

23J011 - Internship proposal

Title: Development of a business model for hydrogen vehicles for maritime applications

EIFER (European Institute for Energy Research) was established in 2001 as collaboration between the Karlsruhe Institute of Technology (KIT) and Electricité de France (EDF). Today EIFER has an international team of more than 100 researchers. The hydrogen team is currently looking for a student in the scope of a prospective study related to hydrogen prospective markets.

The main objective of the internship is to perform a market analysis on the most promising technologies for using hydrogen and/or e-fuels for maritime application.

Once identified the most suitable application a potential business case will be identified. A local analysis to better understand the ecosystem and the hydrogen players of the area will be carried on. With the help of a tool that will be developed during the internship/master thesis, a final assessment will be done, to evaluate the economic and technical feasibility of the identified business model.

The assigned tasks involve

- Hydrogen market analysis, with focus on hydrogen applications in the maritime sector
- Identification and deeper analysis on the different technological solutions that hydrogen can offer in the maritime sector to decarbonize it
- Identification of hotspot areas where a business case could be developed
- Identification of the hydrogen players and assessment of the ecosystem in the area where it is intended to develop the business case
- Development of a tool able to calculate various key performance indicators such as hydrogen cost, CO2 emissions abatement etc.
- Development of a business model for the identified case study and assessment of the economic and technical feasibility

Required qualifications/skills/interests

The position is aimed at students in technical/economics sciences with engineering background who have

- Interest in the field of energy and environment
- Proficiency in energy market analysis, with basic knowledges on hydrogen applications
- Advanced knowledge in mechanical/maritime technologies is an added value
- Fluency in English
- Ability to work autonomously and with spirit of initiative

What you can expect

- A stimulating, multicultural and multidisciplinary environment
- An institute at the intersection between academic research and one of the largest energy utilities in Europe
- If the opportunity arises: participation in conferences, involvement in scientific publications

Conditions

- Duration: 6 months.
- Starting date: as soon as possible
- Location: EIFER, Emmy-Noether-Str. 11, 76131 Karlsruhe, Germany
- Working hours: 39.5 hours per week
- Monthly compensation: 520 € gross (for compulsory internships)

Contact

If you want to join a highly motivated research group, please forward your electronic application **with one single pdf of max. 5MB** including all relevant information (curriculum vitae and cover letter) to **jobs@eifer.org**. **Please refer to the offer number 23J011.**

For additional information concerning the work please contact: Renato Luise,
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