

The global fusion industry in 2025

Fusion Companies Survey by
the Fusion Industry Association

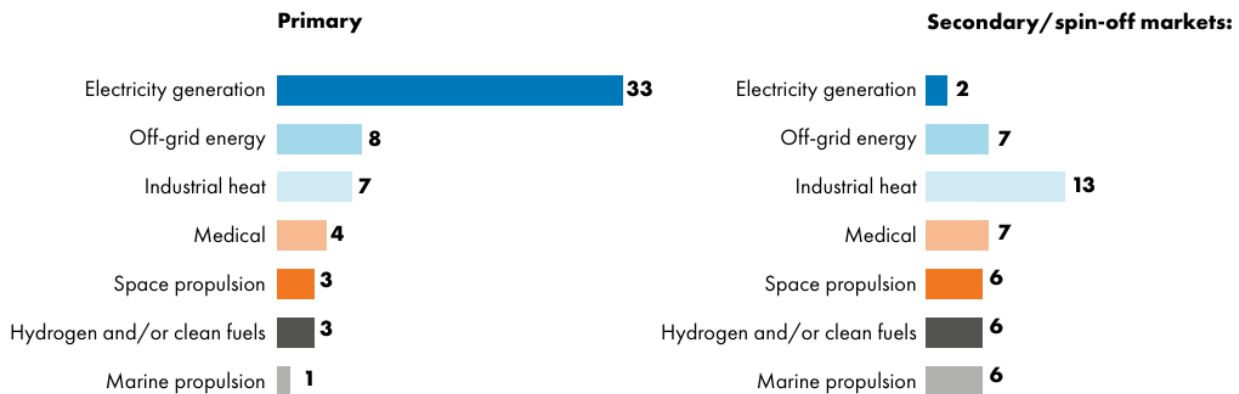
1. Location

By primary HQ



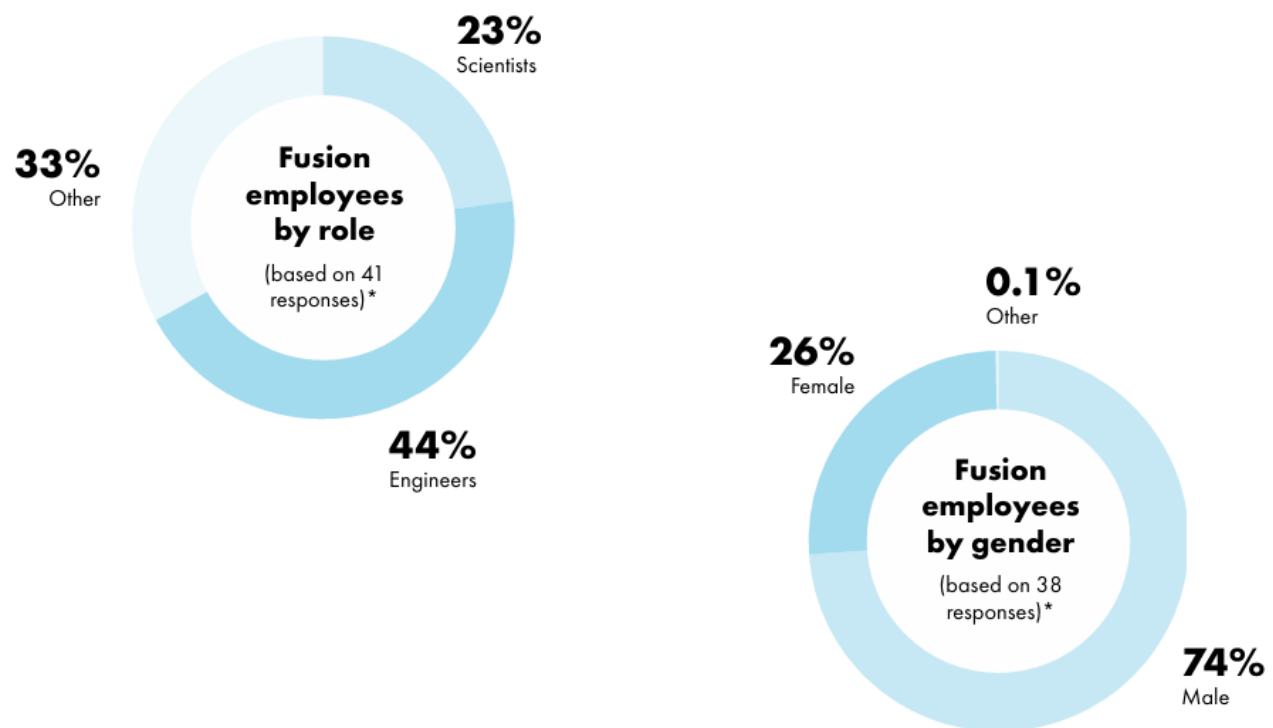
2. Target markets

Primary and secondary markets (respondents could select multiple)



Other named markets included: materials research, lithium breeding, nuclear waste transmutation, laser driven imaging, neutron source, Radiation-as-a-Service (RaaS), hard rock tunneling and mining, diagnostic development, neutron imaging and radiation effects testing for advanced industrial inspection, tritium and radioisotope production.

3. Employees



Numbers are approximate and based on companies' estimated figures, rounded to the nearest 10%. Companies that did not provide demographic and role data are not reflected in these figures.

4. Selected* investors who have made investments in fusion in the last 12 months

31 Ventures	ENN Group	Playfair VC
Addition	EQT Ventures	Plynth Energy
Athos	European Innovation Council Fund	PRIMEPULSE
Avila VC	Fukikara	Sam Altman
b2ventures	Furukawa Electric	Santander
BAM Elevate	Future Ventures	Shell Ventures
Bayern Kapital	Granitor	Siemens Energy
Breakthrough Energy Ventures	GSBackers	SiteGround
BW Group	HV Capital	Softbank Vision Fund 2
Capricorn Investment Group	Industrial47 Venture Studio	Soros Fund Management LLC
Chevron Technology Ventures	Industrifonden	Special Invest
Chishima Real Estate	In-Q-Tel	Speedinvest
Climentum	Nichicon	St1
Crédit Mutuel Impact	Itochu	Tengelmann Ventures
DCVC	K-CAP	Thales
Delight Ventures	Khosla Ventures	Titelton Tech
Deutsche Telekom	Leitmotif	Tom Enterprise
General Catalyst	Lightspeed Venture Partners	Unit-E, Axon Partners
Good Ventures Foundation	Lowercarbon Capital	WARF Ventures
Google	Marubeni	Mayfield
