We enable a paradigm shift for energy production

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Energy
=
Prosperity


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Energy
=
Prosperity

Technology

The energy source of the future - A metal from the Periodic Table

Thorium

A single ball of thorium metal can supply you with all the energy you need your entire life.

$100

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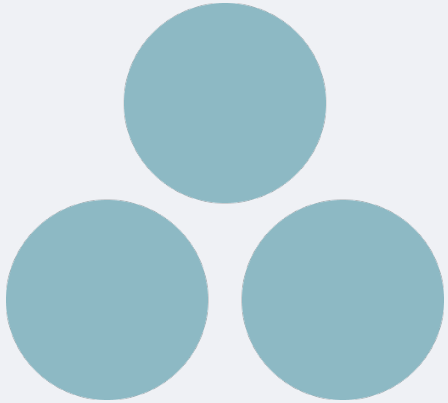
We will never run out

Thorium is more abundant than uranium

Classic nuclear uses U235 and we may run out of it in 200 years time. Therefore it is not considered a renewable energy source.

However thorium can make a breeder reactor and we will run out of materials to build wind and solar before we run out of thorium and the materials needed to build Copenhagen Atomics power plants. Therefore CA reactors are considered über-renewable energy.



Natural Thorium
100% thorium-232

Natural Uranium
99.3% uranium-238
0.7% uranium-235

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We will never run out

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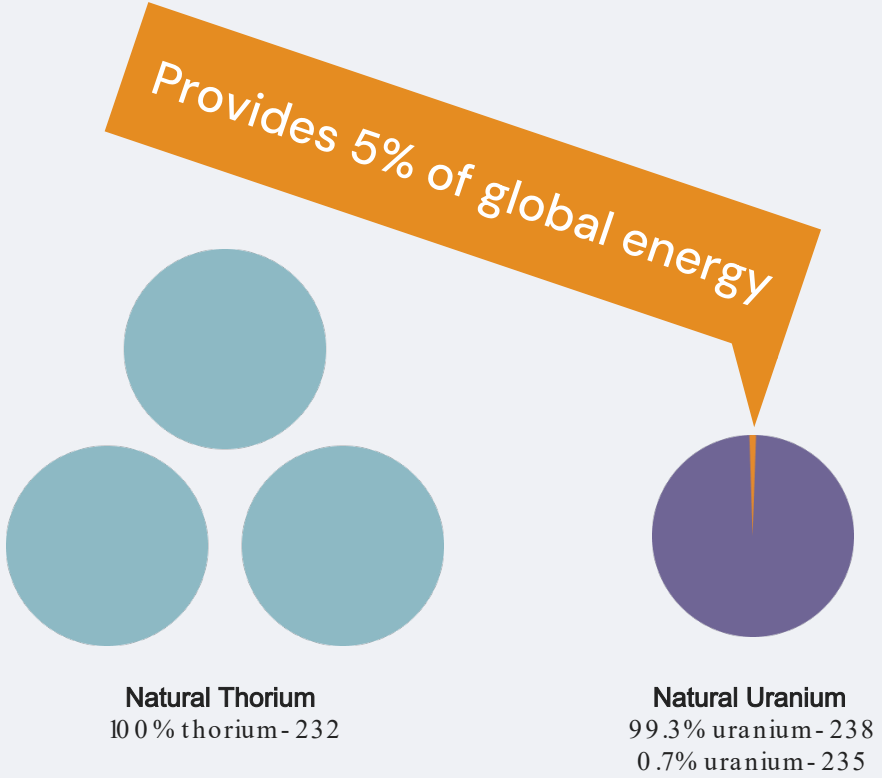

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The goal

Mass manufacturing thorium reactors

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100 MW heat = 42 MW electric

