

General Fusion Achieves World-First 1 keV Electron Temperature Milestone on its Path to Commercial Fusion Power

October 8, 2026

1 keV result announced jointly with the UKAEA and accompanied by meaningful ion heating

VANCOUVER, British Columbia, Oct. 08, 2026 (GLOBE NEWSWIRE) -- General Fusion Group Ltd. (NASDAQ: GFUZ) ("General Fusion" or the "Company") has achieved a world-first compressional plasma heating result with its large-scale Lawson Machine 26 ("LM26") demonstration, a key milestone on its path to commercialize fusion energy. Using Magnetized Target Fusion ("MTF"), the Company has reached electron temperatures exceeding 12 million degrees Celsius, more than 1 keV, measured with both Thomson scattering and absolute extreme ultraviolet ("AXUV") diagnostics, and accompanied by meaningful ion heating. This world-first result for General Fusion's practical approach to fusion marks a major step forward on the Company's plan to deliver reliable baseload, economical clean power from fusion energy.

The gold-standard Thomson scattering result, measured in collaboration with the UK Atomic Energy Authority ("UKAEA"), is detailed in a [joint release](#) issued today by the two organizations and a technical paper co-authored by UKAEA that is being concurrently posted on [General Fusion's website](#) and submitted for peer review. The Company's AXUV temperature measurement and ion heating results are detailed in a separate technical paper, also available on [General Fusion's website](#) and submitted for peer review.

The combined results provide further confidence in the Company's core MTF technology principles and achieve the first of three key technical milestones for LM26. Its next major milestone on its path to commercial power: compressional heating to 10 keV. Planned upgrades to LM26 are now underway for this next milestone.

Path to Commercialization

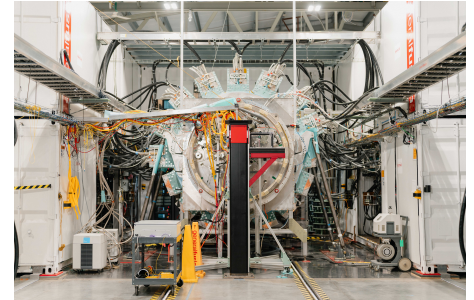
As a technology, General Fusion's MTF aims to achieve fusion in a practical and economical way, avoiding superconducting magnets and high-powered lasers, and using a liquid metal wall which enables the use of existing materials and, ultimately, durable machines. It is designed to solve significant long-standing barriers to commercializing fusion energy at a time when demand for reliable, scalable electricity is surging, and nations around the world are racing to bring fusion power to the grid.

General Fusion's LM26 program was designed to reach three key technical milestones on the path to a first-of-a-kind fusion plant in the next decade. Upgrades to the LM26 machine are now underway to support higher plasma compression ratios required to achieve the second milestone of 10 keV. From there, the program will advance toward its third milestone, the Lawson criterion, which is the combination of temperature, density, and energy confinement time required for net fusion energy in the plasma. Additionally, the Company is preparing to start its commercial systems program to advance key systems and components for a commercial plant. This step-by-step approach is designed to de-risk the path to practical fusion power and support the Company's goal to begin operating a first-of-a-kind plant around 2035.

Key Technical Highlights

- Using an industry-recognized, gold-standard Thomson scattering diagnostic, General Fusion measured electron temperatures of approximately 1.1 keV, or 12.6 million degrees Celsius, just prior to peak compression, a result measured with UKAEA and detailed in a paper co-authored by General Fusion and UKAEA.
- In addition, the Company's AXUV diagnostic data closely aligned with the Thomson scattering heating trend and measured electron temperatures of approximately 1.2 keV, or 13.7 million degrees Celsius, during peak compression, a deeper point at which Thomson scattering measurement is not available.
- During compression, the Company also observed ion heating to approximately 0.46 keV, up to a twofold increase above starting ion temperature. Ion temperature is inferred through both a measurement of neutron yield and plasma density profile and through time-dependent reconstruction of diagnostic data.
- Plasma temperature, density, and magnetic field all increased as expected for a stable plasma under compression, providing further confidence in the Company's core MTF technology principles and its next key technical milestone:

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A World-First for Practical Fusion Technology

Only a few fusion companies have achieved the key milestone of 1 keV, all using other approaches. LM26 is the first fusion machine in the world to achieve 1 keV with practical low-speed compression. The Company's approach uses MTF to heat magnetically confined plasma through relatively low-speed compression (milliseconds) as compared to other types of plasma compression technologies (microseconds or nanoseconds). This compression is achieved with a metal wall, rather than high-powered lasers or other methods operating in physical extremes. This method and speed of compression is advantageous for the commercialization of fusion power and, ultimately, its economics: it means less required power, less complexity, and less cost. It also means, in General Fusion's commercial design, a liquid metal wall can protect the machine from neutrons, breed fuel, and efficiently capture heat to create steam and spin a turbine, the technology's key commercialization advantages. This 1 keV achievement is a key step toward the Company's ultimate commercial approach.

