

We hereby provide information about our organisation with the intention to team up with other CCUS experts. We are interested in discussing new project proposals to upcoming ACT Calls related to subjects listed below.

1. Name of Institution

TUBITAK Marmara Research Center Energy Institute

2. Specialities field within CCS

CO₂ Capture: TUBITAK MRC Energy Institute has started CO₂ capture studies, based on chemical absorption, within a national project in June 15th, 2009. Designed and constructed:

- A lab laboratory-scale CO₂ capture solvent screening test unit with a capacity of 0,5 kg.CO₂/h
- A pilot-scale CO₂ capture system, with a capacity of 200 kg.CO₂/h

Recently another laboratory-scale CO₂ capture system with a capacity of 2 kg.CO₂/h is under construction within another national project.

TUBITAK MRC Energy Institute has the capability of developing rate based Aspen HYSYS models for different capacities.

Oxy-Combustion: TUBITAK MRC Energy Institute is a part of on going national oxy-combustion project. There are two Oxy-combustion Pilot Plants in operation.

- a) 30 kWth Atmospheric Circulating Fluidized Bed Combustion system
- b) 30 kWth Pressurized Bubbling Fluidized Bed Combustion system (5 bara)

The systems can be operated with coal, biomass, biochar and the mixture of those. Both systems are fully equipped with instruments and gas measurement systems.

3. Website

<http://ee.mam.tubitak.gov.tr/en>

4. Contact person:

For CO₂ Capture

For Oxy-Combustion

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Chief Senior Researcher

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