
H2X
ECOSYSTEMS

Our fields of intervention

Technical

R&D

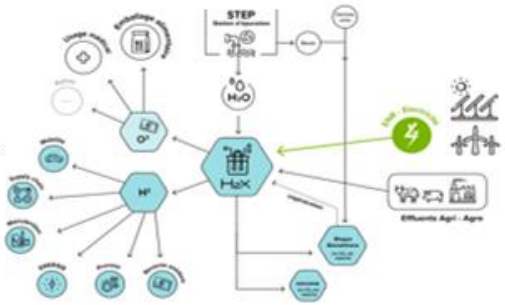
New generation electrode

Oxygen recovery

Optimization of hydrogen ecosystems

Ecosystems

Territories



Industry

Training

Engineering schools

The products

G005 – Fuel Cell and Genset

H2X-Ecosystems Fuel Cell 5 kW

Function :

- Supply energy (electricity and heat),
- Reduce carbon dioxide (CO2) emissions,
- Quiet and low thermal footprint,
- Fast 30-second recharge,
- Compatible with photovoltaic (PV) solar panels.

Uses :

- Powering communication antennas, a base station module.

Fuel cell characteristics:

- PAC H_2: 5kW
- Temperature: -20°C to +40°C
- Max. altitude: 2500 meters
- Consumption H_2: 350 grams/hour
- Inlet pressure H_2 : 8-10 bar
- Weight: 52 kg
- Dimensions in millimeters: 700 x 750 x 450
- Battery voltage range: 48V, 72V, 96V
- Autonomy per H_2 tank: 2h30 / 12 kWh
- Weight per tank: 25 kg
- dB: < 60

HERMIONE

Function:

- Remote-operated reconnaissance and surveillance with aerial drone (wire-guided),
- Fast 30-second mobile recharging system,
- Modular system,
- Quiet and low thermal footprint.

Application:

- Guarantee energy availability in isolated areas,
- Increase response capacity

Features:

- PAC H_2: 5kW
- Batteries: 25 kWh
- Autonomy per H_2 tank: 2h30 / 12 kWh
- Weight of one H_2 tank: 25 Kg
- Inlet pressure H_2 : 8-10 bar
- Autonomy: 7 hours and 24 minutes
- Payload capacity: 300 kg
- Top speed: 20 km/h
- Cruising speed: 12 km/h
- Weight: 650 kg
- Dimensions in millimetres: 2800 x 1800 x 1500

G015 - GENSET

Function:

- Supply energy,
- Reduce carbon dioxide (CO2) emissions,
- Quiet and low thermal footprint,
- Compatible with photovoltaic (PV) solar panels.

Uses :

- Powering communication and radar antennas, several base station modules, recharging a hybrid vehicle.

Features:

- PAC H_2: 20 kW
- Temperature : -20 °C to + 40 °C
- Max. altitude: 2500 m
- Consumption H_2 : 1200 g/h
- Inlet pressure H_2 : 8-10 bar
- Weight : 1600 kg
- Dimensions in millimeters : 2500 X 1200 X 2200
- dB : < 60

G350 – HUB

Function:

- Replace generators,
- Reduce carbon dioxide (CO2) emissions,
- Compatible with photovoltaic (PV) solar panels.

Uses :

- Powering high-power installations (mine, factory, port, airport), recharging a fleet of vehicles.

Features:

- PAC H_2: 220 kW
- Batteries: 400 kWh
- Output: 400 V three-phase
- Temperature: -5 °C to + 40 °C
- Max. altitude: 2500 meters
- Consumption H_2 : 15 kg /hour
- Inlet pressure H_2 : 8-10 bar
- Size : 1 container of 30 feet
- Weight: 18 tons
- dB : 80
- Domestic hot water box: 210 L/min at 55°C in a 20-foot container
- Solar farm: 74 kWp - 500m²

