



Sustainable Energy Authority of Ireland

2022 SEAI Fellowship Pilot Programme

Call for Submission of Applications

Key Dates	
Call Open Date	November 29, 2022
Deadline for Application Submission	February 14 th 2023, 3PM IST

It is the responsibility of each applicant to SEAI's Fellowship Pilot 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); **Application Form Template** (word doc); the **SEAI RD&D Budget Policy** (where applicable) and the SEAI National Energy Research Development and Demonstration Funding Programme [Privacy Notice](#).

The Sustainable Energy Authority of Ireland (SEAI) works with the public, businesses, government and communities to achieve a cleaner energy future. SEAI is funded by the Government of Ireland through the Department of the Environment, Climate and Communications.



Rialtas na hÉireann
Government of Ireland

TABLE OF CONTENTS

1. Pilot Programme Description and Objectives	2
2. Who Can Avail of the Programme	3
3. Definition of Project Roles	3
4. Fellowship Durations and Funding Available	3
5. Fellowship Topics	5
6. Submitting Your Application	6
7. Evaluation Process and Criteria	6
ANNEX – Fellowship Topic Descriptions	8

1. Pilot Programme Description and Objectives

SEAI will be central to the national energy revolution, 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 policy-making. 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 SEAI National Energy Research Development and Demonstration (RD&D) Funding Programme supports innovative energy RD&D projects which contribute to Ireland's transition to a clean and secure energy future. The Programme supports innovative and targeted actions which assist in delivery of the [Climate Action Plan](#), the [Programme for Government](#), the [2030 Climate and Energy Framework](#), the 2015 Department of the Environment, Climate and Communications [Energy White Paper](#), 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. In addition, the funding Programme aims to support emerging EU Directives, such as [Renewable Energy Directive III](#), and emerging policy, such as [Fit for 55](#) and [RePowerEU](#).

SEAI is now piloting a new SEAI Fellowship Programme. This pilot programme will provide the opportunity for postdoctoral or experienced researchers to apply for **fellowship positions based within SEAI**.

The SEAI Fellowship Programme aims to provide successful applicants with career development opportunities through researching areas of Irish energy policy priority, while immersed in the diverse activities carried out by SEAI, Ireland's sustainable energy authority. SEAI aims to provide an enabling mechanism for researchers to secure diverse career opportunities in 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 SEAI 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 SEAI 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 experiences and skills
- Provide a development opportunity for experience in energy policy and strategic development and implementation

2. Who Can Avail of the Programme

Fellowship applications will be accepted from 3rd Level Educational Bodies only, based in the Republic of Ireland. The SEAI Fellowship Programme is open to researchers who:

- Hold a relevant PhD or equivalent* relevant research experience
- Have the support of a 3rd Level Educational Body for their application

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

Applications must be 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. 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 for any reason.

3. 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 carry responsibility for 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.

Organisation Sponsor: The confirmed 3rd Level Educational Body supporting the fellowship application.

4. Fellowship Durations and Funding Available

The SEAI Fellowship Programme provides funding for fellowship projects of up to 24 months in duration. Longer durations will be considered on an exceptional basis where justified. Fellowship projects will be offered on a full-time, continuous period basis, located in SEAI Dublin office.

Eligible requested costs include Staff Costs (and associated overheads) only. The maximum SEAI contribution to a Fellowship award is for two year's salary plus overheads. Please refer to the SEAI RD&D Budget Policy and IUA salary scales. Deviations from IUA scales will be considered where well justified. Applicants should liaise with their organisation's HR department to determine the correct salary level. Please refer to the SEAI RD&D Budget Policy for further details. Eligible staff 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.

SEAI expect that for fellowship applications requesting salaries on the IUA Research Fellow Scale, a Research Fellow would:

- Have at least 4 years' post-doctoral or equivalent experience
- Demonstrate the capacity for independent research
- Have a strong track record of high-quality publications
- Could have experience of research leadership and management within a research group or laboratory
- Could have demonstrable experience of engaged research and working with stakeholders
- May have secured independent research funding whilst remaining associated with a PI who would act as their mentor

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

Successful Fellows will be recognised as an employee of their supportive host 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 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 Research Body will apply.

