



# TRANSFORMING HOW WE ENERGIZE THE WORLD

## Overview of General Fusion

general fusion®

# generalfusion<sup>®</sup>

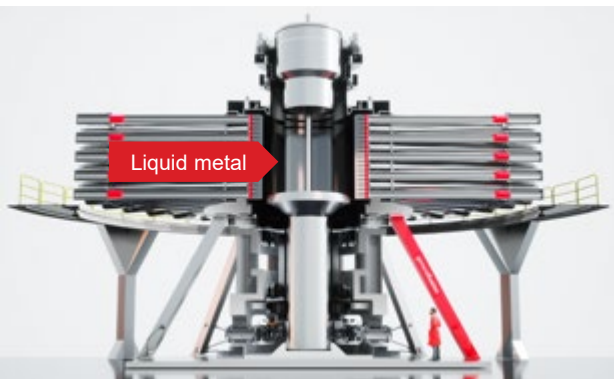


- Among first private fusion ventures founded
- Team of over 160 employees
- 15+ years and 200,000+ fusion plasma experiments conducted to date
- Headquartered in Vancouver, Canada with offices in Oak Ridge, TN and Culham, UK

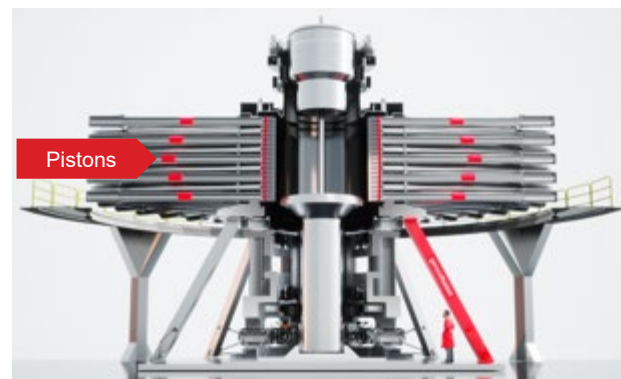


# General Fusion's Magnetized Target Fusion Technology

## Cavity Formation



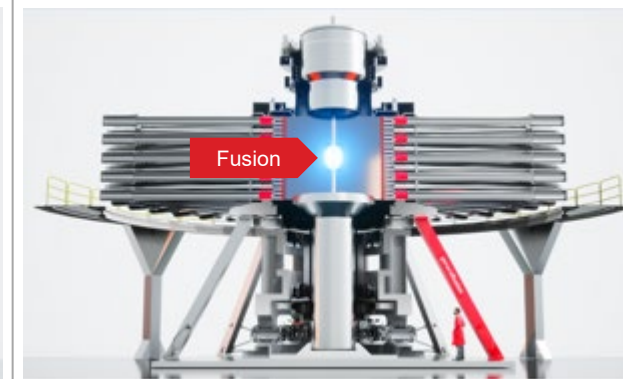
## Compression system Initiation



## Plasma injection



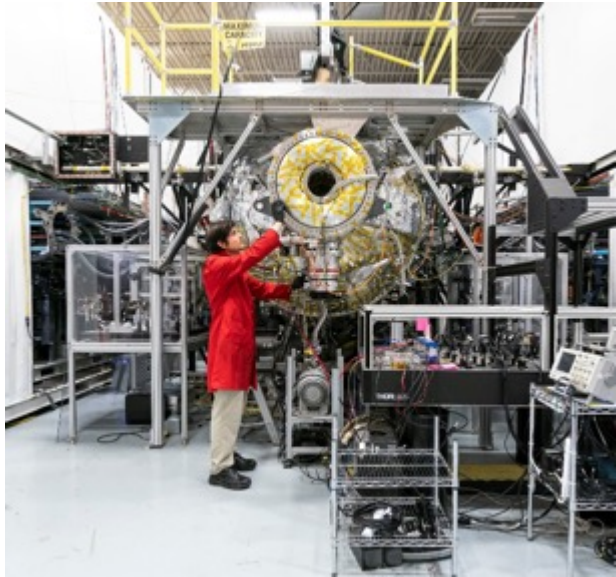
## Fusion and energy conversion



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

# Core technologies are in place for the first power plant-scale demonstration

## Plasma injector



## Compression system



## Fusion process stability



Company's innovative and protected technology is the result of 15 years of development and 200+ patents and patents pending



Focused on maximizing value by partnering with industry leaders to:

- Aggregate complementary strengths
- Access key enabling technologies
- De-risk program execution



Continuing to build and strengthen partnerships to complement General Fusion's core expertise in:

- Technology scale up
- EPC business operations
- Business Development
- Government Relations

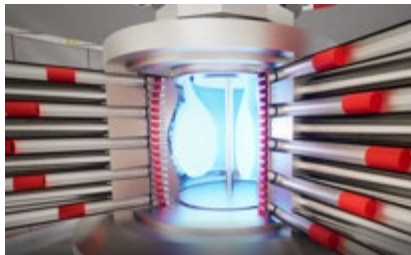
# A Wide Spectrum of Partnerships

## Partnership-based strategy

### Fusion technology development:

Build sustained value around fusion technology

Example: Plasma science



Fusion research



### Enabling technologies:

Develop supporting capabilities through enhancement of existing industrial IP

Example: Heat exchanger



Big data/AI



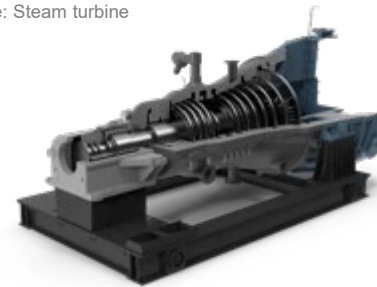
Manufacturing



### Engineering, construction, and manufacturing:

Apply commercially proven technologies delivered by partners

Example: Steam turbine



Engineering and construction



Forging/materials



Architect



# The MTF Fusion Demonstration Plant's (FDP) Purpose

Integrate all key technologies for MTF fusion: Plasma injection, compression vessel, rotor, pistons, liquid metal & diagnostics



**70% scale**

of commercial power plant

**1 pulse per day**

repetition rate

**Off-grid**

demonstration prototype

The FDP Program has 2 primary goals:

Demonstrate at relevant power plant-scale, that fusion conditions can be practically achieved using General Fusion's MTF technology

Refine commercial fusion power plant economics and next steps based on actual FDP performance



The FDP will be hosted by UK Atomic Energy Authority (UKAEA) at the Culham Campus

*Fantastic news that General Fusion is building a plant in the heart of UK fusion at Culham Science Centre!*

**Boris Johnson, Prime Minister UK, June 2021**

*"We want General Fusion to become a central part of the UK's fusion ecosystem, driving forward innovation and research in this hugely promising field."*

**UK Government, January 2021**

## Strategic benefits

- FDP located at world's leading fusion research center
- Jointly funded collaborative R&D on key technologies
- Resources for FDP engineering and operations
- Preferred access to UK supply chain
- Construction starting in 2022 with FDP operations beginning in 2025

## Strategic Implications

- Major technical and financial risk reduction milestone
- Presence in North America and Europe
- Funded by 3 governments





**CLEAN ENERGY. EVERYWHERE. FOREVER.™**

generalfusion®



Website  
[generalfusion.com](https://generalfusion.com)



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



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



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