Crafting High-Impact Voluntary Commitments to Prevent and Reduce Marine Litter

Guide & Scorecard for SDG Target 14.1

Ocean Recovery Alliance

Made possible with funding from United Nations Environment

Crafting High-Impact Voluntary Commitments to Prevent and Reduce Marine Litter

Guide & Scorecard for SDG Target 14.1

28F Central Tower
20 Queen's Road
Central
Hong Kong
www.oceanrecov.org

DISCLAIMER

This report was made possible by funding from UN Environment with the research and methodology conducted and created by Ocean Recovery Alliance, a non-profit organization (NGO) focused on creating innovative solutions and collaborations to improve the health of the ocean. Its dedication to broad ocean governance and new thought leadership, combined with its network of organizations, entrepreneurs and innovators, particularly related to plastic sustainability and circularity, helps create engaged and active dialogues where gaps often occur due to entities that often do not have a history of working with one another. The group creates purposefully designed activities to educate, build awareness and provide solutions which inspire positive societal change at community, national and international levels.

ACKNOWLEDGEMENTS

Main authors: Rob Steir, Berna Tural, and Doug Woodring

Contributors: Amy Brooks, Mathilda Blume, Elisa Maria Klophaus, Connor Keisling and Linda O'Doughda

Design / Layout: Upendra Kumar (GraphixCare) and Jo Farrell

Cover Picture: "Skyscraper", by Jason Klimoski and Lesley Chang (StudioKCA) ©STUDIOKCA

Issued: January 2020

TABLE OF CONTENTS

ANNEX

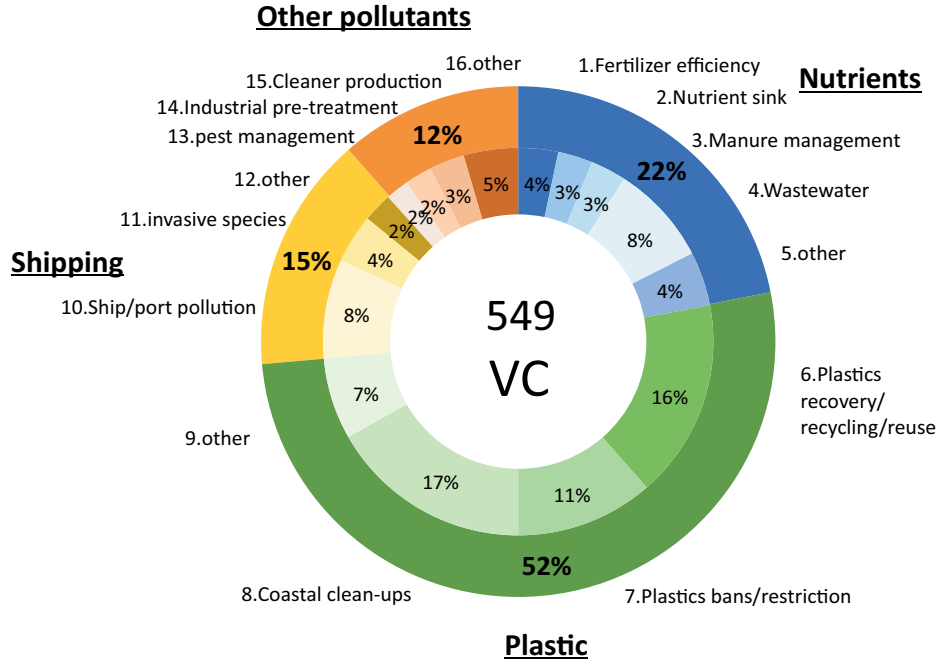
A Summary Report is available at:

http://bit.ly/PlasticCommitments2020

PREFACE

Over the last few years, education efforts and images of the world's ocean awash in plastic pollution have raised public awareness and galvanized growing numbers of people in all continents to take action. The prevention and reduction of marine litter and microplastics has become a priority on environmental agendas across the globe, in part because it is a crisis people can both see and touch, with the ocean as the unifying factor which is driving changes across governments, communities and business sectors globally.

The focus brought to the marine litter and microplastics issue has resulted in a wide variety of voluntary commitments by various stakeholders, including nations, local governments, NGOs, industries, and civil societies. This movement to spread awareness and create initial actions for improvement has been vitally important in aligning stakeholders worldwide to address this pervasive problem.



Source: In-depth analysis of Ocean Conference Voluntary Commitments to support and monitory their implementation.UN DESA 2017

Many responses have been visible and reactionary: for instance, the hundreds of public commitments in different countries to ban use of plastic bags and straws as well as to place levies on certain types of packaging. Other actions include the work of dedicated people and organizations that ranges from local beach cleanups to long-term, sustainable multination programs, such as the Regional Seas action plans.

The 2017 UN Ocean Conference alone generated more than 1,400 voluntary commitments, 549 of which pledged to fulfill the UN Sustainable Development Goal (SDG 14.1.1), which focuses on preventing and significantly reducing marine pollution by 2025.

The purpose of this report, made possible with funding support from UN Environment, is to review a large subset of publicly listed voluntary commitments made by the global community between 2014 and 2018, and to analyze and understand what activities have been pledged to date, and to find out what can be improved upon in the future. In particular, the following questions were addressed:

- **Is the current mix of interventions and initiatives, through voluntary commitments, making enough of an impact to slow the flow of plastic into the world's ocean? If not, what are the most promising ones, and where could new intervention/initiative efforts be directed and geographically emphasized?**
- **Are the current voluntary commitments constructed to maximize impact? If not, how could they be structured to enhance impact?**
- **How effective are the current prevention interventions/activities by each type of stakeholder? What are the optimal types of voluntary commitments that each stakeholder group could be undertaking?**
- **If the "next 1,000" voluntary commitments were similar to current ones will the global community succeed in reducing marine litter, and if not, what needs to change to be successful?**

To answer these questions, the report took a positive "can do" mindset that the global community can indeed significantly reduce the flow of plastic pollution, and ideally stop it in full by 2050. After analysis of current voluntary commitments, the report focuses on what else stakeholders can do collectively in order to bring about a considerable reduction in marine litter and microplastics, and outlines a scoring system stakeholders can adopt that will drive the implementation of a multitude of long-term sustainable high-impact voluntary commitments over the next 30 years.

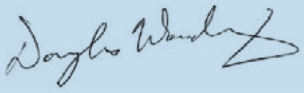
Section 1 presents the key takeaways of this report and recommended actions, especially in light of **Section 2**'s macro factors that will affect the projected exponential use of plastic by society.

Sections 3 and **4** describe the considerable efforts to date made by various stakeholders yet shows why these efforts are not overly impactful at scale.

Section 5 presents a new way to engage stakeholders – ***Commitments 2.0***. It includes a set of guiding principle which can be used for future commitments: among them are the need to better collaborate, the importance of collecting, measuring data and setting baselines, and the absolute need to replicate and scale-up successful programs. In addition, this section introduces 11 criteria for crafting more impactful voluntary commitments, as well as two new analytical tools (scorecard and step-by-step template) for stakeholders to use that are designed to help each stakeholder create the most impactful commitments.

Section 6 steps back to individually analyze the publicly listed voluntary commitments made between 2014 and 2018 by using the new scorecard. This provides insights into effective voluntary commitments for each type of stakeholder by intervention and initiative, and which ones that consistently score poorly and can be improved.

Sections 7 and **8** present a number of recommendations to design more impactful voluntary commitments, and to showcase what is possible if the world decides to craft high-scoring, high-impact voluntary commitments to effectively slow, and one day stop, the flow of marine litter and microplastics.



Douglas Woodring

WHAT IF ALL STAKEHOLDERS …

KNEW THAT THEIR EFFORTS IN 2019 AND BEYOND COULD MAKE ALL THE DIFFERENCE IN THE WORLD BY 2050 IF STAKEHOLDERS DECIDED TO CREATE AND APPLY A SET OF GUIDING PRINCIPLES TO DESIGN NEW COMMITMENTS AND REPRIORITIZE EXISTING COMMITMENTS FOR LONG-TERM EFFECTIVE IMPACT.

"Skyscraper" by StudioKCA ©STUDIOKCA

2050 HEADLINE: Marine Life Wins. The Ocean Wins. The Planet Wins. Humans Win

The 2016 McKinsey Report which, for the sake of argument, says in 2050 there will be more plastic in the ocean than fish, does not come true. Marine litter significantly reduced over the last few decades thanks to the efforts of all stakeholders and people around the world!

Or:

2050 HEADLINE: There is Now More Plastic in the Ocean than Fish as Predicted

The world population, as predicted in the 2019 UN DESA World Population Index report, hits 9,800,000,000 people[2], and despite the dire warning three decades ago, the world never truly committed itself to making improvements to limit plastic consumption.

1 KEY MESSAGES

An evaluation of 580 voluntary commitments to reduce marine plastic pollution made on a UN platform between 2014 and 2018 was performed to assess their potential effectiveness. The evaluation specifically focused on the types of prevention interventions, initiatives, and expected impact declared in the voluntary commitments. This review resulted in two main takeaways:

A Wake-up Call

Comparing the commitments already made, and the increasing understanding of the potential threats from marine litter and microplastics, the world is faced with an alarming challenge: increasing volumes of plastic finding their way to the ocean. The only way to reduce the volume is through intentional, targeted collaboration with a well-defined set of measures, accountability, and transparency. This report is a "Wake-up Call" to the global stakeholder community that improvements are needed in what is being committed for larger, preventative impacts. It lays out a set of guiding principles and a template that any stakeholder can use.

Rethinking How Voluntary Commitments are Structured

With the recognition that "business as usual" efforts are not reducing marine litter and microplastics, and current voluntary commitments are not impactful enough, a new approach to constructing them is warranted.

Introducing a Set of Guiding Principles

- Structure commitments so that these can be replicated and scaled
- Pursue collaborations that engage multiple stakeholders
- Capture data and share results
- Build in long-term impact and continuity
- Secure proper, adequate funding / resources and set short-term milestones

"WE HAVE ONE PLANET

FOR THE NEAR TERM, THE AMOUNT OF PLASTICS ENTERING THE OCEAN IS INCREASING EVERY YEAR

SLOWING THE FLOW OF PLASTIC INTO THE OCEAN IS ONLY POSSIBLE WITH GLOBAL COORDINATION

WHAT WE CAN MEASURE, WE CAN IMPROVE

THE WORLD CAN SHARE EFFECTIVE SOLUTIONS

WE SHOULD REPRIORITIZE & IMPROVE OUR COMMITMENTS

THE WORLD CAN USE ALL RESOURCES – TIME, EFFORTS, AND CAPITAL – MORE WISELY"

Introducing the *Commitment Scorecard*

Although the global community of stakeholders (nations, local governments, NGOs, industry, and civil society) has developed a wide variety of projects and programs that can be replicated and scaled, they do not get replicated and reused enough for wide-scale impacts. This report introduces a scorecard to improve the efficacy and impact of all future voluntary commitment to be made by all stakeholders.

Using Guiding Principles and Scorecard to Craft More Impactful Voluntary Commitments

By 2025, the UN Sustainable Development Goal target 14.1 (SDG 14.1) is to prevent and significantly reduce marine pollution of all kinds, particularly from land-based activities, including marine litter and nutrient pollution.

In order to attain this target, global stakeholders can improve voluntary commitments for greater efficacy and impact by considering the following actions:

- **Creation of sustainable, long-term prevention intervention programs and initiatives that can be replicated and scaled at all levels.**

  These can be large multi-country programs that occur simultaneously in different regions, or thousands of local programs in cities and communities where multiple stakeholders get involved to make a scaled difference in preventing and reducing marine litter and microplastics.

- **Capture, measurement and sharing of data from all current global voluntary commitments.**

  With proper data, the world can identify "good practice" programs and activities with highest impact when compared to required effort, time, and cost.

- **Improve waste management and product design at both the government and business levels.**

  Judging from the large number of educational and awareness building voluntary commitments since 2014, as a result of our analysis, it is clear that there has been a strong emphasis on driving awareness of plastic pollution, while encouraging governments and communities to stop using single-use plastics. Though plastic bag and straw bans are effective for awareness building, in actuality, they represent only a small portion of the scope of the plastic waste issues that most countries face. Future commitments should focus more on the use of less plastic, improved product design, reusability, recycled content, improved waste management, and resource recovery.

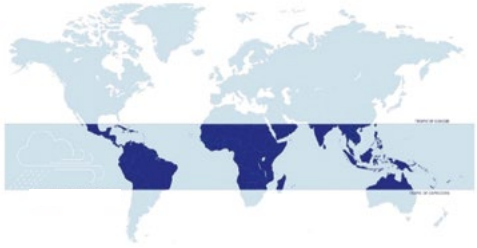
- **Increase funding from governments and donor institutions for more pilot programs to be replicated and scaled as part of their own voluntary commitments. Once proven, these pilot programs can be implemented simultaneously in multiple countries and by multiple stakeholders.**

It is estimated that 40% of the world's waste is "removed" via uncontrolled burning

WHAT IF ALL STAKEHOLDERS ...

FOCUSED COMMITMENTS ON CERTAIN REGIONS FOR GREATER EFFICACY AND IMPACT.

"Skyscraper" by StudioKCA
©STUDIOKCA



The geography between the Tropics of Cancer and Capricorn are where large weather events and flooding tend to occur, often exacerbating loss of plastic waste where waste infrastructure is not readily available.

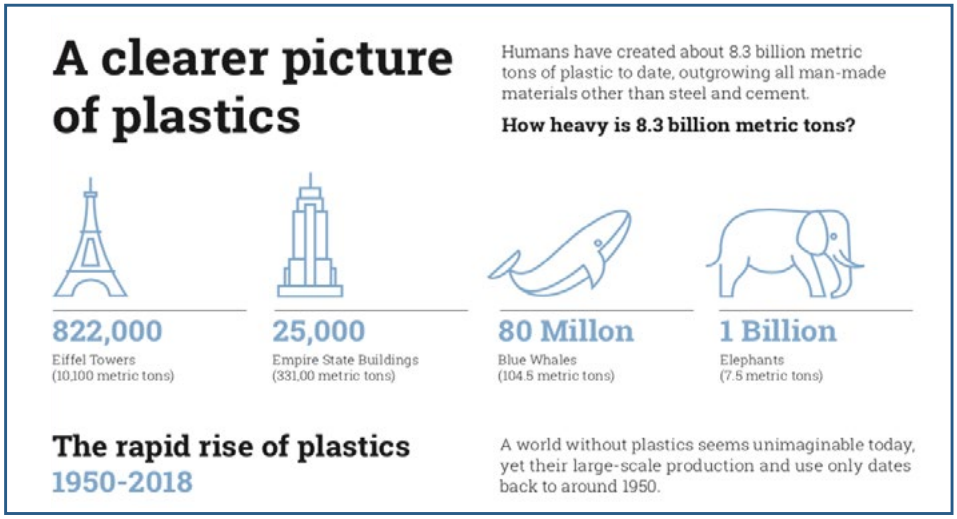
Many commitments have focused on the reduction and avoidance of the use of products designed with a single life. These are often the easy first targets of reducing unnecessary waste. To date, however, few commitments have focused in-depth on the challenges that face a high percentage of the world's communities regarding basic recycling, waste management, or resource recovery. World Bank data (as highlighted in the Jambeck report) suggests that up to 85% of the world's mismanaged waste comes from countries within the band between the Tropic of Capricorn and the Tropic of Cancer. These countries are also some of the most densely populated, and they have some of the highest rainfall and storm incidences. These combinations create a global burden in terms of plastic pollution lost to the environment and suggest that special attention within this geographical band is paid to focused interventions and capacity building which can enhance the success of goals for plastic waste reduction and preventing litter from ending up in the ocean. It highlights the need for collective responsibility for materials used in products and packaging, and where some of the commitments may make large impacts in addressing capacity shortfalls.

