Reliable and Sustainable Energy Solutions for Data Centers

Integra Cleantech

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Green hydrogen as a support and enabler of the growth of the digital economy

The accelerated growth of digitalization and artificial intelligence is transforming the electricity demand of data centers. Globally, they already represent about 1.5% of electricity consumption, with growth of up to 15% per year.

This growth faces capacity constraints, congestion and risk of power grid disruptions. Data centers demand **99.999% availability**, making it imperative to support renewables and the grid with robust, long-lasting backup solutions.

Energy reliability is no longer just environmental: it is operational, economic, and strategic

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Why green hydrogen?

- Long-term support (days/weeks).
- Ideal for isolated applications or grid-tied systems with risk of interruptions.
- Diesel replacement (zero local emissions).
- Safe in urban areas and feasible inside buildings.
- Modular, scalable, easy and fast to expand.

Long-term, reliable, and sustainable backup

Diesel	Batteries	Hydrogen
• Days • Highly polluting	• Hours • Zero emissions	• Days/weeks • Zero local CO2 emissions

In 2024, Microsoft validated 1.5 MW of hydrogen fuel cells as a backup for data centers, demonstrating reliable supply for >48 hours.

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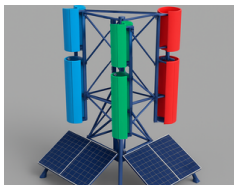
Integra Cleantech is a **commercial integrator** of cleantech. We integrate complementary solutions into **complete and cost-effective systems**, solving hydrogen "chicken-and-egg" dilemma.

Our model allows **manufacturers to invoice directly to the end user**, reducing CAPEX and friction compared to traditional EPC schemes.



IMPULSO ENERGY

Renewable energy (solar or wind)

Enapter

Electrolyzer

Mincatec Energy

Solid Hydrogen Storage

Hydrogen production by biomethane reforming - various manufacturers

Fuel cells - various manufacturers or

Hone

100% H2 Generator + Backup Batteries

Data Center (99.999% available)

Technologies represented and integrated by:

Integra Cleantech

Base in Vancouver with extended equipment in LATAM.
Optimal solutions adapted to network variability, economic context, regulatory framework, and urban and remote needs.