

The UKRI logo consists of the letters 'UK' stacked above 'RI' in a white, bold, sans-serif font, set against a blue square background with a white diagonal line.

Science and
Technology
Facilities Council

An aerial photograph of a university campus. On the left is a large, circular stadium with a grey roof and a central field. To the right and in the background are various university buildings, parking lots, and green spaces. A large blue triangle is overlaid on the right side of the image, pointing towards the center.

Welcome

STFC's mission

Mission:

- Discovering the secrets of the Universe
- Developing advanced technologies
- Solving real world challenges

Responsibilities:

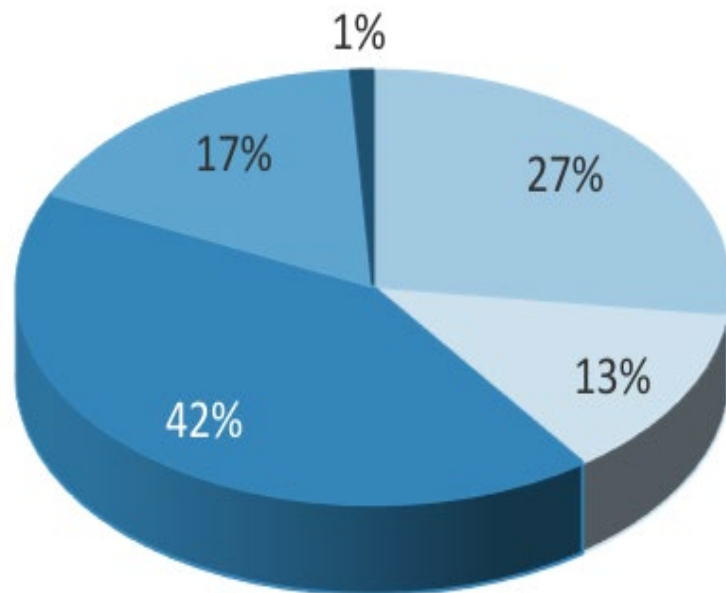
- Frontier research: particle physics, astronomy, nuclear physics and space science
- **Major UK multi-disciplinary facilities**
- **Stewardship of our R&I campuses**



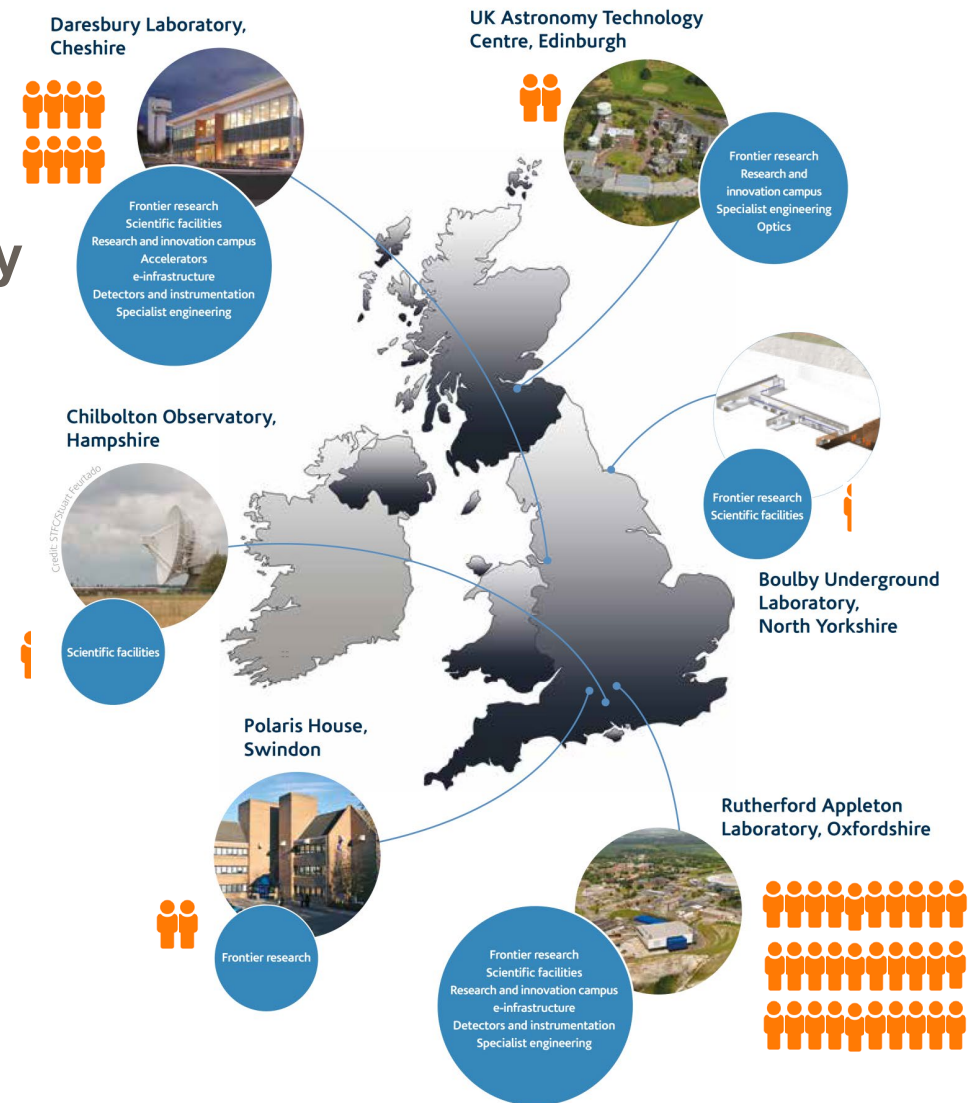
Who we are and where we are located?

