

**Project title:** Cost-effective production of lightweight CFRP pressure vessels for the storage of gases and fluids in mobile applications - **EcoVessel**

**Partner:** ITA – Institut für Textiltechnik of RWTH Aachen  
DLR – German Aerospace Center  
Institute of Industrial Science, University of Tokyo

**Duration:** 03/2018 – 02/2021

**Funding Agency:** BMBF – Promotion of workshops and project application with Japan

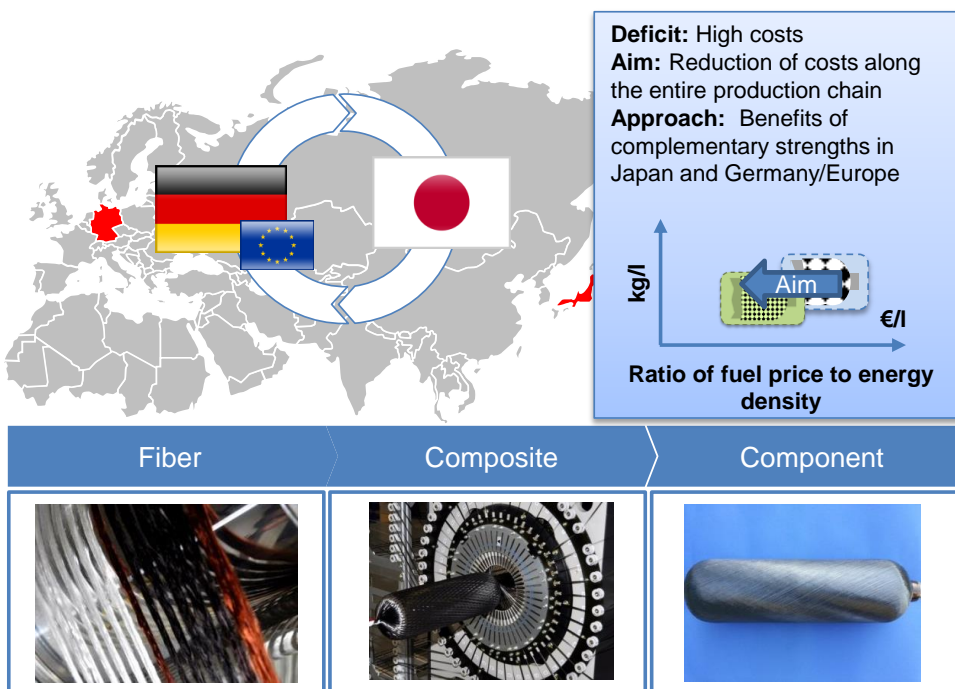
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Mission Statement

Cooperation with the Asia-Pacific Research Area in research, education and innovation has a high value for Germany. The aim of this project is to bring together the excellence of the two research locations, Germany in Europe and Japan, in order to further expand the market for the use of fiber-reinforced plastics in high-pressure vessel production. Research projects between the EU and Japan cover the potential of the entire development chain from fiber to component application.



Due to the broad field of application and the high application potential, particular focus is placed on research on fiber-reinforced pressure vessels for energy storage in mobile applications (aerospace, automotive industry). The ITA is equipped with a new multifilament winding machine from Murata Machinery, Ltd. (Japan), which has particular economic potential.

#### Approach:

In the form of workshops, lectures, company visits and networking, the submission of Horizon 2020 applications for high-pressure vessel production is supported and the bilateral cooperation structures between RWTH Aachen University, as well as European research partners and Japanese research partners are systematically further developed. The number of applications with Japanese partners is directly supported by the funding, so that during the funding period three EU applications will be submitted by a European-Japanese consortium led by the Institute of Textile Technology at RWTH Aachen University.

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