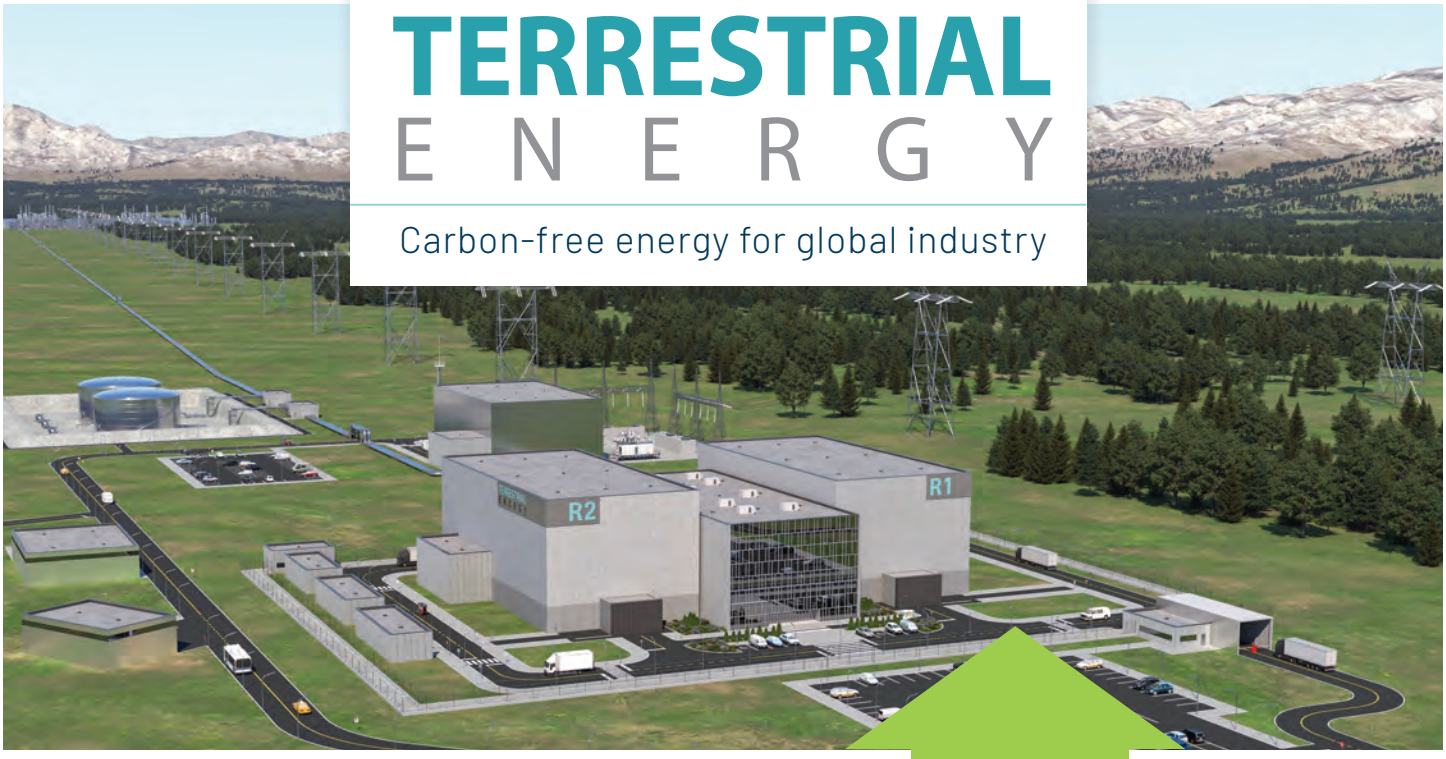
TERRESTRIAL ENERGY

Carbon-free energy for global industry



Terrestrial Energy: Carbon-free energy for global industry

Terrestrial Energy is developing a cogeneration plant for clean and cost-competitive heat and electric power generation that will change how the world produces energy.

> “This is next-generation fission technology: powerful, affordable, carbon-free energy.”

By using demonstrated molten salt technology in an innovative small modular Generation IV fission plant design, we've created an emission-free, sustainable energy source (822 MWt net) that can scale rapidly to meet the industrial world's growing energy demands while avoiding greenhouse gas emissions.

Protecting our environment and securing national energy supplies with cost-competitive domestic sources of energy are more important than ever – we need a clean, up-to-the-task alternative to importing and burning fossil fuels, deployable at scale. Our IMSR® (Integral Molten Salt Reactor) cogeneration technology fulfills that goal and will be key to our clean energy future.

