CO₂ Capture and Storage (CCS)

Don Valley (Hatfield)

MEMBER STATE(S) INVOLVED
UK

PROJECT PARTNERS
2Co Energy; 2Co Power; National Grid

BASIC TECHNICAL DATA
Capture: 900 MW (gross); IGCC
Storage: Offshore saline aquifer
Annual CO₂ captured & stored:
up to 5 million tonnes per annum

BUDGET
EEPR Action: € 245 m of which:
  Project partners: € 65 m
  EEPR support: € 180 m
(funding rate of 73%)

EEPR ACTIVITIES TIMETABLE
Start date: 16 July 2009
End date: 31 December 2013

ADDITIONAL INFORMATION
EU CCS Project Network
http://www.ccsnetwork.eu

http://www.2coenergy.com/don_valley_power_project.html

Updated: October 2013

OBJECTIVES
The objective is to have a fully integrated CCS power project operational by winter 2016/2017. The Don Valley project would be a new-build IGCC power plant, with carbon capture on the full 900 MW gross (650MW net) capacity of the power plant from the start up of operations.

PROJECT IMPACT
The plant should capture slightly more than 90% of the CO₂. Using Integrated Gasification Combined Cycle (IGCC) technology means both impurities and the CO₂ are removed before combustion. The CO₂ will be compressed and transported by pipeline to the UK sector of the North Sea, where it will be stored in a deep saline formation. Up to 5 million tonnes of CO₂ will be stored per year. The aim of the project is to cost-effectively demonstrate CCS technology on an industrial scale, and therefore help CCS to be commercially viable by the 2020s.

ACTIVITIES (CO-FINANCED UNDER THE EEPR) IN BRIEF
EEPR funds cover investment at all stages of the CCS chain (capture, transport and storage). Front-end engineering design (FEED) studies, storage permits, the environmental permit for the power plant and an environmental impact study are also included in the action. The EEPR also funds knowledge sharing activities as the EEPR seeks to ensure that all important findings from the CCS projects are shared.

STATE OF PLAY OCTOBER 2013
The UK government’s decisions not to support the project via the national CCS Commercialisation programme and NER300 were serious setbacks. However, the promoters remain committed and aim to secure operational support via the UK’s Contract for Difference (CFD) scheme, which is currently being prepared. The Commission is currently negotiating a restructuring plan with the partners.