Cleanup activities in Cambodia and Malaysia

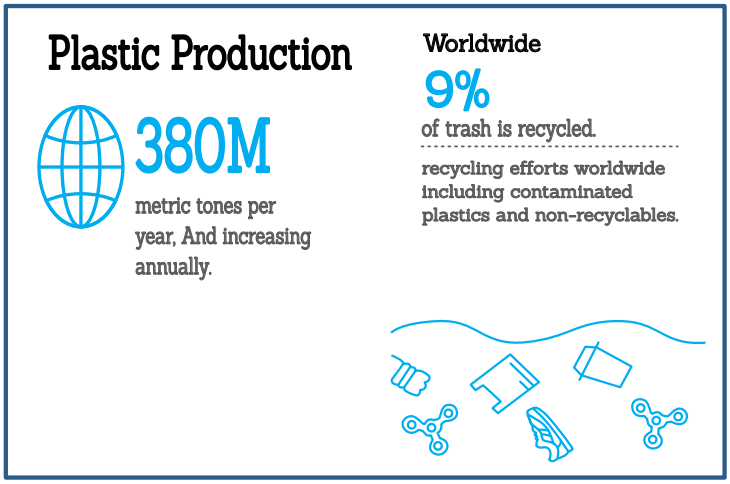
2 UNDERSTANDING SOME OF THE MACRO ASPECTS OF PLASTIC POLLUTION

- **Plastic is a Valuable Material with Many Everyday Uses**

  For an idea of just how much plastic has been produced since 1950, consider these comparisons:

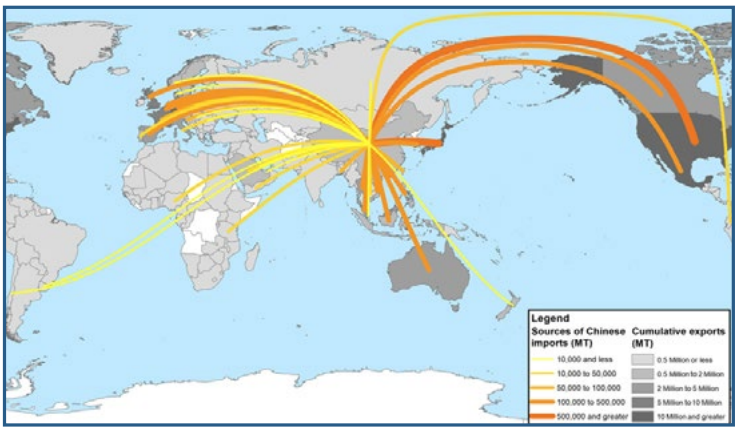


- **The World's Plastic Production Continues to Grow at 6% Annually[3], yet Total Global Plastic Recycling Recovers Only an Estimated 9% of the Total Volume Produced [5]**



- **China No Longer Buys the World's Unprocessed "Dirty" Plastic, Which Artificially Supported Much of the World's Mislabeled Recycling Activities**

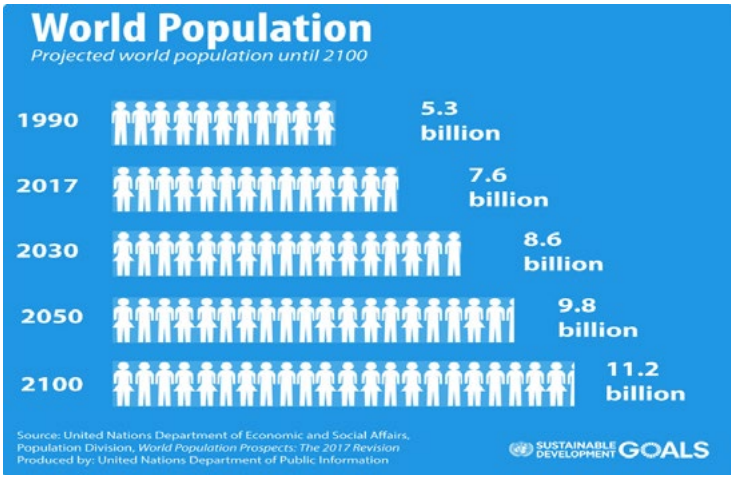
  China's decision in January 2018 to ban the import of unprocessed plastic scrap material for recycling has caused a large-scale global disruption in both the price of recycled commodities around the world, and the locations where they are now stored, processed, or disposed. This has exposed the reality of "recycling" in the Western world: the relative lack of capacity to domestically manage recycling and material recovery. It has also forced many countries to rethink how they handle their domestic waste.



- **Waste Mismanagement Enables an Estimated 8,000,000 Metric Tons of Plastic Waste (80% by Land) to Enter Rivers and the Ocean Each Year**

  An estimated 8,000,000 metric tons of plastic waste enters the ocean each year (80% from land-based sources) due to waste mismanagement.[6] This is due largely to the combination of rapidly developing economies and the lack of waste management and recycling infrastructure in the developing world, where as many as 2 billion people live in areas without formal waste management solutions. Not only does this lead to dumping waste directly into rivers and the ocean, but also the additional harmful consequences of placing waste into unsanitary garbage dumps, or open burning that releases toxic chemicals into the air.

- **Population Growth by 2050 Is Expected to Generate 70% More Waste [7]**



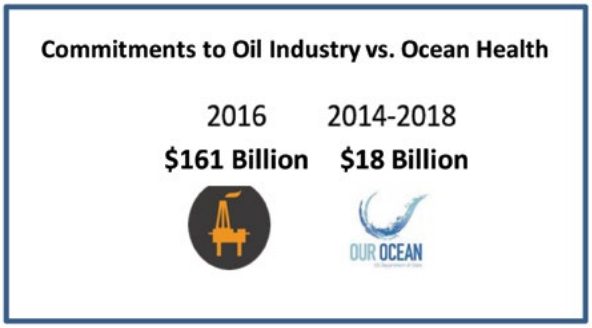
  As an increasing global population brings increased consumption, the result will be the use of more plastic and packaging along the way. In fact, the World Bank, in its 2018 "What a Waste 2.0" report [8], predicts that by 2050, the world is expected to generate 3.40 billion tons of waste annually, increasing drastically from today's 2.01 billion tons. The world, therefore, can expect a commensurate increase in plastic waste that must be handled. Thus, strained, already porous waste management systems will be severely tested if significant improvements to waste disposal and recycling solutions around the world are not made.

- **Governments Continue to Prioritize (by Subsidies) the Use of Fossil Fuels (compared to healthy oceans)**

  Subsidized fossil fuel extraction means that the true cost of virgin plastic production from petroleum is not taken fully into account. The cost of virgin plastic is too low. This means that the often-unsubsidized recycling industry has an unfair disadvantage in trying to create competitive products from materials that are hard to recover, transport, aggregate, clean, purify, and create economies of scale with, and then make these reusables within a new, circular economy.

  A 2018 Companion report issued by the Organization for Economic Cooperation and Development (OECD) estimates that countries representing 94% of global CO2 emissions also provided fossil fuel subsidies for oil and gas projects of at least $370 billion between 2010 and 2015 [9]. Additionally, the report found that government subsidies for 2016, in mainly 36 OECD countries, were $161 billion[10].

  The G7 have committed to end these subsidies by 2025[11]. In comparison, the total pledges for voluntary commitments from all "Our Ocean" conferences prior to 2018 totaled just $18 billion[12]. Even with a larger spotlight on plastics and the ocean, the 5th Our Ocean conference in 2018 generated 305 voluntary commitments and only $11 billion[13] in pledges –paling in comparison to the $161 billion that is for oil (and indirectly virgin plastics). On a positive note, the 2019 "Our Ocean" conference generated 370 commitments and $64 billion in pledges for all ocean initiatives.



WHAT IF ALL STAKEHOLDERS ...

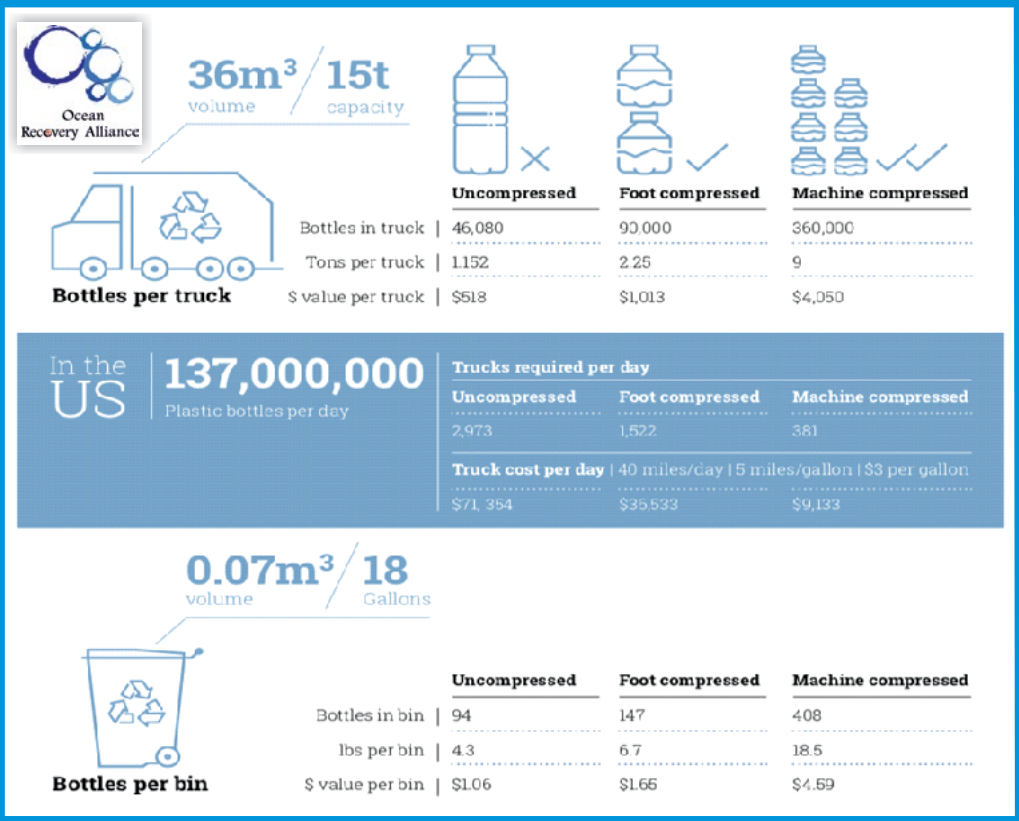
IMPROVED ON DESIGN OF PRODUCTS AND PACKAGING FOR END OF USE PURPOSES

"Skyscraper" by StudioKCA ©STUDIOKCA

Many plastic products or types of packaging are rigid in their structure. This makes them hard to compress at the source of disposal. As a result, they take up a considerable amount of space and transportation effort when being "stored" as waste in a bin, for example, or when moved across a community to be recovered or disposed of in some manner.

What if stakeholders involved in waste management first deployed localized compactors, shredders, and/or grinding machines at the local source? This could save more than six times as much space for certain types of packaging, would allow more plastic waste resources to be stored or transported, and lower overall costs. The economics to recyclers, with better economies of scale, would improve along the way.

The graphic that follows compares the space and volume required to manage plastic bottles, which are rarely compressed at an industrial scale until they reach proper processing and recycling facilities, often far from the source of initial disposal.



Source: Ocean Recovery Alliance

3 THE WORLD'S EFFORTS SINCE 2012 TO REDUCE PLASTIC POLLUTION IN THE OCEAN THROUGH VOLUNTARY COMMITMENTS

By 2025, prevent and significantly reduce marine pollution of all kinds, particularly from land-based activities, including marine debris and nutrient pollution.

U.N. Sustainable Development Goal 14.1 Target

The World Is Responding with Voluntary Commitments

Ocean-based voluntary commitments have been made since the United Nations convened the RIO+20 conference in 2012. In fact, the 2017 UN Ocean Conference generated over 1,300 voluntary commitments and an official online registry, The Registry of Voluntary Commitments. Listing these voluntary commitments is important as they provide inspiring examples, raise the bar for industry, and put pressure on decision makers, leaders, and even consumers to do more.

In all, 549 commitments were tied to SDG 14.1.1 Marine Pollution as presented by the United Nation in a 2018 report "2017 Analysis of Ocean Conference Voluntary Commitments[15]

This enthusiastic response would not have occurred except for a small cadre of people and organizations that figuratively began shouting from their rooftops starting in the early 1990s. In the past five to seven years, traction has been gained with the public because of work of a number of organizations and initiatives and an increased media coverage on various topics suggesting that there will be "more plastic in the ocean by 2050 than fish" and what the press referred to as the "Great Pacific Garbage Patch."[17] In many ways, that original small cadre provided the necessary ingredients for today's wide acceptance that the world has a waste problem.

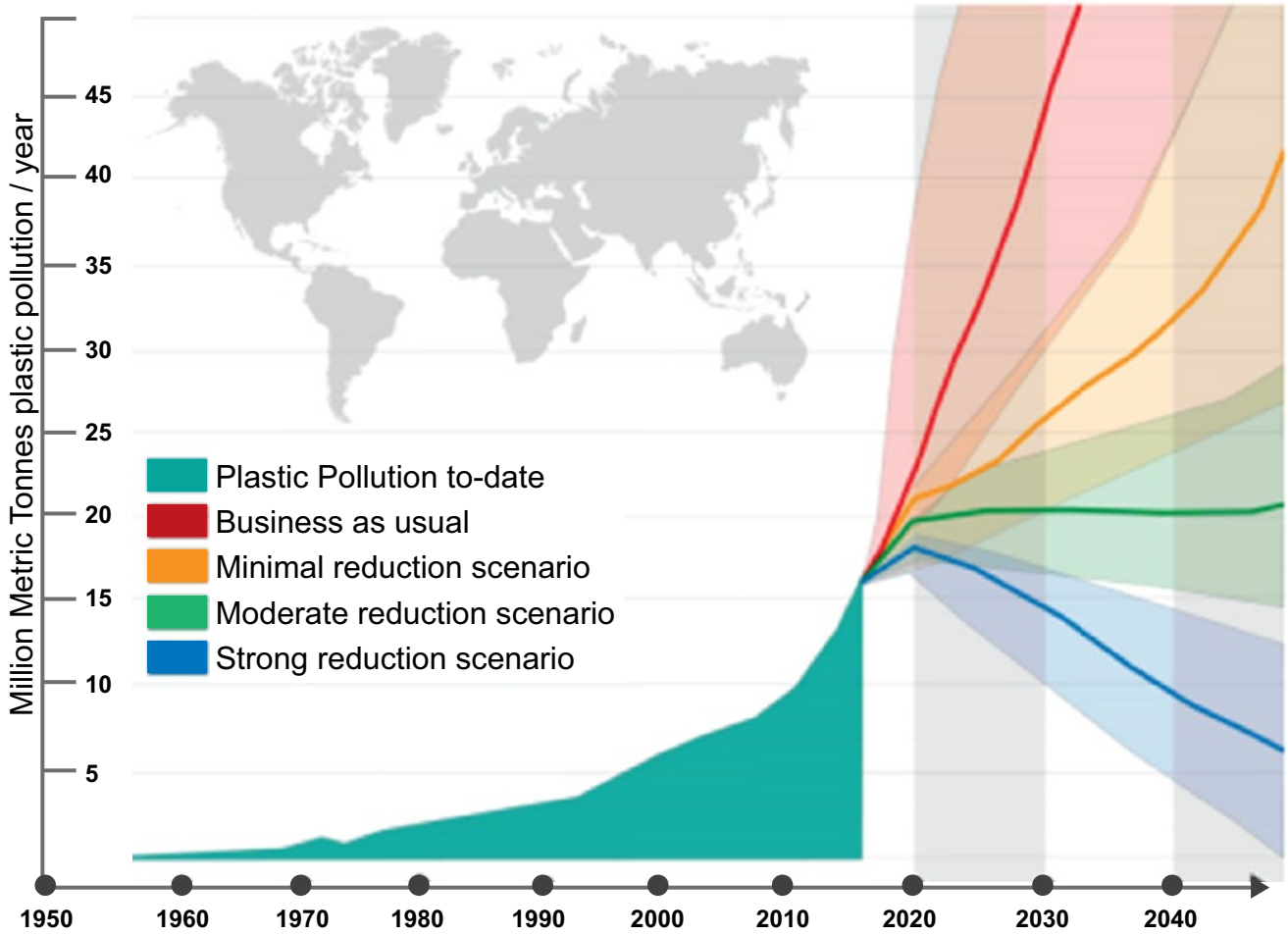
There has been a welcome and increased awareness of tackling marine litter and microplastics globally: from rethinking ways to reduce plastics in production and packaging, to increasing reusability and recyclability of products, to improving waste disposal processes and avoiding the loss and abandoning of fishing gear. Governments, companies, and individuals or grassroots groups are all beginning to contribute in valuable ways.

Of critical importance is that both consumers (as expressed by their buying decisions) and investors are demanding meaningful actions from businesses as well as local, national, and global government entities, while also looking to make responsible choices themselves. This led to high-profile plastic bag bans and tax levies in 127 countries by mid-2018 as one direct political response. Although these programs might not fully reduce marine litter and microplastics in the ocean, they do contribute and importantly help to raise awareness on the overall topic and challenge at hand.

4 PLASTIC POLLUTION IS PROJECTED TO CONTINUE TO RISE, DESPITE CURRENT ACTIONS BY ALL STAKEHOLDERS

A 2017 academic study, " Production, use, and fate of all plastics ever made"[18] provides a clear high-level view of the importance and social and economic benefits of plastic compared to the global community's ability to recycle it. The study projects that the gap between waste generation and proper waste management is expected to grow considerably between now and 2050. This includes the impact from current commitments to increase awareness, reduce plastic waste generation, and existing capacities for resource recovery.

In 2018, a group of independent scientists, and individuals from NGOs and organizations within a SESYNC (National Socio-Environmental Synthesis Centre) working group (www.plasticpeg.org), wrote a White Paper "Evaluating the impact of mitigation strategies for marine plastics to inform policy." This Plastic Pollution Emissions Working Group has developed a mechanistic framework and prototype model to evaluate the effectiveness of a range of reduction and mitigation strategies at different geographic scales to reduce the amount of litter entering our oceans. The first model is due in December 2019 or early 2020. The illustrative graph published in their November 2018 White Paper below shows how theoretically, with proper data capture and effective, targeted voluntary commitments, stakeholders can reverse Business as Usual.



