

CLEAN TRANSPORTATION

HELPING CREATE A SUSTAINABLE FUTURE

How Parker Instrumentation alternative fuel solutions for trucks and buses contribute to a better world.

Alternative fuels (CNG, LNG, H₂) are emerging as strong and viable alternatives to traditional fuels for HGVs for many reasons: energy security, economics and the potential to reduce emissions and noise. Parker's solutions for reliable fuel distribution and regulation help OEM's around the world drive towards a better future.

ON-BOARD VEHICLE FILLING STATION

CNG

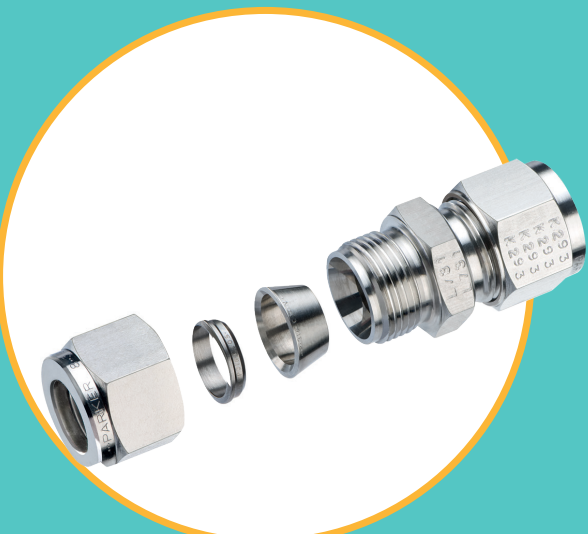
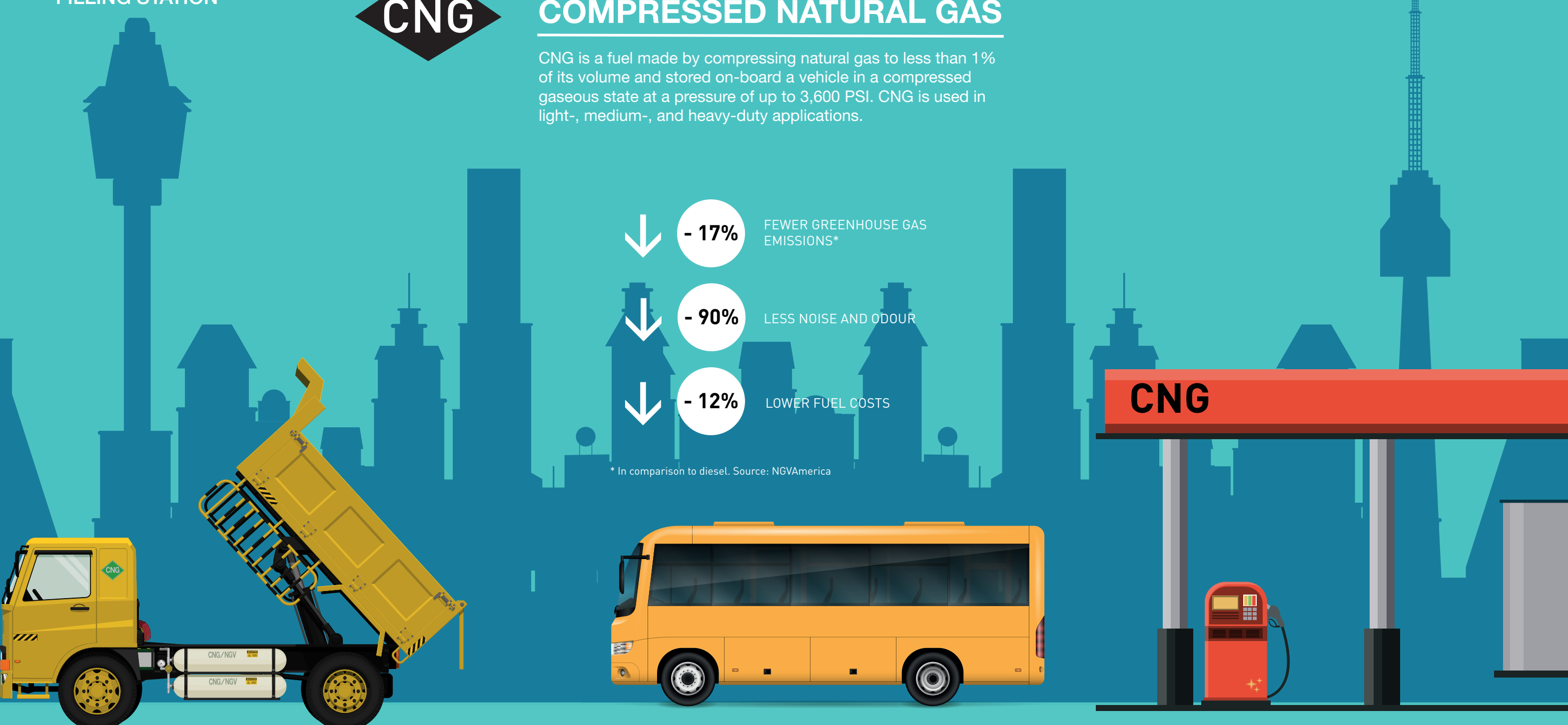
CNG COMPRESSED NATURAL GAS

