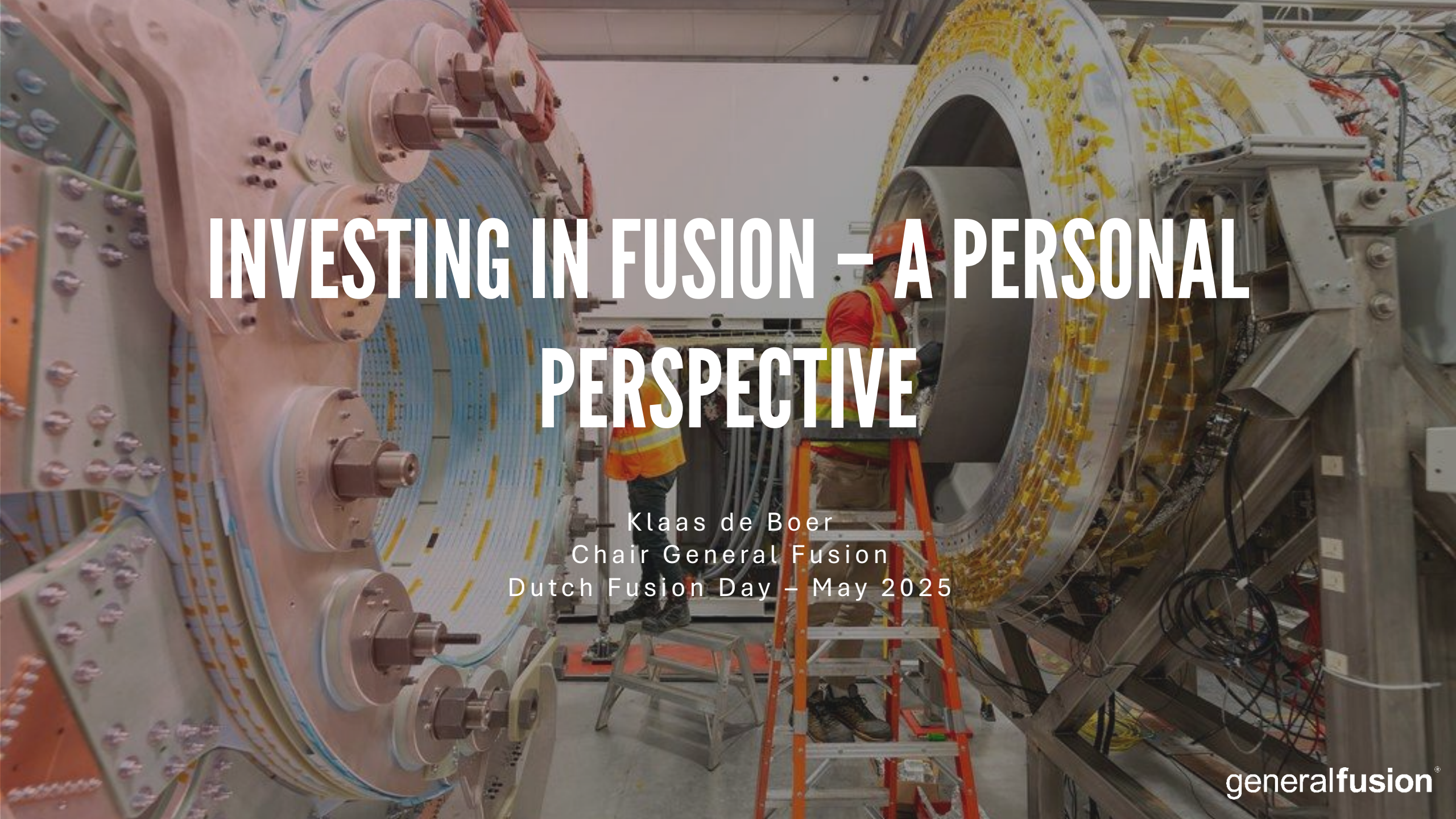


INVESTING IN FUSION – A PERSONAL PERSPECTIVE

Klaas de Boer
Chair General Fusion
Dutch Fusion Day – May 2025

generalfusion®

INTRODUCTION: GENERAL FUSION

General Fusion
31,780 followers
1d •

General Fusion is at a crossroads. Please read an open letter from our CEO Greg Twinney: https://lnkd.in/gv6fxbZT