WHAT IF ALL STAKEHOLDERS …

COULD IMPLEMENT EVERY NEW "PILOT" VOLUNTARY COMMITMENT THAT EXHIBITS THE FOLLOWING CHARACTERISTICS, AND IF FUNDS AND RESOURCES ARE AVAILABLE FOR REPLICATION IN MANY FUTURE LOCATIONS:

Optimal Case for Commitments:

- All funding for the pilot program is available from the start to expedite the program-completion timeline.
- Data are both captured and evaluated in a globally agreed, standardized and harmonized way, in real-time or near real time to determine high impact/effectiveness, and shared through open access platforms
- Multiple local collaborators buy into the pilot to maximize the level of engagement.
- The pilot is designed to be replicated and scaled; otherwise, it isn't funded. The entire pilot must be documented and shared for re-use.
- Pilot teams agree to share results during the program, and interested stakeholders from other countries join as observers.

AND IF A PILOT IS A SUCCESS…

Funding and resources would be available to be secured by all stakeholders who want to replicate the program, with:

- local adaptations, in their jurisdictions
- Appropriate due diligence for all new stakeholders and programs
- audited funding and operations during program execution.

Community engagement for reducing plastic pollution in rivers and creeks.

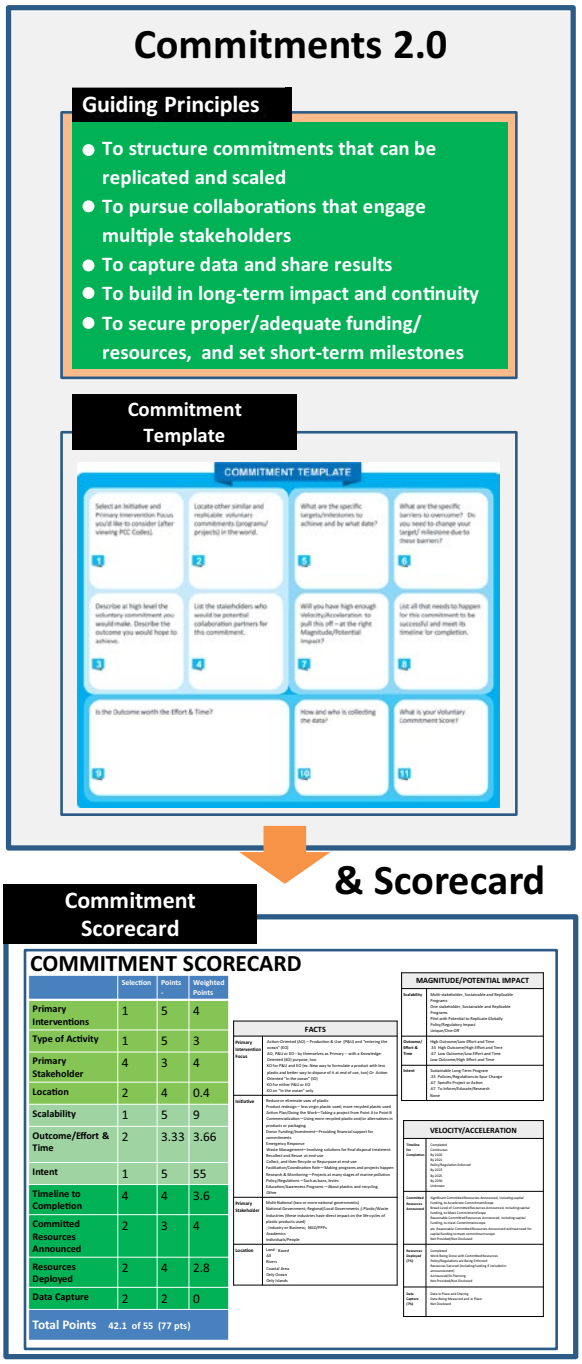
5 INTRODUCING A NEW STAKEHOLDER ENGAGEMENT MODEL FOR CRAFTING VOLUNTARY COMMITMENTS

As already described, if stakeholders continue with "Business as Usual," the global community is not expected to succeed in significantly reducing the amount of marine litter that enters the ocean. A new approach is required in crafting new high-impact voluntary commitments. ***We call this new approach, Commitments 2.0.***

Commitments 2.0

In brief, the Commitment Toolkit has four components.

- A set of guiding principles
- 11 underlying key criteria (listed below) that a well-structured voluntary commitment should possess;
- The ***Commitment Template*** that a stakeholder can use, step by step, to structure a new commitment or revamp an existing one.
- The ***Commitment Scorecard*** based on the 11 underlying key criteria that a stakeholder can use to evaluate how well



Guiding Principles and Underlying Key Criteria:

You will recall from Section 1, "Key Messages," that the five guiding principles are to:

- Structure commitments so that these can be replicated and scaled
- Pursue collaborations that engage multiple stakeholders
- Capture data and share results
- Build in long-term impact and continuity
- Secure proper, adequate funding / resources and set short-term milestones

These five principles are built on the foundation of 11 criteria for crafting voluntary commitments that were distilled from the current ones analyzed for this report. They are:

1. Primary Stakeholder
2. Primary Intervention Focus
3. Type of Initiative
4. Location
5. Scalability
6. Outcome/Effort and Time
7. Intent
8. Time to Completion
9. Resources Allocated
10. Resources Deployed
11. Data Capture

To understand the power of this new engagement model for stakeholders it is important to dive deeper and look more closely at each of the components:

We further define these 11 criteria and break them into 3 distinct sections:

1. Facts
2. Magnitude/Potential Impact
3. Velocity/Acceleration

5.1 A Set of Guiding Principles

A strengthened voluntary commitment should be based on the following guiding principles to achieve the target milestones by 2025:

- **Structure commitments to be replicated and scaled:**

  A stakeholder should first look to find another stakeholder who completed a similar commitment with the similar target results. If none exists, the new voluntary commitment should be designed to be replicated and scaled, if possible.

- **Pursue collaborations that engage multiple stakeholders:**

  A stakeholder should strive to include a greater number of collaborators including local constituents and groups in order to increase the probability of success.

- **Capture data and share results:**

  A stakeholder should incorporate capturing and measuring data into the commitment plan in order to track progress over time, impact, and effectiveness of the commitment. The data is then shared with the global community to better inform design/adaptation of the future commitments where it can be considered for use in other countries/locations as best applicable.

- **Build in long-term impact and continuity:**

  A stakeholder should devise a local commitment that can be self-sustaining, continuous, and, at the same time, impactful.

- **Secure proper/adequate funding/resources and set short-term milestones:**

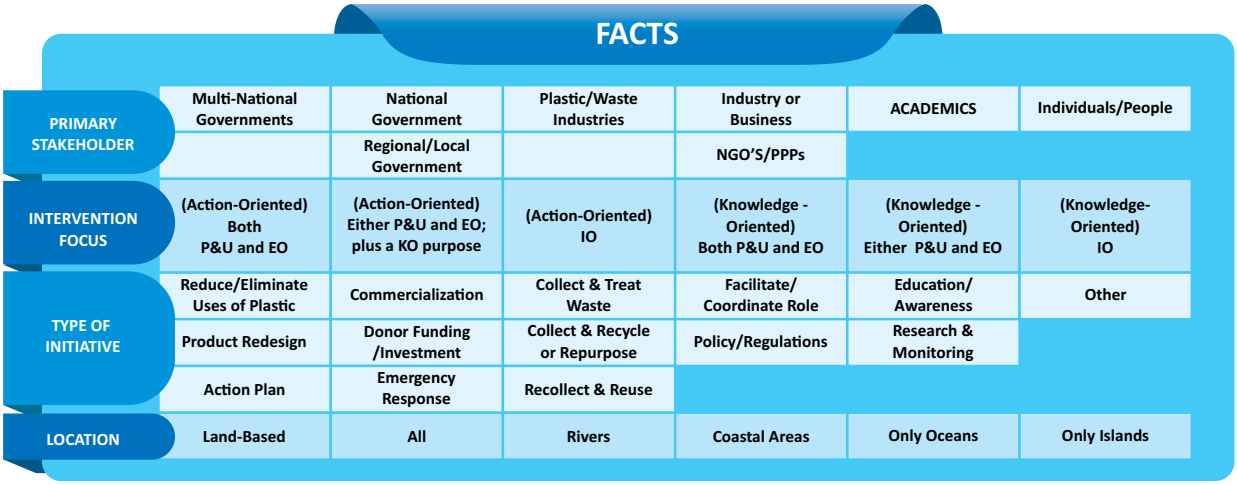
  A stakeholder should secure appropriate funding/resources at all milestone stages of each voluntary commitment to assure success.

5.2. 11 Key Criteria of a High-Impact Voluntary Commitment

Each commitment can be broken down into 11 distinct key criteria, each with a set of choice options, detailed below, for the stakeholder to use when constructing a new voluntary commitment or, perhaps, modifying a current one. These 11 key criteria can be organized in three sections: (1) Facts; (2) Magnitude/Potential Impact; and (3) Velocity/Acceleration.

Cleaned and shredded thin film plastic for recycling.

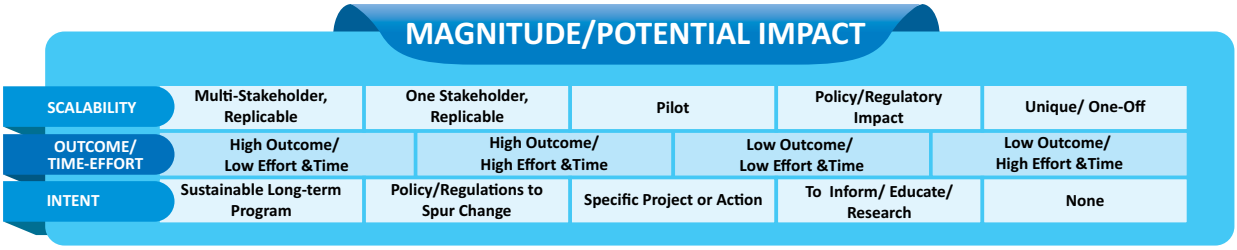
Where there is value for materials, there will be economic activity to recover those materials - Manila



Facts: These four criteria define and describe the commitment: who is the primary stakeholder; what is the primary intervention focus; what is the type of initiative; and where does it occur/who does it impact.

Primary Stakeholder	The stakeholder is responsible for setting and executing a commitment—the key player taking action (the initiative) and achieving results
Primary Intervention Focus	There are, broadly speaking, 6 types of interventions that can be the focus of the commitment. Choices take into consideration if the type of intervention is either **ACTION-ORIENTED** with the aim to change the status quo or **KNOWLEDGE-ORIENTED** with the aim to add to the knowledge base. Interventions can be further classified based on where they occur in the plastics value chain from initial creation to end of life: 1) For the "production and use" of plastics (P&U)—a focus upstream in the plastic value chain that aim to reduce and/or eliminate plastic end-of-life flows through changes in consumer behavior (i.e. avoid use, use alternatives) and developing new products, materials and business models that use less virgin plastics and more recycled plastic. 2) For post-use plastics that can "enter the ocean" (EO)—a focus on managing plastic end-of-flows to divert it from ending up in the ocean, such as waste management initiatives, anti-littering public measures, and increased recycling 3) For plastic already "in the ocean" (IO)—a focus on the cleanup and/or mitigate impacts of plastics already in the ocean or research impacting plastic in ocean

	Here are the intervention types: • Action-Oriented Commitments that focus on the production and use of plastics • Action-Oriented Commitments that focus on post-use plastic that can enter the ocean. • Action-Oriented Commitments that focus on cleaning up the plastic in the ocean • 4rKnowledge-Oriented Commitments that focus on the production and use of plastics • Knowledge-Oriented Commitments that focus on post-use plastic that can enter the ocean. • Knowledge-Oriented Commitments that focus on cleaning up the plastic in the ocean
Type of Initiative	What is the focused high-level action that the commitment declares to take? • Action Plan/Doing the Work—Taking a project from Point A to Point B • Collect, and then Recycle or Repurpose at end-use • Commercialization—Using more recycled plastic and/or alternatives in products or packaging • Donor Funding/Investment—Providing financial support for commitments • Education/Awareness Programs—About plastics and recycling • Emergency Response • Facilitation/Coordination Role—Making programs and projects happen • Policy/Regulations—Such as bans, levies • Product Redesign – less virgin plastic used; more recycled plastic used • Recollect and Reuse at end-use • Reduce or Eliminate uses of plastic • Research & Monitoring—Projects at many stages of marine pollution • Waste Management—Involving solutions for final disposal treatment • Other
Location	In what targeted geographical area related to water, land, or both does the commitment impact?

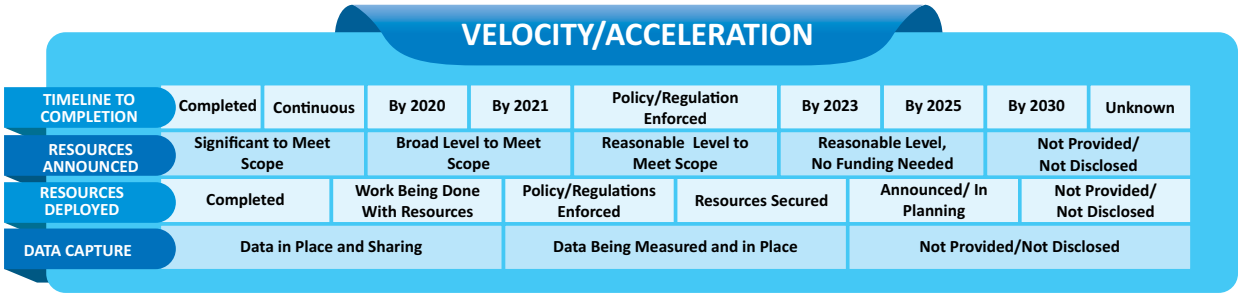


The Magnitude of the commitment is the potential scaled long-term impact and difference it can make for its intended purpose, and also globally.

Ideally, each commitment should be highly scalable with multiple stakeholders and local participants, have high outcome potential, and are designed with long-term sustainability in mind.

Scalability	Replicable commitments that involve multiple participants should have a higher likelihood of success, given shared resources and efforts, than ones with one responsible entity. Unique one-off projects are not scalable. Pilot programs are encouraged that have potential to be replicable, taking into account that context specific circumstances may require some adjustments.
Outcome versus Effort/Time	The trade-off between time, effort, and outcome to recognize what it will take to complete and/or implement the commitment. There are four choices. The optimal option is to expect a high outcome with only a low effort to be made that will take less time to achieve the outcome.
Intent	The targeted intention of a commitment is important. Is it a policy or program expected to make a long-term sustainable outcome happen? Or a specific project tailored only for the stakeholder and not replicable? Or an effort to inform or educate or to do research about plastic pollution?

Showcasing the benefit of even a simple boom system to trash floating plastic, using simply a set of bamboo poles in slow moving water – Manila

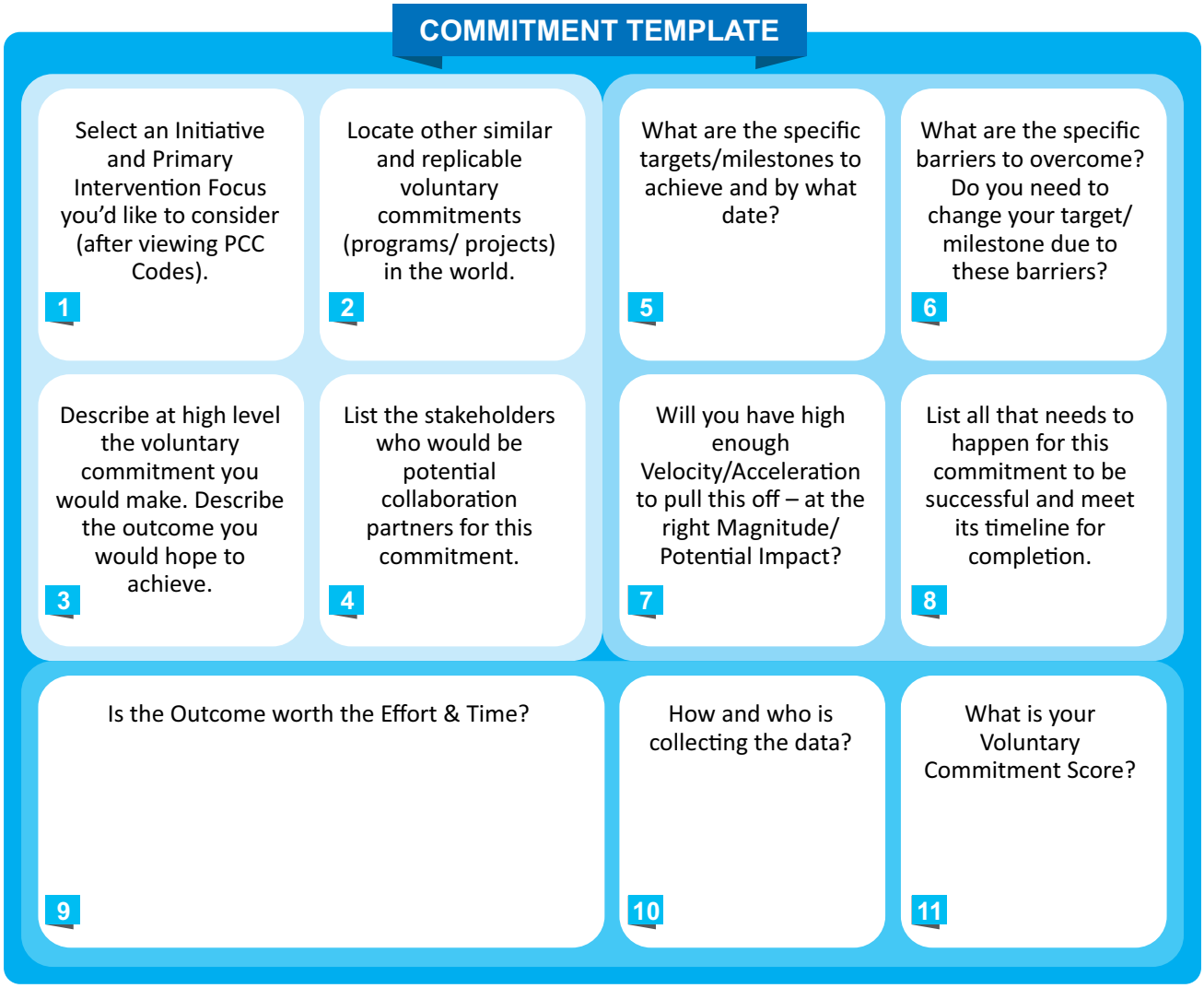


These are the criteria that are directly controllable by the stakeholder and can determine the speed in which results are recorded and impact happens.

