

# ENERGETICS

## DENERG - Hydrogen Valleys: modeling and optimization, including experiments in H2 Tunnel

<b>Funded By</b>	Dipartimento DENERG
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<b>Context of the research activity</b>	Hydrogen value chain: production, transportation, end-uses Modeling of hydrogen value chain inside Hydrogen Valleys Experimental activities in Hydrogen Tunnel
<b>Objectives</b>	The PhD is connected to the wide thematic of the Hydrogen Valleys, concepts that have the aim to connect the complete H <sub>2</sub> value chain, from production to transportation and storage, to the various end-uses In particular, the PhD is devoted to the modeling of the complete valley, and on the identification of the optimal configuration and management of the Valley Finally, the PhD will also develop experimental activities related to emission and leakage of H <sub>2</sub> or He mixtures, in a dedicated lab defined as "H <sub>2</sub> Tunnel": these data will be used in the modeling of the H <sub>2</sub> value chain
<b>Skills and competencies for the development of the activity</b>	Hydrogen Technologies and Processes Modeling and optimization Experimental activities in H <sub>2</sub> technologies