



THORIZON

**REDEFINING NUCLEAR
WITHOUT COMPROMISES.**

MODULAR MOLTEN SALT REACTOR

NAP Contactmeeting - Small Modular Reactors (SMR's) – 7 May 2026

REDEFINING NUCLEAR WITHOUT COMPROMISES.

We unlock the full potential of nuclear energy by overcoming the barriers of **cost**, **safety**, and **waste** that hold it back.

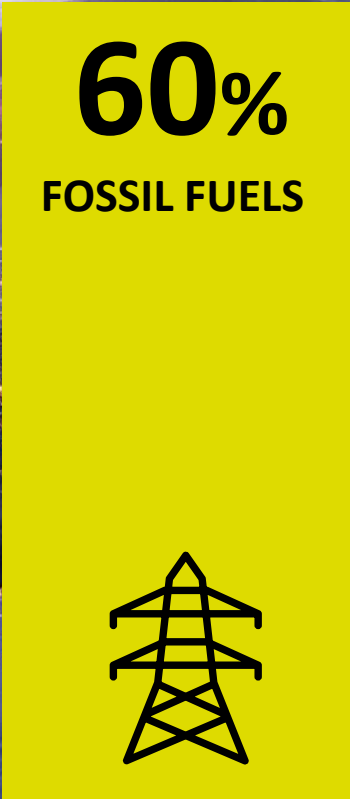
We're building a new generation of **modular reactors** to power industry, strategic compute, and deliver **energy independence**.



