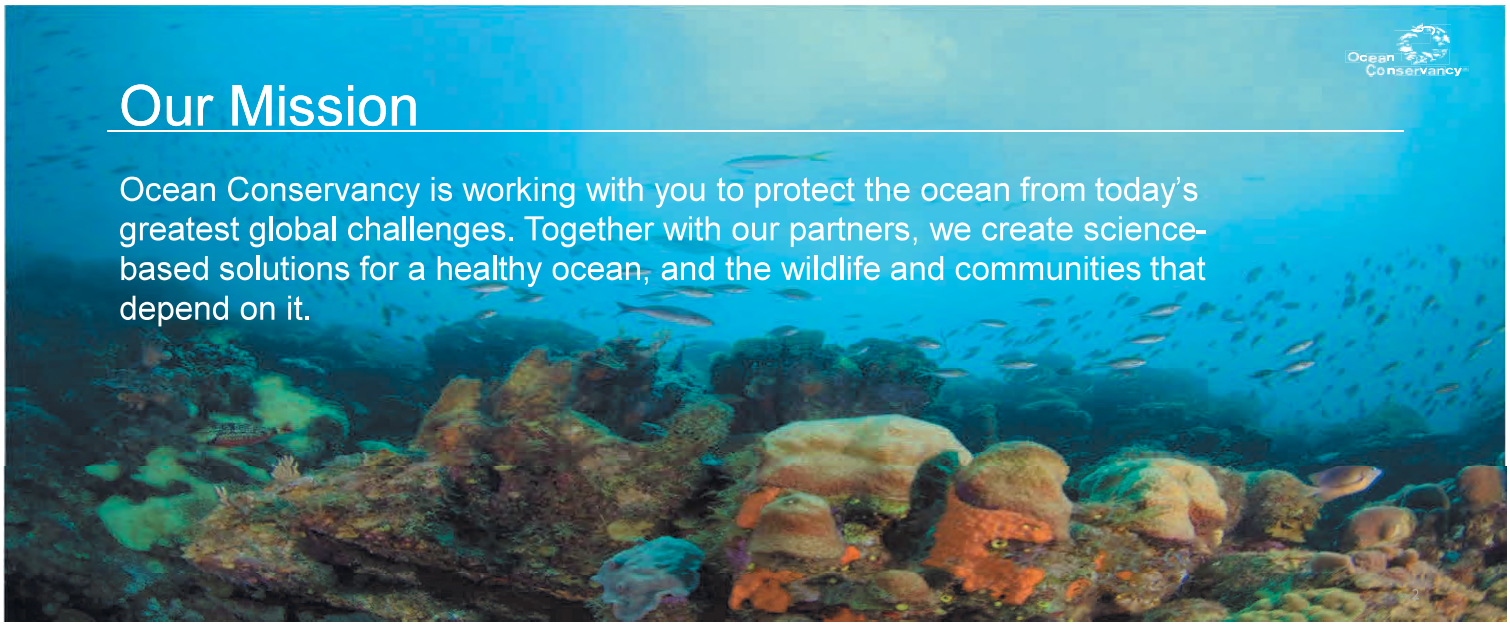

Ocean Conservancy
Policy Playbook:
Social, Environmental, and Economic Impacts
APEC Workshop
Bali, Indonesia
February 18, 2020


Ocean Conservancy
Our Mission
Ocean Conservancy is working with you to protect the ocean from today's greatest global challenges. Together with our partners, we create science-based solutions for a healthy ocean, and the wildlife and communities that depend on it.

Celebrating 34 Years

International Coastal Cleanup

14 million
volunteers

300 million
pounds of trash

450,000
miles

34
YEARS

360 million
ITEMS COLLECTED

153
COUNTRIES

TRASH FREE SEAS ALLIANCE SIGNATURE INITIATIVE – OUR JOURNEY

CIRCULATE CAPITAL

Research phase
2015

To **understand how and why plastic waste is leaking into the ocean** and evaluate potential prevention approaches

Enabling phase
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2017-2018

To design and launch the collective effort including:

- Building an investment pool and funding mechanism
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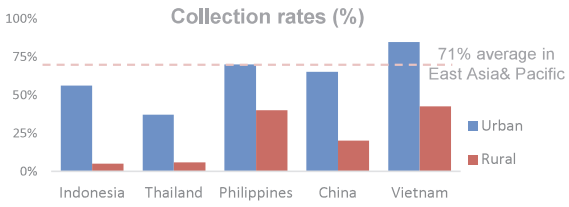
Previous research has highlighted uncollected waste and low value plastics as the major contributors to marine debris, exacerbated by an underfunded value chain

