TERRESTRIAL ENERGY

Delivering affordable nuclear at scale

JULY 2026

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Investment summary

The most capital-efficient SMR for rapid deployment at scale

Terrestrial Energy is an SMR developer whose proprietary Integral Molten Salt Reactor (IMSR), a Generation IV technology, delivers low-cost nuclear energy. Its use of readily available LEU fuel, modular design for fast construction, and regulatory leadership position it for rapid deployment at fleet scale.

Clean firm high-temperature thermal energy and electric power generated ~50% more efficiently

IMSR Plants supply clean firm thermal energy and electricity directly to industry. High-temperature (585°C) thermal energy supply delivers ~50% greater steam-turbine efficiency than nuclear plants that use light-water reactor technology.

Capital-light model targeting a $2.3T Serviceable Addressable Market

Terrestrial Energy's capital-light model captures a Serviceable Addressable Market growing to $2.3T by 2050 with revenues starting during site development and construction, and extending 50+ years over IMSR Plant operating life with component, fuel, and O&M services supply

Decade plus track record of nuclear plant design, supplier and regulatory development

IMSR Plant now benefiting from Terrestrial Energy's decade plus track record of design, supply chain and regulatory development. Company's management team has delivered multiple consequential milestones including those from engagement with U.S. and Canadian nuclear regulators

The IMSR Plant's unique attributes allow it to address both industrial heat and electricity markets

$1.6T
current SAM

Total Serviceable Addressable Market (SAM) for IMSR Plants is expected to grow 47% to $2.3T by 2050

OECD industrial heat market ($1,200B)

+

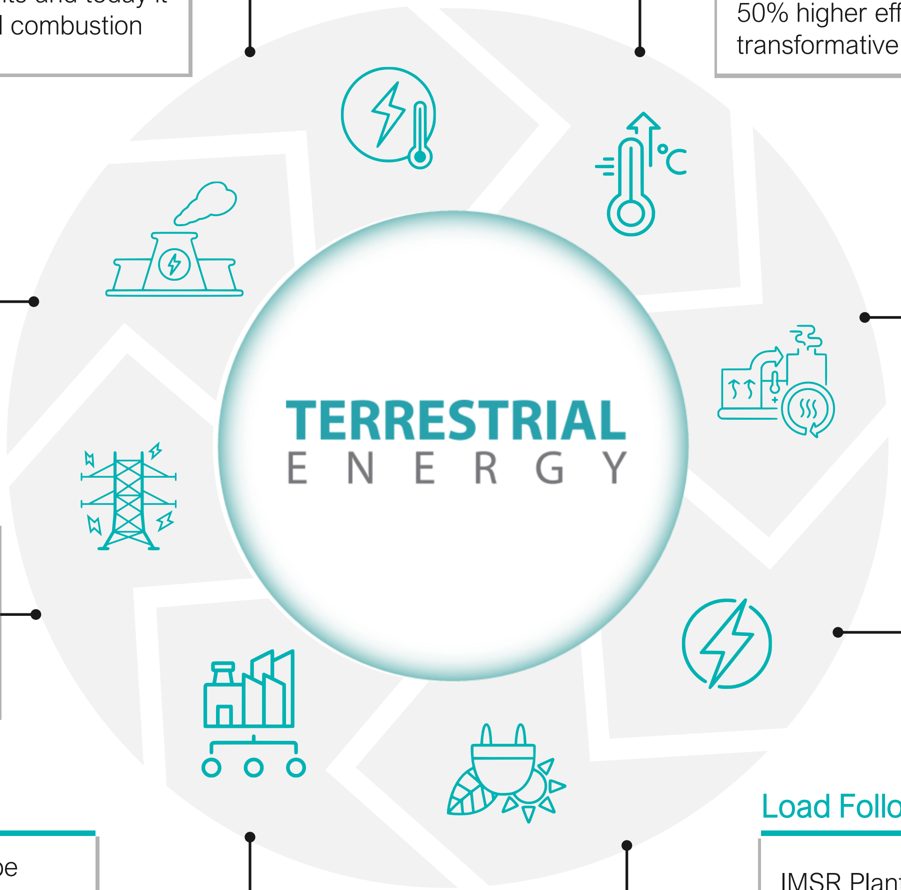
OECD electricity market ($1,100B)

Firm & Low-Cost
Industrials require clean firm low-cost thermal energy at high-temperatures for manufacturing processes. This is beyond the capabilities of LWR nuclear plants and today it is almost universally supplied with fossil fuel combustion

High Temperature
IMSR Plants have high-temperature thermal output, creating an alternative to fossil fuel combustion in many industrial processes. This also enables electricity generation at up to 50% higher efficiency than LWR nuclear plants for transformative economic improvement

50+ Year Life
IMSR Plants have a 50+ year operating life, which is more competitive than coal-fired power generation fuel supply, inclusive of coal and transportation costs

Deployable
IMSR Plants enable distributed generation as they are deployable at or near industrial site, including "behind the fence" for dedicated industrial heat and power supply



Modular
IMSR Plant design is smaller to be right-sized for today's deployment opportunity and modular in design for fast construction and decentralized generation at individual industrial sites, coal plant sites, data centers, for grids

Clean
IMSR Plant provides clean firm electric power for industry and municipal use. It is a logical solution for near- and co-located large data center supply and for coal plant replacement, two large markets

Customized
IMSR Plant heat and steam supply systems can be customized without requiring nuclear regulatory re-approval, to deliver a customized mix of high-temperature heat and low-cost electricity for industrial use

