

The Natural Environment Research Council (NERC); Funding CCUS research and innovation

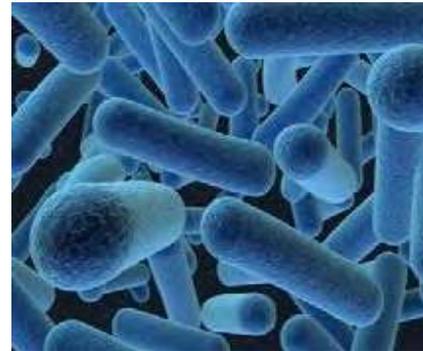
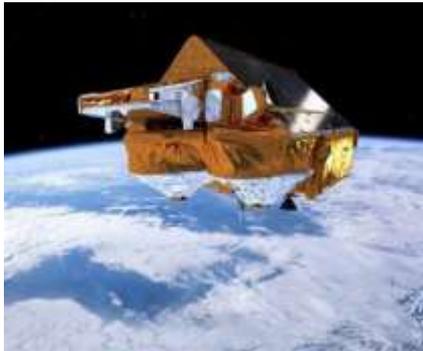
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Natural Environment Research Council



- NERC is the UK's leading public funder of environmental science
- We invest £330M each year in cutting-edge research, postgraduate training and innovation in UK universities and research centres



Our remit

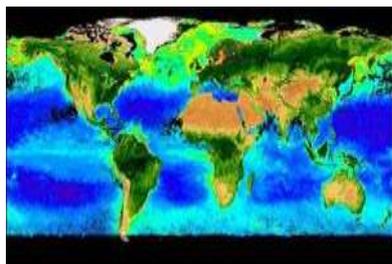


- Our scientists study and monitor the physical, chemical and biological processes on which our planet and life itself depends.



Our goals

Fund excellent, peer-reviewed environmental science that helps us:



- understand and predict how our planet works

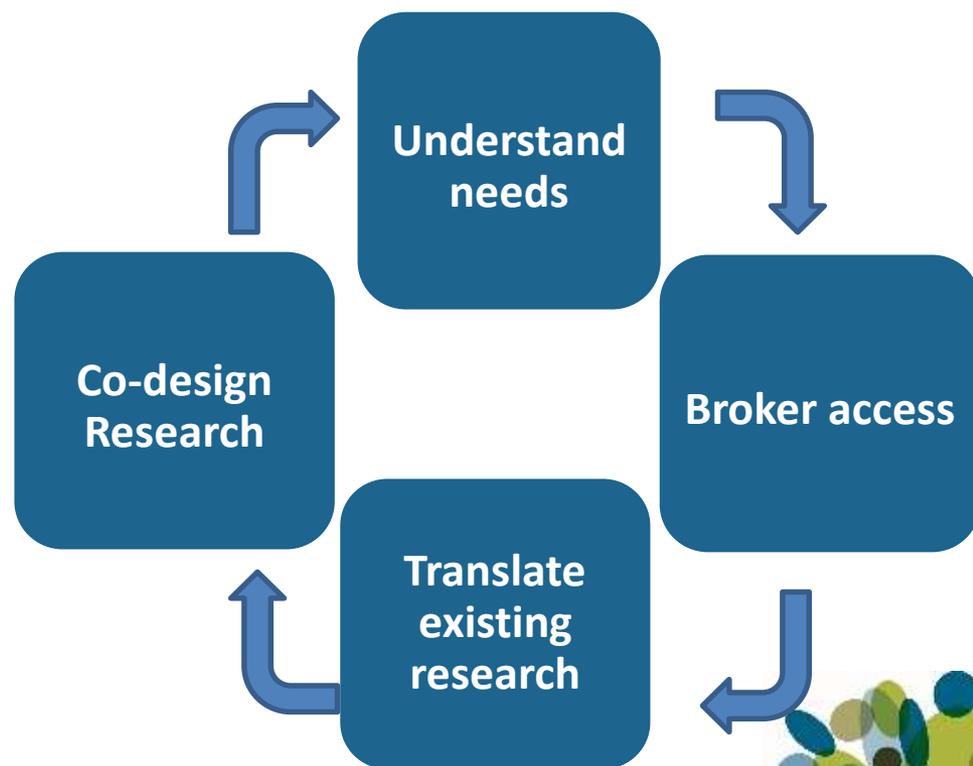


- manage our environment responsibly as we pursue new ways of living, doing business, escaping poverty and growing economies.

