

TECHNICAL PARTNER

RePG 
RePG GEOTHERMAL AGS



R. Rockefeller S.C.

GEOTHERMAL AGS FOR DATA CENTERS

CLEAN • RELIABLE • CONTINUOUS • SCALABLE

RePG GEOTHERMAL AGS TECHNOLOGY

- ✓ Works on any warm rock
- ✓ Shallow access, anywhere
- ✓ Up to 80% lower cost
- ✓ Zero dry well risk
- ✓ No water dependency
- ✓ 24/7 baseload clean energy



CLEAN
ENERGY



RePG GEOTHERMAL AGS

THE SMART CHOICE FOR A SUSTAINABLE DIGITAL WORLD

DIGITAL
POWER



IDEAL FOR DATA CENTERS

- ✓ 99.99% uptime with stable power
- ✓ High energy density
- ✓ Lower PUE and operating costs
- ✓ Scalable for AI & HPC workloads
- ✓ ESG & carbon footprint reduction
- ✓ Energy independence



SUSTAINABLE
ZERO-EMISSION



RELIABLE
24/7 AVAILABILITY



SCALABLE
FOR THE FUTURE



ESG COMPLIANT
GREEN IMPACT



GLOBAL VISION
LOCAL IMPACT

THE ROB ROCKEFELLER S.C. | REPG GEOTHERMAL AGS

ADVANCED GEOTHERMAL SYSTEMS

Geothermal baseload for the AI era

*Clean power that runs 24/7, for data centres
and industrial sites, from 250 kW to 30 MW*

Europe cannot plug in the machines it is building

The bottleneck of the AI economy is no longer chips. It is **electricity, and the wire that carries it**. Data centres are expected to account for around **10% of the growth in European electricity demand to 2030**, and global data centre consumption is on track to more than double over the same period.

The grid cannot absorb that pace. Inside the European Union, securing a grid connection takes **two to ten years**; in the main hubs, Frankfurt, London, Amsterdam, Paris and Dublin, the average is **seven to ten years**, and up to thirteen in the most congested. Ireland has a de facto moratorium on new Dublin data centres until 2028. The Netherlands and Frankfurt have effectively closed new connections until at least 2030. Denmark has paused as well.

So the industry faces a question it has never had to answer before: not how to buy cheaper power, but **how to have power at all**, on site, now, without waiting a decade for permission.

7 to 10
years

average wait for a grid connection in the main European hubs

10%
of EU demand growth

attributed to data centres to 2030

2028
2030
closed

Dublin, then Amsterdam and Frankfurt

Sources: IEA, Overcoming energy constraints for Europe's data centres, 2026; European industry reporting, 2026.

Why the alternatives do not solve it

A data centre is the most demanding electrical customer that exists: it needs power that is **continuous, dense, local and predictable in price**. Measured against that, every familiar option falls short somewhere.

Solar and wind are clean and cheap, but they stop. A facility that must never go dark cannot be built on a source that is unavailable most hours of the year, and firming it with storage multiplies both capital and land.

Batteries move energy in time; they do not create it. **Diesel** runs whenever you want it to, at the cost of carbon and of a fuel price nobody can forecast. **Small modular reactors** are promising, but capital heavy and years away from routine deployment. **Traditional geothermal** is clean and constant, and would be the obvious answer, except that it demands volcanic geology and wells three kilometres deep, which restricts it to a handful of places on earth.

What is missing is not a cleaner source. It is a source that is **clean, continuous and available where the building actually stands**.

The question is no longer which energy is greenest. It is which energy is there at three in the morning, on the site you have already bought.

AGS is the answer. Almost nobody is ready.

Advanced Geothermal Systems solve the geography problem. A sealed loop draws heat from warm rock by conduction, so the plant no longer needs a volcanic reservoir, no longer consumes water and no longer carries dry well risk. Our platform generates from **55 °C**, a temperature reachable at around 750 metres almost anywhere, instead of the 150 °C that conventional geothermal requires.

