

Title of the work:

“Modeling & Optimization of Power-to-Fuel Systems“

Background:

Are you looking for an exciting and innovative thesis opportunity? Join the EU Project GreenDEALCO₂ team and help drive the transition to a more sustainable energy future. In this thesis, you will work to develop and evaluate future scenarios for producing green hydrogen and utilizing it to produce green fuels for the future. You will work with an optimization model developed for this purpose to evaluate these scenarios. The goal of this work is to investigate the effect of volatile electricity prices over the design and operation of such systems and efficient integration of power-to-x solutions in green future industrial setups



Outline of the contents:

- Literature review of the relevant industries and power-to-fuel processes
- Investigate the effect of volatile electricity prices over the design and operation of power-to-x systems
- Efficient integration of this concept in green future industrial setups
- Written documentation of the work

Benefits:

- You will gain hands-on experience with open energy modeling & optimization and learning it on-the-go.
- Increase in knowledge related to Power-to-X systems.
- Contribute to the transition to a more sustainable energy future.
- The expected duration of the thesis is 6 months. We are seeking a highly motivated and qualified individual to join our team. If you're interested in this opportunity, please send an email with your resume to the contact person expressing your interest in the topic.