The goal

Mass manufacturing thorium reactors

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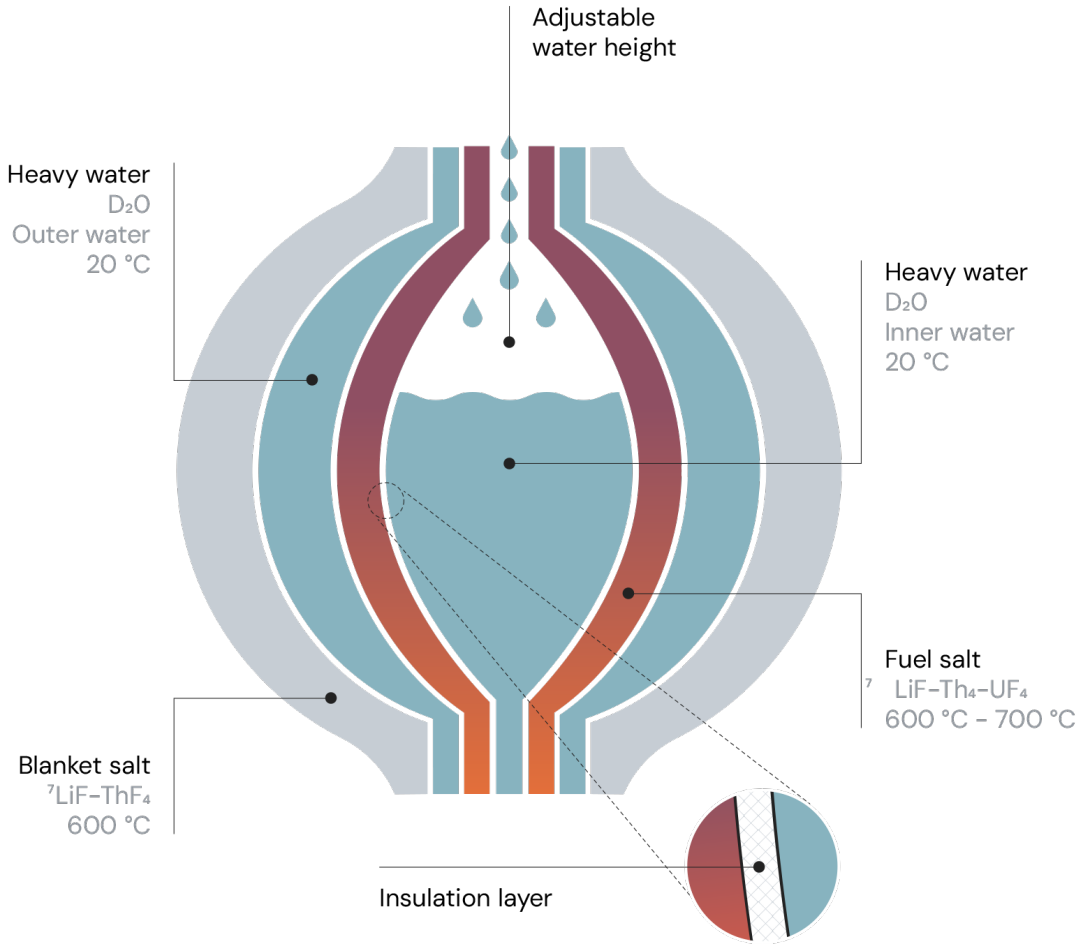
Non-fission prototype

The Onion Core®

The Onion Core®

Cross-section view

- Unpressurized room temperature heavy water moderator
- Double barrier and insulation between salt and heavy water
- segments made from metal or composite material
- Below 2% neutron leakage
- Reactivity control using heavy water level adjustment