That single shift turns geothermal from a regional privilege into **infrastructure that can be built next to the building**: clean, continuous, on site, with no queue to join.

The catch is that very few companies in the world are actually ready to deliver it. The field is small and **concentrated in North America**, and every established name works the same way: deep drilling, utility scale, single projects worth hundreds of millions, years of development before the first megawatt.

We are one of the few, and we are the only one built differently. **R. Rockefeller S.C. with RePG** delivers the same technology as a certified industrial product, ready today for small, medium and large projects alike: from a single 250 kW unit next to a data hall, to a 30 MW field for a hyperscale campus.

Everyone else asks you to fund a project. We deliver a product.

Why **RePG Wins**: The Data Center Energy Comparison

No Other Technology Delivers What Geothermal Can

	AVAILABILITY (24/7)	CARBON FOOTPRINT	COOLING CAPABILITY	LAND FOOTPRINT	SCALABILITY	COST PREDICTABILITY
DIESEL GENERATORS	Available 24/7 ✓	HIGH carbon ✗	NO cooling ✗	MEDIUM footprint	LIMITED scale ✗	VOLATILE fuel cost ✗
SOLAR PV	NOT 24/7 (night/clouds) ✗	ZERO carbon ✓	NO cooling ✗	LARGE land footprint ✗	GOOD scale ✓	MEDIUM predictability
WIND POWER	NOT 24/7 (calm days) ✗	ZERO carbon ✓	NO cooling ✗	VERY LARGE footprint ✗	GOOD scale ✓	MEDIUM predictability
NUCLEAR SMR	Available 24/7 ✓	LOW carbon ✓	NO direct cooling ✗	MEDIUM footprint	LIMITED scale ✗	HIGH upfront cost ✗
TRADITIONAL GEOTHERMAL	Available 24/7 ✓	ZERO carbon ✓	PARTIAL cooling	MEDIUM footprint	LIMITED ✗ (needs volcanic zone)	EXCELLENT predictability ✓
REPG GEOTHERMAL (OUR TECHNOLOGY)	Available 24/7 ✓	ZERO carbon ✓	FULL DIRECT COOLING ✓	MINIMAL footprint ✓	UNLIMITED scale ✓	EXCELLENT cost predictability ✓ — THE ONLY SOLUTION THAT CHECKS ALL BOXES.

AGAINST THE ALTERNATIVES

The only option that checks every box

Diesel runs 24/7 but burns carbon. Solar and wind are clean but intermittent. SMRs are heavy on capital and limited on scale. Traditional geothermal is clean and constant, but needs the right volcanic geology.

Our system is the only one on the list that delivers **availability, zero carbon, direct cooling, a minimal footprint, unlimited scale and predictable cost at the same time.**

Strategic Infrastructure

DATA CENTER HEAT RECOVERY



SUSTAINABLE
BY DESIGN



INTEGRATED
SOLUTIONS



MAXIMIZED
EFFICIENCY



ON SITE

Power in, waste heat back out

The same platform works in both directions: it generates baseload power from the ground, and it recovers the heat a data centre or an industrial process throws away, turning it back into electricity.

Modular units sit alongside the building, connect to the existing thermal loop and start producing.

No new grid connection to wait for.

Advanced Geothermal Systems (AGS)



