Interreg North Sea

Co-funded by the European Union

LIHYP

Uniting Stakeholders to build a regional hydrogen economy in the North Sea Region!

Development of a local Energy HUB for city cargo

DLR Deutsches Zentrum für Luft- und Raumfahrt

Institut für Vernetzte Energiesysteme

BMÖ clever versorgt

OLEC Energie bewegt den Nordwesten

Internal logistics with many start and stop cycles and limited accessibility through desired emission reduction measures need an energy supply that meets the operating and usage expectations of the users.
The supply of the application with green hydrogen allows the reduction of emissions and long operating times of the cargo bike.
The rapid restoring readiness will then also allow for reliable delivery in cold periods of the year with increased goods traffic.

Operation in several shifts and optimised conditions for trained staff through changing or refuelling times and heat supply for the driver of the vehicle also offer advantages here.
How can and must green hydrogen reach the customer?
How should the application be supplied with hydrogen in the best way for the user? Which requirements on the personnel and on the filling functionality have to be considered? All these questions are to be investigated in practice in the LIHYP project and provide answers to the required infrastructure and the provision of the fuel.
Fuel cell cargo bikes for inner-city logistics allow longer operating times and advantages for the operator. This proof will be investigated in the project as a technical demonstration. Both the supply of green hydrogen and the provisioning will be investigated. In addition, influences of the fuel quality and there filling of the tanks for use in the vehicle will be conceptually and prototypically implemented. In the process, both official regulations and labour law requirements for handling hydrogen must be implemented accordingly.
In addition to the reduction of emissions and the new logistical advantages, the pilot should also be able to be recommended toother regions for as a blueprint. To this end, appropriate communication and presentation of the concept to interested parties will be promoted within the framework of the project.