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Plastic Pollution in Southeast Asia: Wasted Opportunity?

By Julius Cesar Trajano

SYNOPSIS

Plastic pollution is clearly a climate problem as it contributes to global greenhouse gas emissions. What has been done in Southeast Asia – one of the plastic pollution hotspots – to reverse the worsening marine plastic pollution?

COMMENTARY

PLASTIC POLLUTION in oceans and other bodies of water continues to worsen. The amount of plastic waste in the oceans is projected to approximately double by 2030 and even triple by 2040, according to the [latest report by the UN Environment Programme](#) (UNEP).

As the world seeks to implement durable commitments to reduce global carbon emissions, it has been pointed out that the [contribution of plastic waste](#) and the plastics industry to climate change is often less recognised or worse, disregarded. There is a need to put a stop to this. It is time to widely recognise that plastics originate from fossil fuels (mostly oil and gas) while the plastic industry comprises around 6% of global oil consumption and projected to increase to 20% by 2050.

Plastics as a Climate Problem

The UNEP Report, which was released for the 2021 United Nations Climate Change Conference (COP26), highlights that plastic pollution is clearly a climate problem as well. For example, in 2015, greenhouse gas emissions from the production, use and disposal of fossil fuel-based plastics were 1.7 gigatonnes of CO₂ equivalent.

By 2050, these emissions will rise to approximately 6.5 gigatonnes, comprising 15% of the whole global carbon budget – the amount of greenhouse gases that can be

emitted while keeping warming below a specific temperature goal set by the Paris Agreement.

Current waste management practices (inadequate waste collection, uncontrolled dumping, and burning of waste) also contribute to 5% of global greenhouse gas emissions. Plastic pollution in our oceans also exacerbates global warming. When exposed to sunlight and heat, discarded [plastics emit methane and ethylene](#), two potent greenhouse gases, increasing the rate of climate change, and thus perpetuating the cycle.

Cleaning Up Marine Trash in SC Sea, Pacific Ocean

Southeast Asia is both a source and victim of plastic pollution in the Pacific Ocean, including the South China Sea, peripheral seas and rivers. The region is a major contributor to land-based plastic waste leaking into the world's oceans with six of the ten ASEAN member states generating a combined 31 million tonnes of plastic waste per year.

Around 80% of marine plastic debris can be traced back to land-based plastic waste. Shared river systems and waterways are the conduits for ocean plastic pollution. As a result, the South China Sea and the Pacific Ocean are littered with marine trash. What has been done in Southeast Asia, one of the plastic pollution hotspots, to find solutions?

There has been growing momentum in Southeast Asia, in cooperation with the international community, to look for solutions, evidenced by the inclusion of the issue in the ASEAN agenda. In recent years, a majority of ASEAN member states have individually launched their national roadmap/plan of action on marine plastic pollution.

The [ASEAN Regional Action Plan for Combating Marine Debris in the ASEAN Member States \(2021-2025\)](#) outlines regional actions necessary to collectively address the issue of marine plastic pollution in ASEAN over the next few years.

Critical Area in ASEAN Plan

One critical area that the ASEAN Regional Action Plan cited is that there is a general lack of capacity around plastic waste management in the region, both in the public and the private sectors. In this regard, one component of the action plan deals with research, innovation and capacity building. There have been significant cooperative initiatives in this area, with robust assistance from donor countries and dialogues partners of ASEAN.

For instance, the [ASEAN-Norway Cooperation Project on Local Capacity Building for Reducing Plastic Pollution](#) in the ASEAN Region (ASEANO) Project, which commenced in 2019, focuses on local municipality/city level sustainability and a set of science-based and feasible measures to reduce plastic pollution from key sectors.

It aims to improve the capacity of local actors such as regional governments, NGOs, and academic institutions. Other ongoing capacity building projects benefitting Southeast Asian countries include the ASEAN+3 Marine Plastics Debris Cooperative

Action Initiative and the Japan-funded Promotion of action against marine plastic litter in Asia and the Pacific (CounterMEASURE Project).

The private sector has been recently a major driver of the growing recycling ecosystem in Southeast Asia. National recycling associations have been setup by companies in Singapore, Malaysia, Vietnam, the Philippines, Vietnam and Indonesia to ramp up their recycling efforts and reduce plastic packaging waste.

The expanding responsibility being assumed by businesses is a necessary part of the sustainable approach to the collection and proper treatment of their plastic/packaging products at end-of-life. However, this approach remains voluntary; this should progressively move towards a legally mandated Extended Producer Responsibility (EPR) approach, where businesses bear the responsibility for the collection and treatment of their products when they reach end-of-life. States need to legislate an EPR framework in this regard.

Empowering the Consumer

Complementing producers' responsibility, there is a need for a stronger consumer-driven movement that will encourage companies to drastically minimise, if not completely eradicate, single-use plastics. This entails the need to increase public awareness and boost public education.

The COVID-19 pandemic has affected the momentum of societies and communities in shifting towards reduced use of plastics and recycling them. There has been a heavy reliance on food-delivery services and online shopping, utilising more plastics, as well as disposable PPEs and facemasks amid the pandemic, while recycling has dropped off. Intensive public education campaigns to institutionalise behavioural changes are essential.

Civil society organisations, including environmental groups in the Philippines, Indonesia and Thailand, for instance, have been conducting grassroots campaigns on sustainable consumption, river protection, and plastic waste reduction system at the community level.

Innovative initiatives that offer consumers financial incentives to either decline or return packaging can be considered. Across the world, governments are developing [Deposit Return Schemes frameworks](#) and businesses incentivise using less plastic packaging through discounts.

Ultimately, the approach to addressing plastic pollution should be comprehensive and multi-sectoral. This includes not only the reduction of our [plastic footprint](#) but also better waste management, technological solutions, behavioural changes and sustainable economic models that can address both our plastic problem and carbon emissions.

As universal consciousness grows, there is an opportunity to work together to save the world's oceans from the ravages of human litter. This opportunity should not be wasted.

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