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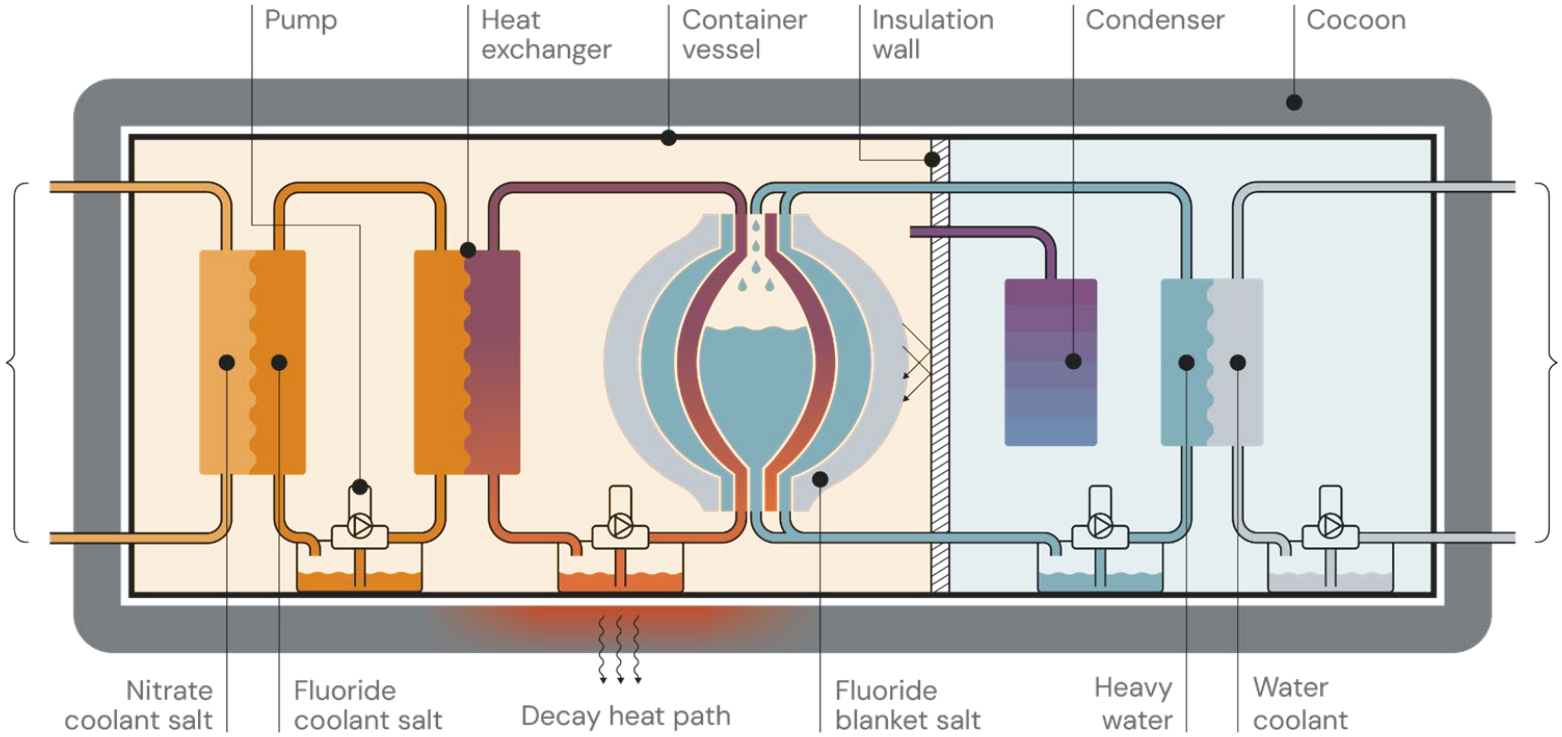
The Onion Core®