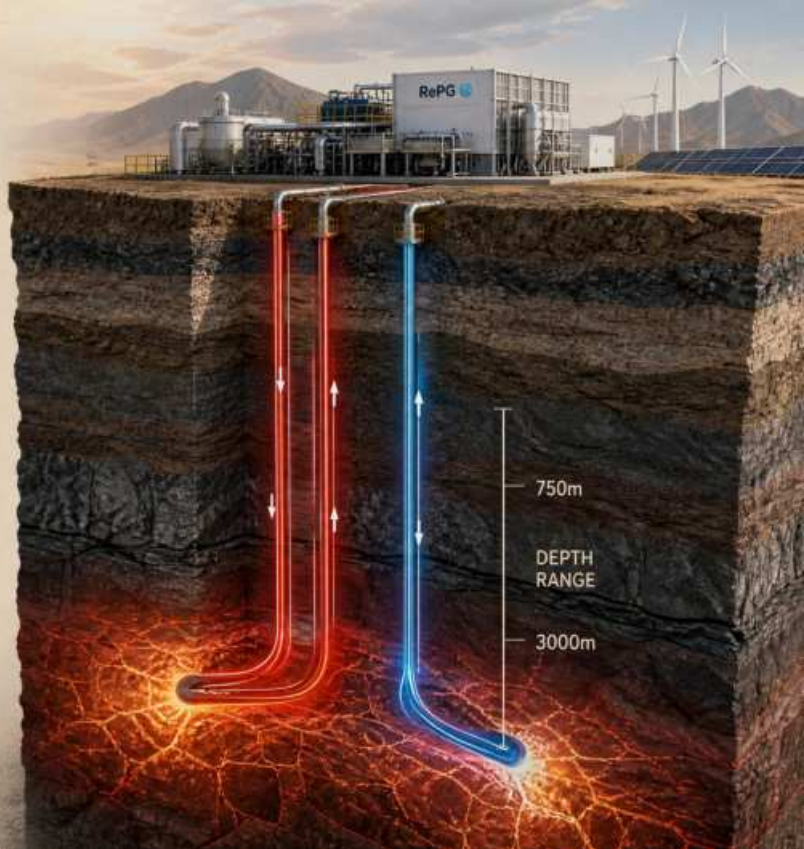
CLOSED-LOOP TECHNOLOGY:
No water consumption.



GLOBAL APPLICABILITY:
Operates at 750m to 3000m depth.



SUSTAINABLE:
Zero emissions and zero environmental impact.



THE TECHNOLOGY

A sealed loop in the ground

The fluid circulates inside a **closed circuit**: it never touches the aquifer, consumes no water and produces no emissions. Heat is drawn from the rock by conduction, with no fracturing and no reservoir depletion.

It works globally, at depths between **750 and 3,000 metres**, delivering power around the clock.

TRADITIONAL GEOTHERMAL vs REPG ENERGY

LOWER TEMPERATURE. HIGHER MATURITY. LOWER COST.

METRIC	TRADITIONAL GEOTHERMAL	RePG ENERGY
 MINIMUM SOURCE TEMPERATURE (°C)	150°C	55°C LOWER TEMPERATURE GREATER RESOURCE ACCESS
 TECHNOLOGY READINESS LEVEL (TRL)	LOWER GREATER TECHNICAL RISK	TRL 9 PROVEN. OPERATIONAL. BANKABLE.
 CAPEX PER WELL	HIGH HIGHER CAPITAL INVESTMENT	-80% SIGNIFICANTLY LOWER CAPEX

THE DIFFERENCE

Lower temperature. Higher maturity.
Lower cost.

Traditional geothermal power needs a source at around **150 °C**, which exists in very few places. Our platform generates from **55 °C**, which exists almost everywhere.

Add **TRL 9** industrial maturity and up to **80% lower capex per well**, and the risk profile of the whole project changes.

