



Hi! We are CEP

The Clean Energy Partnership (CEP) partners work as an industry alliance to further establish green, hydrogen- and fuel cell-powered mobility on the market. With a focus on supply security and environmental compatibility.

Hydrogen, naturally!

www.cleanenergypartnership.de

Here, technology, petroleum and energy companies, gas producers, car manufacturers and suppliers collaborate across industries and sectors. Together, we set standards across all modes of transport. Innovatively and with a view to the future. We are natives of the mobility sector, but consider all adjacent sectors. We see the big picture. Our solution for a successful energy and transport transformation? **Hydrogen, naturally!**



MINIMUM REQUIREMENTS FOR PUBLIC HYDROGEN STATIONS IN EUROPE

With the expected increase of hydrogen stations in Europe as stated by the “Fit for 55” package from the European Commission, the CEP would like to inform you about the vehicle interface requirements necessary to deploy stations in the EU. This can be split into a legal requirement, and some practical recommendation.



LEGAL REQUIREMENT:

According to the Alternative Fuel Infrastructure Directive 2014/94/EU Article 5^a.

All new or renewed hydrogen refuelling stations must meet the following requirements:

As of 12/11/2021:

- HRS Technical Specifications: **EN 17127**
- Hydrogen quality: **EN 17124**
- Fuelling algorithm: **EN 17127**
- Connection devices: **EN ISO 17268**

PRACTICAL RECOMMENDATION:

The HRS operator shall comply to the above regulations and the CEP recommends providing the following documents:

- FAT^b test report (Example shown in Annex C of ISO 19880-1 and CEP guideline)
- SAT^c test report (Template provided by CEP is free to use.) Provide as many graphs as possible for each test.
- Hydrogen quality sampling and analysis report

It also means the following:

- For H70, a nozzle equipped with a communication device is mandatory (**EN17127** requirement) and strongly recommended for H35
- **SAE J2601** is the approved filling protocol by the manufacturers of vehicles. (ISO 19880-1 and EN17127 are referring indirectly to this standard.)
(Note: SAE J2601:2010 is only a TIR and withdrawn.)
- IR communication as currently described in **SAE J2799**. (EN17127 refers to this standard)
- Make sure that the pressure provided by the HRS ensures to achieve 95~100% SOC..

The OEM group of the CEP offers (for free) upon request, documentation, explanations, guidance and support for the needed requirements and documentation (FAT, SAT report and Quality certificate) and can recommend the involvement of a third party.

• ^a <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32014L0094> refers to the original text
<https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32019R1745> refers to the amendment using the EN standards

• ^b Factory Acceptance Test. This is a test report that your HRS supplier should provide to the HRS Operator or owner

• ^c Site Acceptance Test. This is a test, performed at the station location