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 2023, however this is subject to change.

Please note the actual work programme of a fellow may be subject to evolution following award, in alignment with relevant emerging national energy policy priorities related to that specific area of research.

5. Fellowship Topics

Within this 2022 Pilot Call, applications can be submitted to one of seven defined topics.

Each topic description in the Annex 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.

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 within the Annex (linked in the Table below). Please note the actual work programme of a fellow may be subject to evolution following award, in alignment with relevant emerging national energy policy priorities related to that specific area of research.

SEAI Fellowship Topics		
1	Investigating gender aspects of Ireland's clean energy transition	
2	Investigating ecological preservation while maximising Ireland's clean energy transition	
3	Investigating innovation to impact frameworks to achieve Ireland's clean energy transition	
4	Developing a research impact framework to support Irelands energy research sector	
5	Research informing model methodology and functionality to enhance comprehensive energy modelling capability	
6	Improving the Effectiveness and Equity of Energy Saving Programmes	
7	Behavioural economic trials to understand energy consumption and encourage uptake of energy saving measures	

6. Submitting Your Application

Applications to the 2022 SEAI Pilot Fellowship Programme should be made through SEAI's online application platform, PEP (Project Evaluation Platform).

The PEP Application Portal will be available from January 2023 and information and guidance on how to submit your application will be provided at the following link:

www.seai.ie/grants/research-funding/research-fellowship/

Applications must include a complete Application Form (Word doc), which must be submitted to SEAI via PEP. The Application Form template is available to download at the link above.

Applications should also include Letters of Support from the following: (1) An authorised staff member in the Organisation Sponsor (e.g., the Vice President for Research or equivalent); (2) 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 Checklist

Application Form	<input type="checkbox"/>
Letter of Support - Vice President for Research or Similar	<input type="checkbox"/>
Letter of Support – Academic Sponsor	<input type="checkbox"/>
Declaration of 3 rd level educational body – Non-Economic Public Good (NEPG)	<input type="checkbox"/>

7. Evaluation Process and Criteria

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 administrative compliance with programme requirements and objectives.

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

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

Successful applicants will be based in SEAI's Dublin office for the entire duration of the Fellowship.

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

Fellowship Suitability (30%)

- Relevance of qualifications and experience
- Motivation to undertake fellowship
- Scientific outputs appropriate to career stage

- Other communications and public engagement
- Overall suitability for proposed project

Excellence and Innovation (30%)

- Familiarity with relevant RD&D activities/knowledge of the area
- 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 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 impacts of project outputs
- Strength of communication/dissemination and exploitation plans and approach to data management

Quality and Efficiency of Implementation (20%)

- Coherence and effectiveness of the proposed fellowship project work plan
- Quality of project framework, clarity of deliverables and milestones with a credible breakdown of activities

ANNEX – FELLOWSHIP TOPIC DESCRIPTIONS

Fellowship Topic 1	Investigating gender aspects of Ireland's clean energy transition
SEAI-based Department	Research and Technology Department

Background:

The Irish government has increased its climate ambitions over the past number of years and has set challenging emission reduction targets. The scale of the challenge is such that there is a need for the inclusion and contribution of all citizens to the actions required to reduce our emissions. The United Nations (UN) has compiled 17 Sustainable Development Goals (SDGs) as part of the 2030 Agenda for Sustainable Development adopted by all United Nations Member States in 2015. There is a global commitment to the SDGs including access to sustainable energy for all by 2030.

