

Transforming How We Energize the World

January 2024

generalfusion®

Proprietary and Confidential. Do Not Distribute.



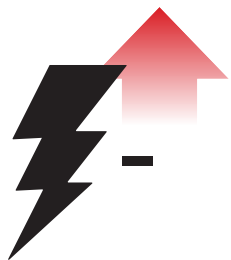
General Fusion will transform the world's energy supply with the fastest and most practical path to commercial fusion energy —

Magnetized Target Fusion (MTF)

generalfusion[®]

The Global Energy System Faces a Massive Challenge

Fusion has the power to uniquely solve these challenges



150%

Increase

in electricity
demand by 2050



100%

Decrease

in net CO₂ emissions
targeted by 2050¹

Fusion Can Uniquely Benefit the World

Fusion satisfies all real-world economic, social and political constraints of energy

Clean

Zero carbon emissions
Negligible environmental impact

Efficient and Scalable

Minimal land use
Limited expected regulatory burden
No required separation from social infrastructure
Cost competitive

Safe

No chain reaction
No long-term waste
Cannot be weaponized

Abundant

Fuel sourced wherever there is water
Stable, uninterrupted baseload power
Energy security and independence

Reaching net zero emissions requires a practical, scalable, new source of clean energy

1. This decrease in net CO₂ emissions does not represent formal governmental policy, but a target case presented by the International Energy Agency. This target case is referred to throughout the presentation. | Source: International Energy Agency World Energy Outlook 2021 Net Zero Emissions by 2050 Scenario.

About General Fusion

General Fusion's practical fusion technology addresses commercialization challenges others ignore and will leave competitors behind

Company Highlights



Fusion is necessary to meet energy demand and achieve a net-zero transition



Massive global addressable market



Significant investor and government support



3-year path to transformative technical milestones



Key Differentiators

- 1 The only fusion technology approach addressing barriers to commercialization:
 - ✓ Durable fusion machine
 - ✓ Sufficient fuel production
 - ✓ Simple energy extraction and conversion
 - ✓ Economical fusion power
- 2 LM26 demonstration will validate General Fusion's lead position and leave others behind on the timeline to commercialization
- 3 Proven culture of execution with 20 years of designing, building, operating and scaling test beds and prototypes yielding strong technical results
- 4 World class team of scientists, engineers and entrepreneurs

1. Breakeven refers to Deuterium-Tritium breakeven equivalent using Deuterium-Deuterium fuel.

General Fusion Overview

General Fusion has the surest, fastest pathway to commercial fusion

Company

FOUNDED IN
2002



Headquartered in
Vancouver, Canada

New, state of the art fusion campus, with
~100,000 sq ft spanning 3 facilities



~140
employees



>170
patents¹

Backed by a global syndicate of leading
investors and government support

~US\$325 million raised to-date²

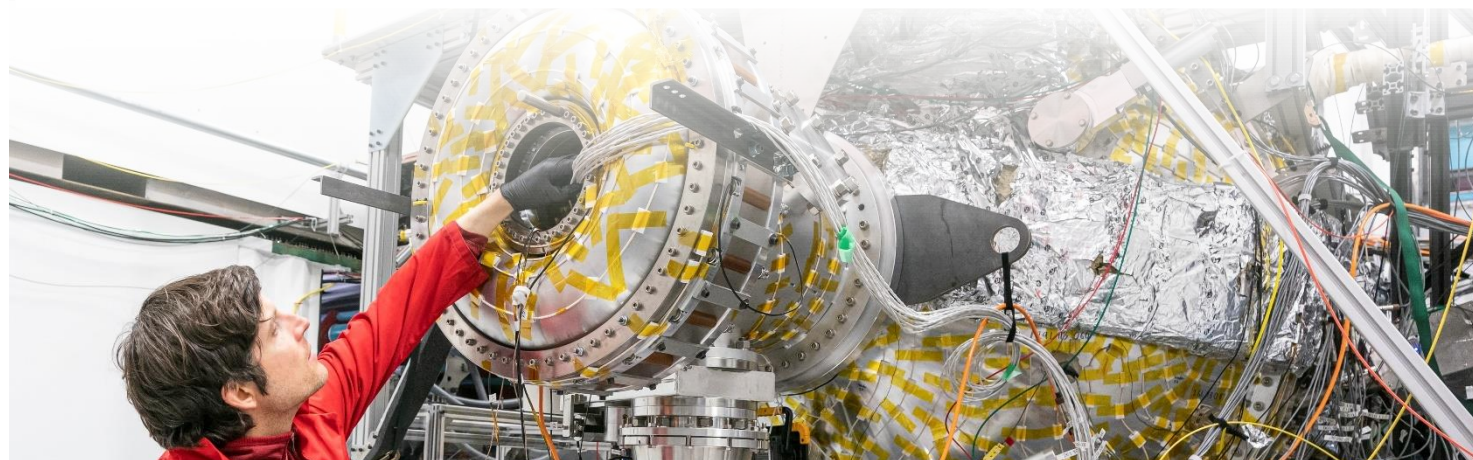
General Fusion Strategy

Pursue the fastest, lowest-risk path to commercial fusion with
practical Magnetized Target Fusion technology (“MTF”)

MTF uniquely solves hurdles
to commercialization

Core technologies in
place and tested

Next milestone is compression
of magnetized plasma to
fusion conditions



**General Fusion’s two decades of technology development put
commercial fusion within reach**

1. Over 170 patents and patents pending. | 2. Funds raised from private equity investments and government support. Including \$21mm from series F-1 closed on 8/7/2023, plus \$7.6mm (CAD 10mm) of new funding commitments approved in July 2023 from the Government of Canada (SIF) and Province of British Columbia.



