



International Atomic Energy Agency

IAEA Statement

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Mr Chair, Distinguished Delegates and Observers,

Thank you for providing the International Atomic Energy Agency (IAEA) an opportunity to speak today. The IAEA has long recognized plastic pollution as one of the most serious environmental challenges and nuclear technology can be part of the solution.

In 2021, the Director General of the IAEA, Rafael Mariano Grossi, launched the NUclear TEChnology for Controlling Plastic Pollution (NUTEC Plastics), an initiative that builds on the IAEA's efforts to firstly address plastic pollution through recycling using radiation technology and secondly marine monitoring using isotopic tracing techniques. NUTEC Plastics can effectively support the goals of the INC treaty in tackling plastic pollution.

Regarding recycling, radiation-assisted upcycling contributes to the INC's objectives by promoting new ways for turning waste plastics into useful, higher-value products. Countries like Argentina, Indonesia, Malaysia, and the Philippines, are already demonstrating this, and over 52 other countries are exploring using radiation technology as part of the solution. This not only reduces the amount of plastic waste but also supports sustainable practices and a circular economy, where waste is turned into new resources.

Regarding marine monitoring, nuclear techniques help us better understand and monitor plastic waste. For example, techniques like isotopic analysis provide precise, science-based data on plastic origins, pathways, and environmental impacts. These scientific methods provide accurate data that help countries track marine microplastic pollution more effectively and are essential for the INC's mission to develop binding agreements, prevent illegal dumping or mishandling. Through its marine

environment laboratories, the IAEA can support Member States in their effort to monitor microplastics in the marine environment and the new Treaty could benefit from the NUTEC Plastics Global Marine Monitoring Network which is already made up of 100 laboratories around the world.

The IAEA, through its dedicated R&D laboratories and coordinated research mechanisms, is also working on supporting the development and optimisation of bio-based alternatives through radiation assisted technology which complements these efforts by providing safer, renewable options that reduce dependence on fossil fuels. Here again, the INC's treaty can benefit from these innovations by encouraging member states to shift toward sustainable, bio-based plastics in line with international cooperation and environmental commitments.

On 25-26 November this year, the Philippines will host the IAEA High-Level Forum on NUTEC Plastics which will highlight recent achievements in these areas, showcasing progress and reinforcing the importance of continued international collaboration.

In summary, Mr Chair, being through combining advanced radiation technology tools for innovative upcycling, manufacturing of bio-based plastics or tracing marine microplastic pollution with isotopic techniques, the IAEA's activities can support the implementation of the INC treaty with the view to reduce plastic pollution, enhance transparency in plastic waste management and promote safer, greener alternatives worldwide. Together, we can contribute to building a more resilient and environmentally friendly future.

Thank you.

For more information, visit [IAEA Flagship Initiative | IAEA](#)