

Statement on the 2nd WFEG Ministerial Meeting

Conclusions in Chengdu

14 October 2025

The second ministerial meeting of the IAEA World Fusion Energy Group (WFEG), held in Chengdu, China, on 14 October 2025 – for the first time alongside the 30th IAEA Fusion Energy Conference – brought together ministers, senior officials, scientists, regulators, industry leaders, and international organizations. Over the course of the day, delegations and panellists reflected on the status of fusion energy, the pathways ahead, and the shared responsibility to advance this transformative technology.

The WFEG expressed its appreciation to the People's Republic of China for hosting this year's meeting, and to the Province of Sichuan for its warm hospitality and support.

The discussions reaffirmed the importance of international cooperation and the vital role of organizations such as the IAEA and ITER in supporting fusion research, development and deployment. Achieving this goal will require an inclusive, multi-stakeholder approach that brings together governments, regulators, academia, private industry, and civil society. Equally vital is building public trust: engaging communities from the very beginning to ensure that fusion energy is developed transparently, deployed safely, and embraced responsibly.

The WFEG established by the IAEA provides a platform for uniting these stakeholders and fostering a cohesive global fusion community. In this role, the Group seeks to accelerate research, development, demonstration, and deployment of fusion energy, acting as a catalyst at this critical juncture. Areas of focus include:

- Increasing global cooperation through recurring opportunities for dialogue and partnership,
- Ensuring efficacy of R&D programmes and effective use of facilities,
- Identifying and addressing technology and engineering gaps,
- Supporting the establishment of effective fusion regulation,
- Raising public engagement, youth involvement, and gender equality in fusion, and
- Promoting integration of fusion into energy markets and infrastructure.

The panels provided a comprehensive overview of the opportunities and challenges across three central themes:

Fusion State of Play: This panel provided an overview of recent developments in fusion research and technology including in physics, material science, engineering, construction, and manufacturing, outlining progress achieved in both public and private sectors. The discussion emphasized the need for sustained investment, effective knowledge exchange, and a clear roadmap to overcome remaining challenges and advance from experimental progress to demonstration and deployment.

Fusion Regulation: This session explored on how different countries are shaping their national approaches on fusion regulation while considering opportunities for alignment and cooperation. In this context, participants also discussed the importance of enabling innovation, safety, and fostering public confidence. Delegates highlighted the importance of international dialogue and cooperation that can help foster convergence in emerging regulatory frameworks.

Fusion Supply Chain: This panel discussed the readiness of global industrial and manufacturing capabilities to meet the needs of future fusion projects. Discussions centred on the development of crucial components, materials, and skills, as well as the role of collaboration between governments, research institutions, and industry in building resilient supply networks.

Throughout the day, a recurring theme was the central role of international collaboration across governments, industry, research and academia to ensure fusion progresses efficiently and safely to provide a clean solution to ever increasing global energy demands.

The WFEG asks the IAEA to continue advancing activities under its auspices, in collaboration with its Member States and partners, to support progress across these areas. The IAEA will periodically convene WFEG gatherings to review achievements, maintain high-level engagement, and promote further collaborative action to bring fusion from vision to reality.

The Group looks forward to convening again to take stock of progress and chart next steps.