Global Collaboration

General Fusion has spent more than two decades developing its fusion technology in Canada, with support from the Government of Canada's Strategic Response Fund and other programs that have been instrumental to the Company's progress. General Fusion has also worked with UKAEA to develop the diagnostic systems behind this result, described further in today's joint news release with UKAEA. General Atomics Energy Group is also advising on the diagnostic system required for the Company's next milestone.

Quotes

"Reaching more than 1 keV on LM26, alongside confirmed ion heating and corroborating AXUV data, is an important step forward for General Fusion and a meaningful validation of the approach we have spent more than two decades developing. It shows that we are delivering against the technical roadmap we set out for LM26 and gives us greater confidence as we advance toward our next target of 10 keV, the Lawson criterion and practical and economical fusion power at commercial scale. Congratulations to our incredible team, who achieved an industry-defining result on our path to deliver cost-effective, practical fusion energy."

— Greg Twinney, Chief Executive Officer, General Fusion

"General Fusion's latest achievement underscores Canada's strength as a global leader in clean technology innovation. Advancing fusion energy from the laboratory toward commercial application will unlock significant economic opportunities, drive industrial growth, and support highly skilled jobs. This milestone highlights the value of supporting Canadian champions that are transforming bold ideas into solutions and will ensure Canada can lead and compete in emerging global energy markets."

— The Honourable Mélanie Joly, Minister of Industry and Minister responsible for Canada Economic Development for Quebec Regions

About General Fusion

General Fusion (NASDAQ: GFUZ) is a fusion technology development company. The Company aims to deliver economical, carbon-free fusion energy through its practical Magnetized Target Fusion ("MTF") technology, an engineering-driven approach to fusion energy. General Fusion's commercialization program is anchored by LM26, the world's first commercially relevant-scale MTF demonstration machine. The Company is working toward the commercial deployment of fusion power in the mid-2030s. General Fusion is the first publicly listed fusion company and TIME's No. 1 GreenTech Company of 2026. For more information, visit generalfusion.com or follow General Fusion on [LinkedIn](#), [YouTube](#), and [X](#).

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Cautionary Note Regarding Forward-Looking Statements

This communication includes "forward-looking statements" within the meaning of the U.S. federal securities laws and "forward looking information" within the meaning of applicable Canadian securities laws (collectively, "forward-looking statements"). All statements other than statements of historical facts contained herein are forward-looking statements. Any statements that refer to projections, forecasts, or other characterizations of future events or circumstances, including any underlying assumptions, are also forward-looking statements. In some cases, you can identify forward-looking statements by words such as "estimate," "plan," "project," "forecast," "intend," "expect," "anticipate," "believe," "seek," "strategy," "future," "opportunity," "may," "target," "should,"

“will,” “would,” “will be,” “will continue,” “will likely result,” “preliminary,” or similar expressions that predict or indicate future events or trends or that are not statements of historical matters, but the absence of these words does not mean that a statement is not forward-looking. Forward-looking statements include, without limitation, statements regarding its ability to commercialize Magnetized Target Fusion (“MTF”) or any other fusion technology on its expected timeline or at all; statements regarding the current and expected results of the LM26 program, the Company’s plan to operate a first-of-a-kind plant around 2035; statements regarding the expected market opportunity for fusion energy, as well as any information concerning possible or assumed future results of operations or financial position of the Company.

