



 otrera

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

**New gen core**

Breakeven core  
10-year cycle

**Maturity**

TRL 5-6

**Fuel versatility**

MOX  
& UO2 HALEU

**Safety & Security**

4 containment barriers

**Innovative & Compact**

Vessel < 3 meters



**Electricity & Heat**

at 100-150°C up to 500°C



**LCOE (€/MWh)**

60€



90€

20€



50€



Electricity

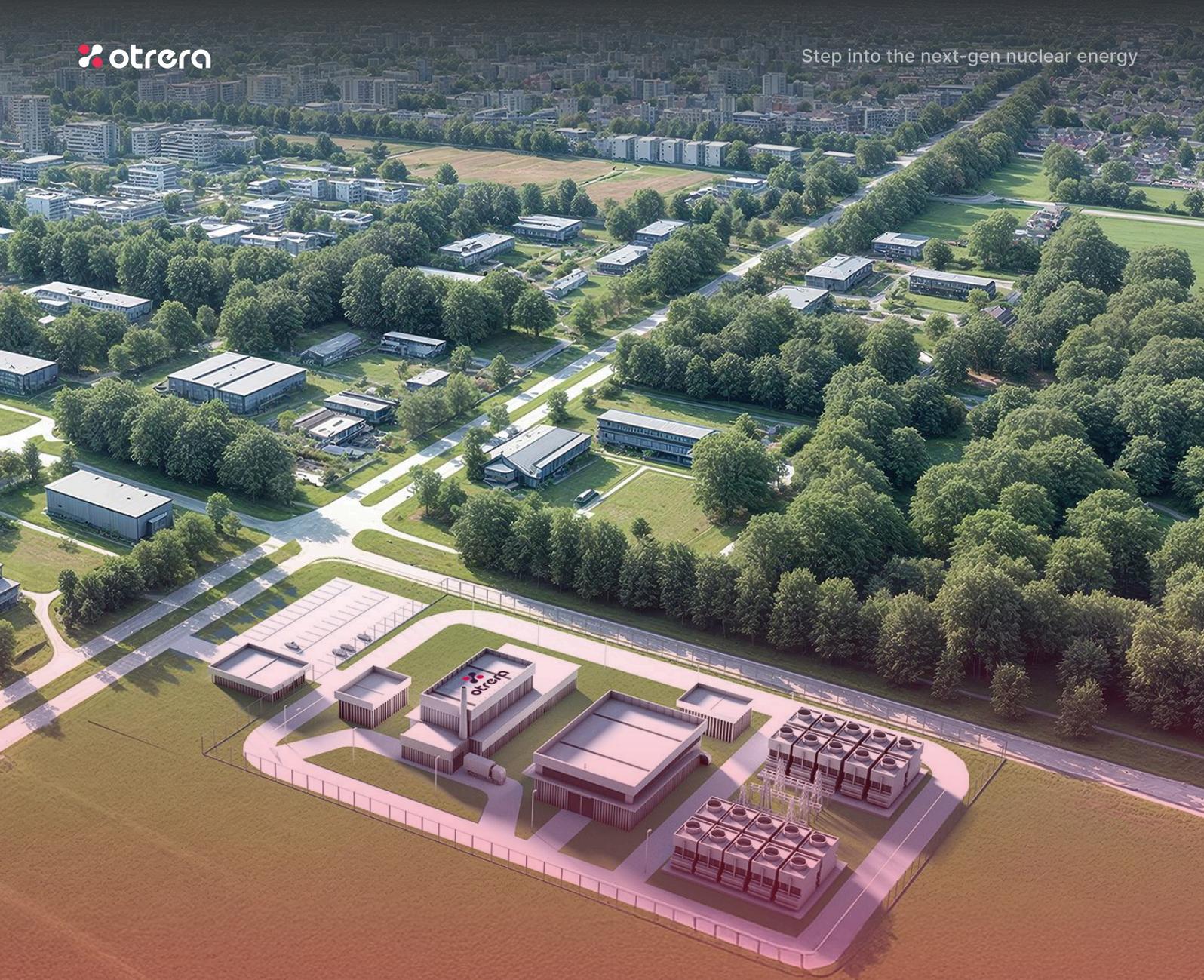


+ Heat

= 50-70€/MWh



**OTRERA One** 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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otrera.fr

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