RePG®
ADVANCED GEOTHERMAL SYSTEM

ADVANCED GEOTHERMAL SYSTEM



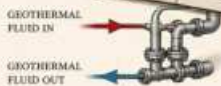
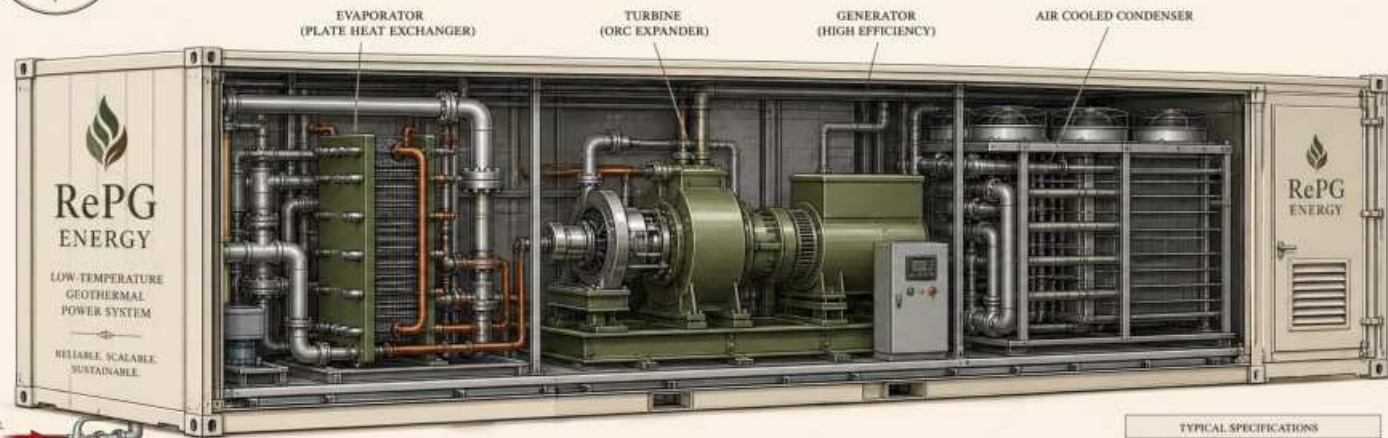
Conventional plants chase the 110 °C zone, 3,000 metres down. Our system reaches its working zone at roughly **750 metres**: four times shallower.

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RePG ENERGY



LOW-TEMPERATURE RESOURCE
Operates efficiently with resources as low as 85°C



ORGANIC RANKINE CYCLE TECHNOLOGY
Proven, efficient and reliable power generation



MODULAR & CONTAINERIZED
Fast deployment, easy transport and scalability



HIGH EFFICIENCY PERFORMANCE
Maximizing energy production from low-grade heat



BUILT FOR RELIABILITY
Engineered for continuous operation in remote conditions

TYPICAL SPECIFICATIONS	
NET POWER OUTPUT	500 - 2,000 kW
THERMAL INPUT	2,000 - 8,000 kWth
EVAPORATING TEMPERATURE	85 - 160 °C
WORKING FLUID	R245fa (or similar)
CONTAINER SIZE	40 ft ISO Container
SYSTEM WEIGHT	20 - 25 Tons (approx.)

← Low-Temperature Geothermal Becomes Global Infrastructure →

INSIDE THE MACHINE

An ORC power plant in a container

Evaporator, turbine, high efficiency generator and air cooled condenser, all inside a **40 foot ISO container**. Factory built, factory tested, shipped complete.

Large systems in this configuration reach **2,000 kW net** per container; the AGS configuration extends the same platform down to 55 °C resources.

THE PRODUCT FAMILY

Configurations, from 250 kW upwards

One platform, three deployment sizes. Every configuration is containerised, energy storage ready and AI driven as standard, and every one of them synchronises with the others.

Configuration	Net output	Typical application	Delivery
Standard unit	250 kW net	Data hall, factory, campus building	20 weeks, 1 week to install
Multi unit block	1 to 10 MW net	Data centre campus, industrial area	Phased, unit by unit
Large container system	up to 2,000 kW net each	Utility scale field development	Per project schedule

Footprint of the standard unit: 15 x 20 m. Around 2,000 MWh net per year and 962 tonnes of CO2 avoided, per unit, at 8,000 operating hours.

