge from least-cost optimisation modelling and scenario planning. SEAI is undertaking the Decarbonised Electricity System Study (DESS) to provide such a set of pathways (portfolios) to the government under the Climate Action Plan.

However, when these portfolios are translated into national or sectoral plans, the Strategic Environmental Assessment (SEA) Directive (2001/42/EC) may require an assessment of likely significant environmental effects, including a transparent appraisal of reasonable alternatives, public participation, and monitoring of effects. Long-term strategic electricity plans may fall within scope because they set the framework for future development consent.

There is a gap in current research and practice in Ireland. Standard approaches to long-term, strategic electricity sector scenario planning do not systematically consider environmental impacts other than scope 1 (operational) emissions. SEAI hopes to bridge this gap by comparing the environmental impacts of -term power sector portfolios (produced by our in-house modelling team) using a method that is compatible with national SEA requirements, producing SEA ready evidence on alternatives, effects, mitigation and monitoring.

Project Description:

This project will utilise the outputs of SEAI's Decarbonised Electricity System Study (DESS) to develop and demonstrate a framework for comparing power sector portfolios for the purposes of a SEA.

The Fellowship will (i) explore SEA compliant approaches for comparing long-term power portfolios; (ii) investigate options for developing a practical, auditable framework that connects least cost power modelling outputs to SEA requirements; and (iii) potentially demonstrate a framework with Irish portfolios and stakeholders.

SEAI will place a significant number of resources at the disposal of the fellow. These include:

- In-house expertise on the Irish electricity system, system modelling, spatial analysis and stakeholder engagement
- The full set of outputs from the Decarbonised Electricity System Study; a range of scenarios-based portfolios with sensitivities, and a multi-criteria analysis of technologies and portfolios with the associated technical inputs
- A network of power sector stakeholders and Subject Matter Experts (SMEs) to participate in the demonstration of the framework.

Skills/Expertise Required:

The following skill areas are relevant to work, but we do not expect a single candidate to have all of them. Having any number of the skills below is sufficient for an application. We expect that some new knowledge and skills will be acquired during the Fellowship.

- SEA/Environmental Assessment: Experience with national SEA, alternatives, cumulative effects, mitigation hierarchy, and monitoring.

- Decision Science: Expertise in applying group decision-making methods such as pairwise comparisons / Analytic Hierarchy Process, PROMETHEE/TOPSIS.
- Power Systems: Basic knowledge of power sector technologies and translating infrastructure deployment into environmental pressure metrics.
- GIS/Spatial Analysis: Experience in terrestrial or marine sensitivity mapping and cumulative effects implementations aligned with EU practice.
- Ecologist/Biodiversity Specialist: Biodiversity pathways, AA/NIS interface, and mitigation/monitoring design in line with Irish/EU requirements.
- Stakeholder Engagement Practitioner: Design and facilitation of elicitation workshops and SEA consultations in Ireland.

Fellowship Objectives and Expected Outputs:

- Method determination: Investigate the most appropriate methods (including, where suitable, pairwise comparison) to compare long term power portfolios in a way that would satisfy SEA legal and guidance requirements in Ireland
- Framework development: Create a Portfolio Environmental Appraisal Framework (PEAF) that maps optimisation outputs to SEA ready evidence
- Demonstration: Where appropriate, test or illustrate the framework to Irish power portfolios and coproduce SEA-ready chapters and schedules with stakeholders, illustrating how portfolio choices translate to a compliant consideration of reasonable alternatives

Fellowship Topic 3	Developing National Electric Vehicle Fleet Charging Profiles in Ireland
SEAI-Based Department	Energy Modelling Programme - Data and Insights Department
SEAI	Dublin or Cork

Background:

As the stock of electric vehicles (EVs) grows, there is a need to simulate a range of EV charging behaviours to investigate the potential impacts of EV adoption on electricity grids and markets. As well as being a relatively new form of electricity demand, EVs, given their smart controls, are also a leading candidate to provide flexibility services by charging during off-peak or by more sophisticated forms such as vehicle-to-grid and grid-to-vehicle. Such flexibility provision not only aids electricity system operators but can also benefit end consumers via charging-cost reductions and/or additional revenue streams whilst preserving end consumer preferences.^{3,4,5}

