

otrera

Step into the next-gen nuclear energy



60 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 40 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

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OTRERA GEN IV REACTOR

Compact, optimized & efficient design

2x300 MWth

220 MWe 360MWth

Simplified & Modular architecture

6x50MWth per reactor

New isogenerator core

Breakeven core: 7 to 10 years cycle



Pre-Industrialized

60 years SFR legacy

Low-fissile fuel

MOX & UO_2
HALEU

Safety & Security

Four levels of protection

Innovative & Compact

Electricity & Heat

at 100-150°C up to 500°C

LCOE (€/MWh)

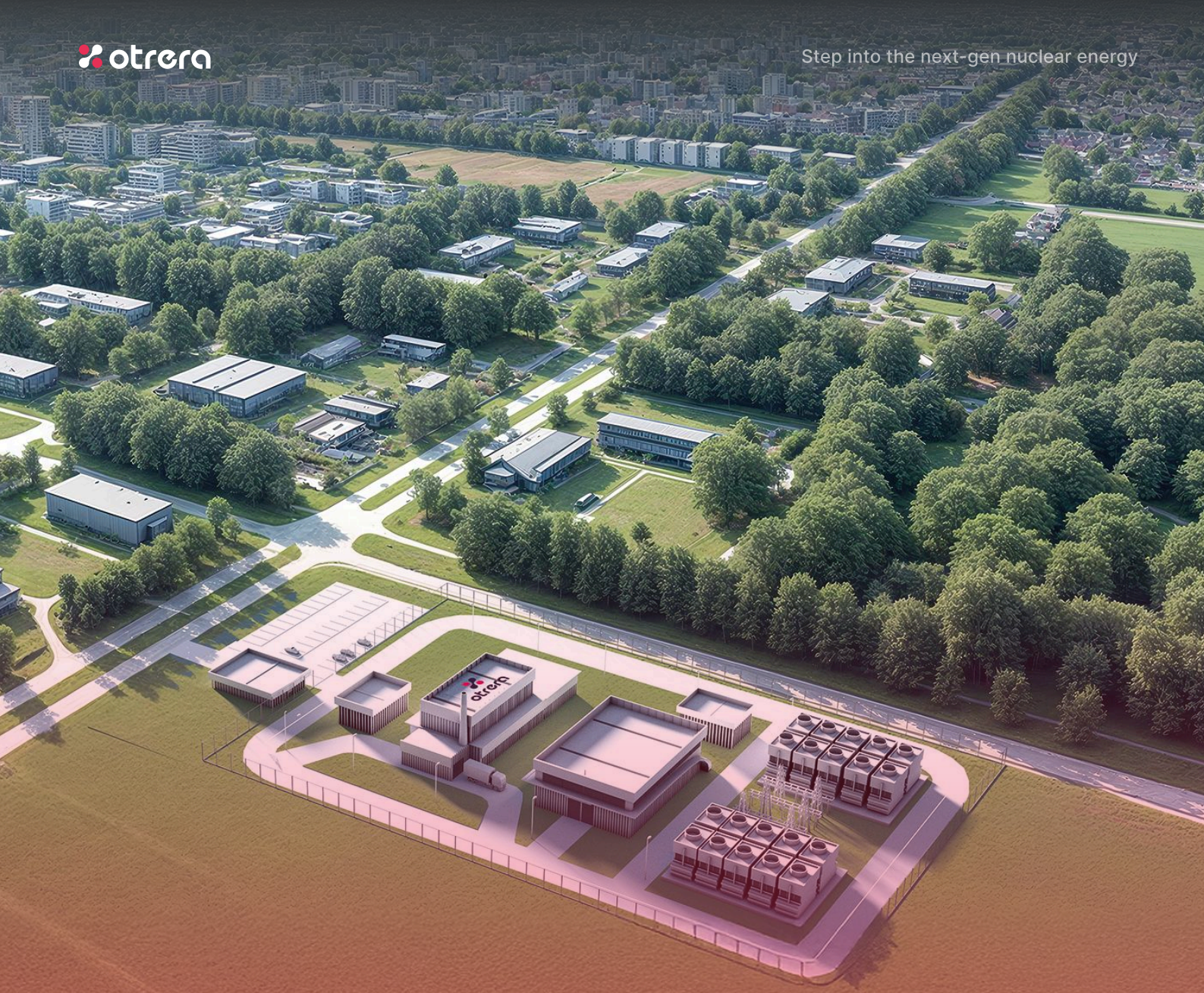
60€ — 90€ | 20€ — 50€

Electricty + Heat = 50-70€/MWh

OTRERA One available in 2032

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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

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What are we waiting for?

Contact us

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Supported by

FRANCE 2030

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GREENTECH INNOVATION