generalfusion

6020 Russ Baker Way, Richmond, British Columbia, V7B 1B4
Tel: 604-439-3003 | www.generalfusion.com

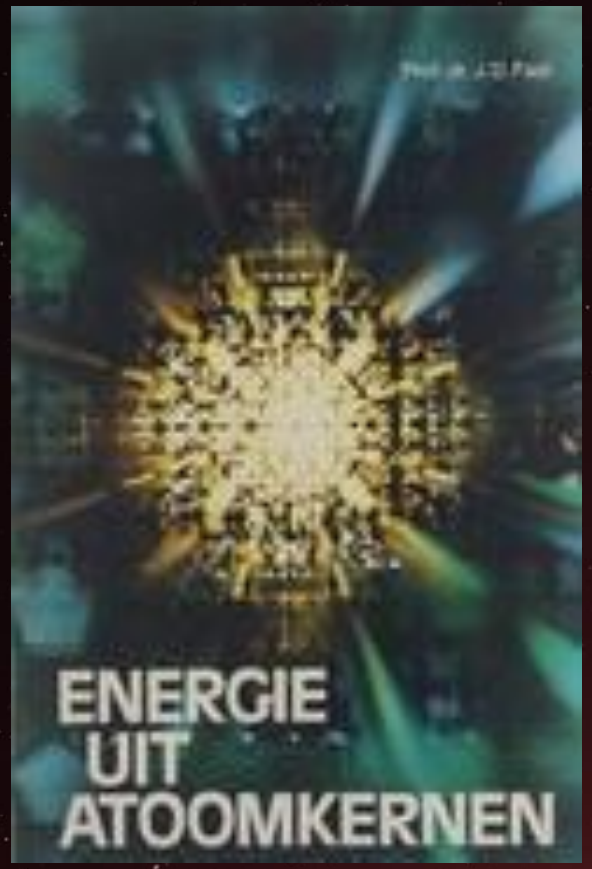
May 5, 2025

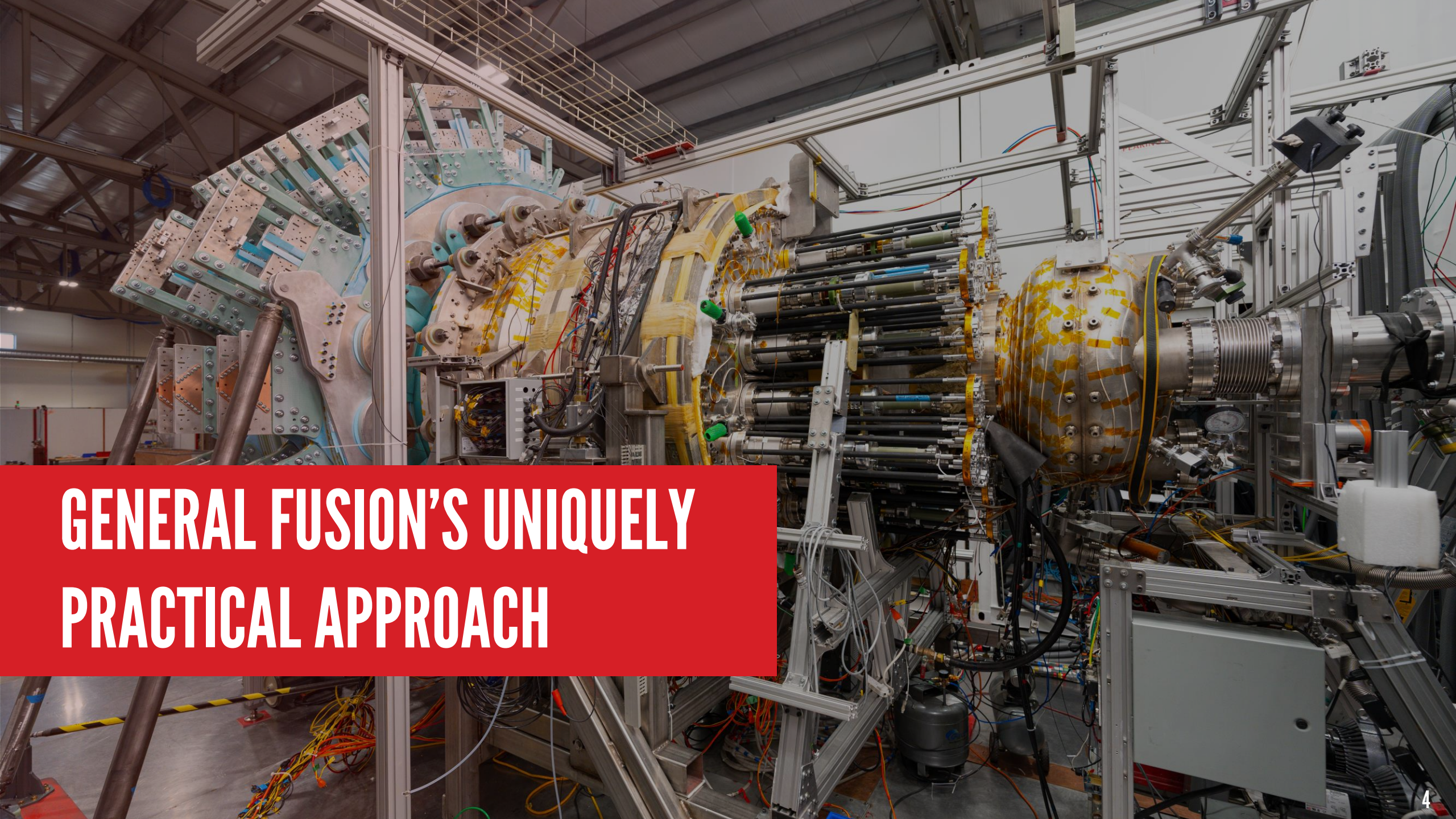
General Fusion at a Crossroads

General Fusion has been at the forefront of fusion technology development for more than 20 years. Today, we stand as a world leader on the cusp of our most exciting technical milestone yet—and one of the most challenging financial moments in our history. We are closer than ever to delivering practical fusion, but success depends on securing the right financing partners to carry this breakthrough forward.

On April 29th, we achieved a transformative milestone at our Vancouver, B.C., headquarters in Canada—we successfully compressed a large-scale magnetized plasma with lithium using our world-first LM26 fusion demonstration machine. The full, integrated system and diagnostics operated safely and as designed, and an early review of the data indicates we saw ion temperature and density increase, and our lithium liner successfully trapped the magnetic field. This was an incredible success for our first shot! What does this mean? From a technology perspective, we're one step closer to bringing zero-carbon fusion energy to the electricity grid using our unique, home-grown Canadian technology that global industry

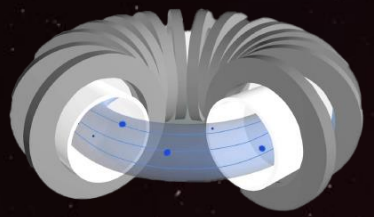
INTRODUCTION





GENERAL FUSION'S UNIQUELY PRACTICAL APPROACH

THE BEST OF BOTH WORLDS
COMBINING STRENGTHS FOR THE MOST PRACTICAL FUSION POWER PLANT

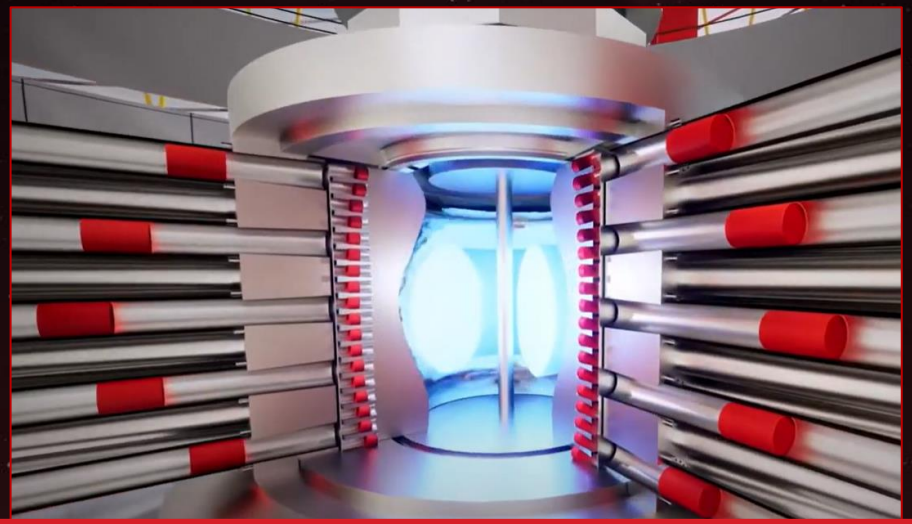


Magnetic Confinement (Tokamaks & Stellarators)

Extreme Confinement Time

Designed for research
Not suited for power generation

iter
china eu india japan korea russia usa



General Fusion's Magnetized Target Fusion

Designed from the ground up for power generation

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

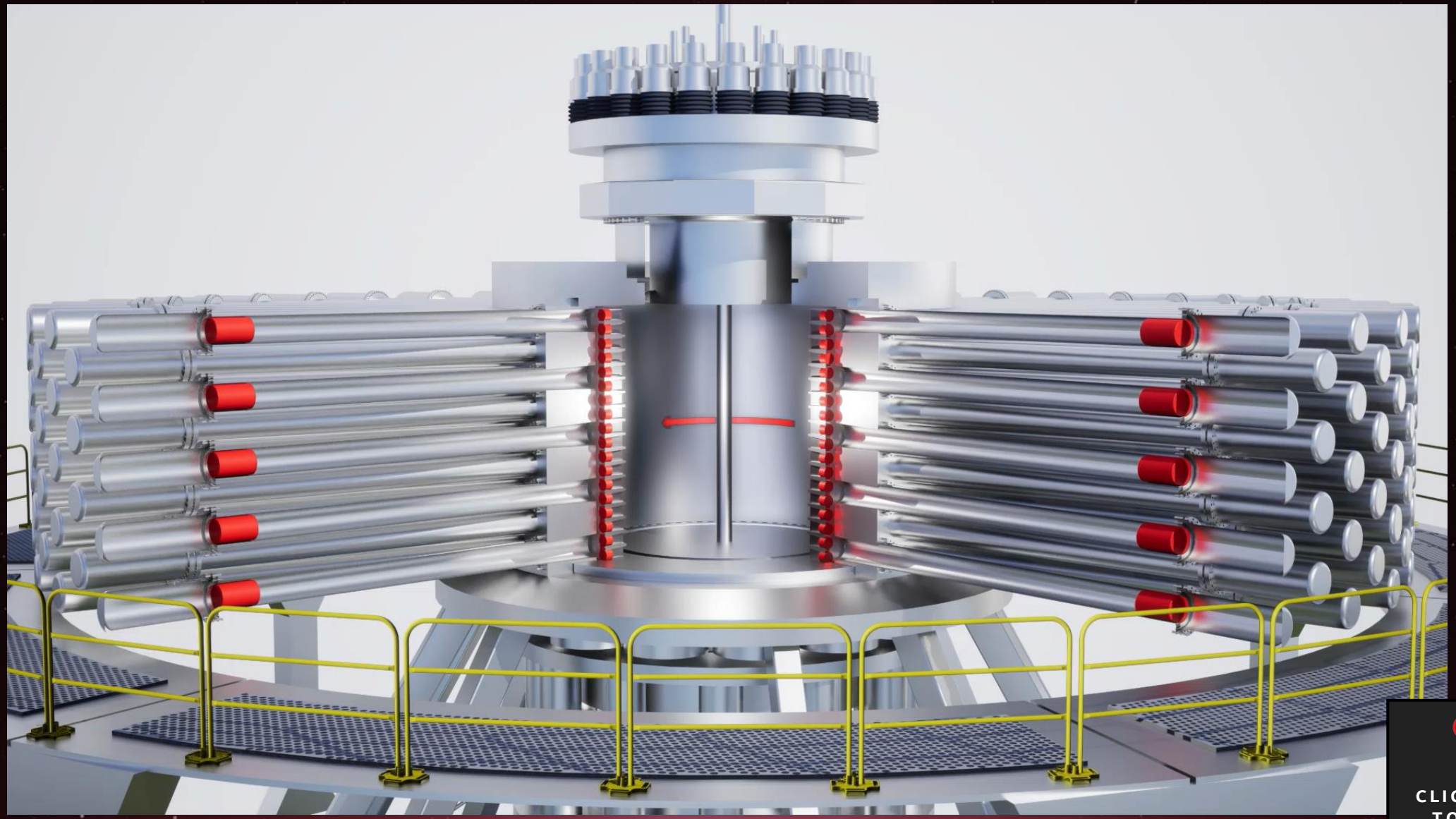
Inertial Confinement (Lasers)