In order to simulate high temporal-resolution charging patterns of the national EV fleet, a transport model capturing mobility patterns (trips) is essential. In recent years, open-source software has been developed to allow users to model mobility behaviour and electric vehicle charging strategies.^{6,7}

Project Description:

-This Fellowship will explore approaches for developing an automated workflow in Python that can generate transportation, consumption and charging patterns at high temporal resolution, building on existing open source software where appropriate. The initial focus will be on passenger cars, with the potential to extend the workflow to light goods vehicles, heavy goods vehicles and buses, as well as a range of smart -fleet management- strategies. Subnational spatial information may also be considered if suitable datasets are available.

Please note that stock turnover (EV adoption rate) modelling is outside the main scope of this work and will be provided through scenario-based data from SEAI's Energy Modelling transport model (or other sources as appropriate).

The successful fellow will be situated within the Energy Modelling team in the Data & Insights Department at SEAI, working closely with colleagues specialising in electricity and transport. Engagement with other teams—such as Behavioural Economics, Energy Policy & Programme Evaluation, and Energy Statistics—may also arise where relevant.

Skills/Expertise Required:

Required

- A research degree (master's or PhD) in engineering or science.
- A strong background in transport modelling.
- Proficiency in computer programming, particularly with Python.

Desired

³ CRU, "National Energy Demand Strategy: Decision Paper", July 2024. [Online.] Available at: [URL](#).

⁴ ESB Networks, "Flexibility Multi-Year Plan 2025-2029: Distribution Markets and System Operation", Sept. 2024. [Online.] Available at: [URL](#).

⁵ G. Morales-España, "Classifying and modelling demand response in power systems", *Energy*, 242, 122544. [URL](#)

⁶ O. Usmani and G. Morales-España, "ChaProEV". [Online.] Available at: [repository URL](#); [paper URL](#).

⁷ A. Mangipinto et al., "RAMP-Mobility. [Online.] Available at: [repository URL](#); [paper URL](#).

- Experience with version control practices (e.g. Git) and using open repositories (GitHub or GitLab).
- Knowledge of datasets for national transport / mobility modelling in Ireland, particularly open datasets.
- An interest in the intersection of transport and energy system modelling and climate or energy policy.

Fellowship Objectives and Expected Outputs:

Anticipated outcomes may include:

- A structured collation of open datasets and assumptions related to transport and electric vehicle modelling in Ireland.
- A configurable, automated workflow that processes these raw datasets and generates electric vehicle charging time-series, given other user-selected configuration parameters.
- An academic paper describing the above and the accompanying public repository with open licenses and documentation.

Fellowship Topic 4	Developing a Methodology for Projecting Long-Term Drivers of Energy Demand in Industry and Services Sectors
SEAI-Based Department	Energy Modelling Programme - Data and Insights Department
SEAI Office	Dublin or Cork

Background:

SEAI holds, develops and runs the Irish National Energy Modelling Framework (NEMF). This model represents the Irish energy system and is used to create scenarios of future energy use in Ireland. It is used to produce the National Energy Projections⁸, which form the basis of Ireland's Greenhouse Gas Emissions Projections⁹, and is also used to provide supporting analysis for other international reporting requirements, including analysis for the National Energy and Climate Plans (NECPs), the National Assessment of Efficient Heating and Cooling Potential, and the National Building Renovation Plan.

One important set of inputs to the NEMF are projections of activity in different sectors of the economy. These are the basis of projections of potential change in useful energy demand of those sectors. For example, in residential sector, a driver of useful energy demand is the total number of dwellings. The NEMF takes as inputs projections of new dwelling completions from the Department of Housing and the Central Bank, which are based on long term population growth estimates. For the transport sector the NEMF takes projections of km travelled of private cars and goods vehicles developed by the National Transport Authority based on detailed modelling transport demand considering population growth and settlement patterns.

The aim of this project is to investigate the drivers of energy demand for key subsectors in industry and services, and to develop a set of indicators that can be used to project the useful energy demand of those sectors, with an appropriate methodology determined by the research fellow in collaboration with the SEAI modelling team.