The gender dimension of the energy transition is integrated into both the fifth SDG - 'Achieving gender equality and empowering all women and girls' (<https://sdgs.un.org/goals/goal5>) and the seventh SDG – 'Ensuring access to affordable, reliable, sustainable and modern energy for all' (<https://sdgs.un.org/goals/goal7>). The EU is also committed to ensuring gender equality in the transition to a sustainable energy model. SEAI is a leading authority driving Ireland's sustainable energy transformation and works with Government to allow the smooth implementation of policy thus helping to deliver the ambitious and necessary national climate targets. It is assumed that energy policy is gender neutral, and that all benefit from it equally. However, that is not necessarily the case and there is a growing interest in understanding gender aspects of the energy transition.

Climate action needs to ensure that all citizens and genders are engaged in decision-making processes, development and use of technologies, and benefit from their outcomes. Different genders may experience different impacts of climate change and therefore, it is important that the needs of all are addressed to ensure effective and equitable climate action. Different and varied perspectives can also bring new insights and innovations in identifying and implementing solutions.

Topic Objectives and Expected Outputs:

Fellowship proposals to this topic could address the following points, among others:

- Review available literature on gender considerations in the energy sector such as awareness, access, consumption, leadership, decision making and assess the level of sex disaggregated data available for the energy sector;
- Consider whether energy policies in Ireland are gender neutral or gender blind;
- Assemble detailed data and information and/or review available databases on the different policy implementing programmes in SEAI;
- Investigate whether gender plays a role in the implementation of programmes by examining related available gender data;
- Where gender data is unavailable provide recommendations for whether gender data should be collected and the process that would need to be followed to implement the data collection;
- Make recommendations about how gender considerations could be included in the design phase of new programmes;
- Consider the impact of gender on the communication strategies for policy implementing programmes;
- Conduct additional research activities relating to gender in the energy sector which may be required to support SEAI in delivery of relevant activities.

Fellowship Topic 2	Investigating ecological conservation management while maximising Ireland's clean energy transition
SEAI-based Department	Research and Technology Department

Background:

It is recognised that the development of renewable energy sources is crucial for achieving Ireland's and the EU's energy and climate targets. However, exploitation of renewable energy resources may also lead to certain environmental problems or risks regarding human health. Ireland, through the Climate Action Plan (2021), established an increased 80% renewable energy target for the electricity sector by 2030. Accelerated deployment and delivery of Ireland's clean energy ambitions need to be conducted in adherence with EU biodiversity goals, in particular EU protected habitats and species.

Renewable energy developments, such as wind, solar, ocean, geothermal and bioenergy, all require a planning authority to grant permission for the activity. As part of this application process, environmental screening is required for any likely impacts of the project on the environment and in particular, on protected habitats or species. Environmental assessments, including Strategic Environmental Assessment, Appropriate Assessment and Environmental Impact Assessment, are tools which help to maximise environmental and social benefits resulting from renewable energy development, while avoiding or minimising potential adverse effects. Increased demand of renewable energy in turn is increasing demand for ecological participation.

Topic Objectives and Expected Outputs:

SEAI wishes to examine ecological conservation management and its role in Ireland's clean energy transition.

Proposals to this topic should aim to enhance national ecological capacity and suggest approaches, in line with EU Directives and ambitions, that could mitigate potential risk and streamline project level development, while capturing implications for stakeholders, including landowners and citizens.

The following is a non-exhaustive list of potential outputs that could be expected from this fellowship:

- Review policies in place in European member states, identifying measures that may support the mitigation of negative impacts to the Irish context, and tracking any unintended consequences;
- Literature review of evidence-based research into effective mitigation and compensation measures that have contributed to planning confidence;
- Habitat Management - review the efficacy of existing management plans and analysis of how adaptive management could be put in place based on current best evidence;
- Consider how ecology legal requirements fit in to the planning regime, including suggesting a best practice review process for local authorities to follow;
- Conduct additional research activities relating to ecology in the energy sector which may be required to support SEAI in delivery of relevant activities.

