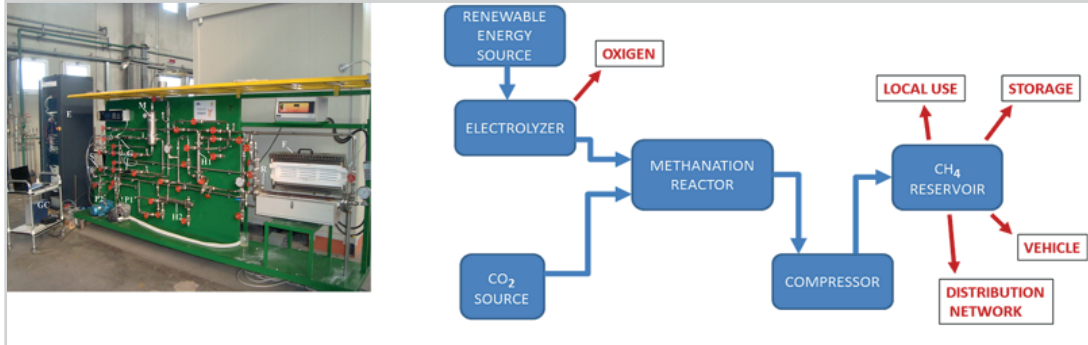


FENICE EXPERIMENTAL FACILITY FOR PRODUCTION OF METHANE GAS FROM CO₂

Innovations and Benefits - ENEA hosts the Fenice experimental facility transforming CO₂ into fuel. The carbon present in CO₂ is revitalized by reducing it with hydrogen: their reaction produces methane and water. The electrolyzer for hydrogen production can be renewable-powered allowing to store solar energy in the chemical form. Such storage technique presents environmental benefits and a great versatility, since the methane so produced can be used diversely for both local use and network distribution.

Use - Fuel production by reusing CO₂, integrated with renewable energy sources.

Applications and ongoing Activities - The facility has been tested for producing 500 L/h of methane and can be adapted to produce other fuels such as, e.g., Dimethyl ether (DME).



FENICE experimental facility