Project Description:

The Research Fellow will investigate the drivers of energy demand for existing subsectors in industry and services and examine methodological options for projecting activity levels and useful energy demand of those subsectors for a 30-year time horizon. The project could also consider the potential for emerging industries as envisioned by the Governments Large Energy User Action Plan.

The Fellowship is open to a range of analytical approaches and modelling techniques proposed by the researcher, with the main requirement being that the outputs generated by the methodology are explainable in their link back to key macroeconomic indicators, allowing for benchmarking against other publicly available economic forecasts.

Skills/Expertise Required:

Required:

- PhD in Engineering, Science or Economics
- Experience of analysis of industry activity or energy use from an economic or engineering perspective

⁸ SEAI, "National Energy Projections 2025", October 2025. [Online.] Available at: [URL](#).

⁹ EPA, "Ireland's Greenhouse Gas Emissions Projections 2024-2055", May 2025. [Online]. Available at: [URL](#).

- Experience in data analysis using a general-purpose programming language such as Python

Beneficial:

- Experience of energy system scenario design and analysis
- Proficiency in implementing modelling and data science logic in Python

Fellowship Objectives and Expected Outputs:

- Conduct a literature review of appropriate methods to project near- and long-term energy demand in Irish industry and services sectors
- Establish methodology to project the activity and useful energy demand of industry and services subsectors for a 30-year time horizon.
- Implement methodology in Python, in collaboration with modelling team
- Prepare an academic paper exploring the impact of the methodology and performance over near- and long-term projection horizon

Fellowship Topic 5	Securing the Clean-Power Supply Chain for a Renewable Energy-Based Electricity System: Critical Materials, Components, and Strategic Dependencies
SEAI Programme and Department	Innovation and International Energy Research Programme- Research, Innovation and Electricity Department
SEAI Office	Dublin or Cork

Background

Ireland's pathway to a fully decarbonised electricity system by 2050 depends not only on technology deployment but on resilient supply chains for critical raw materials, components and infrastructure. Government policy and SEAI's analysis highlights the scale and timelines for deployment across technologies, such as onshore and offshore wind, solar PV, enhanced electricity networks, storage, and system services. However, global supply chains for many of these technologies are increasingly exposed to geopolitical, market and permitting risks, including significant reliance on non-EU suppliers.

Project Description

This Fellowship will provide SEAI with a structured, evidence-based assessment of supply chain risks associated with delivering a decarbonised electricity system in Ireland. It will focus on critical raw materials, key components and enabling infrastructure, and will identify practical policy and programme-level interventions to mitigate risks and enhance resilience, including areas for future research prioritisation.

Potential work plan components could include: mapping critical raw material inputs and component supply chains for important technologies in the future Irish energy system; assessing supply concentration, geopolitical exposure, and lead times; stress-testing technology deployment pathways against supply disruption scenarios; identifying mitigation levers, policy options and programme recommendations

Skills/Expertise Required:

Energy and climate policy; economics; supply chain and industrial policy analysis; critical raw materials; qualitative and quantitative research methods; stakeholder engagement.

Fellowship Objectives and Expected Outputs:

Objectives:

- Strengthen SEAI's evidence base on supply chain resilience for clean energy technologies.
- Inform programme and policy design focused on pathways to a renewable energy-based electricity system.
- Support cross-government and EU-aligned action on critical raw materials and supply chain resiliency.

Expected Outputs:

- Policy and programme recommendations report.
- Supply chain risk register for energy technologies critical to Ireland's decarbonisation plans.
- Stakeholder engagement materials, internal SEAI briefings, research-to-policy dissemination.

Submitting Your Application

Please note that applications need to be approved by your Organisation Sponsor Approver within the SmartSimple portal in order to be submitted. The Approver is the authorised individual and designated signatory for your Organisation. Please check with your research office and allow sufficient time for your organisation Approver to approve the application in advance of the deadline.

Applications should also include Letters of Support from an Academic Sponsor in the Organisation Sponsor institution; confirming their support for the proposed Fellowship application. Any additional unsolicited Letters of Support will not be accepted.

Application Form Template Instructions

This section provides guidance on how to complete the Application.

