

Press Release

Assessment of H2stations.org by LBST

15 September 2020

Global hydrogen refuelling infrastructure has been growing continuously for the last 5 years

Munich. The total number of hydrogen stations has more than doubled in the last 5 years. The continuous growth in deployment is led by Europe and Asia. This is the result of a 10-year evaluation by H2stations.org, an information service provided by Ludwig-Bölkow-Systemtechnik (LBST).

The number of hydrogen refuelling stations (HRS) worldwide has more than doubled in the last 5 years, marking the path towards more widespread commercial deployment. While early deployment until 2013 was mainly associated with demonstration projects where certain refuelling stations have been decommissioned after project completion, the number of stations has been continuously increasing since then.

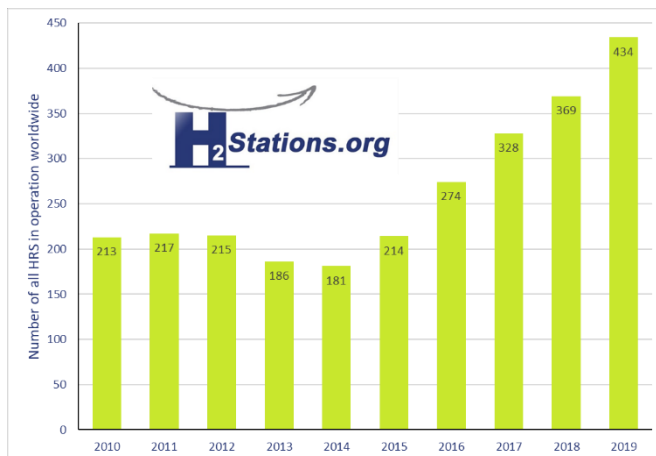


Figure 1: Number of all, public and private, hydrogen stations in operation worldwide

A geographical analysis shows that the expansion of the hydrogen refuelling infrastructure has mainly been taking place in Asia and Europe. In North America, development concentrates on California in the USA and, more recently, also on British Columbia in Canada. There are only a few hydrogen refuelling stations in the rest of the world (Figure 2).

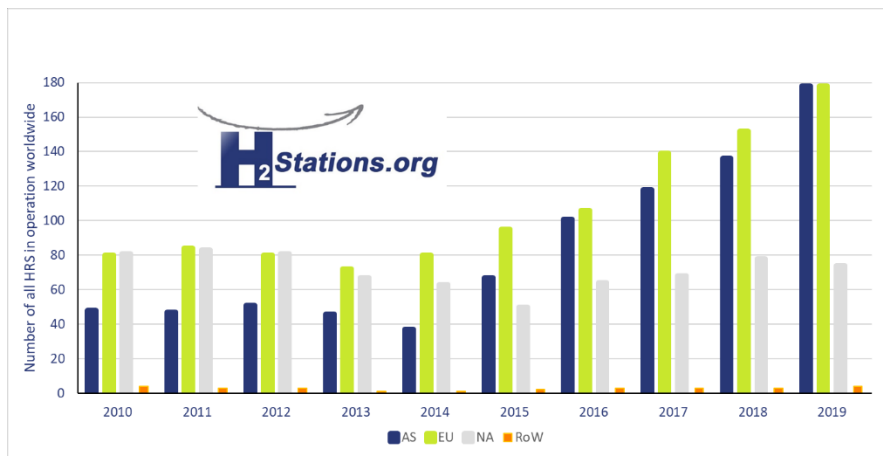


Figure 2: Numbers of all operational hydrogen refuelling stations split by regions (Asia, Europe, North America and Rest of World)

With the emergence of commercially available vehicles in 2014, the number of publicly accessible stations has increased significantly (Figure 3). ‘Private’ stations not accessible to private users are typically serving commercial vehicle fleets, i.e. buses or other commercial vehicles. China and France show a notable share of private stations, reflecting the initial strategic focus on commercial vehicle deployment. While public stations all offer refuelling at 70 MPa pressure, many private stations refuel at 35 MPa, a pressure level used in most buses as well as in some light-duty commercial vehicles.

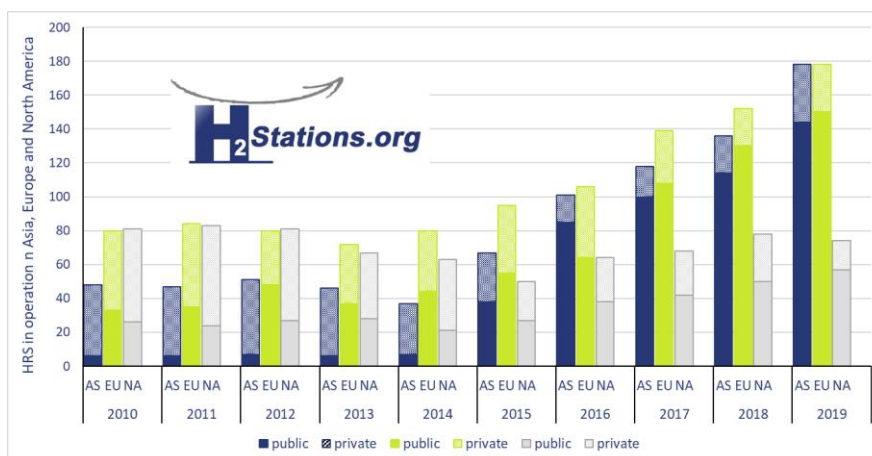


Figure 3: Hydrogen refuelling stations in operation in Asia, Europe, and North America differentiated by type of access

Interactive location maps and individual evaluations

The H2stations.org (www.H2stations.org) website uses interactive maps to globally list all hydrogen refuelling stations in operation, planned, or already shut down including a summary on recent changes. With its global reach and its detailed information on past, present, and upcoming stations, H2stations.org is unique in also providing a view on the development history of the hydrogen infrastructure and on statistical data.

The website draws on an extensive database which has been continuously updated since 2005 with new stations as well as with extensive additional information on already existing sites. All in all, it currently contains detailed information on more than 1100 hydrogen refuelling stations globally. “We continue to provide basic information free of charge for non-commercial use”, says LBST Managing Director Uwe Albrecht. “We offer commercial users

to license the data including further detailed information, regular reports on new developments, and bespoke analyses.”

Ludwig-Bölkow-Systemtechnik GmbH, an associated company of TÜV SÜD AG, is an international expert consultant for sustainable energy and mobility, and a strong expert team in hydrogen and fuel cells. With its expertise bridging technologies, markets, and policy the company supports international clients from industry, finance, politics, and non-governmental organisations with questions about technology, strategy and sustainability. Large international companies trust LBST's reliable assessments of new developments and innovations in the fields of energy management and mobility. Over three decades of continuous experience from the interdisciplinary team of renowned experts form the basis of LBST's extensive expertise. Further information: www.lbst.de

Note for editorial staff: The press release and diagrams can be found on www.h2stations.org.