Loops and containment



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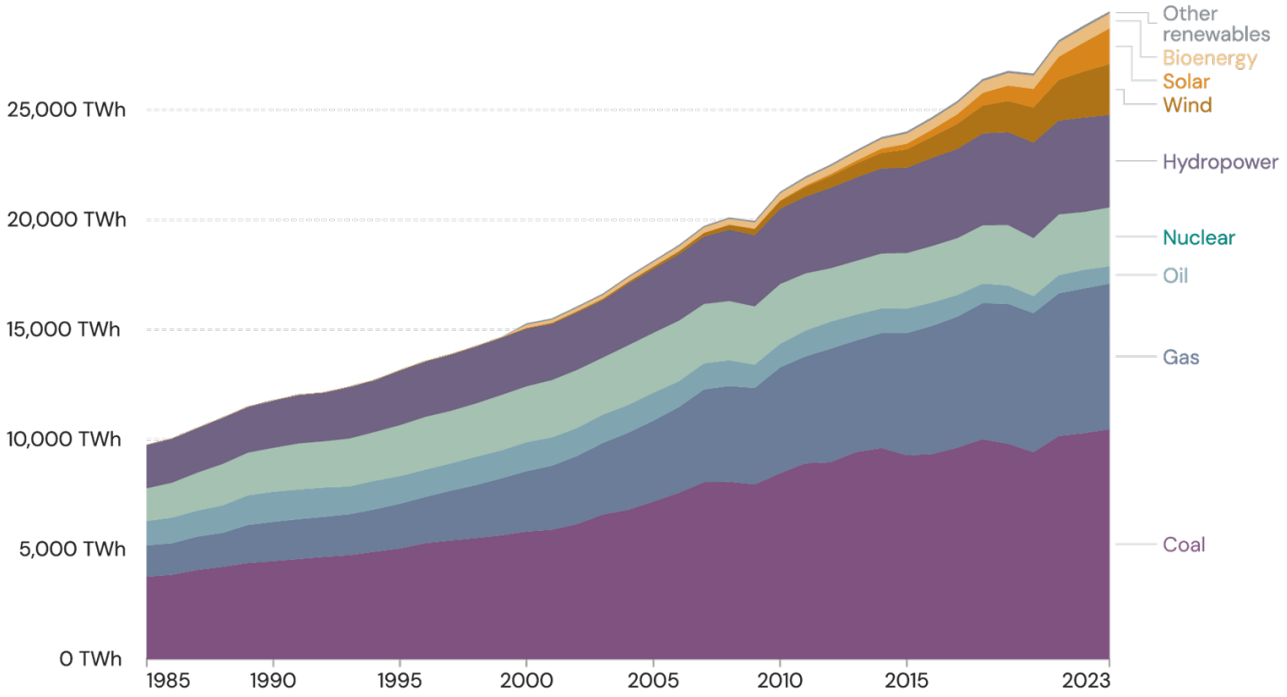
https://youtu.be/27IntvWo4mo

Electricity production by source, World

Measured in terawatt-hours

Today global electricity market:

4.5 trillion USD



Source: Vaclav Smil (2017) and BP Statistical Review of World Energy

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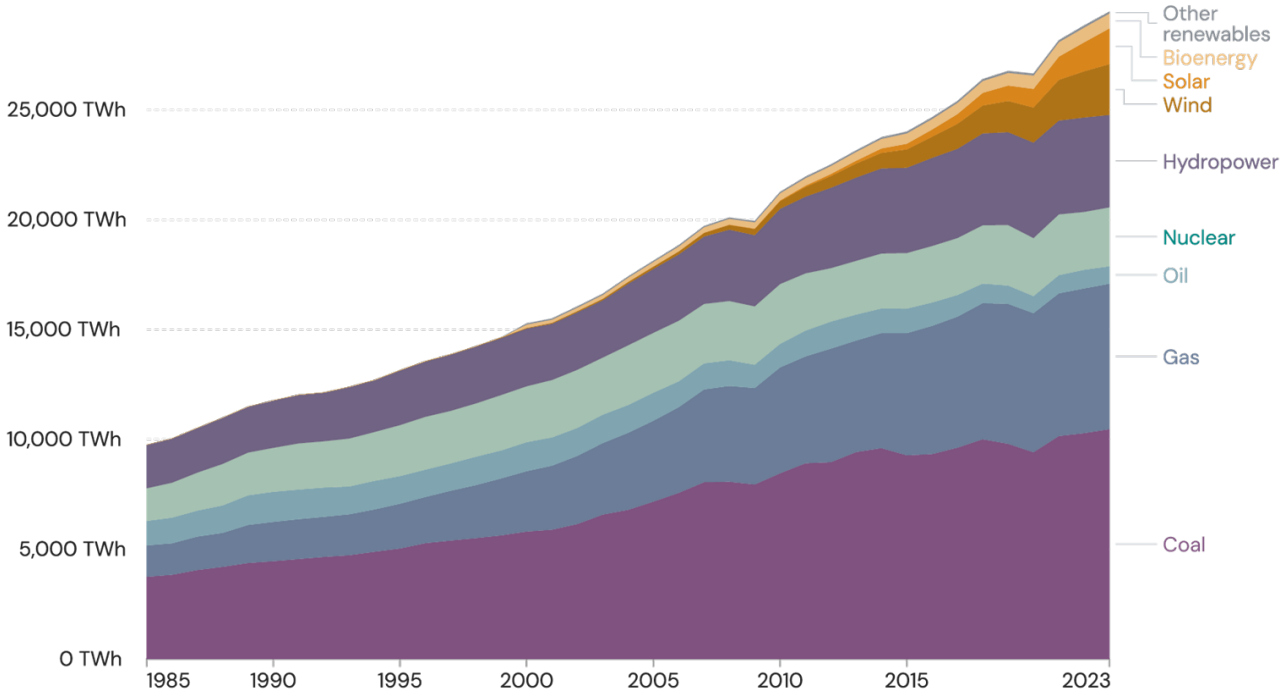
Electricity production by source, World