Extreme Density

Designed for research
Not suited for power generation

NIF

THE FUSION EQUIVALENT OF A DIESEL ENGINE



CLICK PLAY TO VIEW VIDEO

MTF SOLVES THE BARRIERS TO PUTTING FUSION POWER ON THE GRID

Barrier

Material Degradation

Fusion neutrons damage and ultimately destroy the machine

Fuel Production

Tritium is not naturally occurring, and traditional approaches have no clear path to breed tritium at self-sustaining rates

Energy Capture

No practical or efficient method to extract and convert fusion energy into electricity

Cost

Costly superconducting magnets, high-power lasers, or new materials required for other approaches make cost uncompetitive

MTF Solution

Liquid metal wall technology uniquely solves these barriers

Durable Fusion Machine

- Absorbs neutrons emitted from fusion
- **Protects machine** from fusion damage

Abundant Tritium Fuel Production

- Neutrons hitting lithium create tritium
- Third party assessment by the UKAEA confirms a rebreeding ratio of >1.4, significantly higher than competitors

Simple Energy Conversion

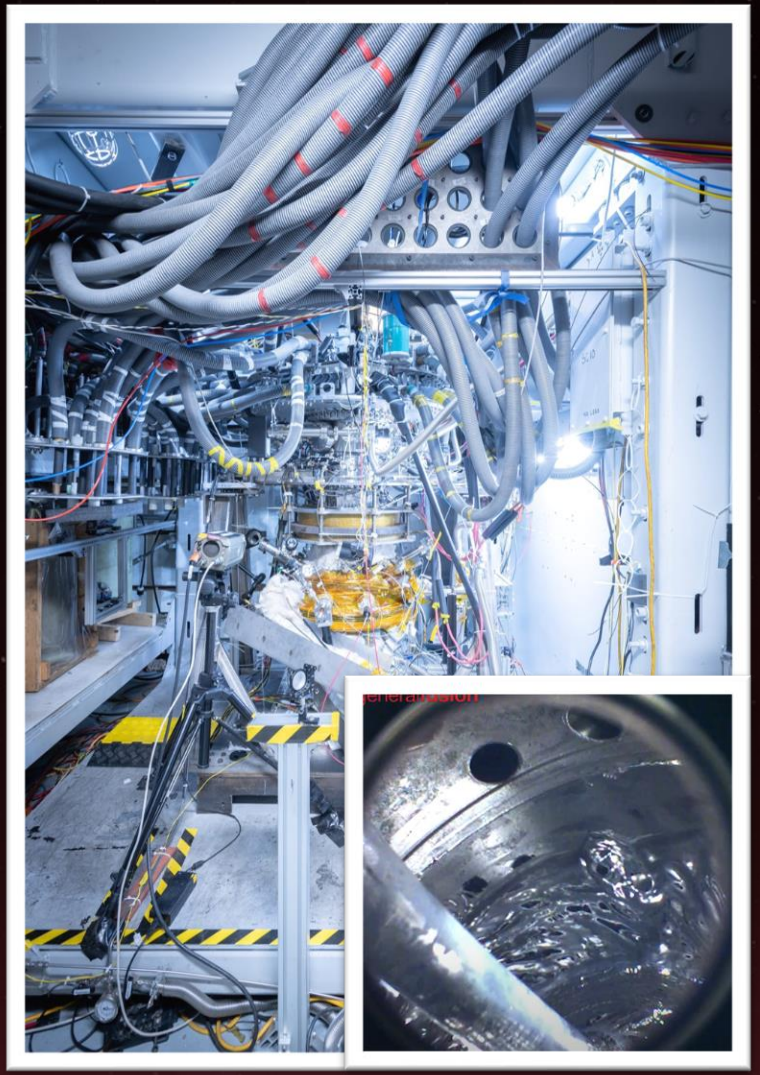
- Absorbs neutrons and heat from fusion
- Enables simple energy conversion via heat exchanger and steam turbine

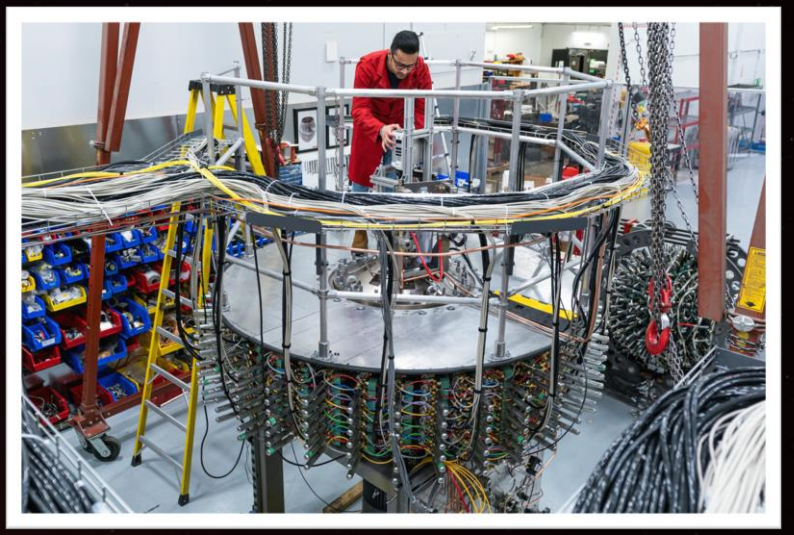
Economical Fusion Power

No need for:

- Expensive magnets or targets
- High-power lasers
- Exotic or not yet invented materials