These forward-looking statements are provided for illustrative purposes only and are not intended to serve as, and must not be relied on as, a guarantee, an assurance, a prediction or a definitive statement of fact or probability. These forward-looking statements involve a number of risks, uncertainties that may cause actual results or performance to be materially different from those expressed or implied by these forward-looking statements. These risks and uncertainties include, but are not limited to, the risk that the technical results disclosed herein are not accepted or validated by the broader scientific community (including that the peer review process is unsuccessful); the risk that prior results are not successfully repeated on a larger scale; the risk that the scientific and technical assumptions underlying the results described herein prove to be incorrect; the risk that our relationship with the UKAEA and others deteriorates or terminates, the risk that recent technical results do not prove to be as significant to the operation of LM26 as expected; the risk that the anticipated cost of funding the LM26 program across several planned technical milestones through the end of 2028 is greater than anticipated and additional capital needed by the Company may not be raised on favorable terms, or at all, including as a result of the restrictions agreed to in connection with the private placement the Company closed on July 10, 2026; the risk of adverse changes in general economic, financial market and geopolitical conditions, including conditions affecting capital markets and the clean energy sector; the risk that we are unable to develop, demonstrate and commercialize MTF technology on the expected timeline or at all, including any failure to achieve the balance of technical objectives of the LM26 program; the risk that we are unable to begin operating a first-of-a-kind plant around 2035, or at all; the risk that fusion energy does not gain public acceptance, the risk that the scientific and technical assumptions upon which the Company’s MTF technology is based do not prove to be correct, risks associated with the Company’s status as a development-stage company with a history of losses, no revenue from commercial fusion energy operations and no assurance of achieving profitability; the risk that our competitors develop viable fusion technology sooner than we do, the risk of supply chain disruptions, the risk that key technical material and service inputs may not be available when required on reasonable terms or at all, the risk that we are unable to attract and retain qualified personnel with highly technical expertise, the risk that we are subject to negative publicity, the risk that our assessment of the total addressable market for fusion energy is incorrect, the risk of changes in the laws and regulations governing the Company’s research and development activities and in the regulation of fusion energy generally; the risk of fluctuations in foreign currency exchange rates, particularly fluctuations in the Canadian dollar relative to the U.S. dollar; the risk that the Company is unable to complete and successfully integrate any future acquisitions; the risk of increased competition from other fusion energy companies and from other clean energy, conventional energy and energy storage technologies; the risk of accidents, earthquake, fires, floods and other natural disasters, the risk that our information technology fails, the risk that our operating expenses are materially higher than forecast, the risk that we are unable to remediate material weaknesses in our internal controls or identify additional material weaknesses in the future, the risk that we are unable to adequately protect or enforce our intellectual property rights, the risk of third party claims that we are infringing or violating another person’s intellectual property rights, the risk that our intellectual property applications are not granted, the risk of a cyber event or privacy breach resulting in an interruption in operations or financial loss, the risk that the trading in our securities may be volatile due to limited volume and the release of a substantial number of Subordinate Voting Shares from a lock-up expiring 180 days after the closing date of our business combination in July 2026; the risk of substantial dilution upon a reduction in the exercise or conversion price of the Multiple Voting Shares and PIPE warrants issued in July 2026 in accordance with the terms thereof; the effectiveness of our internal controls and disclosure controls and procedures; risks arising as a result from the limited experience of certain members of our management team in operating a public company; the risk that the period during which we will qualify as an emerging growth company under the JOBS Act is reduced; and the risk of litigation, governmental or regulatory proceedings, investigations or inquiries.

The foregoing list is not exhaustive, and there may be additional risks that the Company does not know or currently believes are immaterial. You should carefully consider the foregoing factors, any other factors discussed herein and in the other filings by the Company with the U.S. Securities and Exchange Commission including those described under the heading “Risk Factors.” If any of these risks materialize or assumptions prove incorrect, actual results could differ materially from the results implied by these forward-looking statements.

These forward-looking statements are based on a number of estimates and assumptions that we believe are reasonable when made including but not limited to: that none of the risks identified above materialize; that there are no unforeseen changes to economic and market conditions, and that no significant events occur outside the ordinary course of business.

In addition, these statements reflect the expectations, plans, and forecasts of the Company’s management as of the date of this communication; subsequent events and developments may cause their assessments to change. While the Company may elect to update these forward-looking statements at some point in the future, they specifically disclaim any obligation to do so, unless required by applicable securities laws. Accordingly, undue reliance should not be placed upon these statements.

In addition, statements that “we believe” and similar statements reflect our beliefs and opinions on the relevant subject. These statements are based upon information available to us as of the date of this communication, and while we believe such information forms a reasonable basis for such statements, such information may be limited or incomplete, and our statements should not be read to indicate that we have conducted an exhaustive inquiry into, or review of, all potentially available relevant

information. These statements are inherently uncertain, and investors are cautioned not to unduly rely upon these statements.

A photo accompanying this announcement is available at <https://www.globenewswire.com/NewsRoom/AttachmentNg/8081b2e4-14f2-4ca0-ac40-f64b9864a86f>

A video accompanying this release is available at <https://www.globenewswire.com/NewsRoom/AttachmentNg/419b7847-e15d-4354-855f-7ba6e5575a2c>