



**Project Acronym** : DYNAMIS

**Project Title** : Towards Hydrogen and Electricity Production with Carbon Dioxide Capture and Storage

**Coordinator** : Sintef Energiforsking (Norway)

**Website** : <http://www.dynamis-hypogen.com/>

## ABSTRACT

DYNAMIS responds to the target of "Preparing for large scale H<sub>2</sub> production from decarbonised fossil fuels including CO<sub>2</sub> geological storage". The main objective is to prepare the ground for large scale European facilities producing hydrogen and electricity from fossil fuels with CO<sub>2</sub> capture and geological storage. 29 legal entities have established DYNAMIS, encompassing 4 European fossil fuel end users, 3 fossil fuel producers, 6 technology providers, 1 engineering- and 1 financing group together with 14 RTD providers. The group gathers the critical mass required to undertake such a task. DYNAMIS is designed as an element of the HYPOGEN project, part of the European Commission's Quick-Start Programme within the Initiative for Growth. The HYPOGEN project includes as an interim step the construction of a large-scale facility for the production of hydrogen and electricity from decarbonised fossil fuels with CO<sub>2</sub> storage. DYNAMIS is the first step on that route, designed to rank the options and to reduce the risk in development of a fullscale pilot plant post-2008. DYNAMIS is organised as an integrated project (IP). The RTD activities are structured in 5 sub projects that directly meet the stated objectives of the Work Programme: \* SP2 Power plant and capture technology \* SP3 Product gas handling (H<sub>2</sub> and CO<sub>2</sub>) \* SP4 Storage of CO<sub>2</sub> \* SP5 Planning and pre-engineering of plants \* SP6 Societal anchorage of a HYPOGEN demonstration DYNAMIS will, in compliance with the stated objectives of the Work Programme: \* deliver appropriate information and provide recommendations for potential technologies, plants and sites for large scale hydrogen production with CO<sub>2</sub> management from fossil fuels at a level intended for pursuing the pilot phase of HYPOGEN \* provide a framework for legal, financing and public perception of a HYPOGEN demonstration \* generate, exploit and disseminate new knowledge that contributes to the implementation of the EU energy and research policy.

## PARTNERS

Sintef Energiforsking – **Norway**; Vattenfall Research and Development AB – **Sweden**; Nederlandse Organisatie Voor Toegepast Natuurwetenschappelijk Onderzoek - TNO – **Netherlands**; Technique Universitet Sofia – **Bulgaria**; Ecofys B.V. – **Netherlands**; Institut Français du Pétrole – **France**; Fraunhofer Institute for Systems and Innovation Research - ISI – **Germany**; Sintef Petroleumsforskning AS – **Norway**; Société Générale – **France**; Progressive Energy Ltd – **United Kingdom**; Etudes et Productions Schlumberger – **France**; L'Air Liquide S.A. – **France**; Alstom Power Environment ECS – **France**; Alstom AG – **Switzerland**; Alstom Power Centrales – **France**; Enel Produzione S.P.A. – **Italy**; Endesa Generación S.A. – **Spain**; E.ON UK PLC – **United Kingdom**; Store Norske Spitsbergen Grubekompani AS – **Norway**; BP International Ltd – **United Kingdom**; Statoil ASA – **Norway**; Sintef - Stiftelsen for Industriell og Teknisk Forskning ved Norges Tekniske Høegskole AS – **Norway**; Norges Tekniske - Naturvitenskapelige Universitet – **Norway**; Siemens AG – **Germany**; IEA Environmental Projects Ltd - **United Kingdom**; Bundesanstalt fuer Geowissenschaften und Rohstoffe – **BGR** – **Germany**; Danmarks og Groenlands Geologiske Undersoegelse – **Denmark**; Commission of the European Communities - Directorate General Joint Research Centre – **Belgium**; Natural Environment Research Council. - **United Kingdom**.