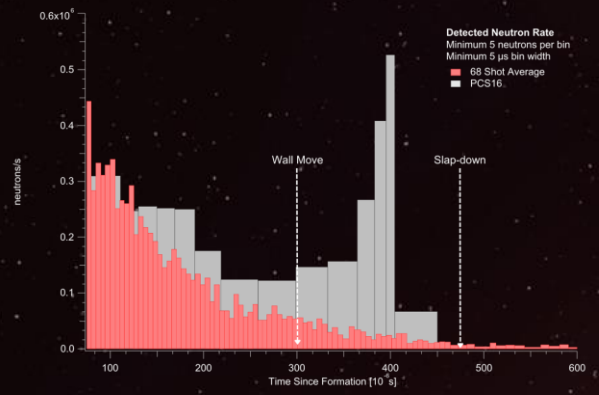
UNPARALLED EXPERTISE BUILDING MACHINES TO DELIVER RESULTS



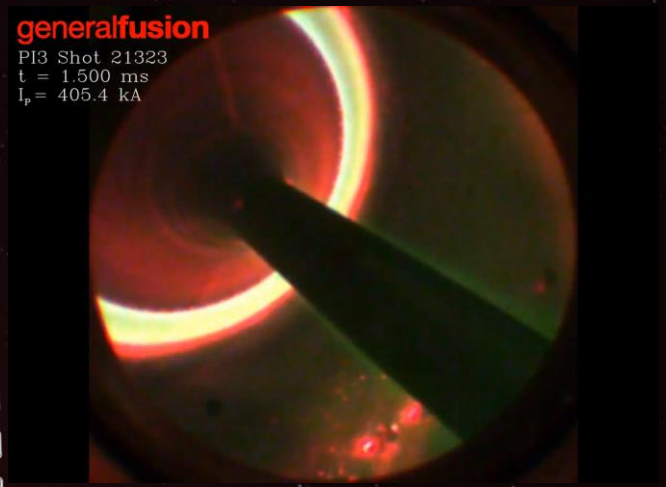


TECHNOLOGY BACKED BY REAL RESULTS

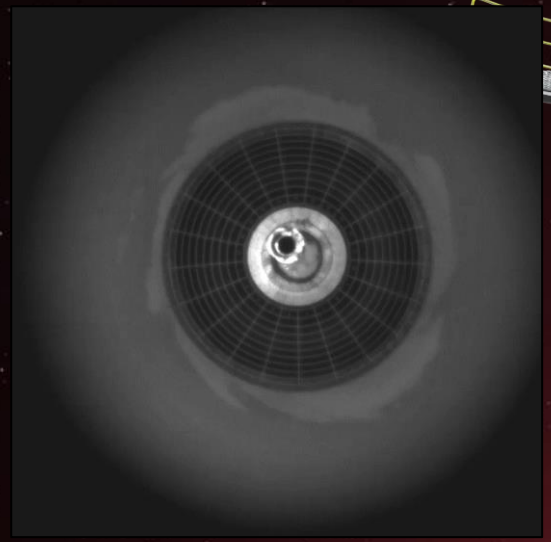
STABLE FUSION PROCESS

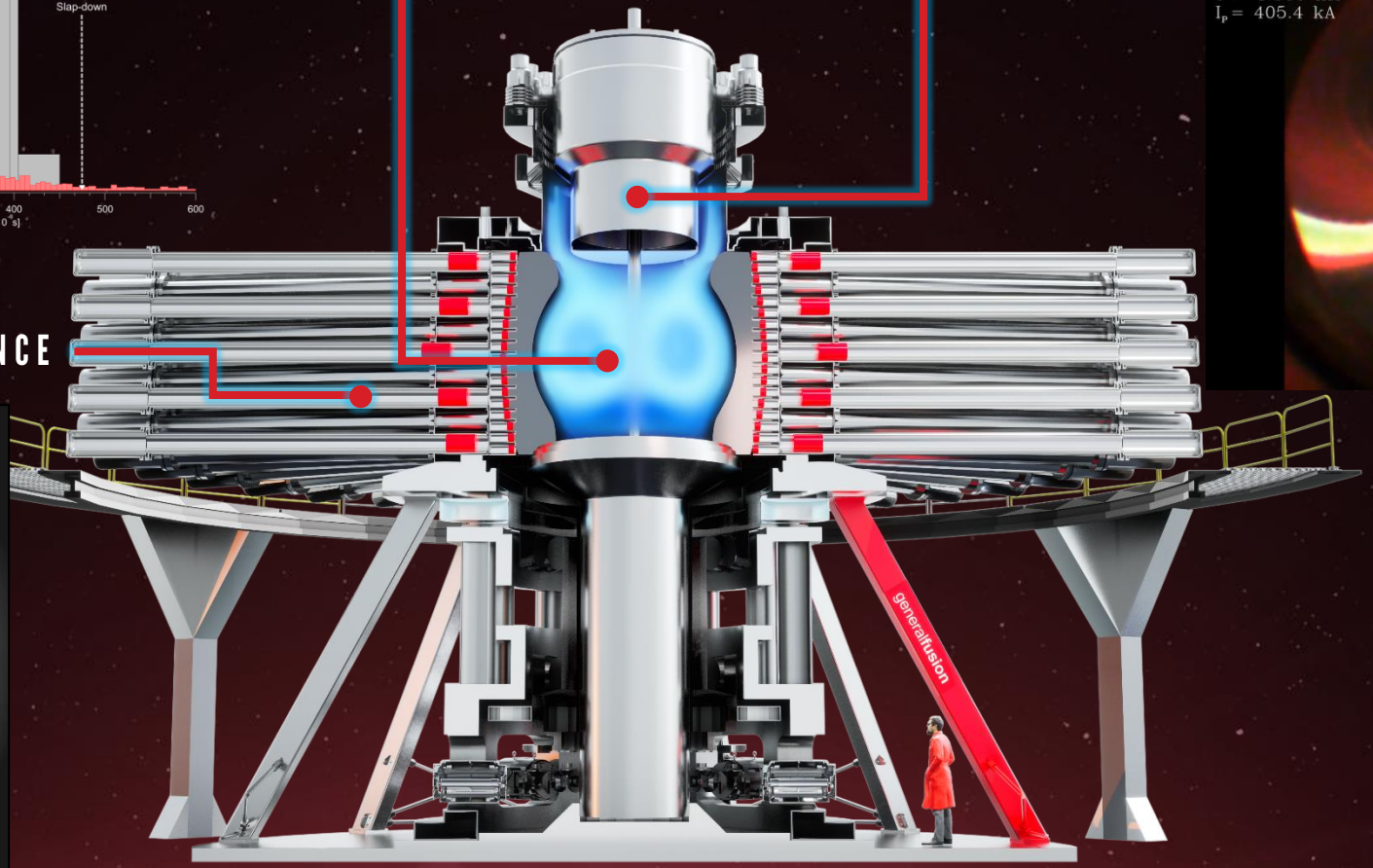


PLASMA PERFORMANCE