Fellowship Topic 3	Applying an innovation to impact framework to achieve Ireland's clean energy transition
SEAI-based Department	Research and Policy Insights Directorate

Background:

To meet Ireland's climate targets, strategic innovation in the energy sector must develop and expand in a rapid fashion. The role of innovation in the establishment, survival and growth of organisations is understood. However, management approaches to embed innovation into current practices are required to support agile decision making and resource allocation in the context of changing opportunities, as well as time and resource constraints.

To achieve breakthroughs, it is required that research outcomes are scaled for population-level clean energy transition impact in Ireland, with a structured but flexible transformative approach that can support innovators in the context of their own organisation and industry. A flexible framework for the Irish energy sector would facilitate development, implementation, testing, evaluation, and fast-cycle iteration and can guide the development of strategic innovation capabilities in Irish organisations over time with a strong foundation.

Fellowship Topic Objectives and Expected Outputs:

The key outcome of this fellowship would be a framework to be adapted by SEAI which can address innovation challenges effectively within different SEAI Departments. It is intended to support SEAI in translating outputs from its research and technology, and data and insights teams into continuously developing sustainable innovative programmes that identify and support high impact business opportunities and in turn transform them into purposeful innovations that create significant value for all stakeholders. A concise framework sharing the language of core concepts of innovation and value proposition would be beneficial to SEAI to quantify its potential impacts as part of the Clean Energy Transition.

The following is a non-exhaustive list of the outputs that could be expected from this fellowship:

- An extensive literature review and assessment of:
 - Different innovation to impact frameworks
 - Innovation models and management approaches
- Identify issues and challenges to the Irish energy sector in innovation;
- Design an Irish Innovation to Impact Framework for SEAI including:
 - Adaptable process template
 - Core tool template and toolkits
 - Common language and definitions
- Trial of the framework with a number of different departments of SEAI, supports and guidelines on how to use the framework;
- Conduct additional research activities relating to innovation to impact in the energy sector which may be required to support SEAI in delivery of relevant activities.

Fellowship Topic 4	Developing a research impact framework to support Ireland's energy research sector
SEAI-based Department	Research and Technology Department

Background:

Researchers, evaluators and research funding bodies are increasingly required to both describe and assess the impact of energy research related work. While specialised impact assessment studies exist, they can be difficult to replicate and may require resources and a skillset not readily available. While recognising the subjective and qualitative nature of impacts as they are perceived by different stakeholders in different times, places and cultures, a research impact framework is required to enable assessment of the significance and reach of both positive and negative effects of energy research.

Fellowship Topic Objectives and Expected Outputs:

An SEAI-based Fellow would be tasked with creating a Research Impact Framework for energy research, based in the Research and Technology Department of SEAI. This could be developed by identifying potential areas of energy research impact from the research impact assessment literature and based on research assessment criteria. By conducting an extensive literature review, this research could aim to define, from an Irish energy research point of view:

- A new definition of research impact and impact evaluation;
- A typology of research impact evaluation designs;
- A methodological framework to guide evaluations of the significance and reach of impact that can be attributed to research;
- Conduct additional research activities relating to funded research in the energy sector which may be required to support SEAI in delivery of relevant activities.

A prototype of the framework would be used to guide an analysis of the impact of selected research projects funded by the SEAI National Energy Research, Development & Demonstration (RD&D) Funding Programme. The successful applicant could identify additional areas of impact in the process and interviewing researchers for feedback on which descriptive categories they thought were useful and valid in relation to the nature and impact of their work. This could aim to identify broad areas of impact that would be applicable across the broad range of energy research funded. It could also encompass detailed descriptions of categories of impact e.g., on policy / technological readiness / risk reduction / public understanding.

The Research Impact Framework would provide prompts and descriptive categories that will assist researchers, evaluators and funding bodies to systematically identify a range of specific and verifiable impacts related to their work. The framework could also help researchers think through implementation strategies and identify unintended or harmful effects. The standardised structure of the framework would facilitate comparison of research impacts across projects and time, which is useful from analytical, management and assessment perspectives.