How IMSR® technology is changing the way we look at energy

We have taken a fresh look at fission technology to create an energy source that is far more affordable and cost-competitive. It produces carbon-free thermal and electric energy at the high temperatures necessary to drive green hydrogen and ammonia production at industrial scale, and much more. And we can deploy it swiftly – in a timeframe to meet commercial and climate goals.

IMSR® cogeneration plants are designed to meet today's commercial and societal needs – this Generation IV fission technology is a clean energy game-changer.

2030

- *Licensing, construction and operation of first IMSR® cogeneration plants*
- *Selection of first IMSR® power plant site with first customer*

2022

- Completion of the CNSC's technology review process (VDR) of the IMSR® plant
- $20 million investment from Canadian federal government
- First customer revenues for site-specific IMSR plant engineering

2020

- Former Prime Minister of Canada, Rt. Hon. Stephen Harper, joins Advisory Board
- IMSR® selected by USNRC and CNSC for first joint reactor review
- Secretary of Energy, Dr. Ernest Moniz joins Advisory Board
- Start of CNSC's technology review process (VDR) for IMSR® power plant design

2016

- Successful completion of CNSC's VDR Phase 1 for IMSR® power plant design, a nuclear industry first

2014

- Engaged with the Canadian Nuclear Safety Commission (CNSC); awarded cleantech grant from SDTC, an agency of the Canadian government
- Incorporated

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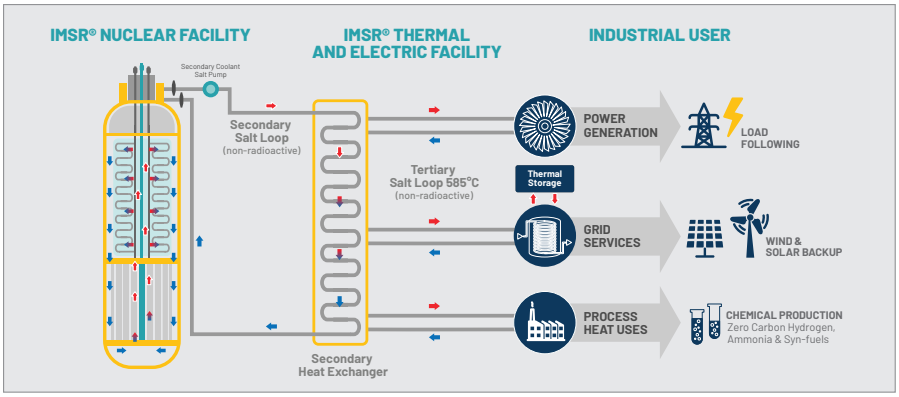

Terrestrial Energy's IMSR® cogeneration plant: Carbon-free, low-cost, high-impact. Flexible and resilient.

IMSR® plants capture the transformative advantages of Molten Salt Generation IV fission technology: They are safe, reliable, carbon-free, low-cost, and are today's alternative to fossil fuel combustion. They supply thermal energy at high temperature (585°C) that many industrial processes require. This carbon-free heat offers nearly a 50 percent game-changing efficiency improvement in electric power generation. With this flexibility and these economic advantages, IMSR® plants are a powerful tool for economic growth, energy security, and net-zero emission goals.

- **Transformative high-temperature energy supply:** IMSR® plants thermal energy supply transforms the industrial use-case for nuclear energy, extending it into the industrial sector for the first time.
- **Efficient:** IMSR® plants generate electric power 50% more efficiently than conventional nuclear plants and that means a much lower cost of electricity.
- **Eco-conscious:** Like all nuclear power plants, the IMSR® produces no greenhouse gases. A small land-use footprint and a low-water requirement minimize environmental impacts and increase siting flexibility.
- **Fast construction:** With a modular simpler design combined with today's advanced manufacturing techniques, each IMSR® plant will take less than four years to construct.
- **High impact innovation:** The IMSR® plant blends long-proven molten-salt technology with innovative enhancements for impressive speed-to-market and economic performance.
- **Standard nuclear fuel:** IMSR® plants use Standard-Assay LEU, standard nuclear fuel, essential for near-term deployment and international acceptance.
- **IMSR is superior fission technology** for today's needs compared to conventional (water-cooled-water-moderated) nuclear technology in use for more than 60 years.

Why Terrestrial Energy is the company to watch

IMSR® development at Terrestrial Energy is advancing with engineers and advisors from some of the world's leading nuclear energy companies, and its executives have decades of world-class experience. Our team has taken a fresh look at fission technology to create a much more affordable, flexible, and cost-competitive energy source. Its carbon-free thermal and electric energy will drive green hydrogen and ammonia production at industrial scale, and much more. And we are deploying it swiftly — in a timeframe to meet commercial and climate goals.

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