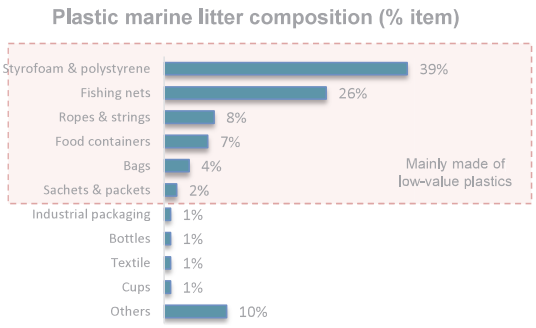
❶ UNCOLLECTED WASTE

- **75% of plastic leakage** in the ocean comes from **uncollected waste**



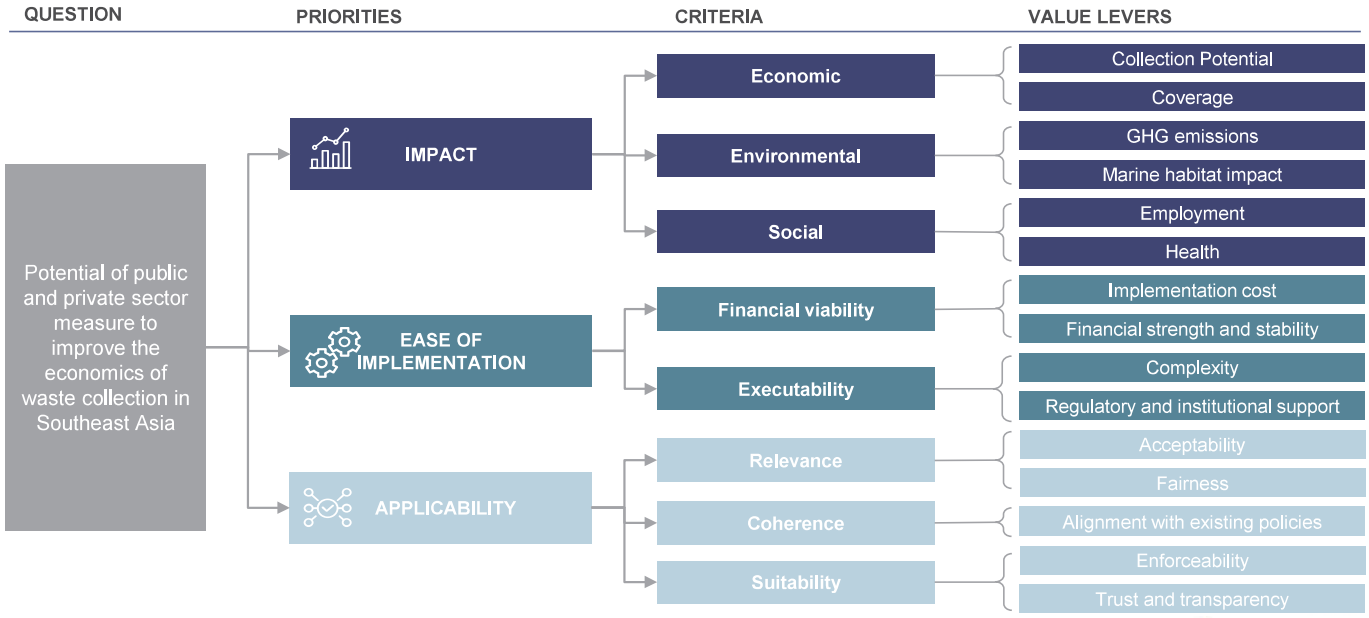
❷ LOW VALUE PLASTICS

- **61% of plastic waste is low value** (e.g. films, composites etc.), 21% of the plastic is medium value (LDPE, PS) and only 18% of the remaining is high value plastic waste (e.g. PET, HDPE)
- Waste pickers are **less likely to collect low-value**, high-bulk plastic waste



Source: The Next Wave (2017), Plastic waste inputs from land into the ocean, Jenna R. Jambeck (2015)

These measures have been assessed based on their potential impact, ease of implementation and prioritised according to their applicability to a specific geography



We delivered a multi-stakeholder project that engaged experts from across the public and private sectors, at a global scale

