



Research Councils UK Energy Programme Energy Strategy Fellow

Call type: Expression of interest

Closing date: 18 November 2011

Summary

The Research Councils UK Energy Programme, led by the Engineering and Physical Sciences Research Council (EPSRC), invites expressions of interest for an Energy Programme Strategy Fellow, initially focusing on developing a roadmap of research, skills and training needs across the entire Energy landscape to position the UK to meet its 2050 climate change targets, and then developing their own research activity.

This is a prestigious appointment, with the opportunity to inform and influence the future research agenda of the Energy Programme. The successful candidate and their team will be working with the Research Councils, with senior policy makers and with leading researchers to develop a plan to help position the UK to meet its 2050 climate change targets.

An International Review of Energy Research was recently carried out. A Review Panel considered the energy research and development undertaken in the UK, largely through the funding of the Research Councils UK Energy Programme and made a number of recommendations. As a response to some of the recommendations the Energy Programme is inviting proposals to appoint a Strategy Fellow, with appropriate support, to synthesise a roadmap of research, skills and training across the entire energy landscape to meet the UK 2050 climate change targets. The intention is that the roadmap will be a living document, owned by the Research Councils which will evolve over time and will be used to inform the Energy Programme's research strategy in the long term.

The Fellow will be supported for five years. The Fellow and their support team will work closely with the Research Councils and the Department of Energy and Climate Change (DECC) on the development of the roadmap in the first year of their project. In the following 4 years the Fellow will focus on their research programme alongside any further development and updating of the roadmap as appropriate, and working with the Research Councils as necessary.

The call closes at 4pm on 18 November 2011.

All applicants must contact Jacqui Williams at EPSRC by 28 October 2011 to register their intent to apply before submitting a proposal. Applicants that do not register their intent will have their applications rejected.

Prior to registering intent candidates should check with their Head of Department to ensure that they have the support of their institution.

Proposals will initially be sifted by a panel consisting of research council representatives. It is anticipated that a maximum of three candidates will be invited to an interview stage in December 2011. The interview panel will include research council and external representatives. The successful candidate will then be invited to submit a full proposal which will be considered by the representatives who have formed the interview panel. Support for the activity will be through a grant or contract award.

Background

The Energy Programme is bringing together engineers and scientists from many areas to tackle the research challenges involved in creating new energy technologies and understanding their social, economic and environmental implications. EPSRC leads the Energy Programme, in which BBSRC, ESRC, EPSRC, NERC and STFC work together to develop and deliver energy research and training within a common strategic framework, using a whole systems approach.

An International Review of Energy Research was recently carried out and its report is available on the RCUK website (<http://www.rcuk.ac.uk/Publications/reports/Pages/Energy2010.aspx>) together with background information. A Review Panel was established to consider the energy research and development undertaken in the UK, largely through the funding of the Research Councils UK Energy Programme. The panel visited the UK between 24-29 October 2010 and made a number of recommendations.

The Review highlighted that a vision of the UK's energy future and energy technology roadmaps are missing. The UK's energy roadmap is currently stipulated at a high level and is built around real progress by 2020 and 80% reduction of greenhouse gas emissions by 2050. It felt that this is insufficient guidance for RCUK and researchers to act in a coordinated fashion and the UK is missing an opportunity. As a consequence there is no coherent plan against which to evaluate the medium and longer term energy research portfolio. The Review recommended that a fully integrated "roadmap" for UK research targets be developed and maintained.

Accordingly the Energy Programme is inviting proposals to appoint a Strategy Fellow, together with appropriate support, to synthesise a roadmap of research, skills and training needs across the entire energy landscape to meet the UK 2050 climate change targets.

Remit

This is a prestigious appointment, with the opportunity to inform and influence the future research agenda of the Energy Programme. The successful candidate and their team will be working with the Research Councils, with senior policy makers and with leading researchers to develop a plan to help position the UK to meet its 2050 climate change targets.