250 kW

entry size

the smallest we deploy

30 MW+

top size

same platform, in series

20

weeks

from order to delivery

SCALING AS TOPOLOGY

MODULAR UTILITY SCALE



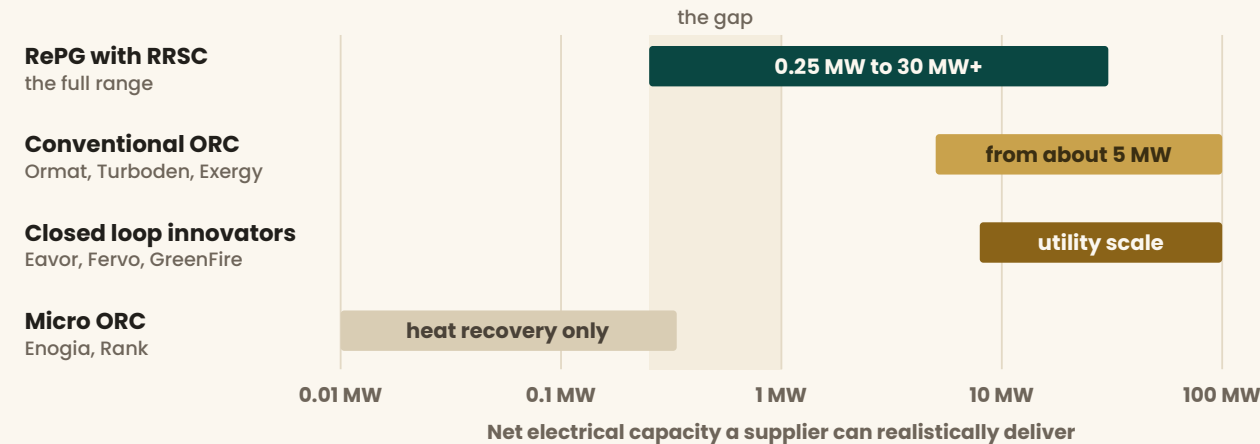
Units connect in series and parallel and synchronise as one plant. **4 units make 1 MW** for a facility, **12 make 3 MW** for an industrial area, **40 make 10 MW** for a data centre campus, **120 make 30 MW** for hyperscale.

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COVERAGE

Who can actually serve your size of project

The industry is built for the top end. We cover the top end too, and we are the only ones who also cover everything below it.



Indicative ranges from public references and product documentation, August 2026. The shaded band is the 0.25 to 1 MW window where a data centre or an industrial site actually sits.

Everyone else starts where your project ends. We start where your project starts, and we keep going.