Measured in terawatt-hours

Today global electricity market:
4.5 trillion USD

Sweden is 0.5% of this market



Source: Vaclav Smil (2017) and BP Statistical Review of World Energy

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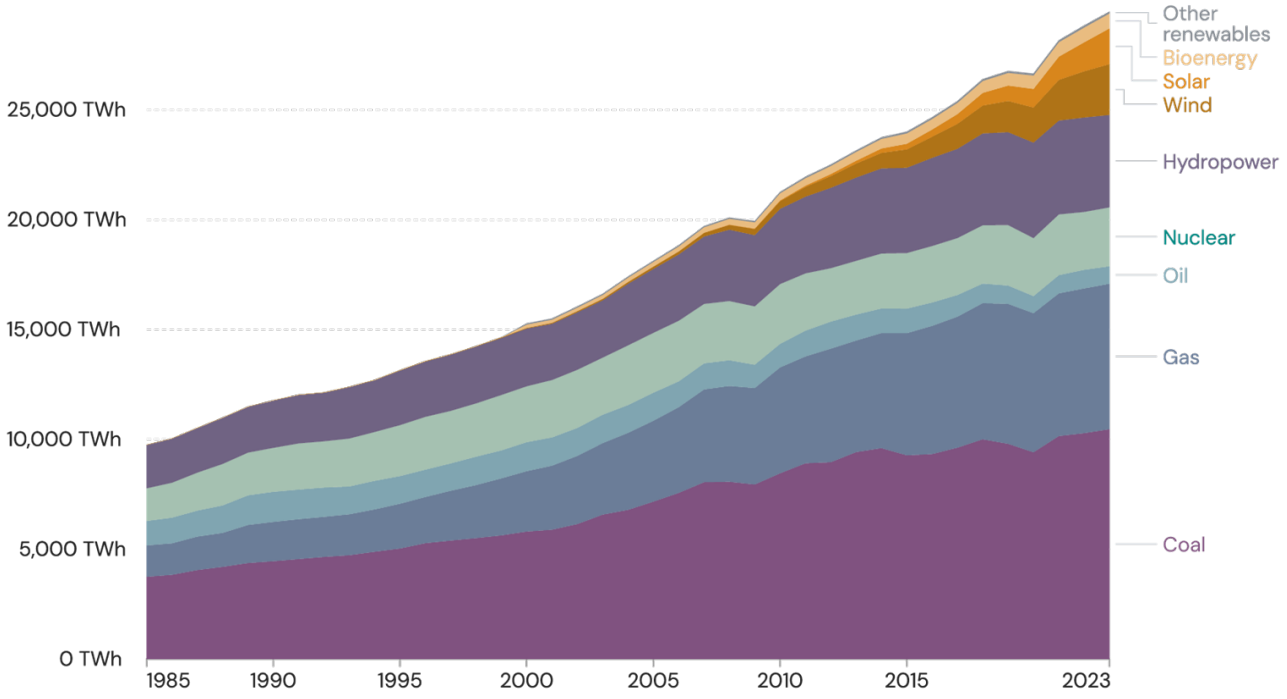
Electricity production by source, World