The successful candidate and their team is expected to produce a roadmap of research, skills and training needs across the entire energy landscape to meet

the UK 2050 targets. The Fellow and their support team will work closely with the Research Councils and with the Department of Energy and Climate Change on the development of the roadmap in the first year of their project. In developing the roadmap the Fellow and their team will organise and attend meetings and workshops, and will be expected to act as advocates for the Energy Programme. This process will enable gaps and misalignments of activities with UK goals to be identified and research needs to be evaluated, prioritised and implemented. The Fellow and their team should be seen as impartial and independent in their work.

The following four years will focus on the Fellow's research but will also include any updating or further development of the roadmap as necessary. Proposals should therefore include an internationally leading research programme, in an area of importance to the Energy Programme. The research programme should add to and coordinate with any existing research activity in the field, such as Supergen Hubs, the BBSRC Sustainable Bioenergy Centre and the UK Energy Research Centre.

Requirements of the roadmap

The Fellowship should develop a roadmap of research, skills and training needs across the entire energy landscape to position the UK to meet its 2050 climate change targets. The roadmap should cover all aspects of energy research, across the entire portfolio of the Energy Programme and the proposal should demonstrate a clear vision for its development including:

- The Fellowship will lead on the production, review and dissemination of an integrated roadmap, including skills needs. It will build on and integrate existing roadmaps and analyses. Such roadmaps have been developed or are under preparation by BIS, DECC, the Energy Research Partnership (ERP) and the UK Energy Research Centre. For example the UK Energy Research Centre has developed local roadmaps for some key technologies of the UK's future energy mix (e.g. solar photovoltaics, wind energy, nuclear power) but these are not yet integrated or implemented by RCUK. The 2050 DECC pathways should also be used to support the roadmap development and the Energy Technologies Institute ESME model should also be taken into account.
- The Fellowship will also address the point that there are no R&D roadmaps for many of the other generation technologies, nor for the electric power delivery system of the future (transmission and distribution) and none for the demand side/end use.
- In order to generate the roadmap the Fellow and their team must ensure a broad array of stakeholders including academia, industry, environmental activists, research funders, policymakers and others, from both the UK and beyond, are involved.
- The UK's position relative to the strengths and weaknesses of overseas research should be assessed as part of this exercise.
- The roadmap should clearly outline how 2020 targets can be engineered and 2050 targets can be met. Progress towards the 2020 and 2050 targets should also form part of the roadmap exercise.

- The roadmap should address the skills needs and should build on work underway, such as that in BIS/Defra/DWP on skills needs for the green economy, to pull together a skills strategy linked to the roadmap.
- Long term elements of the roadmap should be kept sufficiently open, steering towards high level targets with the possibility of the roadmap being refined towards clear deliveries as time progresses.
- Once the integrated roadmap has been developed a methodology should be implemented to use this to suggest action plans within the respective energy discipline areas and between near-term and long-term research goals. Skills needs should be included as a high priority item associated with the research.

The Research Councils and the roadmap

This roadmap will impact on all of the Councils in the Energy Programme. The intention is that the roadmap would be a living document, owned by the Research Councils, and will be considered as an additional advice stream to guide the overall Energy Programme strategy that will be developed in consultation with a large variety of stakeholders.

It is intended that activities such as scoping events make use of the roadmap that will be produced and the evolving research strategies of funded projects will be expected to make ongoing use of the roadmap and adjust their research direction accordingly. This roadmap will also provide input to inform government policies as well as research strategy for the Research Councils.

Person specification

This prestigious fellowship is at the level equivalent to an EPSRC established career fellow (<http://www.epsrc.ac.uk/funding/fellows/Pages/whocanapply.aspx>). Candidates should demonstrate how they fulfil each of the expected attributes of that level as listed below:

Research excellence – has a track record of outstanding research and in delivering impact. Evidence of international standing and influence in the context of the research and shows evidence of recognition in the community on an international scale.

