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The plastic paradox

The crisis that won’t recycle itself

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If we take a closer look at the failure of international efforts to combat plastic pollution, exemplified by the Fifth UN Intergovernmental Negotiating Committee (INC-5), one thing stands out: the resistance from oil-producing nations to capping plastic production. According to Eunomia data, China, the US, India, South Korea, and Saudi Arabia were the top five polymer producers in 2023. These nations, heavily invested in the petrochemical industry, consistently prioritise profit over environmental protection. This treaty had the potential to be a game-changer—possibly as impactful as the 2015 Paris Agreement—yet competing economic interests left it on shaky grounds.

Now, a question might arise in one's mind: why? Because plastics are made from fossil fuels, and over the past 15 years, petrochemicals—especially plastics and oil additives—have become a critical pillar of the oil and gas industry's survival. Moreover, the plastics industry is the fastest-growing source of industrial greenhouse gases (GHGs). Groundbreaking research from Carbon Majors shows that just 100 active fossil fuel producers, including ExxonMobil, Shell, BHP Billiton, and Gazprom, are responsible for a staggering 71 percent of industrial GHG emissions since 1988. In 2019 alone, the production and incineration of plastic led to GHG emissions equivalent to those from 189 coal-fired power plants. Over the last 30 years, they have prevented political decisions against climate change, raised scientific doubt, and stopped any development that could regulate

nearly triple by 2060. This linear “take-make-waste” model is unsustainable. A staggering 79 percent of plastic waste accumulates in landfills or the environment, 12 percent is incinerated, and less than 10 percent is recycled. This raises a critical question: why has recycling failed so dramatically?

Plastics are inherently more complex than other recyclable materials, like metal or glass, due to their heterogeneous nature. Each type of plastic contains unique chemical additives—such as colourants, stabilisers and fungicides—that enhance functionality but complicate recycling. Even polyethene terephthalate (PET), one of the most recyclable plastics, degrades in quality with each recycling cycle, accumulating toxins that contaminate new products.

What's more, not all plastics are created equal. PET makes up only about six percent of global plastic production, while other types, like polyethylene (PE) and polypropylene (PP), are recycled even less frequently due to their distinct chemical structures and the presence of additives. These additives, designed to make plastics more durable, flexible and transparent, often combined during the recycling process, further degrading the quality of the material.

A common example is multilayer plastics—composites made from combinations of

products throughout their lifecycles. Besides that, these policies lack clarity, and responsibilities across the supply chain fall through the cracks, leaving implementation is still up in the air. Furthermore, the focus on recycling shifts responsibility from the producer to the consumer, perpetuating what researchers call the “plastic paradox.”

To drive real change, the government must enforce stringent policies that hold manufacturers responsible, or progress will remain elusive. Local governments are critical in implementing waste management policies but often lack the funding, technical expertise and accountability frameworks needed to enforce policies effectively. Lack of reliable data further complicates matters. Effective policymaking requires accurate information to guide decisions, and Bangladesh currently lacks a robust system for data collection, dissemination, and analysis, as well as dashboards to track progress. Without accurate and actionable data, even the most well-intentioned policies risk falling flat.

Local governments are uniquely positioned to collect and monitor data on waste generation and recycling rates, but they need the tools and support to perform this role effectively. Empowering municipalities with the necessary resources and authority can

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plastic, aluminium and paper—frequently used in food and medical packaging. These materials are virtually unrecyclable with current technologies, illustrating how design choices can render recycling ineffective from the outset.

Recycling is not just a technical challenge—it's an economic one too. Sorting and processing plastics is labour-intensive and costly. Caps, labels, and differing grades of plastics require meticulous separation, which often costs more than the value of the recycled material itself. The result is a process so complex and expensive that new, high-quality plastics remain more profitable and marketable than recycled alternatives.

Another significant obstacle to effective plastic recycling is the lack of transparency from manufacturers. Many manufacturers keep their chemical formulations proprietary, making it difficult for recyclers to identify and eliminate hazardous substances. This secrecy undermines efforts to create a truly circular recycling system, allowing hazardous substances to remain in circulation.

The path forward

Bangladesh recognised the plastic problem early by banning single-use plastics in 2002 under the Bangladesh Environmental Conservation Act. It later introduced the National 3R Strategy for Waste Management (2010) and Solid Waste Management Rules (2021). However, on paper, these policies seem magnificent, but in practice, they are maleficent. You might ask: why?

These policies failed to utilise the transformative power of corporate accountability through the “polluter pays” principle and Extended Producer Responsibility (EPR) frameworks, which require manufacturers to manage the environmental and social impacts of their

bridge the data-policy-implementation gap and drive meaningful change.

