Innovative compression solutions for large scale hydrogen mobility applications

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**COSMHYC XL: THE OBJECTIVE**

**COSMHYC XL** is a follow up project of the **COSMHYC** project funded by FCH JU, with the same European partners working on innovative compression solution.

Hydrogen mobility is one of the most promising solutions for a sustainable energy transition in large scale transport, such as trucks, busses or professional vehicle fleets. These applications demand a specific infrastructure, including hydrogen compressors that are able to allow the necessary flow rate and availability.

COSMHYC XL aims to
- lower investment and maintenance costs
- increase flow rates
- improve reliability and availability of hydrogen refueling stations.

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**COSMHYC XL: THE APPROACH**

COSMHYC XL develops an innovative compression concept for extra large scale hydrogen refuelling stations combining:
- a baseload metal hydride compressor, with high level of reliability
- and a new mechanical compressor enabling very large flow rates.

Within the 3 year project a very cost efficient and flexible compression solution, with strong potential for modularity, scalability and flexibility will be developed and tested. In addition, the new compression solution will contain no critical raw materials.