How Fusion Works

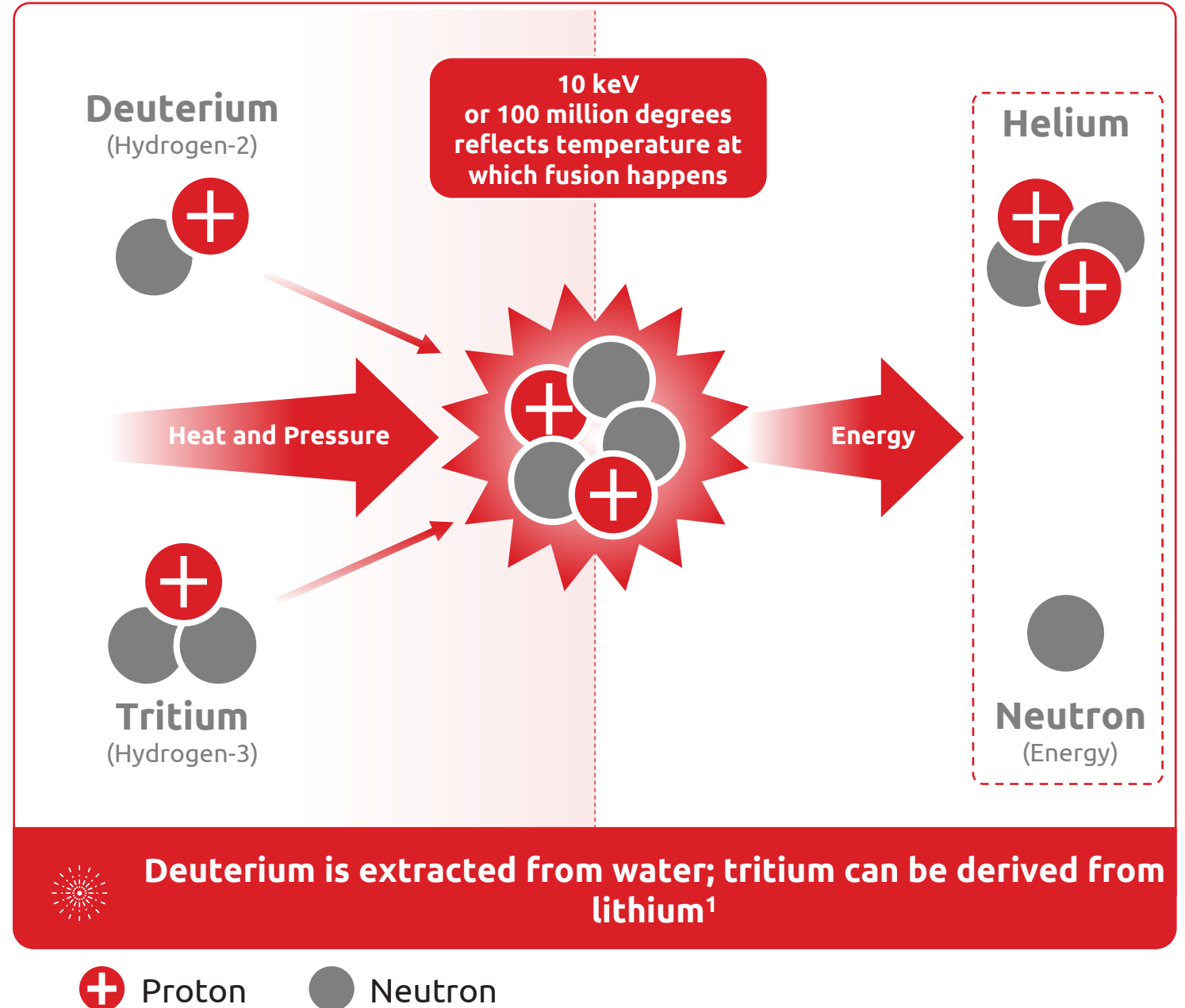
Fusion is the process by which two light atoms fuse to form a single heavier atom, releasing energy as a byproduct

Fusion powers all stars

The gravity of the stars creates tremendous pressure and heat which causes lighter atoms to fuse together into heavier atoms, releasing enormous amounts of energy

Commercial systems seek to replicate this fusion process, but need to create the pressure and heat by means other than gravity

Converting hydrogen fuel to helium is the easiest, lowest temperature and lowest pressure fusion process

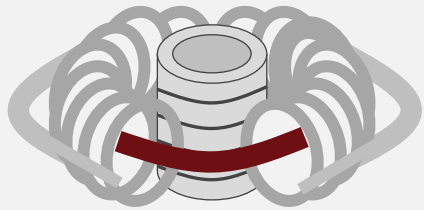


1. Lithium can be extracted from certain ores and salars or water.

A Balanced Approach – Proprietary Fusion Technology that is Uniquely Practical

General Fusion's technology optimizes advantages of magnetic confinement and inertial compression for commercialization

Magnetic Confinement Fusion



All-Confinement Pathway

- × Prohibitively expensive magnets
- × Scarce, consumable fuels
- × Material issues due to neutron damage
- × Heat extraction challenges

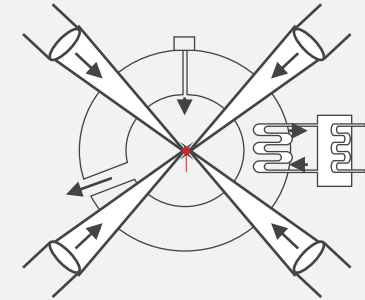
Magnetized Target Fusion



General Fusion's Superior Approach

- ✓ Durable Fusion Machine
- ✓ Sufficient Fuel Production
- ✓ Simple Energy Extraction & Conversion
- ✓ Economical Fusion Power

Inertial Confinement Fusion



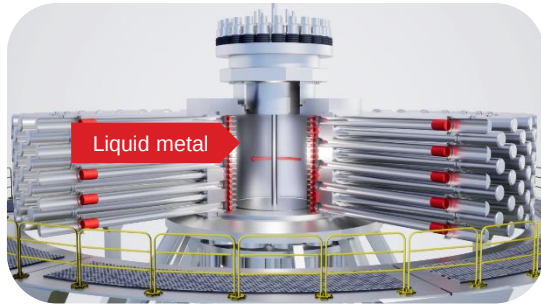
All-Compression Pathway

- × Expensive high-power lasers and/or targets
- × Scarce, consumable fuels
- × Efficiency, structure and control issues
- × Heat extraction challenges