Measured in terawatt-hours

Growth is ~525 TWh/year = 60 GW = 4 CA reactors per day



https://www.iea.org/reports/electricity - 2024/executive - summary

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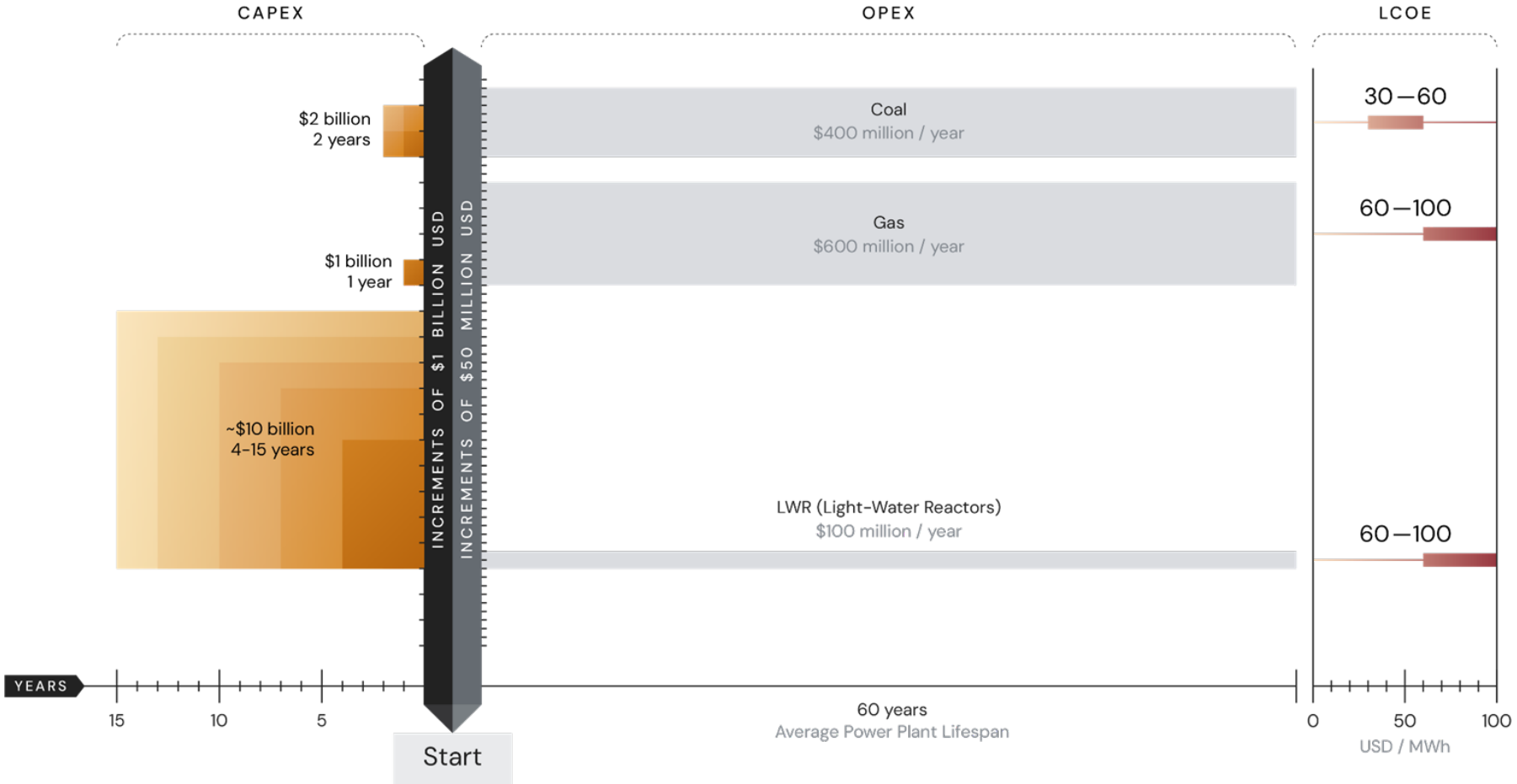
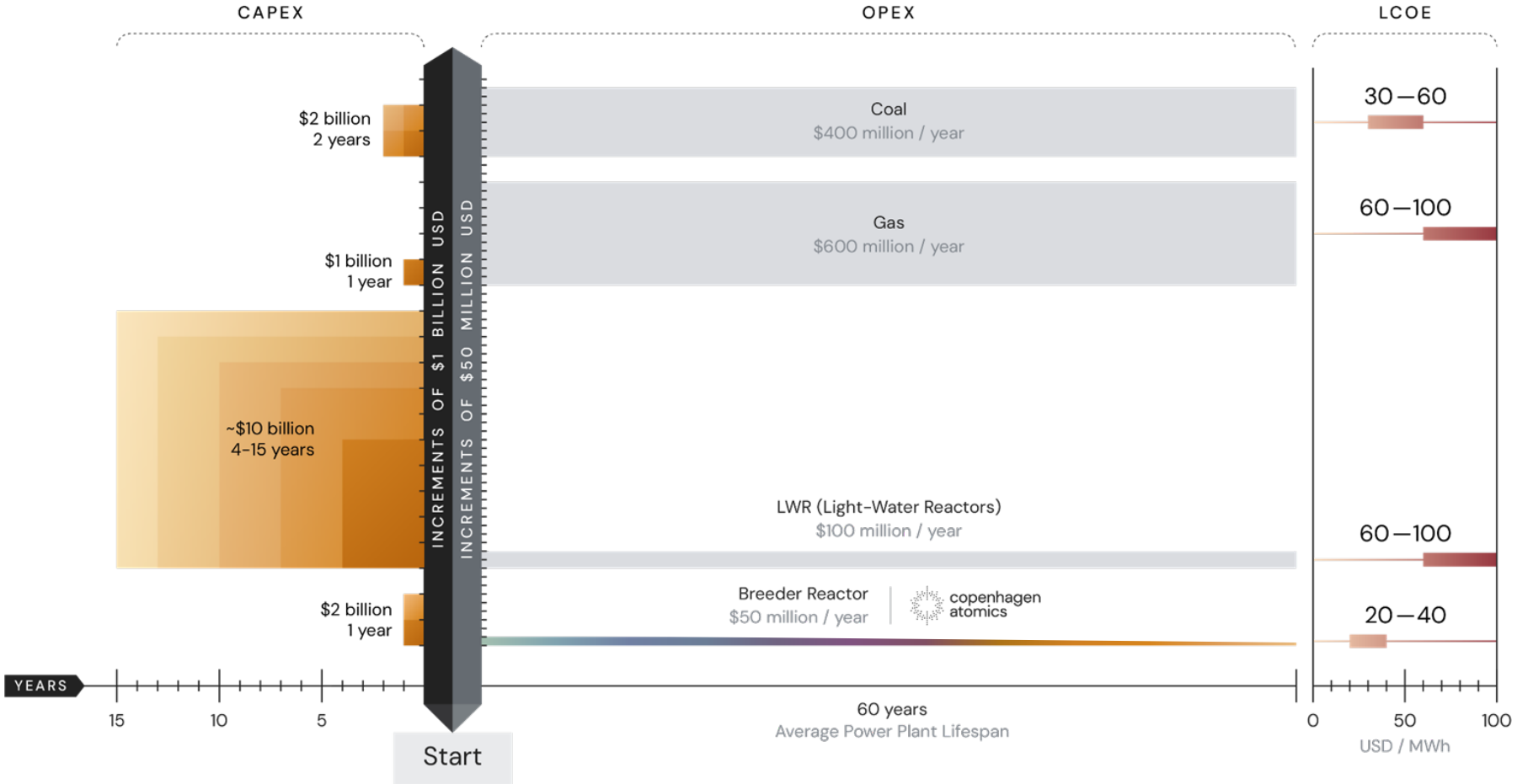
Cost & Time