The final piece of the puzzle is consumer awareness. Consumers have the power to demand sustainable packaging and avoid or support businesses prioritising the environment. International best practices like Germany's bottle deposit scheme, which boasts a 98 percent return rate for empty packaging, demonstrate how consumer-driven solutions can significantly reduce waste. Adapting such practices in Bangladesh could foster a culture of reuse and refill, cutting plastic waste at its source.

A paradigm shift

The dream of a circular plastic economy—where plastics are endlessly reused and recycled—has morphed into a nightmare. Instead, plastics have spread across the planet like a deadly virus, threatening ecosystems and human health. The plastics industry continues to thrive because the true costs—on health, climate and biodiversity—are shifted onto the public.

Real solutions demand nothing less than a systemic overhaul—from redesigning packaging and improving waste management infrastructure to holding producers accountable. We need a complete transformation in how plastics are produced, used and perceived. Transitioning from a disposable culture to a circular economy requires innovative business models, consumer behaviour shifts, and accountability across the entire supply chain. Bans alone won't work—they haven't in the past, and they won't in the future—unless the entirety of plastics use is strictly monitored and regulated. Without such reforms, resistance will grow, progress will stagnate, and we risk replacing meaningful action with superficial greenwashing.

Living in fear



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“We're survivors. We control the fear. And without fear, we are all as good as dead. Do you understand?” These words by Forrest Bondurant, portrayed by Tom Hardy in the movie *Lawless*, resonated with me deeply. The character's philosophy about survival and fear seemed distant and theatrical when I first watched the film. But recently, I lived through my own experience of being “controlled by fear,” and the source of that fear was none other than those entrusted to protect us: our law enforcement agencies.

It began in May last year, when I learnt that members of a law enforcement agency in Bangladesh were investigating my background and my family's political affiliations. To gather this information, they resorted to harassing my mother over the phone.

My crime? I am a journalist working for an international news organisation, Deutsche Welle.

Despite finding nothing suspicious about my family or me, their attempts to intimidate me continued. They even tracked down my former residence, where I hadn't lived in a decade, and contacted the property owner, who now resides in Australia. The intent was clear: to instil fear without directly confronting me.

When I reached out to them, they identified themselves as being from the cantonment and demanded detailed personal information. For a time, their strategy worked. Fear crept into my life, dictating my every move. I worried constantly about being followed, abducted or harassed. Worse, I feared for my family's safety, especially my mother's.

The irony is that I, a law-abiding, tax-paying citizen, had to seek protection from international colleagues and organisations to feel safe in my own country. I had committed no crime, yet I felt like a criminal. The experience made me question whether my dream of working for an international media outlet like Deutsche Welle was worth the emotional toll.

My father, an honest banker who led a simple life, instilled in me the values of integrity and hard work. I have always upheld these principles in my career as a

journalist. But even this wasn't enough to shield me from the harassment. It became evident that the goal wasn't justice or security but control—an attempt to force allegiance through intimidation.

I was being coerced to support the authorities, regardless of my professional or ethical stance. The message was clear: dissent would have consequences.

The shame lies in being treated like a criminal in the country where I was born and raised—a country that prides itself on its democratic ideals. Why did I have to live in fear? Why was my mother subjected to mental trauma for something she didn't understand? Who will take responsibility for the stress and fear inflicted upon us?

These questions have haunted me for months, and I fear they will remain unanswered. However, I hold onto hope that as Bangladesh moves forward, this era of living in fear will end. I dream of a future where every citizen, regardless of their profession or affiliations, can live without intimidation—a future where democracy means freedom, not fear.



