ENERGETICS

DENERG - Modelling for safe hydrogen injection and management for European gas network resilience and decarbonization

Funded By	Dipartimento DENERG
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Context of the research activity	The activity is related with modelling of gas network for the integration of renewable gases. The research will highlight advantages and challenges for the integration of renewable gases within the Europan gas network aiming at increase security of supply and decarbonization of final uses. Main focus of acivity is related with hydrogen injection and related challenges of quality tracking and fluidynamic constraints.
Objectives	The research acivity is cofunded within an European project that aims at the investigation of gas network with transporting/distributing of renewable gases and especially hydrogen. The research will foreseen therefore interaction with partners either academic and industrial stakeholders i renewable gas sector and gas networks.
Skills and competencies for the development of the activity	Expected activity is modelling gas networks at transmission and distribution level including capability of fluidynamic, thermal and quality description. The activity will also concern the capability to design and simulate scenarios for hydrogen blending in gas networks looking at the EU perspective towards an harmonization of practices.