Setting the research agenda - Demonstration of leadership within the research community and evidence of pushing the boundaries of the research area.

Strategic vision - An aptitude for identifying, exploring and developing research opportunities more broadly and across different interfaces. Can demonstrate where they have positioned themselves to take up these opportunities and has the ability to make decisions to deliver this vision.

Profile and influence - Evidence of acting as an ambassador and advocate for a research field/theme and for research in general. Advising and influencing into policy making.

Inspirational team leader - Ability to lead and inspire. Ability to identify and maximise potential in others (i.e. get the best out of people).

Communication and engagement skills - Possesses excellent communications and interpersonal skills.

Funding available

Resources are available to support one Fellowship for five years under this call, subject to the quality of the proposals received. The award is expected to support the Fellow, up to two research assistants and appropriate support. Resources should be requested for the roadmap exercise including close liaison with the Research Councils, DECC and other stakeholders; appropriate community consultation and engagement; and for a four year research programme plus updates to the roadmap over that period. Resources should also be included for appropriate management of the project, including a steering committee. Funds will be provided through a grant or contract.

Eligibility

For information on the eligibility of organisations and individuals to receive EPSRC funding, see the EPSRC Funding Guide:

<http://www.epsrc.ac.uk/funding/apprev/basics/Pages/fundingguide.aspx>

As this call is a targeted funding opportunity provided by the RCUK Energy Programme through EPSRC, higher education institutions, and some research council institutes and independent research organisations are eligible to apply. A list of eligible organisations to apply to EPSRC is provided at:

<http://www.rcuk.ac.uk/research/Pages/Eligibilityforrcs.aspx>

How to apply

Submitting application

The following attachments are mandatory:

- Expression of interest (maximum 8 sides of A4)
- Host organisation statement (maximum 2 sides A4)
- CV (maximum 2 sides A4)

At this stage we do not require a work plan, justification of resources or any letters of support. These are only required at the full proposal stage. Once submitted you will not be permitted to amend your application or provide additional information unless specifically requested by EPSRC.

Guidance on the types of support that may be sought and advice on the completion of the research proposal forms are given on the EPSRC website (<http://www.epsrc.ac.uk/funding/apprev/Pages/default.aspx>) which should be consulted when preparing all proposals.

Guidance on writing your application

Font size 11 is the minimum acceptable, and the minimum margin **must** be size 2cm on all sides. If any attachments exceed the page limit stated, fail to adhere

to the specified format or include any documentation that has not been specified your proposal will be returned or rejected.

1. An expression of interest document addressing the required competencies and experiences outlined below, an indicative programme for developing the roadmap, an indicative proposed research programme (programmes to be expanded upon for the full proposal if selected), and including indicative costs (To obtain indicative costs, you will need to contact your host organisation's Research Administration (depending on the organisation this may be departmental or central) who will advise you about costing your proposal), in no more than eight pages.
2. CV - Please include the following:
 - Your current contact details;
 - Your employment history, listed in reverse order. Please start with your current employment and make sure that the title of your current post is clear;
 - Your academic history, listed in reverse order. The dates of any degrees obtained;
 - Track record of research funding, where applicable: please include start/end dates, funding body, value of award, type of grant (e.g. first grant, fellowship etc), your role on the grant (PI, Co-I, Researcher etc).
 - Any current teaching commitments and administrative activities: examples may include editorial responsibilities, committee membership etc;
 - Other: examples may include invited talks, awards, prizes, memberships of professional bodies etc.

Please do not include details of possible reviewers on your CV.

Please ensure that any breaks in your career due to maternity, paternity or adoptive leave, ill health, career breaks or unemployment are clearly stated, as well as any periods of part time working.