Velocity is the "acceleration/momentum" that a commitment accrues. Ideally, each commitment should have a shorter/defined timeline to completion, appropriate & secured resources to deploy, and be set to capture and measure its data. A commitment with high velocity can have a measurable impact on the Magnitude, the impact, of the commitment.

Timeline to Completion	A smart targeted timeline provides a specific goal to manage towards. Commitments with shorter timelines are preferred as all interested parties have to be more engaged.
Resources Announced	A stakeholder can create a volunteer commitment that creates a lot of positive publicity and has large goals to achieve. One key determinant should be to capture the pledged and actual committed resources (financial, staff, volunteers, partners, etc.) both initially secured at announcement, and, over time, delivered to meet the commitment. A stakeholder who updates a commitment as it progresses from announcement to action, by providing details of the resources committed, is engaged. Plus, an updated current status can show a higher likelihood of the commitment being completed and successful.
Resources Deployed	The high-level disclosure, as time progresses, of the status of actual resources deployed (financial, staff, volunteer, partners, etc.) is an important gauge to assess a stakeholder's ability to meet a commitment's milestones and scope. The faster and greater the resources are secured and deployed after announcement, the greater the opportunity for the stakeholder involved in completing the commitment on time and to meet or exceed its scope of work and expected outcome versus effort/time.
Data Capture	The monitoring, measuring, and sharing of data and results of a commitment for the purposes of improving commitments and replicating and scaling the proven successful ones.

5.3 The *Commitment Template*



Any stakeholder can use the ***Commitment Template*** to determine the type and initiative of new commitments they want to pursue. Through a step-by-step process, the stakeholder will be able to look at potential options, find similar programs that others in the world have already done well, and find the right one(s) to select and adopt.

Using a model proven effective many times over in the business world to track progress and measure success, the template is based on the one-page Business Model Canvas, introduced as part of the lean start-up global movement over the last decade.

The template has 11 steps (see Section C3 of the Annex for details), and takes the stakeholder through a process of discovery, analysis, and decision making as follows:

The ***Commitment Template*** Steps: (Designing a High-Impact Commitment)

1. Select an Initiative and Intervention your organization would like to consider and engage. Locate other similar and replicable programs/projects to review and possibly use all or parts of them that are applicable.
2. Describe at high level, the voluntary commitment you would like to make.
3. Describe the outcome you would hope to achieve.
4. List the stakeholders who would be potential collaboration partners for this commitment.
5. What are the specific targets/milestones to achieve, and by what date?

6. What are the specific barriers to overcome? Do you need to change your target/milestone due to these barriers?
7. Will you have enough Velocity/Acceleration to accomplish your objectives? With the right Magnitude/Potential Impact?
8. List all of the requirements that need to happen for this commitment to be successful and meet its timeline for completion.
9. Is the Outcome worth the Effort & Time?
10. How are you collecting any data, and who is undertaking that role?
11. What is your Voluntary Commitment Score as a result of these questions and commitment planning?

The first two steps take advantage of a new way to categorize voluntary commitments to reduce marine litter and microplastics, which has been created for this report, called the ***Plastic Category Classification Codes ("PCC Codes")***. These are modelled similarly to the SIC Codes used for global industrial trade and manufacturing. The ***PCC Codes*** are designed around the various combinations of activities and stakeholders, and within each combination, a further breakdown of the actual purpose of the commitment. In this way, ***PCC Codes*** will be a great reference for stakeholders to use in building new programs and projects done elsewhere by similar stakeholders.

Section E of the Annex provides a list of the ***PCC Codes*** as currently created, although it should be continually refined by the academic world, when proven useful. Currently, there are 84 potential categories of Stakeholders (7) x Initiatives (14).

PRIMARY STAKEHOLDERS

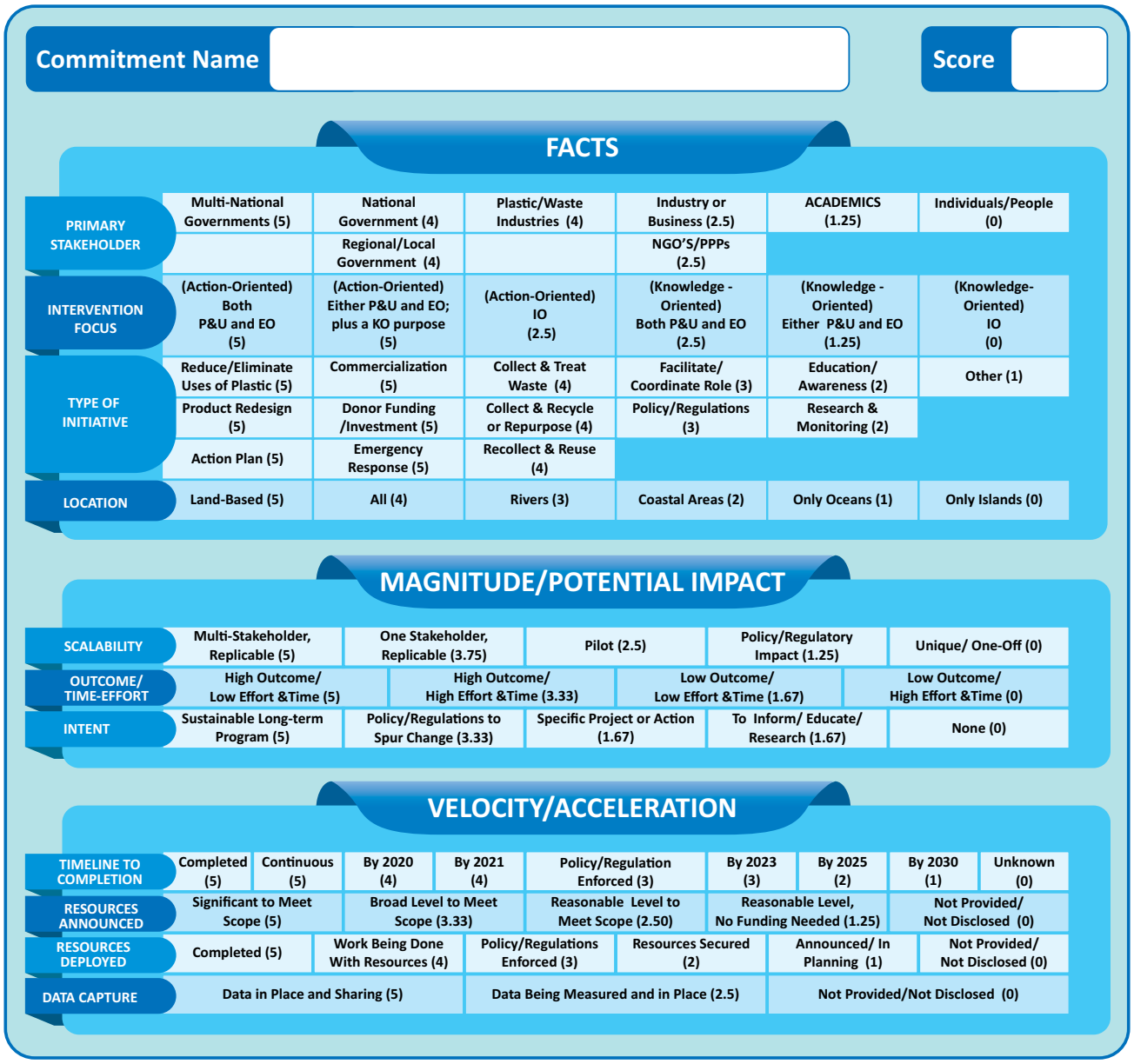
- Multi-National Governments
- National Government
- Plastic and Waste Industries
- Regional/Local Governments
- Business or Industry
- NGOs/PPPs/Academics
- Individuals/People

INITIATIVES

- Reduce or Eliminate Uses of Plastic
- Product Redesign
- Action Plan/Doing the Work
- Commercialization
- Donor Funding/Investment
- Emergency Response
- Waste Management
- Recollect and Reuse at End-use
- Collect, and then Recycle or Repurpose at End-use
- Facilitation/Coordination Role
- Research and Monitoring
- Policy/Regulations
- Education/Awareness Programs
- Other

Trash removal from a river. Once it is clean, local authorities can then ask their citizens to keep it clean, with proper messaging, but not until it is cleaned in the first place (similar to the effectiveness of the "Broken Windows Theory").

5.4 The *Commitment Scorecard*



Commitment Name		Score	

FACTS

PRIMARY STAKEHOLDER	Multi-National Governments (5)	National Government (4)	Plastic/Waste Industries (4)	Industry or Business (2.5)	ACADEMICS (1.25)	Individuals/People (0)
		Regional/Local Government (4)		NGO'S/PPPs (2.5)		
INTERVENTION FOCUS	(Action-Oriented) Both P&U and EO (5)	(Action-Oriented) Either P&U and EO; plus a KO purpose (5)	(Action-Oriented) IO (2.5)	(Knowledge - Oriented) Both P&U and EO (2.5)	(Knowledge - Oriented) Either P&U and EO (1.25)	(Knowledge-Oriented) IO (0)
TYPE OF INITIATIVE	Reduce/Eliminate Uses of Plastic (5)	Commercialization (5)	Collect & Treat Waste (4)	Facilitate/ Coordinate Role (3)	Education/ Awareness (2)	Other (1)
	Product Redesign (5)	Donor Funding /Investment (5)	Collect & Recycle or Repurpose (4)	Policy/Regulations (3)	Research & Monitoring (2)	
	Action Plan (5)	Emergency Response (5)	Recollect & Reuse (4)			
LOCATION	Land-Based (5)	All (4)	Rivers (3)	Coastal Areas (2)	Only Oceans (1)	Only Islands (0)

MAGNITUDE/POTENTIAL IMPACT

SCALABILITY	Multi-Stakeholder, Replicable (5)	One Stakeholder, Replicable (3.75)	Pilot (2.5)	Policy/Regulatory Impact (1.25)	Unique/ One-Off (0)
OUTCOME/ TIME-EFFORT	High Outcome/ Low Effort &Time (5)	High Outcome/ High Effort &Time (3.33)	Low Outcome/ Low Effort &Time (1.67)	Low Outcome/ High Effort &Time (0)	
INTENT	Sustainable Long-term Program (5)	Policy/Regulations to Spur Change (3.33)	Specific Project or Action (1.67)	To Inform/ Educate/ Research (1.67)	None (0)

VELOCITY/ACCELERATION

TIMELINE TO COMPLETION	Completed (5)	Continuous (5)	By 2020 (4)	By 2021 (4)	Policy/Regulation Enforced (3)	By 2023 (3)	By 2025 (2)	By 2030 (1)	Unknown (0)
RESOURCES ANNOUNCED	Significant to Meet Scope (5)		Broad Level to Meet Scope (3.33)		Reasonable Level to Meet Scope (2.50)	Reasonable Level, No Funding Needed (1.25)		Not Provided/ Not Disclosed (0)	
RESOURCES DEPLOYED	Completed (5)		Work Being Done With Resources (4)		Policy/Regulations Enforced (3)	Resources Secured (2)	Announced/ In Planning (1)	Not Provided/ Not Disclosed (0)	
DATA CAPTURE	Data in Place and Sharing (5)				Data Being Measured and in Place (2.5)		Not Provided/Not Disclosed (0)		

Note: A full description of the *Commitment Scorecard*; its scoring methodology; a detailed description of the scoring process; the type of information used and missing; and detailed definitions of the individual choices for each criterion used are located in Section C of the Annex and includes five examples.

Once a voluntary commitment has been put together for consideration by using the ***Commitment Template*** and the 11-step process, the stakeholder can use the ***Commitment Scorecard*** for further constructive evaluation purposes. Specifically, the resulting score is used internally to evaluate the commitment's structure and potential for success, relative to other voluntary commitment options.

It is important to note that each commitment is scored from 0 to 100. Scores are determined using the following formula after selections are made for each of the 11 criterion that reflect the current commitment being evaluated:

1. Each criterion's choice is assigned a point value (using a 0-5 Likert Scale).
2. This point value is then multiplied by its criterions assigned weighted value based on its importance (sum of all 11 equally 100%).
3. These new points for the 11 criteria are then added up to create the actual score.

Evaluating voluntary commitments with the *Commitment Scorecard*: A fully structured commitment will have one selected choice in each of the columns. The stakeholder uses the 11 criteria as a straightforward and clear guide in crafting a commitment. A commitment that best addresses each criterion will score highly. Note: Additional samples are provided in Section C of the Annex, as well as 5 actual examples.

High-Scoring Commitment (sample)*

Commitment Name		Score	

FACTS

PRIMARY STAKEHOLDER	Multi-National Governments	National Government	Plastic/Waste Industries	Industry or Business	ACADEMICS	Individuals/People
		Regional/Local Government		NGO'S/PPPs		
INTERVENTION FOCUS	(Action-Oriented) Both P&U and EO	(Action-Oriented) Either P&U and EO; plus a KO purpose	(Action-Oriented) IO	(Knowledge - Oriented) Both P&U and EO	(Knowledge - Oriented) Either P&U and EO	(Knowledge-Oriented) IO
TYPE OF INITIATIVE	Reduce/Eliminate Uses of Plastic	Commercialization	Collect & Treat Waste	Facilitate/ Coordinate Role	Education/ Awareness	Other
	Product Redesign	Donor Funding /Investment	Collect & Recycle or Repurpose	Policy/Regulations	Research & Monitoring	
	Action Plan	Emergency Response	Recollect & Reuse			
LOCATION	Land-Based	All	Rivers	Coastal Areas	Only Oceans	Only Islands

MAGNITUDE/POTENTIAL IMPACT

SCALABILITY	Multi-Stakeholder, Replicable	One Stakeholder, Replicable	Pilot	Policy/Regulatory Impact	Unique/ One-Off
OUTCOME/ TIME-EFFORT	High Outcome/ Low Effort &Time	High Outcome/ High Effort &Time	Low Outcome/ Low Effort &Time	Low Outcome/ High Effort &Time	
INTENT	Sustainable Long-term Program	Policy/Regulations to Spur Change	Specific Project or Action	To Inform/ Educate/ Research	None

