



**Asia-Pacific  
Economic Cooperation**

---

**2021/CTI/SEM2/002**

Session: 1

## **Recyclable Materials Policy Program**

Submitted by: United States



**Webinar on Improving Waste Management  
and Recycling Policies in the APEC Region  
17 June 2021**



Asia-Pacific  
Economic Cooperation



**USAID**  
FROM THE AMERICAN PEOPLE

# Recyclable Materials Policy Program

Joshua Palfreman

**US-Support for Economic Growth in Asia (US-SEGA)**

*A joint project of the U.S. Agency for International Development and  
the U.S. Department of State*

# Introduction

Building on APEC's Sustainable Material Management (SMM) under the APEC Regulatory Cooperation Advancement Mechanism (ARCAM), the Recyclable Materials Policy Program (RMPP), led by the United States and implemented by US-SEGA is building the technical capacity of policymakers to identify appropriate domestic policies that promote environmentally sound and economically viable WMR infrastructure in the scope of circular economy.

- Addressing marine litter and ocean plastics is not a new issue for the APEC:
  - Addresses marine litter and ocean plastic across 30+ various programs, strategic papers and working groups.
  - Consistent and bold initiatives from the APEC Virtual Working Group (“VWG”) on Marine Debris; the Chemical Dialogue (CD); the Oceans and Fisheries Working Group (OFWG) and the Committee on Trade and Investment (CTI).
  - Bridging networks and partnerships with range of private sector and other multilateral and regional organizations including ASEAN, the World Bank and various UN Agencies.

# Methodology and Approach

RMPP conducted a series of tailored surveys with 12+ economies, the private sector, large multilateral organizations and donor groups to scope inputs into the study.

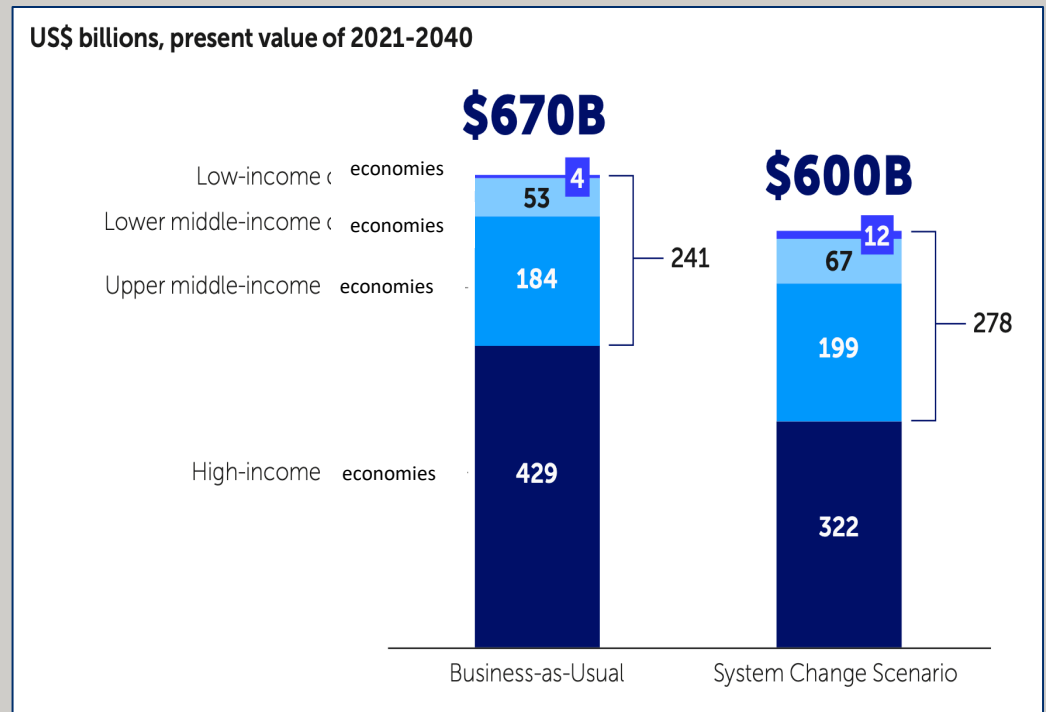
Area	Focus
Regulatory, Legislative and Policy Framework and Pipeline	The development of white papers, masterplans, integrated solid waste management planning and EPR initiatives).
Private Sector Engagement	The recognition of waste pickers; investment facilitation; grant financing and tax incentives for investments in recycling services.
Attracting Investment / Investment Promotion	large infrastructural / PPP, investments (including materials recovery facilities, chemical recycling facilities, waste-to-energy, composting, carbon trading); trade facilitative policies (including foreign ownership, tax waivers, export or special economic zones) and public subsidies and investments (including through cross subsidization and tariff ring-fencing).
Enforcement and Digital Innovations	licensing and certification requirements (for general and hazardous waste types; fines, fees and penalties for improper waste disposal (for general and hazardous waste types) and specific insight into the management, disposal and enforcement of investors or operators, who handle electronic waste.