CNG is a fuel made by compressing natural gas to less than 1% of its volume and stored on-board a vehicle in a compressed gaseous state at a pressure of up to 3,600 PSI. CNG is used in light-, medium-, and heavy-duty applications.

- ↓ -17% FEWER GREENHOUSE GAS EMISSIONS*
- ↓ -90% LESS NOISE AND ODOUR
- ↓ -12% LOWER FUEL COSTS

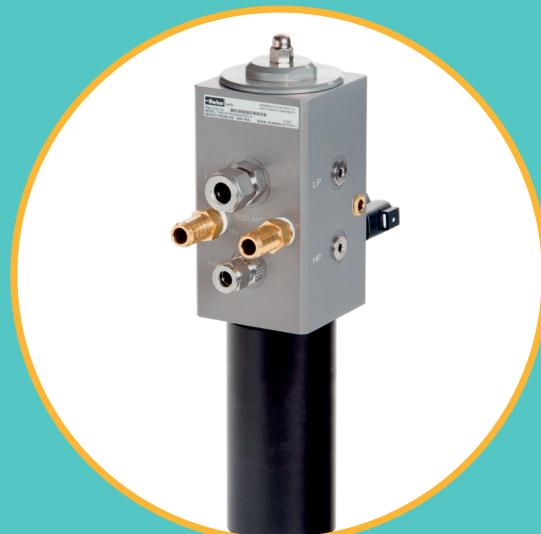
* In comparison to diesel. Source: NGVAmerica

CNG



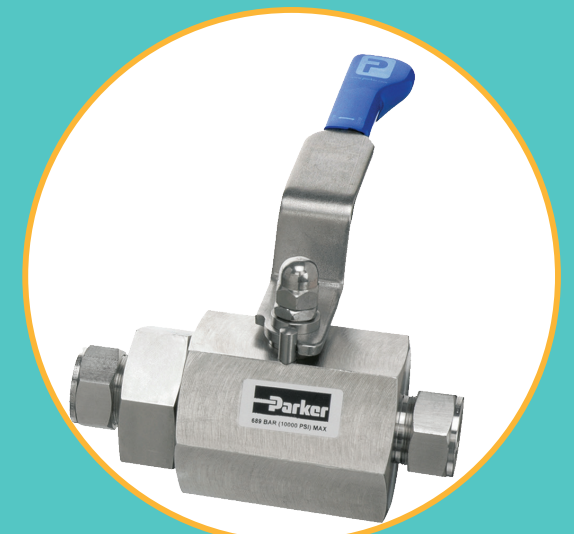
FITTINGS AND TUBING

Parker's A-LOK® two ferrule fittings, CPI™ single ferrule fittings and tubing provide reliable leak-free tube connections on-board CNG vehicles and at fueling stations. The unique Supercase™ hardened ferrule design provides superior grip and safe life time operation.



FUEL REGULATION MODULE

Parker's integrated gas regulator system, FM80 provides advanced fuel handling performance. Piston regulator design delivers better control, fewer connections, and longer range.



