

Accelerating transformative research to  
deliver Ireland's energy revolution

# 2023 SEAI Fellowship Programme

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**SEAI National Energy Research, Development & Demonstration Funding Programme**

Date January 17<sup>th</sup> 2024

**SEAI Presenters: Irene Ward, Robert Egan, Joanne Fitzgerald, Louise O'Connor**

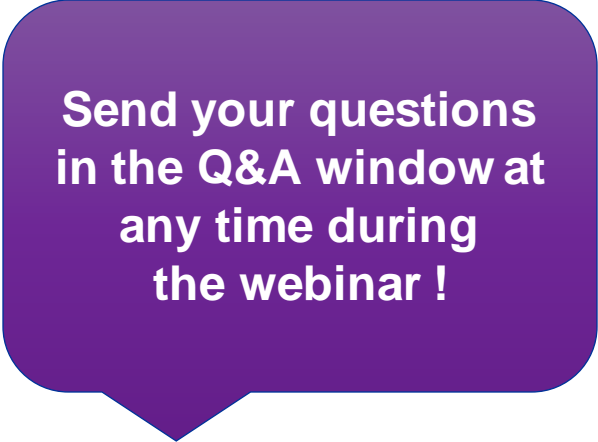


# Irene Ward Programme Manager, RD&D, SEAI

## Welcome and Introduction

## Agenda

1. Introduction
2. The SEAI Fellowship experience
3. Programme description & objectives
4. Who can avail of the programme?
5. Key timelines
6. Definition of project roles
7. Application process
8. Evaluation process
9. Fellowship Topics
10. Submitting your application
11. Q&A with SEAI panel



**Send your questions  
in the Q&A window at  
any time during  
the webinar !**

## WebEx Housekeeping

This event is being recorded



Attendees are muted with cameras off



Questions submitted by clicking Q&A bubble



Questions will be answered at the end of the webinar



A recording and slides will be distributed after the event



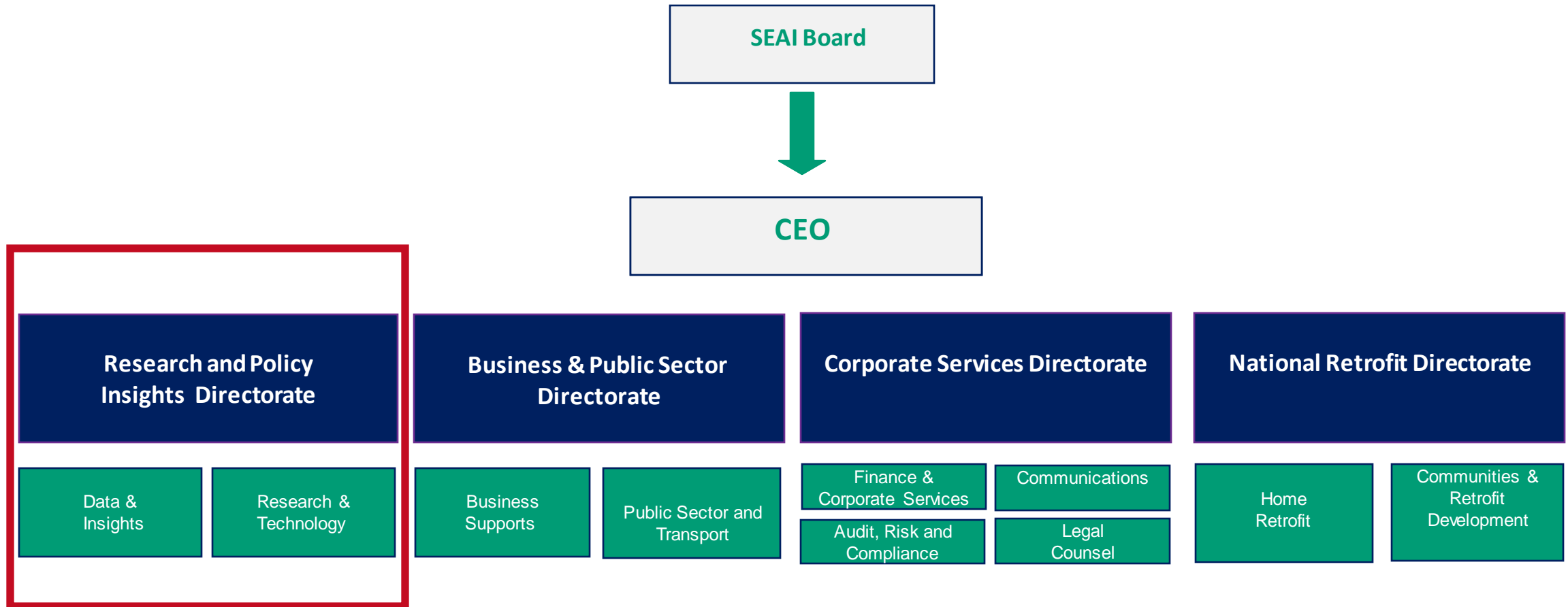
An FAQ will be created from all questions submitted and shared