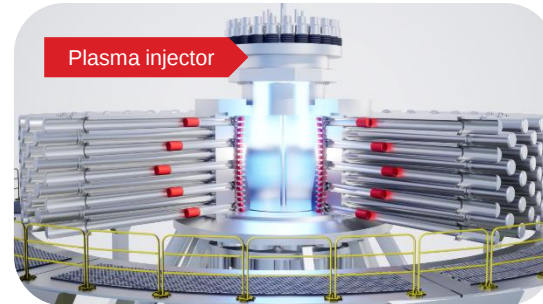
General Fusion's Magnetized Target Fusion Approach

Commercial fusion machine basics

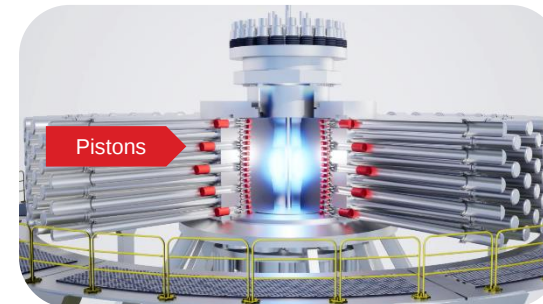
Form liquid metal cavity inside fusion vessel



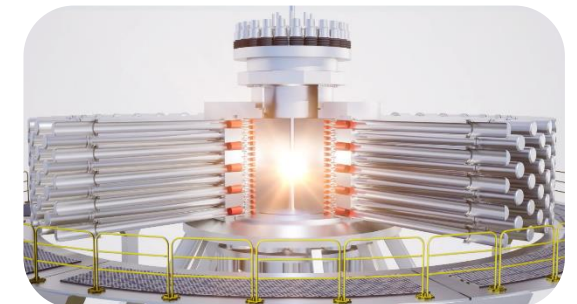
Inject magnetized plasma¹ into liquid metal cavity



Compress plasma with liquid metal using mechanical drivers



Fusion and energy extraction, conversion and recovery



Repeat



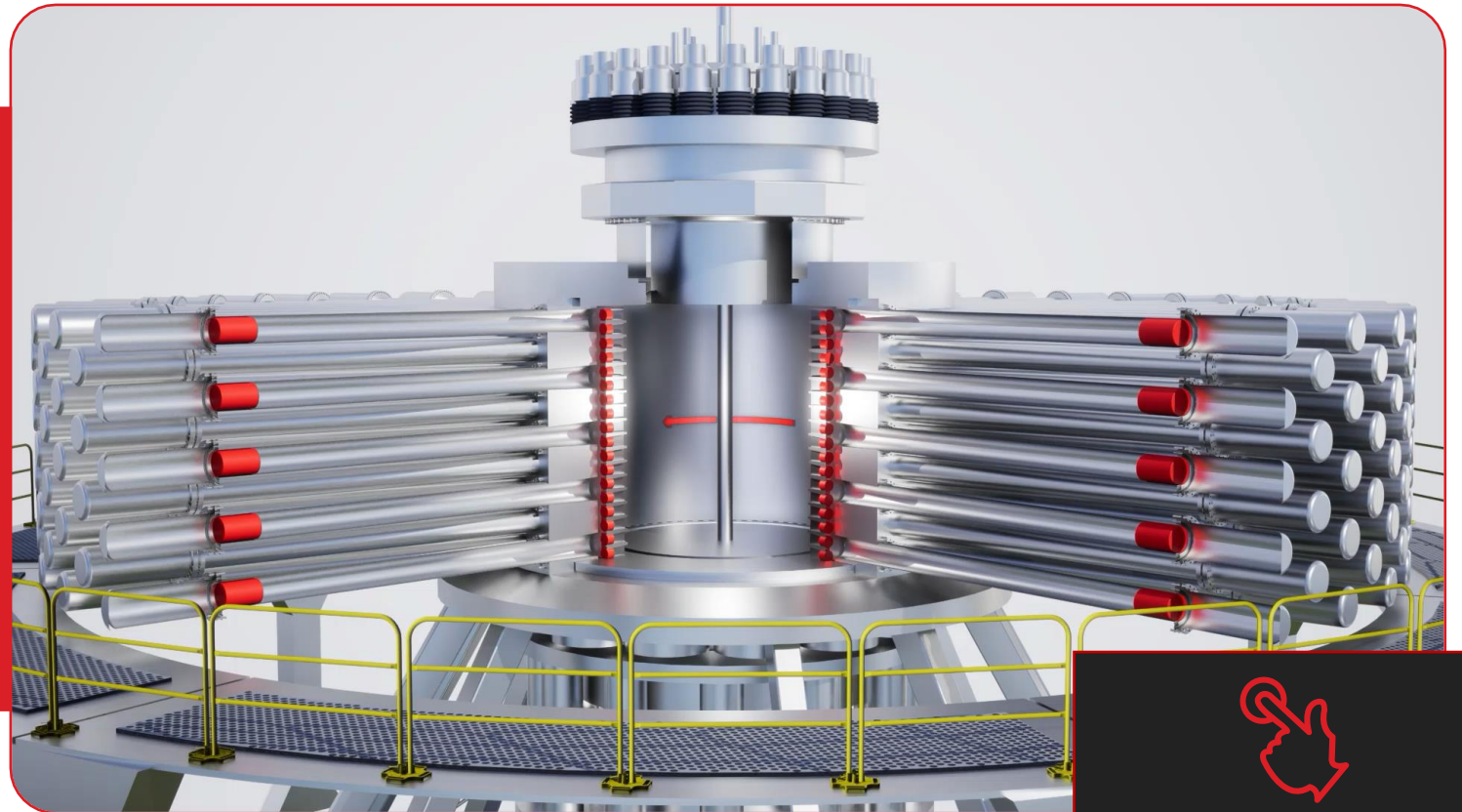
Magnetized plasma compressed fluid-mechanically to fusion conditions

1. General Fusion's plasma injectors form spherical tokamak plasma targets using a 100% coaxial helicity injection (CHI) process. Targets are formed into a chamber with solid metal walls. There is no active feedback; plasma position and stabilization is accomplished entirely through the metal walls acting as a flux conserver.