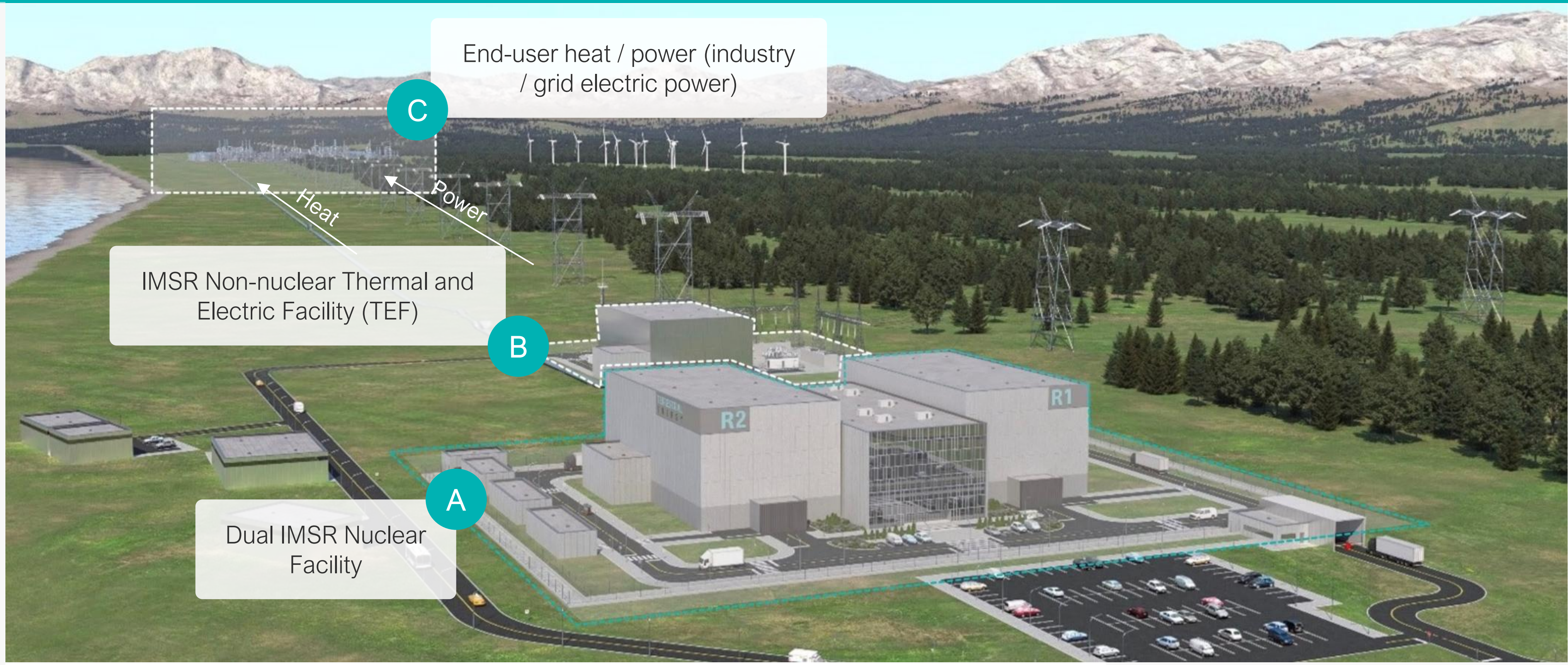
Load Following
IMSR Plant output can rapidly load-follow (i.e., adjusts its output to demand) for hybrid installations integrating intermittent renewable generation to deliver clean firm power to grid

IMSR Plant is designed for fast delivery of energy solutions to industry

Separation of nuclear from thermal and electrical systems allows:

- Allows end-user flexibility to customize thermal and electricity supply
- Provides an attractive pathway for coal plant conversion
- Allows for hybridization with other energy systems, including natural gas and renewables, facilitating the delivery of electric power within five years.

Note: Example is for a dual reactor IMSR Plant. Scaling up is possible.
Source: Company internal view

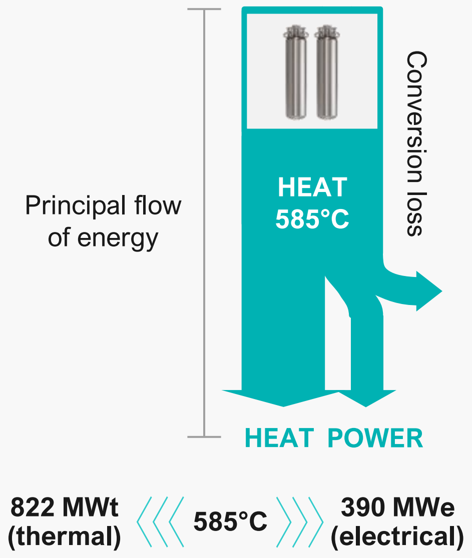


A **Standardized IMSR Nuclear Facility**
- Subject to nuclear regulation
- Standardized, simplified design reduces costs
- 822 MW (net) thermal energy production from twin IMSRs

B **Customized non-nuclear Thermal and Electric Facility (TEF)**
- Converts thermal energy to 585°C 822 MW (net) thermal or 390 MW (net) electric power for commercial supply – or any heat/electric power mix in between
- Steam turbines operate at ~50% greater efficiency than in a plant employing LWRs
- Separate Nuclear Facility & non-nuclear Thermal and Electric Facility (TEF) enables the potential to integrate natural gas as a bridge to rapid commercial operation and use as back-up during nuclear systems' operation

C **Near and co-located generation**
- Data centers
- Chemical and petrochemical plant
- Other industrials requiring clean firm heat & power

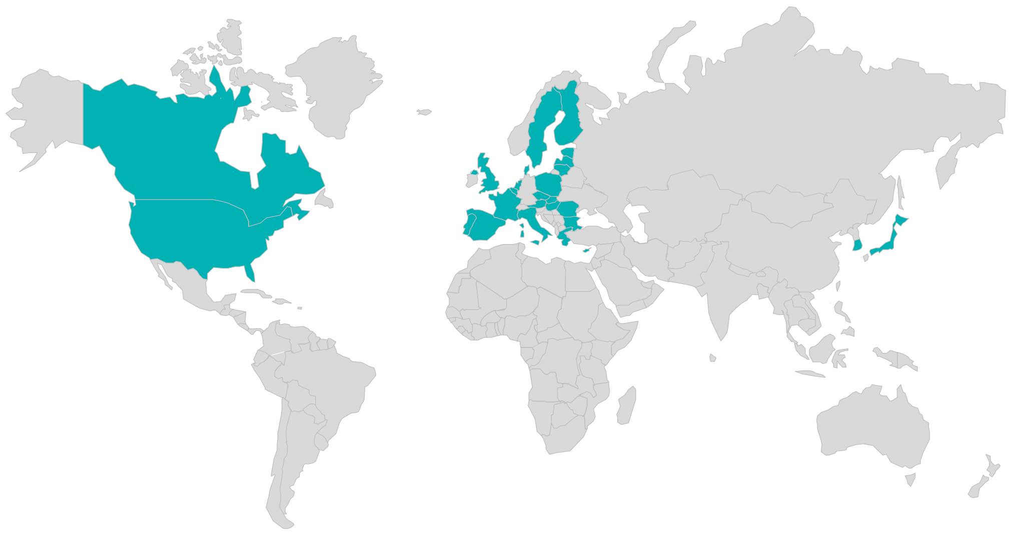
Prospective off-takers
- Electric grid, from coal conversion



IMSR Plant innovation reaches new markets and sectors

The IMSR Plant has the operational capability to supply three key, large market verticals

Many markets showing clear policy support for nuclear energy



1 **Data center power supply**

Increasing demand for computing driven by the AI industry requires near- and co-located clean firm power. IMSR Plants can be installed at near-location sites to supply electricity to data centers at giga-watt scale with baseload reliability, high-efficiency, and zero emissions.

2 **Industrial heat and power**

Today, thermal energy (heat) for industrial processes is produced almost entirely from combustion of oil, coal, and natural gas – presenting a large replacement market to be filled with IMSR Plants.

3 **Coal plant replacements**

IMSR Plant at 390 MWe is suitably sized for data centers, industrial applications, and grid applications, including replacing aging fossil fuel plants. IMSR Plant is land-efficient – requiring a fraction of the physical footprint of LWR technology – which further increases siting flexibility.

The IMSR Plant is small and modular for fast construction and ease of deployment. It is ideally suited for deployment close to point of demand, whether a data center, large industrial plant requiring heat and/or power, or for grid generation at points of congestion, generating clean firm electric power with high efficiency while reducing grid congestion.