VISUAL: SALMAN SAKIB SHAHRYAR

<div><div><div><div><div></div><div>ER</div></div></div><div><div><div></div><div>ইস্টার্ন রিফাইনারী লিমিটেড</div><div>EASTERN REFINERY LIMITED</div><div>(বাংলাদেশ পেট্রোলিয়াম কর্পোরেশন এর একটি অংশ প্রতিষ্ঠান)</div></div></div></div></div>		
দরপত্র বিজ্ঞপ্তি		
ইস্টার্ন রিফাইনারী লিমিটেড (ইথারএল) এ মেইটেন্যান্স শাখার নিম্নবর্ণিত কাছাসমূহ করার লক্ষ্যে নির্ধারিত সিডিউল এ সীমামোহরকৃত দরপত্র আহ্বান করা যাচ্ছে-		
১।	সহো	ইস্টার্ন রিফাইনারী লিমিটেড
২।	কাজের বিবরণ	ইস্টার্ন রিফাইনারী লিমিটেড এর টপিক ইউনিট সলিডউইন-২০২৫ এ প্রায়ের বিভিন্ন পাইপ লাইন পরিবর্তন, ভেলেন ফেব্রিকেশন, প্রাচীরের মেরামত এবং ফার্নেল টিউব পরিবর্তন ও ফার্নেল টিউবের ওয়েভিং টেস্ট ইত্যাদি কাজ।
৩।	দরপত্র সূচর নং ও তারিখ	২৮.২৫.০০০০.১৩১.৩১.০০১.২৫, তারিখ: ১৩/০১/২০২৫ খ্রিঃ
৪।	দরপত্র পদ্ধতি	উন্মুক্ত দরপত্র পদ্ধতি
৫।	কার্যসম্পাদনকারী শাখা	মেইটেন্যান্স শাখা
৬।	দরপত্র বিজ্ঞপ্তির শেষ তারিখ ও সময়	১৮/০২/২০২৫ খ্রিঃ, বিকাল ১৭ঃ০০ ঘটিকা পর্যন্ত
৭।	দরপত্র জমা দেওয়ার শেষ তারিখ ও সময়	১৮/০২/২০২৫ খ্রিঃ, সকাল ১১ঃ০০ ঘটিকা পর্যন্ত
৮।	দরপত্র খোলার তারিখ ও সময়	১৯/০২/২০২৫ খ্রিঃ, সকাল ১১ঃ১৫ ঘটিকা
৯।	দরপত্র বিক্রয়কারী অফিস	ক) একএন্ডএ ভিভিভিসের এ্যাসিস্টেন্ট ম্যানেজার (একাকটস), ইস্টার্ন রিফাইনারী লিমিটেড, উত্তর পতেঙ্গা, চট্টগ্রাম-৪২০৪। খ) ইথারএল লিয়ারো অফিস, ১/১ পাইওনিয়ার রোড, ওয়াইএমসিএ ভবন (৩য় তলা), কারবাইল, ঢাকা-১০০০।
১০।	দরপত্র জমা দেওয়ার স্থান	এ্যাসিস্টেন্ট ম্যানেজার ম্যানেজার (মেইটেন্যান্স) এর অফিস কক্ষ, প্রধান কার্যালয়, ইথারএল, উত্তর পতেঙ্গা, চট্টগ্রাম-৪২০৪।
১১।	দরপত্র খোলার স্থান	জেনারেল, ইথারএল রোডস্ট্রিক বিল্ডিং, প্রধান কার্যালয়, ইথারএল, উত্তর পতেঙ্গা, চট্টগ্রাম-৪২০৪।
১২।	দরপত্রে অংশগ্রহণের যোগ্যতা	ট্রেড লাইসেন্সধারী হতে হবে, ট্রেড লাইসেন্স (সদা সমায়ুক্ত) এর সত্যায়িত কপি দাখিল করতে হবে। যুক্ত শিল্প কারখানার প্রসেস গ্রাউন্ডে এ ধরনের কাজের অভিজ্ঞতা থাকতে হবে এবং অভিজ্ঞতার সনদের কপি দরপত্রের সাথে প্রদান করতে হবে।
১৩।	দরপত্রের মূল্য	১১,৫০০/= (এক হাজার পঁচাত্তর) টাকা মাত্র (অক্ষরহরফে)।
১৪।	দরপত্রের সিডিউলিট মানি বা জামানত	৬০০,০০০/= (ছাশি হাজার) টাকা মাত্র (সেফরহরফে)।
১৫।	কাজ সম্পন্ন করার সময়কাল	৩০ (ত্রিশ) দিন
১৬।	কার্যকাল	সাত ডায়েরির সন্ধ্যা সময়কাল সন্ধ্যার-২০২৫ হতে ডিসেম্বর-২০২৫ পর্যন্ত।
১৭।	দরপত্র আহ্বানকারী	প্রকৌশলী মুর্তজা হাসান, ম্যানেজার (মেইটেন্যান্স), ইস্টার্ন রিফাইনারী লিমিটেড, উত্তর পতেঙ্গা, চট্টগ্রাম-৪২০৪, ফোনঃ ০২ ৩৩৩৩ ০১২৬০-৭, এক্সটেনশন-৩৩১।
অনিবার্য কারণবশত নির্ধারিত দিনে দরপত্র খোলা সম্ভব না হলে পরবর্তী কার্যদিনে একই সময়ে তা এবং/বা খোলা হবে। কর্তৃপক্ষ কোন কারণ প্রদর্শন ছাড়াই সর্বান্ন দরপত্র গ্রহণ না করার বা যে কোন কিংবা সকল দরপত্র বাতিল করার অমতা সন্মত করেন।		
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