General Fusion's Magnetized Target Fusion Technology

Commercial fusion machine mechanics

The fusion
equivalent of
a diesel engine:
practical, durable
and cost-effective



CLICK HERE TO LEARN
MORE ABOUT OUR
FUSION TECHNOLOGY

General Fusion's Unique Approach Solves the Four Long-Standing Barriers to Commercial Fusion

1

Material Degradation

Neutrons emitted from fusion reaction damage unshielded machine structures

2

Fuel Production

Difficult technological path for creating a self-sustaining fuel source

3

Energy Capture

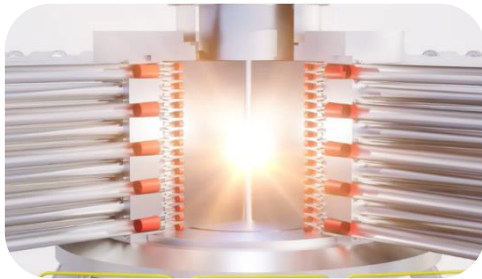
The path to extract and convert fusion energy into a heat source and electricity is still experimental

4

Cost

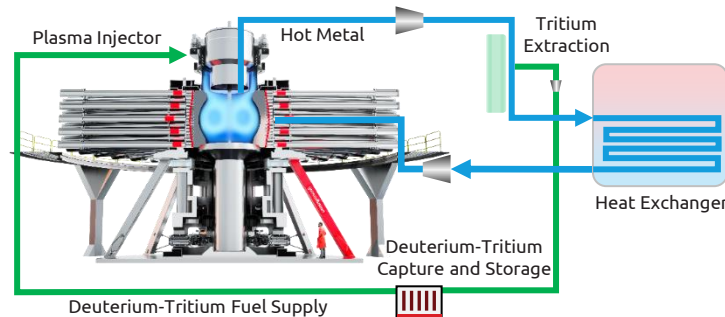
Steady-state fusion needs costly superconducting magnets, while inertial confinement relies on pricey high-power lasers and/or targets

General Fusion Addresses the Barriers to Commercial Fusion



✓ Durable Fusion Machine

Liquid metal wall compression technology absorbs neutrons and protects machine from fusion damage



✓ Sufficient Fuel Production

Liquid metal wall surrounding fusion plasma produces tritium fuel with a sustainable breeding ratio

✓ Simple Energy Extraction and Conversion

Liquid metal wall surrounding fusion absorbs neutrons and heat for simple conversion to electricity via steam turbine

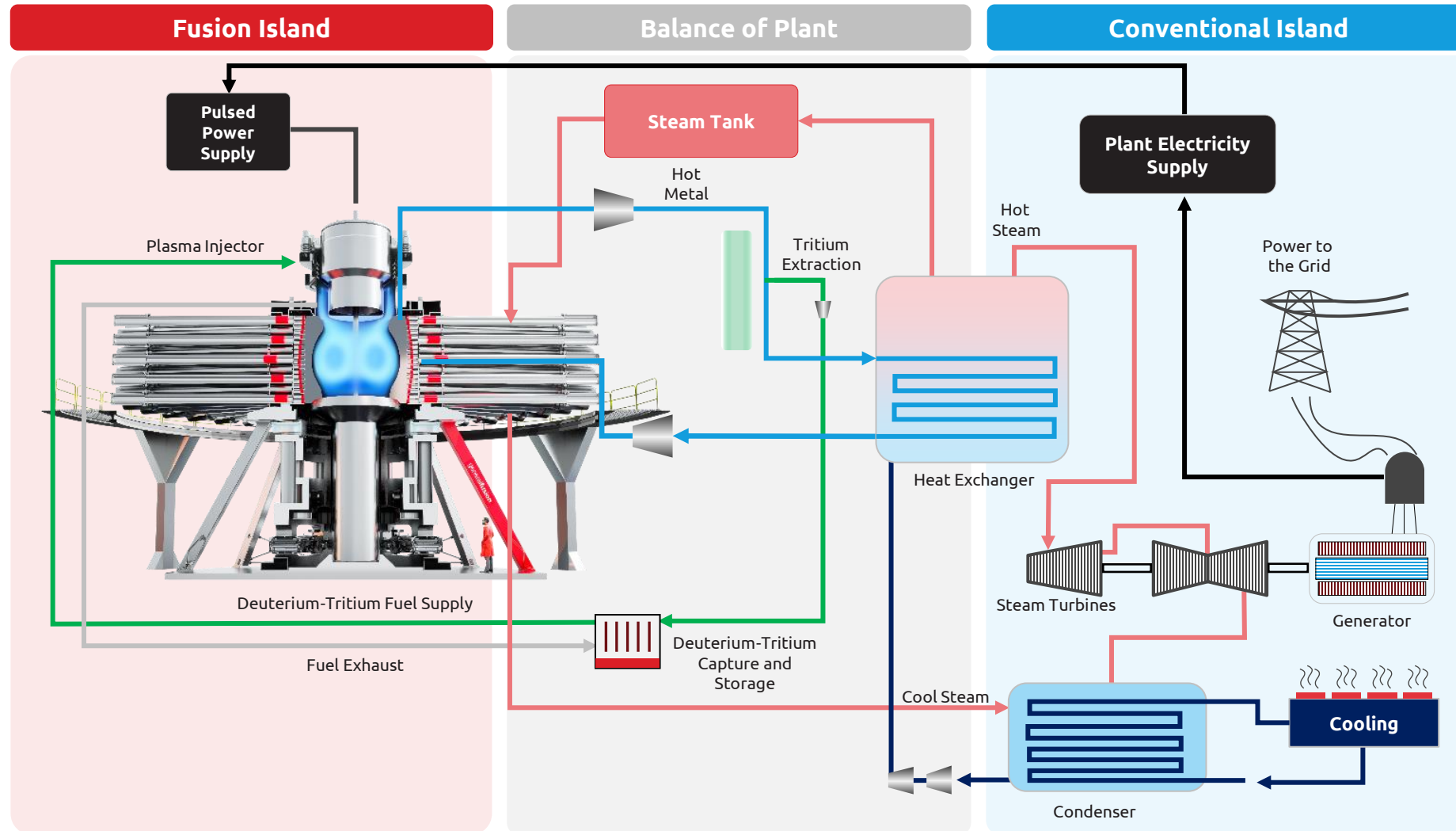


✓ Economical Fusion Power

Mechanical compression with liquid metal avoids the need for expensive magnets or targets, high-power lasers and exotic/unavailable materials

