



**Head of Institute**

Prof. Dr.-Ing. Philip Leistner

**Your contact**

M. Sc. Ehsan Nemati

Nobelstraße 12

70569 Stuttgart

[bewerbung-gabi@iabp.uni-stuttgart.de](mailto:bewerbung-gabi@iabp.uni-stuttgart.de)

Stuttgart, 14th of November 2023

# Life Cycle Assessment of the State-of-the-Art of Power-to-X Products

Power-to-X (PtX) technologies are one of the promising solutions for defossilization of the transportation sector and the industry. There are various production routes and technologies investigated in the literature for producing hydrocarbons which can be used as fuel and/or chemical.

In the scope of this project, a systematic literature review shall be performed to present the state-of-the-art of PtX studies. Moreover, the key parameters affecting the Life Cycle Assessment (LCA) and costs of PtX products should be discussed as investigated in the literature. In a next step, an LCA model shall be built using an LCA software and the results shall be interpreted with respect to the identified key parameters.

**Your profile:**

- Interest in LCA and chemical processes
- Knowledge of Power-to-X technologies and GaBi software is an advantage, but not mandatory
- Confident use of MS Office
- Good knowledge of English and German

**We offer:**

- Independent work in a young, friendly team
- Cooperation in a research project with partners from industry and science
- The possibility of a parallel employment as HiWi
- Good, free coffee ☺
- Possibility to work on site or from home

**Application:**

If this advertisement has caught your interest or if you have any questions, please send your current application documents (CV, transcript of records, letter of motivation, ...) to:

[bewerbung-gabi@iabp.uni-stuttgart.de](mailto:bewerbung-gabi@iabp.uni-stuttgart.de)

Department of Life Cycle Engineering GaBi  
at IABP offers a

## Master Thesis/Bachelor Thesis/Student Research Project

for students of

- Verfahrenstechnik
- Umweltschutztechnik
- WASTE/WAREM

Or similar study fields

**Start date: now**