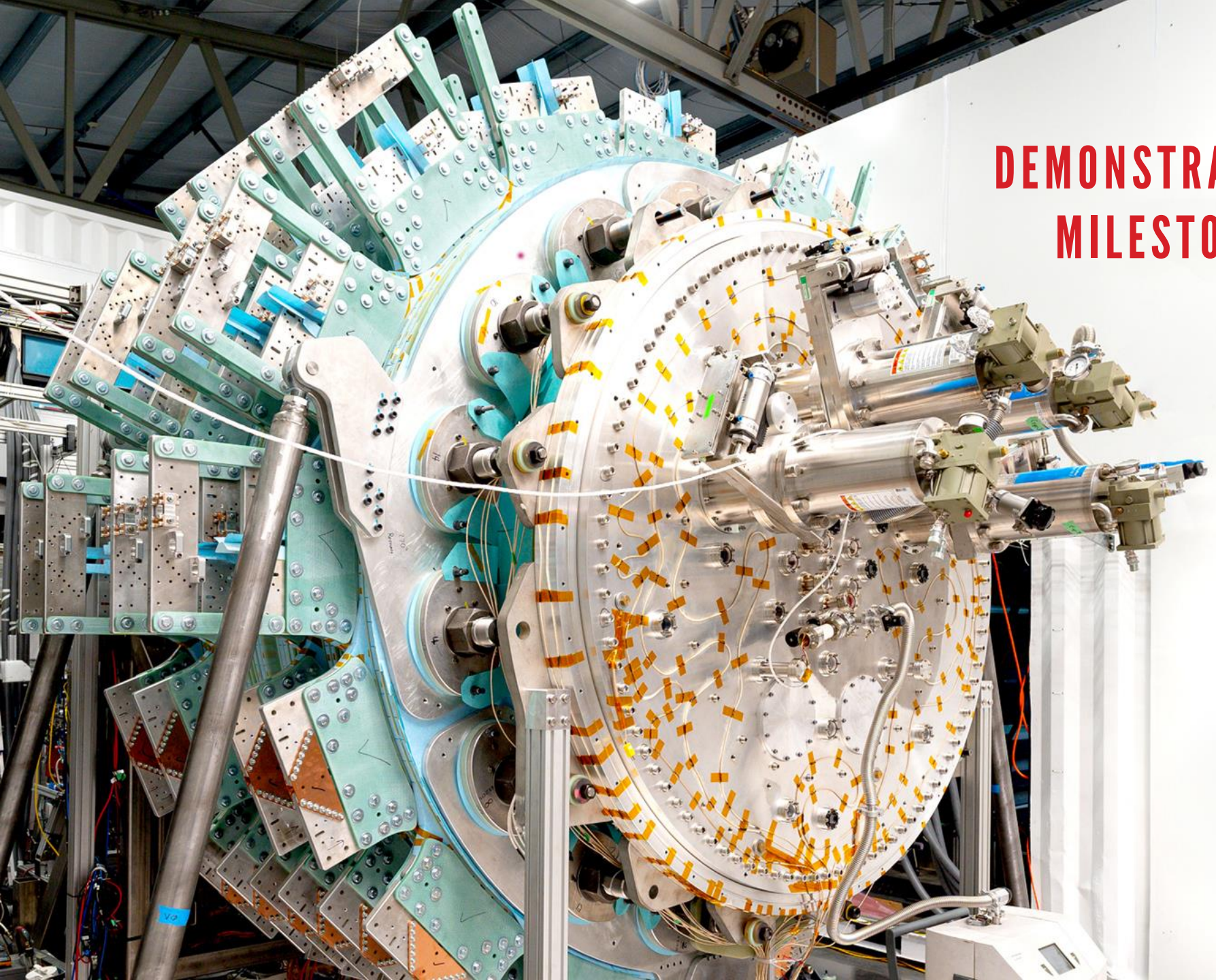


LIQUID COMPRESSION PERFORMANCE





LM26 DEMONSTRATION PROGRAM



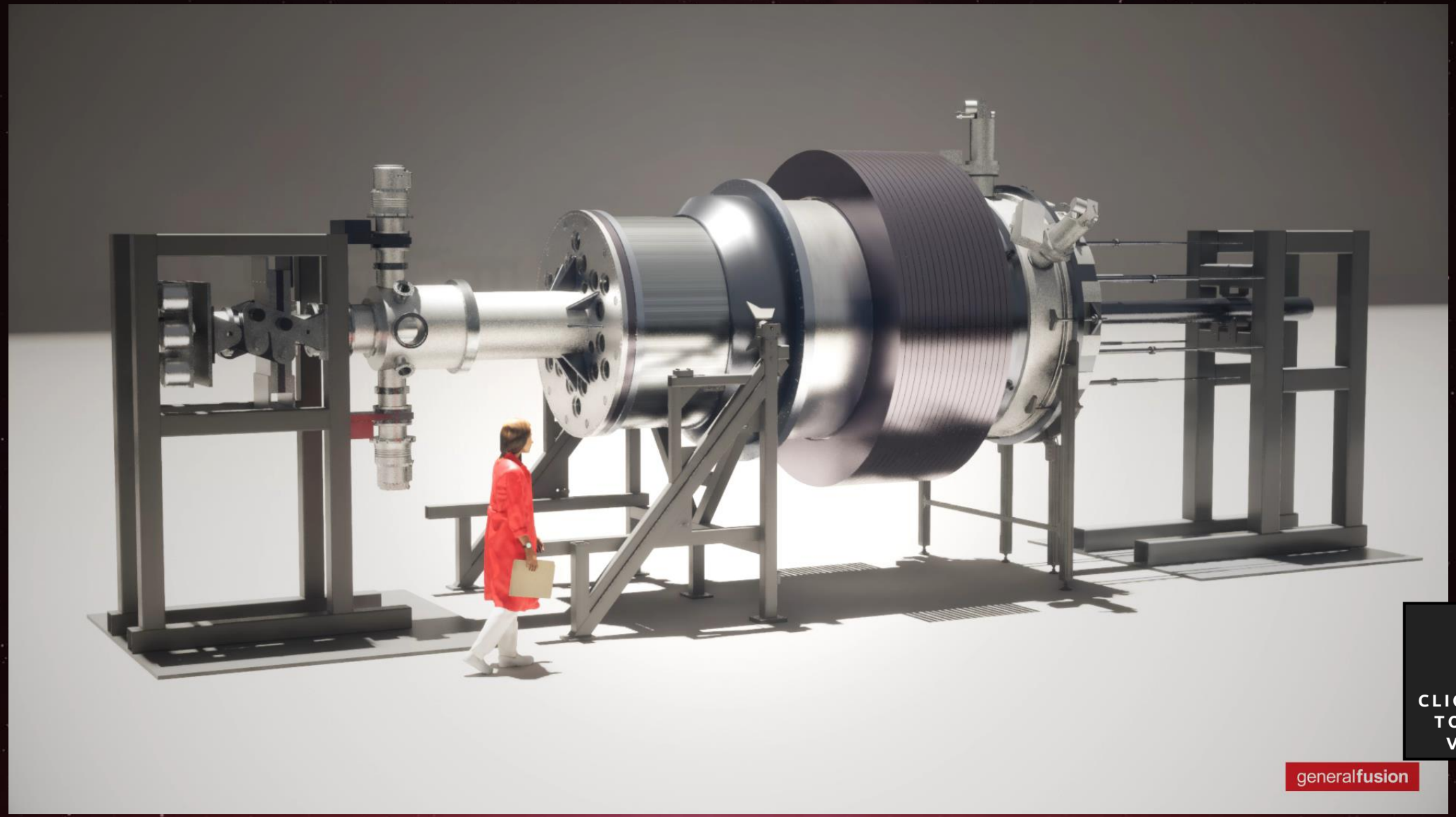
LM26:
DEMONSTRATING WORLD-FIRST MTF MILESTONES AT LARGE SCALE

10 M°C (1 keV)

100 M°C (10 keV)

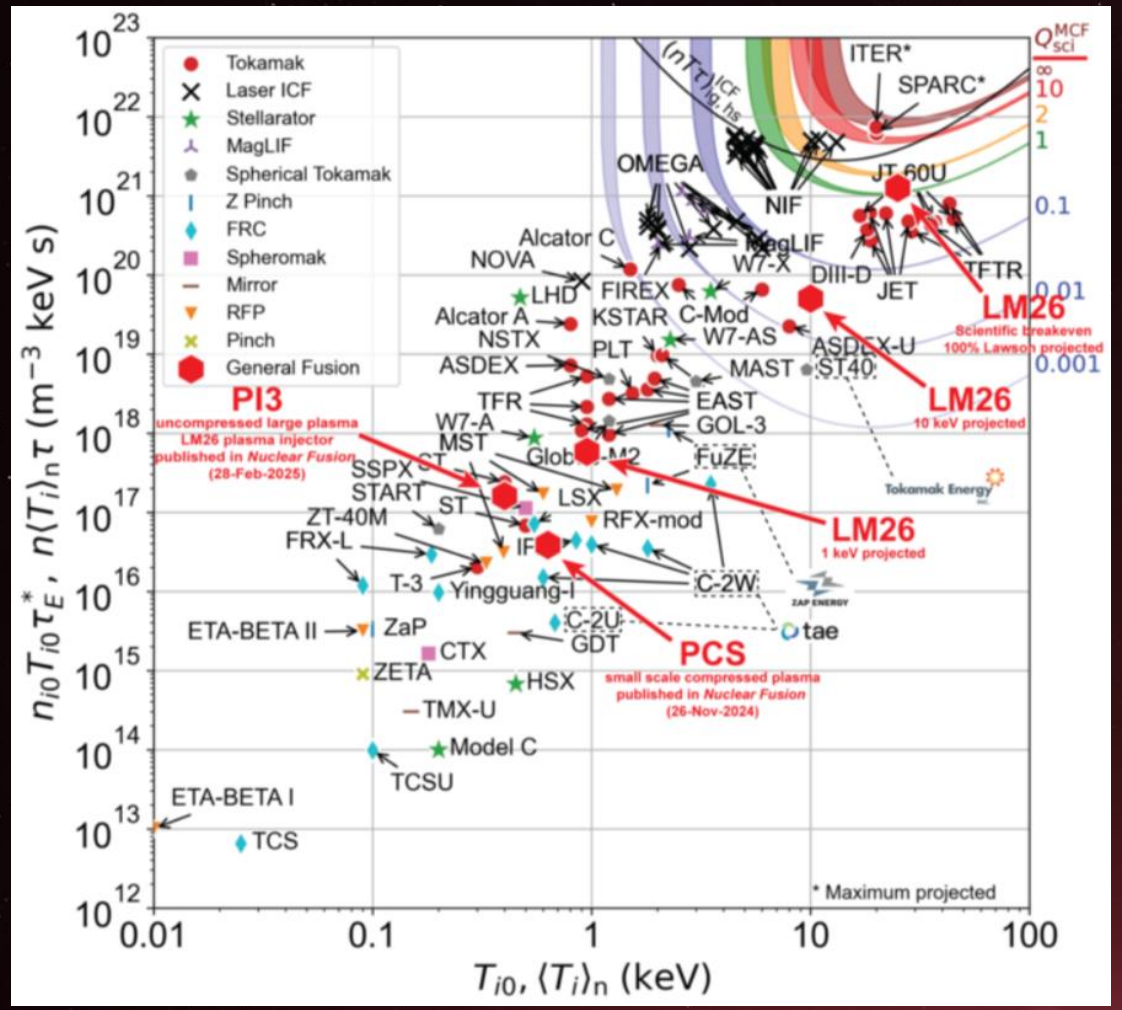
Scientific Breakeven Equivalent (100% Lawson)

