

## CO2 conversion exploited in industry

Hysytech is an engineering and process equipment construction company established on 2003, in Turin, Italy. Main product is engineering focused on innovation, providing total quality engineering solutions and services to industrial clients. It supplies specialized solutions on chemical processing, traditional and renewable energy, power generation and environment treatment. The company invests since its inception on the development of proprietary technology (patents and trademarks) with the aim to deploy products in the market. Its products are characterised by a better performance for the energy and the environment compared to the traditional solutions or competitors. Up to now the main products commercialised are a hydrogen generator based on thermochemical technology, a biogas upgrading to biomethane based on a hybrid cleaning technology and a microscale liquefaction system to deliver LNG based on a reverse Stirling cycle cryocooler.

The urgent need to capture and utilize the CO<sub>2</sub> at industrial level is a technical and economic challenge, but also an opportunity. Several CO<sub>2</sub> capture and utilization technologies are developed by the company, in the biochemical, electrochemical and thermochemical field, with the primary help of the EU funding through several projects, with different level of risk and an excellent network of EU partners. Co-funded projects are on-going to demonstrate that several chemicals can be obtained capturing and recycling CO<sub>2</sub> throughout different pathways.