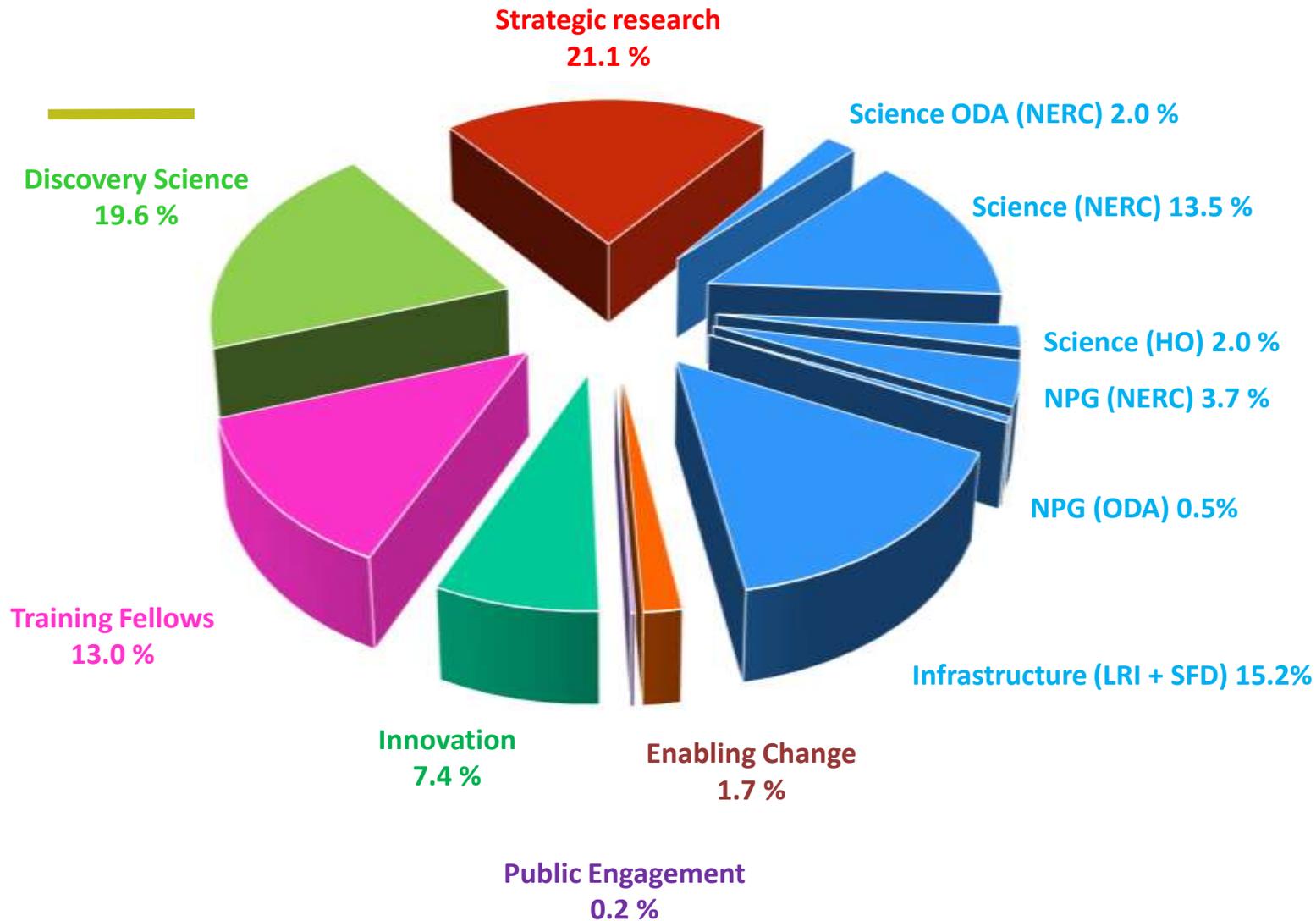


NERC's Innovation Investments

- Partner with business to help them find and use environmental science they need
- Priority areas
 - Environmental Data
 - Sustainable Food Systems
 - Risk and Resilience
 - Energy



