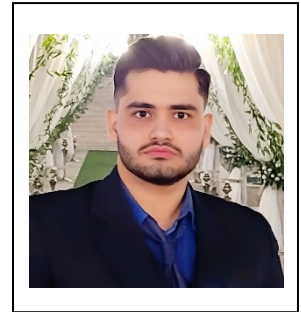


ICRERA 2025

14th INTERNATIONAL CONFERENCE ON RENEWABLE ENERGY RESEARCH AND APPLICATIONS

AMIRHOSSEIN SHAHPARI

Master's Thesis Researcher, Shell Global Solutions International BV (Affiliated with Politecnico di Torino, Torino, Italy)



Paper ID : 195

Paper Title : Techno-Economic and Environmental Analysis of Hydrogen Supply Chains

Bio :

Amirhossein Shahpari is a highly motivated Renewable Energy Engineer completing his Master of Science degree in Energy Engineering (Renewables) at Politecnico di Torino, Italy. He holds a BSC degree in Mechanical Engineering.

His primary research focuses on the Techno-Economic Modeling and System Optimization of complex renewable energy systems, including PtX technologies and long-term energy storage. He is proficient in computational methods, including Python, MATLAB, ASPEN+ for process simulation, and PYPISA for large-scale energy system analysis.

He is currently working as a Master Thesis Researcher at Shell's Energy Transition Campus Amsterdam (ETCA), where his research involves modeling and uncertainty quantification for hydrogen supply chain evaluations. His expertise is critical in fields spanning renewable energy, hydrogen transport, and decarbonization strategies.