Making Hydrogen Affordable to Sustainably Operate Everywhere in European Cities

#zeronoise

#hydrogencities

#fuelcells

#zeroemission

This project has received funding from the Fuel Cells and Hydrogen 2 Joint Undertaking under grant agreement No 779606. This Joint Undertaking receives support from the European Union's Horizon 2020 research and innovation programme, Hydrogen Europe and Hydrogen Europe Research

EVERY WH2ERE

FUEL CELLS AND HYDROGEN
JOINT UNDERTAKING

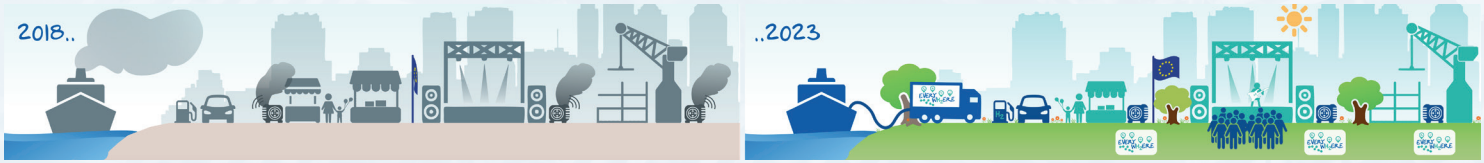
PROJECT PARTNERS

RINA
VTT
POWERCELL
FRIEM
MAHYTEC
ITM control
H2
greenmusic initiative
THE LINDE GROUP
I.C.L.E.I Local Governments for Sustainability
acciona Construction
ENVIRONMENT PARK
everywhere
everywhere
everywhere
everywhere
Everywhere Project
www.everywhere.eu

This project has received funding from the Fuel Cells and Hydrogen 2 Joint Undertaking under grant agreement No 779606. This Joint Undertaking receives support from the European Union's Horizon 2020 research and innovation programme, Hydrogen Europe and Hydrogen Europe Research

MISSION

Temporary diesel gensets are used everywhere in our cities (fairs, markets, construction sites, temporary events and concerts…) and Non-road diesel engines account for 5-10% of fine-particle pollution in urban environment. Fuel cell (FC) can easily replace these technologies promoting 0 noise, 0 emission temporary generation. The main objective of EVERYWH2ERE project is to demonstrate at TRL8 easy to transport "plug and play" FC gensets. Demonstration results will be capitalized for replication, business model, environmental and logistic analysis.



DEMONSTRATORS

The prototypes (4x25 kW and 4x100 kW) will be tested in construction sites, music festivals and urban public events all around EU. These events will be important showcases to promote FC potential to a large audience in order to increase their social acceptance and public awareness. An active involvement of public authorities and industrial stakeholders can foster the spreading of FC gensets opening a potential market doorway towards viable EU cities and Hydrogen economy.

GENSETS

To increase robustness and handling, the FC system and the H_2 storage will be installed in container solution. All gensets will be equipped with a remote monitoring system to track their position and performances. Automotive components will be used wherever possible in order to improve the system (both 25 kW and 100 kW) reliability and to reduce the BOP cost.

The 25 kW genset will be be based on the PCS S2 FC Stack. In order to increase power output of the PCS stack, but reducing the CAPEX of the system, VTT is proposing an ejector solution to be applied to the 25 kW EVERYWH2ERE genset.

The 100 kW genset will be be based on the PCS S3 FC Stack providing a very high power density and efficiency (>52%). The durability was predicted at least 5000 hours (for automotive application) and it will be capable to start up to -20°C.

Are you interested in EVERYWH$_2$ERE project?
Would you like to host one of EVERYWH$_2$ERE GENSETS?

CONTACT US: info@everywh2ere.eu - www.everywh2ere.eu

@everywh2ere @everywh2ere @everywh2ere Everywh2ere Project