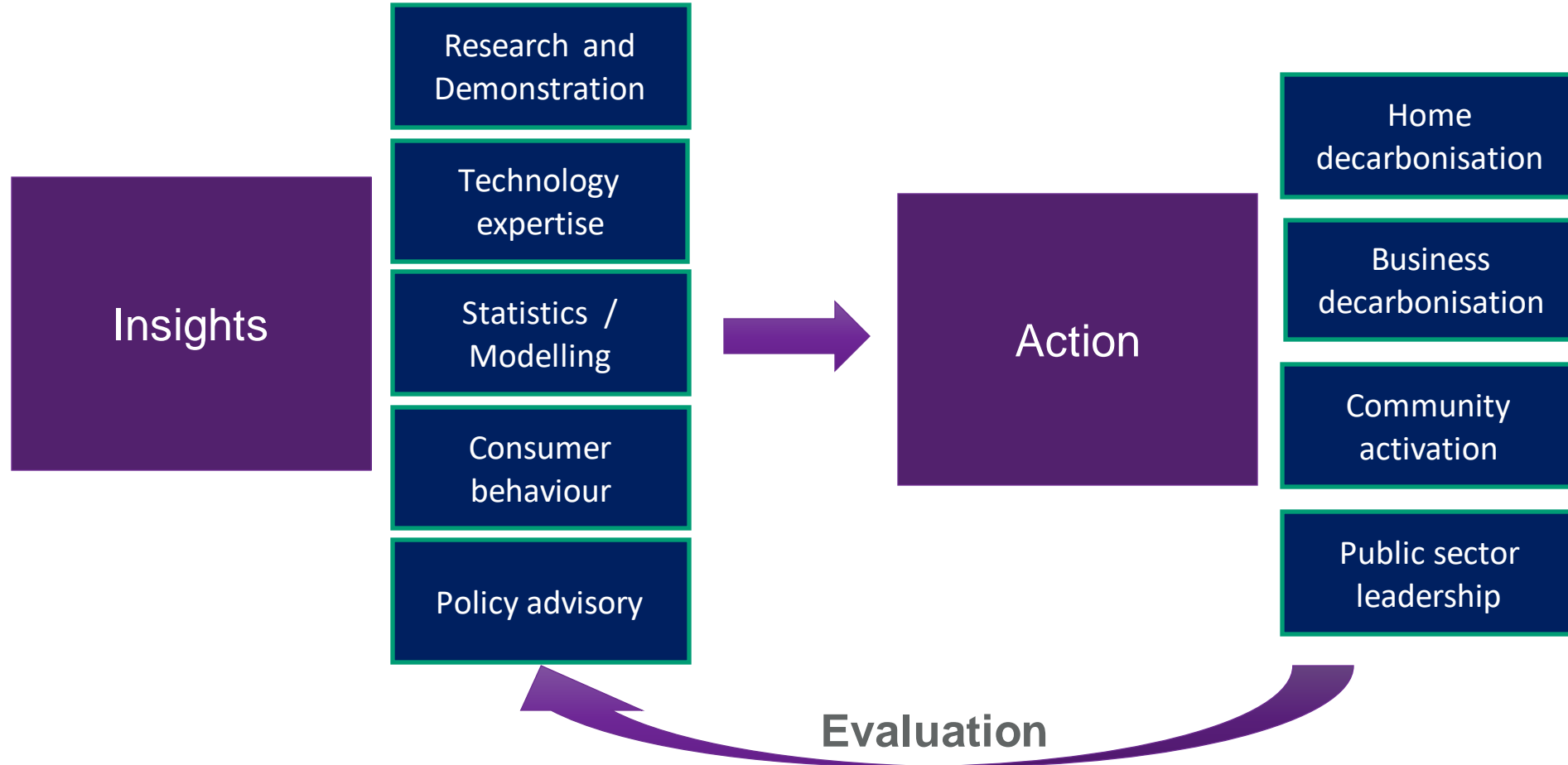


We work with Government, homeowners, business and communities to create a cleaner energy future

