

Originated from Airbus Group's developments, PowiDian has demonstrated its know-how of **intermittent renewable energy storage technologies** and management of poor quality networks.

PowiDian integrates **all hydrogen technologies** in its solution portfolio: hydrogen production, electricity, heat, fuel for mobility and long-term storage.

Anticipation, learning, optimization and control are the cornerstones of PowiDian SAGES® software suite of solutions.



100% AUTONOMOUS POWER



HYDROGEN BASED PROJECTS FEASIBILITY STUDIES



EPC (ENGINEERING, PROCUREMENT, CONSTRUCTION & COMMISSIONING)



PRODUCTION OF DECARBONIZED ELECTRICITY



DIESEL GENERATORS REPLACEMENT



ENERGY SYSTEM MANAGEMENT, OPTIMIZATION AND CONTROL



ACHIEVEMENTS



COL DU PALET MOUNTAIN SHELTER

ISOLATED BUILDING

World highest hydrogen production installation in Parc de la Vanoise (Alt. 2,600 m) for a 40 bed mountaineering shelter. This SAGES® station has been in operation since its 2015 commissioning.



LA REUNION ISLAND - MAFATE

ISOLATED VILLAGE - MICRO-GRID

Installation of a SAGES® station for EDF (Électricité de France). 100% solar powered electric network with hydrogen storage. It supplies public buildings with electricity all year round. In operation since its 2016 commissioning.



GLORIEUSE ISLAND - INDIAN OCEAN

INSULAR SITE - MICRO-GRID

Solar power plant associated with hybrid battery / hydrogen storage to replace the present diesel based electrical production. Client: French Army. Installation in 2019.



SOPHIATECH UNIVERSITY CAMPUS

COMPLETE DEMONSTRATOR OF THE HYDROGEN CHAIN

Delivery of a «Plug and play» hydrogen shelter with the hydrogen system supervision, control and management tools. Installation in early 2023.



ELST - NETHERLANDS

ENERGY SELF-SUPPLY

System allowing 60% self-sufficiency of the Rijnstate hospital in terms of its electrical and thermal energy needs. It uses low-pressure hydrogen storage integrating a fuel cell and electrolyzer. Installation June 2023.



KOUROU - GUYANA

GENERATOR

Installation of a hydrogen generator on French Guiana territory for the French Guiana Space Center on the historic "Sounding Rocket" site. This 100 kW group takes over immediately, without interruption, in the event of a power outage. Installation at the end of 2023.

HYDROGEN SOLUTIONS

FOR ENERGY TRANSITION



ENERGY TRANSITION VIA HYDROGEN

Hydrogen is a real energy vector. It allows long-term energy storage, it is a fuel for mobility, and can produce electricity, heat and cold.

Hydrogen is now recognized as one key solution to decarbonize many activities still dependent on fossil fuels: mobility, electricity generation, industry and housing.



ECO-DISTRICTS

Hydrogen is used to store renewable energy and increases individualized or shared self-consumption within a neighborhood.

GREEN TRANSPORT

Regardless of the type of mobility, hydrogen is a solution to decarbonize short or long-range transportation.

CLEAN CONSTRUCTION SITES

Thanks to hydrogen, urban construction sites can be CO2 emission-free and noise-free for all of their electrical needs: construction equipment, tools, lighting etc...

PORTS POWER SUPPLY

For the power supply of docked or refueling ships, Hydrogen is a key element to decarbonize maritime transport and tourism.

ISOLATED SITES

Hydrogen makes it possible to add «long-term storage» components to renewable feeds of isolated sites, thus making them fully autonomous without any fossil fuel.

OUR SOLUTIONS



100 % AUTONOMOUS POWER

The combination of renewable energy production and **short and long-term storage** technologies makes it possible to meet the energy needs of **isolated sites** (villages, islands, remote facilities). Thanks to its **design capabilities**, PowiDian takes care of the design and installation of projects and also offers **operation and maintenance**.

PRODUCTION OF DECARBONIZED ELECTRICITY

With its field proven technology, PowiDian is a **green electricity producer** and proposes **PPA** type contracts (Purchase Power Agreement).

DIESEL GENERATORS REPLACEMENT

PowiDian, **fuel cell** specialist, offers a **range of hydrogen powered «zero emission» generators**, ranging from a few kW to the MW.

HYDROGEN BASED PROJECTS FEASIBILITY STUDIES

Due to its **intimate knowledge of the hydrogen world** and its full expertise on related equipment, PowiDian carries out **feasibility studies and budget estimates** of all types of hydrogen based projects.

ENERGY SYSTEM MANAGEMENT, OPTIMIZATION AND CONTROL

Optimizing energy management is at the heart of PowiDian's raison d'être. PowiDian proprietary software embedded in our solutions ensures **efficient and autonomous energy management**. Our dedicated supervision interface allows visualization and analysis of energy data. Thanks to AI, PowiDian offers on-board **self-learning** capabilities based on production and consumption forecasting.

EPC (ENGINEERING, PROCUREMENT, CONSTRUCTION & COMMISSIONING)

PowiDian focus and know-how is the realization of **integrated systems** based on the use of hydrogen. PowiDian takes care of the **engineering, installation and commissioning of any projects**.