

Towards a zero carbon future

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We have a longstanding working relationship with SCCS across a range of CCS initiatives. SCCS continues to be instrumental in developing CCS in the UK and globally, and we value their support on our journey to decarbonise and towards Net Zero."

Tom Snow, Engineering Manager Peterhead Carbon Capture Project Engineering, SSE

www.sccs.org.uk

Supporting a global CCS industry

CLIMATE CHANGE is one of our greatest challenges. The world's reliance on fossil fuels could continue for decades and we must urgently tackle carbon emissions from industry, transport, electricity and heat generation.

Carbon capture and storage, or CCS, captures carbon dioxide and stores it permanently in deep geological formations. CCS can also deliver lowcarbon hydrogen for transport and heat. When combined with bioenergy, it could achieve negative emissions.

In Scotland and the UK, decarbonisation scenarios all point to CCS as a necessary and cost-effective route to meeting our Net Zero targets.



SCCS is the largest CCS research partnership in the UK. Our partner institutes are engaged in innovative research and development focused on improving the efficiency, economics and public perception of CCS to support its deployment worldwide.

A centre of excellence for CCS research

The SCCS Secretariat supports researchers at partner institutes to unlock the potential of CCS. With expertise in project management, outreach, education & training, policy systems & analysis, communication & public engagement, the SCCS Secretariat also manages and participates independently in international collaborative research projects.

sccs.org.uk/expertise

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BGS has worked with SCCS research partners and industry in three Scottish Government-led research projects on Scotland's CO₂ storage capacity. It has been a pleasure to collaborate with the SCCS Secretariat, as partners in European CCS projects. They have a justifiably high international profile when delivering professional and compelling dissemination of CCS-related research to stakeholders and public."

Dr Maxine Akhurst Principal geologist, SCCS Directorate member for the British Geological Survey



The SCCS Partnership: At the forefront of CCS research

World-class researchers at SCCS Partner Institutes are dedicated to different areas of CCS including:

- CO₂ capture and power plant engineering
- CO₂ transportation, storage and injection
- Measurement, monitoring and verification
- CO₂ utilisation technologies
- Energy storage technologies
- Carbon dioxide removal (CDR)
- Nature-based solutions
- Life-cycle analysis (LCA)
- Risk, uncertainty, and mitigation
- Legal and regulatory matters

sccs.org.uk/expertise/our-partners

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SCCS is a key partner in decarbonising the UK's industrial base and our experience of working with them has been genuinely collaborative and entirely positive."

Bryony Livesey Director, Industrial Decarbonisation Challenge, UKRI

Facilities

SCCS Partner Institutes house state-of-the-art laboratories and equipment — including analytical, modelling and simulation facilities — that are available for collaborative research with industry and academia worldwide.



Hydrates and Ice Laboratory Keyworth British Geological Survey



Multiphase CO₂ and Hydrogen Flow Rig The University of Edinburgh



Research Centre for Carbon Solutions Heriot-Watt University



MicroCT Scanner University of Aberdeen



GeoEnergy Lab Facilities University of Strathclyde



Centre for Sustainable Solutions University of Glasgow

Education & training

SCCS Partner Institutes offer a variety of training courses, including PhD and postdoctoral research projects and Masters programmes, which develop knowledge and expertise in CCS and CCS-related disciplines.

CPD Courses for industry

The SCCS Secretariat develops and delivers MOOCs and short courses that are tailored to meet the requirements of both employees and employers.



www.sccs.org.uk/resources/education-training

Net Zero by 2050

The SCCS Partnership believes a Net Zero carbon future is achievable and is expanding its work into relevant sectors including: hydrogen production with CCS; hydrogen storage; CO₂ utilisation to make valuable products such as building materials and high-value chemicals; nature-based carbon capture solutions; and negative emission technologies such as direct air capture (DAC) and bioenergy with carbon capture and storage (BECCS).

Email us at info@sccs.org.uk to find out how your organisation could benefit from being part of the SCCS partnership.



CCS is essential to achieve Net Zero targets

Decarbonise

Industry



Full-chain CCS has been operating safely since the 1990s and new projects are coming on stream every year. Explore the world of CCS with our Global CCS Map: www.sccs.org.uk/resources/global-ccs-map

Decarbonise

Transport

www.sccs.org.uk

SCCS is a partnership of academic and research institutions, including the British Geological Survey, Heriot-Watt University, The University of Edinburgh, the University of Aberdeen, the University of Strathclyde, the University of Glasgow and associate partner, the University of St Andrews.

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