Fellowship Topic 5	Research informing model methodology and functionality to enhance comprehensive energy modelling capability
SEAI-based Department	Data and Insights Department

Background:

As part of its statutory function, SEAI produces Ireland's National Energy Projections annually. The work of the Energy Modelling Team is to identify potential solutions and pathways for decarbonisation of heat, electricity, and transport energy use in Ireland and to drive effective climate action. SEAI has developed and maintains the National Energy Modelling Framework (NEMF). This modelling framework combines several integrated cross-sectoral modules with detailed technology and policy assumptions and consumer choice modelling to estimate the impact of sustainable energy policies and measures on Ireland's energy economy. The NEMF is made available via SEAI to energy policy makers in relevant government departments, primarily the Department of the Environment, Climate and Communications (DECC). This data is a vital input towards meeting international reporting obligations, advising policymakers and informing investment decisions.

SEAI takes a comprehensive approach to energy modelling, with continuous enhancement of the NEMF to incorporate the latest economic, technical, behavioural and policy analysis to maximise the impact of modelled insights in informing national policy and progress against targets. The Energy Modelling Team is seeking to support further research to enrich the modelling framework. Research informing model development is undertaken based on academic best-practice and leverages our unique position at the research/policy interface with the ability to access significant data holdings providing the potential to deliver high-impact academic publications. This research fellow would collaborate and perform academic research to inform model development. SEAI is open to further co-developing a proposed fellowship project based on the interests of the applicant and open to any ideas the applicant may have developed themselves, provided they are within scope of our activities.

Fellowship Topic Objectives and Expected Outputs:

- Contributing to the design and development of components of a comprehensive model of the Irish energy economy
- Undertaking literature reviews on topics such as energy systems integration, infrastructure and investment planning, and net-zero pathways
- Leading on and contributing to analysis of quantitative data
- Collaborating with and advising modellers and software developers on the implementation of methodology within the energy modelling framework
- Writing and contributing to academic papers and policy briefs arising from research findings
- Communicating with key stakeholders and coordinating stakeholder events
- Presenting research at academic and policy conferences

Fellowship Project Scope:

The scope of the proposed project for a fellowship researcher is only broadly defined, allowing flexibility to refine according to the specialisation of the applicant. Some example topics are provided below:

- Open-source simulation and optimisation model development
- Development of detailed freight and car fleet model incorporating consumer decision making component
- Electric power modelling
- Data-driven Infrastructure and Investment planning
- Detailed consumer choice modelling and behavioural analysis

- Net-zero pathways and sector coupling
- District heating, Hydrogen, Energy Storage, Power to Gas
- Demand-side flexibility and Optimisation, incorporating modelled methodologies for security of supply with high renewables, high electrification (weather-dependent supply/ demand)
- Modelling negative emissions technologies
- Model development on potential % barriers for low carbon heating technologies in industry, e.g., economic potential for heat pumps/bioenergy in specific industrial sectors, potential for electric boilers in industry as flexible demand

A project steering group may be formed, comprising the fellow, SEAI and other relevant Public Bodies.

Fellowship Project Outputs:

The research project should lead to the following outputs:

- Design for implementation of research findings within modelling framework
- Final report fully documenting the research as carried out and its findings, intended for communication to key stakeholders in energy policy in Ireland
- Publishable scientific paper intended for an academic audience

The project findings should be suited to an academic setting, as well as make some consideration for calibration to further real-world datasets in its application within modelling.

Fellowship Topic 6	Improving the Effectiveness and Equity of Energy Saving Programmes
SEAI-based Department	Data and Insights Department

Background:

As part of its mission to bring about an energy revolution in Ireland, SEAI has a wide array of programmes awarding financial grants to households to speed up the adoption of measures that decarbonise and reduce energy use. These programmes include improving the heating efficiency of homes, converting to electricity-based heating, encouraging a shift to electromobility, and facilitating local electricity generation.