Terrestrial Energy's IMSR Plant addresses the weaknesses and limitations of LWR technology with best-in-class Gen IV reactor technology

- While Gen IV reactors are defined by international accord as having capabilities to outperform Gen III reactors (LWRs), MSRs have the potential to outperform in the Gen IV class from the unique *"triple operating advantage"* of high-temperature and low-pressure operation with high inherent safety.
- Terrestrial Energy has captured this triple operating advantage to deliver the most capital efficient SMR in its sector and with its use of LEU the most deployable at scale.

Terrestrial Energy IMSR
Gen IV Molten Salt Reactor (MSR)

Best-in-class SMR capital efficiency:
- ~585 ˚C operational temperature, delivers ~44% (net) thermal efficiency
- Low-pressure operation easing design requirements, lowering manufacturing costs
- High inherent safety
- High power density captures best practices in modular design for fast construction and economic performance

Lower Supply Chain Risk:
- Uses Standard fuel – LEU (<5% enrichment)
- Fuel widely available, no exotic fuel suppliers and bottlenecks to fleet scale, no single point of failure in the supply chain

Favorable Regulatory Positioning:
- Full review by CNSC, a first for a Gen IV SMR
- Two NRC topical reports approved

Gen IV High Temperature Gas Reactor (HTGR)

Lower capital efficiency due to:
- Expensive high-pressure helium cooling systems with inefficient heat transfer limits thermal efficiency to <40% (net)
- Large pressure vessels and oversized containment systems limits use of modularity in design
- Comparatively low power-density results in larger reactor components and poor modularity capabilities

Constrained Supply Chain:
- Requires TRISO with HALEU (15-20% enrichment)
- Nascent supply chain. Limited qualified vendors. Constrained production capacity

No previous licensing for HTGR:
- Mixed commercial Opex

Gen IV Sodium Fast Reactor (SFR)

Lower capital efficiency due to:
- Low pressure but lower temperature operation reduces efficiency to <40% (net)
- Complexities of safe fast reactor operation and management of 1000's of tonnes of hot liquid sodium drive costs
- Comparatively low power-density results in larger reactor components and poor modularity capabilities

Constrained Supply Chain:
- Requires HALEU (15-20% enrichment) fuel at commercial scale, subject to material bottlenecks and geopolitical risk

Mixed regulatory history:
- Mixed safety and commercial Opex

IMSR plant's technology and design choices drive large economic advantages

- High thermal stability of molten salt enables safe high-temperature and low-pressure operation with high inherent safety, which drives high capital and operating efficiencies, as well as power plant revenue and profitability
- TEF flexibility enables integration of natural gas as a bridge to early commercial operation and use as back-up during nuclear systems' operation
- The IMSR Plant at 390 MWe is ideally suited for data centers, industrial applications, and grid applications, including replacing fossil plants
- The IMSR Plant is a modular design for factory-built components and faster on-site assembly. It is land-use efficient – requiring a fraction of the physical footprint of conventional plants – enabling siting flexibility, lower capital costs, and shorter construction schedules

MOLTEN SALT COOLANT

The superior reactor coolant

- High thermal stability
- High radiation stability
- High heat capacity

A

High temperature

Increased Plant revenues

Use of a molten salt coolant and fuel delivers high inherent safety

- Negative temperature coefficient of reactivity for inherent power control and load-following
- Fluid convection supports passive dissipation of fuel heat

B

Low pressure

Lower Plant Capex

No high-pressure nuclear systems, structures, or components

- Plant simplification
- Lower costs, quicker construction time and more financeable

C

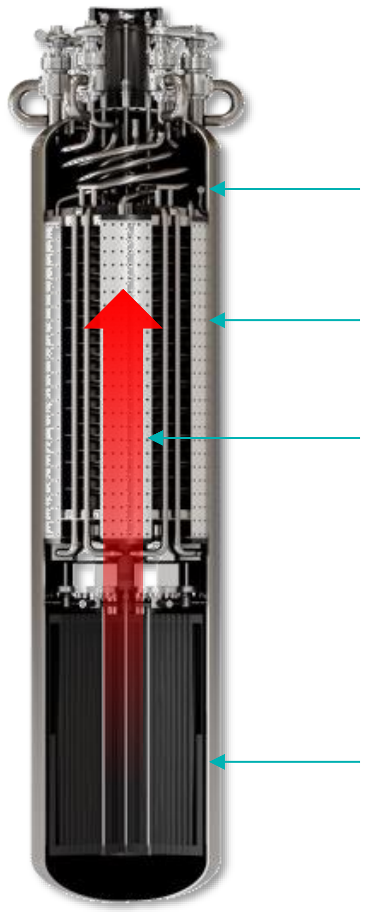
High inherent safety in Plant operations

Operates at high temperature for up to 50% greater steam turbine efficiency vs. LWR technology

- Generates up to 50% more kWh(e)s for more revenues
- More capital efficient and profitable operation

Innovative and Patented Replaceable IMSR "Core-unit" Solves the Key Industrial Maintenance Challenge for the MSR, Releasing the technology's commercial potential

01 | IMSR Core-unit cut-away (illustrative)



Core-unit replaced every 7 years

Primary Heat Exchangers

Flow of salt

Passive cooling system

Graphite Moderator

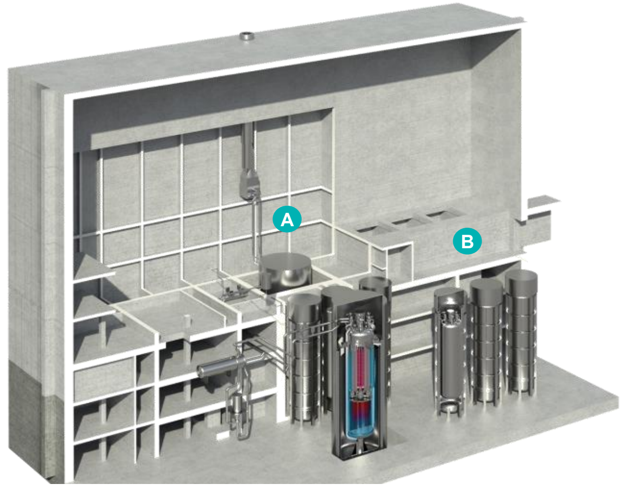
All primary reactor components will be contained in the sealed and replaceable "Core-unit"

- Key innovation is integration of all primary reactor components into a sealed, compact and replaceable reactor vessel designed to have a 7-year operating life:
  - Reactor graphite core
  - Primary heat exchanger
  - Pumps

- This "integral" design captures commercial value through:
  - Maintenance simplicity of "plug-and-play"
  - High capital efficiency

- IMSR Plant has strong IP
  - 90 patents pending or granted across 6 invention families

02 | Cut-away reactor building, one of two in the IMSR Plant (illustrative)



The sealed IMSR Core-unit innovation delivers safety and operational simplicity for commercial operation

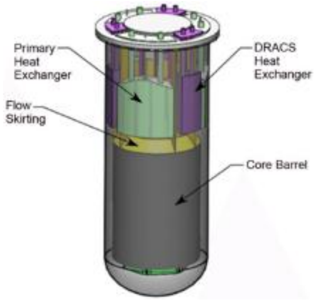
- Each Reactor Building houses one reactor (A) operating in one of two operating silos along with storage for six IMSR Core-units (B) arranged in two rows of three.
- At the end of each 7-year cycle, the spent IMSR Core-unit is swapped with a new one previously installed in the adjacent operating silo in a planned, safe, and efficient manner.
- Consequently, eight IMSR Core-units can be operated sequentially over the 56-year plant lifetime