NERC funding budget, 2017/18



National Capability 37.0 %



NERC investments in CCUS



- Since 2005 – NERC has invested >16m in research projects and fellowships in CCUS
- Build and maintain environmental and earth science key to:
 - Understanding CCUS technologies
 - Reducing risks of investment
 - Enabling effective regulation and deployment
 - Enabling/driving breakthroughs



Current NERC investments in CCUS



Accelerating CCUS Technologies (ACT)

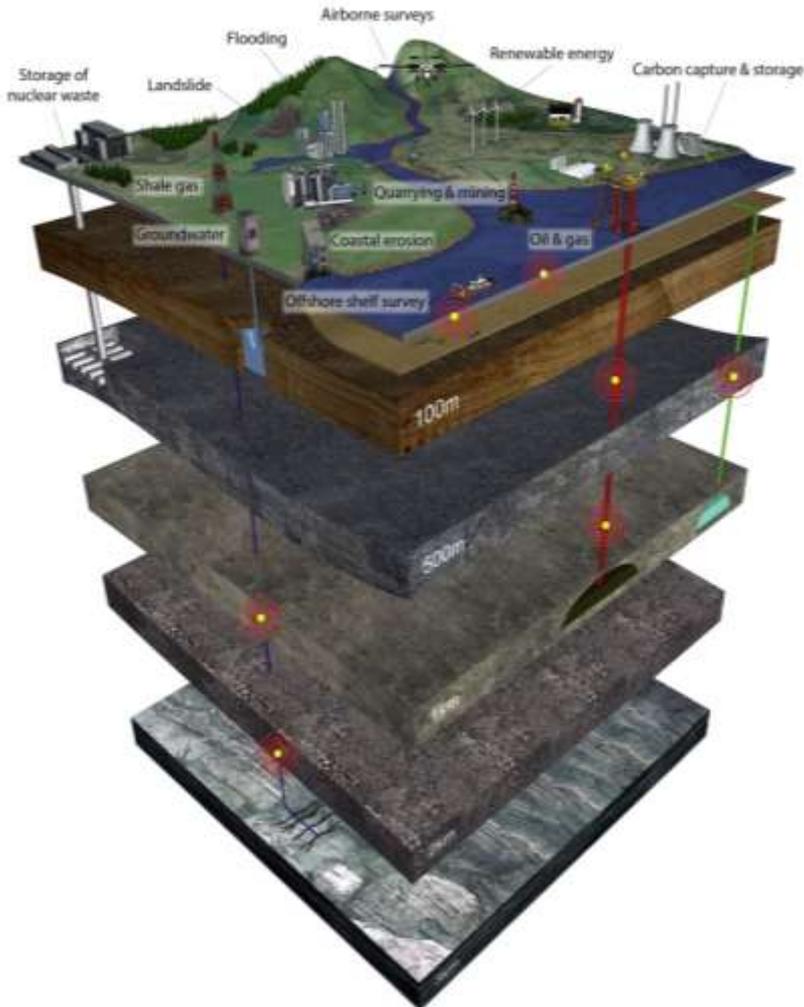
(2018-22): NERC, EPSRC, BEIS (£1m/£0.5m/£5m) cofunding the UK participation in an international initiative (Total call budget up to €30m) to establish CO₂ capture, utilisation and storage (CCUS) as a tool to combat global warming.

NERC Highlight Topics:

- Characterisation of major overburden leakage pathways above sub-seafloor CO₂ storage reservoirs in the North Sea (CHIMNEY) (2016-20, £1.3m)
- Migration of CO₂ through North Sea geological carbon storage sites: impacts of faults, geological heterogeneities and dissolution (2016-20, £1.8m)



Current NERC investments in CCUS



- UK-Geoenergy Observatories (UKGEOS)
- £31 million capital investment
- 2 world-class, subsurface energy-research test centres
- Monitoring and observing the subsurface – real time data
- Understanding subsurface processes is critical to furthering our understanding of CCUS, and the feasibility of CCUS technologies



NERC's role in CCUS



- Funding cutting edge research and innovation investments
- Enabling breakthroughs in environmental science understanding that inform technology development
- Facilitating the link between researchers/research and business
- We have a role in helping the UK move towards a low carbon economy, and meeting carbon emissions targets