LM26: DESIGNED FOR WORLD-FIRST MILESTONES

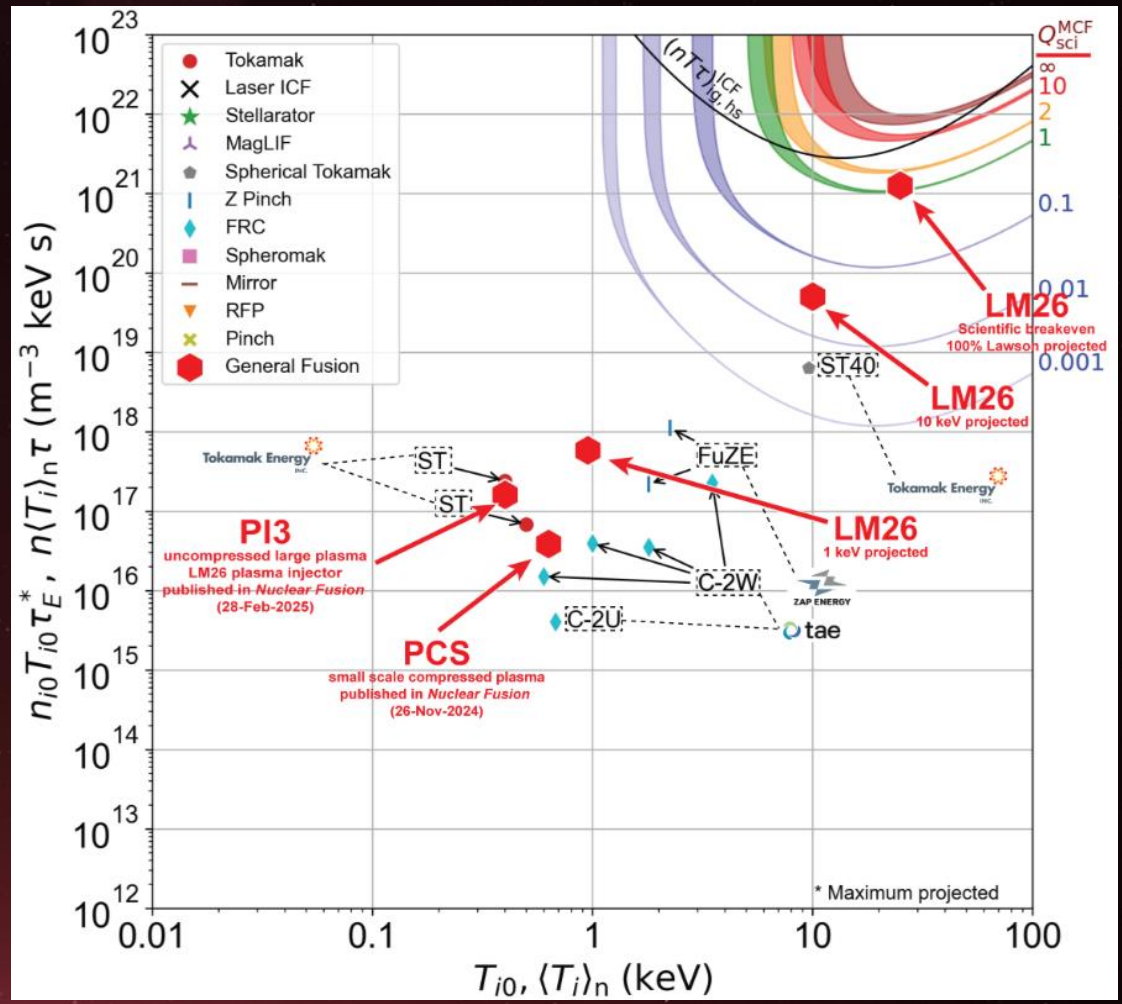


COMPETITORS AND LAWSON CRITERION (Under DOE Review)

Public Institutions and Private Companies

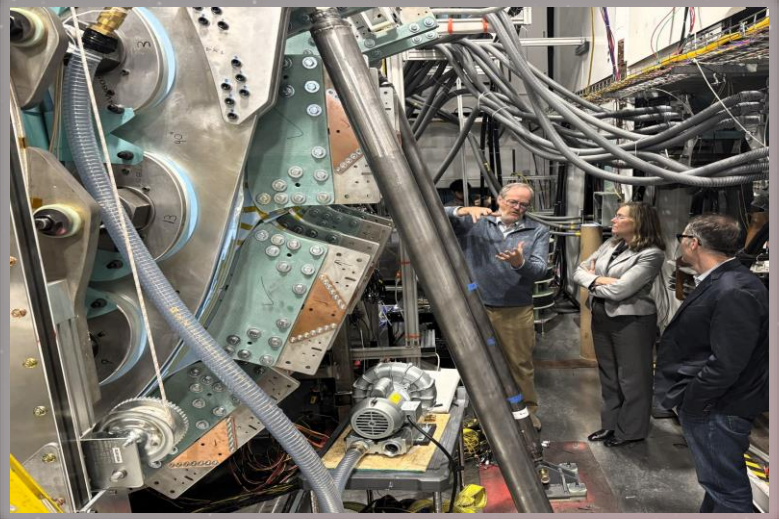


Private Companies Only

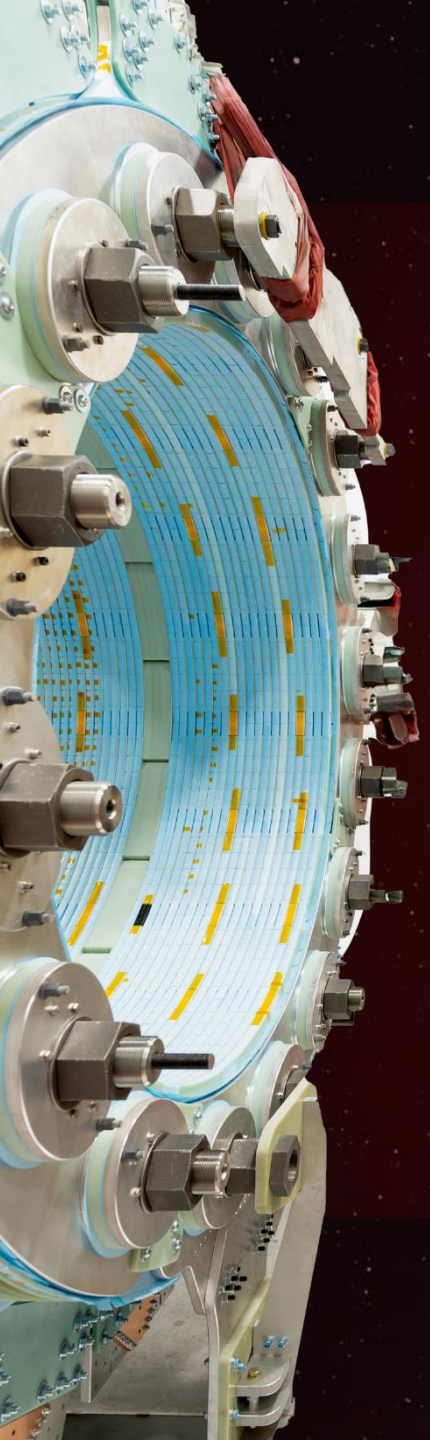


📝 Wurzel, Samuel E., and Scott C. Hsu. "Progress toward fusion energy breakeven and gain as measured against the Lawson criterion." Physics of Plasmas 29.6 (2022); https://github.com/swurzel/lawson-criterion-paper; updated by the authors for June 21, 2024; General Fusion data added and public data removed by General Fusion.

