

Research Ireland - Gas Networks Ireland Innovation Challenge

The GNI Challenge

Frequently Asked Questions (FAQs)

Last Updated – 30 June 2025

Questions have been grouped under the below categories based on their topic. All categories will be updated regularly as we receive more questions. A final FAQ document will be generated on 15 September 2025.

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Terms of Reference

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1. General

Q1.1. What is Challenge Funding?

Challenge Funding is a *solution-focused* approach to research funding that directs research activities at specific challenges or problems. Challenge Funding uses defined timelines, stage gated funding and incentive prizes to accelerate research activities toward tangible impact.

Q1.2. How is Challenge Funding different to traditional research grant funding?

Like traditional funding approaches, Challenge Funding provides grants to support research teams to carry out their proposed projects. However, in addition, it also uses defined timelines (or phases) in conjunction with incentive prizes to direct and accelerate research activities. Research Ireland's approach to challenge funding also provides the teams with significant additional supports such as training, mentoring, and networking opportunities.

Research Ireland's approach to challenge funding differs in a number of ways from its other funding programmes:

- **Teams** – It focuses on teams rather than individual researchers and has an expectation that non-academic and transdisciplinary members will have leadership in defining how research is planned and undertaken.
- **Stakeholder Engagement** – Challenge funding requires researchers to engage with stakeholders in order to understand the problem from the stakeholders' perspective and reflect their needs as part of research activities. Utilising the learnings from this engagement enables researchers to develop solutions that are meaningful and impactful.
- **Training and Skills** – Challenge funding provides a valuable opportunity for researchers to undertake engagement and innovation activities to accelerate their research. Not all researchers will have experience in these areas so in order to support their participation, training is provided during challenge programmes with skills development forming a central part of the supports provided. Research Ireland provides training opportunities at all phases of challenge awards. Training is offered in areas such as Design Thinking, Theory of Change, and Communication Skills.
- **Agility** – In challenge funding, research teams are required to engage with stakeholders throughout the award which may change their perspectives, ideas, and approaches regarding solution development and feasibility. Challenge funding enables and supports this and encourage agility amongst teams in order to deliver impact.

Q1.3. What is the role of Gas Networks Ireland in this challenge?

Gas Networks Ireland (GNI) is a commercial semi-state organisation that operates and maintains Ireland's €2.7bn and 14,664 km national gas network. GNI have partnered with Research Ireland to develop the GNI Challenge funding programme. The scope of the call has been co-designed with GNI taking into consideration Ireland's current and emerging needs in utilisation of renewable gases by the energy industry in Ireland.

Applicants are strongly encouraged to liaise with GNI while developing their proposals to validate the alignment of their proposal idea to the challenges described in call scope. Following application review, successful teams will be assigned a GNI Liaison who will be Subject Matter Expert in the area relevant for the project and will work closely with the research team in validating and developing the solution.

Contact details for GNI: innovation@gasnetworks.ie

In addition, GNI plans to welcome the prospective applicants for an interactive day with the GNI team at two locations i.e., Dublin and Cork Offices.

Q1.4. When will the date for Open Day at GNI be communicated? What can the applicants expect from their interaction with the GNI team on the day?

Dates for these Open Days will likely be in August 2025 and will be announced in July 2025. Registration link for the two days will also be available on Research Ireland website.

The Open Day will provide an opportunity for the researchers to discuss their ideas and the challenges they plan to address with the GNI team members. Researchers can benefit from these discussions to further inform their proposed solution.

Q1.5. How many projects are expected to be funded under the GNI Challenge call?

Following the recommendations of the Application Review Panel, it is expected that up to **five** projects in total across all themes will be funded for the initial phases (Concept and Seed Phases) of the GNI Challenge. At the end of Concept Phase, project will undergo a panel review. All project deemed competitive are expected to progress to the Seed Phase.

No caps will be imposed on the number of projects recommended for funding under any particular challenge theme.

Q1.6. How will the Intellectual Property be managed?