General Fusion's Practical Commercial Power Plant

General Fusion's MTF technology is ideally suited for traditional steam plant applications and repowering old power plants

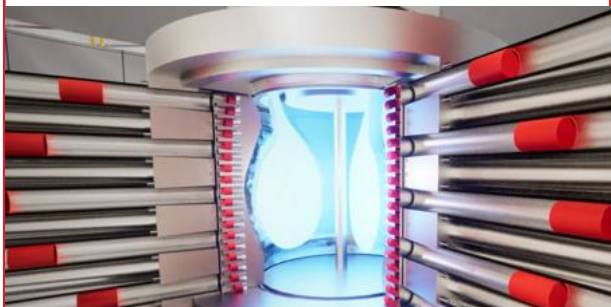


A Wide Spectrum of Partnerships

General Fusion has partnerships with industry leaders to accelerate its path to commercial deployment

Fusion Technology Development

Build sustained value around proprietary MTF fusion technology



Technology Development Partner



UK Atomic Energy Authority

Plasma Stability and Compression



MHD Simulation



Hydrodynamic Stability



Edge Plasma Modeling

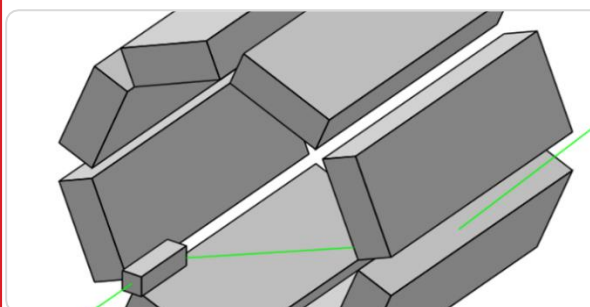


Thermal Transport



Diagnostic Development

Leverage experience to build diagnostic tools



Diagnostics and Code



UK Atomic Energy Authority

Neutron Spectrometer



Magnetic Probes



Neutron Diagnostics



Ion Doppler



Support for Future Near Commercial Machine and Related Systems

Cornerstone partners to support commercialization



Project & Future Location Partner



UK Atomic Energy Authority

Engineering and Construction



Tritium Fuel Cycle and Balance of Plant



Building Engineering



Project Management



Forging and Materials



Tritium Extraction



Liquid Lithium



Tritium Inventory



Collaboration agreement with UKAEA propels General Fusion's technology and commercialization plans forward

Current UKAEA Collaboration Projects:

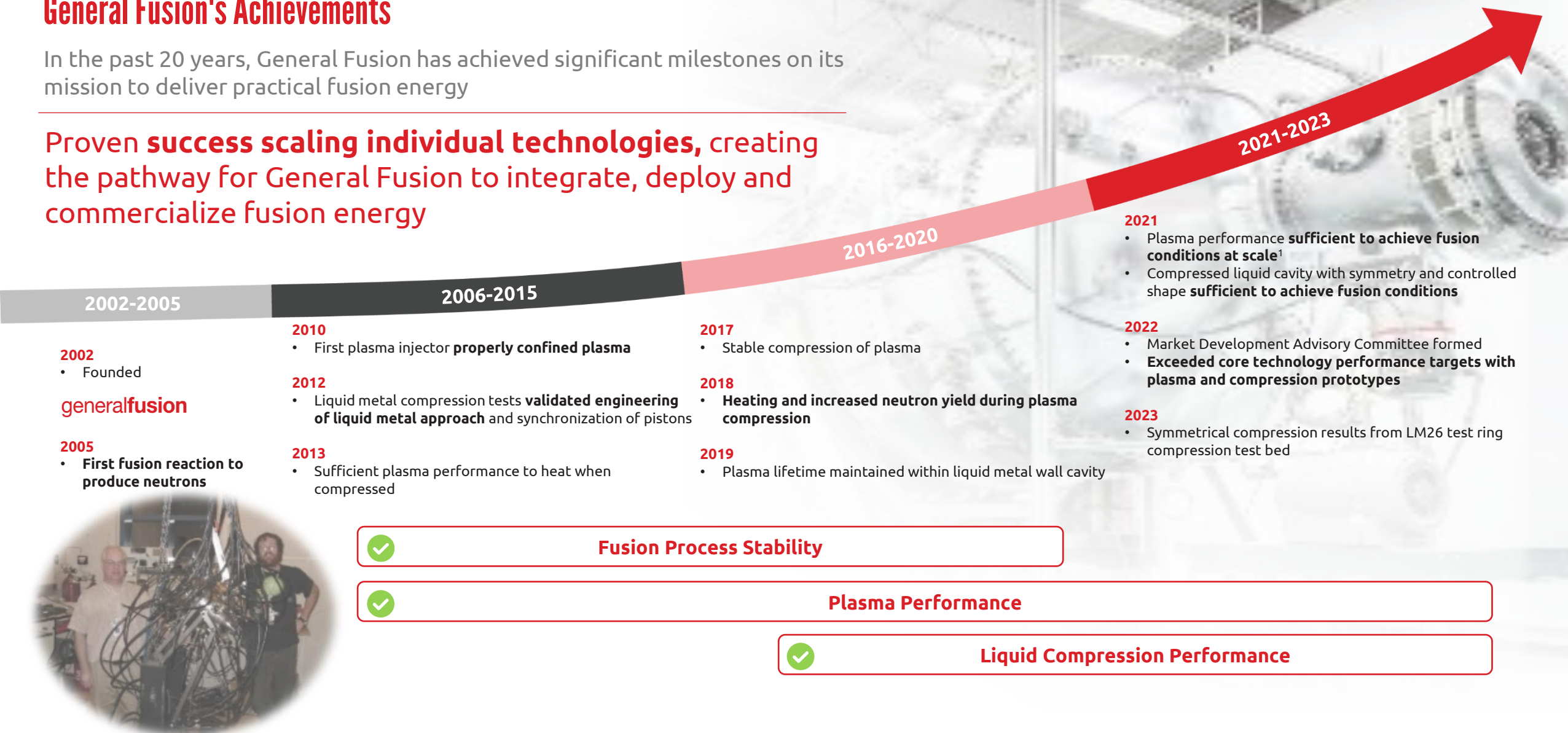
- Neutronics Model Development and Simulation
- Qualifying Class 3 Steel for Vacuum
- Supply of Thompson Scattering Polychromators
- Magnetic Profile Reconstruction Validation
- Polarimeter and Interferometer Consulting
- STEP²-GF Supply Chain Development
- Thermal Transport Analysis Training