IMSR is Built on 65 Years of National Lab Proven and Demonstrated MSR Technology

1958-1969

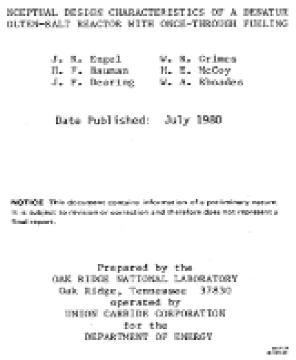
Molten Salt Reactor (MSR) research program started in the 1950s[1, 2]

- Molten Salt Reactor Experiment (MSRE) at Oak Ridge National Laboratory (ORNL) highly successful and lays foundation for future molten salt reactor designs
- Built/operated for 13,000 hours



2010

- ORNL pre-conceptual design for Small Modular Advanced High-Temperature Reactor (Sm-AHTR), using solid fuel and molten salt cooling[4]
- Key innovation: Cartridge core design



NCEPTUAL DESIGN CHARACTERISTICS OF A DENATUR
OLTEN-SALT REACTOR WITH ONCE-THROUGH FUELING

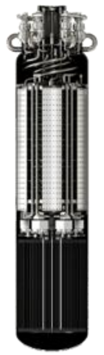
J. R. Engel W. R. Grimes
H. F. Bauman H. E. McCoy
J. F. Dearing W. A. Rhoades

Date Published: July 1980

Prepared by the
OAK RIDGE NATIONAL LABORATORY
Oak Ridge, Tennessee 37830
operated by
UNION CARBIDE CORPORATION
for the
DEPARTMENT OF ENERGY

1980

- Denatured Molten Salt Reactor (DMSR)[3] conceptual design developed at ORNL
- Key innovation: Use of SALEU with a once-through fuel cycle for strong proliferation defenses



>2012

Terrestrial Energy's IMSR combines these critical innovations

- Use of SALEU fuel with a once-through fuel cycle
- Integral core architecture

IMSR is a molten salt reactor that uses:

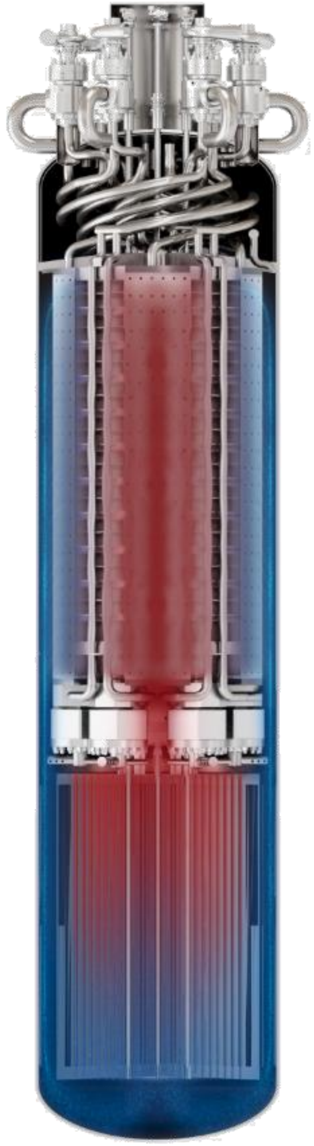
- Fluoride salt chemistry
- SALEU-fueled once-through fuel cycle
- Thermal spectrum
- Graphite moderator
- Integral reactor core architecture

1. "A Look Back: The Molten Salt Reactor Experiment." *ORNL*, 01 June 2016, https://www.ornl.gov/molten-salt-reactor/history.
2. "ORNL-2474 Molten-Salt Reactor Program Quarterly Progress." *ORNL*, https://energyfromthorium.com/pdf/MSRP-TOC.pdf.
3. Engel et al. "Conceptual Design Characteristics of a Denatured Molten-Salt Reactor with Once-Through Fueling." *ORNL*, July 1980, https://www.osti.gov/servlets/purl/5352526.
4. Greene et al. "Pre-Conceptual Design of a FluorideSalt-Cooled Small Modular Advanced High-Temperature Reactor (SmAHTR)." *ORNL*, Dec. 2010, https://info.ornl.gov/sites/publications/files/Pub26178.pdf.

Source: ResearchGate; ORNL; Company

Compared to LWR Technology, IMSR Offers Transformative Advantages on a Range of Technical and Economic Factors

- IMSR's key technology advantage is from the use of a molten salt coolant and fuel
- Molten salt is a superior coolant relative to traditional cooling mechanisms of LWR technology (based on water, pumps, actuators, etc.) and is foundational to the compelling economic and use-case advantages of the IMSR Plant



	IMSR Plant	LWR Plant
Coolant	Molten Salt	Water
Temperature of Thermal Supply	585°C	~270°C
Net Thermal Efficiency of Electricity Generation	44%	~30%
Pressure	Low: 1 bar (atmospheric)	High: 55-150 bar
Application	Industrial heat & electric power	Electric power only
Modularity	Standardized, factory prod.	Bespoke on one-off basis
Inherent load-following	Yes	No
Construction & Commissioning Time	Under 4 Years	~10 Years
Unit Capital Cost	~$1-2 B upfront[1]	Over $10 B upfront
Capacity (net)	822 MWt / 390 MWe	1,000+ MWe
Levelized Cost of Heat ($/MMBTU)	8.60	N/A
Levelized Cost of Electricity ($/MWh)	69	Over 140[2]
Fuel Cycle	7 years	18-24 months
Waste	32% less fission product waste per kWh(e) by mass	Baseline waste quantities

1. Range for IMSR reflects estimated unit capital cost to the owner-operator at Nth Commercial Plant (NCP) status based on Terrestrial Energy internal estimates.
2. "Levelized Cost of Energy+." *Lazard*, June 2024, https://www.lazard.com/media/xemfey0k/lazards-lcoeplus-june-2024-_vf.pdf.

Business Model

Revenues start well before construction at site development project stage and last for the entire operation of the plant

Terrestrial Energy's business is to:

- Supply engineering services for construction and operation of IMSR Plants
- Supply key nuclear components and fuel for construction and operation of IMSR Plants
- Provide a long-term supply of replacement IMSR Core-units and IMSR fuel, as well as operating and maintenance (O&M), and decommissioning services

Terrestrial Energy's customers are site developers, IMSR Plant project developers, and owner-operators

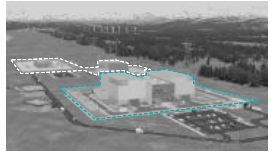
Full project lifecycle

Site and Project Development

Development Scope and Services

- Terrestrial Energy's scope: 30% of total IMSR Plant cost
- EPC Firms, component suppliers, service providers: 70% of IMSR Plant cost
- Supply of services
- Supply of components

