Stanford



Julia Frohmann

Ph.D. Student in Energy Science and Engineering, admitted Autumn 2023

Bio

BIO

Julia Frohmann is a PhD candidate in Energy Science and Engineering, and leads the demand side technology utilization modeling at STEER. Her research focuses on the feasibility of large-scale grid storage deployment in the US by evaluating battery energy storage revenue generation potential. Julia's key areas of interest are electricity market operations, and macro-scale energy systems modeling. Previous work focused on renewable grid penetration effect on electricity exchange variability and modeling optimal integration of power-to-heat-to-power storage. Julia obtained her bachelors in Mechanical Engineering and masters in Energy Engineering from RWTH Aachen, Germany.

EDUCATION AND CERTIFICATIONS

- M.Sc., RWTH Aachen University , Energy Engineering (2023)
- B.Sc., RWTH Aachen University , Mechanical Engineering (2021)

Publications

PUBLICATIONS

- **Design of low-carbon multi-energy systems in the SecMOD framework by combining MILP optimization and life-cycle assessment** *COMPUTERS & CHEMICAL ENGINEERING*
  Reinert, C., Nolzen, N., Frohmann, J., Tillmanns, D., Bardow, A.
  2023; 172