1. General Fusion has a project development agreement with the UKAEA. This project was previously referred to as the Fusion Demonstration Program, or FDP. However, the LM26 program will significantly de-risk the project at the UKAEA, and allow a much more advanced machine to be built. This is now referred to as the Near Commercial Machine. 2. The UKAEA's Spherical Tokamak for Energy Production Program

General Fusion's Achievements

In the past 20 years, General Fusion has achieved significant milestones on its mission to deliver practical fusion energy

Proven **success scaling individual technologies**, creating the pathway for General Fusion to integrate, deploy and commercialize fusion energy



1. Plasma lifetime and quality shown to be sufficient to achieve fusion conditions through General Fusion's approach.

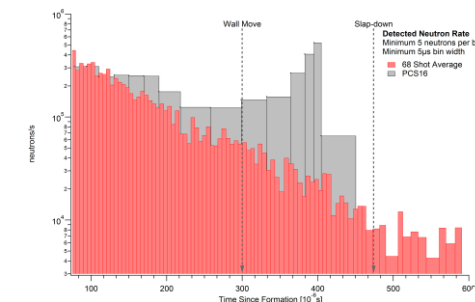
20 Years of Practical Development and Demonstration

Core technology capabilities developed and successfully tested



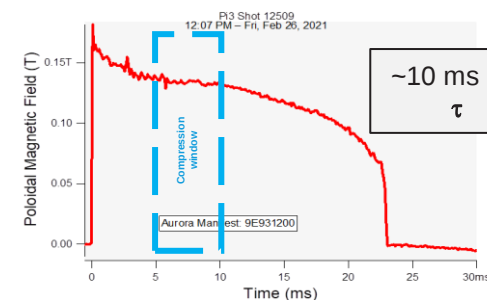
Fusion Process Stability

Sub-scale science program provides understanding of plasma behavior and neutron yield under compression as well as plasma behavior in liquid metal systems



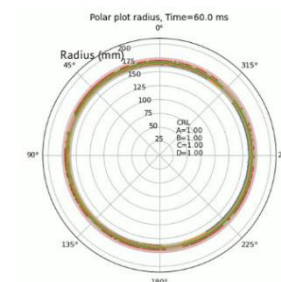
Plasma Performance

24 prototypes and over 200,000 plasma experiments have culminated in the world's largest and most powerful operational fusion plasma injector for LM26



Liquid Compression Performance

Testbeds demonstrate compression technology necessary for smooth, rapid and symmetric compression of a liquid cavity



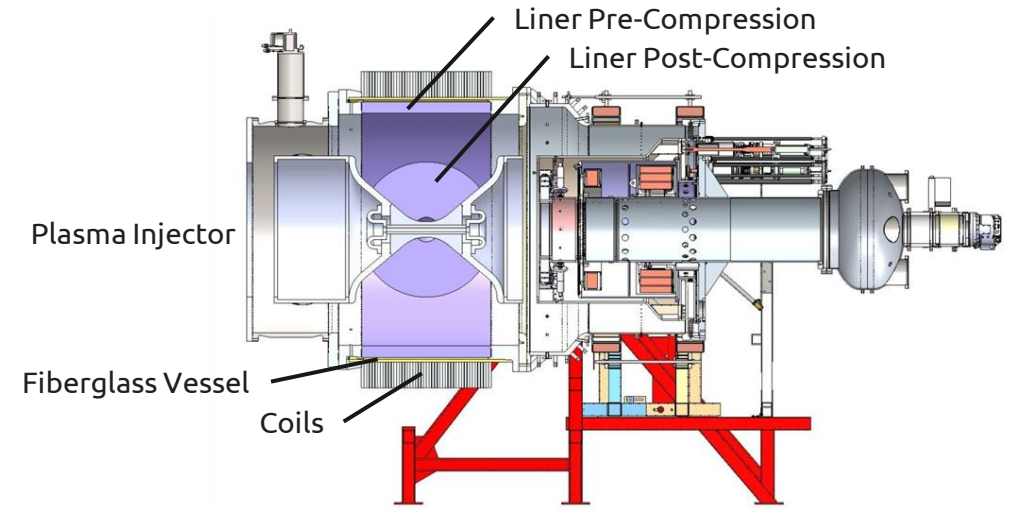
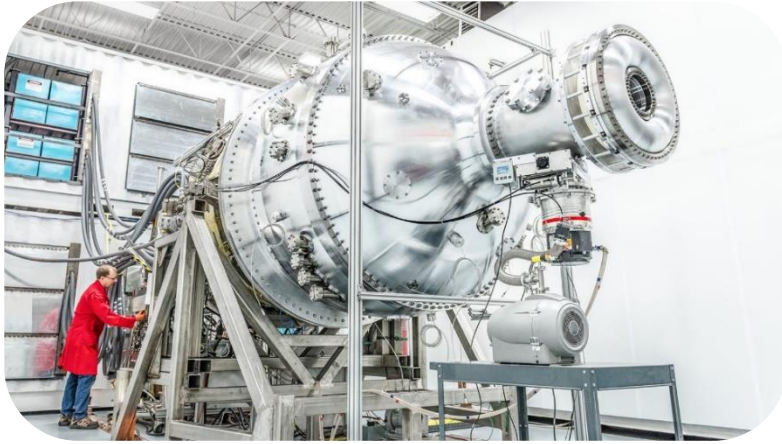
Next Up: LM26 – Integrated demonstration of Magnetized Target Fusion to achieve fusion conditions (10 keV) with potential for breakeven¹

1. Throughout this presentation breakeven refers to Deuterium-Tritium breakeven equivalent using Deuterium-Deuterium fuel.