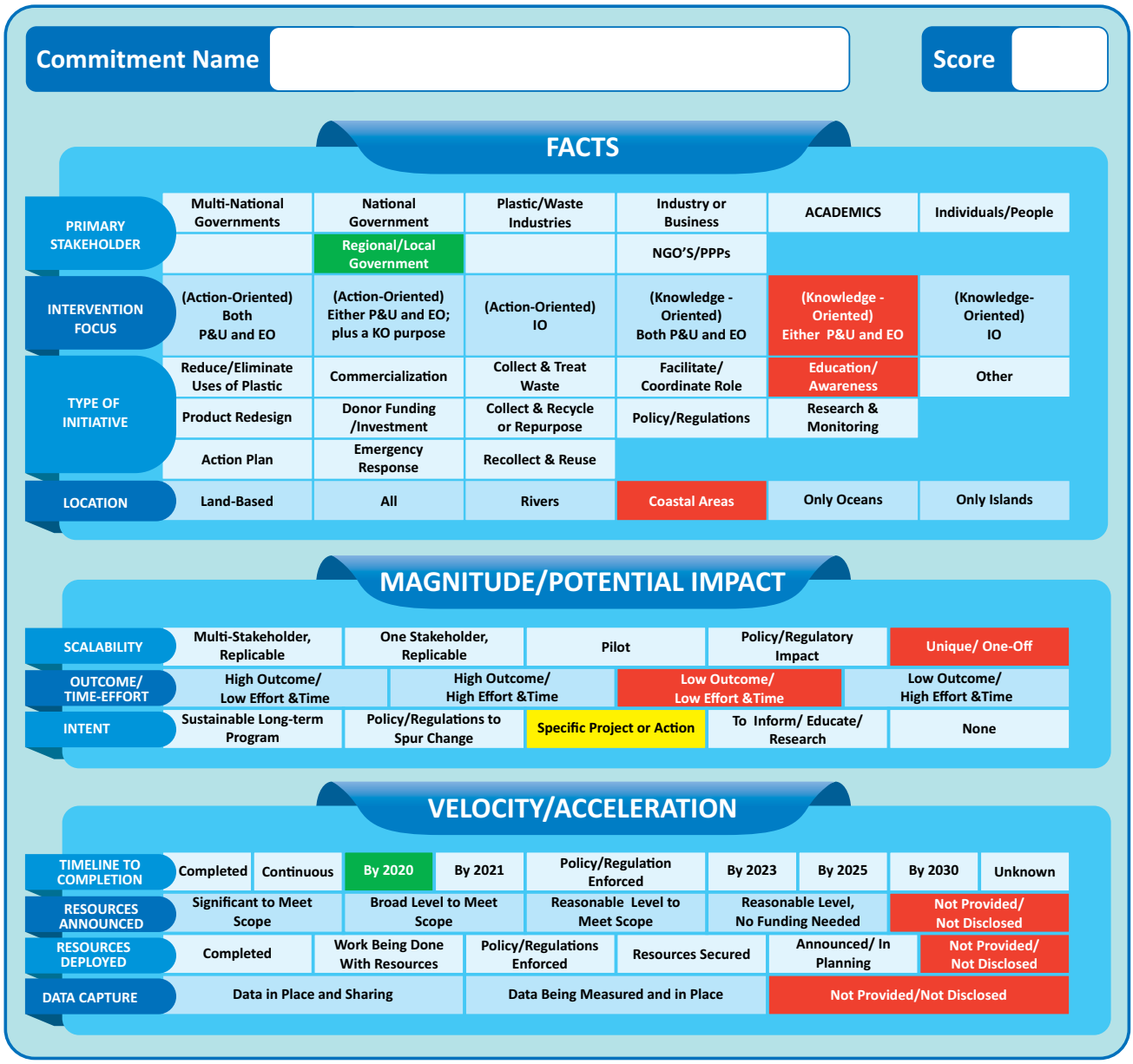
VELOCITY/ACCELERATION

TIMELINE TO COMPLETION	Completed	Continuous	By 2020	By 2021	Policy/Regulation Enforced	By 2023	By 2025	By 2030	Unknown
RESOURCES ANNOUNCED	Significant to Meet Scope	Broad Level to Meet Scope	Reasonable Level to Meet Scope	Reasonable Level, No Funding Needed	Not Provided/ Not Disclosed				
RESOURCES DEPLOYED	Completed	Work Being Done With Resources	Policy/Regulations Enforced	Resources Secured	Announced/ In Planning	Not Provided/ Not Disclosed			
DATA CAPTURE	Data in Place and Sharing		Data Being Measured and in Place		Not Provided/Not Disclosed				

This is an example of a multi-national commitment, with an action-oriented intervention focus on both product design improvements to lower the amount of plastics produced (P&U) and waste management (EO) efforts to capture all of it at disposal time. It is an Action Plan where work is already being done with committed resources. Data is being captured and measured. It is also a long-term sustainable, multi-stakeholder program that will require high effort and time, but yield expected high outcome results.

*** Please Note: Choices are listed from highest score to lowest score (left to right), using Likert 0-5 scale.**

Low-Scoring Commitment (sample)*



By looking at the choices selected: In contrast, a Regional/Local Government has developed a one-week outdoor informational education program for a coastal city with the topic of keeping plastic waste from entering the ocean during a one-time festival week (specific project). There is no mention of data being captured, the resources announced, nor the actual status of the project (resources deployed). By following the ***Commitments 2.0*** framework, the Regional/Local Government would make sure to have provisions to capture the data and announce timely updates about the project and funding/resources deployed status. That way, other coastal communities can see what's being accomplished and can possibly collaborate with them.

*** Please Note: Choices are listed from highest score to lowest score (left to right), using Likert 0-5 scale.**

6 EVALUATING CURRENT VOLUNTARY COMMITMENTS USING THE *COMMITMENT SCORECARD*

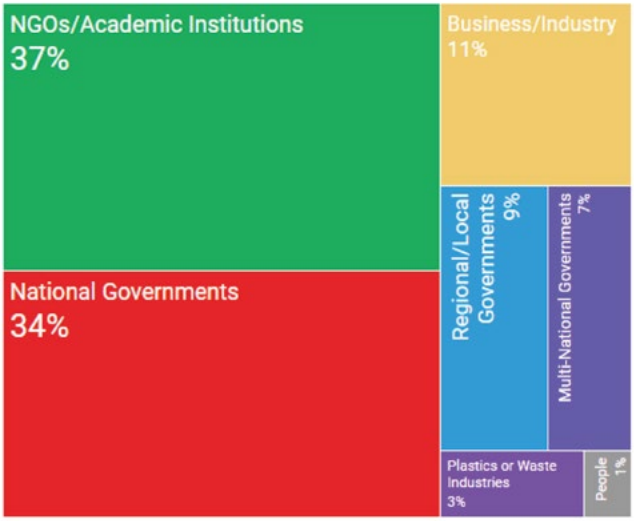
From the list of over 1,000 voluntary commitments reviewed, 580 commitments were found to directly impact marine litter and microplastics. These were reviewed against these 11 criteria as part of the new ***Commitment Scorecard***. Each commitment was independently scored for each criterion. (See Section D in the Annex for this report for more details.) The amount of information publicly provided by stakeholders about their voluntary commitments was, in most cases, severely lacking and incomplete for a full comprehensive and updated analysis. Nevertheless, the qualitative information provided by examining the written descriptions of these commitments was robust enough to be used in the Scorecard analysis.

The results are not particularly positive. With a possible score of 100, only 11% of all the voluntary commitments achieved a score above 70, and most were much lower. This indicates a lot of need and room for improvement.

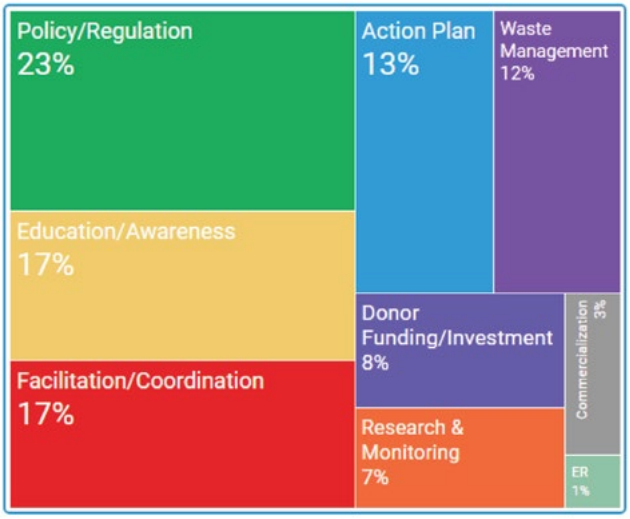
It is, therefore, imperative, to identify well-constructed, high-scoring voluntary commitments (existing and new ones) in order to replicate and scale them. At best, if stakeholders fully embrace the ***Commitment Scorecard***, they will have a much larger number of proven commitments to select from –with a high-degree of certainty they work (and with well-defined instructions on how to replicate). This should empower the global community to commit even more resources as quickly as possible to make the largest global impact on preventing and reducing marine litter.

6.1 Overall Facts

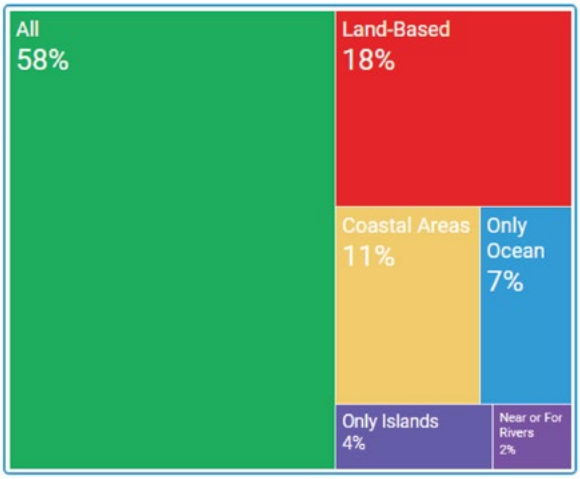
Primary Stakeholders



Initiatives



Location-Based



Prime Prevention Interventions

WHAT IF ALL STAKEHOLDERS …

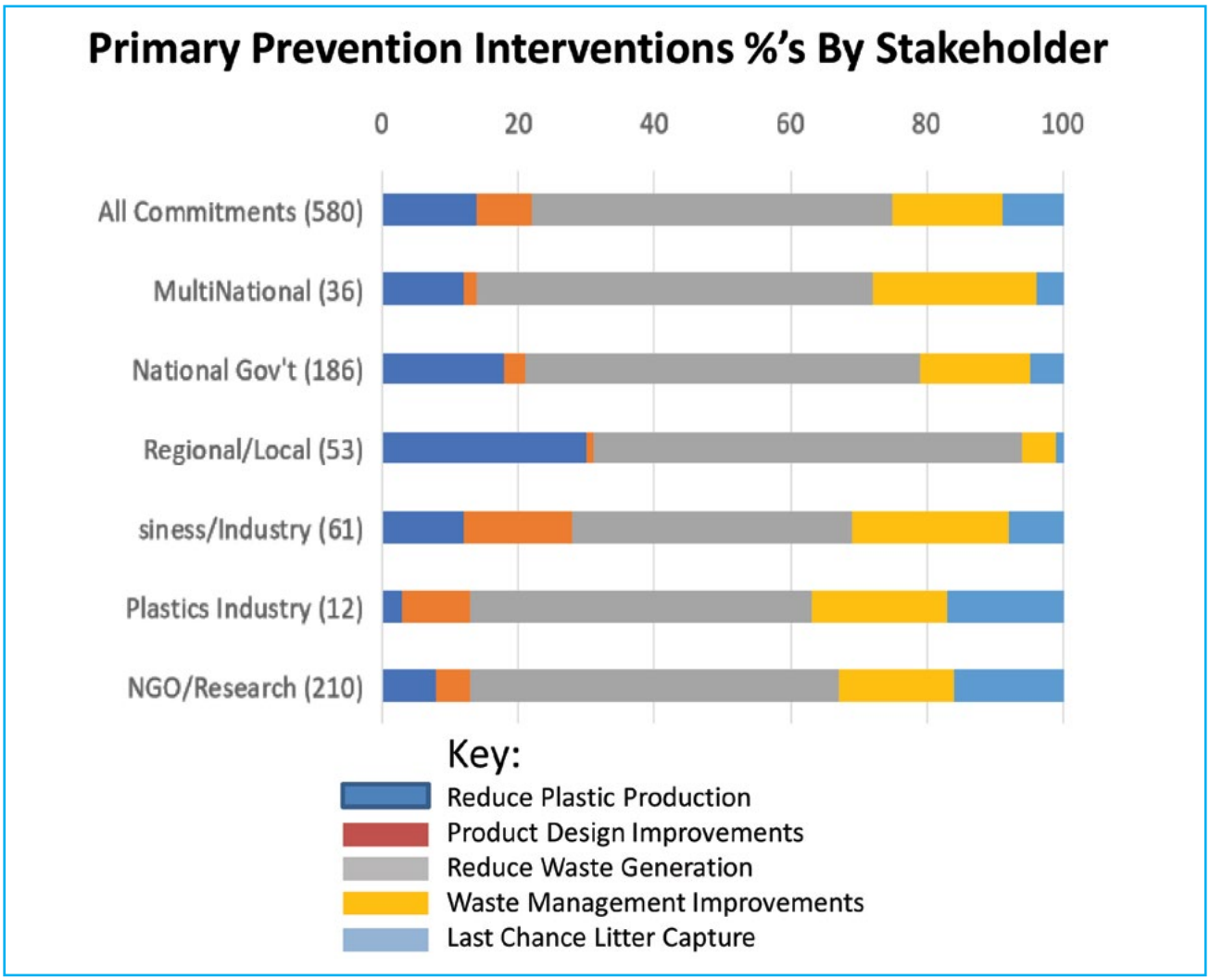
WERE TO POOL THEIR FUNDING RESOURCES AND INVEST IN FIVE "WASTE INNOVATION PILOT SMALL CITIES" WITH $10 MILLION EACH TO PILOT NEW WASTE TECHNOLOGIES? THESE CITIES, WITH POPULATIONS UP TO 1 MILLION PEOPLE, WOULD AGREE TO FAST-TRACK THESE NEW WASTE MANAGEMENT INNOVATIONS AND THEIR PERMITTING PROCESSES. LOCAL WASTE FIRMS WOULD BE HIRED AND LOCAL WORKERS EMPLOYED.