THORIZON



WE ARE STILL HIGHLY DEPENDENT ON FOSSIL FUELS

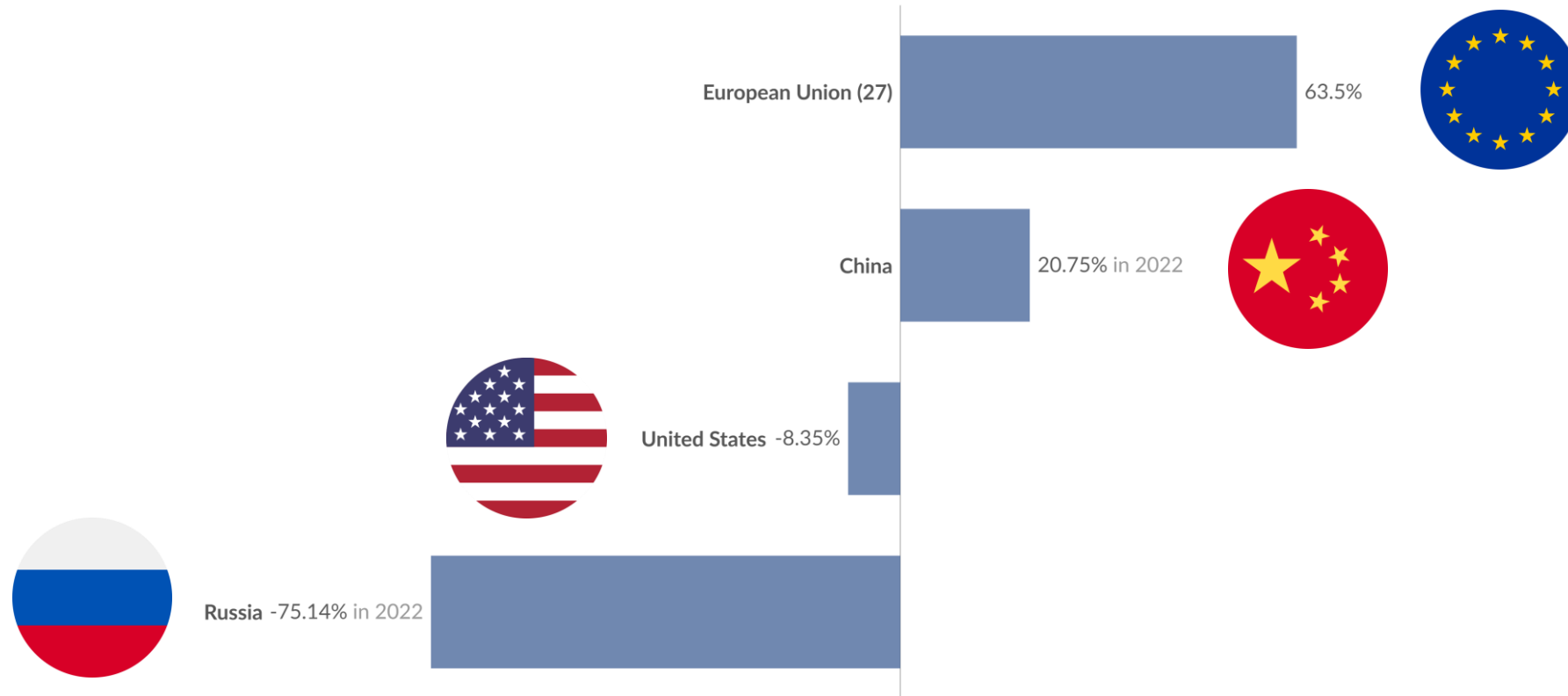


AND WE ARE VERY DEPENDENT ON OTHERS

Energy imports and exports, 2023

Our World
in Data

Energy trade, measured as the percentage of energy use. Positive values indicate a country or region is a net importer of energy. Negative numbers indicate a country or region is a net exporter.





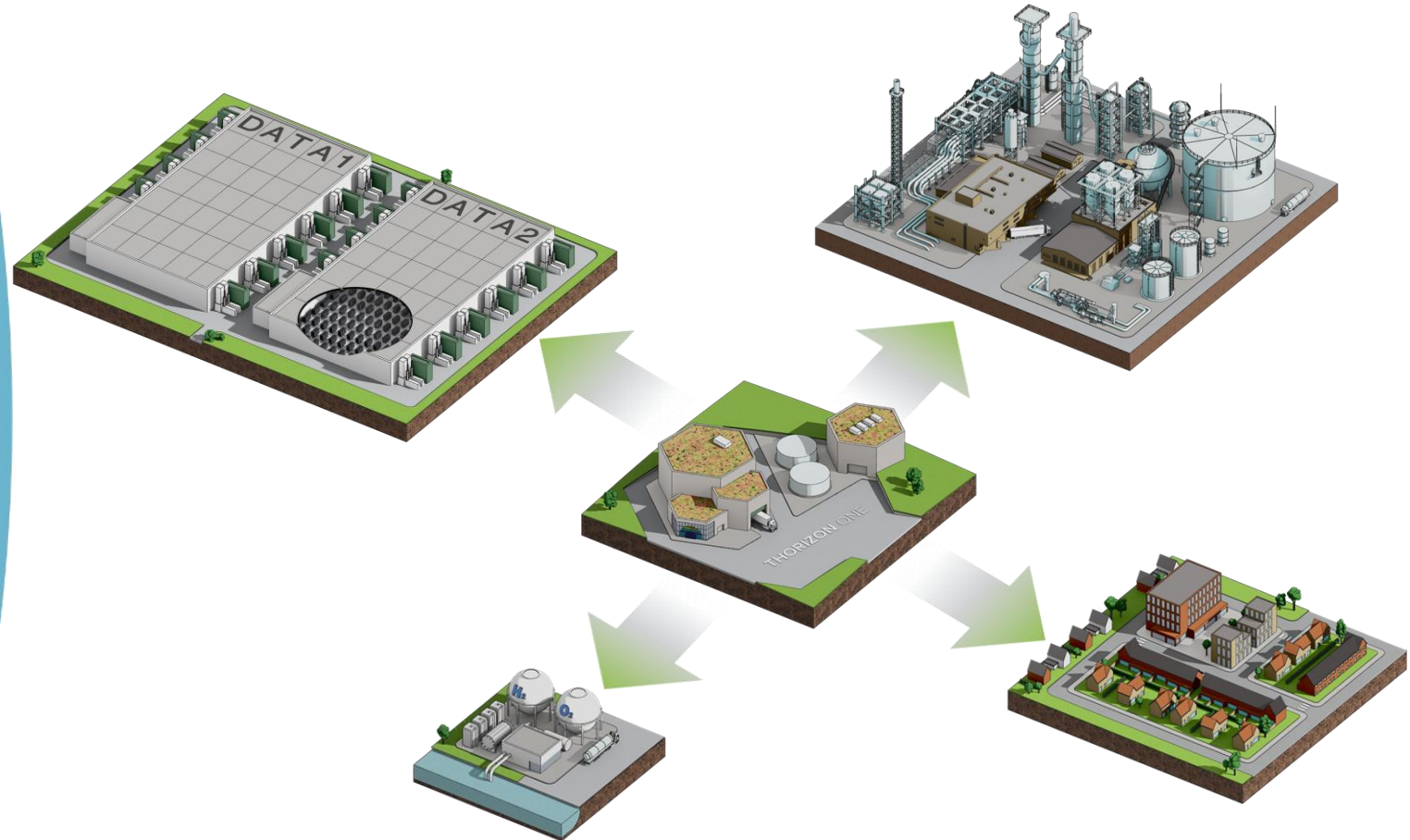
Turning away from nuclear was a strategic mistake