Lawson Machine 26 (“LM26”)

General Fusion’s LM26 machine will compress General Fusion’s world-leading plasmas using a lithium liner

LM26 Demonstration Program in Progress



✓ 1. Plasma Injector Operating

- **Plasma lifetime and density sufficient** to create fusion conditions (10 keV) when compressed

○ 2. Next Step: Compression System Integration

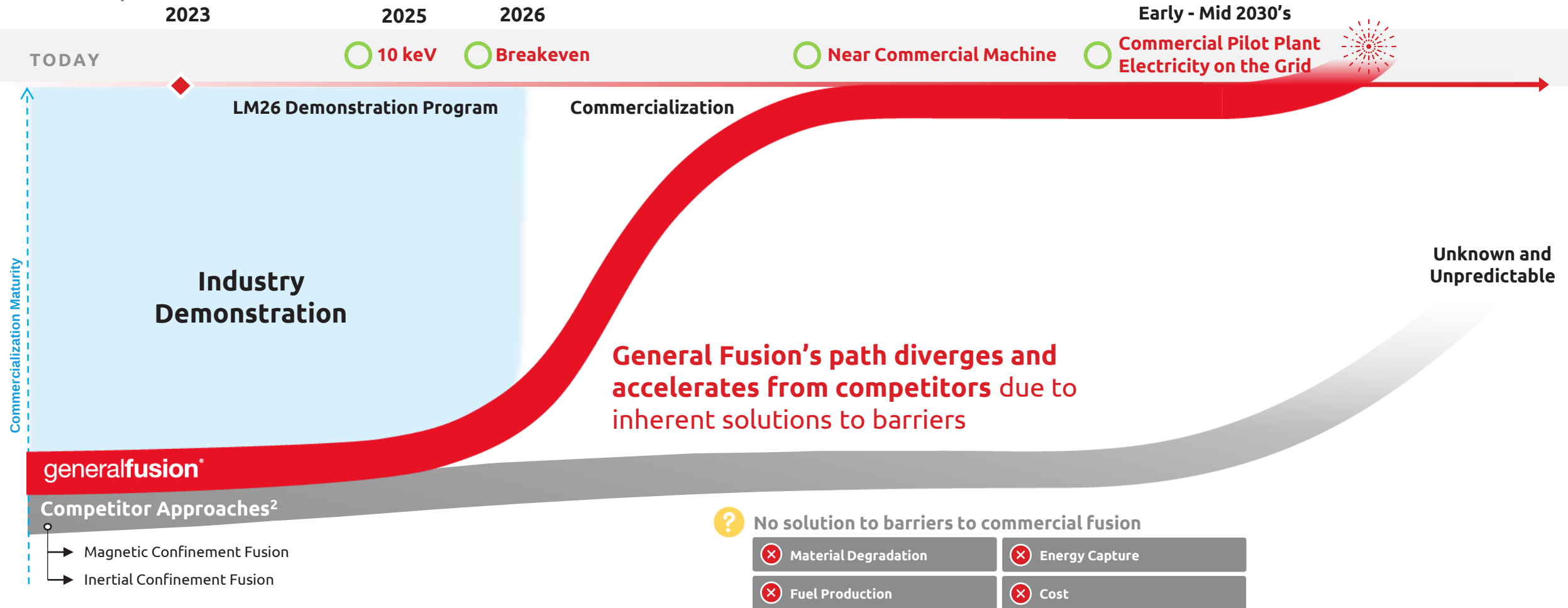
- Compression system will compress plasma using electromagnetic acceleration of a solid lithium liner
- The LM26 machine aims to **reach 10 keV in 2025** with **increasing progress toward breakeven¹ demonstration in 2026**

General Fusion’s goal is to achieve scientific breakeven¹ (100% Lawson) in 2026

1. Throughout this presentation breakeven refers to Deuterium-Tritium breakeven equivalent using Deuterium-Deuterium fuel.

General Fusion and Competition Commercial Maturity

Because General Fusion's approach addresses the four barriers to commercialization of fusion technology¹, others will be left behind post-demonstration



1. The four barriers to commercial fusion technology are referenced in detail on slide #14. | 2. Additional detail on competing Fusion companies is referenced on slide #15 of this presentation.

LM26 Demonstration Program

General Fusion Milestones Completed

Three Core Technology Milestones Achieved, Leveraging Large Scale Prototype Systems



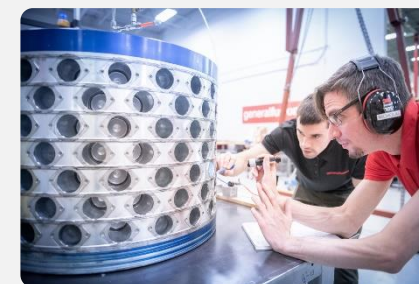
Fusion Process Stability



Plasma Performance



Liquid Compression Performance



Next Milestones

LM26 Demonstration Program



2021 – 2023

Demonstration of LM26 Plasma Injector Performance: Plasma injector¹ achieved pre-compression plasma performance sufficient to achieve fusion conditions (10 keV) when compressed



2025

Demonstration of LM26 Plasma Compression to 10 keV: Addition of solid lithium liner compression system to LM26 plasma injector to achieve fusion conditions (10 keV) through compression of magnetized plasma



2026

LM26 modification to increase plasma performance to target breakeven²



Commercialization Program



2026 Onward

Near commercial fusion machine with liquid lithium compression system, followed by first commercial plant putting electricity on the grid

1. General Fusion is leveraging its Pi3 plasma injector, which achieved previously announced performance milestones in 2021 and 2022, as part of the LM26 Demonstration Program. 2. Throughout this presentation breakeven refers to Deuterium-Tritium breakeven equivalent using Deuterium-Deuterium fuel.