HEAD TO HEAD

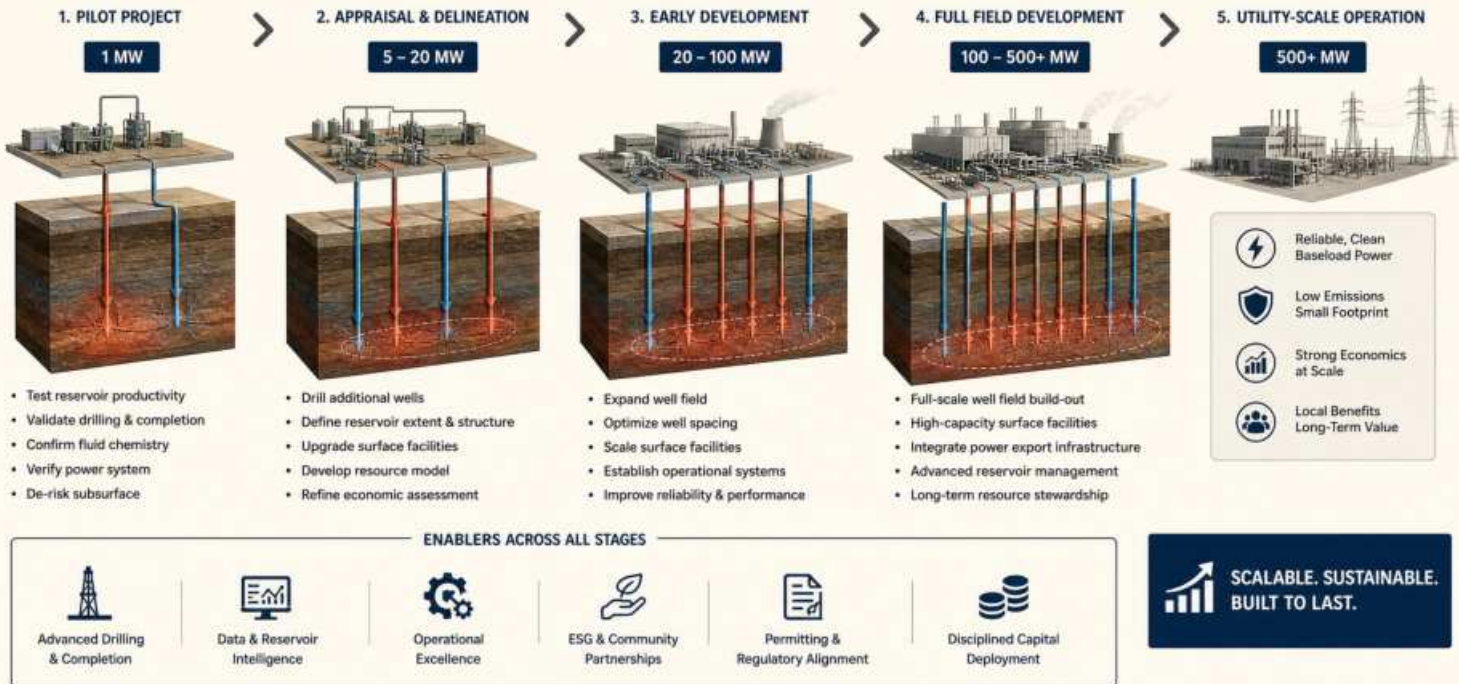
Not just the only ones. The better ones.

Criterion	Conventional ORC	Closed loop innovators	Micro ORC	RePG with RRSC
Minimum viable project	about 5 MW	utility scale	tens of kW	250 kW
Maximum reach	100 MW+	100 MW+	under 1 MW	30 MW+ modular
Source temperature	150 °C typical	deep, high enthalpy	waste heat	from 55 °C
Drilling depth	3,000 m+	4,000 to 5,000 m	none	750 to 3,000 m
Water consumption	yes	closed loop	none	none, closed loop
Sold as	project	project	component	finished product
Time to power	years	years	months	20 weeks to deliver
Fits a data centre or industrial site	No	No	Partly	Yes

Comparison built on public references and product documentation, August 2026. Categories, not individual quotations.

We are not the small alternative to the big players. We are the only ones covering the whole range, and the only ones ready to deliver at the size your site actually needs.

Strategic Leap: Pilot to Utility Scale



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THE PATH

Ready for the big ones too

The same platform runs the full development path: a pilot de-risks the subsurface, appraisal defines the resource, then the field grows from **5 to 20 MW**, to **100 MW**, to utility scale.

Every stage is financed by the one before it. Disciplined capital, not a leap of faith.

AI Monitoring & Remote Control

SMART. CONNECTED. OPTIMIZED.



Real-time 4G/5G
connectivity for
global access.



Predictive diagnostics
and autonomous system
optimization.



Intuitive dashboard
for energy, temperature,
and flow tracking.



OPERATIONS

Monitored and optimised by AI

Real time 4G/5G connectivity, predictive diagnostics and autonomous optimisation: output, temperatures and flow tracked continuously, from anywhere in the world.

Maintenance is scheduled before a fault happens, not after: the discipline a data centre operator expects.

