Engineering and Physical Sciences Research Council





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RCUK Energy Programme

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The global landscape





Performance of the UK research base



UK punches above its weight

0.9% of global population
3.2% of R&D expenditure
4.1% of researchers
15.9% of most highly-cited articles

Source: International Comparative Performance of the UK Research Base – 2013, Elsevier.

Key facts





Research Councils UK Energy Programme





Research Councils UK Energy Programme





Our Mission to 2011-15



To position the UK to meet its energy and environmental targets and policy goals through high quality research and postgraduate training.

- Launched with investment announced in 2002.
- Continues to be a major investment strand (£540m over 4 years from 2011-15 Spending Review period).

Key UK Targets:

80% reduction in GHG emissions by 2050 15% of energy from renewable sources



by 2020. Increases in energy efficiency

Strategy, Planning and Management



The Research Councils work together to plan, develop and deliver energy research and training within a common strategic framework through the RCUK Energy Programme.



The Energy Landscape



Public Sector organisations working together to provide coordinated activity and a complete innovation chain. Coordinated through the Low Carbon Innovation Co-ordination Group (LCICG) led by DECC.



Our Mission 2016-21



Drivers: Research and postgraduate training to tackle all elements of the energy 'trilemma'



EPSRC Energy Theme objectives





Balancing our Portfolio



Action

Maintain

Maintain

Grow

Reduce

Maintain

Maintain

Maintain

Grow

Grow

Maintain

Maintain

Reduce

Maintain



Annual Expenditure on energy (EPSRC)





EPSRC Energy Theme objectives





Building Leadership





9,000 DOCTORAL STUDENTS SUPPORTED



115 CENTRES FOR DOCTORAL TRAINING

Building Leadership - Fellowships



Support for three stages:

- Postdoctoral
- Early Career
- Established Career
- Applications welcome at any time, with two rounds of interviews typically held each year
- A 'person specification' is used to describe the desired attributes for each career stage
- Applicants work with their institutions to establish which career stage suits them best







Energy Fellowship Areas



Post-doctoral Fellowships	Early career Fellowships	Established career Fellowships	
Bioenergy	Bioenergy		
End-use Energy Demand	End-use Energy Demand	End-use Energy Demand	
	Carbon Capture and Storage	Carbon Capture and Storage	
	Hydrogen and Fuel Cells	Hydrogen and Fuel Cells	
Energy Networks	Energy Networks		
Energy Storage	Energy Storage	Energy storage	
	Marine Energy	Marine Energy	
Nuclear Fission	Nuclear Fission		
	Offshore Wind Energy	Offshore Wind Energy	
Solar Energy	Solar Energy		







What can you apply for as part of a fellowship?



The resources available are determined by the career stage under which you are applying

Resource Package	Postdoctoral	Early Career	Established Career
Duration	Up to 3 years	Up to 5 years	Up to 5 years
Salary	Up to 100%	Up to 100%	Up to 100%
Travel & Subsistence	Yes	Yes	Yes
Staff	No	Yes	Yes
Visiting Researchers	Yes	Yes	Yes
Equipment	Small equipment items	Yes – in line with current EPSRC guidelines for equipment	Yes – in line with current EPSRC guidelines for equipment
Consumables	Yes	Yes	Yes
Public Communication Training	Yes	Yes	Yes

EPSRC Fellowship: Assessment Process (Duration 6-9 months)



Not Fund

Fund



Manufacturing and Healthcare Technologies are assessed at the same panels

Centres for Doctoral Training







THE NUMBER OF CENTRES

1,100 NUMBER OF PARTNERING COMPANIES





THE NUMBER OF UNIVERSITIES

Centres for Doctoral Training





RCUK Energy Strategy Fellow



- Professor Jim Skea, based at Imperial College, appointed to develop a prospectus for research and training across the UK energy research landscape.
- Appointment made following recommendations of 2010 International Review of Energy Research.
- To provide an evidence base to help the Research Councils plan our forward activities, acting in concert with government, other RD&D funding bodies, the private sector and other relevant stakeholders



EPSRC Energy Theme objectives





Accelerating Impact





Joint working with Innovate UK – a broad collaborative spectrum





Energy Catalyst



 Funded by Innovate UK, EPSRC and DECC, the aims of the Energy Catalyst are to:

- accelerate the UK's best energy research and concepts to commercial readiness
- provide a mechanism for continuity of investment
- provide support at the time, in the way and of the magnitude, that innovators need.
- The Catalyst will support projects which tackle the three elements of the energy 'trilemma'







Energy Catalyst



- The Catalyst is always open for applications
- Projects can involve universities, SMEs and large companies
- There are three stages of award:
 - Early stage technical feasibility
 - Mid stage technology development
 - Late stage technology validation

https://www.innovateuk.org/energy-catalyst

UKERC UK Energy Research Centre



- Phase III underway
- £42m of support from the Energy Programme.
- Focal point for UK research on sustainable energy.
- Independent, whole-systems approach.
- Bridge between energy research and business, policymakers and international energy research community.



Further Information



www.rcuk.ac.uk/energy





Questions?