1GWe

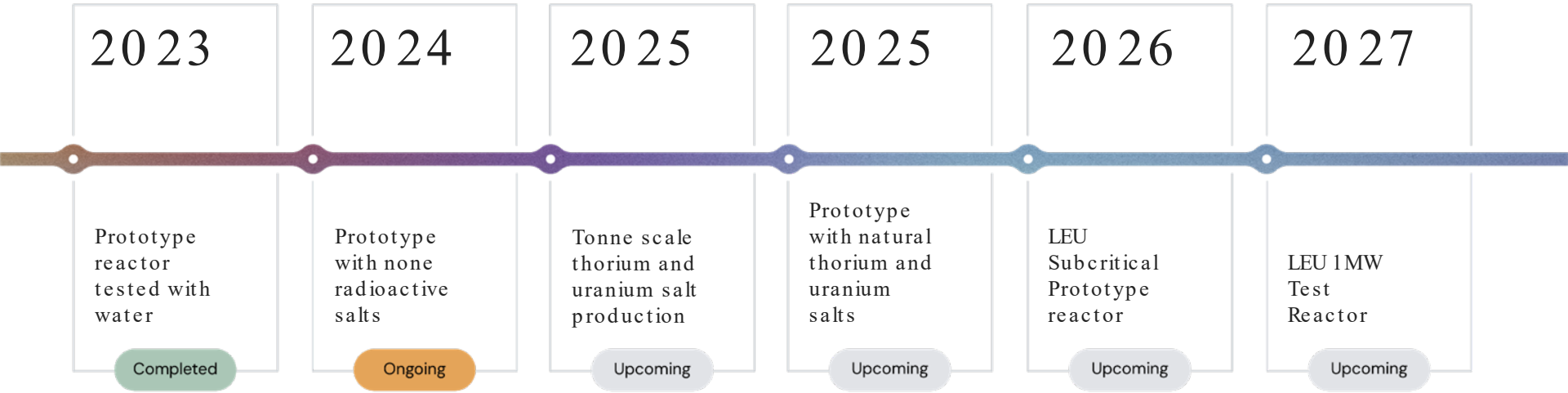


Cost & Time

1GWe



Milestones towards the 1MW test reactor



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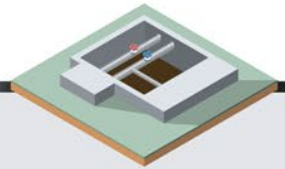
CURRENT STATUS
END OF 2023

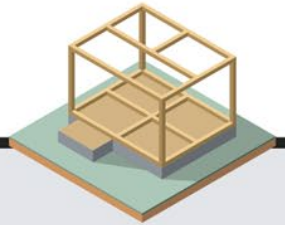
95% DONE



2015-2026

Technology foundation

75% DONE



2020-2024

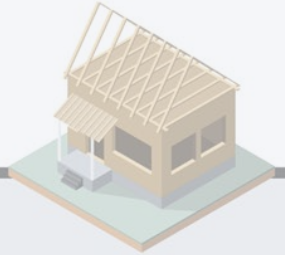
Non-fission prototype reactor

25% DONE

2023-2026

1 MW Nuclear Test Reactor

5% DONE



2025-2029

First commercial reactor

1% DONE

2029-2035

Assembly line reactor production

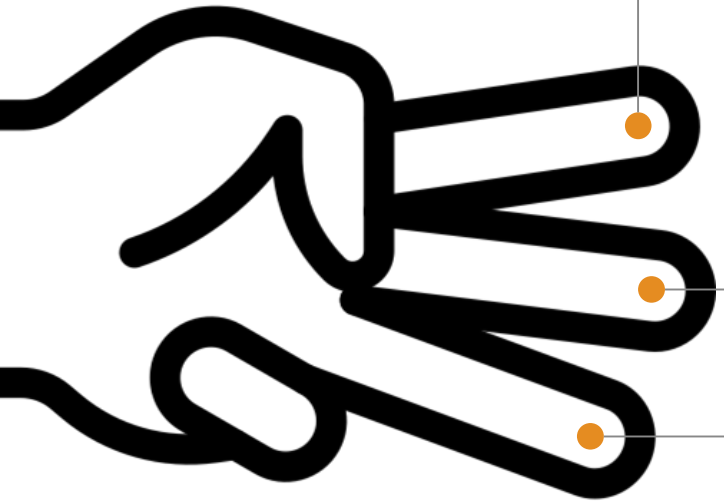
2% DONE

2032-2035

Waste Burner Breeder Reactor

Nuclear technology paradigm shift

This is a new category of commercial nuclear energy!



Lowest cost of energy .
We can match anyone else on price!

No taxpayer investments. Copenhagen Atomics, **finance, build, own** and **operate** the nuclear power plant and we decommission it after end of life.

Copenhagen Atomics reactors are able to **burn nuclear waste** and reduce storage from 100,000 down to 300 years.

Ten times more energy can be generated from spent nuclear fuel in CA reactors than in classic reactors first use.

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Thank you

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