RIBBON CUTTING & FIRST PLASMA



TECHNOLOGY BACKED BY REAL RESULTS



20+
Years' Technology Development

$350M
Capital Raised

140
Employees

30
Peer Reviewed Publications

190
Patents

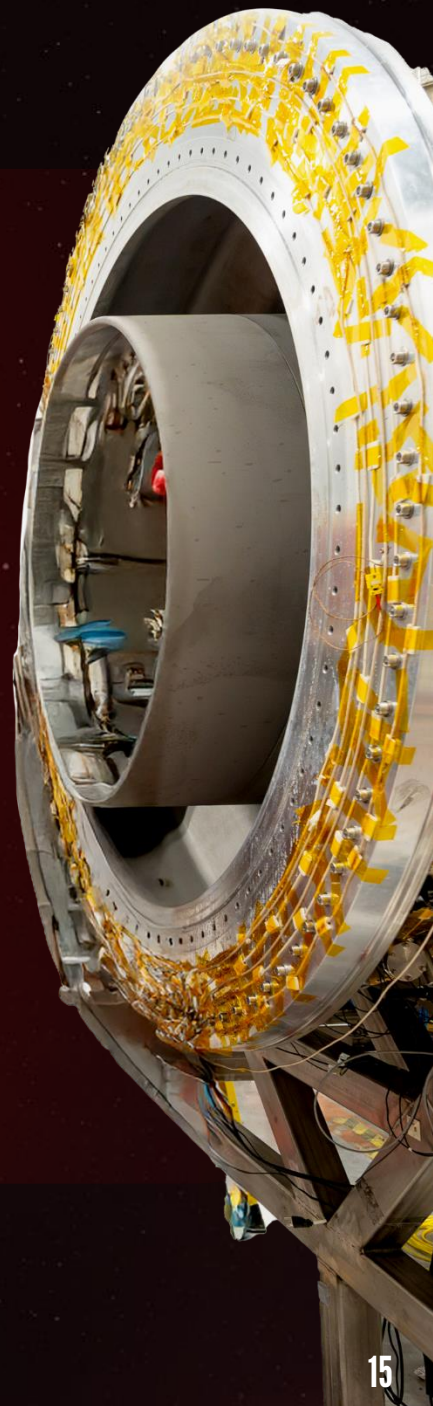
24
Plasma Injectors

200,000+
Plasma Shots

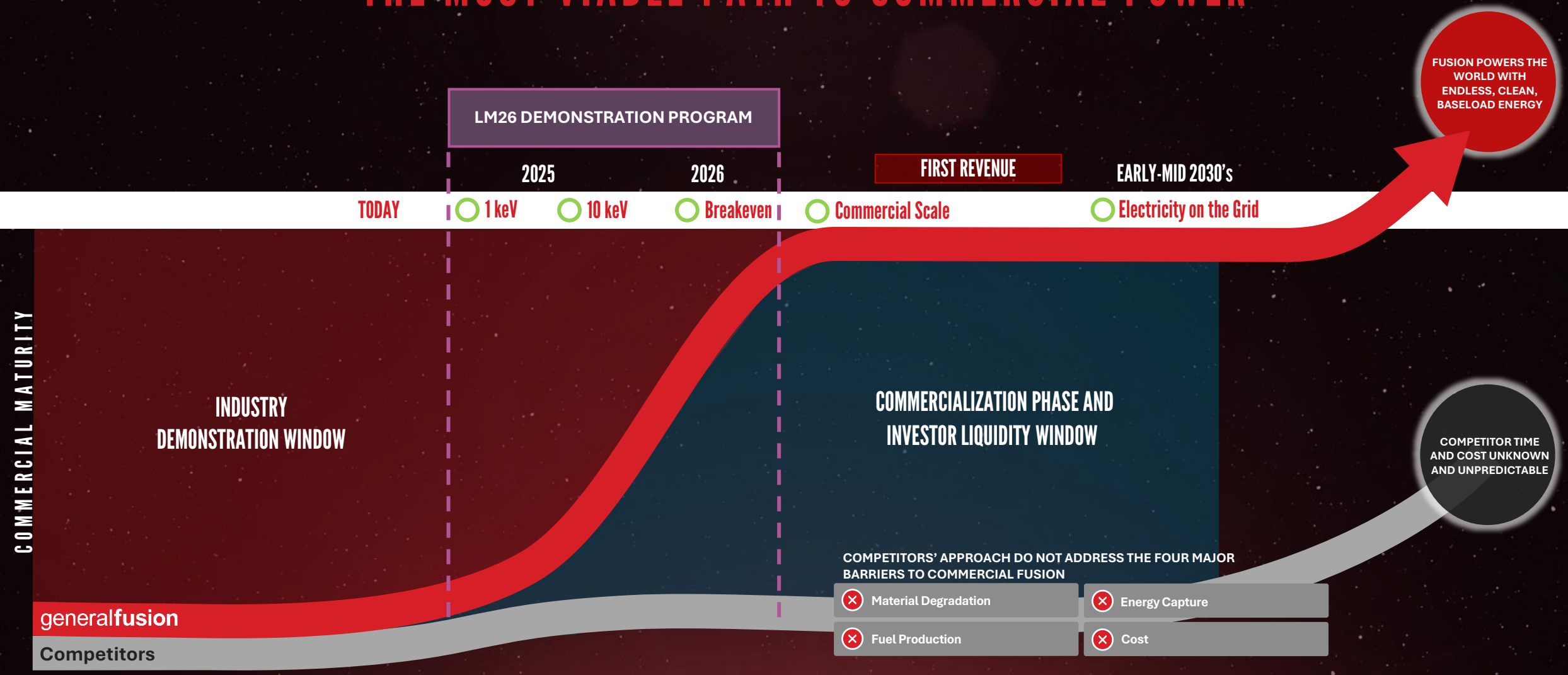
>600M
Neutrons/Second from Plasma Compression

1,000+
Liquid Vessel Compressions

LM26
Large-scale Demonstration Assembled



THE MOST VIABLE PATH TO COMMERCIAL POWER



CLEAN ENERGY. EVERYWHERE. FOREVER.™

generalfusion®

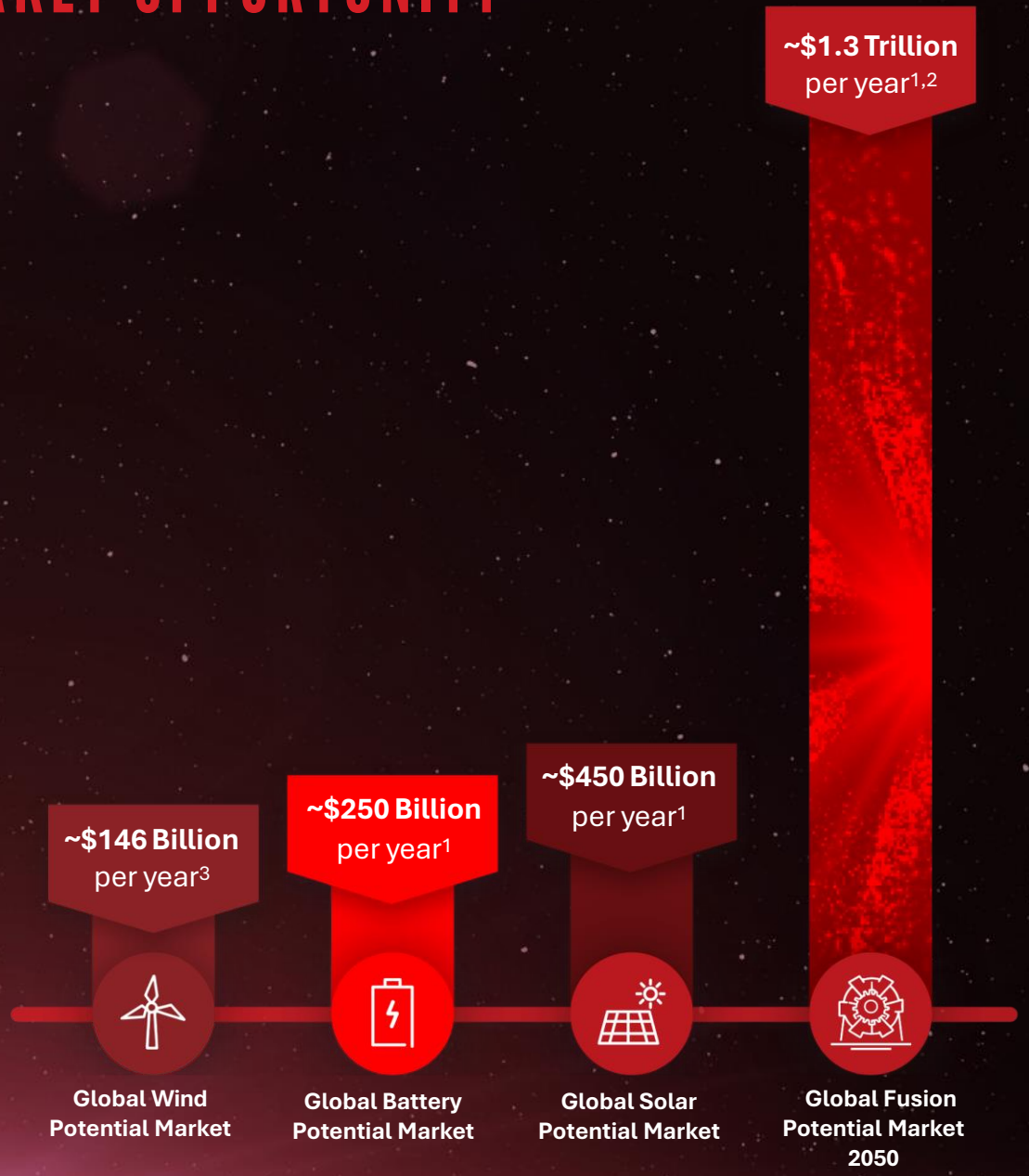
Website	Twitter/X	Instagram	LinkedIn
generalfusion.com	@generalfusion	@generalfusion	general-fusion