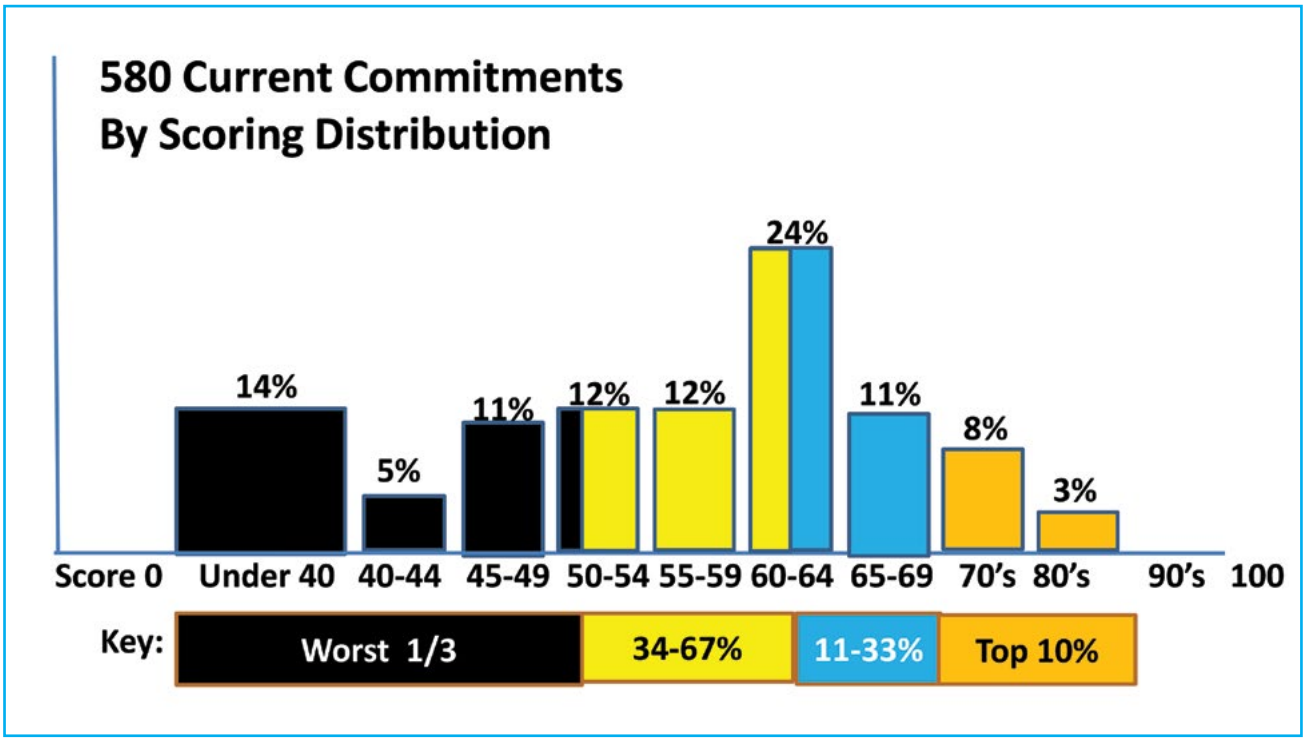

"Skyscraper" by StudioKCA ©STUDIOKCA

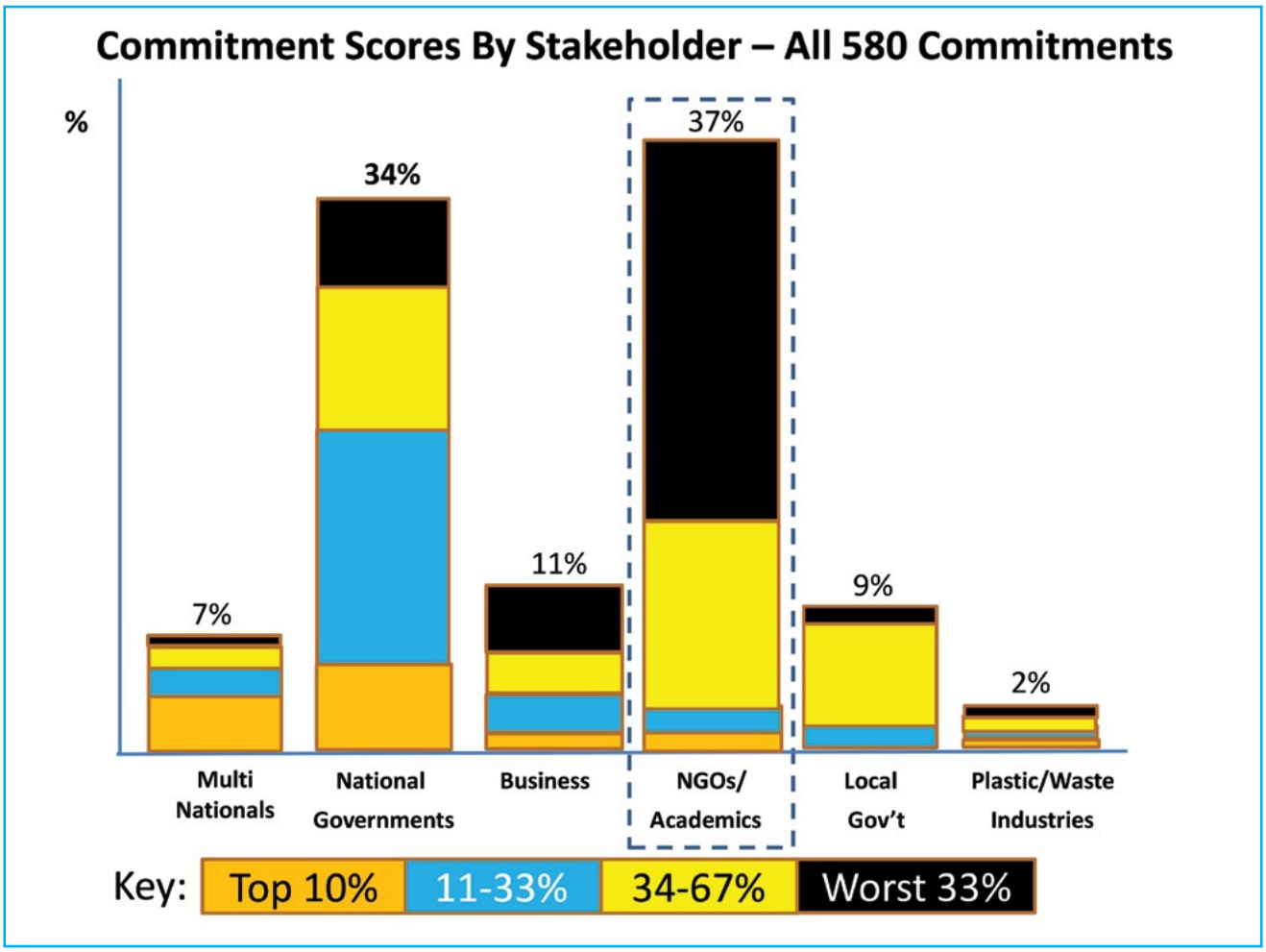
Key Possibilities

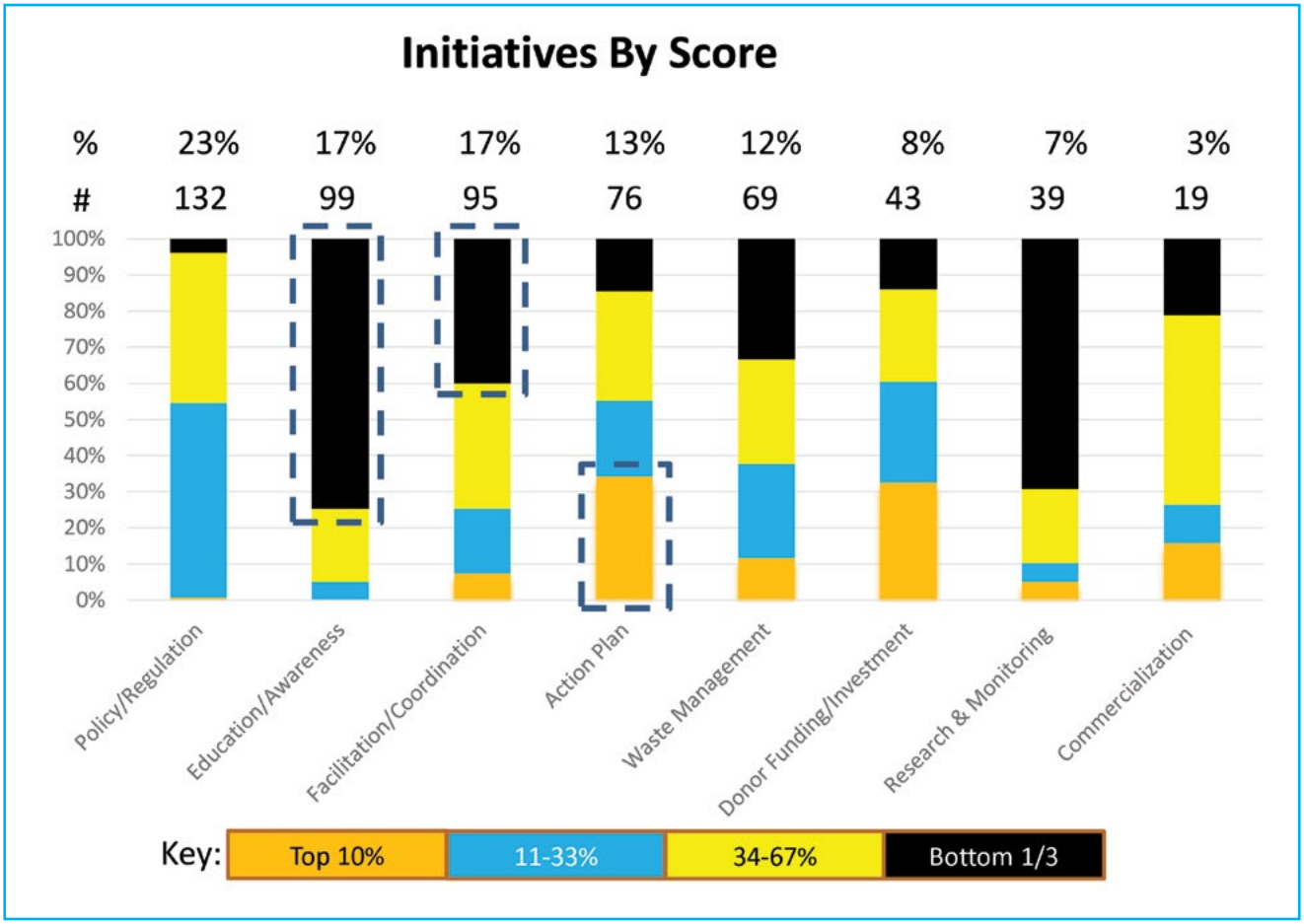
- Hold RFP contest to select these five cities.
- Timeline of less than two years to build and implement all waste solutions
- Waste innovations must have positive operating cash flows
- Funding of capital expenditures only of these innovation solutions
- After one year of operations, share proven solutions with other "sister" cities
- Work with the UN Habitat Waste Wise Cities campaign

6.2 *Commitment Scorecard* Results






Commitment Scores By Stakeholder – All 580 Commitments
%
7%
34%
11%
37%
9%
2%
Multi Nationals
National Governments
Business
NGOs/ Academics
Local Gov't
Plastic/Waste Industries
Key:
Top 10%
11-33%
34-67%
Worst 33%


Initiatives By Score
%
#
23%
132
17%
99
17%
95
13%
76
12%
69
8%
43
7%
39
3%
19
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
Policy/Regulation
Education/Awareness
Facilitation/Coordination
Action Plan
Waste Management
Donor Funding/Investment
Research & Monitoring
Commercialization
Key:
Top 10%
11-33%
34-67%
Bottom 1/3

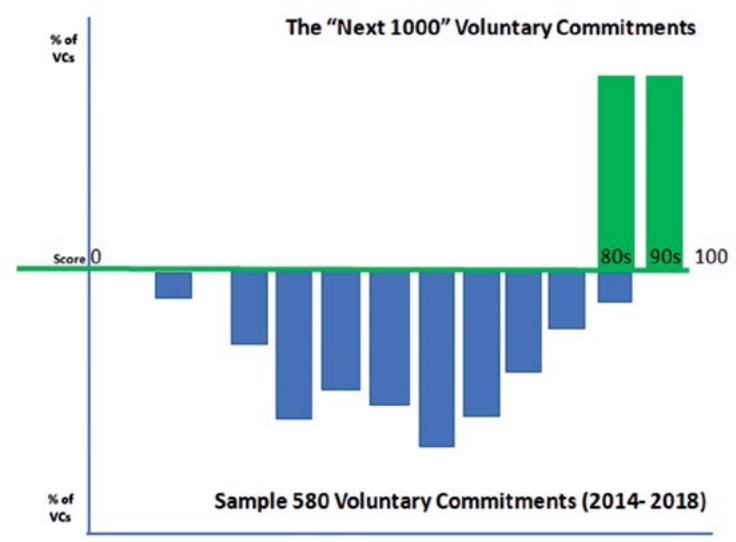
WHAT IF ALL STAKEHOLDERS ...

WOULD FUND AND PROVIDE RESOURCES FOR THE NEXT NEW 1,000 VOLUNTARY COMMITMENTS THAT HAVE "HIGH SCORES," USING VOLUNTARY COMMITMENTS 2.0'S GUIDING PRINCIPLES.


"Skyscraper" by StudioKCA ©STUDIOKCA

In light of the evaluation of the current voluntary commitments, and in light of the projected unimpeded growth of the "Business as Usual" use of plastics through 2050, it is unlikely that amounts of plastic entering the ocean will be significantly reduced unless new commitments achieve much higher impacts.

By using the Commitment Scorecard, and by thinking differently, we can develop programs that make a difference in reducing the amount of plastic in our ocean. This can be the future blueprint for creating powerful and effective plastic pollution commitments.




Bales of sorted thin film plastic for recycling.


Community cleanup program.

7 OPTIONS FOR DEVELOPING MORE IMPACTFUL/ EFFECTIVE/ STRONGER VOLUNTARY COMMITMENTS

For Each Stakeholder Making Voluntary Commitments

Apply the ***Commitment Scorecard*** to Identify Areas to Improve Current Commitment Impacts

- **Improve Public Commitment Write-ups**

  All stakeholders can update their current voluntary commitments by following the guiding principles and applying the **Commitment Scorecard** to determine the appropriate metrics. Stakeholders should then commit to assess current commitments using the scorecard, and then revamp their commitments to improve their scores and get as close to 100 as possible.

- **Create /Improve Data Capture Plans**

  When updating commitment descriptions, every stakeholder should likewise include data capture and tracking plans and work with other UN bodies, NGOs, and academic organizations to share the data and avoid duplication of efforts.

Apply the ***Commitment Scorecard*** to Make New Commitments

- **Look at the Replicable High-Scoring Commitments by Other Similar Stakeholders**

  Each stakeholder can be actively looking at other voluntary commitments it can use. These serve as models for new ones they wish to design and implement. Stakeholders can also review the ***PCC Codes*** for program and project inspirations.

- **Publicly Announce Each New Fully Formed Voluntary Commitment**

  In adhering to the new guiding principles, stakeholders should emphasize all 11 of the evaluation criteria, especially those focused on collaboration, data capture, and creating detailed public write-ups. Well-constructed, high-scoring, and meaningful voluntary commitments will be available for another stakeholder to replicate.

Execute on All Commitments and Continually Update Scorecard

- **Publicly Showcase Successes**

  As illustrated in the high number of low scores in the analysis of the 580 current commitments, intentions are not realized. In addition, even when a commitment is perfectly executed, there seems to be little acknowledgment within the global community of a job well done.

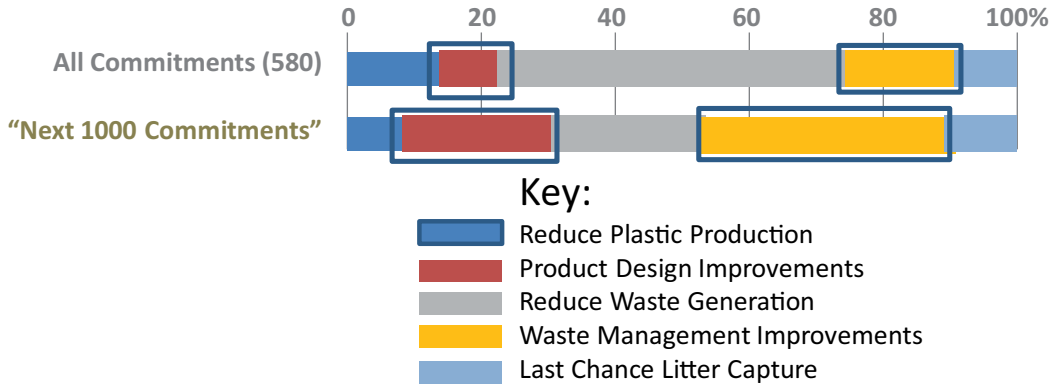
  This can be remedied, however. By continually updating these publicly listed commitments using the Scorecard and showcasing actual accomplishments, stakeholders will let the world know they are actively working to complete the mission of each commitment listed. Their successes will be duly noted and celebrated through replication by others (imitation being the sincerest form of flattery). This improved transparency will also benefit all stakeholders around the world who are working on similar voluntary commitments and want to collaborate, or are very interested in replicating another stakeholder's voluntary commitment in the future.

For All Stakeholders (i.e., the Global Community) Working Together

- **Emphasize More and Better Waste Management and Product Design Interventions**

  As revealed by analyzing the 580 voluntary commitments, both waste management and product design improvements have been used only to a limited extent as primary interventions. The global community should step up and get more engaged both to fund and to do more pilot programs involving improved product design as well as waste management/resource recovery systems, either separately or together. Take this best case, for example: what if a new, circular product design not only uses less virgin plastic and more recycled plastic but could also be easier for consumers and waste operators to properly sort, recycle, and dispose? Once these types of proven successes occur and are validated, these new programs can be shared with every country and interested stakeholder. That will, it is hoped, make appropriate funding abundantly available.

  The graphic that follows illustrates the disparity between the actual percentage of commitments listed under Waste Management Improvements and Product Design Improvements that occurred between 2014 and 2018. It also shows what could occur for the next 1000 commitments if the global community commits to increasing the number of high-scoring waste management and product design voluntary commitments – which can only happen by committing the funding/ resources towards validated programs and projects.



- **Structure New Commitments with Scores in the High 80s and 90s**

  Now armed with the guiding principles, step-by-step template and scorecard, it should be straightforward for each stakeholder to commit to creating and funding/providing resources only for voluntary commitments that score highly.

For the Plastics and Waste Management Industries

- **They Can Play a Pivotal Role by Embracing the Commitments 2.0 Guide Right Away**

  The plastic, recycling, material recovery, and waste industries can lead the way to improvements by adopting the ***Commitments 2.0*** guide. For the world to meet the UN Sustainable Development Goal (SDG 14.1) objectives, it is imperative that these industry sectors engage with the broader business community to collaborate in the creation of new commitments, especially with respect to innovation in waste management, and product design. Both industries have the potential not only to embrace these two new analytical tools but also to seize the opportunity to create positive change, to introduce groundbreaking collaborations, and to launch a stream of voluntary commitment pilot programs that can be replicated and scaled in size.

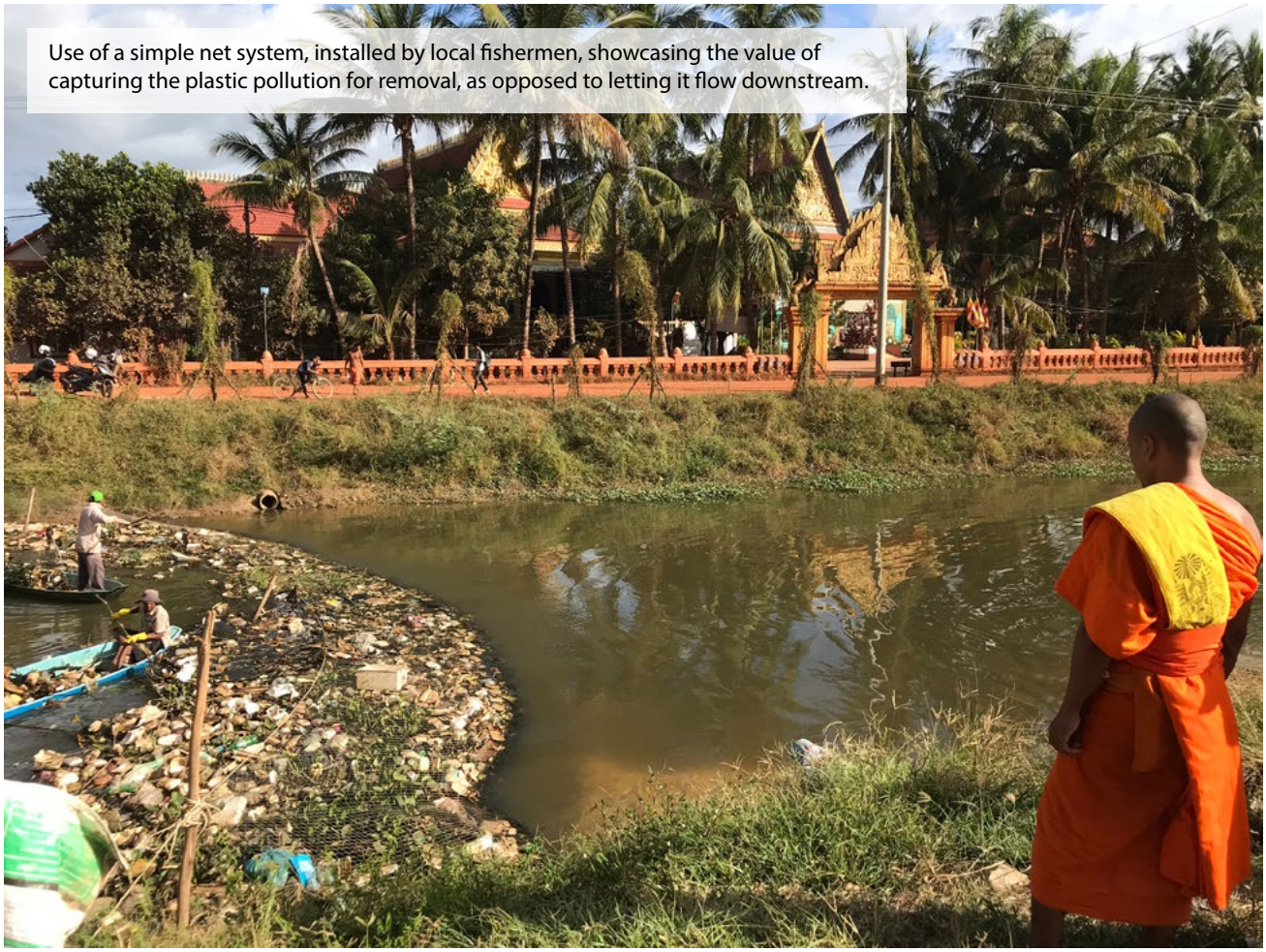
As a result of the above actions, voluntary commitments could be significantly improved to have an effective design and structure (using the 11 criteria for impactful commitments) to make a real dent in the fight against marine plastic pollution.