Please note:

- Applications to the 2026 SEAI Fellowship Programme should be made through <https://seai.smartsimple.ie>. Please keep an eye on our website for when the SmartSimple portal is open for applications.
- Organisations and individuals that have previously been awarded SEAI funding are already registered on the SmartSimple platform. New applicants to the system will need to register themselves.
- Only fully complete and approved applications received prior to the application deadline will be considered for evaluation.
- Please ensure all sources are appropriately referenced including use of any generative AI or AI assisted tools. Please refer to the European Commission Guidelines for further guidelines on the use of generative AI in research and describe which tools (with version specified), where the tool was used in the application and to what extent.
- In order to avoid losing data inputted to SmartSimple, use the 'save draft' button after completing each section of the application.
- You may wish to complete your application offline using the guidance in this document and then paste into the relevant sections. Figures, graphs, etc can be uploaded as separate documents in Section 7: Work Plan.

Section 1: Contact Information

- **Academic Mentor/Sponsor**

Name the Academic Sponsor supporting your application. For further information see definition of project roles above.

- **Approver**

Please select your organisation Approver. The Approver is the authorised individual and designated signatory for your organisation. Please note the Approver will need to approve your application before submission.

Section 2: Project Details

- **Project Title**
The project title should clearly convey the nature of the project to be undertaken.
- **Project Acronym**
Please include a project acronym.
- **Topic Number**
Please enter the topic number you are applying to here.
- **Requested Duration**
Indicate the requested project duration (months), noting that the maximum duration is 24 months.
- **SEAI-Requested Costs and Total Project Costs**
The costs requested from SEAI and the total cost of the project. These figures should auto populate from the budget section.
- **Full Time or Part Time**
Please indicate percentage of time that will be spent on the project. This should be no less than 40%
- **Abstract (max 250 words)**
This should be a succinct and accurate summary of the proposed work.
- **Non-technical Summary (max 250 words)**
Provide a brief, easy-to-understand description of your project. This should be written in simple language, aimed at helping the public understand the reasons and methods behind the work.
- **Keywords (max 5 words)**
These should be descriptors that best characterise the proposed research.
- **Energy Research Classification**
From the drop-down list, please select the energy research category that best aligns with the proposed research.
- **Collaborators**
Identify any collaborator Organisations in the project if applicable. Collaborators are organisations who are committed to providing a valuable intellectual, technical or financial contribution to the proposed project. Collaborators are not funded by SEAI in a proposed project.

Section 3: Suitability

- **Year of Obtaining PhD**
Please include the year you obtained your PhD, or type 0 if not applicable.
- **Education Details**
Please provide details of your education including Dates, Qualification, Subject, Country and Institution.

- **Employment History Details**

Please provide details of your employment history including Dates, Position and Organisation name.

- **Motivation to undertake Fellowship (max 1000 words)**

This key section should demonstrate the Fellowship applicant's interest in and suitability for the proposed Fellowship. Provide a summary of your academic and professional background. Highlight any relevant experience, achievements, and skills that make you a suitable candidate for the Fellowship. Detail your specific research interests and how they align with this opportunity. Explain the significance of the research, its potential impact on the field, what drives you to pursue it. Describe your short- and long-term career goals, how the Fellowship would help you to achieve these goals and how it fits into your overall career trajectory. Ensure that your statement aligns with the goals and objectives of the Energise Fellowship Programme.

The following sections follow the structure of the narrative CV. Please omit journal-based metrics such as impact factors and author-based metrics such as h-index. For more information, please visit <https://sfdora.org/>. For guidance on writing a narrative CV refer to online resources, including <https://www.sfi.ie/funding/sfi-policies-and-guidance/narrative-cv-dora/>

- **Most Relevant Research Outputs (max 500 words)**

*Please reference up to **five research outputs that are most relevant to your role on this application**. Please include one reference per output, if applicable, and explain very briefly for each (for example three to four lines) your specific contribution and the significance and impact to the field or to policy and/or practice.*

Key Achievements in Research Excellence & Impact

Describe the significance and/or impact of up to 3 key achievements per category below. For each example, provide an outline of the stated achievement, what specific role you played, why you think it is important, any benefit to the field and, where relevant, the resulting impact.