VALVES AND PRESSURE REGULATORS

Parker's high integrity precision ball valves Hi-Pro® and B-Series, check valves and pressure regulators provide safe isolation, regulation and control on-board CNG vehicles and at fueling stations.

GAS TRANSPORT AND STORAGE

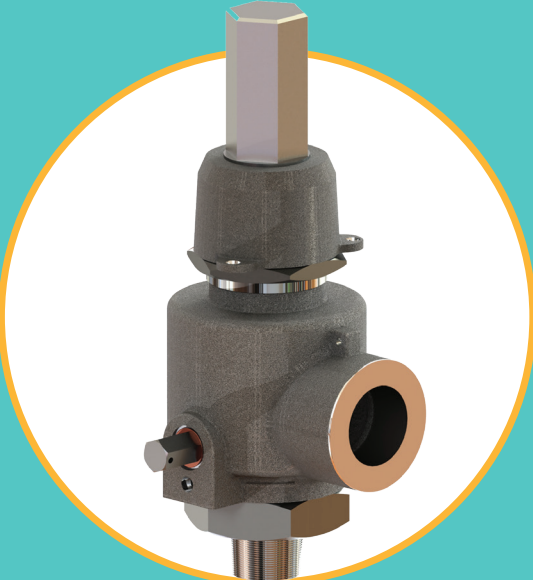
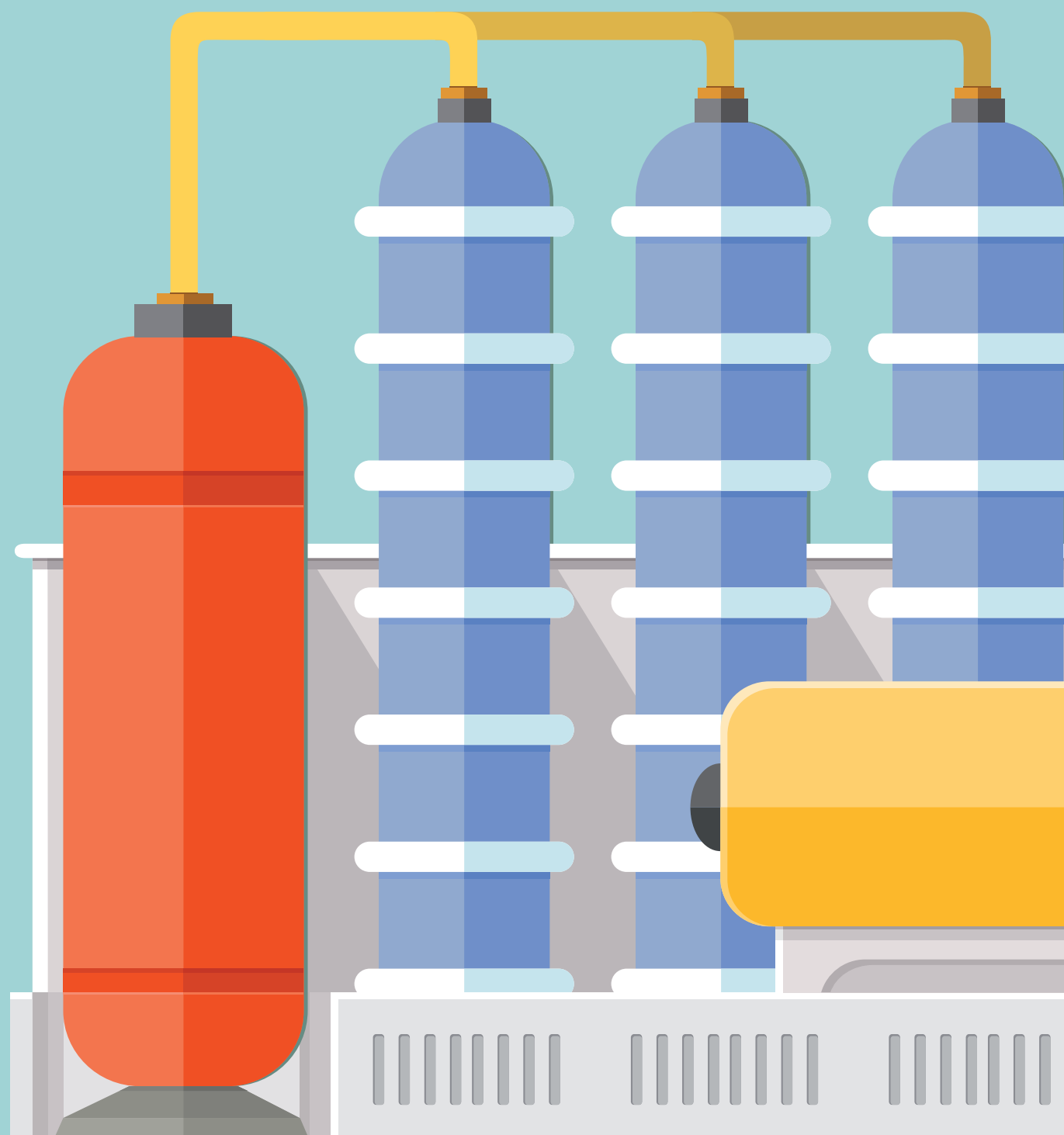
LNG LIQUIDISED NATURAL GAS