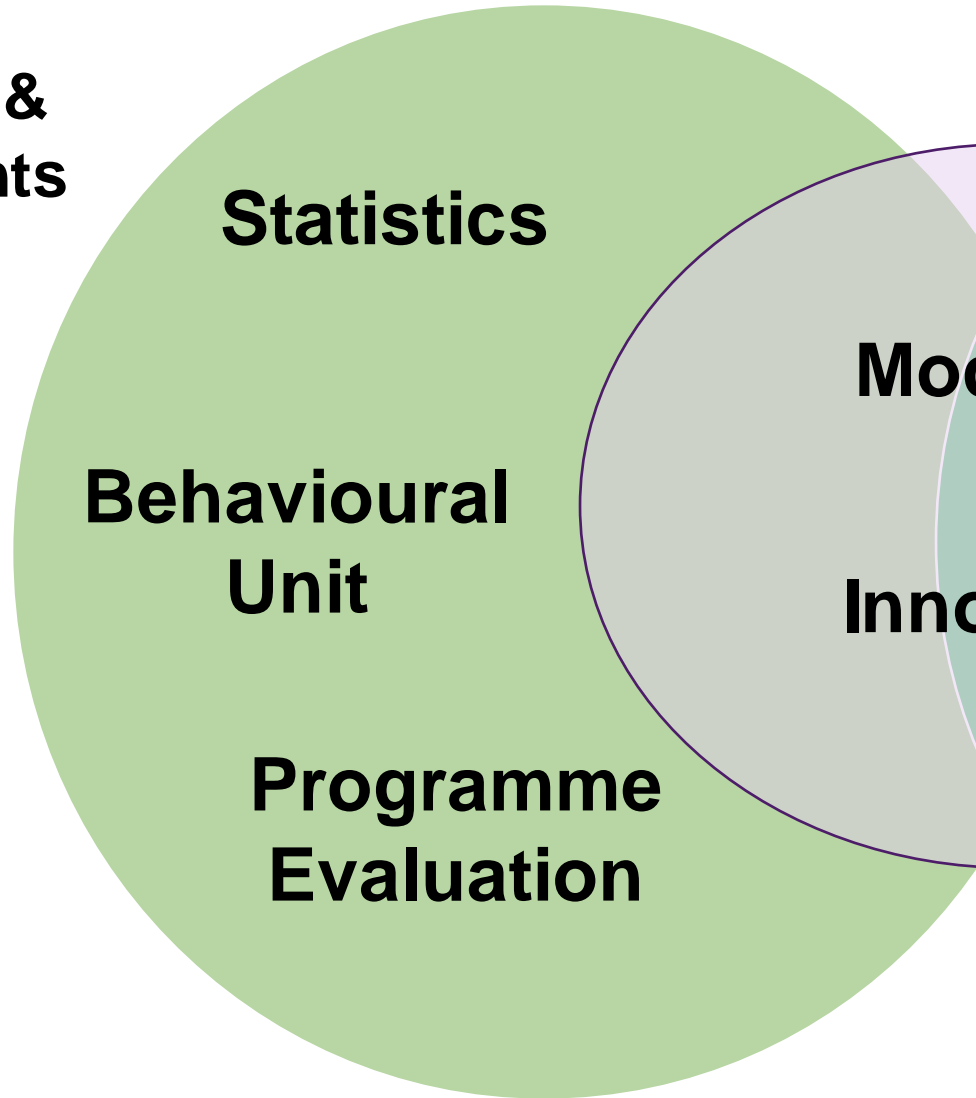


# SEAI Organisation Chart



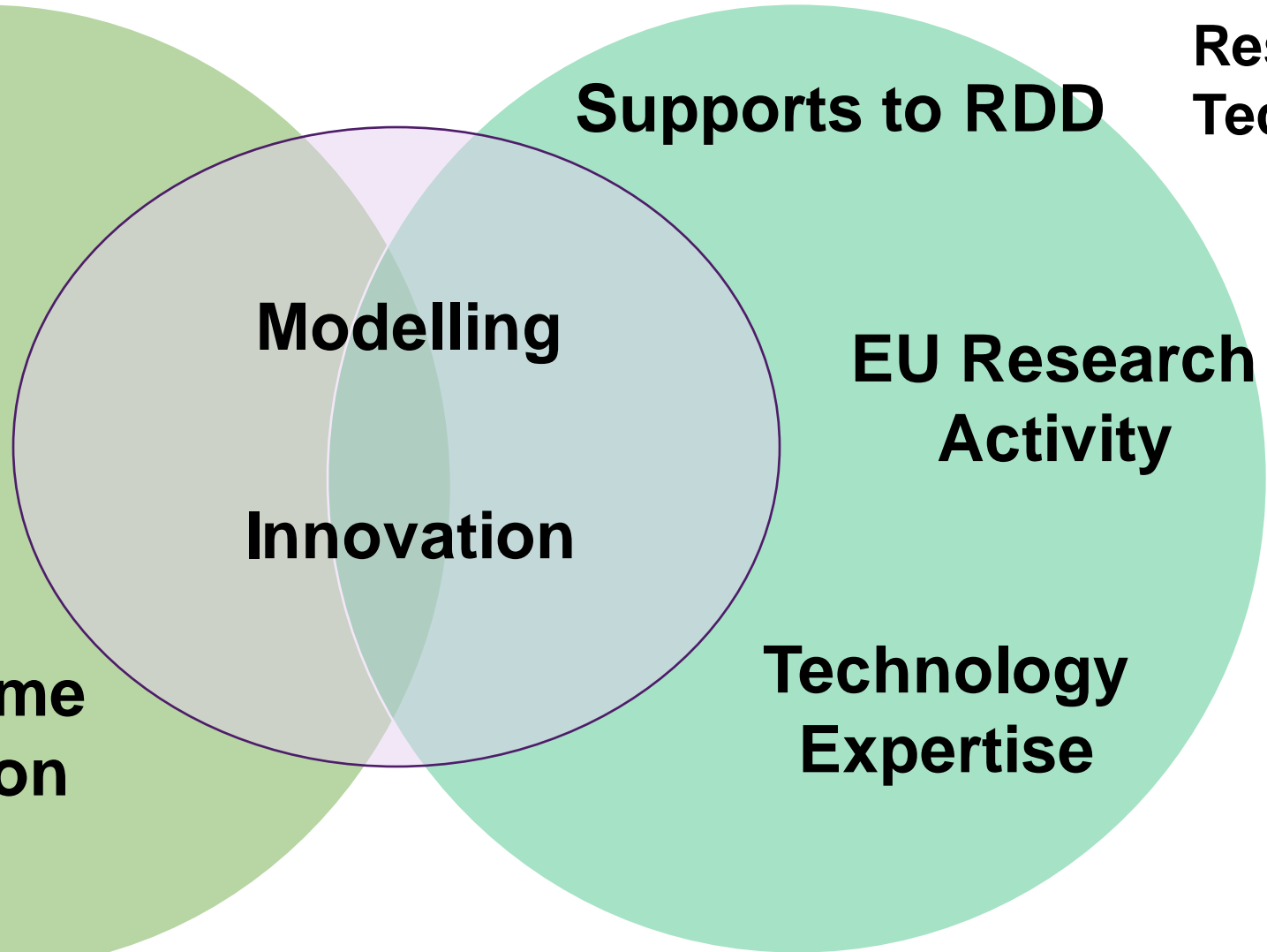


**Data &  
Insights**



**Supports to RDD**

**Research &  
Technology**

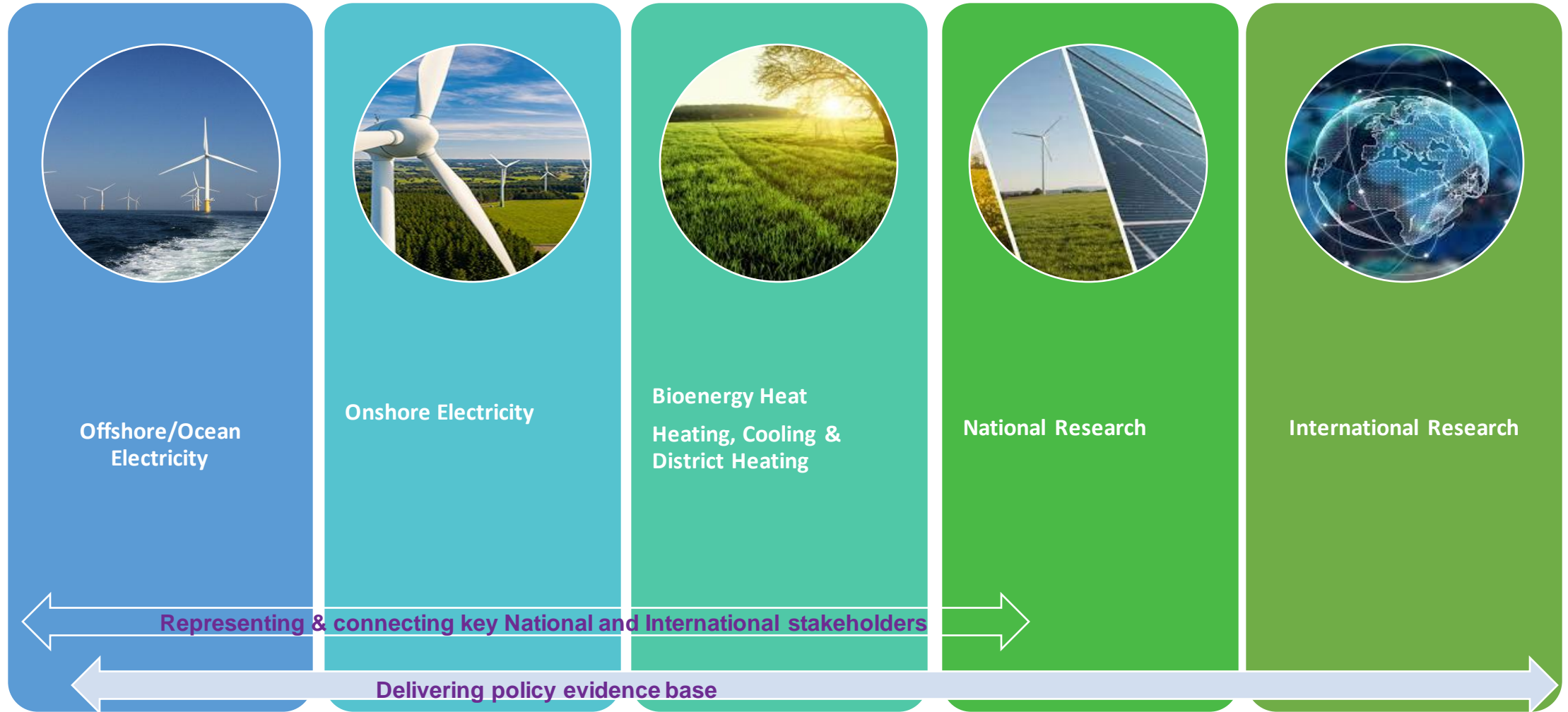


**Modelling**

**Innovation**

**Research and Policy Insights Directorate**





**Collaboration**

# Dr. Robert Egan

## SEAI Research Fellow

# SEAI Fellowship Programme: My Experience

# The SEAI Research Fellowship Programme

1. Pursue original research in your own name
2. Doing research for climate policy impact
3. Diversifying skills and abilities with an organisation leading climate action in Ireland
4. Learning how research is done in a policy-focused context outside of academia

# Dr. Joanne Fitzgerald

## Programme Executive, SEAI

### SEAI Fellowship Programme Overview

# SEAI Fellowship overview

- Applicants submit a research proposal with the support of a 3<sup>rd</sup> level institution.
- After successful evaluation, funding awarded to 3<sup>rd</sup> level institution.
- Fellows are based within SEAI.
- Fellows research areas of Irish energy policy priority, while immersed in the diverse activities carried out by SEAI.
- Fellows develop key skills that may open up further opportunities at the energy research-policy interface.

# SEAI Fellowship Programme Objectives

**Build**

Build capacity in the sustainable energy sector

**Enhance**

Enhance national capabilities and capacities at the energy-policy interface

**Bridge**

Build capacity in bridging the gap between policy and research

**Strengthen**

Strengthen knowledge to support the clean energy transition

**Career**

Provide career development opportunities for participating fellows

**Skills**

Provide researchers considering a transition from academia to the private or public sector with relevant skills and experience

**Experience**

Provide opportunity for experience in energy policy and strategic development and implementation

## Who can avail of the programme

Open to applicants who have support of **3rd level educational bodies:**

- 3<sup>rd</sup> Level body must be based in the Rep. Of Ireland.
- Applicant must have a PhD or equivalent experience

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

## Eligible 3rd level educational bodies include:

<b>Atlantic Technological University</b>	<b>Technological University Shannon</b>