40+
Interviews with senior industry members, investors and non-profits

77
Stakeholders engaged through in-country workshops

20
Experts consulted during detailed review process

6
Countries represented in research team

10
Private sector companies engaged as part of the Steering Committee

4
Countries where the project team planned and delivered workshops

180
Public-private measures to reduce ocean plastic explored

Measures were shortlisted based on an assessment of their impact and ease of implementation, as well as inputs from the in-country workshops

THEMES	PUBLIC SECTOR MEASURES	PRIVATE SECTOR MEASURES
I. FINANCE THE COLLECTION	• Packaging material fees • Deposit return scheme • Plastic credits / packaging recovery note • Pay as you throw • Municipal collection and MRFs • Source segregation • Municipal union	• Pre competitive voluntary EPR • Blended financial instruments • Digital waste management
I. REDUCING PROBLEMATIC AND UNNECESSARY SINGLE USE PLASTICS	• Taxes and levies on SUPs • Ban on SUPs • Ban on primary microplastics	• Remove non-recyclable plastics from packaging • Develop alternative materials
II. DESIGN FOR CIRCULARITY	• Eco-design standards • Recycling Content Standards	• Establish cross-industry standards • Design circular packaging
IV. DEVELOP RECYCLING AND TREATMENT MARKETS	• Incentives for recycling industry • Sustainable offtake and conversion markets • Preferential procurement • Virgin material tax	• Invest in recycling capacity

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Key numbers from our findings

24

High-priority measures can be the focus in improving collection and reducing ocean plastic

5

Key principles for success which must be in place for a waste management strategy to be successful

4

Themes across the value chain that public-private solutions must address

$28-40

Financing gap per ton to manage plastic waste

75%

The amount by which Extended Producer Responsibility can reduce the financing gap

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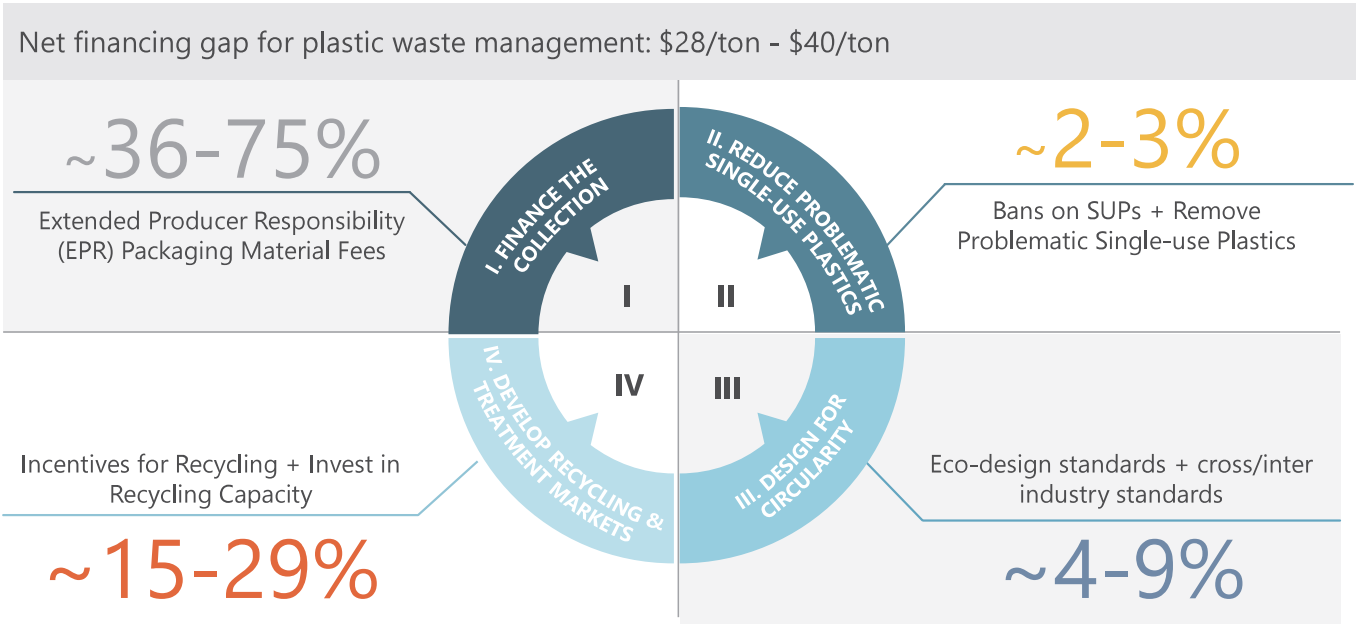
Summary of financial modelling across the four themes



