

## Dear 10 Cians,

Over the past several decades, plastic — a remarkably durable and adaptable material — has become an inseparable part of our daily lives. It is present in a wide range of products and applications — from life-saving medical equipment to food packaging, from mobile phones to aeroplanes. Its versatility and affordability have made it indispensable across several sectors and industries.

Common alternatives like paper and glass consume more energy and water, and result in higher emissions over their life cycle. Specialized materials like bioplastics, while biodegradable, are more expensive and may have a **greater environmental impact.** Instead of attempting to replace plastic entirely, **we must focus on** its proper use, responsible disposal, systematic collection, and repurposing.

The common belief is that polythene is the primary cause of environmental pollution. However, most of the pollution we observe — both on land and in the oceans — results from mismanaged waste and littering behaviour, not from the material itself. In fact, over 80% of littering is intentional. While plastics account for less than 1% of global waste by weight, it is their **improper disposal** that poses a significant threat to the environment.

This becomes especially relevant as countries, communities, and corporations come together to observe World Environment Day on June 5, under the aegis of the United Nations, to advocate for sustainable ecological practices. This year's theme, "Ending Plastic Pollution," and the campaign "Beat Plastic Pollution" provide us an opportunity to remind people that the solution lies

in changing our approach to plastic disposal rather than abandoning a material that serves so many vital functions.

Each year, over 360 million tonnes of plastic waste are generated, much of it intended for single use. Unlike organic matter, plastic does not degrade and lingers for centuries. This persistent pollution endangers marine life, degrades soil, contaminates groundwater, and threatens human health. By 2040, projections suggest that 37 million tonnes of plastic waste could be entering our oceans annually. Addressing this challenge is critical — not by abandoning a material that serves so many essential functions, but by managing its afterlife more responsibly.

At IndianOil, we are not just producing materials; we are also actively exploring circular solutions, advanced recycling technologies, and partnerships that ensure these materials are part of a sustainable system.

Our 'Unbottled' initiative that was launched in



November 2022 is a step in this direction. Over time, we have transformed about 20 million used PET bottles into uniforms for nearly three lakh f u e l s t a t i o n attendants and LPG

delivery personnel. We are targeting recycling of 100 million waste PET bottles into various merchandise that are available for purchase by customers at our retail outlets.



IndianOil has introduced its brand of recycled plastics,

'CYCLOPLAST', which combines recycled petrochemicals with virgin plastics — promoting responsible disposal and reuse in manufacturing and consumption. These polyolefin recyclates are already being used in products such as furniture, containers, and other industrial applications, reaching over 140 customers through our existing channels. In our lubricant packaging, we now use over 30% recycled plastics — a significant step towards fostering a circular economy.

IndianOil is aggressively pursuing the establishment of green-field plastics recycling units across country. This ambitious project will be designed to process the vast amounts of plastic waste currently generated across the country and create substantial economic value through recycling. Over the next three years, we aim to recycle one million metric tonnes (MMT) of plastic waste.

Going a step further, IndianOil's R&D team has developed an efficient catalytic pyrolysis process to convert plastic waste into valuable refinery feedstocks and monomers that can be reused for synthesis of other chemicals and petrochemicals. In Digboi Refinery, waste plastic is processed in the delayed coker unit to generate fuel.

We are also introducing sustainability into road infrastructure. A new grade of bitumen, CRMB55, developed at the R&D Centre, incorporates 2% of recycled plastics. This grade has already been tested through the construction of a 0.85 km pilot road. Such roads promise higher strength, longer life, and reduced water seepage, adding value to road infrastructure while managing waste. These innovations are aligned with the vision of promoting a circular economy model centered around plastic waste.

Beyond reuse of plastics, our wide-ranging environmental stewardship efforts are spearheading a greener world. In 2024–25, we planted more than 3.39 lakh trees across our refineries, absorbing over 204 thousand metric

tonnes of CO<sub>2</sub> equivalent. A new plantation initiative at Digboi, in partnership with the state pollution control board, will add 6.25 lakh trees using the Modified Akira Miyawaki method. At Haldia, we are undertaking mangrove restoration across 150 hectares, with 30 lakh mangroves already planted. Our eco parks and green belt across locations continue to enhance biodiversity, purify the air, and serve as natural barriers to waste and pollutants entering our waterways.

## The Way Forward

Sustainability is central to how IndianOil operates. But as we build systems and technologies, we also must spread awareness and instil responsibility at the individual level. Segregating plastic waste, avoiding littering, supporting recycled products—these are small actions that, together, make a big difference.

It is time we shift the narrative from viewing plastic as the problem to recognizing that the problem lies in how we manage it. **Plastic remains one of the most versatile materials of our age** — but we must use it responsibly and ensure it does not pollute our environment.

This World Environment Day, let us strengthen our resolve to address plastic pollution through accountability. IOCians must continue to lead this journey with purpose and pride.

New Delhi June 05, 2025 **A S Sahney** Chairman, IndianOil