WHAT IF ALL STAKEHOLDERS …

WOULD FUND THE CREATION OF A DATA-CENTRIC KNOWLEDGE REPOSITORY OF NEW VOLUNTARY COMMITMENTS, AS SUGGESTED IN THIS REPORT, IN ORDER TO MAXIMIZE THE IMPACT FOR PREVENTING AND REDUCING MARINE LITTER


"Skyscraper" by StudioKCA
©STUDIOKCA

As described in the ***Commitment Template***, stakeholders would have access to a common data and knowledge repository or platform that showcases the "best practice" voluntary commitments. This could be maintained by an NGO or academic institution on behalf of the United Nations. It would also include funding to provide templates for, or actually do the work to create, "how-to" manuals for other stakeholders to use in setting up, operating, and executing the replicable program being described. The goal would be for stakeholders to then adapt these how-to manuals to their own specific-use cases and purposes—not only to save time and money, but also to enable many stakeholders to simultaneously work on processes and programs that matter.



Use of a simple net system, installed by local fishermen, showcasing the value of capturing the plastic pollution for removal, as opposed to letting it flow downstream.

8 TOWARDS THE LONG-TERM ELIMINATION

- **We Can REDUCE the Flow**

  Humanity achieves great results through creating bold and daring visions. Examples can be seen with achievements in reducing the depletion of the ozone layer, eradicating polio, and reaching the Moon. The global community can rise to the challenge in similar ways with regards to preventing plastic pollution in the ocean.

  As described in Section 2, there are significant macro factors favoring the continued exponential growth of plastic use predicted through 2050. Today's capacities for recycling and waste reduction are not adequate to meet this increased use of materials, but the analysis of 580 voluntary commitments showed an impressive range of solutions and stakeholders who are committed to making a difference. When observing the Top 10% of the current voluntary commitments focused on marine litter and microplastics in the ocean which score 70 or higher, it is possible to see proven programs which can be replicated and scaled in size, or where data can be shared. There has also been a significant growth in funded voluntary commitments since 2012, with over 200 unique ***PCC Codes*** being used.

  This report is a "wake-up call" to the global stakeholder community that improvements in the design of voluntary commitments are needed for larger, preventative impacts. The guide has laid out a set of guiding principles, a scorecard, and a ***Commitment Template*** which any stakeholder can use to strengthen existing voluntary commitments and developing impactful new ones. Best practice examples and scoring of all proposed commitments can further help inform and improve the design for each stakeholder.

  By adhering to the guiding principles, by tracking progress, monitoring which programs work, and by making continuous adjustments to focus on programs that have high impact and high scores, the world's stakeholders can make significant progress towards ending plastic pollution.

- **The Importance of Transparency, Collaboration, and Scalable Actions**

  It will be critical for the world's stakeholders to craft new voluntary commitments based on the proven successes of previous ones. Collaboration and involvement by as many local participants as possible, for each and every commitment, is also necessary. In fact, by including local stakeholders in developing each commitment, adding their perspectives and diverse views, it will only improve the effectiveness, transparency and information sharing that is essential for a commitment's success.

  Therefore, it is paramount that best practices are transparent and made available through a global clearinghouse that provides an understanding of the types of sustainable voluntary commitments that are urgently needed. If adopted, the "next 1,000" voluntary commitments can have powerful impacts.

  Moreover, as the analysis of the 580 voluntary commitments clearly illuminates that all stakeholders can target the creation of new voluntary commitments that do not just primarily focus on education, awareness, coordination, or facilitation (per the era of voluntary commitments 1.0). Instead, present and future stakeholders worldwide must strive to drive action and results through replicable and scalable programs, and in particular, improvements to two important underused interventions: waste management/resource recovery; and product design.

WHAT IF ALL STAKEHOLDERS ...

DECIDED THAT THE GOAL OF "STOPPING MARINE PLASTIC POLLUTION" IS AS IMPORTANT AS THE AUDACIOUS GOALS OF CLOSING THE HOLE IN THE OZONE LAYER, ERADICATING POLIO, AND GOING TO THE MOON.


"Skyscraper" by StudioKCA ©STUDIOKCA

Included are some options which might be considered as part of the solution-set used by different jurisdictions, though it is by no means the only set of solutions that exists.

1. Single-use plastic which is not critical to the performance of a product or service, could be replaced or eliminated.
2. Every type of plastic material, at each step of its life cycle, is designed for maximum efficiency and post-consumption pollution-free outcomes.
3. Unnecessary plastic-based products are phased out, or are not produced in the first place.
4. Packaging practices and products are sustainable: materials are designed for recycling, are made of recycled materials, or are made of alternative materials that have similar qualities to that of petroleum-based plastic.
5. Alternative materials are available and cost-effective to produce at the volume the world demands.
6. The circular economy takes off as markets benefit from recycling, repurposing, and reuse, and consumers actively participate.
7. All plastic-based products have defined circular end-to-end life cycles where manufacturers and retailers combine efforts to coordinate and distribute these "best and highest uses" as appropriately.
8. Waste management processes are available around the globe to capture and handle waste properly, reducing the size of unsanitary landfills while increasing the value of what is called "waste" today, while adding jobs and innovations.
9. Every part of the world has the infrastructure required to provide services to process plastic properly through the end of the initial life of the product and into the next use of that material.
10. Focus is put onto rivers, waterways, and outflows so that they have effective solutions to capture and prevent plastic waste from flowing downstream to the ocean.

Having this clear and specific future state in mind while designing and setting up voluntary commitments can make it easier to prioritize across different interventions and considerations, leading to broader collective success.

9 ABOUT OCEAN RECOVERY ALLIANCE

Ocean Recovery Alliance is an international NGO whose mission is to reduce plastic pollution on land and water. It works alongside individuals, businesses and governments worldwide to raise awareness and create long-term solutions to plastic waste. As a 501c3 registered non-profit in California, and a registered charitable organization in Hong Kong, it is one of the first NGOs to have worked with both the United Nations Environment (UNEP) and the World Bank on global plastic pollution solutions. It is the founder and organizer of the global Plasticity Forum events, one of the few conferences which is solely focused on solutions for plastic in its second life, without waste footprint.

The founder of the **Ocean Recovery Alliance**, Doug Woodring, was awarded the 2018 Prince's Prize for Innovative Philanthropy from Prince Albert of Monaco for his work in environmental protection.

Rob Steir, the main author, has worked with Ocean Recovery Alliance as a consultant since 2018. When not working with Doug, Rob is a co-founder of **OceanCurrency.com**, a startup offering direct impact solutions for islands and the Blue Economy, and is a founding partner at **FrontlineWaste.com**, a waste management firm offering community-scale waste-to-energy solutions for islands and developing countries.

Berna Tural is focused on ocean conservation, and raising awareness about the impact of our decisions in big cities on the ocean and environment. She works with cities, NGOs, and businesses, to create collaborations, secure investments, develop strategies to visibly reduce their plastic and waste footprints, organize corporate and community events, as well as influence policy decisions.

www.oceanrecov.org

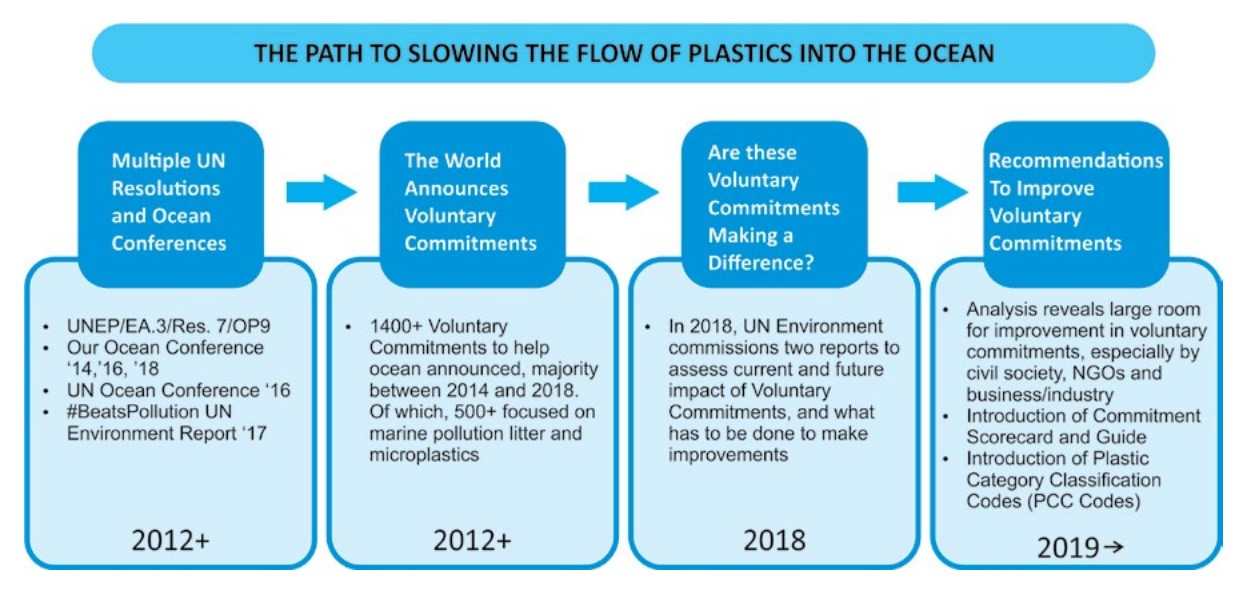
Please Note: A Summary Report is available at http://bit.ly/PlasticCommitments2020

"Skyscraper" the Whale at Marina Bay Sands in Singapore, showcasing the plastic pollution issue via public art and sculpture.

Showcasing the use of a simple catchment system, similar to that of a fence, used in shallow water to catch plastic pollution. At this site in Kuala Lumpur, Malaysia, they recover 100kg – 200kg per day of waste, meaning it will not flow further downstream, to the ocean.

THE ANNEX

ANNEX PREFACE



In 2018, the United Nations Environment ("UN Environment") commissioned two separately produced analytical reports to assess the potential–and the realized impacts–of current voluntary commitments made to combat marine litter and microplastics in the ocean.

Report #1:

Analysis of Voluntary Commitments for Marine Litter and Microplastics, Report 2018

The first report, issued in January 2019 for use by the United Nations Environment Assembly (UNEA), measures the macro impact and efficacy (i.e., the ability to produce a desired or intended result) of 407 marine litter–related voluntary commitments and their overall alignment with the various UN resolutions related to marine litter and microplastics in the ocean. The report is a one-year follow-up analysis which leverages the same framework used in the 2017 UNEA-3's pollution report (#Beatspollution), including: (1) how a voluntary commitment relates to policy development and capacity building; (2) how inclusive and representative voluntary commitments are of the various targeted and vulnerable groups; and (3) how these voluntary commitments relate to international agreements made to date. The report also takes into consideration such related topics as land and soil issues, freshwater issues, marine and coastal issues, chemicals and waste issues, and other cross-cutting efforts in reaching its conclusions.

One of its conclusions is the answer to the question "Are voluntary commitments on marine litter and microplastics making a difference?" The UNEA report concludes that it is "**crucial that better guidance be given**" regarding how to improve the efficacy of commitments made on this issue. This is especially true for the three categories of "Civil Society, NGOs, and Business," which received, on average, low or medium grades.

Table 4 Analysis of the Potential Efficacy of 407 Voluntary Commitments on Marine Litter and Microplastics

FOCUS	GOVERNMENTS (COUNTRIES	UN AGENCIES & INTERGOVERNMENTAL INITIATIVES	CIVIL SOCIETY & NON-GOVERNMENTAL ORGANISATIONS	BUSINESS	OVERALL RANKING
Marine Litter	High	High	High	Low	1
Microplastics & microbeads	High	Medium	Low	Low	4
Marine debris	High	High	Low	Low	2
Marine pollution	High	Medium	Medium	Low	2
Plastics	High	Low	Medium	Medium	2

Report #2:

Crafting High-Impact Voluntary Commitments to Prevent and Reduce Marine Litter

This report reflects our examination of 580 voluntary commitments made by the global community from 2014 to 2018 that involve marine plastic litter and microplastics (Section D). It addresses the clear need stated in the first report—to provide "better guidance" to improve a voluntary commitment's desired or intended results—through the introduction of two analytical tools (Section C): (1) the ***Commitments 2.0*** guide, which consists of guiding principles and a template that are used to create a new commitment; and (2) the ***Commitment Scorecard*** to evaluate current and new commitments.

In other words, the report looks at the construction of each voluntary commitment through the lens of a new scorecard that uses 11 new scoring criteria to determine whether a commitment is creating a valuable, results-oriented impact on marine litter and microplastics reduction. The relative score of each voluntary commitment is then compared in various ways to the peer group of all 580 commitments, and call-to-action recommendations are made in the report itself).

THE WORLD IS WATCHING

Why "Scoring" Voluntary Commitments Matters for Maximizing Long-Term Impact

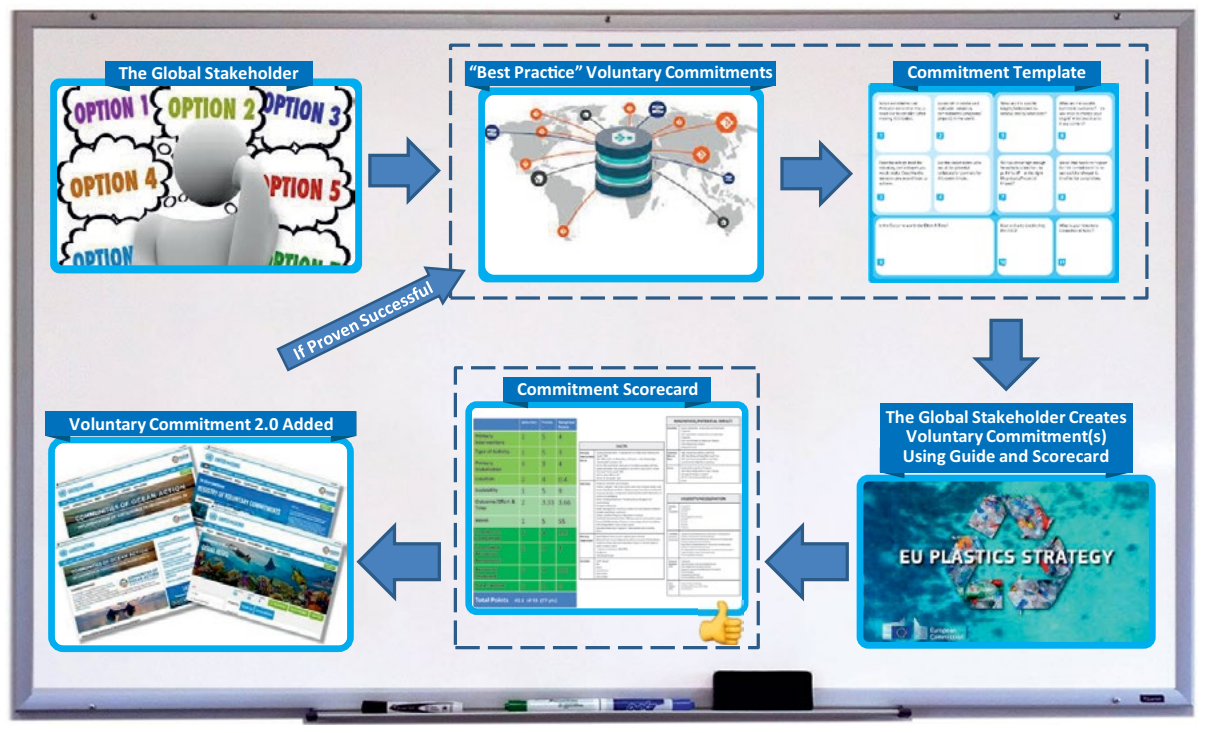
To understand the real value of scoring voluntary commitments, one has to understand what typically happens after a voluntary commitment is initially publicly announced by the stakeholder, usually with fanfare. It is usually added to a public list of similar commitments, mostly made at major conferences. The voluntary commitment description may be updated periodically, but in most cases, there is a profound lack of capturing or communicating

meaningful data after the initial listing. As one would expect, most completed voluntary commitments just seem to fade away without any transparency regarding results.

