

# Research Councils UK Energy Programme

## EPSRC Update

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*For a Low Carbon Energy Future*

# Research Councils UK



**Economics**

**Chemistry**

**Astronomy**

**Social Sciences**

**Medical Sciences**



**Humanities**

**Environmental Sciences**

**Physics**

**Engineering**

**Biological Sciences**

**Arts**

# RCUK's Energy Programme

RCUK's Energy Programme was launched to;

- Support a full spectrum of energy research
- Work in partnership with the energy community
- Increase international visibility and international collaboration within the UK energy research portfolio.
- Expand UK research capacity in energy-related areas.

Reduce GHG by  
80% emissions  
before 2050.



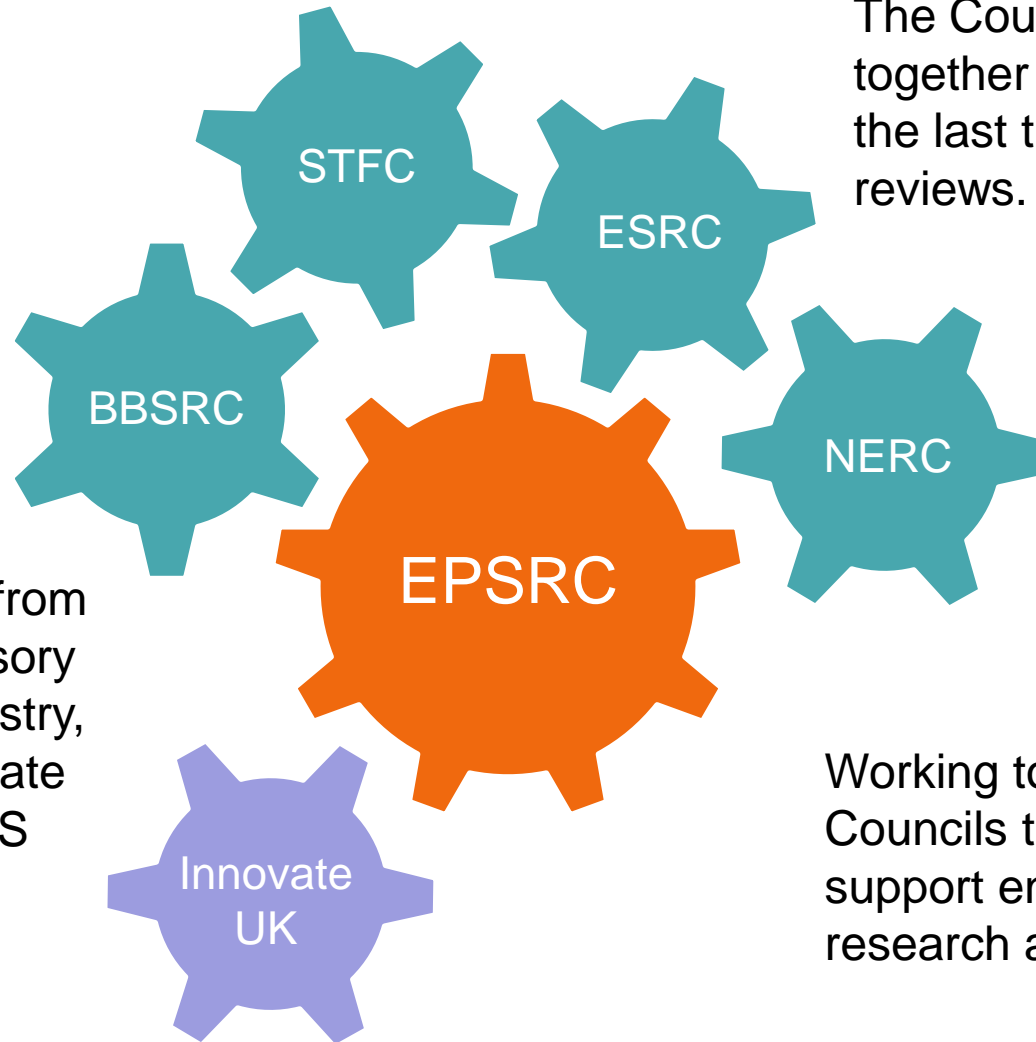
15% of energy from  
renewable sources  
by 2020.



Increase energy  
efficiency



# Strategy, Planning and Management



The Councils have worked together strategically over the last three spending reviews.

High level input from a Scientific Advisory Committee: industry, academic, Innovate UK, DECC & BIS representation.

Working together the Councils to plan and support energy research and training.

# EPSRC & CCS

EPSRC funded a number of areas including;

- CCS for Natural Gas Power Stations.
- Challenges in Geological Storage for CCS.
- Challenges in Carbon Capture for CCS.
- And the current call in Industrial CCS.

EPSRC has invested in a number of projects;

- Early career and established career fellowships.
- Invested in a new Centre of Doctoral Training (CDT) in CCS and Cleaner Fossil Energy.



# EPSRC/NERC interface

- ☞ Injection of CO<sub>2</sub> and injection sites – e.g. cap rock. EPSRC & NERC. (Injection = EPSRC; Cap rock = NERC).
- ☞ Monitoring, measurement and verification. Depends on focus.
- ☞ Modelling e.g. of reservoirs. [Generally NERC, fluid dynamics EPSRC]
- ☞ Enhanced oil recovery. [Usually EPSRC]
- ☞ Behaviour and migration of trapped CO<sub>2</sub>. [NERC]
- ☞ Permeability and porous media. [Usually NERC]
- ☞ Pore scale studies. [Typically NERC]
- ☞ **Capture and transport and whole systems modelling: EPSRC**
- ☞ **Storage and environmental aspects of CCS: NERC**
- ☞ Use the remit enquiry service if you are not sure which council to submit to:

<http://www.epsrc.ac.uk/funding/howtoapply/basics/remit/remitqueries/>

# Our Mission 2016-21

EPSRC aims to provide research and postgraduate training to tackle all elements of the energy 'trilemma'.



Reduce  
emissions



Enhance  
security of  
supply



Reducing  
cost



# Our Mission 2016-21



Future priorities include;

- Securing energy supply.
- Promote Low carbon innovation.
- Enhance understanding of the social, environmental and economic implications of future energy options, i.e. CCS.
- Reduce energy consumption and demand through developing whole system methods.
- Build capacity of skilled people to deliver new energy systems.
- Continue to build and sustain international links with key countries.



