



Opening Statement of Chairman Brian Babin

Energy Subcommittee Hearing
Igniting America's Energy Future: The Promise and Progress of Fusion Power
September 18, 2025

Thank you, Chairman Weber.

This morning's hearing will examine the future of fusion energy and how the United States can maintain global leadership in fusion energy technologies.

Fusion has the potential to revolutionize electricity generation and reshape entire industries.

Beyond powering the grid, it holds significant promise for a variety of commercial applications—from providing medical radioisotopes for cancer treatment, to enabling advanced materials processing techniques, to propelling spacecraft on deep space missions.

The private sector has emerged as a dynamic force in the commercial fusion energy landscape, with global investments exceeding ten billion dollars—driven largely by American companies.

This reflects a transition from government-led research and development to market-driven, commercially viable fusion innovations that could transform energy production worldwide.

Even major tech companies, such as Nvidia and Google, are investing more in fusion power startups, viewing the technology as a promising way to meet their growing energy demands.

Despite substantial private sector investments, the Department of Energy (DOE) plays a vital role in making fusion a reality.

DOE's latest Fusion Energy Strategy aims to accelerate the path to commercial fusion in collaboration with industry, while coordinating fusion-related efforts across government, academia, and the public and private sectors.

For example, Oak Ridge National Laboratory is leveraging its deep expertise in fusion materials, plasma diagnostics, and advanced modeling and simulation through three new research collaborations through the Innovation Network for Fusion Energy (INFUSE) program. These partnerships focus on addressing practical engineering challenges essential to delivering fusion power to the grid by the 2040s.

Additionally, DOE serves as the central hub for bridging the science and technology gaps necessary to achieve commercial fusion power.

Its role is critical, as the federal government is the only entity capable of undertaking the high-risk, high-reward long-term research and development required to address these challenges.

Although significant progress has been made, much more work remains to fully harness the potential of fusion technologies.

The rapid progress of the Chinese Communist Party (CCP) in this sector poses a direct challenge to U.S. technological leadership.

Historically, the United States has led the way in fusion research. However, the CCP has effectively utilized its industrial base and civil-military integration to accelerate technological development and rapidly scale critical infrastructure.

It is also committed to connecting the first fusion-fission hybrid power plant to the electrical grid by 2030.

The nation that successfully commercializes fusion first will likely set the global standards, supply chains, and technological frameworks that will shape the industry for decades to come. Moreover, the implications go beyond merely achieving technological leadership; they also raise important questions about global governance and values.

Fusion energy technologies must be developed and deployed by nations that uphold democratic values, transparency, and international cooperation—not by authoritarian regimes that might exploit energy dominance as a weapon.

The U.S. must prioritize fusion energy development to outpace the CCP's aggressive timelines.

Achieving leadership in fusion technology is not only essential for energy independence but also for ensuring that democratic values shape one of the most consequential breakthroughs of the century.

I want to thank our witnesses for their testimony today, and I look forward to a productive discussion.

Thank you, Chairman Weber. I yield back the balance of my time.