



Step into
the next-gen
nuclear
energy





50 years of French Expertises to Redefine Nuclear Energy

OTRERA is a French deeptech company developing **small modular Sodium Fast Reactors (SFR)** that cogenerate competitive electricity and heat.

Founded in 2024 in Aix-en-Provence, the company now brings together more than 30 team members.

Recognized as a **France 2030 program winner** and awarded the **Greentech Innovation label**, the company is shaping the future of sustainable nuclear energy — in France and beyond.

"At Otrera, we believe the future of nuclear is not just to produce clean energy — **but to amplify its potential and deliver it at a cost the world can rely on.**

From nothing to everything, is our promise of **abundant and competitive energy for generations.**"



Frédéric Varaine
Fondateur - CEO, Otrera

OTRERA GEN IV REACTOR

Compact, optimized & efficient design

2x300 MWth

⚡ 220 MWe ⚛ 360MWth

Simplified & Modular architecture

6x50 MWth for each vessel

Maturity
TRL 5-6

Safety & Security
4 containment barriers

New gen core
Breakeven core
10-year cycle

Fuel versatility
MOX & UO₂ HALEU

Innovative & Compact
Vessel < 3 meters



Electricity & Heat

at 100-150°C up to 500°C



LCOE (€/MWh)

60€ ⚛

90€

20€

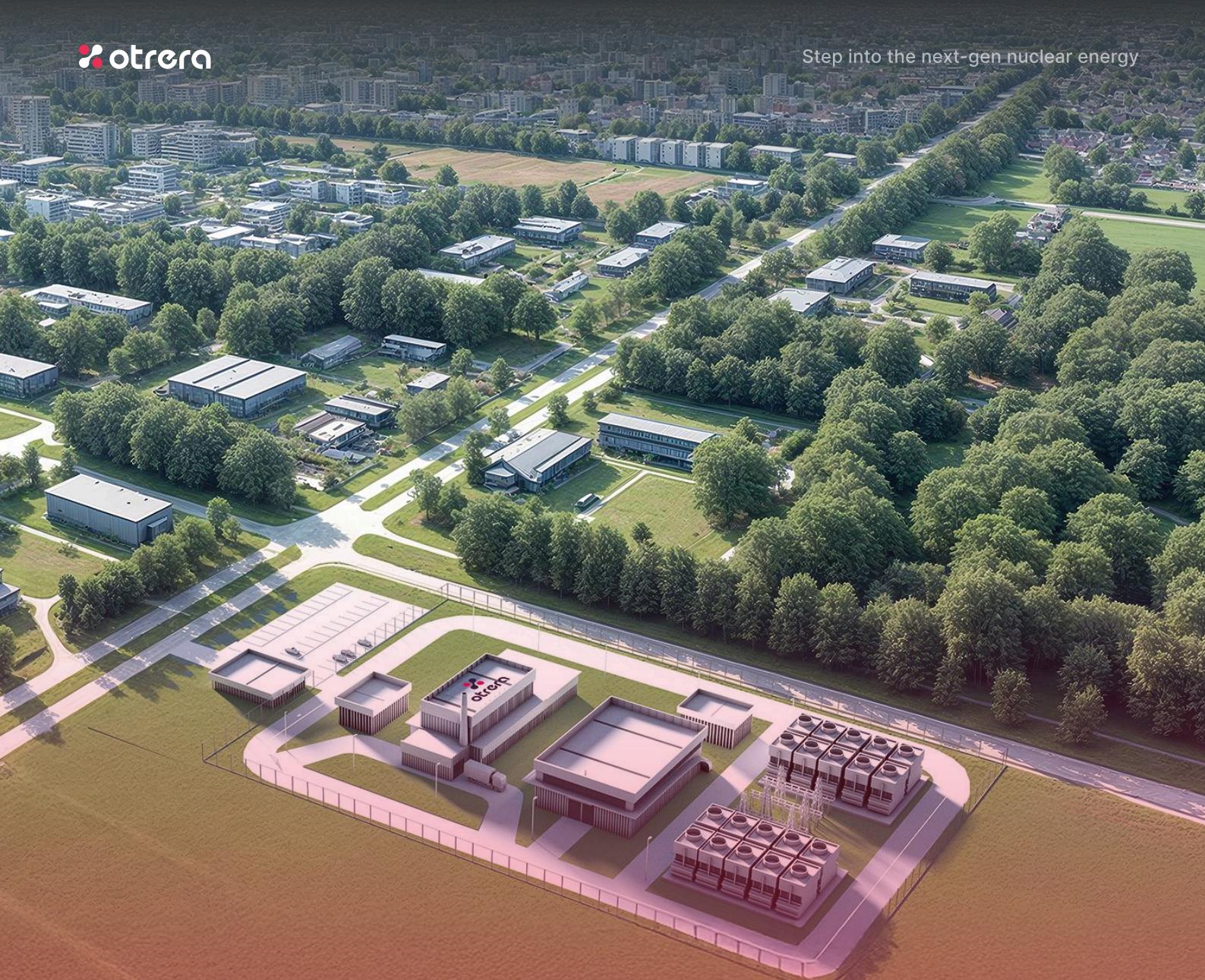
50€



Electricity + Heat = 50-70€/MWh



First of a kind available in 2032



Beyond electricity: The power of cogeneration

Flexible source of electricity and heat to support industries and cities in achieving their decarbonization goals.

Multi-sector applications:

District heating

Data centers

Hydrogen & e-fuel

Carbon capture

Desalination

Grid support & more

— A compact solution, right where it's needed

Learn more on

Our innovative design



Smart, cost-driven design
for game-changing energy competitiveness



Designed for flexibility
from heat to pure electricity player



Fuel adaptability and availability
with an optimized core for sustainable
use of nuclear materials



Semi-underground design, inert operation
for safety and minimal footprint (around 4ha)
for deployment nearby suburban areas



Modular design ready
for industrial-scale production with standardized,
manufacturable components



15 patents filed on the key technology features



Our industrials partnerships



Working with industrials leaders





What are we waiting for?



Contact us

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