We have **2,100 staff** across six UK sites

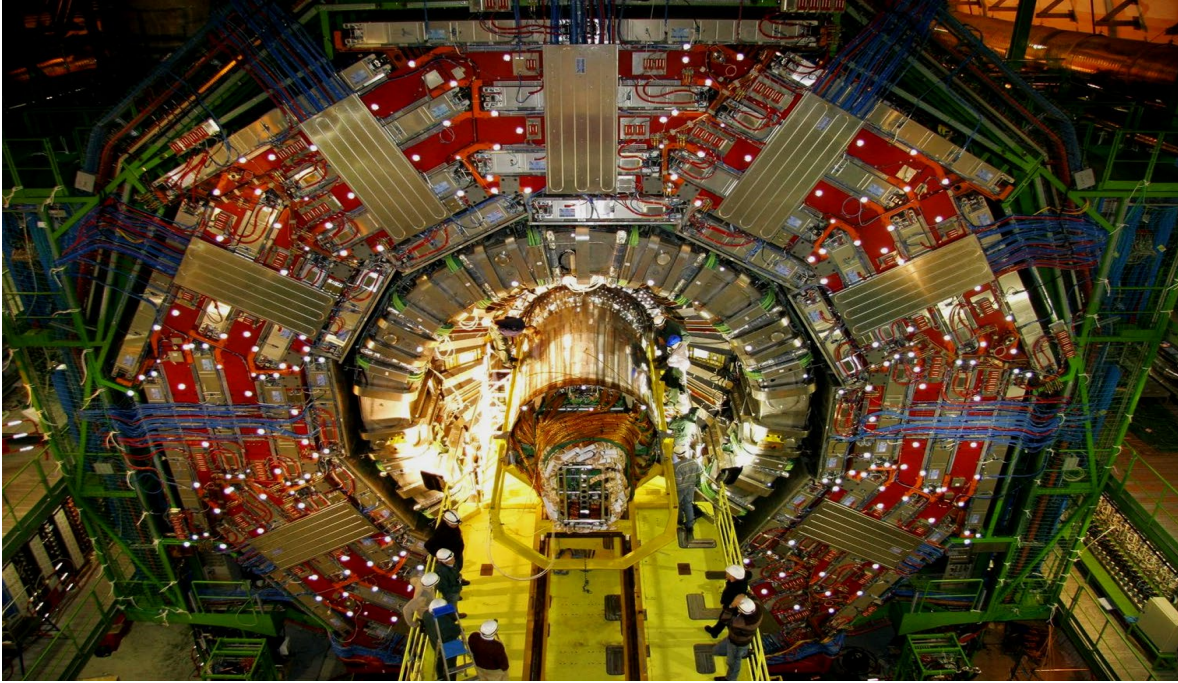
- > 80% are in STEM roles
- Around 6% are apprentices and students
- < 1% are delivering peer review for university awards