- **Key achievements in the generation of knowledge (max 500 words)**

Please describe how you have contributed to the generation of new ideas, hypotheses and tools in your field. These can include but should not be limited to, preprints, open data sets, software, publications, blogposts, innovation and commercialisation activities and policy publications. Highlight if these are openly available and include a DOI, if available.

- **Key achievements in the development of individuals and collaborations (max 500 words)**

Please describe your role in the success of a team or team member. You may wish to refer to how you have supported individuals in progressing their careers or how you have been integral to a team's success (including supporting equality, diversity and inclusion in your team and mentoring). You may also wish to refer to contributions you have made to the success of consortia, collaborations, academic activities (e.g., teaching and workshops).

- **Key achievements supporting the research and innovation community (max 500 words)**

Please describe your key achievements supporting wider research and innovation community such as editing, reviewing and evaluation of researchers and applications for funding. Your response can also include activities such as organising events that benefited the research and innovation community, improving research culture (including, but not limited to, ethics, research integrity, equality, diversity and inclusion). It may also include your contribution to infrastructure for research, participation in committees or consortia etc

- **Key achievements supporting broader society (max 500 words)**

Please describe your key achievements in supporting society and knowledge exchange, such as engagements with the private sector, the public sector, the non-profit sector, clients and the broader public. Include impacts on research policy and/or business practice, evidence of advising policymakers at local, national or international level, and the provision of information through the press, social media etc

Section 4: Excellence and Innovation

- **Background (max 300 words)**

Summarise the context of your proposed research idea.

- **How this research will address the topic (max 500 words)**

Describe the concept of the proposed project and provide details of how the proposed project will further the current state-of-the-art, current knowledge or current practice. The degree of novelty and innovation associated with the proposed project should be clearly demonstrated. Describe clearly how this project would advance the state of the art in the research area/field, and within Ireland.

- **Outline how you will address the key goals of the research including research methods (max 500 words)**

Describe the proposed research methodology to carry out this research and meet its objectives- including but not limiting to research design, data collection, data analysis, etc. Please disclose and appropriately reference the plan for using any generative AI or AI assisted tools in the research and/or their use in the production of this proposal.

- **Project Objectives**

Provide details of the objectives of the project.

Section 5: Relevance and Impact

This section should be as specific as possible and provide information that reviewers will find helpful in assessing the relevance and potential impact of the proposed research activity.

- **Relevance to the needs of the Irish Energy Sector and to SEAI (max 500 words)**

Clearly demonstrate the relevance of the proposed project to the needs of the Irish energy sector with particular reference to Ireland's Climate Action Plan, the Programme for Government, the National Mitigation Plan, Energy White Paper and/or Ireland's National Energy & Climate Plan (NECP), Climate Action and Low Carbon Development Bill (2021). Refer to other relevant policy documents as appropriate.

- **Impact Statement (max 750 words)**

*Describe how this research will build and/or maintain national capacity, capability and critical mass to carry out internationally leading research activities underpinning the energy sector
Describe any enterprise, scientific, policy and social impact of project outputs*

Section 6: Declarations

- Confirm that the information provided in the application is correct to the best of their knowledge, that all sources including generative AI have been correctly acknowledged in the application, and that the proposed project has not been/is not the subject of grant aid from any other source.
- Please tick to confirm that the use of generative AI or AI assisted tools in the production of this proposal has been appropriately disclosed and referenced.
- **Letters of Support**
Please upload a Letter of support for:
 - **Academic Sponsor.** *Confirming they are a core-funded member of academic staff or a member of academic staff with a fixed-term contract covering at least the duration of the proposed Fellowship); and confirming support of the fellow and their agreement to take on the role of academic sponsor as defined in the SEAI call document. For faculty members the academic sponsor should be their head of school.*
 - **Each Collaborator Organisation (if any)** *included in the application, providing details to confirm their role in the project, and details of any proposed support (e.g., data access, technology trial/demonstrator, in-kind support, or other).*

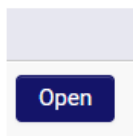
Section 7: Work Plan

- **References, tables and Figures**
Please include a list of references/bibliography as an appendix as required. Any relevant tables or figure relating to the application may also be included here.