Site selection & Feasibility Contract

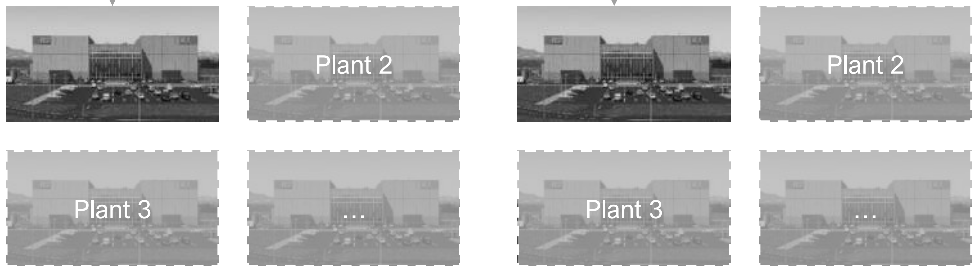


Site-specific Engineering and Licensing Support Contract

Pre-construction revenues

Engineering Construction and Procurement Contract

Construction



Customer A
Investors

Customer B
Investors

IMSR Plant Operations

Life of Plant Services

- IMSR Core-unit supply every 7 years
- IMSR Plant O&M services
- IMSR Fuel Salt
- Refueling services

IMSR Plant Maintenance Contract

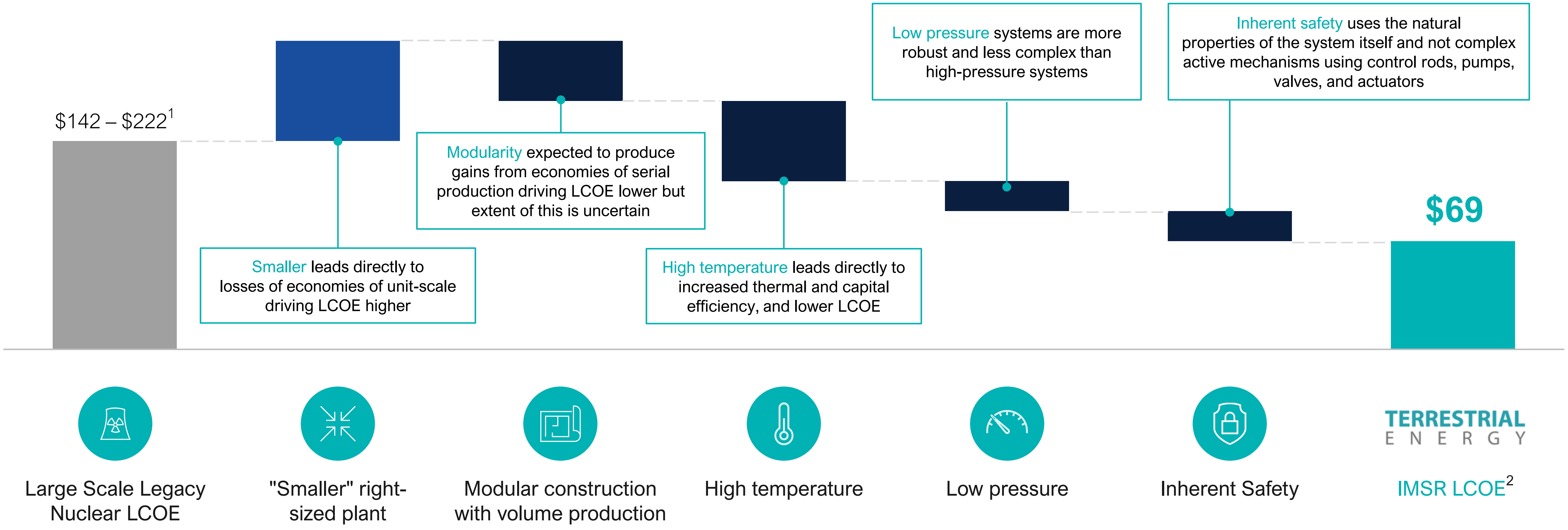
IMSR Plant Supply Contract

Supply of IMSR Core-units

56-year plant life

- Plant construction is financed by IMSR Plant site and project developers, and off takers
- End-users are industrial, technology, municipal, and utility off takers requiring firm, clean, low-cost high-temperature heat and/or electrical power from a near-site location
- Standardized and modular nuclear systems and components support fast plant construction, and time and cost efficiencies when scaling deployment across multiple sites with minimal site-specific customization of nuclear systems

IMSR Technology Fundamentals Drive Down the LCOE – Illustrative



1. "Levelized Cost of Energy+." *Lazard*, June 2024, https://www.lazard.com/media/xemfey0k/lazards-lcoeplus-june-2024-_vf.pdf.
2. IMSR LCOE is Terrestrial Energy's internal estimate at NCP status.

IMSR uses readily available and inexpensive low-enriched uranium (LEU) in its fuel

Low-Enriched Uranium LEU[1]		High-Assay Low-Enriched Uranium HALEU (15-20%)
<5% U-235	Uranium-235 enrichment level	15-20% U-235
$2,700 / kgU[2]	Cost	$32,600 / kgU[2]
Terrestrial Energy IMSR (Gen IV), Gen II/III/III+ (light-water reactors)	Typical use case	Most other Gen IV reactors today require HALEU at 15-20% U-235
Known and straightforward (both production and transportation)	Regulatory requirements	Complex and uncertain (many regulatory protocols such as waste disposal and transport not yet developed)
Centrus (US) Framatome (US) Global Nuclear Fuel (US) Westinghouse (US) / Springfields (UK) Orano (Europe) Urenco (Europe)	Key suppliers for fleet deployment	US production insignificant compared to required quantities. Existing enrichment facilities cannot be modified to produce HALEU (15-20%), entirely new facilities with higher Class 2 security[3] will require years to establish at high cost.

1. Also referred to as "SALEU" or standard assay low enriched uranium, which contains less than 5% U-235
2. Norman et al. "How Much Does it Cost to Develop New Nuclear Fuel Capacity." *Third Way*, 28 June 2023, https://www.thirdway.org/blog/how-much-does-it-cost-to-develop-new-nuclear-fuel-capacity.
3. "Physical Security Requirements for Facilities with Category II Quantities of Special Nuclear Material Informational Sheet." NRC, https://www.nrc.gov/docs/ML2117/ML21172A282.pdf.

IMSR's triple advantage – high-temperature, low-pressure operation with high inherent safety – and using LEU to deliver best-in-class capital efficiency with speed to fleet scale

585 °C

IMSR heat supply is best-in-class, vs 270-299 °C from Gen III+ and 440-585 °C from other Gen IV competitors

44% vs 30%

Electricity is generated up to ~50% more efficiently than light water reactor nuclear power plants

$8.6

Exceptional levelized cost of heat (LCOH) $8.6 per MMBtu1

$69

Exceptional levelized cost of electricity (LCOE) $69 per MWh(e)1 for dispatchable/ base load applications

822 MWt

IMSR Plant provides co-located or near-location cogeneration at industrial scale (822 MWt / 390 MWe net)

65 years

IMSR builds on over 65 years of proven, prototyped and demonstrated molten salt technology using innovative enhancements applied to the U.S. DOE's Oak Ridge National Lab's base design

50+ years

Long operational life of IMSR Plants

Fuel at standard enrichment

IMSR Plant uses low enriched uranium (LEU) in its fuel, readily available from North American and Western European sources