- Scientific
- Computing
- Technology and engineering
- Programme, innovation and strategy
- Peer review for university awards



World Class Facilities



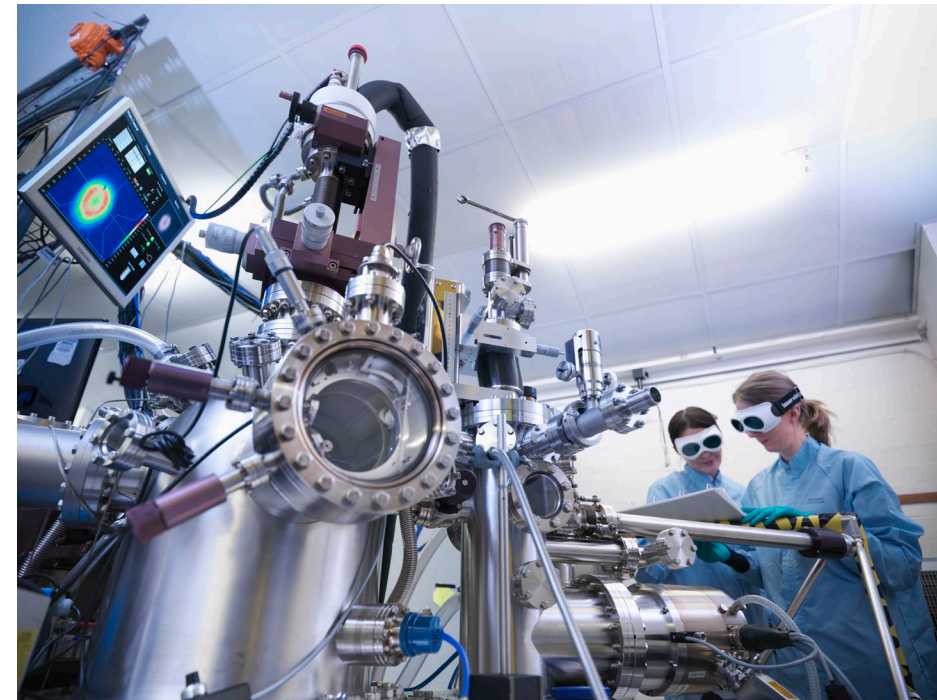
ISIS neutron and muon source: providing a unique view of the materials world

- ISIS is the world's most productive pulsed neutron and muon spallation source
- £1.4 billion net economic impact over 30 year life: >200% return on total investment
- Target Station 2 expanded the science programme into soft matter, advanced materials, energy and bio-science
- Has 30 neutron and 5 muon beamlines with newly commissioned instruments responding to new challenges



Central Laser Facility (CLF)

- Internationally leading capability in suite of five high intensity lasers for over 40 years
- Research in a broad range of science areas from high energy physics to chemistry and biology
 - Complex biological reactions within cells to new ideas for future energy production
- Centre for Advanced Laser Technology and Applications
 - Cobalt Light Systems
 - European projects: ELI, HiLASE
- Ground-breaking of new **£80m** facility (EPAC) took place two weeks ago



Diamond Light Source

- The UK's national synchrotron and a world-leading centre for synchrotron science
- Operated as not-for-profit limited company joint venture between STFC and the Wellcome Trust
- Has been operational since 2007 with over 30 beamlines + EM
 - Extensive applications in life sciences, including protein discovery





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Research and Innovation Campuses





Extreme Photonics Applications Centre

Central Laser Facility (STFC)

ISIS (STFC)

Rosalind Franklin Institute

NQCC

Research Complex at Harwell

Diamond Light Source

National Satellite Test Facility

RAL Space (STFC)