All successful applicants to the GNI Challenge will be required to provide a Collaborative Research (or Intellectual Property Rights) Agreement with the Gas Networks Ireland prior to any research activities commencing. The CRA should clearly outline arrangements for Intellectual property (IP), insurance, liability, and warranties. A template for the CRA may be provided in advance for the researchers and their hosting institutes for consideration.

2 Challenge remit

Q2.1. What challenge themes are targeted in this call?

Proposed solutions must align with at least one of the specific challenge themes described in the call. These are:

- The **Energy System Integration Challenge** will support the development of solutions to accelerate the optimisation and integration of the energy system in Ireland's transition to a

low carbon economy. There are two broad themes under this Challenge: (Theme 1) the integration of renewable gases at a local and regional level and (Theme 2) the development of Artificial Intelligence-based solutions for intelligent gas network performance diagnostics.

- The **Biomethane and Biohydrogen Challenge** will seek to support the development of solutions which improve the efficiency, efficacy and commercial viability of (Theme 3) biomethane and (Theme 4) biohydrogen production, including extraction and utilisation of the byproducts.

For further details on the themes, please refer to the full [Call Document](#).

Q2.2. What type of solutions is the GNI Challenge looking for?

Given the nature of the challenge themes identified, it is expected that solutions would rely on or be directly informed by a STEM innovation. The solutions, and the underlying technologies proposed, should be innovative and advance the state of the art, and they should be informed by the current needs of the industry.

Depending on a chosen problem within the challenges themes, applicants may also consider novel approaches to enable decision and policymaking, such as for planning, measurement, regulatory aspects, monitoring, and evaluation.

Q2.3. Would solutions proposing alternative or complimentary decarbonisation solutions for the gas industry (e.g., direct air capture) be considered for review in the application phase?

Decarbonisation and direct carbon capture are not included in the scope of the call as a challenge theme. However, in the context of a specific challenge/problem identified by the applicants, it can be part of an overall integrated energy transition solution.

Q2.4. What Technology Readiness Level (TRL) of the proposed solutions is expected from the teams at application stage and by the end of each Phase? Is there any variation in these expectations across the themes?

Themes currently open for applications under the GNI Challenge are quite diverse and the current state of the art for each theme is different. Therefore, there are no expectations/targets for a particular TRL to be achieved for all solutions under any of the themes. The Review Panels will be evaluating the progress each team is achieving in developing their solutions and contribution that each proposal can realistically bring to advance the knowledge in the field and enhance the current TRL of any pre-existing solutions or technologies.

Challenge Funding expects the teams to develop fit-for-purpose solutions through adapting and iteratively co-developing their technologies to best address a challenge. Therefore, generally, high-TRL solutions are less likely to deliver the intended impact through this programme.

Note: The programme is intended to support pre-commercial/pre-deployment activities only, and as such development of existing products is not permitted.

Q2.5. Can the same applicant/team submit multiple proposals under more than one theme?

Multiple applications from same applicant teams may be considered provided these proposals are exclusively distinct and address different challenge themes; similar or closely related proposals will not be considered for the Application Review Panel.

Applicants planning to submit multiple proposals must consider the highly time-demanding nature of challenge funding programmes and must be able to demonstrate that their team can realistically commit to the intensive process, in case the team is successful in more than one application.

Q2.6. Can a challenge/programme identified by researchers cover more than one Challenge Theme of the Call?

Yes, applicant teams may submit a proposal that addresses the wider aspects of the GNI Challenge and therefore may be marked as covering more than one theme.

3 Applicant Eligibility and Profile

Q3.1. Can an individual researcher apply to challenge call under the GNI Challenge?

One of the key features of Research Ireland challenge funding is its focus on teams and the importance of including diverse expertise. Therefore, individual researchers cannot apply by themselves to the GNI Challenge.

Q3.2. How many people should be part of a team applying for the GNI Challenge?

The core applicant team must consist of **two** members:

- Team Lead (an academic staff member or a contract researcher at an eligible institution in Ireland)
- Team Co-Lead (an academic staff member or a contract researcher at an eligible institution in Ireland)

Following successful application, a **GNI Liaison** will be assigned to work with the team lead and co-lead.

Q3.3. What is the role of the GNI Liaison? Are they a mandatory team member?