Contracts entered with leading group of suppliers for services and components

- Blue-chip service and major component suppliers support deployment readiness
- Awards to top-tier suppliers of engineering and operations services inspire nuclear market confidence
- Predominantly U.S. supply chain enables best use of local economic benefits and tax credits

Plant & Infrastructure	KSB, L3HARRIS, ptc, SIEMENS energy, BWXT Canada Ltd.
Nuclear fuel	orano, Westinghouse, urenco* Nuclear Stewardship, Cameco*
R&D and System Testing	NRG Nuclear. For life., The University of Tennessee Knoxville, European Commission, INL Idaho National Laboratory, Pacific Northwest National Laboratory, ANSTO, Argonne National Laboratory, Virginia Tech, Oak Ridge National Laboratory
Graphite	sgl carbon, IBIDEN, MERSEN, TOYO TANSO Inspiration for Innovation, FRAZER-NASH CONSULTANCY A KBR COMPANY
Services	TÜVRheinland® Risktec, KINECTRICS, NUMERICAL ADVISORY SOLUTIONS a Zachry Group company, AECON, HATCH, AECOM

*Tier 2 supplier; subcontractor to Westinghouse

Terrestrial Energy is scaling up its IMSR plant project pipeline

- Market demand and policy developments are driving deployment in major markets
- Terrestrial Energy recent developments illustrate path-to-market, and strategy for fast deployment of an IMSR Plant fleet operating in the 2030s

Mining
Ammonia and hydrogen
Data centers
Capital goods
Utilities
Industrials

10+ Projects

- Off-takers/customers
- Consortium Partners
- Site owners

Basic materials
Petrochemicals and plastics
Marine propulsion
Chemicals
Fossil fuel retrofits
Merchant power

15+

10 projects already formed from 15+ consortium relationships involved in projects, including potential customers seeking IMSR to meet power requirements and capable of delivering further projects.

50+

Portfolio of 50+ consortium relationships with the potential to deliver additional projects to deploy IMSR Plants covering a range of deployment use-cases including co-location for data center power supply, co-located industrial plant heat and power supply, and distributed on-grid generation

Recent commercial developments

CNSC VDR
April 2023
Completion of CNSC's regulatory review of IMSR Plant

MOU
November 2024
Signs MOU to collaborate on IMSR Plant development and deployment

Public Announcement
February 2025
Texas A&M announces plans to site a commercial IMSR Plant at its RELLIS campus

Public Announcement
June 2025
Partners with Ameresco for US site identification, project development, design, licensing, construction and operation of IMSR plants

Public Announcement
September 2025
NRC completes Safety Evaluation of IMSR Principal Design Criteria and approves Topical Report

Public Announcement
September 2025
Selected for DOE Office of Nuclear Energy Advanced Pilot Program and Fuel Line Pilot Program, advancing IMSR nuclear supply chain strategy

Public Announcement
November 2025
Signed contract with Westinghouse supporting IMSR fuel supply chain development

Public Announcement
May 2026
NRC issues its Safety Evaluation Report (SER) approving the Company's Postulated Initiating Events (PIE) Topical Report

Public Announcement
May 2026
Announces collaboration to develop a best-in-class pairing of data centers with co-located advanced nuclear plants targeting 4GWe.

Public Announcement
June 2026
Texas A&M signs site and R&D agreements to facilitate testing and cover projects, including the planned commercial IMSR Plant.

Tracking 2026 guidance. Catalysts and positioning for long-term growth

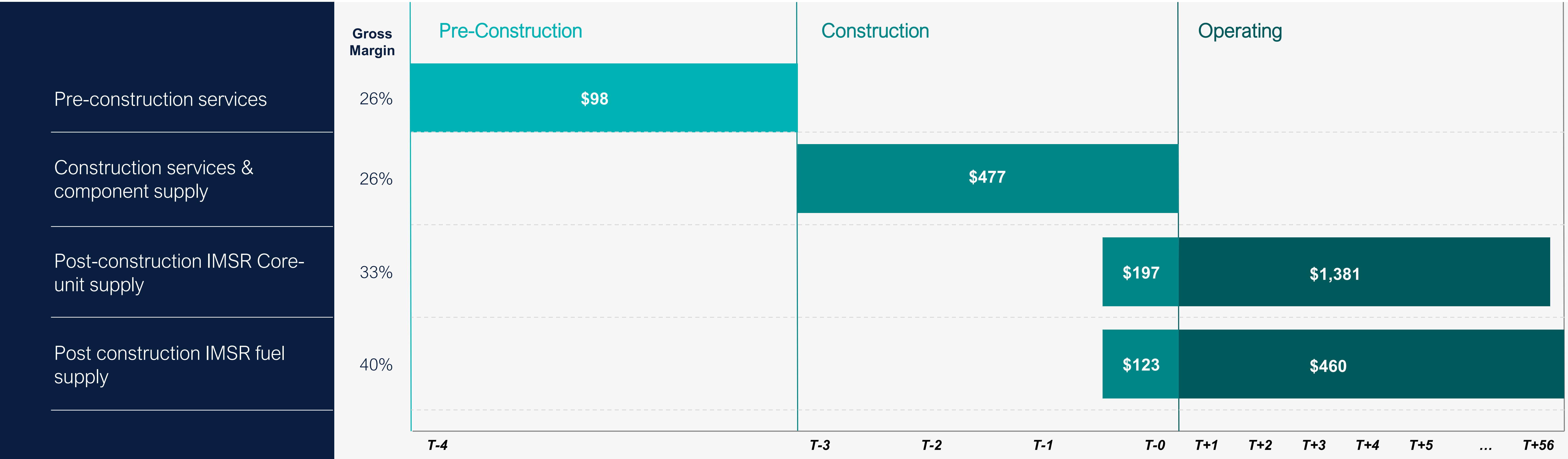
PILLARS	2026 DRIVERS	EXPECTED FUTURE DRIVERS
Engineering developments & regulatory approvals	• NRC approves Principal Design Criteria and Postulated Initiating Events methodology Topical Reports and issues Safety Evaluation Reports (SER) • Submission of at least two further IMSR Topical Reports each further readiness of NRC operating license application • Construction of DOE partnership TETRA pilot reactor	• Construction and operation of DOE partnership TETRA pilot reactor • Submission and approval of NRC Construction Permit for commercial IMSR Plant unlocks construction start and construction-phase revenues • Testing data from NRG, TETRA and others, including testing at Texas A&M, advances readiness for NRC Operating License applications for commercial plant operation • Readiness for NRC Operating License demonstrated through series of Topical Report submissions and NRC SER issuance. • NRC Operating License approvals unlock commercial operation of IMSR Plants, operating-phase revenues, and a clear path to repeatable construction and licensing process for further plants and deployment at scale
Supply Chain developments and expansion	• Suppliers announced for TETRA & TEFLA, including for engineering and construction, and for component and fuel supply • Graphite irradiation testing at NRG Petten advances for material qualification	• Construction and operation of DOE-partnership TEFLA fuel line pilot establishing blueprint for proprietary fuel production • Sites and suppliers for IMSR Core-unit manufacturing and fuel production plants selected and construction commences supporting commercial operations of first IMSR plants
IMSR Plant project pipeline developments and expansion	• Riot Platforms MOU partnership established for best-in-class SMR and data center pairing incorporating use of NG supply bridge • Details of 1 to 3 additional IMSR Plant projects to be announced in FY 2026 expanding indicative power capacity of project pipeline • Land-use & R&D agreements announced with the Texas A&M System to secure site control of ~44 acres at RELLIS enabling completion of site characterization studies required for NRC Construction Permit application • Engineering & project management office opened at RELLIS	• Series of preliminary power off-take contracts and MOUs catalyze IMSR Plant project formation driving project development to pre-construction and construction phase revenues • Milestone-rich IMSR Plant project development schedules repeatedly demonstrates supplier, construction and regulatory execution, as well as market-demand pull across data center, industrial heat, and coal-replacement SAM verticals • Progress with initial IMSR plant projects from start of construction and operation become powerful catalysts for IMSR Project portfolio expansion to fleet scale deployment in 2030s with a path to a ~$2.3T SAM in 2050