Campus Technology Hub

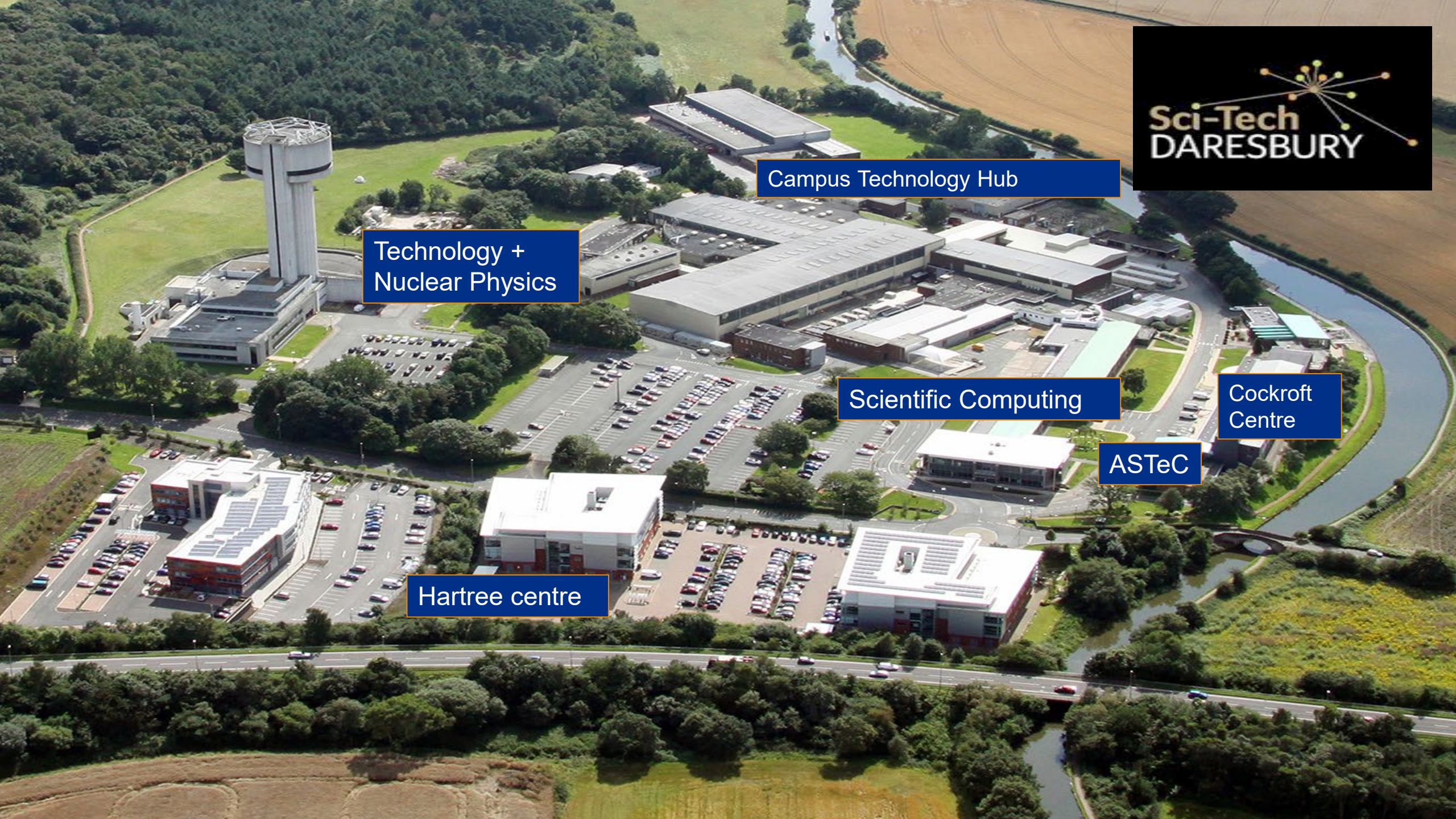
Technology + Nuclear Physics

Scientific Computing

Cockroft Centre

ASTeC

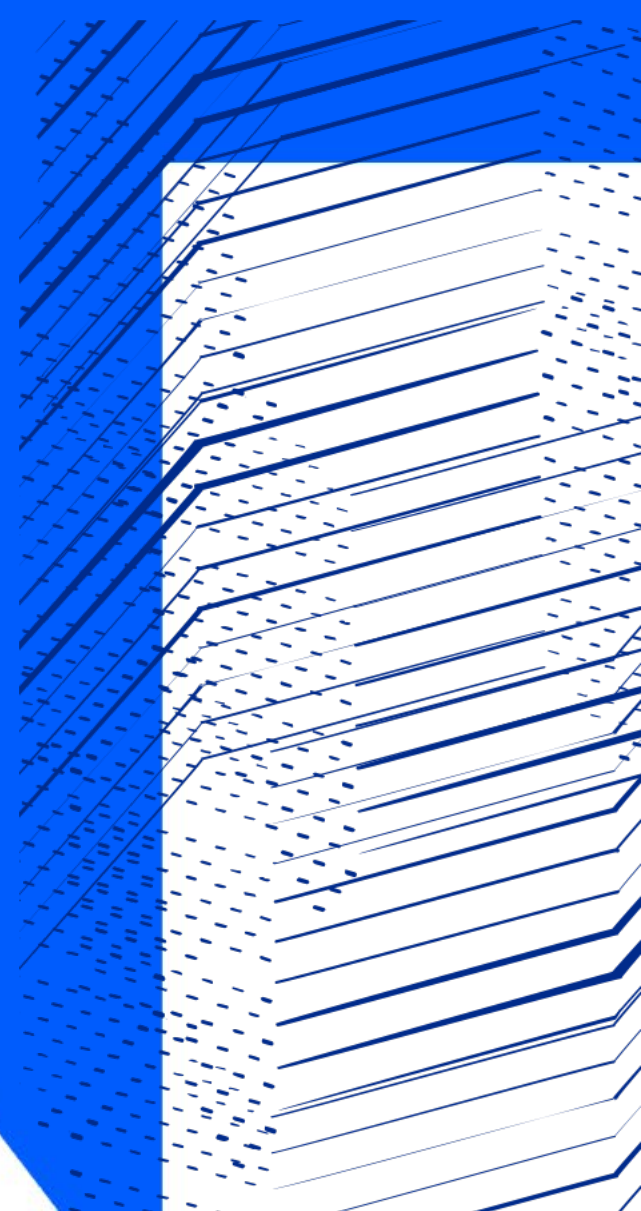
Hartree centre





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STFC and Sustainability



The size STFC's challenge