<b>Dublin City University</b>	<b>Technological University Dublin</b>
<b>Dundalk Institute of Technology</b>	<b>Trinity College Dublin</b>
<b>Maynooth University</b>	<b>University College Cork</b>
<b>Munster Technological University</b>	<b>University College Dublin</b>
<b>National University of Ireland, Maynooth</b>	<b>University of Galway</b>
<b>South East Technological University</b>	<b>University of Limerick</b>

**The complete list of eligible 3rd level institutions will be included in our FAQ sheet.**



## 2023 Fellowship Call – Outline timelines

Key Dates	
<b>Call Open</b>	December 12 <sup>th</sup> 2023
<b>Application Deadline</b>	Monday February 12th 2024, 3pm
<b>Stage 1: Eligibility</b>	February 2024
<b>Stage 2: Evaluation</b>	March 2024
<b>Stage 3: Interview</b>	April/May 2024
<b>Award Notification</b>	June/July 2024

All call details are available at:

<https://www.seai.ie/grants/research-funding/research-fellowship/>

# Definition of Project Roles



Fellowship  
Applicant

Academic  
Sponsor

Organisation  
Sponsor

SEAI  
Supervisor

## 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.

## Definition of Project Roles



### 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 3<sup>rd</sup> level body in relation to any contractual and employment requirements, leave entitlements and other administrative duties for the Fellow with the 3<sup>rd</sup> Level Educational Body while the Fellow is participating in the Fellowship Programme.

## Definition of Project Roles



Fellowship Applicant

Academic Sponsor

**Organisation Sponsor:**

The confirmed 3<sup>rd</sup> Level Educational Body supporting the fellowship application.

# Definition of Project Roles



Fellowship Applicant

Academic Sponsor

Organisation Sponsor:

**SEAI Supervisor:**

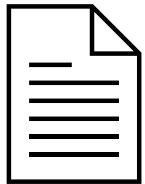
Fellows will be assigned an SEAI supervisor who will provide support and guidance for the duration of their Fellowship.

## SEAI Fellowships – Important information

- 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 2024, however this is subject to change.
- Fellowships will be 2 years' duration with longer considered in exceptional circumstances if justified.
- Successful applicants will commence fellowships in Q3.

