

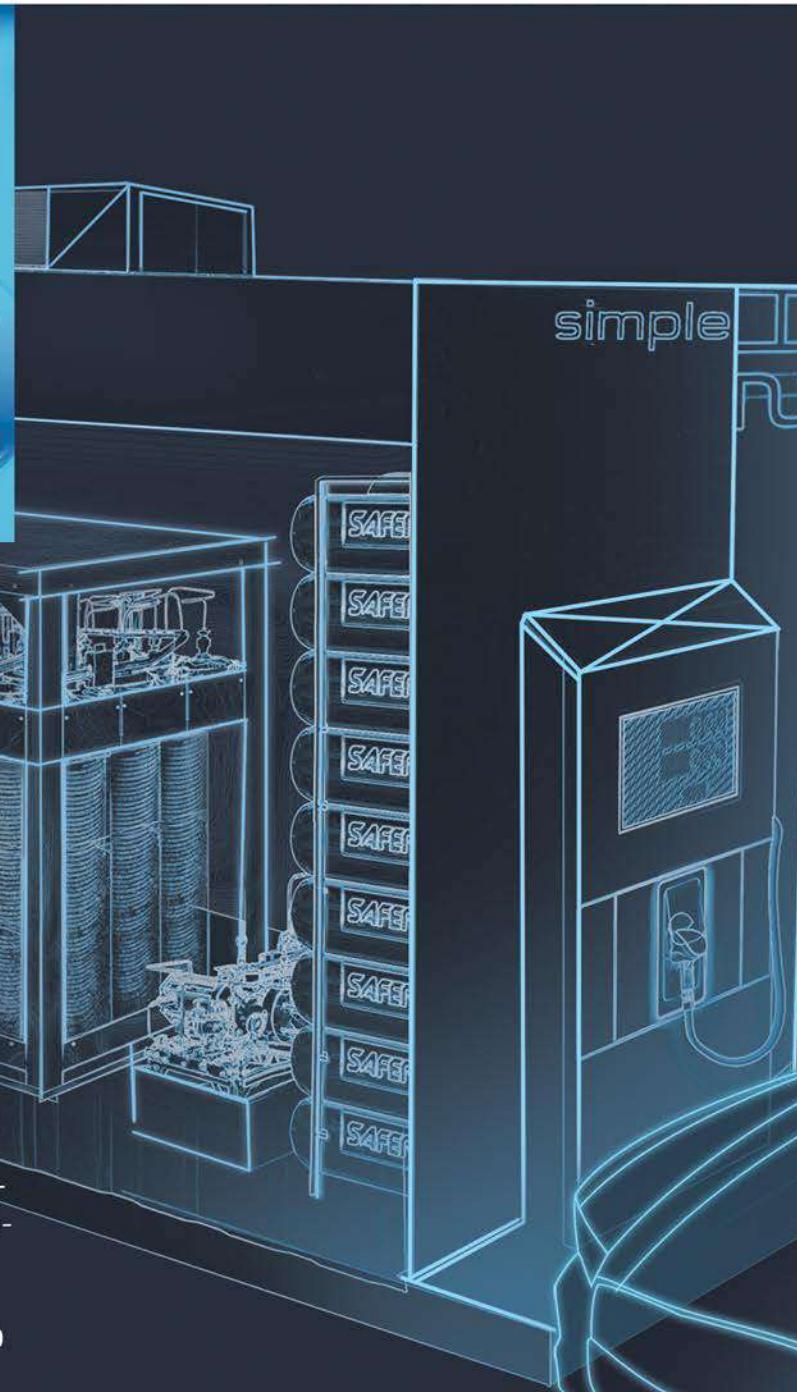


Station was designed and manufactured in Poland in accordance with technology developed and patented by Polish design engineers. The station is patented in Europe, USA and China.

Station is designed based on ordering party's individual project (type of electric power supply, water, efficiency of the station, size of the storage module, refueling specification).