LNG

LNG is a fuel produced by purifying natural gas and cooling it to -161°C to turn it into a liquid. LNG is suitable for trucks that require longer ranges and typically used in heavy-duty vehicles. Parker Bestobell's cryogenic valves are widely used on road LNG trucks transporting LNG to fuelling stations and storage tanks.

- ↓ -11% FEWER GREENHOUSE GAS EMISSIONS*
- ↓ -50% LESS NOISE AND ODOUR

* In comparison to diesel. Source: NGVAmerica



CRYOGENIC SAFETY RELIEF VALVES

Parker Bestobell's cryogenic safety relief valves are designed to protect LNG storage tanks or capital equipment on road going transport trucks from damage caused by over-pressure.



CRYOGENIC CHECK VALVES

Parker Bestobell's cryogenic check valves with innovative loose flange bolted bonnet design allow for thermal expansion and contraction eliminating leakage and maximising safety and performance.



CRYOGENIC GLOBE VALVES

Parker Bestobell's cryogenic globe valves deliver smooth operation and reduced closing torque by use of a PTFE anti-friction disc between the valve spindle and the disc assembly.

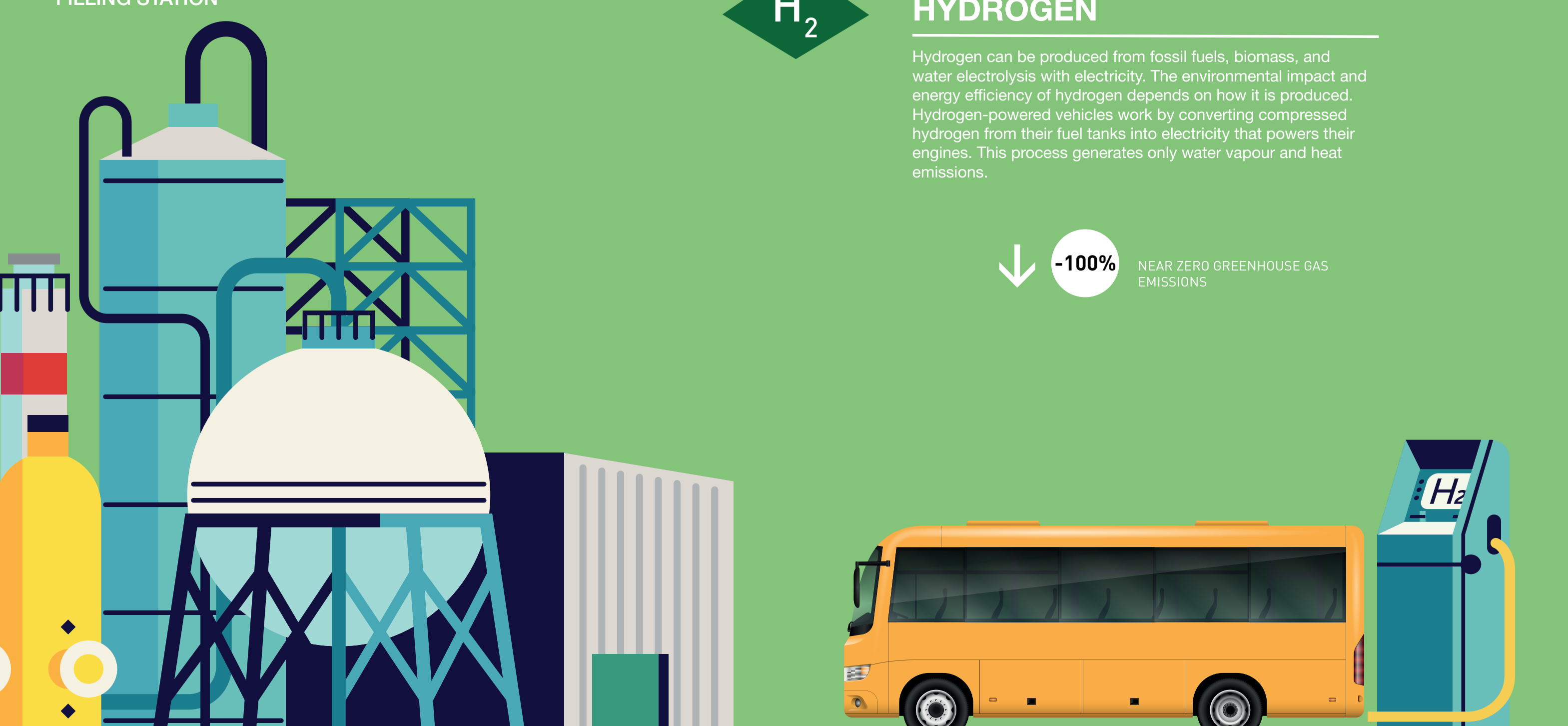
ON-BOARD VEHICLE FILLING STATION

H₂

H₂ HYDROGEN