The only thing that is harder than doing fusion is:
raising money for fusion

FUSION: A MASSIVE MARKET OPPORTUNITY

The Fusion Market is Massive

- **Transformative Solution Deployable Globally**
- **Solves Energy Security Challenges Worldwide**
- **Favorable Regulation Already Underway**
- **Universal Demand, Everyone Needs Power**



1. International Energy Agency (2024). World Energy Outlook 2024. Investment in the global power sector is projected to reach $3 trillion annually by 2030 under the Announced Pledges Scenario. | 2. Calculated as forecast 2050 of 44.4% multiplied by $3 trillion. Forecast 2050 global electricity generation mix based upon Roland Berger's proprietary, country-level power models for 25 countries that are extrapolated to the rest of fusion market share the world that take into account the system cost of energy (levelized cost of energy plus reserve cost for intermittent resources based on penetration) and the availability/suitability of wind, solar and nuclear, among other variables. | 3. Wind Energy – Global Strategic Business Report by Global Industry Analytics Inc. January 2025

COMMON CHARACTERISTIC OF SUCCESSFUL FUNDRAISING PRIVATE FUSION COMPANIES

- SCIENTIFIC & ACADEMIC CREDIBILITY
  - Known science
  - Links to National Laboratories & Academics
- INCLUSION IN DEPARTMENT OF ENERGY (US) MILESTONE-BASED FUSION PROGRAM
- ACCESS TO OTHER NATIONAL SUPPORT PROGRAMS

- BILLIONARES SUPPORT
  - Bill Gates – Commonwealth Fusion Systems - through Breakthrough Energy
  - Sam Altman - Helion
  - Jeff Bezos – General Fusion
- ALTERNATIVE BUSINESS MODEL OR SOURCES OF REVENUE (e.g. SHINE Technologies, TAE Technologies)

COMPARISON WITH BIOTECH INDUSTRY – "FALSE FRIEND?"

BIOTECH

- Long time to reach market
- Distinct business models
- Clear regulatory framework
- Knowledgeable & specialized investor base
- Well understood model of external innovation
- Success stories

HOW DOES FUSION COMPARE?

What Fusion Energy Can Learn from Biotechnology*

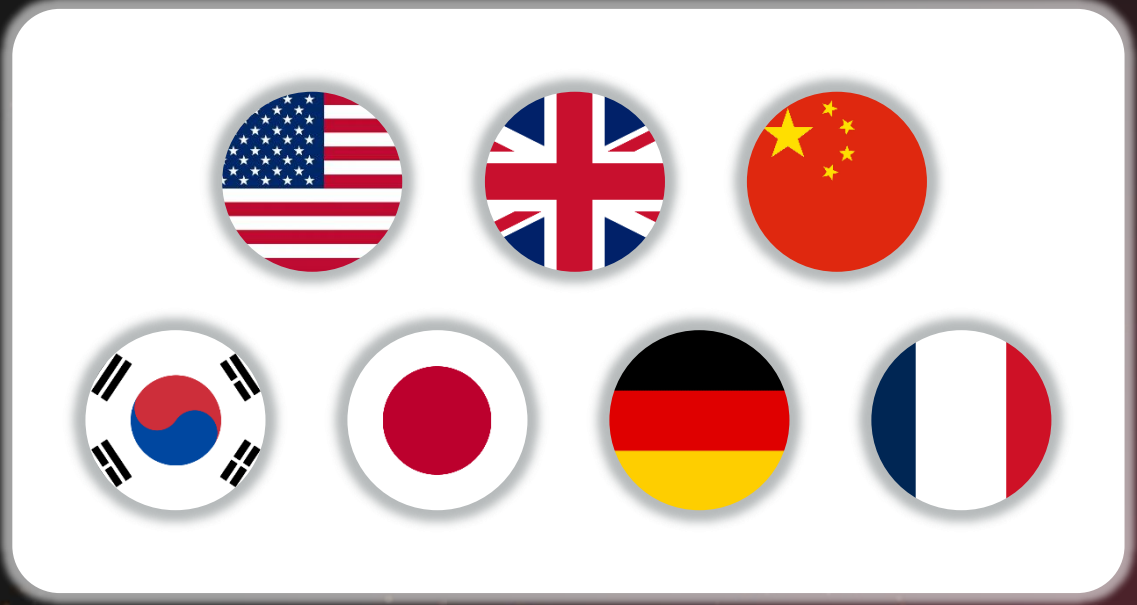
Andrew W. Lo[1–4,†] and Dennis Whyte[5–6]

[1]MIT Sloan School of Management, Cambridge, MA, USA;
[2]MIT Laboratory for Financial Engineering, Cambridge, MA, USA;
[3]MIT Computer Science and Artificial Intelligence Laboratory, Cambridge, MA, USA;
[4]Sante Fe Institute, Santa Fe, NM, USA;
[5]MIT Department of Nuclear Science & Engineering, Cambridge, MA, USA;
[6]MIT Plasma Science and Fusion Center, Cambridge, MA, USA;
†Corresponding author: Andrew W. Lo alo-admin@mit.edu

This version: 27 February 2024

GLOBAL FUSION RACE

National Fusion Programs



Private Fusion Companies

Government of Canada has provided 27% ($100M) of General Fusion's funding to date, and a Canadian National Strategy is being developed

EUROPEAN PRIVATE FUSION LANDSCAPE

TOP EUROPEAN PRIVATE FUSION COMPANIES BY FUNDING RAISED

- Tokomak Energy
- Marvel Fusion
- First Light
- Focused Energy
- Proxima
- Renaissance Fusion
- Gauss Fusion
- Novatron Fusion

- **Total Raised < $1 billion**

There are four private fusion companies in the US which EACH have each raised more funding than the entire private fusion sector in Europe!

- Commonwealth Fusion Systems
- Helion Energy
- TAE Technologies
- Pacific Fusion (committed)

EUROPEAN NATIONAL STRATEGIES

- United Kingdom: STEP
- Germany: €1bn research & “home of first fusion powerplant”
- France: ITER / France 2030

Programme de recherche exploratoire piloté par le CEA et le CNRS dans le cadre de FRANCE 2030

WHAT ABOUT PRIVATE FUSION IN THE NETHERLANDS?

- No private fusion companies
- Small number of fusion investors e.g. SET Ventures, Positron, high-net worth individuals
- Current Policy: 10 key technologies in for the Netherlands: #8 is Energy Materials

GENERAL FUSION "A LITTLE BIT DUTCH"

Leadership

TONY DONNE. PH.D.
Chairman, Scientific & Technical Advisory Committee

KLAAS DE BOER
Chairman, Board of Directors

WAL VAN LIEROP
Board Member

Investors

SET Ventures

CHRYSALIX VENTURE CAPITAL

Other Dutch High Net Worth private individuals

CLOSING QUESTION:

Someone will build the ASML of fusion.

The race is still wide open

What role does NL play?

Investment Opportunity into Fusion Leader

General Fusion, a world leader in bringing zero-carbon Magnetized Target Fusion (MTF) energy to the electricity grid is actively seeking strategic options with investors, buyers, governments and other funding partners to continue its world leading Lawson Machine 26 (LM26) fusion program.

Investment Highlights

- Significant opportunity to set lucrative terms by **June 30**
- Industry Leading LM26 is operating and has achieved a first plasma compression
- Clear Path to transformative milestones & significant value uplift in short term
- Proven track record building real machines

Value Drivers

- One of the only fusion companies in the world that has built and operated fusion testbeds.
- LM26 is operating and has compressed it's first plasma. It is well on track to achieving fusion conditions (1 & 10 keV) and Scientific Breakeven.
- LM26 will demonstrate and confirm MTF's ability to produce fusion, creating dramatic differentiation from the competition and valuation uplift opportunity.

Business Overview

- 23 years of fusion technology development expertise
- 190+ patents maintained around the world
- 30 peer reviewed publications on MTF
- $350 M in capital invested in MTF technology advancement to date from leading investors & government

Funding Timeline