Earlybird VC	Mithril Capital	Xplor Ventures
Ecosphere Ventures	Miyako Capital	A complete list of reported investors over all time is available in previous year's reports: www.fusionindustryassociation.org/fusion-industry-report-archive
Virginia Venture Partners	Mizuho Financial Group	
Emerson Collective	Nucor	
Energy Impact Partners	NVTRN Supporters	

* Investor information is self-reported by companies. This list reflects those reported investments made in the past 12 months. The FIA is not responsible for the responses listed in this report from survey participants and does not intend to disclose any proprietary information. For a complete history of reported investors, please refer to our earlier reports.

5. Public-Private Partnerships



20 companies

report being engaged in a Public-Private Partnership (PPP) that includes cost-sharing with government



Most grants in the
\$5-15m range



with a couple as high as
\$100-150m
(milestone dependent)

Noted PPPs include:

- **Milestone-Based Fusion Development Program:** U.S. Department of Energy (DOE) program to support development of a fusion pilot plant (FPP) and commercialization of fusion power.
- **Innovation Network for Fusion Energy (INFUSE):** DOE initiative funding PPPs to accelerate fusion energy development by providing access to national laboratories.
- **INCITE:** Provides access to DOE's supercomputing facilities to accelerate scientific discoveries and technological innovations.
- **CHADWICK:** Part of DOE's Advanced Research Projects Agency-Energy (ARPA-E) focused on developing advanced materials for the first wall of fusion machines.
- **The UK's Prosperity Partnership programme:** Funds collaborative research between universities and industry to drive innovation in key technologies.

