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Paper ID: 137

Paper Title: A simulation-based evaluation of a direct air capture system with coupled electrochemical and thermochemical processes

Bio:

Giuseppe Calabrese holds a Bachelor's Degree in Energy Engineering from Politecnico di Torino (Italy) and an Erasmus Mundus Joint Master's Degree in Energy and Nuclear Engineering – Hydrogen Systems and Enabling Technologies (HySET), completed at Politecnico di Torino and Universitat Politècnica de Catalunya (Spain). His master thesis, conducted in collaboration with Shell Global Solutions International B.V. at the Energy Transition Campus Amsterdam (ETCA, the Netherlands), focused on the simulation and techno-economic evaluation of a direct air capture system integrated with hydrogen production. The results of this research are partially presented in the paper he is contributing to at the conference. He is deeply interested in the themes of climate change, decarbonization, and the energy transition, and is eager to continue working in this field to actively contribute to a more sustainable future.