# The application form – what's needed?

Call Doc  
Guidance



Application  
Form



1

- Fellowship Suitability

2

- Excellence and Innovation

3

- Relevance and Impact

4

- Work Plan

5

- Budget

6

- Letters of support



# Application Form – breakdown

- Section 1 Project and Applicant Details
- Section 2 Candidate and Motivation
  - Employment History
  - Motivation to undertake Fellowship
  - Most relevant research outputs
  - Key achievements in development of individuals and collaborations
  - Contribution to wider research community and society
  - Key achievements supporting the research community
- Section 3 Excellence and Innovation
- Section 4 Relevance and Impact
  - Includes Communication and dissemination plan
  - Data management
- Section 5 Work Plan
  - Project management (max of 5 work packages)
  - Gantt Chart
- Section 6 Budget

# Application Form – Section 6 Budget

## SECTION 6: BUDGET

### 6.1 Budget Justification

#### Fellow

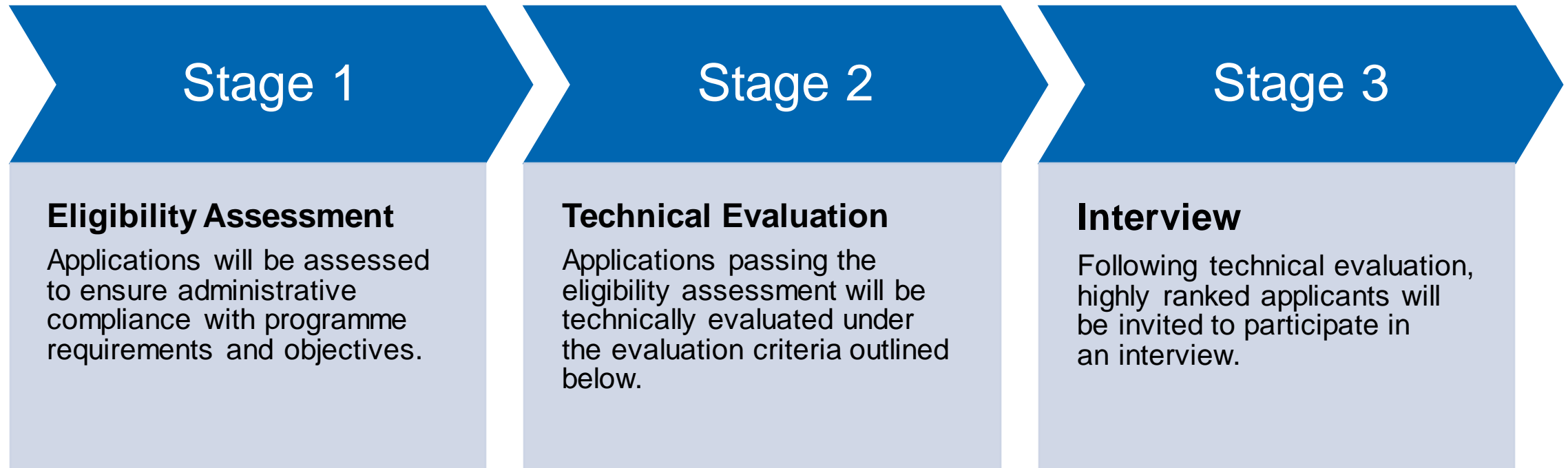
IUA Salary Level	
Total SEAI costs requested	
Justification for the level of this position (off scale will be considered if justified)	

Applicants should outline relevant experience within the Application Form (Section 2).

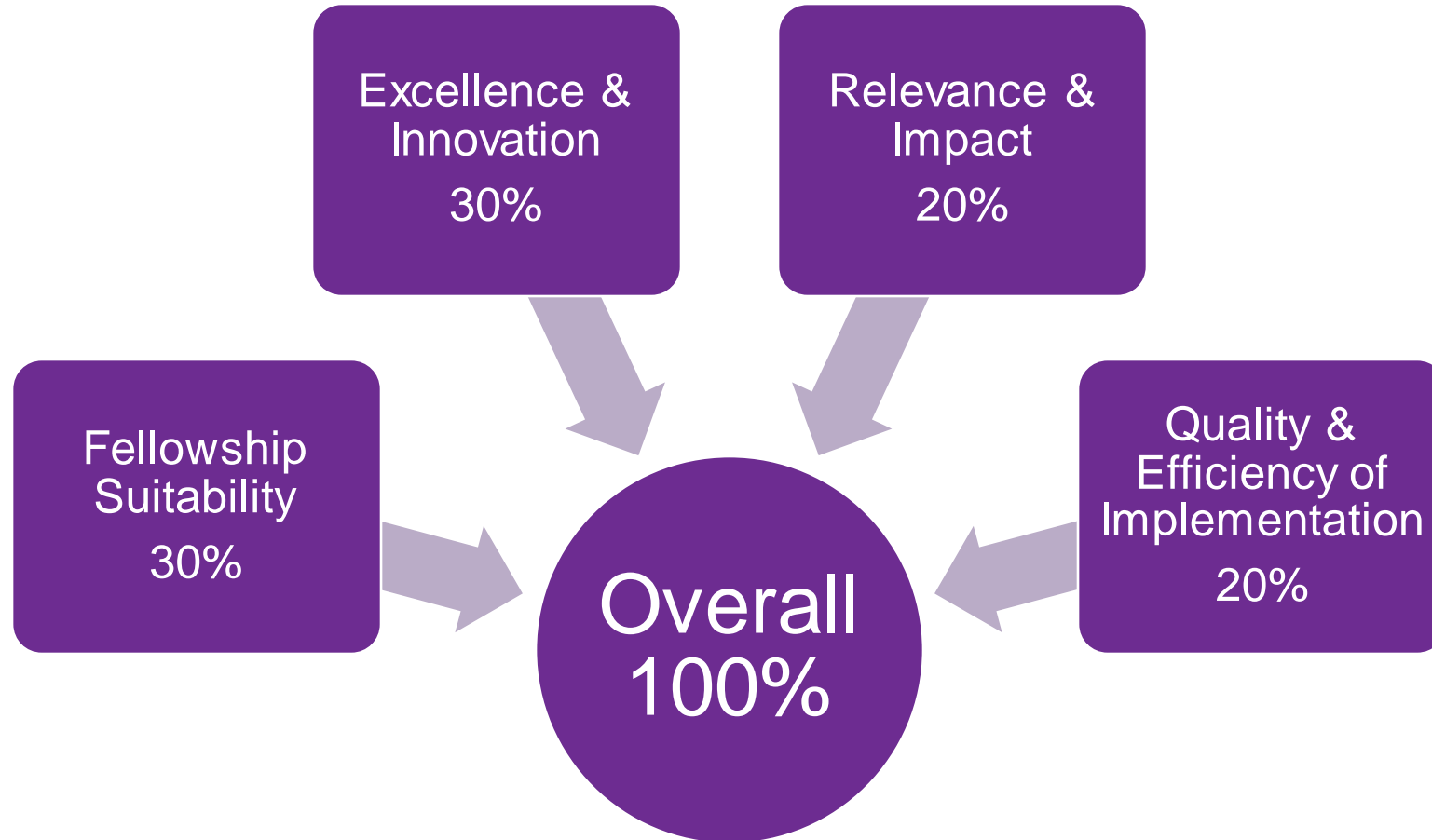
Applicants should apply for the appropriate point on the IUA scales, commensurate with experience.

