

SOME OF OUR ACHIEVEMENTS



COL DU PALET MOUNTAIN **SHELTER**

ISOLATED BUILDING

2015: World highest located hydrogen production installation in Parc de la Vanoise (Alt. 2,600 m) for a 40 bed mountaineering shelter.



KOUROU - GUYANA

EMERGENCY POWER SUPPLY

2023: Installation of an emergency hydrogen-powered electric station at the Guiana Space Centre to provide immediate, uninterrupted power in the event of an outage.



LA REUNION ISLAND - MAFATE

ISOLATED VILLAGE - MICROGRID

2016: Installation of a SAGES® station for EDF (Electricité de France), 100% solar powered electric network with hydrogen storage. It supplies public buildings with electricity all year round.



MORET-LOING-ET-ORVANNE (77)

PROJECT MANAGEMENT ASSISTANCE

2024: Consulting for EDF R&D concerning the control and command part of an electrolyzer test platform. Stored hydrogen is used to fill trailer tubes for heavy transport.



GLORIEUSE ISLAND - INDIAN OCEAN

INSULAIR SITE - MICROGRID

2019: Solar power plant associated with hybrid battery / hydrogen storage to replace the present diesel powered electrical production, for the French



CRETEIL (94)

PROJECT MANAGEMENT ASSISTANCE

2024: Project management assistance to the SUEZ group for the construction of a hydrogen production and distribution plant within the Créteil UVE (Energy Valorization Unit) to supply public transportation vehicles.



SARLAT-LA-CANEDA (24)

RADIO COMMUNICATION POWER SUPPLY

2021: Setting up a hydrogen station with photovoltaic panels to power a civil aviation radio communication antenna at an isolated location for the DSNA (Air Navigation Services Directorate).



NANT CRUET (73)

VALVE AUTOMATION

2024: Installation of a SAGES® station with fuel cell, hydrogen storage and solar panels to automatically control the water intake valves supplying the Tignes dam.



SOPHIATECH UNIVERSITY CAMPUS COMPLETE DEMONSTRATOR OF THE

HYDROGEN CHAIN

2023: Delivery of a «Plug and play» hydrogen chain shelter with hydrogen system supervision, control and management tools.



AUXERRE (89)

TRAILER TUBES RECHARGING EQUIPMENT

2024: Manufacture of an onboard controlling system for Hynamics, an EDF subsidiary, enabling the refueling of trailer tubes with hydrogen to power Transdev's fleet of buses.



ELST - NETHERLANDS

ENERGY SELF-SUPPLY

2023: System allowing 60% self-sufficiency of the Rijnstate hospital in terms of its electrical and thermal energy needs. It uses hydrogen storage coupled with a fuel cell and electrolyzer.



RABAT INTER. UNIVERSITY - MOROCCO

HYDROGEN DEMONSTRATOR

2025: Development of a full-scale SAGES® station to train students and doctoral candidates of the "Hydrogen Master's" program, incorporating cogeneration systems that simultaneously produce electricity and of heat to efficiently power a building.









HYDROGEN SOLUTIONS

FOR ENERGY TRANSITION







ENERGY TRANSITION VIA HYDROGEN

a pivotal energy carrier for long-term energy storage

A leader in energy production and storage solutions using 'green' hydrogen, **PowiDian Energy** has been contributing to the ecological transition of various regions for more than a decade, both within France and globally, through its SAGES® autonomous stationary stations.

PowiDian Energy is an EPC (Engineering Procurement and Construction) / an integrator with expertise in the design, implementation, and operation of various types of hydrogen projects.

Hydrogen

is now recognized as

a key solution to decarbonize

various activities still dependent on fossil

fuels: mobility, electricity generation,

industry and housing.



BUILDINGS

Hydrogen facilitates the storage of renewable energy, enhancing individual or shared self-consumption in buildings and enabling heat recovery from installed equipment.

ENR STORAGE

Hydrogen offers limitless storage over time and has a higher capacity than batteries for storing energy generated from any renewable source.

CLEAN CONSTRUCTION SITES

Hydrogen power offers a clean solution for urban construction sites, eliminating CO2 emissions and noise pollution while meeting all electrical needs, for heavy machinery to handheld tools and site lighting.

GREEN TRANSPORT

Hydrogen is a solution for decarbonizing both short- or long-range transportation, regardless of the type of mobility.

PORTS POWER SUPPLY

Hydrogen serves as an essential energy source for ships while they are docked or refueling, contributing significantly to the decarbonization of both commercial shipping and cruise tourism

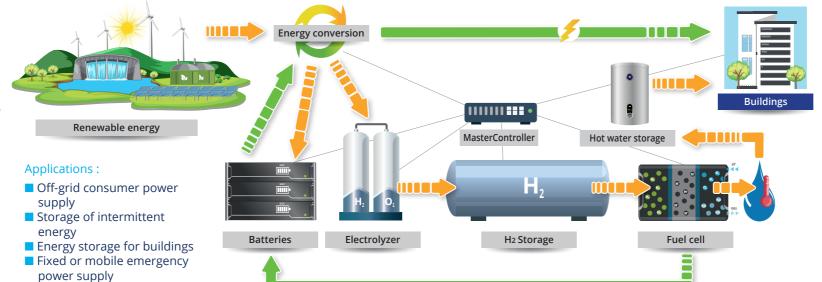
ISOLATED SITES

Hydrogen enables the integration of 'long-term storage' components into renewable energy systems for isolated sites, making them fully autonomous without relying on fossil fuels.

Our SAGES® technology

converts intermittent and uncontrollable renewable energy into a reliable resource, making it available to users at any time. This is accomplished through hybrid energy storage systems that combine hydrogen and batteries.

Additionally, the SAGES® station reuses waste heat by reinjecting it into the building.



OUR SOLUTIONS



100 % AUTONOMOUS POWER

The integration of renewable energy production with **short- and long-term storage** technologies enables the fulfillment of energy needs of **isolated sites** such as villages, islands, remote facilities. Leveraging its **design expertise**, PowiDian Energy handles both the design and installation of projects, while also offering **operation and maintenance services**.



HYDROGEN BASED PROJECTS FEASIBILITY STUDIES

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



EPC (ENGINEERING, PROCUREMENT, CONSTRUCTION & COMMISSIONING)

PowiDian Energy's core expertise lies in the creation of integrated systems using hydrogen. The company is fully equipped to manage all aspects of projects, including **study**, **installation**, **commissioning and maintenance**, either in full or in part.



PRODUCTION OF DECARBONIZED ELECTRICITY

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



ENERGY SYSTEM MANAGEMENT, OPTIMIZATION AND CONTROL

Optimizing energy management is central to PowiDian Energy's mission. Integrated into our solutions, our proprietary software guarantees **efficient and autonomous energy management**. A dedicated supervision interface enables the visualization and analysis of energy data, while Al-drive **self-learning** capabilities allow PowiDian Energy to forecast production and consumption for enhanced performance.