GREEN HYDROGEN'S PRODUCTION AND DISTRIBUTION CONTAINER STATION



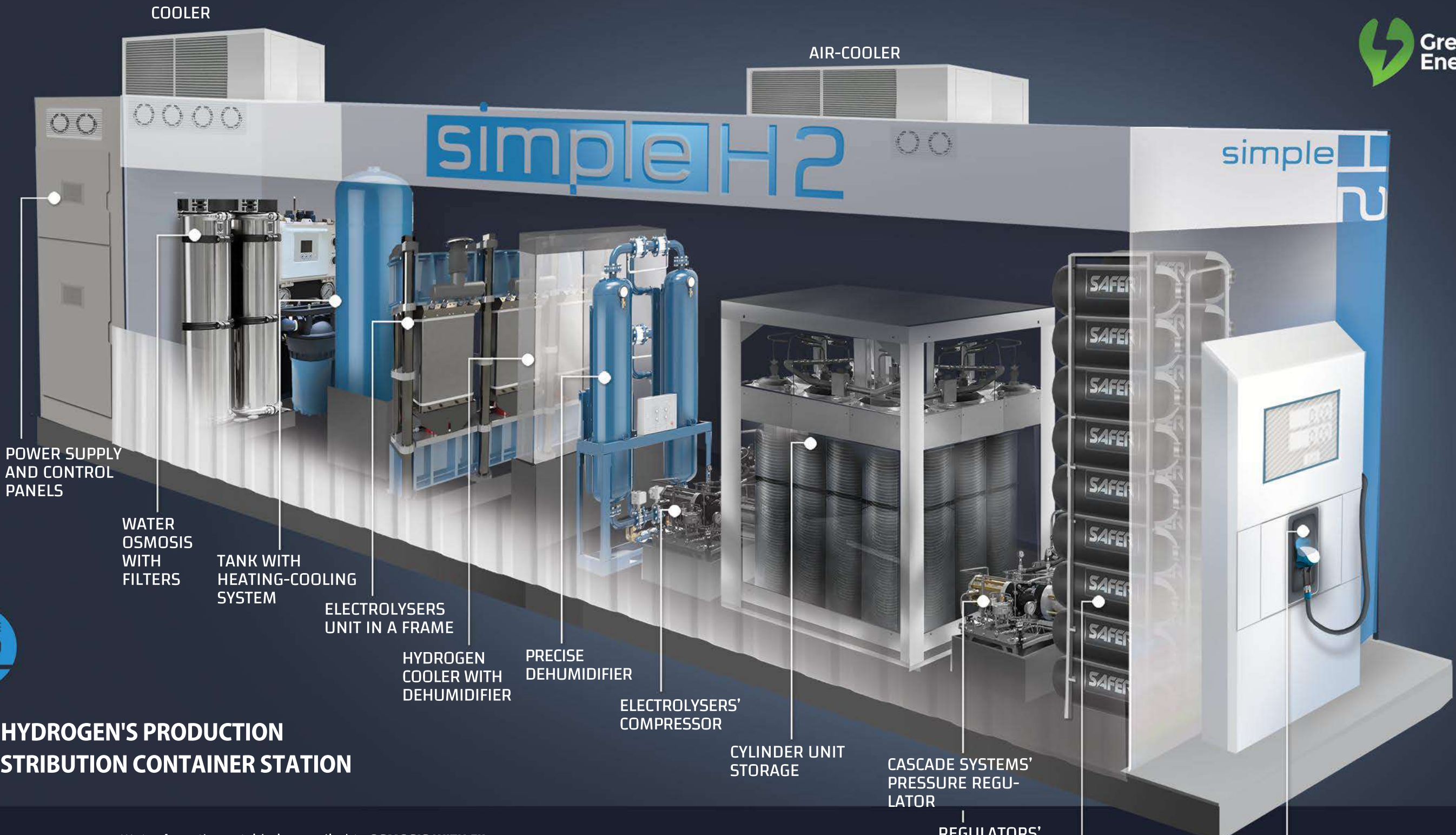
Green hydrogen
from 1PLN for 1kg

FEATURES OF THE STATION

- ▶ High quality materials and units of European and Polish origin were used in production of the station.
- ▶ Battery electrolyzers used in the station were developed and manufactured in Poland
 - Electrolyzers are both highly efficient and durable - as it is made with innovative technology based on the use of grapheme.
 - The technology was patented in Poland and abroad.
 - Hydrogen is stored in Polish-made composite tanks produced in unique nanotechnology.
- ▶ Process of Water filtration for electrolysis is carried out in Polish-made filtration units and therefore reaches **ultra-high level of purity(99,999‰)**.
- ▶ The station is equipped with double quality control system of both produced and tanked up hydrogen.
- ▶ Hydrogen container unit is fully mobile and doesn't have to be permanently affixed to the land.

EMPLOYMENT OF THE STATION

- ▶ **Production of high purity hydrogen (99,999‰) for tractional purposes in accordance with SAE2719, ISO14687-2 standards**
- ▶ **Oxygen production** (after dehumidifying and certification may be used in both medicine and technology).
- ▶ **Vehicles refueling in accordance with SAE J2799 norm in H35 and H70 standards.**
- ▶ **AC or DC power supply from renewable energy sources** (Photovoltaics, wind turbines, hydropower turbines)
- ▶ Possibility of refueling from mobile depot or depot refueling with hydrogen produced by station.



GREEN HYDROGEN'S PRODUCTION AND DISTRIBUTION CONTAINER STATION

POWER SUPPLY panel sends voltage to electrolyser and other electric units.

CONTROL PANELS pilot and control the entire process.

Water from the outside is supplied to **OSMOSIS WITH FILTERS** where it is demineralized and packed to the **TANK WITH PUMP**. From the pump equipped tank water is pumped to **ELECTROLYSERS UNIT**, where during the process of electrolysis it turns into gaseous state - **HYDROGEN** and **OXYGEN**. **OXYGEN** is set into atmosphere (or it can be pumped into a tank). **HYDROGEN** is cooled and preliminarily dehumidified in **HYDROGEN DEHUMIDIFIER** and then again in precise dehumidifier. Electrolysis process is carried out by supplying water with constant voltage from power supply panel.

COMPRESSOR pumps hydrogen into **CYLINDER UNIT STORAGE** up to pressure of around 500 bar.

CYLINDER UNIT STORAGE stores compressed hydrogen (SAFER tanks).

REGULATOR along with **COMPRESSOR** supplies hydrogen in **CASCADE SYSTEM** up to pressure level on every cascade.

CASCADE SYSTEM is a set of tanks with compressed hydrogen. Pressure inside the tanks is secured by **CASCADE SYSTEM PRESSURE REGULATOR**.

DISPENSER through gas pump nozzle tanks hydrogen into vehicle. Process is carried out gradually as pressure rises generated by **CASCADE SYSTEM**.