Please refer to <https://www.iua.ie/for-researchers/researcher-salary-scales-career-framework/>

# Evaluation



# Evaluation Criteria



## Evaluation Criteria continued

### **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









## Evaluation Criteria continued

### 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

SEAI Fellowship Topics		
1	Investigating ecological conservation management while maximising Ireland's clean energy transition	
2	Applying an innovation to impact framework to achieve Ireland's clean energy transition	
3	<del>Research informing model methodology and functionality to enhance comprehensive energy modelling capability</del>	
4	A just decarbonisation of Ireland's passenger vehicle fleet	
5	Behavioural science approaches to understanding and changing energy-related behaviours	
6	Barriers and opportunities in the uptake of low carbon heating technologies in industry	
7	Bioenergy opportunities for Ireland	
8	Understanding the impacts of Irish policies on the successful development of a community energy sector in Ireland.	

**NOTE  
TOPIC 3  
has been  
removed!**

## 7 Fellowship Topics

Fellows located in  
Research & Policy  
Insights Directorate,  
SEAI

Full fellowship topic details  
available in the Call Document

# SEAI Fellowship Clinics

- Meet the team at SEAI
- Learn about the relevant programme/department
- Ask questions about your proposal.

To register interest, please fill out this MS Forms and we will get in touch (link in chat and in follow-up email).

<https://forms.office.com/e/43HQ5AAbEk>

## SEAI Fellowship Topic - Clinic Registration

SEAI are planning to run information clinics on the SEAI fellowship topics in the coming weeks. Register here to join a clinic about the specific topic you are interested in submitting an application to.

1. Which clinic do you wish to register to join

- Topic 1. Ecology
- Topic 2. Innovation to impact
- Topic 4. Just decarbonisation of Ireland's passenger vehicle fleet
- Topic 5. Behavioural science and energy related behaviours
- Topic 6. Low carbon heating technologies in Industry
- Topic 7. Bioenergy opportunities for Ireland
- Topic 8. Policy and the community energy sector



## Topic 1 - Investigating ecological conservation management while maximising Ireland's clean energy transition

Exploitation of renewable energy resources may also lead to certain environmental problems. 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.

This fellowship could address the following among others

- 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.

## Topic 2 - Applying an innovation to impact framework to achieve Ireland's clean energy transition

Support SEAI in translating outputs from its Research & Technology, and Data & Insights Departments into continuously developing sustainable innovative programmes that identify and support high impact business opportunities.

This fellowship could address the following among others:

- 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.

## Topic 3 - Research informing model methodology and functionality to enhance comprehensive energy modelling capability

NOTE  
TOPIC 3  
has been  
removed!

Due to unforeseen circumstances we can no longer offer a SEAI fellowship under this topic.

Anyone planning to submit to this topic may be interested in submitting a proposal to the 2024 SEAI RDD call which will open in Q1 2024.

This will have opportunities for Academic Fellowship applications similar to last year - including in the open strand.

More information is available on our website <https://www.seai.ie/grants/research-funding/research-development-and-demonstration-fund/>

## Topic 4 - A just decarbonisation of Ireland's passenger vehicle fleet

To meet its carbon abatement targets, Ireland's Climate Action Plan 2023 sets out several KPIs such as 175,000 of Ireland's passenger fleet to be EVs by 2025, and 845,000 EVs in 2030. The interventions intended to accelerate this decarbonisation should deliver equitable outcomes for society both for potential grant recipients and for those indirectly affected by grants, such as other road users.

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

- Review available literature on private fleet decarbonisation including strategies, incentives, and regulations.
- Design and implement data collection strategies to support the intended analyses, with the possibility of quantitative, qualitative, or mixed approaches.
- Carry out appropriate analysis techniques, and to the extent necessary apply new techniques, to draw insights from data material.
- Make recommendations about how future policies and interventions could be designed to contribute to the carbon abatement target more effectively.
- Make recommendations about how just transitions aspects better be addressed in fleet decarbonisation policies and interventions.

## Topic 5 - Behavioural science approaches to understanding and changing energy-related behaviours

The Behavioural Economics Unit (BEU) is an established team within SEAI's Data and Insights department, comprising of staff with expertise in behavioural science, psychology and quantitative methods.

The BEU uses a range of research methods (literature reviews, data analysis, surveys, qualitative methods, online experiments, field trials & RCTs) to identify barriers and enablers of a range of energy-related behaviours and to test interventions designed to address these. Behaviours of interest include both once-off behaviours such as the uptake of energy efficiency measures (e.g. home energy upgrades, heat pumps, electric vehicles) as well as ongoing behaviours such as travel behaviour, home energy use and demand flexibility (e.g. shifting electricity use away from peak times). There is also an increasing interest in understanding public attitudes/acceptance of new energy policies and technologies (e.g. district heating).