6. Approach



General approach

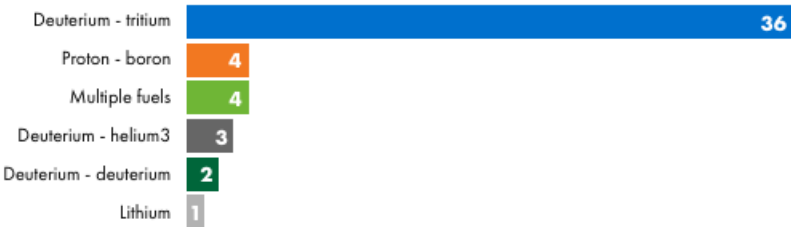
- 25 Magnetic confinement (inc. Tokamak, Stellarator)
- 11 Inertial confinement
- 6 Magneto-inertial
- 4 Hybrid electrostatic confinement
- 1 Muon-catalyzed fusion
- 4 Non-traditional concepts/Not stated



Specific approach

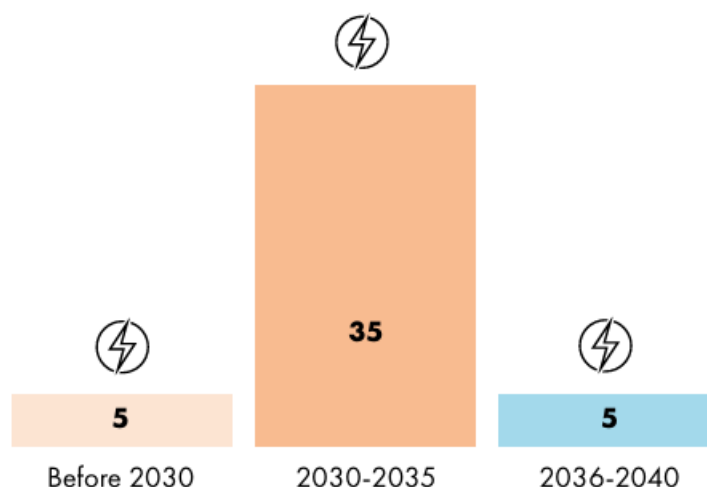
- 7 Stellarator
- 7 Laser-driven inertial confinement
- 4 Spherical tokamak
- 3 Tokamak
- 3 Magnetized target fusion
- 3 Magnetic-electrostatic confinement
- 3 Field Reversed Configuration
- 2 Laser-driven inertial confinement, with pB11 fuel
- 2 Z-pinch
- 1 Active-target muon production and high density fusion cell
- 1 Inertial-electrostatic lattice confinement
- 1 Poloidal magnetic confinement
- 1 Pulsed magneto-plasma pressurized confinement
- 1 Shock-driven inertial confinement
- 1 Plectoneme
- 1 Supporting Multiple Approaches
- 1 Dense Plasma Focus
- 1 Magnetic Mirror
- 1 Dynamic Stellarator
- 1 Levitated Dipole
- 1 Pulsar-driven inertial confinement
- 1 Quasi-isodynamic stellarator
- 1 Spindle cusp, superconducting shielded-grid Inertial Electrostatic Confinement
- 1 Magnetic Mirror
- 1 Electrostatic confinement
- 1 Centrifugal Magnetic Mirror

7. Fuel Source



8. When do you anticipate your company will operate a commercially viable pilot plant?

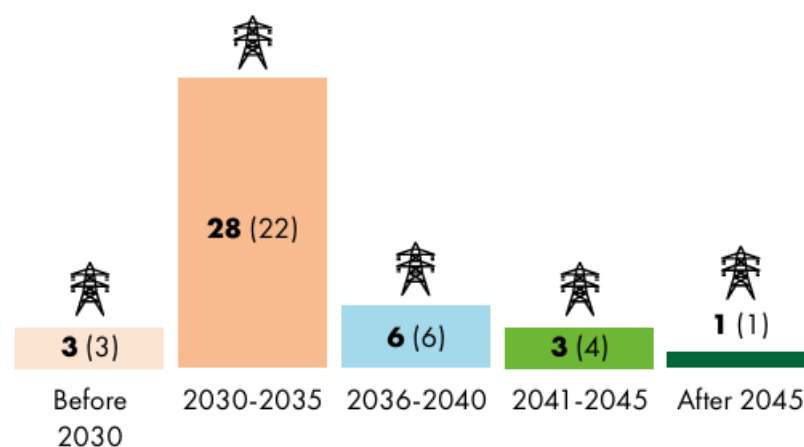
(45 responses)