STFC 2018-19 emissions report

- 41,480 tonnes of CO₂ emissions
- 330 tonnes of CO₂ emissions - business travel
- 142,000 m³ of water consumed
- 987 tonnes of waste produced
- 19 tonnes of hazardous waste produced

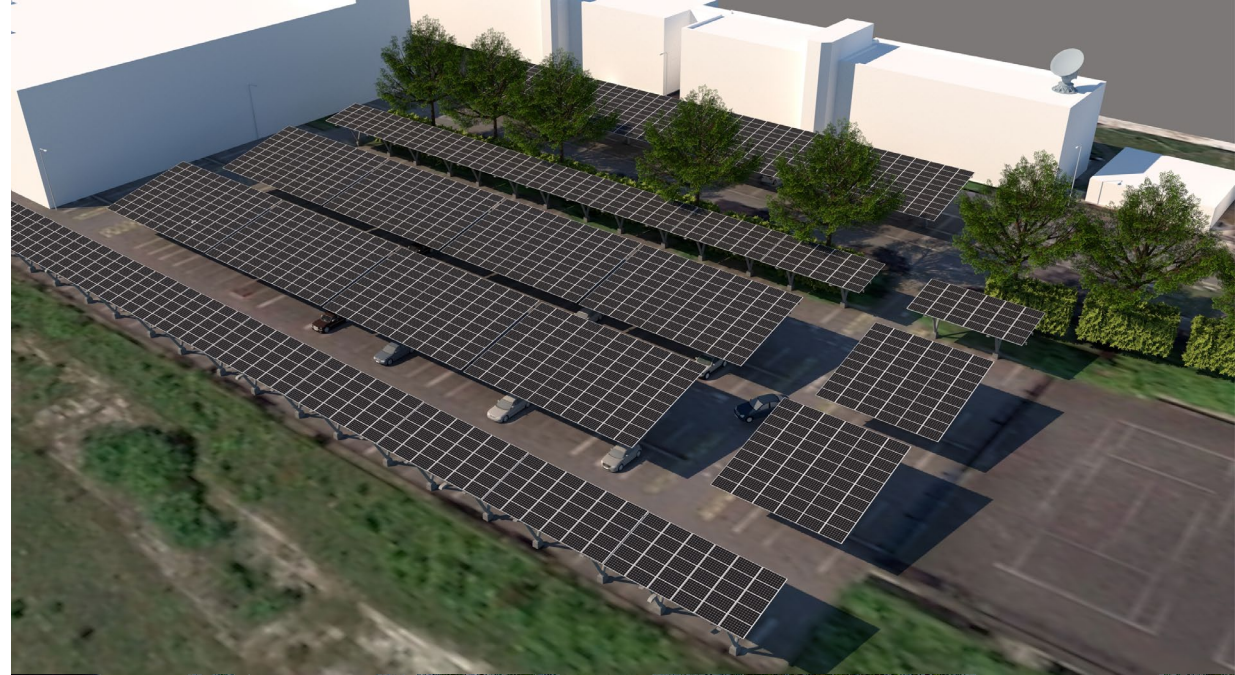
STFC currently accountable for 60% of UKRI's Carbon Footprint*