Teams are not required to identify a GNI Liaison. Following successful application, a **GNI Liaison** will be assigned to work with the team lead and co-lead.

The GNI Liaison will be integral to the team and will work as part of the team to provide insights as well as organisational, operational or mission context to support the team in understanding and validating problems, and the development of a solution, facilitate access to stakeholder networks and provide relevant policy context.

Q3.4. What is the expected profile of applicants to the GNI Challenge?

Postdoctoral, early career, or established researchers based at [eligible research bodies](#) in Ireland may lead teams under the GNI Challenge, subject to meeting the eligibility criteria described in the call document. Applicants should be ambitious and motivated to address important technical and/or societal challenges and be willing to engage in an agile programme to support the development of their solution.

Profiles of funded teams supported under previous Challenge Funding programmes can be found [at this link](#)

Q3.5. I am a post-doctoral researcher applying to this call, are there any additional requirements to my submission?

Where an applicant (lead or co-lead) is a post-doctoral researcher, they will need to identify a Mentor, who is an experienced academic staff member. Mentor is not required to be a part of the team but will need to provide a letter of support that would ensure they will be providing appropriate advice and guidance to the postdoctoral applicant related to research and grant management.

Q3.6. Can a researcher from an AHSS discipline be the part of an applicant team?

Yes, researchers from any discipline can apply to the GNI Challenge. The remit of the programme implies that proposed solutions rely on or are directly informed by a STEM innovation. While it is expected that teams include expertise in the STEM research area underpinning the proposed solution (either as lead or co-lead), consideration should be given to the broader challenge/solution context. This may require input from experts in areas outside of STEM, for examples, economics, market design, regulatory compliance, etc.

Q3.7. Can an applicant who applied for another Research Ireland Challenge apply to this call?

Core team members may be named on applications to different challenge calls, or be members of broader challenge teams, regardless of whether these are running concurrently or consecutively.

Applications must propose distinct ideas or, if they have been previously reviewed, must adhere to the [Research Ireland Resubmission Policy](#). Furthermore, given the activities involved in undertaking a Challenge award, applicants should carefully consider how team members' time commitment arrangements may impact project delivery, especially if those members are involved in multiple concurrent or consecutive applications.

Given the time commitment involved with leading on a Challenge award, Research Ireland may follow up with individuals managing other/multiple Research Ireland grants to provide justification and rationale for how they would manage two or more major Research Ireland grants. This information is provided for planning purposes by Research Ireland Staff and will not be shared with reviewers.

Q3.8. I hold an SFI-IRC/Research Ireland Pathway Award. Am I eligible to apply to Research Ireland Challenge Calls?

Research Ireland (formerly SFI-IRC) Pathway award holders are permitted to apply to the GNI Challenge as either Team Lead or Co-Lead.

As outlined in the Pathway Programme call document, potential applicants to the Research Ireland Challenge Programmes should note that Pathway awardees are expected to dedicate the majority of their time to that award in the first year of the award. It should also be noted that your commitment to the Pathway award should not drop below 50% at any point over the course of the award.

Potential applicants are advised to contact challenges@researchireland.ie or the programme manager for their Pathway Award to confirm their eligibility.

Q3.9. Do I need to have a PhD to apply to the GNI Challenge?

It is expected that the team lead and co-lead will hold a PhD or [equivalent](#) to meet this eligibility criterion for the GNI Challenge.

However, it is recognised that in certain disciplines relevant to this call, such as engineering or societal development, research-active members of academic staff may not hold a PhD or equivalent. Such research-active staff members may be considered eligible to participate as a Team Lead or Co-Lead but must confirm their eligibility with Research Ireland in advance of submission of an application. Requests must be made by the research office of the host research body to Research Ireland by e-mail (challenges@researchireland.ie) and should include a completed narrative CV template, which must demonstrate evidence of appropriate research experience. In such cases, only current members of academic staff will be considered. Requests for establishing eligibility of each such applicant will be considered on a case-by-case basis.

It is noted that eligibility for this call will not be considered in the assessment of eligibility for other Research Ireland funding calls and does not correspond to confirmation of PhD equivalence.