# The Problem

Municipal waste generation, globally, is expected to increase to 2.2 billion tons per year by 2025 and to 3.40 billion tonnes by 2050, more than double the population growth over the same period. **Between 1.15 to 2.41 million tons of plastic and mixed waste enter the Pacific Ocean from rivers each year, with nearly all of it originating from APEC economies.**

- BAU approach to ocean-based plastic consumer waste will lead to losses of USD 70 billion between 2021 and 2040.
- Regionally, the annual economic damage caused by plastic waste pollution costs the tourism, fishing and shipping sectors of the Asia-Pacific region USD 1.3 billion



Systemiq/Pew – Breaking the Plastic Wave (2020)

## Key Insights: Policy

Several economies are currently actively revamping a host of outdated legislative and regulatory frameworks, from white papers and master plans to new Integrated Solid Waste Management plans and Extended Producer Responsibility mechanisms. These represent:

- legislative and regulatory opportunities to weigh into the legislative processes of various APEC economies—setting a precedent for innovation, private sector engagement and investment facilitation for decades to come.
- the opportunity to design and tailor fiscal incentives to promote foreign direct investment and domestic investments in WMR value chains across the APEC.
- Notable examples profiled through the study include: Singapore’s “Green Plan 2030”, the “Waste Blueprint for Hong Kong 2035” and Peru’s National Plan for Comprehensive Solid Waste Management (PLANRES).

## Key Insights: Infrastructure and Technology

Some APEC economies are benefiting from large FDI and domestic investments in waste management and recycling technologies, through a host of PPP, SEZ and industrial park mechanisms.

- Notable WTE investments have taken off in The Philippines, Thailand and Malaysia (Metro Pacific Investments Corporation; TPI Polene Power, ALCP6, Super Energy Corporation, Cypark Resources Bhd and Worldwide Holdings Bhd) that will add up to 75MW to the grid across these three APEC economies, when completed.
- Stronger and consistent definitions and materials quality standards in the recycling industry as well as the presence of tangible and tailored fiscal instruments, often help to facilitate further FDI and domestic investment in WMR value chains.
- Investments in WMR infrastructure and technology directly ease the burden on municipal, regional and domestic authorities in delivering public solid waste management services and promoting waste recycling and recovery.

# Key Insights: Enforcement and Behavior Change

WMR entitles in APEC economies spoke widely about the advent of digital solutions that they are integrating into their supply chains, including: *designing and employing digital solutions for citizen engagement and behavior change; enhancing operational efficiency through GIS services and vehicle tracking and using digital apps to improve the transparency of recyclables and commodities traded in international markets.*

- Employing digital solutions for citizen engagement, behavior change education, awareness raising and training programming.
- Employing digital solutions to enhance operational efficiency.
- Employing digital solutions to increase the transparency of recyclables trade and mitigate waste crime and the illegal trade of recyclables. This includes through the use of drone imagery, blockchain and the publication and real time update of price indexes for popularly traded recyclable commodities.





# Thank you!

Joshua Palfreman

Waste Management and Recycling Specialist, US-SEGA  
program

[joshpalfreman@gmail.com](mailto:joshpalfreman@gmail.com)