The SEAI's current programme portfolio offers a uniform grant for each kind of energy measure undertaken by the recipient, regardless of socio-economic considerations, with the only exception the Fully Funded Energy Upgrades Scheme (formerly Warmer Homes) which fully funds home upgrades for recognised disadvantaged groups.

Fellowship Topic Objectives & Expected Outputs

The envisaged project for a research fellow is only broadly defined here, allowing flexibility for the incumbent to further refine its scope, but as a starting point the high-level research question is, what are the cumulative distributional effects of SEAI's portfolio of programmes on Ireland's population? Distributional effects here should be taken to represent a range of dimensions of the Irish population, for example income, gender, geographic regions, urban/rural gradient, immigrant populations, Traveller communities, etc.

The research undertaken should not seek to comprehensively answer the high-level question above, but rather identify a narrower, feasible scope of inquiry that contributes to answering that question. Some possible avenues of inquiry could be:

- Are the benefits of grant programmes translated into private benefits rather than energy savings and decarbonisation, and does this vary across population groups?
- To what extent are several programme-specific distributions of benefits across population groups either complementary, i.e. different groups benefit from different programmes, or convergent, i.e. the same groups benefit doubly?
- Among which population groups is there a greater risk of free-ridership, where the marginal effect of a grant programme is relatively low compared to other population groups?
- In what ways does the design and implementation of SEAI's programmes result in structural barriers for certain population groups to benefit?

Note also that the research should not aim to address the full range of SEAI's programmes but rather a small subset, building on an overall review of evaluation needs across programmes that is currently being undertaken. A project advisory group may be formed, comprising the successful researcher, SEAI and other relevant Public Bodies. The successful applicant will be encouraged to collaborate with SEAI's Energy Policy and Programme Evaluation unit in the scoping and implementation of the project.

The research project should lead to a final report fully documenting the research as carried out and its findings, intended for communication to key stakeholders in energy policy in Ireland, as well as scientific article(s) intended for an academic audience. Aside from identifying and characterising distributional effects, the research should consider and recommend concrete measures to mitigate any undesirable distributional effects in the refinement of current programmes and the design of future programmes.

Fellowship Topic 7	Behavioural economic trials to understand energy consumption and encourage uptake of energy saving measures
SEAI-based Department	Data and Insights Department

Background:

The Behavioural Economics Unit (BEU) is an established team within SEAI's Data and Insights team. The BEU systematically applies insights from behavioural science and economics to examine how consumers and businesses act regarding the implementation of SEAI's pilots and programmes. This work complements strong technology, engineering, data science and marketing competencies within the organisation.

The BEU is currently undertaking a range of trials focused on understanding the drivers of energy consumption and encouraging adoption of energy saving activities. All trials are undertaken based on academic best-practice and our unique position at the research/policy interface with the ability to access significant data holdings provides the potential to deliver high-impact academic publications.

Two examples are an upcoming field experiment (randomised-controlled trial) to examine the impact of Community-Based Social Marketing (CBSM) on retrofit activity and the development of an ongoing energy and transport behavioural tracker (using the Day-Reconstruction Method) for the Irish population. The unit is also involved in a number of other activities including evidence reviews and energy monitoring trials.

Fellowship Topic Objectives & Expected Outputs

This Topic calls for a Research Fellow to collaborate and develop some of the BEU research projects into academic research.

We welcome applicants to propose research topics which align with the scope of the BEU activities. Once a fellowship is awarded, further research plans could be co-developed.

A proposed project could include, among others:

- Design and develop online and field experiments
- Undertake literature reviews
- Qualitative research to understand behavioural drivers of emissions
- Lead and contribute to analysis of quantitative data
- Academic papers and policy briefs arising from the research findings
- Communication with key stakeholders and coordination of stakeholder events
- Presenting research at academic and policy conferences

The ideal applicant would have a PhD in a field related to behavioural science, economics, data science, engineering, or another quantitative discipline, along with a keen interest in understanding and developing solutions to address the behavioural drivers of climate change. We would also welcome applicants with an energy engineering or climate background interested in pursuing behavioural research.