Each of the four themes has distinct features and examples of current action

THEME	FEATURES	EXAMPLES
I. REDUCE PROBLEMATIC SINGLE USE PLASTICS *Reduce the amount of plastic waste generated by radically shifting away from the use of unrecyclable plastic products for single use purposes*	▪ Radically increased substitution of plastics for single use purposes through environmentally friendly plastics or alternative materials ▪ Control low value single use items (for ex. plastic bags, cups, straws) from entering the value chain	▪ Tamil Nadu enforced ban on use of 14 types of SUP products in 2019 ▪ Thailand brands consortium removed bottle cap seals in agreement with Government (2018)
II. DESIGN FOR CIRCULARITY *Transition towards recyclable plastic materials and packaging design (format and materials) to enable circular products, services and processes*	▪ Introduce plastic suitable for recycling by phasing out problematic resins, additives and packaging formats such as multi-layered plastics ▪ Re-design packaging for post-consumer reusability	▪ UK tax on packaging without a minimum of 30% recycled content ▪ Indonesia water brand using 100% circular packaging with reverse logistics (19L bottle)
III. FINANCE THE COLLECTION *Enhance collection infrastructure and financing to streamline waste collection without having to fundamentally change the inputs*	▪ Significantly scale the collection infrastructure through various policies focusing on collection stage without any changes in upstream ▪ Formalize additional revenue streams specifically for collection stage	▪ Singapore trial of household PAYT and RFID bin chutes tracking (2019) ▪ Indian start-up connects network of waste pickers with recycling end-markets
IV. DEVELOP RECYCLING AND TREATMENT MARKETS *Catalyze demand for recyclable plastics and develop market solutions for non-recyclable & non-recoverable waste*	▪ Develop the recycling industry, with major investment in sorting, logistics, and recycling infrastructure ▪ Besides mechanical recycling, scale-up other suitable treatment technologies or options	▪ Indonesia 5%VAT incentive to encourage recycling industry in 2019 ▪ Indonesia water brand launched a 100% recycled PET bottle in Bali (2018)

Sources: Accenture Research and press reports

Countries need to challenge their solutions and ask themselves – what are the priorities, trade-offs and challenges?

OBJECTIVES	LEVERS	KEY QUESTIONS
IMPROVING THE ECONOMICS OF WASTE COLLECTION	REDUCING THE SUPPLY	• At what **stage of upstream production**, should governments introduce measures and what kind of measures (**command and control vs market based**) will be effective? • Who are the key private sector stakeholders that policymakers need to **secure buy-in and commitment** from for the identified measures? • How can countries balance the trade-off between **increasing the revenues from taxes**, that will eventually relieve funding gap and incentives for producing and using better plastics?
	STRENGTHENING THE COLLECTION	• How can private sector **best contribute** to the collection stage of solid waste management infrastructure? • What measures will enable **effective integration with informal sector** to maximize collection efficiency?
	FINANCING THE COLLECTION	• What are the **sources and mechanisms** of funding that will improve the economics of plastic waste management at collection? • **Which funding sources** should finance different **system components** of waste for maximum returns? • How can we address the issue of **transparency and traceability** to enable/foster private sector interventions?
	INCREASING THE DEMAND	• How should manage **trade-offs between some short-term measures** (for ex. allowance with the concept of circular economy? • What measures can be taken to **improve the market attractiveness** of waste management and treatment as a business in these countries? • As a country, **what are the trade-offs** between focusing on downstream measures vs upstream measures, and how should this guide the roadmap?