Experienced Management Team

Leadership



Greg Twinney

Chief Executive Officer

- 20+ years commercializing new technologies
- Led multiple businesses through IPOs/M&As
- Scaled several founder-led start-ups into successful multinational corporations



Megan Wilson

Chief Strategy Officer

- 20+ years energy leadership
- Babcock & Wilcox executive roles
- U.S. Navy nuclear engineering officer



Dr. Michel Laberge

Founder and Chief Scientist

- Ph.D. and post-doctoral in fusion
- 25+ patents as lead inventor
- Recognized leader in Magnetized Target Fusion



Jan Laishley

Chief People and Culture Officer

- 19+ years global cleantech industry
- Ballard Power Systems HR executive
- People and culture development for high growth



Mike Donaldson

Sr. Vice President, Technology Development

- 20+ years in disruptive technology development
- Kodak (Creo) product engineering and production
- Risk reduction, rapid prototyping and systems testing



Robert Crystal

Sr. Vice President, Finance

- 16+ years international finance experience
- Demonstrated success at cleantech companies
- Led team growth in accounting functions



David Plant

Vice President, Research & Development

- 20+ years driving solutions from design to production in technology innovation sector
- Kodak (Creo) designing system architecture



Success scaling and commercializing businesses



Ability to manage complex technology development



Global fusion science excellence



Industrial technology commercialization program management

General Fusion's Governance



Klaas de Boer

Chairman, Board of Directors

- 20+ years venture capital experience
- Previous Managing Partner of Entrepreneurs Fund with many successful exits
- Investment committee member for Future Fund: Breakthrough
- McKinsey & Company Amsterdam alumnus



Catriona Fallon

Board Member

- 20+ years of strategic finance and leadership experience
- Chief Financial Officer of Aktana
- MBA from Harvard Business School & BA in Economics from the University of California, Los Angeles



Huw Critchley

Board Member

- Senior Vice President at GIC, leading the infrastructure strategy's Global Investments, Strategy & Risk group
- History in investment banking with a focus on energy, power and infrastructure
- University of Melbourne alumnus



Alice Yang

Board Member

- Director of Investments – Industrials, Business Services, and Energy & Resources at Temasek
- Two Master's degrees: one in International Management from Fudan University and a second from Università Bocconi



Wal van Lierop

Board Member

- Managing Partner and Co-Founder of Chrysalix Energy Venture Capital
- Industry veteran with deep experience as a venture capitalist, executive, international consultant and university professor
- PhD in Economics from Vrije Universiteit



Norman Harrison

Board Member

- World-class energy sector executive with 40+ years of fusion and fission leadership
- Prior CEO of the UK Atomic Energy Authority
- Awarded Commander of the British Empire in 2021 for his services to the fission and fusion industries



Zoltan Tompa

Board Member

- Director, Cleantech Practice at Business Development Bank of Canada
- 15+ years of experience in cleantech innovation and investment
- Sustainable Development Technology Canada alumnus



Greg Twinney

Board Member & CEO

- CEO of General Fusion, joined in 2020
- 20+ years commercializing new technologies
- Led multiple businesses through IPOs/M&As
- Scaled several founder-led startups into successful multinational corporations



Mark Little

Board Member

- 35+ years of leadership experience in the Canadian energy industry
- Prior President & CEO of Suncor Energy
- Strong advocate for energy sector decarbonization
- University of Calgary alumnus

Building Potential Launch Customer Portfolio for Initial Orders

Focus on key prospective markets and customers with Market Development Advisory Committee (“MDAC”)

Purpose of the General Fusion MDAC

Develop early adopters for commercial power plant

Apply end-user input to commercial power plant design

Support formation of regulatory framework for fusion

Participate in energy policy and market design

Regulatory Engagement

The U.K. set precedent as the first country to propose a fit-for-purpose, technology-appropriate fusion regulatory framework in 2021.

In 2023, the U.S. Nuclear Regulatory Commission voted to regulate fusion separately from the regime that regulates nuclear fission.

In October 2023, Canada, Japan and the U.K. published a report with their joint recommendations on developing a regulatory framework for fusion.¹

*Fission and fusion require different technology-appropriate regulatory regimes.
Fusion requires no special nuclear material*

Current Members of the General Fusion MDAC



1. [Source](#): GOV.UK, Policy Paper “Agile Nations: UK, Japan and Canada joint recommendations on fusion energy.”

General Fusion Key Contacts

Points of contact for Investor Relations and Government/External Relations inquiries

Investor Relations

Josh Nycholat

Manager, Investor Relations

Mobile: +1 (778) 200-1990

josh.nycholat@generalfusion.com

Government & External Relations

Danielle Johnson

Manager, Communications

danielle.johnson@generalfusion.com

Kim Nguyen

External Relations Specialist

Mobile: +1 (604) 537-3229

kim.nguyen@generalfusion.com



CLEAN ENERGY. EVERYWHERE. FOREVER.™

generalfusion®



Website
generalfusion.com



Twitter/X
[@generalfusion](https://twitter.com/generalfusion)



Instagram
[@generalfusion](https://www.instagram.com/generalfusion)



LinkedIn
[general-fusion](https://www.linkedin.com/company/general-fusion)

Disclaimer

This Presentation was provided by General Fusion Inc. (“General Fusion”) and is for informational purposes only. The information contained herein does not purport to be all-inclusive. Information about the industry and markets in which General Fusion intends to operate, relates to, or is based on third-party studies, publications and surveys, or General Fusion’s own internal estimates and research. All of the market and related data included in this Presentation involves a number of assumptions, estimates and limitations, and is subject to change, and there can be no guarantee as to the accuracy or reliability of such assumptions or estimates. While General Fusion believes such third-party sources and their internal estimates and research are reliable, such sources, estimates and research have not been verified by any independent source.

Neither General Fusion, nor any of its subsidiaries, stockholders, shareholders, equity holders, affiliates, representatives, control persons, partners, directors, officers, employees, advisers or agents (collectively, General Fusion’s “Related Parties”) make any representation or warranty, express or implied, as to the accuracy, completeness or reliability of the information contained in this Presentation. To the fullest extent permitted by law, in no circumstances will General Fusion, or any of its Related Parties be responsible or liable for any direct, indirect or consequential loss or loss of profit arising from the use of this Presentation, its contents, its omissions, reliance on the information contained within it, or on opinions communicated in relation thereto or otherwise arising in connection therewith.

This Presentation does not constitute an offer to sell, or solicitation of an offer to purchase, any equity or other interest in General Fusion.

Trademarks and Trade Names

General Fusion owns or has rights to various trademarks, service marks and trade names that it uses in connection with the operation of its business, and which are included in this Presentation. This Presentation also contains trademarks, service marks and trade names of third parties, which are the property of their respective owners. The use or display of third parties’ trademarks, service marks, trade names or products in this Presentation is not intended to, and does not, imply a relationship with General Fusion, or an endorsement or sponsorship by or of General Fusion. General Fusion, will assert, to the fullest extent under applicable law, its right, or the right of the applicable licensor, to these trademarks, service marks and trade names.