Applicants can propose their own research based on their skills and experience however the research should seek to understand and/or change energy-related behaviours relevant to SEAI's remit using a rigorous approach based on behavioural science principles

## Topic 6 - Barriers and opportunities in the uptake of low carbon heating technologies in industry

Currently industry accounts for 37% of all heat demand in Ireland and 33% share of total heat related emissions (4.6 MtCO<sub>2</sub>). A significant proportion of emissions in industry arise from fossil fuel use in combustion for manufacturing processes

Proposals to this topic should aim to build on findings from the SEAI's National Heat Study

- Examine current use and application of heat demand across industry archetypes in Ireland utilising SEAI's National Heat Study.
- Undertake an international literature review and assessment of Industrial decarbonisation pathways and policy.
- Review low carbon heating solutions for Industry (non-exhaustive) ie High and medium temperature heat pumps, electric technologies, solid biomass, biomethane, hydrogen, carbon capture and storage.
- Undertake a review of barriers and opportunities to the uptake of low carbon heating technologies across industry in an Irish context i.e. policy framework, planning, market development, technology, infrastructure, economic, behavioural and organisational.
- Assess new business models and policy that enables industrial decarbonisation and deployment at scale aimed at CAP 2030 targets and net zero 2050.

## Topic 7 - Bioenergy opportunities for Ireland

This fellowship explores bioenergy's role in decarbonizing heat (as a priority) and electricity in Ireland. The fellowship could address some of the following objectives:

- **Resource Analysis:** Progress the analyses undertaken in the SEAI National Heat study 2022.
- **Technology Feasibility:** Evaluate the practicality and efficiency of using bioenergy for heat and electricity production in Ireland.
- **Model Development:** Contribute to the development of predictive models for bioenergy's performance in heating and electricity
- **Policy Impact:** Evaluate how current and proposed national & EU policies influence the role of bioenergy in heating and electricity.
- **Comparative Study:** Compare Ireland's use of bioenergy in heating (and electricity) with high performing European
- **Innovation Exploration:** Identify and explore innovative bioenergy solutions that can be specifically adapted for Irish heat and electricity needs.
- **Emission Analysis:** Analyse the impact of bioenergy on greenhouse gas emissions in both heat and electricity sectors
- **Market Assessment:** Assess the market potential and economic viability of bioenergy in heating and electricity
- **Sustainability Evaluation:** Evaluate the long-term sustainability impacts of bioenergy solutions.

## Topic 8 - Understanding the impacts of Irish policies on the successful development of a community energy sector.

This fellowship could examine if specific enablers for Irish communities to develop their own solar PV or wind projects have:

1. Led to an increase in community investment to deliver on the objectives of the RESS?
2. Increased the number of community owned renewable generation plants?
3. Had economic and/or social impacts on the community energy sector?

Exact research questions should be developed by the researcher based on a thorough literature review and the status of policy measures to support community projects in Ireland at the time of commencing the fellowship.

Findings could be compared to related measures in other EU Member States, to offer Ireland practical guidance on the future of RESS and the most effective policy measures and tools to support increased community participation in the Irish energy transition.



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- Topic 5. Behavioural science and energy related behaviours

**Register to find out more**

- Topic 8. Policy and the community energy sector

# Louise O'Connor

## Programme Executive, SEAI

### How to submit your application

# Submitting your application

- All applications should be submitted via SEAI's Project Evaluation Platform (PEP) <https://pepportal.seai.ie/> before the submission deadline
- Prepare your application submission offline. E.g. completed application form and supporting documentation.
- Register and login early to familiarise yourself with the portal.

**seai** SUSTAINABLE  
ENERGY AUTHORITY  
OF IRELAND

Project Evaluation Platform

Login New User Registration Help

Log in

Email / Username

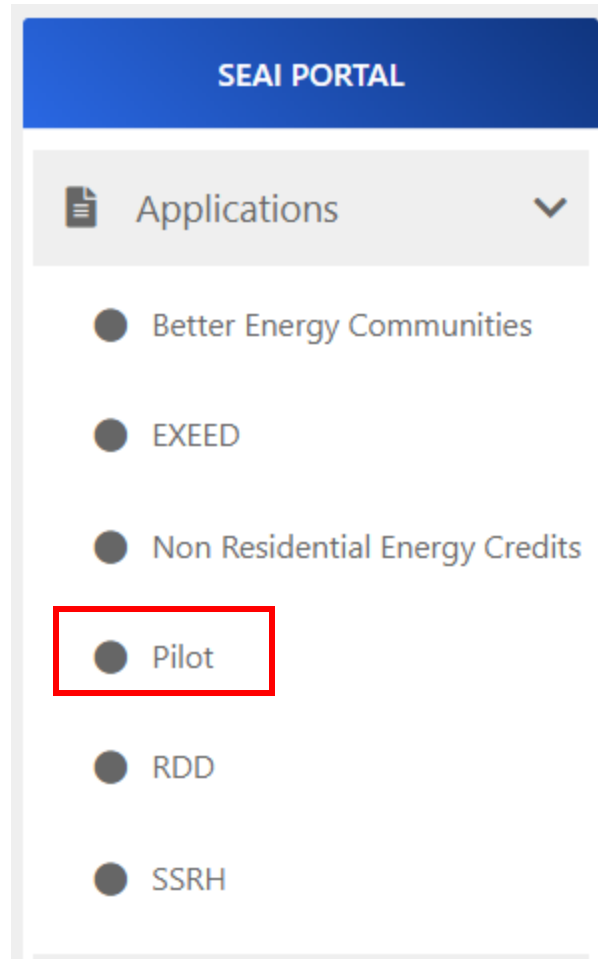
Password

Remember me [Forgotten Password](#)