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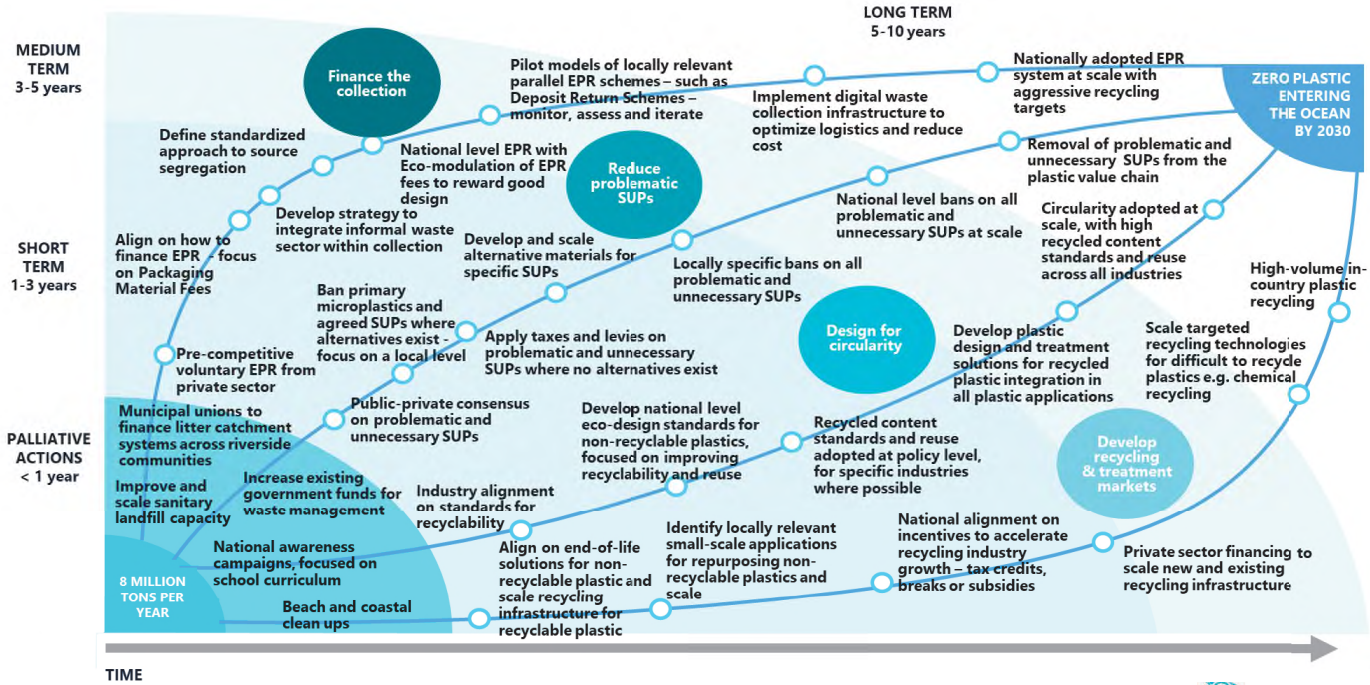
Roadmap for success



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Five guiding principles, supported by the public and private sectors, are critical for the success of any plastic strategy

Combine measures across the value chain	Engage and include the informal sector	Drive consumer awareness and behavior change	Inspire political will	Improve enforcement at national and local level
Real value lies in **combining measures along the value chain, by both the public and private sectors**, in new and innovative ways	Measures must support the human rights and livelihoods of those on the front line of collection efforts. Dignified employment **with improved working conditions and leveraging the expertise of independent waste collectors** can drive improvements in collection quantity and efficiency.	Consumer buy-in is a critical enabler of a successful plastic waste management framework, and focus **countries need targeted awareness campaigns to engage key audiences and spark behavioural change.**	Leaders at the **national and local levels should be motivated and empowered to support solutions** to reduce ocean plastic waste	Measures are only as good as the ability to enforce them. **Strong national policy requires a clear direction and rule of law.** Policy, however, has to be enforced at the local level, which requires improved capacity for action

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Implement & scale phase
2019 -2020

Implement new projects to test and scale effective waste management models

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Our Approach

Giving Cities the tools they need to keep trash out of the ocean:

- Science
- Policy
- Finance

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2019 Milestones

March: Ocean Conservancy, 100 Resilient Cities, Circulate Capital, SecondMuse, and TFSA launch Urban Ocean at the World Ocean Summit

July: Ocean Conservancy, TFSA, and the U.S. State Department launch the APEC Clean Cities project

July: Ocean Conservancy leads two discussions on marine debris at the 100 Resilient Cities Summit

August: NOAA announces its support for Urban Ocean with a $250,000 grant

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FRAGMENTED VALUE CHAIN

Workforce

- Livelihoods Focus
- Already working in the sector
- Incentives – social and financial
- "Keeps children from being pulled out of school to collect"

Capacity

- Little existing capacity to manage higher volume of LVP
- Cartels/monopolies capture profits, keep workforce in debt
- Low capital required to process more LVP

Price Stabilization

- Added price to incentivize collection of LVP not that much
- Initially voluntary EPR/PRO but eventually must be gov't policy
- Price alone will increase plastic collection but will not lead to better workforce conditions

Financing Needs			
Grants	$$	$$	$
Finance	$	$$	$
Investment		$	$$$

Thank you!