3. Host institution statement completed by the Head of Department of your host department. (maximum 2 sides A4)

The Head of Department (through consultation with colleagues as appropriate) at the host organisation must complete a statement in support of the application. The statement should be on Departmental or University headed paper, should be dated, and should clearly state the position held by the author (e.g. Head of Department of Electrical Engineering etc). The statement must include details of the following considerations:

- The process that the host institution has used in order to identify which candidates it would be entering into the competition, why the candidate in particular has been chosen and why the career space for that candidate has been selected
- The statement should identify the key characteristics and skills that the candidate has, which the institution feels highlights the candidate's ability to succeed as an Energy Programme fellow

- How the institution feels that the candidate fits to the various aspects of the person specification
- The level of support that the host institution will be giving the candidate both as a standard career development package that is open to all staff and additional support as part of the institution's backing of their candidate to be successful in the competition.

The host organisation statement will form part of the assessment of the expression of interest and full fellowship proposals.

Assessment

Assessment process

Anyone intending to apply to this call must contact Jacqui Williams at EPSRC by 28 October to register their intent to apply prior to submitting a proposal. Prior to registering intent candidates should check with their Head of Department to ensure that they have the support of their institution.

The Expressions of Interest Proposals will initially be sifted by a panel consisting of research council representatives. It is anticipated that a maximum of three candidates will be invited through to the interview stage in December 2011. The interview panel will include research council and external representatives.

Candidates invited to interview will be asked to give a presentation on their plans to develop the roadmap, and on their planned research programme. One candidate will then be invited to proceed to submitting a full proposal, and will receive guidance on what to include. The full proposal will be considered by the representatives who have formed the interview panel to ensure that it addresses and covers the programmes of roadmap development and research as expected from the interview stage.

The first stage in applying is to register your interest by 28 October 2011 by emailing jacqui.williams@epsrc.ac.uk. The next stage is to submit an Expression of Interest to EPSRC via email (energyteam@epsrc.ac.uk) by 16.00 on 18 November 2011. Proposals received after this time will not be considered. You may include extra information in your proposal cover email but it will only be seen by EPSRC; it will not be sent to the Expression of Interest sift panel.

Assessment criteria

The sift stage will primarily assess the ability of the proposed Fellow to lead the roadmap activity and their planned research programme. This will include:

- The applicant's vision for the roadmap development.
- Quality and importance of the proposed research programme.
- Track record of coordinating research activities across different disciplines.
- Profile of the candidate within the wider research community.
- Understanding of the energy research landscape.

At the interview stage candidates will have the opportunity to:

- Sell their vision for the development of the roadmap and engagement with the research councils, DECC and other stakeholders.
- Convince the panel of their ability to engage with the research community and act as an advocate for the Energy Programme.
- Convince the panel of their ability to take forward an internationally leading research programme in an area of importance to the Energy Programme.

Additional grant conditions

In addition to the standard terms and conditions for grants, the following specific conditions will apply to the final award:

The Fellow will be known as the “Research Councils UK Energy Programme Strategy Fellow” and should use that title in all roadmap activities and publicity.

The Fellow will be required to:

Make presentations to the Energy Programme representatives and its Scientific Advisory Committee as appropriate.

Produce and submit annual progress reports on the roadmap activity to the Energy Programme through EPSRC.

Establish and run a steering committee to oversee and advise on the project direction and delivery. The terms of reference for the steering committee and membership will be agreed with the Energy Programme in advance of the grant start date. The Energy Head of Programme or a deputised representative will be members of the committee. The committee will meet at the outset of the project and then on a six monthly basis to advise and oversee the project.

Key dates

Activity	Date
Announcement of call	September 2011
Express intention to apply	28 October 2011
Closing date	18 November 2011
Interviews	December 2011
Successful candidate invited to submit full proposal	January 2012
Proposals funded/commence	February 2012 onwards

Contacts

Further details about the call process and application procedure can be obtained from:

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Change log

Name	Date	Version	Change
Jacqui Williams	14 September 2011	1.0	Released for web publication
Jacqui William	23 September 2011	2.0	Correction to phone number