** UKRI data excludes NERC ships and Antarctic operations*



Four Pillars

1. Environmental Sustainability Plan



STFC 2021-22 Action Plan

The ES plan identifies six areas of focus for STFC

Leadership: Achieving buy in to distribute responsibility across our leadership team.

Staff empowerment: Providing staff with the information and training they need to begin to consider environmental sustainability as part of their role and their personal contribution.

Physical environment: In-depth analysis of consumption data (electricity, gas and water) to inform reduction plans, confirming assumptions on future growth and conducting feasibility studies for on-site energy generation.

Science delivery: Delivering a facilities pilot project that assess the considerations, options and cost associated with achieving net zero carbon.

Collaboration: Working with central UKRI to inform plans and agree targets.

Procurement: Begin the process of considering environmental sustainability as part of our large scale and long term supply contracts and asset procurements.

Four Pillars

1. Environmental Sustainability Plan

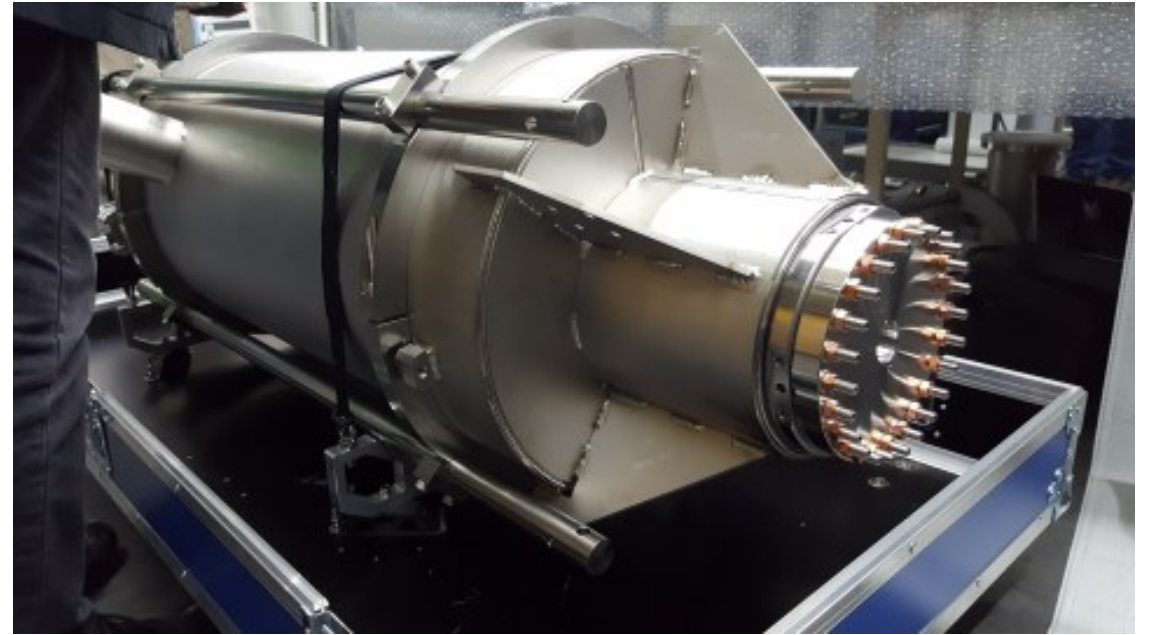
2. Research to Net Zero



Four Pillars

1. Environmental Sustainability Plan
2. Research to Net Zero
3. Energy Efficiency in Large Facilities





Four Pillars

1. Environmental Sustainability Plan
2. Research to Net Zero
3. Energy Efficiency in Large Facilities
4. Research Impacts on Decarbonisation





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Questions?



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Thank you



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@STFC_matters



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