Positioned for the nuclear renaissance

- Energy security, AI demand and electrification driving demand for reliable baseload energy
- Europe accelerating on next-generation nuclear
- Thorizon is based in the Netherlands and France, both strongly investing in new nuclear and innovation

100MW ELECTRICITY OR 550°C HEAT ON FOUR SOCCER FIELDS

- Inherently safe, low-pressure operations, off-grid close to where it is needed
- Competitive costs:
~€60/MWh electricity and
~€25/MWh industrial heat
- 250MWh capacity with 95% uptime and storage option



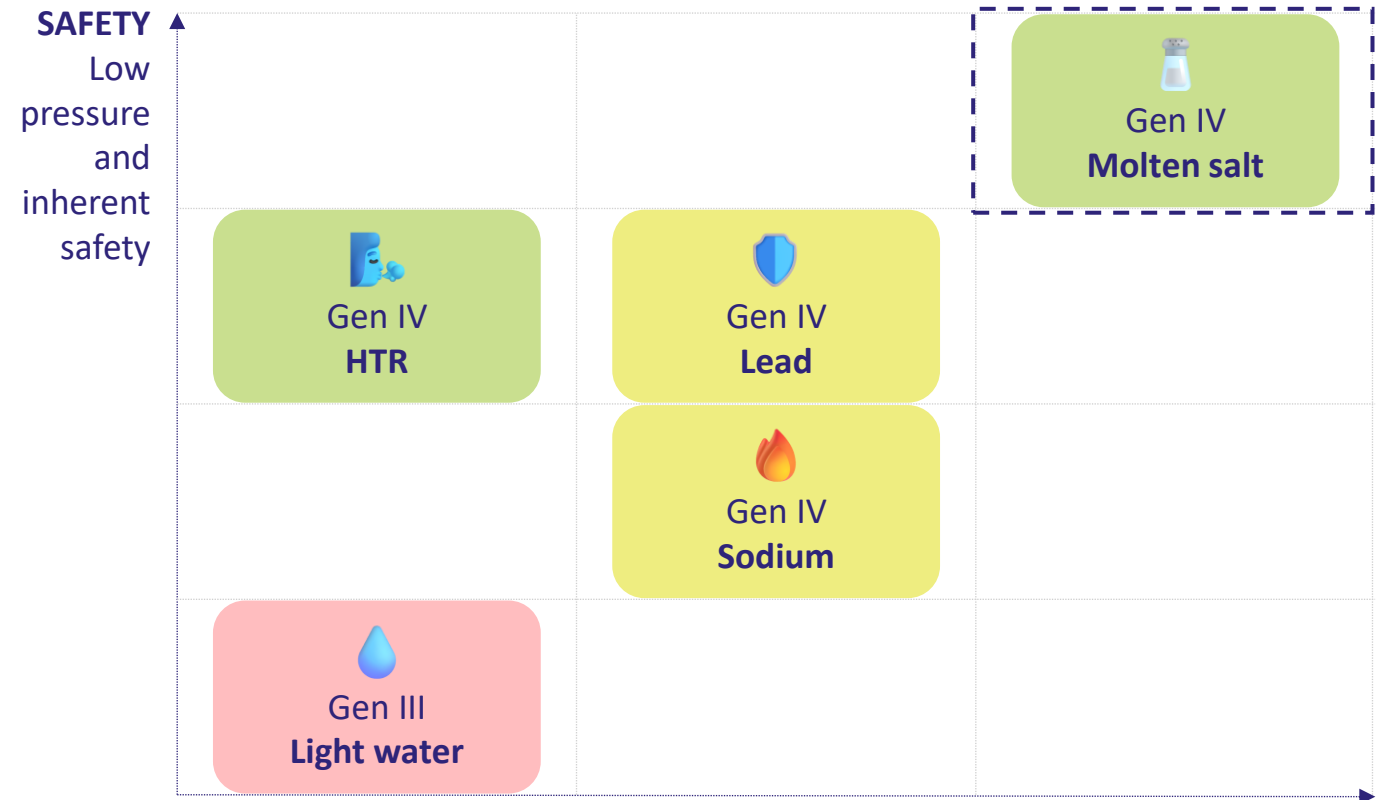
THE MOST COMPLETE SOLUTION IN FISSION

- Molten salt acts as both the fuel and the coolant in Thorizon's reactor
- The only reactor technology delivering industrial heat, maximum safety and fuel circularity
- Turns spent nuclear fuel into clean energy, reducing waste while strengthening Europe's energy sovereignty