Terrestrial Energy's capital-light business model taps four revenue streams across the IMSR Plant's 50+ year lifecycle and starts before construction

Segment	Description	Cumulative revenue $M	*Gross Margin %*	*% of Revenue*
Pre-construction services	Site selection, site and use-specific engineering studies for construction and licensing planning preparation	$98	*23%*	*4%*
Construction services & component supply	Supply of services and components as set out in the Company's Product Delivery Model for construction and commissioning of an IMSR Plant	$477	*26%*	*17%*
Post-construction IMSR Core-unit supply	Supply of replacement IMSR Core-units every seven years. Contracted ongoing O&M services to the power plants for the duration of operational life (50+ years)	$1,578	*33%*	*58%*
Post construction IMSR fuel supply	Supply of IMSR Fuel Salt for the ongoing operation of an IMSR Plant	$583	*40%*	*21%*
Cumulative Totals		~$2.7B	*33%*	100%

Note: Unit economics reflect Terrestrial Energy management estimates at NCP status.

Terrestrial Energy's Capital-Light Business Model Taps Four Revenue Streams Across the IMSR Plant's 50+ year Lifecycle



	Pre-Construction	Construction	Operating
Revenue	$98	$797	$1,840
Gross Profit	$23	$240	$644

A proven leadership team

Terrestrial Energy Leadership

A leadership team with extensive experience across scientific, commercial, and policy realms

Simon Irish

CEO, Director

- Extensive investment banking and investment management experience
- Former U.S. investment head of a leading global investment business

David LeBlanc, PhD

CTO, Director

- Globally recognized expert on molten salt reactors
- Sole private sector member to Gen IV International Forum inter-government research group on advanced reactors

William Smith, P. Eng.

COO

- Over 40 years of experience in nuclear energy
- Former SVP of Siemens Energy Canada
- Former VP at Ontario Power Generation

Brian Thrasher, CPA

CFO

- Over 25 years of financial management experience holding executive management positions at multibillion-dollar companies
- Former CFO at Hilco Transport, Inc.

Robin Rickman

VP Business Strategy

- Over 40 years of nuclear experience, including with U.S. Navy/DoD, U.S. DoE, and private sector
- Former Director of Westinghouse New Reactor Projects

Sarfraz Taj

VP Business Development

- Over 20 years of nuclear experience, including supporting operating reactors, project development, and corporate transactions
- Former Director of M&A and Strategic Projects at Constellation Energy

A proven leadership team

Terrestrial Energy Leadership

A leadership team with extensive experience across scientific, commercial, and policy realms

Iftikhar Haque

VP Nuclear Supply Chain

- Over 35 years of supply chain experience, over 20 in the utilities sector as a supply chain leader
- Former VP supply chain at multiple utilities and suppliers

David O'Keefe

VP Business Development & Project Management

- Over 25 years of experience in the energy industry, including the nuclear fuel cycle and wholesale electric power
- Former Director of Business Development at Centrus Energy Corp

Dara Harrison

VP Human Resources

- Over 20 years of human resources experience supporting the engineering and energy industries within the United States and Canada
- Former HR leader at many companies including Eaton, AtkinsRéalis and Fluor

Frank Akstulewicz

Licensing Manager

- Over 40 years of experience with the NRC, serving in numerous executive leadership and staff positions within the agency
- Former Branch Chief of the Nuclear Performance and Code Review Branch in NRR

Jim Howe

VP Government Relations

- Over 20 years of experience in Washington, DC, serving in government affairs, policymaking, advocacy, and communications roles

Tyler Gronbach

VP IR and PR

- More than 30 years of external affairs experience for publicly traded companies in technology and life sciences.
- Former VP External Affairs at Wolfspeed; VP Communications, Pharma Services at Thermo Fisher Scientific

TERRESTRIAL ENERGY

Compelling demand tailwinds
AI data center growth, grid reliability, and energy security are driving secular changes and unprecedented demand for clean firm power and SMR innovation

Most capital-efficient SMR
Proprietary Gen IV IMSR technology incorporating tested and demonstrated DOE molten salt technology, fueled with LEU for fast deployment at scale

$2.3T SAM by 2050
Data center power, industrial heat, and coal replacement across OECD markets — with early-mover advantage in each vertical

Capital-light, high-margin revenue model beginning before construction
Speed-to-market in 2030s at fleet scale, with per-plant revenue beginning at site development and recurring across a 50+ year operating life

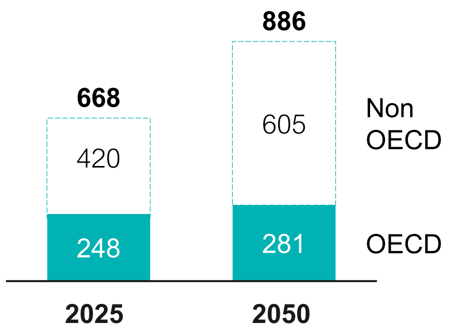
Plant, supplier and regulatory milestones
Track record of design, supply chain and regulatory developments delivering multiple consequential milestones