GLOBAL ECOSYSTEM

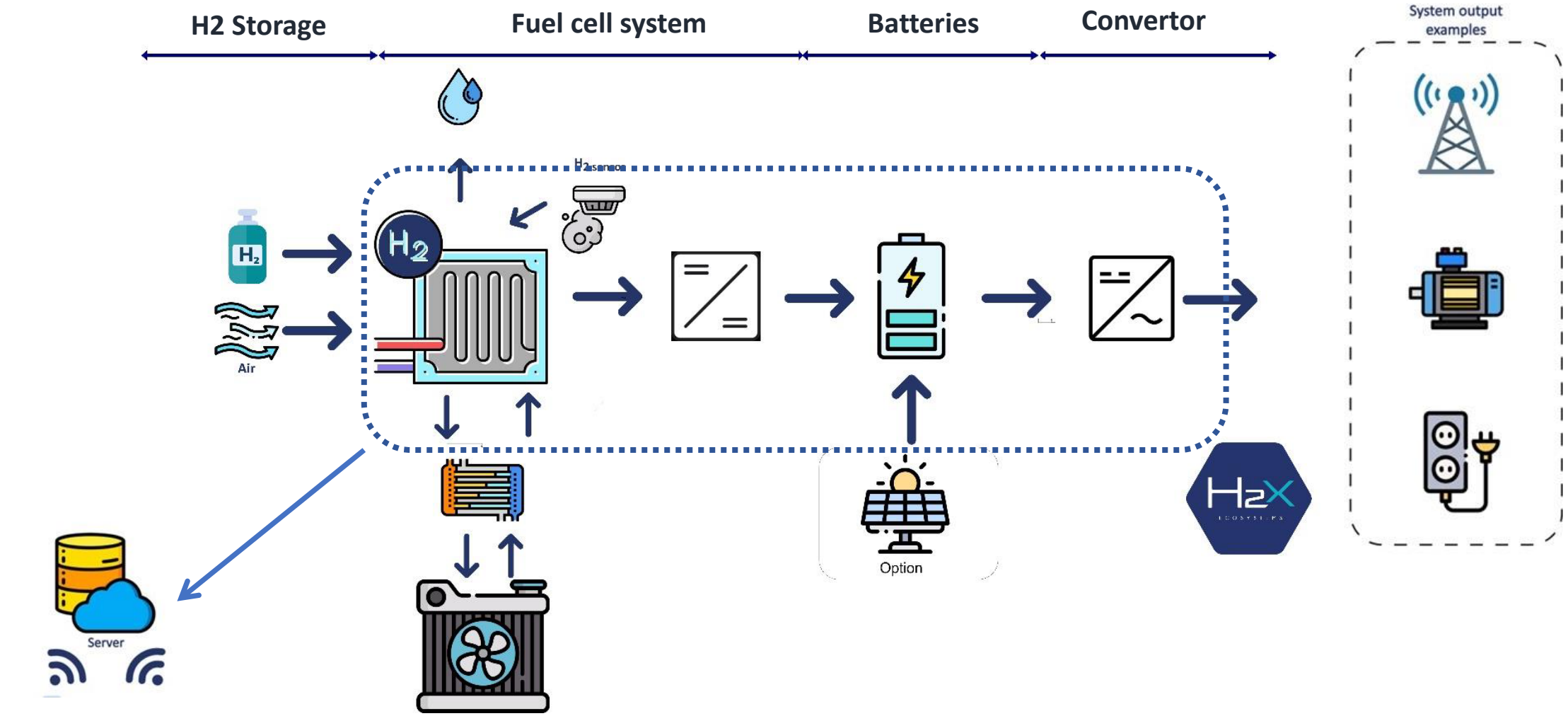
Function:
- On-site hydrogen production.
- Conversion of hydrogen into electricity.
- Compatible with photovoltaic (PV) solar panels.

Uses :
- Ensure greater energy security for high-power requirements.
- Maintain operations in isolated locations.

Features :
- H2 production:
- Production is local, depending on available resources.
- Guaranteed hydrogen origin for site decarbonization
- H2 generator / HUB
- Modular system capable of generating more than 5MW.
- Traceability of usage.