INDUSTRIAL HEAT CAPABILITIES

■ > 550°C
 ■ > 300°C
 ■ < 300°C



FUEL CIRCULARITY

Valorizing resources and reducing long-lived waste

Core outlet temperature from NEA SMR dashboard; Gen IV forum on molten salt reactors; team analysis
 Safety: Assessed as a combination of inherent stability, low operating pressure, and chemical inertness (Gen IV Forum)
 Fuel circularity: While lead and sodium reactors support recycling, liquid-fuel molten-salt reactors offer the highest theoretical efficiency in actinide consumption and waste minimization (NEA)



POWERED BY CARTRIDGES



NO COMPROMISES

Walk-away safe
No long-lived waste



AFFORDABLE

60 €/MWh for electricity
25 €/MWh for heat



SCALABLE

Realistic path to market
Built where it is needed



Thorizon's cartridge-based core combines **low-pressure** operation with inherent stability for **unmatched safety**, while cartridges are replaced before corrosion occurs. High fuel efficiency and burn-up **reduce long-lived waste**.

The cartridges are produced **in series** offsite, reducing reactor construction time and cost. **Low-pressure** operation makes nuclear systems simpler to build. **High temperature** produces industrial heat and efficient fuel cycle.

The cartridge uses **qualified materials** and **proven components**, is compatible with **existing transport casks**, and enables step-by-step prototyping through its modular design. Its inherent safety **de-risks licensing**.



LAUNCHING CUSTOMER AND SITES SECURED



EPZ, operator of the Borssele nuclear plant, combines roles as energy off taker and licensed nuclear operator with 50+ years of experience.

Confirmed site options for:

- Component testing
- Molten salt full-scale PILOT
- Nuclear demonstrator PIONEER
- First commercial reactor THORIZON ONE



BACKED BY TIER 1 INDUSTRIAL PARTNERS



R&D infrastructure
Spin-off parent company

Leading nuclear research
and irradiation center

Testing, materials
validation and licensing



Operations
Since Aug 2021

Dutch nuclear
operator

Operational expertise
and deployment site



Fuel production
Since Aug 2021

Global nuclear
fuel cycle leader

Fuel development and
recycling



Design & Licensing
Since Feb 2024

Global nuclear
engineering leader

Reactor design, safety
and licensing



Manufacturing
Since Jan 2025

High tech
manufacturing group

Advanced industrial
production supply chain



Construction
Since Mar 2026

Global industrial and
engineering group

Nuclear construction
and project delivery



FRANCE



SELECTED BY FRANCE 2030 AND EU SMR ALLIANCE



Provincie Noord-Brabant

Unique public support

- €24M secured in non-dilutive funding from France 2030, European Commission (Joint Transition Fund in Zeeland), Noord-Brabant
- In-house team focused on non-dilutive financing with strong track record
- Positioned for European support as one of eight prioritized projects by EU SMR Alliance

ACCELERATED ROADMAP FROM PROTOTYPES TO THORIZONE ONE BY 2032



Thorizon Loops 2025

Critical components:
pump and heat exchanger with
molten salt in loops

📍 Thorizon labs Amsterdam,
Eindhoven & Borssele



Thorizon Pilot 2027

Non-nuclear: Representative
full-scale cartridge validating
assembly and operations

📍 Test set-ups HTC (Eindhoven)
and at EPZ (Borssele)



Thorizon Pioneer 2028

Nuclear demonstrator:
First fast molten salt reactor
in Europe

📍 NRG Pallas (Petten)