Section 8: Budget


Applicants should refer to the SEAI RD&D Budget Policy 2026 Document and Call document when completing the budget sections of their application.

Please ensure you "open" the budget to start this section



- **Research Category & Justification**
Please select "Non-Economic Public Good: Third Level Educational Bodies" from the dropdown and provide a justification
- **Grant Aid Intensifier & Justification**
Please select N/A here and insert "N/A" into the Justification box.
- **Confirm if you meet the definition of Small or Medium Enterprise for the allocation of the SME Grant Intensifier**
Please select N/A here

- Save Draft and progress to Enter project costs via the “Add/Edit Budget” icon

 Add/Edit Budget

Organisation Project Costs

Provide an overview of costs by completing the budget table. Add additional rows per category as required.

For SEAI-based Fellowships, eligible requested costs include **Staff Costs** (and associated overheads) and a **mobility allowance** where applicable, only.

Staff: Complete the Staff table for each person. Add a row as required for each proposed staff member to be funded by the Fellowship. If requesting Teaching buy-out, please include here.

Applicants to the SEAI based Fellowship can be

- Permanent members of staff **or**
 - Post Docs **or**
 - Not in contract with the HEI.
- Permanent staff can only request teaching buyout, proportional to the amount of time they are spending on the Fellowship.
 - Post docs and those not currently in a contract can request salary.

Example 1 - Permanent Staff requesting 50% teaching buy out [costs include employers PRSI and Pension]

Internal Staff

Role	Name and title of staff member (if known)	Annual rate €	Person months	Year 1 €	Year 2 €	Total €
Other	Teaching Buy	€45,000	12	€29,531	€29,531	€59,062
Total:				€29,531	€29,531	€59,062

Example 2 – Post Doc / Not on contract [from IUA Scales – costs include employers PRSI and Pension]

Internal Staff

Role	Name and title of staff member (if known)	Annual rate €	Person months	Year 1 €	Year 2 €	Total €
Post Doc	Post Doc	€47,273	24	€62,046	€62,046	€124,092
Total:				€62,046	€62,046	€124,092

Travel: Complete the travel table indicating the travel required and the quantity and the associated cost. Add a row as required for each travel item.

Mobility allowance (max. €10,000 over 2 years). A contribution towards vouched travel and vouched accommodation costs directly related to the progress of the Fellowship may be requested to support:

- Travel to and from SEAI throughout the secondment. This does not include short distance daily commuting (when SEAI office is in the same county as the employer)

academic institution/sponsor organisation) but may include relocation costs or long-distance travel within Ireland on a regular basis where required and justified. This should be calculated as the cheapest available public transport option.

- Accommodation costs related to relocation of the Researcher, where relevant and justified.
- Maximum nightly accommodation, and domestic subsistence rates will follow the applicable Civil Service Travel and Subsistence Rates, as published by Revenue (<https://www.revenue.ie/en/employing-people/employee-expenses/travel-and-subsistence/civil-service-rates.aspx>).

Travel

Details	Project personnel	Frequency / duration	Year 1 €	Year 2 €	Total €
Mobility Allow	Post Doc	For 24months	€5,000	€5,000	€10,000
Total:			€5,000	€5,000	€10,000

- **Budget Justification**

Provide a justification to support proposed total project costs included in the application under the headings of staff and travel . For all other fields please input N/A

Staff: *Justify the role and need for each staff member who would be funded by the proposed project. Details should include justification for the level of this position, explaining how the costs associated with this position have been calculated. Details of any requested teaching buyout should be provide and how the cost have been calculated.*

Indirect Costs: *Overheads are automatically calculated as a percentage of staff costs*

Travel: *Justify the need for mobility allowance requested as part of the proposal. Provide a justification/rationale for the quoted cost. Where possible, online meetings/events are encouraged.*

- **Budget Submission**

Please note that the budget itself will need to be submitted before the application can be submitted for approval by your organisation's Approver.

Sustainable Energy Authority of Ireland

w: www.seai.ie

e: energyresearch@seai.ie



Rialtas na hÉireann
Government of Ireland