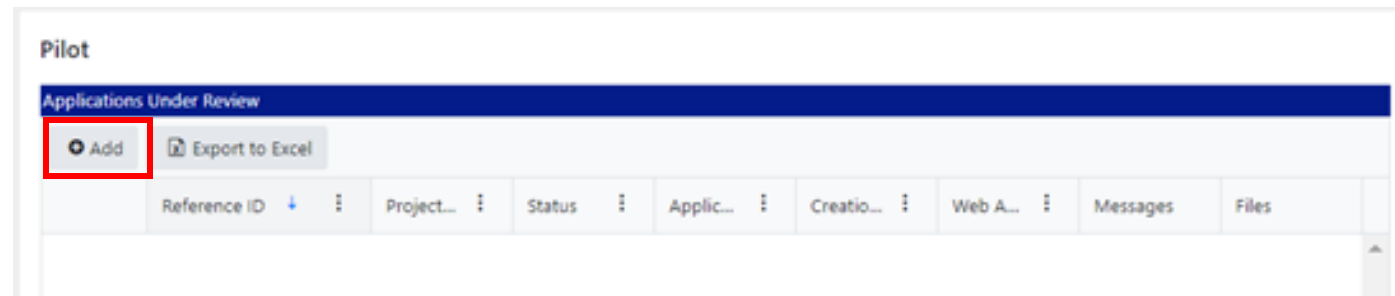
Log in

Not registered yet?  
[Register now](#)

# Submitting your application



- Once you have registered and logged into the portal, Click Applications in the navigation side bar and select Pilot from the dropdown.
- To create an application select the add button highlighted below



# Submitting your application

## PEP Submission

- Section A – Applicant Details and project summary
- Under the "Project type" heading please select **RDD fellowship**
- Section B - Supporting Documentation. Please upload your complete Application Form, and all supporting documentation under the appropriate heading.
- **Warning:** Once you click submit you will NOT be able to edit your application.

### A1. Applicant Details

Project Title \*

Applicant Organisation Name \*

Project Type \*

Principal Business Activity \*

### Section B –

#### B1. Supporting Documentation

Please note that where applications consists of more than one lead/Partner organisation, declarations/documentation files prior to uploading

Note: All Declarations must be for the total project costs. Total project costs are the project c

Application Form \*

Allowed Extensions: .doc;.docx;.txt;.rtf;.pdf;.zip;.rar;.png;.jpg;.bmp;.jpeg;.xlsx;.xls;.xlsm

Academic Sponsor Letter of Support \*

Allowed Extensions: .doc;.docx;.txt;.rtf;.pdf;.zip;.rar;.png;.jpg;.bmp;.jpeg;.xlsx;.xls;.xlsm

Organisation Sponsor Letter of Support \*

Allowed Extensions: .doc;.docx;.txt;.rtf;.pdf;.zip;.rar;.png;.jpg;.bmp;.jpeg;.xlsx;.xls;.xlsm


NEPG Declaration \*

Allowed Extensions: .doc;.docx;.txt;.rtf;.pdf;.zip;.rar;.png;.jpg;.bmp;.jpeg;.xlsx;.xls;.xlsm

# Submitting your application

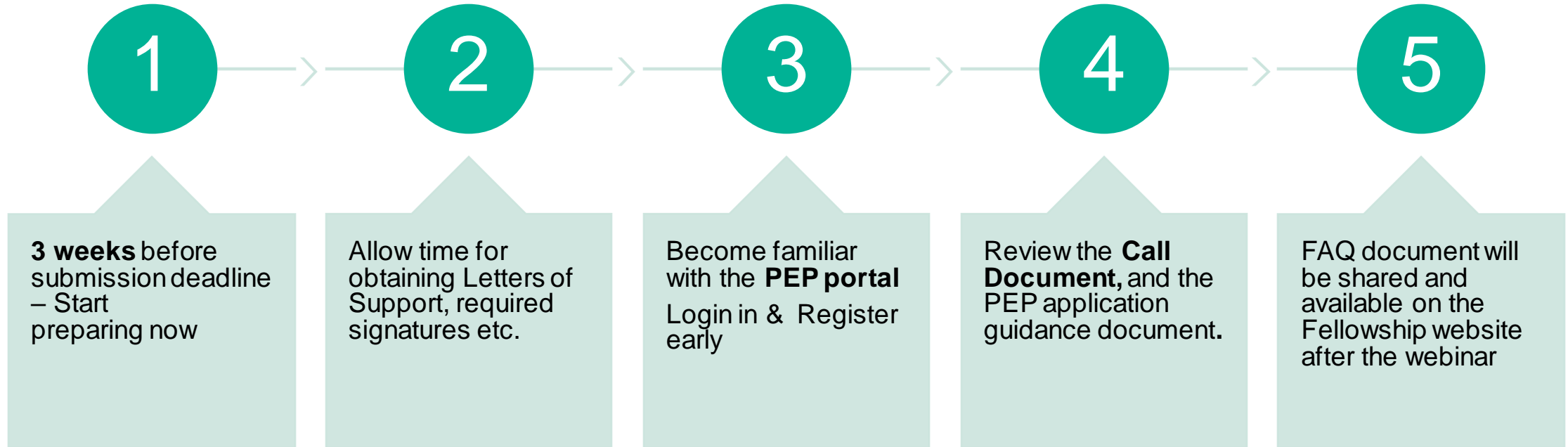
- Please refer to the PEP guidance document which will be available to download on our website.
- Only **fully complete applications** received **prior to the 3pm application deadline** will be considered for evaluation.

## Programme documents

-  2023 SEAI Fellowship Programme Call Document
-  2023 SEAI Fellowship Programme Application Form
-  2023 SEAI Fellowship Webinar
-  Privacy Notice

<https://www.seai.ie/grants/research-funding/research-fellowship/>

# Top tips



- Only fully complete applications received in advance of the 3pm deadline, on **Monday the 12<sup>th</sup> of February** will progress to evaluation
- If you have a query, please contact [energyresearch@seai.ie](mailto:energyresearch@seai.ie)

# Q&A Session





**THANK  
YOU**

**SEAI National Energy Research, Development  
& Demonstration Funding Programme**

**e:** [energyresearch@seai.ie](mailto:energyresearch@seai.ie)

**w:** <https://www.seai.ie/grants/research-funding/research-fellowship/>