4 Programme Structure and Funding

Q4.1. What is the duration and funding level of each programme phase?

Applications to the programme can request up to €200,000 in total direct costs over a duration of 18-months. Up to €50,000 can be allocated for use during the Concept Phase of the programme (Months 1 – 6) while the remaining request of up to €150,000 can be allocated to and will be accessible only during the Seed Phase (Months 7 – 18), subject to successful progression to this phase. Following the Seed Phase review, one winning team will be provided with a follow-on funding from the prize fund of up to €1M.

Please review the [Research Ireland Grant Budget Policy](#) as well as the call document for eligible costs and team member salary scales.

Phase	Funding (Direct costs)	Duration (Months)	Start Date
Concept	Up to €50k	6	1 st January 2026
Seed	Up to €150k	12	1 st July 2026
Prize	Up to €1M	24	1 st July 2027

Q4.2. Do the applicants need to submit separate research programme descriptions and budget requests for the Concept and Seed Phases?

The application form (downloadable as a word file from the call web page) is designed as a single proposal to cover the research programme descriptions for both Concept and Seed Phases. This is a short (max. 6 pages) document that is uploaded in pdf format as part of the application on the SESAME Grant Management System.

The application form focuses on the problem to be addressed, a solution concept and impact. During the Concept phase, successful teams will be guided through the process through stakeholder engagement that may result in change to initial approach to their solution. Hence, as a part of the Progress Report at the end of the Concept Phase, researchers will be provided an opportunity to revise their plans for Seed Phase in line with their learnings.

Proposal budget requests are submitted as part of the application on SESAME. Budget request should be made for both, Concept and Seed Phases at application stage. Two separate tables will be available for completion for both phases. Concept Phase request must not exceed €50k and request for staff, materials and consumables, and travel can be made (Note: no equipment, can be requested in Concept Phase). Seed Phase request must not exceed €150k and request under all budget categories can be made at this stage.

For further information on how to prepare the application, refer to the SESAME Guide Document available on call webpage. <https://www.researchireland.ie/funding/gas-networks-challenge/>

Q4.3. Can postdoctoral researchers who apply to the GNI Challenge as a team member request their salary as part of the budget?

Yes. Postdoctoral researchers based in any eligible research body who are acting as a Team Lead or Co-Lead may include up to 100% of their salary as part of the budget request in line with their time commitment to the project.

Q4.4. Is teaching buyout an eligible cost under the SDG Challenge?

Team Leads and Co-Leads based at Technological Universities (TUs) or Institutes of Technology (IoTs) are permitted to apply for teaching replacement of up to a maximum of 50% of their teaching load for the duration of each phase of the programme. Salary scales for replacement lecturers must be reasonable and justified appropriately within the budget justification. Teaching replacement requests must be pro-rata and proportional to the time commitment to the award.

Confirmation for support for these requests must be included in the Letter of Support from the Research Body.

Q4.5. Can costs associated with the external collaborators be requested as part of the budget under the GNI Challenge?

While it is not permitted to request direct support for external collaborators (e.g., salary or fees), expenses that can be directly aligned to the execution of the research programme may be eligible. Activities may include, for example, travel costs associated with team activities, organisation of workshops, stakeholder engagement, and other related activities. Requests for such costs must be appropriately justified.

5 Review process

Q5.1. How will my application be evaluated?

Following submission, applications are checked for eligibility. Following these checks, documentation will be assessed by a panel of international experts. Projects will be assessed based on the criteria highlighted in the call document.

Q5.2. How do the teams advance from one phase to the next under the GNI Challenge?

Progress reviews will take place at the end of the Concept and Seed Phases and progress will be assessed by an international expert panel based on the same evaluation criteria used at application stage. The Concept and Seed Phase Progress Reviews will also include an interview between the expert panel and the applicant group.

Please note that while there is sufficient funding available for all teams to proceed from the Concept to the Seed Phase, teams will be required to demonstrate progress to date and high impact potential as assessed by the expert panel.

Q5.3. When will applicants be notified of the outcome of the application review process?

It is envisaged that applicants will be notified in late November 2025. Awards will commence on 1 January 2026.