

Achieving the Zero Waste Vision: Advancing Public-Private Partnerships for Waste Management Practices

Summary

The growing large amount of solid waste generated every day is an increasing headache for many cities around the world. To discuss and explore solutions for effective and sustainable waste management, UNDP's Montreal Protocol, Chemicals and Waste Unit held an on-line workshop about zero waste on 28 April 2022.

Mr. Jaco Cilliers (Manager, Bangkok Regional Hub, UNDP Regional Bureau for Asia and Pacific) stressed in his opening remarks that addressing waste challenges requires synergy from upstream and downstream stakeholders and both public and private sectors should be brought in together. **By using a whole-of-society and system approach**, UNDP hopes to support countries in the Asia-Pacific region to achieve zero waste vision through improving waste management and recycling, fostering public-private partnerships and integrating Circular Economy principles and priorities into national and sectoral planning and budgeting.

Ms. Xiaofang Zhou (Director of Montreal Protocol, Chemicals and Waste Unit - Nature, Climate and Energy team, UNDP) presented **UNDP's Zero Waste Offer and its ambition to introduce the Zero Waste vision in 50 developing countries by 2025**. To enhance sustainable waste management governance in cities and finance the development of Zero Waste policies and strategies in selected cities, UNDP provides services on:

1. Integrated planning and programming for zero waste city
2. Clearinghouse on waste management
3. Financing instruments
4. Sustainable production and consumption
5. Training, Education, Advocacy and Formalization

Xiaofang also explained UNDP's advantages in achieving zero waste, including its extensive and in-depth work in 170 countries and territories; its Nature, Climate and Energy portfolio that covers climate mitigation and adaptation, chemicals and waste management, ocean governance and local actions, which provide many entry points on enhancing waste management. UNDP will also work closely with other UN agencies, financial institutions, civil societies, philanthropy, research institutions, city platforms, foundations etc. and engage with the private sector to achieve the Zero Waste vision.

Mr. Weine Wqvist (Senior Advisor, Avfall Sverige - the Swedish Waste Management Association) spoke on the challenges countries are facing in terms of waste management, including widespread practices of open burning and landfilling, insufficient reuse and recycling of resources and great climate impact from mismanaged wastes. He shared Sweden's experience on achieving zero waste through putting in place compulsory municipal waste planning, progressively banning landfills and adopting policies such as extended producer responsibilities and organic waste diversion to reduce waste and GHG emission. He also introduced EU's ambition to reduce landfill to maximum of 10% of municipal waste by 2030.

Weine discussed the four elements for successful waste management: well-defined responsibilities for all stakeholders, flow control to designate where wastes will be processed and treated, sustainable investment and financing mechanism; as well as rigorous law enforcement to ensure compliance. He also touched on the various roles the private sector can play and highlighted that municipal governments must be put in the driver's seat to ensure a successful and effective public and private partnership.

Ms. Saloni Goel (Head Circular Economy and Plastic Waste Management, UNDP India) spoke about how sustainable waste management and social inclusion of waste pickers are promoted in India with support from UNDP. **The Plastic Waste Management Programme** implemented by UNDP India, in partnership with Hindustan Coca-Cola Beverages Private Limited (HCCBPL), Hindustan Unilever Limited (HUL), HDFC Bank & Coca Cola India Foundation (CCIF), has supported urban local bodies in establishing material recovery facilities and developed digital technology for effective, traceable and transparent data management along waste value chain. The programme is operating across 35 cities in India, processed 83,900 MTs of plastic waste and saved 2,09,750 MTs equivalent of carbon dioxide emissions. **The programme has also institutionalized waste workers from the informal sector and improved their socio-economic conditions.**

Mr. Zhuoli (Troy) Tian (Senior Business Development Manager of China Everbright Environment) introduced a Waste to Energy project constructed and operated by Everbright Environment in Cần Thơ, Vietnam. The project is a public private partnership project using the Build-Own-Operate (BOO) modality. It has a disposing capacity of 400 tons of municipal solid waste per day and takes up about 70% of the total daily waste generated in the city. The project received concessional loan from Asia Development Bank and was developed in line with its Social and Environmental Safeguard standards. Troy emphasized that **public private partnership projects, when carefully designed, can help to realise significant social and environmental benefits by bringing in technologies and expertise of the private party, while also yield reasonable returns for private investment.**

Ms. Alexandra Soezer (Global Carbon Technical Advisor, Energy Hub, UNDP) shed light on how composting is enabled through carbon revenues in Ghana by introducing a public private partnership project assisted by UNDP to generate Internationally Transferred Mitigation Outcomes (ITMOs) under Article 6.2 of the Paris Agreement. The project is implemented by Integrated Recycling and Compost Plant Limited (IRECoP) based in Gahanna with an aim to produce compost from organic waste, while reducing methane emission from municipal solid waste. The composting facility established by the project is able to treat 1,400 tons of organic waste daily.

The ITMOs generated by the project are bought by Switzerland, in accordance with a bilateral agreement signed between the two countries. The revenues generated from selling these ITMOs helped to subsidize the project, improve the overall cashflow of IRECoP and reduce credit risks and loan payback period. **The project demonstrates the important role carbon markets can play in financing sustainable waste management practices in developing countries.**

In the panel discussion session, **Mr. Anton Sri Probiyantono** (Senior Programme Manager, UNDP Indonesia) shared Indonesia's experience on toxic and electronic waste management. Indonesia is witnessing a huge increase of electronic waste along with fast urbanization and population growth. The waste problem is particularly acute in the Island of Java where 50% of the Indonesian population live. UNDP works closely with both the public and private sectors of Indonesia and helped strengthen the

country's capacity to identify, control and reduce the adverse impacts of chemical substances regulated by the Stockholm Convention. **UNDP also supported the empowerment of local communities and promoted material recycling by sharing knowledge with them on turning the shredded plastics into materials that has market potential value.**

Mr. Fei Xie (Chief Technical Advisor, China PPP Center, Ministry of Finance of China) shared China's experience on promoting public private partnerships (PPP) in the waste management sector. With clear scope, mature technology and predictable revenue, waste management projects are among the most suitable infrastructure projects to adopt the PPP model in China. Since 2014, altogether 410 waste related PPP projects are completed or in construction in China. **The PPP projects are booming because the country has developed a series of laws and regulations to guarantee a fair, transparent and stable market for private sector players.** Fei also emphasized that **PPP is not a free lunch as the private parties expect reasonable return from their investment.** As to waste management projects, the government therefore should provide necessary subsidy and incentives in order to attract private engagement. Also, it is important that international development organizations help developing countries implement one or two pilot PPP projects for learning by doing to enhance their operational PPP capability.

Weine stressed in the panel discussion **the importance of increasing producers' obligations**, as a recycling society can only be made possible if products are designed to be reused, remade or recycled. Troy highlighted that the **waste to energy solution goes hand-in-hand with the zero-waste vision and circular economy** because even in a country with high recycling rate, there are still some unrecyclable wastes that need to be incinerated.

This workshop is a follow-up event to the Substantive Discussion with RBAP Senior Country Office Managers on Circular Economy, Plastic Pollution and Waste Management, held on 8th December 2021. The workshop was moderated by **Mr. Etienne Gonin** Sustainable Cooling, Chemicals and Waste Management Technical Specialist - Montreal Protocol, Chemicals and Waste Unit - Nature, Climate and Energy team, UNDP.