Glossary

Term	Definition
Base load	The minimum amount of electric power delivered or required over a given time period at a steady rate.
Core-unit	The term to denote the vessel that contains the primary components of the IMSR, the reactor core, heat exchangers, pumps, etc.
DOE and LPO	The United States Department of Energy, and its affiliated Loan Programs Office, which provides loan guarantees to assist in financing energy infrastructure projects.
FCP/NCP	An engineering concept referring to First Commercial Plant and Nth Commercial Plant, reflecting the reduction in price as processes mature and companies proceed along the learning curve. Terrestrial Energy's unit economics are based on NCP estimates, projected to be achieved at the 20th IMSR Plant.
Full lifecycle	The full lifespan of a specific plant, including pre-construction, construction, operations, and decommissioning.
Gen IV	Generation IV nuclear technology, which improves upon Generation III+ technologies (current reactors) through two important improvements: 1) ability to generate high-temperature heat (>400 °C) appropriate for use in industrial applications, and 2) high inherent safety incorporated into the design, versus active and passive safety systems of previous generations. Generation IV technology governed by the Generation IV International Forum, an intergovernmental forum representing 40 countries.
HALEU (15 -20)	HALEU (15 – 20) stands for "High-Assay Low Enriched Uranium" enriched to 15-20% (>15% is required for several other Gen IV nuclear technology)
LEU aka SALEU	LEU stands for "Low Enriched Uranium," it is also referred to as "SALEU" or standard assay low enriched uranium, which is U-235 which has been enriched to <5%. Currently, SALEU is readily commercially available from North American and Western European suppliers.
Inherent safety	A proactive approach to process safety in which hazards are eliminated or lessened to reduce risk without engineered or procedural intervention. A nuclear reactor with high inherent safety may rely upon natural phenomena such as natural circulation or negative feedback power coefficients to achieve a safe state as opposed to older plants that use active safety (e.g. pumps, actuators, valves) to manage risk.
kWe/MWe vs. kWth/MWth	The distinction between power being generated for electricity ("e") versus for thermal/heat ("th"). Generating electricity is a direct function of the thermal efficiency of the plant. In the IMSR's case, the plant generates 822 MWth or 390 MWe.
kWh/MWh	Kilowatt-hour / megawatt-hour, or the production of that amount of energy for an hour.
LCOE	Levelized cost of electricity. A measure of the all-in cost of electricity generation to the owner/operator over the life cycle of the plant, including upfront CAPEX, ongoing OPEX, etc.
LWR aka Legacy nuclear	Nuclear reactor technologies used in the market today, such as Boiling Water Reactors and Pressurized Water Reactors. They are classified as "Generation III+" or below.
Load-following	A power plant that can adjust its power output on demand.
U.S. NRC / CNSC	United States Nuclear Regulatory Commission and Canadian Nuclear Safety Commission, respectively, government agencies of their respective countries tasked with regulating civilian uses of nuclear energy.
OECD	Organisation of Economic Co-operation and Development, a multilateral organization of 38 member countries, the majority of which are high-income economies.
Utilization factor	A measure of "uptime" for a facility, which reflects total operating time less planned and unplanned downtime for maintenance, etc. Utilization factors of 90-95% are typical for nuclear power plants.
VDR	Vendor Design Review. A voluntary high-level review process offered by the CNSC to provide pre-licensing feedback regarding the extent to which the reactor design meets CNSC requirements.

High-temperature, High-quality Industrial Process Heat in OECD is a Primary Market

Primary energy consumption
(Quadrillion BTUs)[1]



US EIA has estimated **248 quads** of primary energy consumption in 2025, growing to **281 quads by 2050**

×

10% of primary energy consumption is high-temp industrial process heat[2]

×

2.93×10^8 MWh / quad[3]

÷

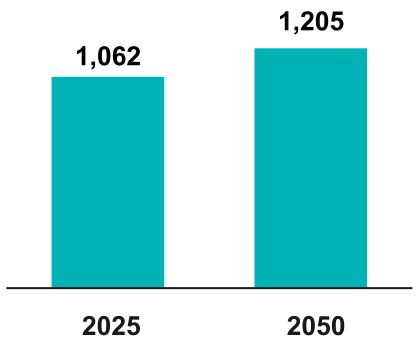
822 MWth

÷

8,322 hours / year
(95% utilization factor[4])

=

Implied number of IMSR Plants



Current market size implied to be **~1,000 IMSR Plants**, growing to **>1,200 by 2050**

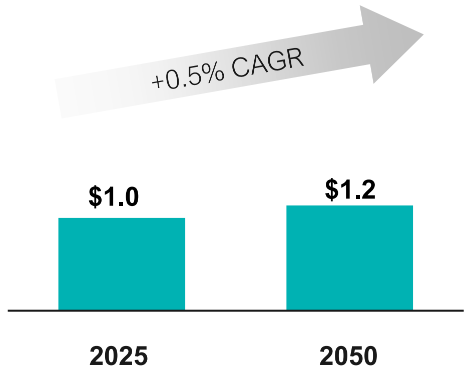
×

$931 M / IMSR Plant[5]

Cumulative upfront and average annual recurring revenue to Terrestrial Energy per IMSR Plant

=

Implied SAM
(US$ T)

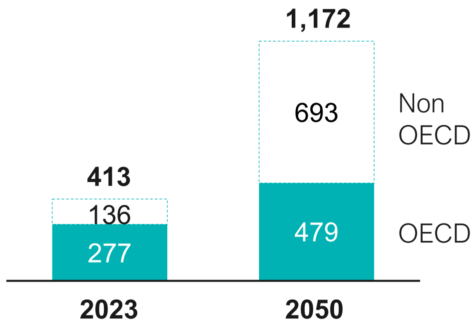


Implied serviceable addressable market (US trillions)

1. US EIA, International Energy Outlook, World total primary energy consumption by region (reference case)
2. German Energy Agency (dena), Powerfuels in Industry: Process Heat (20% of all heat being industrial process heat) multiplied IEA, Industrial heat demand by temperature range (50% of industrial process heat being up to 400 °C, an underestimate as IMSR can supply up to 585 °C)
3. Conversion factor, i.e. mathematical constant
4. Assumption of uptime, i.e. operating time less maintenance and other downtime events, calculated as 24 hours/day × 365 days/year × 95% utilization factor
5. Cost of constructing and operating the IMSR Plant are the same regardless of whether the end customer elects to use it for heat or electricity

Global Nuclear Electricity Generation in OECD Markets Represents a Large Additional Primary Market

Demand for nuclear power
(GWe)[1,2]



McKinsey & Company projects significant new nuclear capacity demand to meet both dispatchable power demand and net-zero targets

×

1,000 MWe / GWe

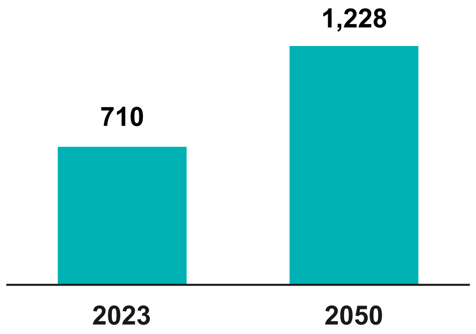
÷

390 MWe / IMSR Plant

Each IMSR Plant (2x reactor Core-units) able to generate 390 MWe electricity (net)

=

Implied number of IMSR Plants



Current market size implied to be **>700 IMSR Plants**, growing to **>1,200 by 2050**

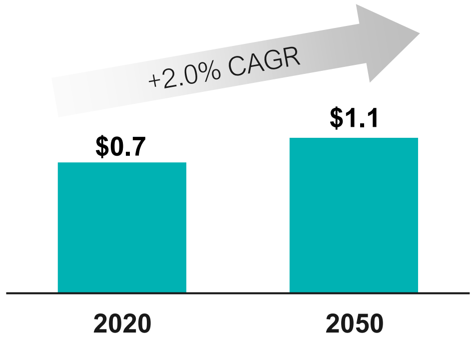
×

$931 M / IMSR Plant[3]

Cumulative upfront and average annual recurring revenue to Terrestrial Energy per IMSR Plant

=

Implied SAM
(US$ T)



Implied serviceable addressable market (US trillions)

1. McKinsey & Company, What will it take for nuclear power to meet the climate challenge?
2. US EIA, calculated share of nuclear electricity installed generating capacity OECD and World
3. Cost of constructing and operating the IMSR Plant are the same regardless of whether the end customer elects to use it for heat or electricity