Third High Level Meeting of IAEA World Fusion Energy Group (WFEG) - 12 November 2026, IAEA HQ, Vienna.

National Statement of Republic of India - Dr. Ajit Kumar Mohanty, Secretary (Department of Atomic Energy) and Chairman (Atomic Energy Commission), India.

Director General of IAEA - Rafael Mariano Grossi

Heads of Delegation,

Distinguished Delegates

Ladies & Gentlemen.

Namaskar

And Greetings from the Indian Delegation.

It is my immense honour to deliver the National Statement on behalf of the Government of India at the Third High Level Meeting of IAEA World Fusion Energy Group.

Two weeks back, at the IAEA Ministerial Conference in Incheon, we had discussed how nuclear power has emerged as an important policy option for the world looking for clean, carbon-free, scalable, secure and sustainable source of energy.

This platform today provides an opportunity to leverage the advances in Nuclear Fusion along with the already proven and ready-to-scaleNuclear Fission technology, for a more robust pathway to clean, abundant, low-carbon energy to power our future.

Excellencies,

Fusion energy production is no longer just a scientific experimentation. It has clearly moved towards engineering reality.

In recent years, we have witnessed remarkable progress in global fusion research. They include advances in high-temperature superconducting magnets, longer plasma confinement times, repeated ignition milestones at inertial-confinement fusion facilities and construction of larger tokamaks.

Hybrid fusion-fission concepts are also being explored in some countries as a bridge technology.

The emergence of private firms and start-ups in Fusion has greatly accelerated innovation and engineering development. However, it is vital that public funding continues to support fundamental science and large-scale experimental facilities.

Excellencies,

It is my great pleasure to brief this gathering on some of the recent developments in our domestic fusion programme and also our international partnerships.

India’s domestic fusion research is led by the Institute for Plasma Research (IPR) in Gandhinagar, under the Department of Atomic Energy.

So far, our domestic fusion program were mainly focused around ADITYA/ADITYA-Upgrade and the Steady State Super Conducting

[SST1]Tokamak along with the Research & Development work in basic plasma science, development of critical fusion technology areas and participation in ITER project.

With regard to ITER project, India has already completed the delivery of more than 75% of its in-kind commitments complying with the safety and quality standards of ITER.

India has also contributed actively to the International Tokamak Physics and Engineering Activities (ITPEA) for addressing specific Research and Development needs of ITER and future reactor grade machines, including leading some of the ITPEA topical groups.

India along with the rest of the Global fusion community eagerly awaits the Start of Research Operations (SRO) in ITER.

Excellencies,

Our own experiments in ADITYA and ADITYA-Upgrade Tokamaks in India have contributed significantly to global tokamak database in the areas of plasma generation, confinement, diagnostics, plasma disruptions and their mitigation, to name a few.

As a next step of our National fusion program, we plan to build a Demonstrative Project, which will be an intermediate, tokamak-based fusion pilot plant to generate 100 - 150 MWe of net electricity by 2040-42.

This project envisages the deployment of technologically demandingHighTemperature Superconducting (HTS) magnets and would

build on the expertise and technologies developed through India's domestic fusion program, ITER partnership and the expertise developed in nuclear fission projects in India.

It is also a matter of great pride for me to share that Indian Start-Ups supported by the Department are also making significant progress in the Tokamak based plasma production.

Our recently enacted 'SHANTI' Act will further catalyze the national effort towards the realization of fusion mission. Draft rules and regulations under the new Actinclude provisions relevant to deuterium–tritium fusion facilities.

We are confident that our fusion roadmap will significantly boost India's progress towards the goal of Viksit Bharat 2047 and meeting the commitment to achieve Net Zero greenhouse gas emissions by 2070.

Excellencies,

India strongly believes that fusion science and technology development must continue to remain as a collaborative global scientific endeavor.

Such global collaborations mutually benefit the participating nations in accelerating the development time, reducing the financial burden and mitigating project risks inevitable in such complex first-of-a-kind (FOAK) science and technology projects.

As fusion technology advances towards practical application, we also have to simultaneously work towards broad basing access and utilization of this technology beyond a limited group of countries.

As a responsible member of the global community, India is committed to both advancing the Fusion Science and Technology and also in engaging actively towards the meaningful participation of countries from the Global South in this mission.

However, this would require in particular, sustained efforts towards capacity building, human resource development, scientific and technical training, technology sharing, institutional partnerships and access to relevant research infrastructure and experimental facilities.

IAEA and the World Fusion Energy Group are uniquely placed to serve as an inclusive facilitator in this effort. In this context, it is our expectation that the deliberations in this forum will help shape a broad-based, transparent and inclusive approach to fusion energy development.

I wish this meeting a grand success.

Thank you.

Jai Hind.