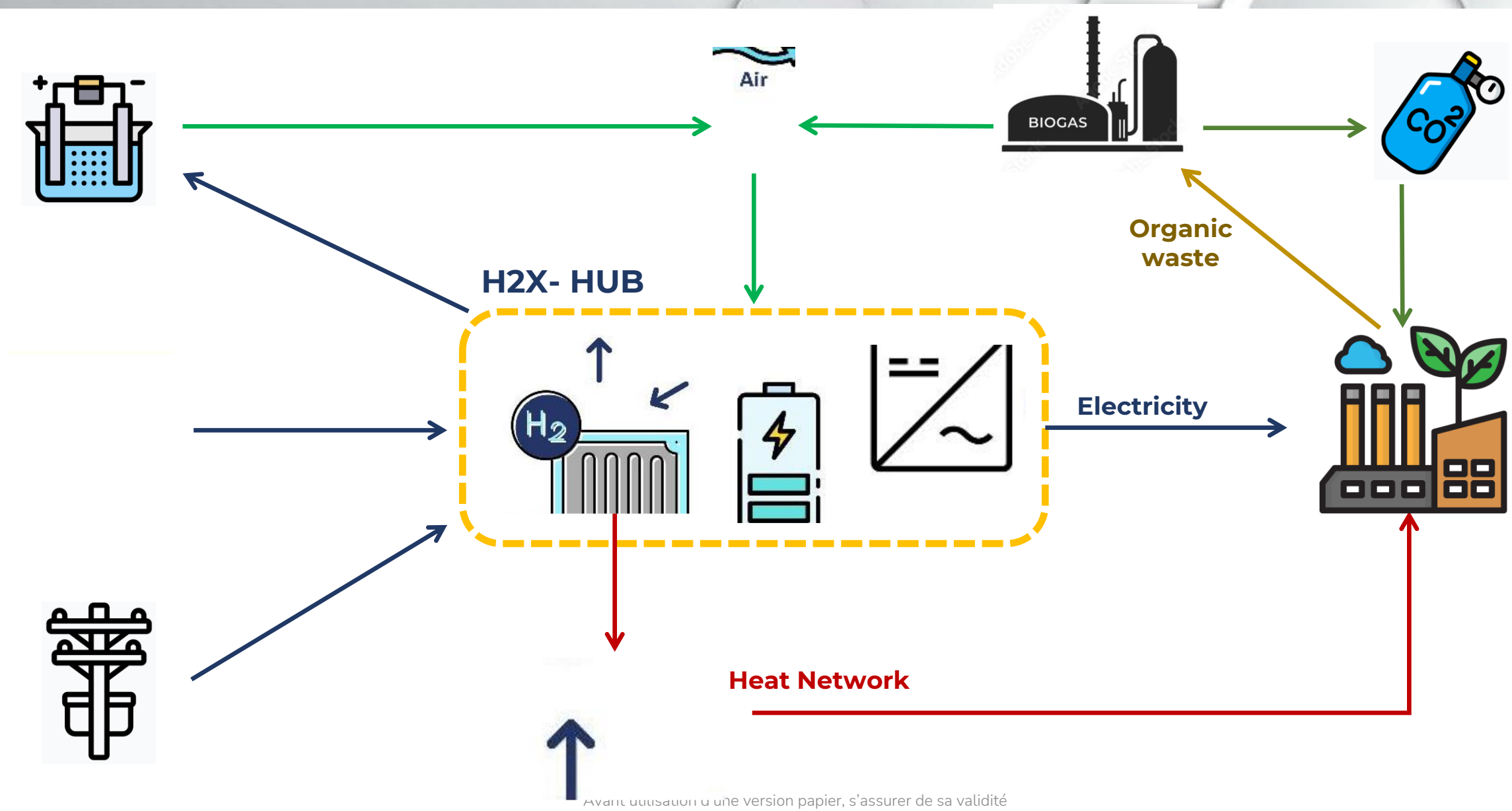
The Ecosystems

H2X HUB Architecture

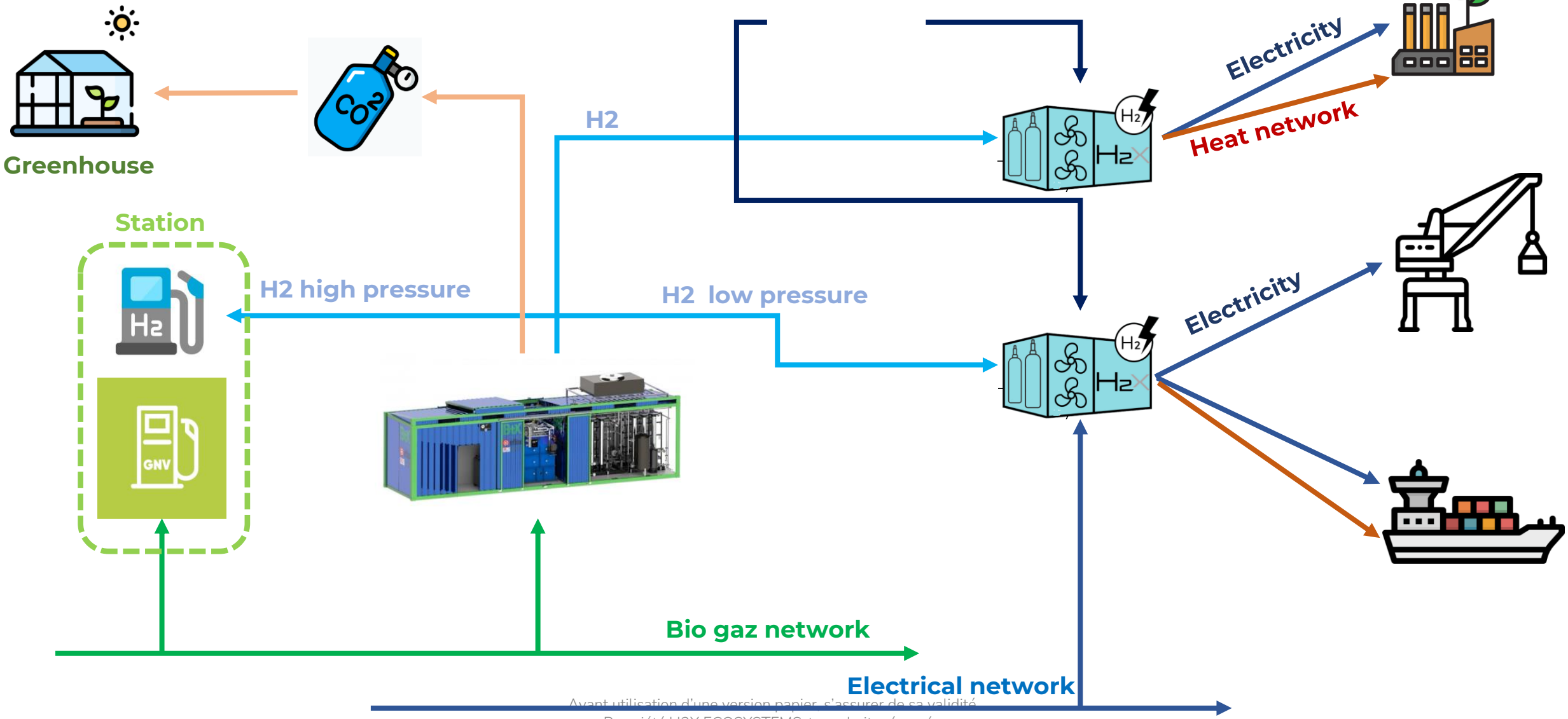


Rhyde Platform

Ecosystems for industry with bio gaz



Ecosystems for ports



20, rue Louis Blériot - 35170 BRUZ
www.h2x-ecosystems.com
contact@h2x-ecosystems.com