WHT **ENTERPRISE** HIGH TECH SOLUTIONS

BRIEF · ENERGY SECURITY · JUST TRANSITION

From coal sites to AI campuses that carry their own power

Data Renoversity™ H -2.0.1 — why Europe's closing power-plant sites are the fastest, cleanest home for new AI capacity

The problem

Data-centre electricity demand is set to nearly double by 2030 — the IEA's central case goes from about 485 TWh in 2025 to about 950 TWh. Europe's answer so far is a queue: about 5 GW of data-centre capacity holds connection agreements with Finland's Fingrid, about 18 GW is reserved with France's RTE, and the IEA expects grid constraints to delay around a fifth of planned capacity worldwide. Meanwhile a conventional 100 MW AI data centre needs about 20 MW of cooling, evaporates about 1.57 million m³ of water a year and keeps forty-odd diesel generators on standby.

The idea

Put new AI capacity where Europe's energy system already is — on closing and closed coal and gas plant sites — and let the campus carry its own power: renewables and batteries first, firm on-site units where the market needs them, surplus turned into hydrogen instead of being curtailed. The site keeps its substation, its land zoned for energy, its permits history and its skilled people. The campus takes energy where it is produced and does not wait for a new connection to start its first phase.

−84 %
CO_2 a year · 261 kt less

≈ 0
water evaporated · 2,200 m³ instead of 1.57 M m³

46 dB(A)
at 300 m · conventional 58 dB(A)

1.08
design PUE · ≈ 20 % less energy than PUE 1.35

More: wht-enterprise.com/solutions/data-center · info@wht-enterprise.com

100 MW IT reference campus, 85 % utilisation; screening values from the WaiMAP data-centre model and the companion note "Environment & People". Each site is confirmed by its own study.

EUROPE'S CASE

Where it fits first

Greece — Western Macedonia

The region is already moving: Agios Dimitrios, once Greece's largest lignite plant, closed in May 2026, Ptolemaida 5 is to leave coal, and PPC has announced a data-centre campus at Kozani. The lignite basin offers exactly what AI capacity needs — substations, land, water rights and a skilled workforce looking for a second life.

The Nordics and beyond

Former coal sites on the Baltic coast, cold climates that cool almost for free, and grid operators that warn connection agreements do not guarantee full build-out. Central and South-East Europe add hundreds of ready renewable projects waiting for grid capacity — energy that a campus can use on site.

Conventional data centre vs Data Renoversity — 100 MW IT

	CONVENTIONAL	DATA RENOVERSITY
Carbon	≈ 312,700 t CO_2 / yr	**≈ 51,400 t CO_2 / yr**
Water	≈ 1.57 million m³ / yr evaporated	**≈ 2,200 m³ / yr, sealed loop**
Noise at 300 m	≈ 58 dB(A)	**≈ 46 dB(A) — no cooling towers, no gensets**
Land above 40 dB(A) at night	radius ≈ 1.3 km	**radius ≈ 0.5 km (−84 %)**
Chemicals, blowdown, diesel tests	8–21 t chemicals · 523 k m³ blowdown · 99 m³ diesel	**none**
Grid	new connection, often years in the queue	**existing substation, import only; the campus balances itself**

Built from what the world already makes

Every element of the first phase is in commercial service today — solar, wind, batteries, liquid cooling, oil-free chillers, electrolysers. The concept is protected (patent and Data Renoversity™ trademark applications filed); the H -2.0.1 design standard publishes the targets: cooling energy −2 / 0 / +1 % of the IT load, design PUE below 1.10, zero evaporative water, at least 100 % of the annual energy produced on site.

Who is behind it

WHT Enterprise — an energy, construction and engineering group with more than 10 GW executed in thermal, renewable and hydropower plants and about 7 GW developed in batteries, solar and wind. Sites are screened with the group's WaiMAP spatial-engineering platform.

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Sources: IEA Energy and AI (2026 central case, 2025 grid-delay estimate); Fingrid (Aug 2026); RTE (May 2026); Balkan Green Energy News (Agios Dimitrios, 15 May 2026); Greek City Times / Bloomberg (PPC Kozani, Sep 2026).