

# Building global CCS academic collaboration

Dr Philippa Parmiter

SCCS Business and Project Manager

### Summary

- About SCCS
- International Academic CCS Summit
- Outputs and next steps



SCCS is a partnership of the British Geological Survey, Heriot-Watt University, the University of Aberdeen, the University of Edinburgh, and the University of Strathclyde, with Associate Member the University of St Andrews

Funded by the Scottish Funding Council

















#### Achieving the SCCS vision

Progressing fundamental CCS research

Forming appropriate worldwide partnerships

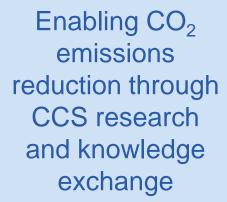
Providing independent analysis and policy advice

Connecting government, industry and research

**Educating CCS professionals** 

through outreach, education and engagement

Encouraging public awareness of CCS





#### Expertise across the full CCS chain



- Capture engineering for power and industry – materials and benchmarking, integration in system (flexibility, technoeconomics, operability)
- Transport pipeline and shipping
- Storage screening and ranking of sites, MMV, leakage overburden simulation
- Utilisation catalysis, CO<sub>2</sub>-EOR, mineralisation
- Economics, public perception, environmental impacts, regulation and policy



# International CCS Academic Summit



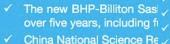


Funded by: UK FCO in Calgary, CSLF Capacity Building Fund, NRCan

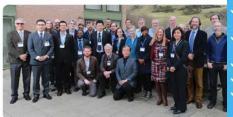
### Outputs and Follow-ups



- Launch of a new £20m M \* partnerships
- European Horizon 2020 pr €42m (£32.7m) ERA Net p \* Spain, Sweden, Turkey and
- China National Science Re







- University of Alberta and W
- CGS/KZN and University o
- Universities of Oslo and Ed
- University of Strathclyde ar
- Chinese Academy of Scien Austin and CGS/KZN/Wits
- Universities of Regina and
- Heriot-Watt University and
- Universities of Melbourne :
- Universities of Edinburgh involvement in Guangdong

Universities of Oslo and Aberdeen - collaboration on 3D digital rock scale

- Universities of Aberdeen and Calgary, Alberta, Texas CCS monitoring
- Universities of Melbourne and Alberta Aquistore sample access
- CGS/KZN and University of Melbourne South African CO2 storage fut
- Universities of Regina and Melbourne involvement in MSc programme 11 Universities of Edinburgh and Melbourne - ongoing and collaborative pr
- Universities of Heriot-Watt and Texas at Austin discussion on extending and guest lecturer programmes to include CCS activities
- China University of Petroleum and Heriot-Watt University expans
- University of Aberdeen and the South African institutes possible joint F
- Yonsei University and Wits University gasifier modelling design work
- China University of Petroleum made many new contacts among atte opportunities with the SCCS partner institutes
- University of Edinburgh and CGS/KZN ongoing talks on potential co project





MoU.

Fund

toring



**Executive summ** 

Scotlish Carbon Captu

# Objectives of an academic network

- Knowledge sharing and collaboration between international researchers with established track records in CCS research
- Maximising value from existing injection and capture research and pilot facilities by enabling access for international researchers

Capacity building in countries new to CCS

research





### Next steps

- International funding opportunities
  - Accessible and up to date
  - Enabling researcher mobility and academic exchange
- Annual/biannual meeting
- Enabling access to CCS test and pilot facilities
- International teaching
  - online courses
  - lecturer exchanges
- 'Carbon Capture Olympics' every four years to assess progress in CO<sub>2</sub> capture methods



#### Conclusions

- Lots of interest in a network –
   someone needs to be responsible
- Funding is available but timelines could be co-ordinated
- Maximise value and make the most of new ways of learning and communicating



### Thank you

philippa.parmiter@sccs.org.uk
+44 (0) 7795 882 122

www.sccs.org.uk/events/past-events/73-international-ccs-academic-summit