Hydrogen can be produced from fossil fuels, biomass, and water electrolysis with electricity. The environmental impact and energy efficiency of hydrogen depends on how it is produced. Hydrogen-powered vehicles work by converting compressed hydrogen from their fuel tanks into electricity that powers their engines. This process generates only water vapour and heat emissions.

- ↓ -100% NEAR ZERO GREENHOUSE GAS EMISSIONS



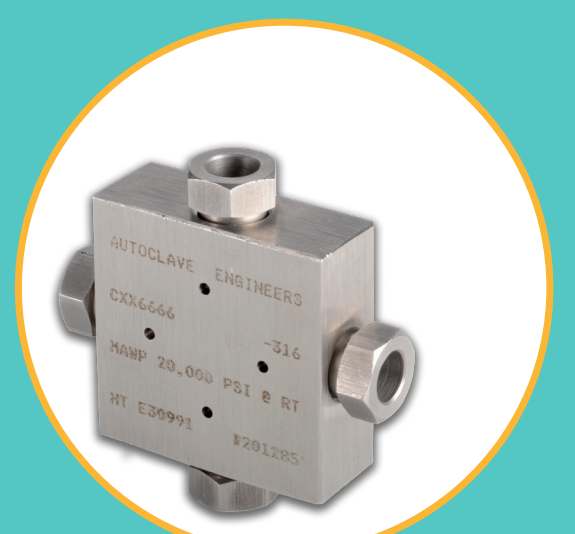
FITTINGS

Parker's A-LOK® two ferrule fittings up to 1" size provide reliable leak-free tube connections on-board hydrogen powered vehicles and at fuelling stations. The unique Supercase™ hardened ferrule design provides superior grip and safe life time operation. EC-79 approved.



MEDIUM PRESSURE VALVES

Parker Autoclave Engineers needle valves, check valves, filters utilize a coned-and-threaded connection design providing a leak tight reliable connection at fuelling stations in applications up to 20,000 PSI and temperatures from -73° to 316°C.



MEDIUM PRESSURE TUBING & FITTINGS

Parker Autoclave Engineers medium pressure cone & thread fittings provide reliable leak-free and safe life time operation at fuelling stations.



ENGINEERING YOUR SUCCESS.