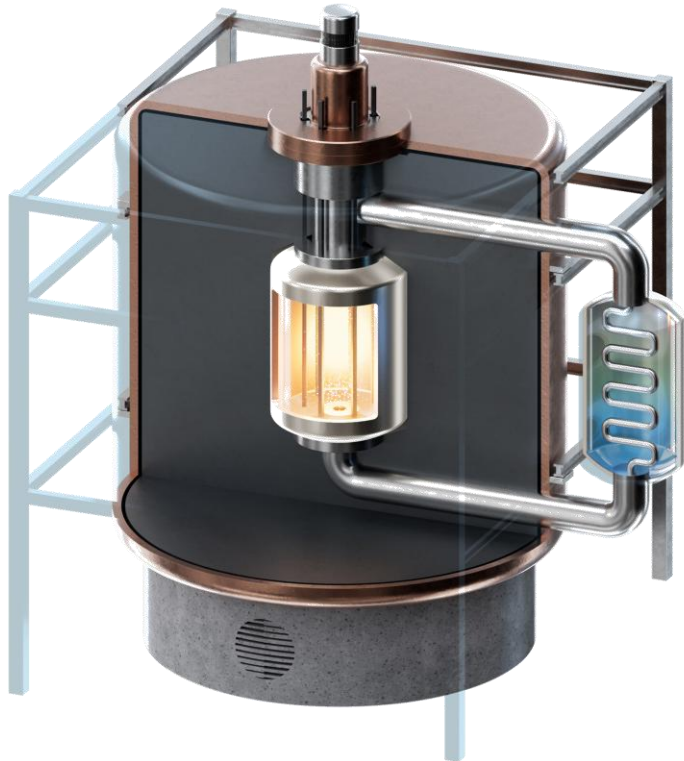


Thorizon One 2032

First full scale,
grid-connected power plant
delivering 100MWe for end-user

📍 Target location existing
nuclear license at EPZ (Borssele)

FAST TRACK TO CONSTRUCTION OF NUCLEAR DEMONSTRATOR IN 2028 ON LICENSED SITE



PIONEER nuclear demonstrator, first molten salt reactor in Europe

- Fast track deployment on site with existing nuclear license, facilities and ecosystem
- De-risking first commercial reactor by validating technology, materials and licensing in a real reactor environment
- Concept design complete and two licensed nuclear sites with site option agreements
- Candidate for European IPCEI funding

ENGINEERED FOR SERIES MANUFACTURING FROM DAY 1

Accelerated and credible path to market

- Using proven materials, components and regulatory frameworks
- Manufacturability being verified by VDL Groep during the design stage
- Fast learning loops with in-house prototyping and external validation



500+ YEARS OF NUCLEAR EXPERTISE

Team of ~25
in Amsterdam



Team of ~25
in Lyon



We combine **deep nuclear expertise** with **industrial execution power**.

Our team includes reactor designers, licensing experts, and hardware engineers with experience from loop design to full reactor deployment. We can **prototype in-house**, move fast, and operate in **cross-functional teams that scale**.

Management team with
deep tech track record

Senior industry leaders in
supervisory board

Professional organization,
ready to scale



THANK YOU

Thanks for the attention

Contact us to learn more about this opportunity



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THORIZON AT A GLANCE

Thorizon is a European deep tech scale-up on a mission to **unlock the full potential of nuclear energy** by overcoming the barriers of cost, safety, and waste. We build a new generation of **small modular reactors** to power industry, strategic compute, and energy independence.

Positioned for the nuclear renaissance



- **Energy security** concerns and are driving unprecedented government backing for next-generation nuclear
- Anchored in the **Netherlands and France**, both strongly investing in new nuclear and innovation.
- Recognized as a **flagship project** in the Dutch competitiveness “Wennink” report

Compelling product and technology advantage



- **100MW** modular reactor delivering electricity and **550°C industrial heat**
- **Competitive costs:** ~€60/MWh electricity and ~€25/MW heat
- **Molten salt** uniquely delivers industrial heat, maximum safety and fuel circularity
- **Unique patented cartridge architecture** enabling safe, manufacturable and operable reactors

Strong traction and external validation



- **EPZ as launching customer** and committed operator
- **Site options secured** for molten salt pilot, nuclear demonstrator and first commercial reactor
- **Backed by tier 1 industrial partners** including VDL Groep, Orano and Hyundai
- Selected by France 2030 and the **EU SMR Alliance**, with €24M secured in non-dilutive funding

Accelerated and credible path to market



- Construction start of **Thorizon One in 2032**, leveraging proven materials, components and regulatory frameworks
- Fast track to construction of **nuclear demonstrator (PIONEER) in 2028** on site with existing license
- **Engineered for series manufacturing** from day one with in-house prototyping and validation by VDL Groep

Strong team and organization ready to scale



- Team of **~50 engineers** combining deep nuclear expertise (500+ years) with industrial engineering experience
- **Supervisory and technical advisory boards** including senior leaders from EPZ, Urenco, EDF, VDL Groep, Orano, NRG Pallas and TU Delft
- **Professional organization** with unique prototyping capabilities and strong execution track record