9. When do you anticipate your company will deliver power to the grid?

(41 responses)

**Last year's response in brackets*

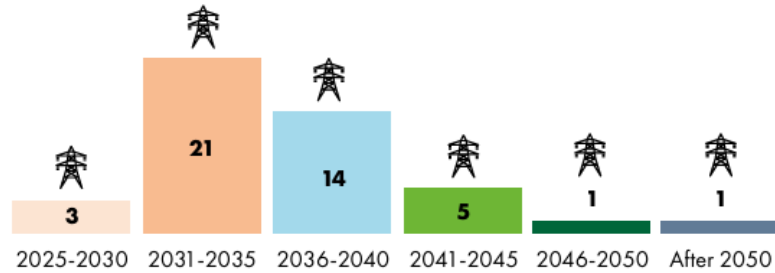


10. Predictions

Any variations between these and previous charts are due to different respondents between questions.

When will the first fusion plant deliver electricity to the grid?

(45 responses)



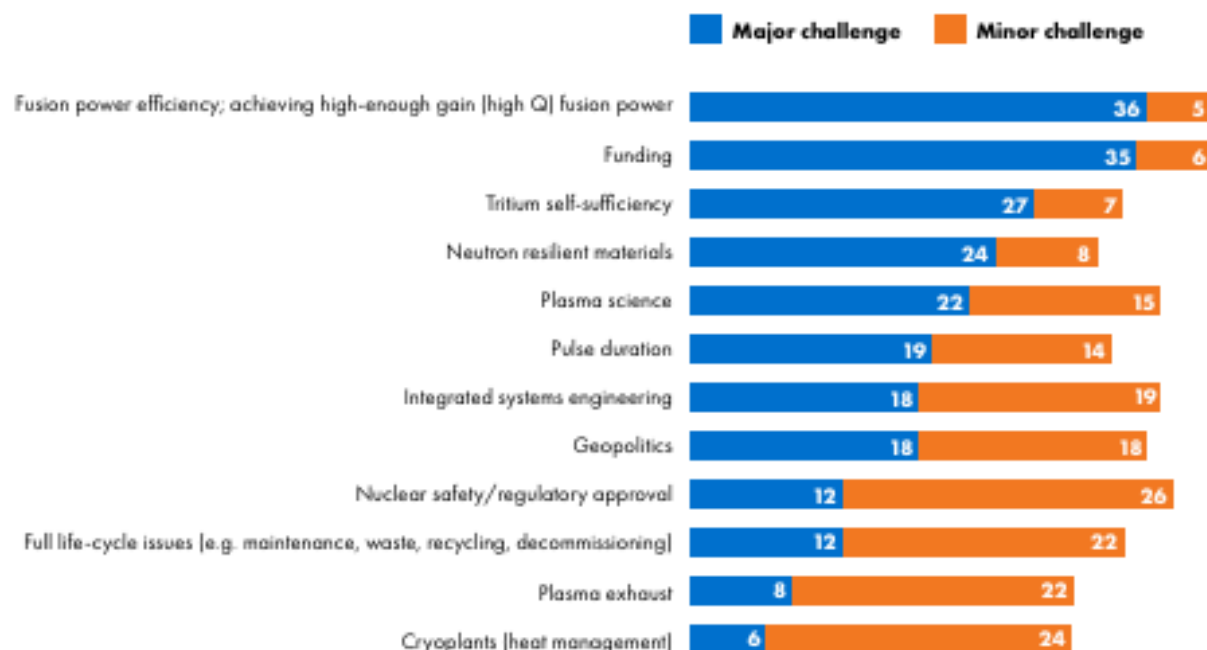
When will the first fusion plant demonstrate a low enough cost/high enough efficiency (Q) to be considered commercially viable?

(44 responses)

11. Challenges

What do you see as the main challenges for fusion energy up to 2030?

[42 responses, non-reported answers indicate not seen as a problem/don't know]



What do you see as the main challenges for fusion energy after 2030?

[38 responses, non-reported answers indicate not seen as a problem/don't know]