R&D and Intellectual Property Rights (IPR)

INNOVATIVE ENERGY SOLUTIONS



36 REGISTERED PATENTS
10 ONGOING APPLICATIONS



22 TRADEMARK REGISTRATIONS
5 DESIGN REGISTRATIONS

CERTIFICATIONS



CE



ISO 9001



ISO 22716
(GMP)



ISO 14001



ISO 45001



ISO 31000

PROVEN AND PROTECTED

Not a prototype. An industrial product.

TRL 9 surface power block, in continuous industrial service for over 15 months at Hayat Kimya, plus a geothermal installation at AFJET, Türkiye.

36 patents registered and 10 pending, 22 trademarks, 5 registered designs, CE marking and ISO 9001, 14001, 45001 and 31000.

Emissions that never enter your books

An AGS plant behaves exactly like a normal continuous supply: same stability, same availability, same 8,000 hours a year. The difference is that it **emits nothing while it runs**. No combustion, no stack, no fuel.

For a company working under an annual emissions limit, that changes the nature of the problem. The megawatt hours produced on site do not need to be offset, reported as bought emissions or compensated later. **They simply never enter the ledger.**

Configuration	Emissions never generated	Allowance value at €72/t	Exposure avoided if you are short
1 unit, 250 kW net	962 t per year	about €69,000 per year	about €165,000 per year
40 units, 10 MW net	38,480 t per year	about €2.8 million	about €6.6 million
120 units, 30 MW net	115,440 t per year	about €8.3 million	about €19.9 million

Allowance value at the EU ETS reference of about €72 per tonne, April 2026. Exposure avoided values a tonne you are short of at the allowance price plus the excess emissions penalty, explained on the next page.

The cheapest tonne of CO2 is the one you never produce. It costs nothing to buy, nothing to offset and nothing to explain.

What going over your limit costs

Under the EU system, exceeding your limit is not a matter of buying a few more allowances at market price. It is deliberately designed to hurt.

If you exceed the limit	What it means
Excess emissions penalty	€100 per tonne as set in the Directive, indexed to European consumer prices since 2013, so materially higher today
The allowances are still due	Paying the penalty does not cancel the obligation. You surrender the missing allowances as well, at market price
Your name is published	Operators that fail to surrender are named publicly by the competent authority
Fuels join the system in 2028	From 1 January 2028 the second EU emissions trading system prices building and transport fuels too, which hits every on site diesel or gas alternative

Sources: EU ETS Directive 2003/87, Article 16; national competent authority guidance, 2026. Combined exposure for a tonne you are short of therefore exceeds €170 at current reference values.

How each type of site benefits

Type of site	What the plant removes
Industrial site inside the ETS	Fewer allowances to buy and surrender, and distance from the penalty threshold
Data centre or commercial site	The carbon price already embedded in the electricity tariff, plus grid charges and levies, plus a permanent Scope 2 reduction

Where local rules allow it and additionality genuinely holds, the same avoided emissions can also be certified as tradable credits. We treat that as an option, never as the business case.

WHERE TO START

Available now, at your size

Clean baseload power no longer has to be enormous to be economic, and it no longer has to be small to be available. The platform is a certified industrial product, in production today, with **20 weeks from order to delivery** and one week to install.

We take a site from first resource assessment through drilling supervision, installation and commissioning to grid connection, at any size between a single unit and a multi megawatt field.

Our **first pilot project is under development at the Augusto Innovation Hub in Milazzo, Sicily**, a hub that will host a data centre: a facility powered by the ground beneath it. If you run a data centre, an industrial site or a campus and you need power that never stops, the conversation now has a different starting point.

The energy transition will not be won only at gigawatt scale. It will be won one site at a time.

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R. Rockefeller S.C. · Technical partner: RePG Geothermal AGS ·



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SOUTH AFRICA | INDIA | CHINA | SINGAPORE | NEPAL | HONG KONG



AI SOFTWARE
DEVELOPMENT



GEOTHERMAL
ENERGY



SUSTAINABILITY



CYBER
SECURITY



GLOBAL
STRATEGY

