

Global Environmental Response Directions for a Plastic-Free Society and Circular Economy

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Excellencies, ladies and gentlemen, it is my honor to deliver the keynote speech at this session. Thank you to the JejuPIEF team for the invitation and all the arrangements.

To start my speech, I have one good news and one bad news. The bad news is that in the past years, the world has become less circular. The global economy is now only 7.2% circular. According to the Circularity Gap Report, that is a drop from 9.1% global economy circularity in 2018. In other words, materials that are cycled back into the global economy after the end of their useful life is only 7.2% today. The reason for this is rising material extraction. The globe almost exclusively relies on new materials. This means that more than 90% of materials are either wasted, lost or remain unavailable for reuse for years.

The good news is that there is hope. A comprehensive circular economy approach holds the potential to significantly reduce the volume of plastics entering our oceans by over 80% by 2040, save governments USD 70 billion by 2040, and cut greenhouse gas emissions by 25%. These figures underscore the transformative power of circular practices and the benefits they can bring to our world.

Responsibility and Circular Economy

Who will take responsibility for circular economy? One way of approaching this is to mainstream Extended Producer Responsibility. Thailand, Indonesia, Malaysia and Philippines have initiated policy and regulatory reforms but need more efforts for implementation and enforcement of these reforms. Other countries are still following up on these much-needed regulatory reforms. Global corporations and the manufacturing industry need to play a major role in ensuring how quickly are circular principles adopted.

Industrial Sectors and Circular Economy

Two systems need to be urgently made more circular: (1) Food / Agriculture (including fishing) and (2) Manufacturing and consumer goods industry (including packaging). These two economic systems hold maximum potential for impact towards achieving our environmental goals and achieving circularity and carbon neutrality. These two sectors also have ample examples of good practices that have not yet been scaled up and adopted on a scale.

Plastics

Today scientists estimate that textiles produce 35% of the microplastic pollution in the world's oceans (in the form of synthetic microfibers), which would make textiles the largest known source of marine microplastic pollution. That's about 2.2 million tons of microfibers entering the ocean every year. Globally, the cost of after-use externalities for plastic packaging, plus the cost associated with GHG emissions from its production, is estimated at USD 40 billion annually. About 40-50% of marine plastic pollution is contributed by single-use or short-use consumer packaging, and approximately 4.8 to 12.7 million tonnes of plastic waste enter the oceans every year.

Development and Plastic

As Asian economies and societies become more affluent, the total waste generated and the proportion of plastics in the waste is also projected to increase. Countries such as Malaysia, Thailand etc. have made commitments towards circularity and reduction of plastic waste but implementation of these strategies need further support from the government and co-operation from private sector players.

Moving away from plastics has economic implications. In 2018, Asia was responsible for 51% of global plastics production with China accounting for 30%. In Malaysia, the plastic manufacturing industry represented around 2% (USD 7.23 billion) of the national GDP in 2018, In Thailand, the plastic manufacturing industry contributed 6.71% to the country's GDP in 2018.

Improving waste management in urban areas of Asia and the developing economies of the south could be the single most important step towards avoiding plastic leakage and ensuring a plastics free environment.

Science, Technology and Plastics

The status of plastic waste management and recycling in Asia is not ideal; and some countries lack the basic recycling technology and facilities required. It would be essential to leapfrog the technical barriers to progress and mainstream technology and best practices from developed economies in the region. Scientific understanding of this issue is still fragmented. Improving this understanding is vital to finding ways to reduce the generation of this waste, to better manage it and find a harmless treatment method for it.

Policy and Plastics

What is needed if recycling to work at scale in Asia? It requires entire recycling value chains to be mainstreamed and incentivized. This requires strong country level implementation and regional collaboration.

175 nations has now agreed to develop a legally binding global agreement on plastic pollution by 2024, prompting a major step towards reducing greenhouse gas emissions from plastic production, use and disposal. I was the legal and strategic advisor to the Least Developed Countries in the UN Climate Change Convention and personally negotiated the Paris Agreement on climate change. So, I am fully aware of the challenges we face in negotiating multilateral legally binding treaties- it is not easy to get everyone to agree to the most rigorous provisions for the necessary urgent change. But I also know the benefits of such a multilateral treaty. With the Paris Agreement, the world has unified now to develop country focused nationally determined contributions, the financial flow has become more focused on getting those plans implemented and the countries have now started to also set net zero targets through long term strategies. The Montreal Protocol on Ozone Depletion is also one very successful multilateral treaties and have delivered considerable amount of change.

Therefore, I am confident that the Global Plastic Treaty will be a promising global intervention and GGGI is looking forward to it's finalization and adoption. The treaty needs to require countries to implement various policy and physical interventions ranging from bans, phase-outs of high risk plastics and adopting circular solutions for other categories etc. This would require a monumental scale up of efforts and resources to achieve the goals including incentives and enforcement measures. GGGI looks forward to

supporting our partner countries in adopting these measures. Along with plastic products, we also hope that plastic chemicals and polymers will also be treated with a similar comprehensive approach in future.

GGGI & Korea Leading the Way

At GGGI, Circular Economy and Waste is one of the fundamental pillars of our portfolio. We are supporting our partners across four areas:

1. Improving waste management systems in urban areas (Integrated resource recovery centers, local regulations, capacity building, smart waste collection systems etc.).
2. Adopting waste to resource pathways (MBT plants, Waste to Biogas facilities, waste recycling centers etc.).
3. Adopting circularity (policy and regulatory frameworks, alternative materials, recycling, resource recovery centers etc.).
4. Accessing sustainable finance through Article 6 and other mitigation initiatives.

The Example of the Philippines

In the Philippines, GGGI is working to significantly reduce the use of single-use plastic through the introduction of Biodegradable (BD) plastic and opening a BD market of around USD 2.5bn, the program will bring a paradigm shift with a new sustainable plastics economy, one in which plastics perform their useful function without causing negative externalities.

To bring about the change, GGGI program is working to develop and improve political and regulatory framework for creating a robust and supportive eco-system for market players to participate in the Biodegradable Plastic sector. We are currently conducting the Techno-Commercial Feasibility options to assess possibilities of installing large Bio-Degradable material production facilities. We will also support the government to strengthen capacities and improve the readiness of the local/regional and international stakeholders to participate in the Biodegradable programs.

GGGI is in conversation with the Asian Development bank and the World bank to bring in the first investment of roughly 100-150 million for the pilot project. This project will be the prime demonstration project for the region, one that will be used by the other countries in the region as an example to replicate at scale. The initial work of this project is funded by Korea Green New Deal Fund.

Municipal Solid Waste Management in ASEAN

I am also happy to announce that GGGI is launching a three-year ASEAN program with support of the Government of Korea and ASEAN Secretariat through the ASEAN-Korea Cooperation Fund towards improving Municipal Waste Management in ASEAN Member States. The program will support the regional agenda for improved waste management and provide catalytic support to develop large scale investments in making their waste streams more circular. We look forward to the engagement of Korean development partners in this program.

Closing Remarks

The current take-make-waste economy harms nature, endangers species, and warms the Earth. The path to a circular economy isn't one-size-fits-all; each country faces unique challenges and opportunities.

Developing nations can boost well-being by leapfrogging to use resource-smart technologies and policies. They can prioritize material efficiency to raise living standards for their growing populations.

Developed countries, while prosperous, consume most global resources. They need to 'use less' and 'use again' to reduce their environmental impact.

Collaboration is crucial. GGGI is ready to work with governments and the private sector to drive circularity through technical assistance, capacity-building, projects, and investments.