In contrast, by analyzing each of the 580 ongoing commitments using the ***Commitment Scorecard***, the report provides actionable real-time insights that can be acted upon by stakeholders. These relative voluntary commitment scores can be used to highlight and define the best voluntary commitments that, over time, can be replicated and scaled for stakeholders to use as they improve their existing commitments or as they create new ones.

Additionally, not only will using the scorecard (which, it should be noted, can be updated in real time), promote these "best practice" structured commitments and the stakeholders who made them, it will also put pressure on each stakeholder to actually complete them, as the global community watches and to share results. Overall, using the ***Commitment Scorecard*** should greatly increase a stakeholder's accountability and responsibility over the life of the commitment.

Furthermore, with continuous data from current and new best practice commitments being captured, analyzed, and shared, the best voluntary commitments will more easily be codified, then replicated and scaled—tailored, of course, to each particular stakeholder's location and situation. At a certain point to be determined, these new commitments should be added to the ***Plastic Category Classification Codes (PCC Codes)***, and eventually to a central global repository that could be created for use by all stakeholders to make even better future commitments. As the diagram below showcases, this creates a continuous improvement and learning loop for stakeholders to create more impactful voluntary commitments, over time.



A GLOSSARY

Word	Definition
Guiding Principles	A set of guiding principles founded on the 11 underlying key criteria that a well-structured voluntary commitment should possess using the ***Commitments 2.0.***
Commitment Scorecard	The scorecard methodology and scoring criteria used to evaluate each voluntary commitment.
Commitment Template	The step-by-step process used by stakeholders to identify, select and score a new voluntary commitment or an existing voluntary commitment.
Plastic Category Classification Codes (PCC Codes)	A new standardized way to categorize voluntary commitments to reduce and prevent marine litter and microplastics modelled similarly to the SIC Codes used for global industrial trade and manufacturing. The PCC Codes are designed around the various combinations of initiative and stakeholder and, within each combination, a further breakdown of the actual purpose of the commitment
Voluntary Commitments	Written pledges made by the world's stakeholders (nations, regional/local governments, NGOs, industry, and civil society) to reduce marine litter and microplastics.
Commitments 1.0	An arbitrary name to describe the efforts made by stakeholders to build awareness and educate the global community about the problems of marine litter and microplastics, and create related voluntary commitments made through 2018.
Commitments 2.0	An arbitrary name to describe a new approach to voluntary commitments that introduces a set of guiding principles, template and scorecard to be used to create new voluntary commitments and update current ones.

B IDEAS FOR CRAFTING THE "NEXT 1,000"

Increase the Impact for All Stakeholders and Commitments via the Use of the ***Commitments 2.0***'s Guiding Principles

As per the ***Commitments 2.0'***s guiding principles, much of the global community is now more aware of some of the challenges which should be overcome, and the need for collaborations in order for improvements to be made. Given the volume and types of action required to reach the long-term goal of stopping the flow of plastics to the ocean, collaboration and replication are possibly the deciding factors for achieving large-scale improvements in the years ahead.

As described in the report itself, *Creating High-Impact Actions to Reduce Marine Litter*, the call to action is mostly (1) to improve waste management commitments and increase resource recovery, and (2) to inspire product design improvements. If waste capacities around the world are not improved upon, product design will have less impact because communities will not be able to take advantage of the improved use or design of those materials. There must also be continued efforts to increase recycling, to decrease the use of single-life plastic products and packaging, and to increase the use of alternative products or materials. At the same time, it is also crucial to have a measurement and reporting system in order to provide an accurate representation of the marine litter–related voluntary commitments — their impact and results, and the challenges they face.

This section discusses some new ways various stakeholders can collaborate in order to create high-impact commitments in these two intervention areas. In fact, by using the **Commitment Scorecard** and structuring a high-score commitment, these stakeholders, by definition, will be creating high-impact commitments. It should be noted that while the total impact is greater for large voluntary commitments based on well-funded commitments, a stakeholder creating a smaller solution with nominal committed funds can also score highly, and these smaller programs are also critical in helping to incentivize scale and replication, once these have been proven.

The suggestions below are high level examples and should not be assumed to be the only solutions that are available.

B1. Improved Waste Management and Resource Recovery

There is an advantage in focusing on commitments that solve for the current inefficiencies in end-to-end waste processing around the globe. Whether it is the waste management facilities, the infrastructure and capabilities, or more efficient, expanded use of existing capacities . . . this is an area of focus with considerable unclaimed opportunity and impact.

Whereas product design focuses on the product itself before use, there should be greater emphasis on commitments focused on designing for recycling and reuse, which can lead to the reduction in the amount of mismanaged plastic waste that goes unrecovered into the waste stream. This will allow for increased opportunities to turn these materials into resources rather than having them sent to landfills, being openly burned, or lost to waterways and the ocean.

The following are three key areas that provide opportunity for new waste management infrastructure and processes:

(1) Significant financial commitments to build effective waste management solutions in developing countries for the billions of people without formal waste management systems today. This also includes a wide range of countries, regardless of their level of development, with inefficient or improper centralized systems that are insufficient to handle the increase in use of plastic products and materials generated by growing populations and consumption rates.

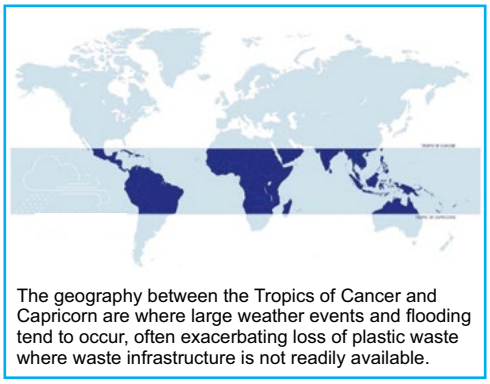
(2) Improved resource recovery programs and infrastructure, particularly to initiate and expand plastic collection programs which create value for the material in its second life, or which focus on reuse in some way, helping to expand the circular economy.

(3) Increased demand for recycled plastic content in new products and packaging, along with reduced demand for new plastic materials.

Improved Waste Management Solutions

- **Collaborate to Build Infrastructure in Countries Located in Areas with Heavy Rainfall**

  Due to high populations in countries where there are high rainfall or storm incidences, the world can achieve considerable impact by focusing on improving waste management facilities in these regions, especially where mismanaged waste is readily lost to waterways and the ocean.

  The geography between the Tropics of Cancer and Capricorn are where large weather events and flooding tend to occur, often exacerbating loss of plastic waste where waste infrastructure is not readily available.

  Multinationals can invest in communities where they have manufacturing, distribution, operations, and employees who are part of those communities.

  Governments, industry, and brands can design new commitments to create processing facilities in their own countries to handle material meant for recycling that previously had been exported to other countries. These domestic capabilities can increase innovation, job creation, and waste reduction, while reducing transportation costs and the reliance on foreign markets, such as China, to process these materials.

  There can be increased focus on commitments to implement innovative technologies to: (1) prevent the flow of waste into rivers, streams, bays, and marinas, and (2) collect and recover marine litter and microplastics from flowing into waterways and downstream to neighboring communities . . . and the sea.

- **Collaborate to Fund Waste Management and Resource Recovery and Waste Management Innovations**

  Funding for improved waste management technologies for decentralized and small-scale implementations is imperative at the local or regional levels.

  National governments, social capital investors, and local groups can all collaborate to fund innovative local initiatives to implement new waste management solutions in small cities and rural areas. These initiatives can create catalytic investment opportunities and attract sponsorships by donors, private capital investors, and large pension funds.

  With proper focus to increase resource recovery, it is possible to capture new value from waste materials, which have no value today in landfills or when openly burned. Many companies and organizations are working on creating products from recycled materials, which include construction and road materials; furniture; shipping materials such as pallets; fuel; and chemical recycling which liquefies the polymers and allows for high-quality reuse of those inputs. The use of return and take-back programs for post-consumer products is also a large opportunity for the recovery of aggregated, uncontaminated materials while also engaging consumers with the brand or company providing the service. These programs help to redefine a material, shifting it from "waste" to "resource."

As in the case of the European Union, governments can implement policies to incentivize the recovery of a certain percentage of materials that are sold on a monthly or annual basis. Companies and organizations can add this important data into their annual reports and their websites if they are part of the recovery process for those materials, even though they are being legislated to do so. Of course, they would be able to exceed government targets for material recovery and reuse, which will help to expand the scale of improved plastic waste reduction in those communities.

Industry, corporations, and investors can collaborate to create innovative deposit, rebate, or bring-back programs. These can incentivize customers to return their used products in a clean way that will help to reduce the contamination of materials while increasing the recyclability of these products. Such programs can also incentivize consumers to return to the vendor of that product or service, building customer loyalty, while creating a new stream of aggregated, valuable materials for recycling. Reduced contamination of materials should also translate to increased domestic reprocessing of those products, creating a stronger circular economy which does not rely on the export of waste. It should be noted that in order to achieve economies of scale for recycling and waste recovery, the export of materials which are "pre-processed for recycling," under specific standards and quality, should be allowed to happen where domestic capacities do not exist for local processing and the creation of a truly circular domestic economy.

The private sector can work together with consumers to incentivize proper recycling behavior. For example, a social media campaign by a large beverage company can provide a platform for the younger generation to share their "success stories of recycling, waste reduction, or product reuse" and to be recognized in the community by the company and their peers.

In addition to incentivizing consumers to return their products via rewards, bring-back programs, or other mechanisms, stakeholders in developed countries can fund resource recovery programs in countries that currently lack the capacity to do so. These initiatives can help to inform and empower people to return packaging and products in a clean state, ensuring uncontaminated high value material for recyclers and manufacturers.

Manufacturers can collaborate with governments to initiate semi-processing via sorting, grinding, shredding, and compressing so that the materials can enter the value chain which third parties, or originating companies can use, while also drastically reducing the volume of such materials, saving resources on transportation of materials to the next market or link in the supply chain.

Increased Demand for Recycled Plastic

- **Plastic-based Products and Packaging**

  Together, governments, organizations, and brands can create commitments to increase the amount of recycled content in plastic-based products or packaging. This collaborative effort would increase the demand for recycled plastic material by creating an end market for the materials to be reused for "circulation" within the economy. This approach provides the "pull factor" in the market for waste to be recovered and reused as a resource.

  Creating economic incentives for businesses and industries to switch from using "virgin" material to the use of recycled plastic can be another mechanism to drive the use of recycled content.

  Innovative financing solutions can be deployed to mitigate payment risks during the early growth phase of recycling and recovery programs in order to reduce and potentially eliminate marine litter and microplastics in these communities.

B2. Product Design Improvements

- **Collaborate to Create Products for the Future**

  To fast-track product design – all governments can replicate proven programs, beyond bags and taxes, providing both business and consumer incentives to increase the recyclability of a product, increase the use of recycled content, or and even the increased use of alternative materials.

  To create demand for recycled materials, governments—as well as companies—can mandate that any party submitting a tender for a contract have minimum levels of recycled content in products where possible.

  Companies can create commitments to meet a set target for the amount of recycled content in all of their products, or at least starting with one of their product lines.

  As part of the design process, industry, manufacturers, and brands can include a publicly available collection or return system. Factoring such a clearly defined collection or return protocol into the design can make the proper return and discarding of the product straightforward, bringing continuity to its end users and to those in the recycling or waste treatment industry.

- **Collaborate to Create Standards**

  A commitment to standardize the terminology used to describe the recyclability, and the recycled content, of products can make it easier to differentiate products, both at the wholesale and the consumer level.

  A key component to support the realization of these goals is for the world to adopt standard labelling. Several organizations are making great headway to establish standard terminology and labelling systems for the material that clearly identifies whether it is compostable, biodegradable, or recyclable. Measuring the volume of the resources captured using the standardized labels is one simplistic way to initiate a meaningful report on the results of the commitment.

- **Collaborate to Create Pilot Scientific and Business Programs**

  Consider the sheer volume of types, sizes, colors, combinations, et cetera, of plastics in today's products. Now consider the effort being undertaken throughout the world in both corporate R&D labs and universities to improve product design. Shouldn't we find corresponding ways to speed up commercialization of these innovations through increased funding for both scientific and business pilots—and increased sharing of the programs that work?

B3. Metrics

Measure the Success and Impact of the Commitments

To maximize the effectiveness of collaborations, a well-adopted and recognized measuring system is beneficial. With proper measures, metrics, and reporting, all stakeholders can readily see what is working and what requires support. With built in measures in each commitment, it will be more straightforward to recognize the rate of success. One suggestion is to use the ***Commitment Scorecard*** throughout the life of the commitment; this way the public can benefit by being able to track stakeholder progress as data points are measured and recorded during the commitment's implementation.

For instance, when improving waste management solutions and resource recovery, scoring data can be classified further depending on the stakeholder and the goal:

- Recycled plastic materials produced by location and type
- Recycled plastics used by industry: by product type, plastic type (e.g., X% of HDPE is used in making toys, toothbrushes, etc.)
- Plastics in resource recovery by location: by product type, recycling rate into original product (e.g., plastic bottle to plastic bottle, toy to toy, packaging to packaging, etc.), or recycling rate into down-cycled product, or sent to landfill
- Plastics in resource recovery by product type (e.g., plastic bottles), by industry (e.g., auto industry), and by final product (e.g., auto dashboard switch)
- Amount of recycled plastic content in products: by product type, by location, by manufacturer, etc.

For commitments, the key metrics would be the duration (time) to implement; the time that has passed since implementation; as well as a measure/metric of the amount of plastic waste that is being prevented or recovered. Understandably, some of these measures might come from high-level estimates at the beginning but which would be refined, and become more accurate, as each year of the program progresses.

A manufacturer who commits to increase its recycled content can begin to measure and report its baseline use of the amount of raw plastic (by type) which is used during the first year of the commitment. It would continue to update its metrics and reporting in subsequent years. The goal would be to increase the volume of recycled content used, where applicable for the product's performance, year by year.

It is estimated that 40% of the world's waste is removed from uncontrolled burning, causing three main impacts which include localized respiratory problems, carbon black from the soot, and the spread of toxins into the air/rain which come back into our food chain.

C COMMITMENTS 2.0 GUIDE AND SCORECARD

C1. Five Guiding Principles and 11 Key Criteria

As defined in Section 5 of Creating High-Impact Actions to Prevent and Reduce Marine Litter, the scorecard's 11 scoring criteria are based on the set of guiding principles of the ***Commitments 2.0*** guide as listed below:

- Structure commitments so that these can be replicated and scaled
- Pursue collaborations that engage multiple stakeholders
- Capture data and share results
- Build in long-term impact and continuity
- Secure proper, adequate funding / resources and set short-term milestones

The scoring criteria can further be broken down into 3 sections: Facts, Magnitude and Velocity.

C2. The 11 Key Criteria's Choices Defined

Commitment Name		Score	

FACTS

PRIMARY STAKEHOLDER	Multi-National Governments	National Government	Plastic/Waste Industries	Industry or Business	ACADEMICS	Individuals/People
		Regional/Local Government		NGO'S/PPPs		
INTERVENTION FOCUS	(Action-Oriented) Both P&U and EO	(Action-Oriented) Either P&U and EO; plus a KO purpose	(Action-Oriented) IO	(Knowledge - Oriented) Both P&U and EO	(Knowledge - Oriented) Either P&U and EO	(Knowledge-Oriented) IO
TYPE OF INITIATIVE	Reduce/Eliminate Uses of Plastic	Commercialization	Collect & Treat Waste	Facilitate/ Coordinate Role	Education/ Awareness	Other
	Product Redesign	Donor Funding /Investment	Collect & Recycle or Repurpose	Policy/Regulations	Research & Monitoring	
	Action Plan	Emergency Response	Recollect & Reuse			
LOCATION	Land-Based	All	Rivers	Coastal Areas	Only Oceans	Only Islands

MAGNITUDE/POTENTIAL IMPACT

SCALABILITY	Multi-Stakeholder, Replicable	One Stakeholder, Replicable	Pilot	Policy/Regulatory Impact	Unique/ One-Off
OUTCOME/ TIME-EFFORT	High Outcome/ Low Effort &Time	High Outcome/ High Effort &Time	Low Outcome/ Low Effort &Time	Low Outcome/ High Effort &Time	
INTENT	Sustainable Long-term Program	Policy/Regulations to Spur Change	Specific Project or Action	To Inform/ Educate/ Research	None

VELOCITY/ACCELERATION

TIMELINE TO COMPLETION	Completed	Continuous	By 2020	By 2021	Policy/Regulation Enforced	By 2023	By 2025	By 2030	Unknown
RESOURCES ANNOUNCED	Significant to Meet Scope		Broad Level to Meet Scope		Reasonable Level to Meet Scope	Reasonable Level, No Funding Needed		Not Provided/ Not Disclosed	
RESOURCES DEPLOYED	Completed	Work Being Done With Resources	Policy/Regulations Enforced		Resources Secured	Announced/ In Planning		Not Provided/ Not Disclosed	
DATA CAPTURE	Data in Place and Sharing		Data Being Measured and in Place			Not Provided/Not Disclosed			

FACTS

Primary Stakeholder

The Primary Stakeholder is responsible for setting and executing a commitment—the key player taking action and achieving results.

Significance: Under ***Commitments 2.0***, each stakeholder has an important role to play. For example: Governments can play an important role in providing incentives for adapting new technologies as well as for practices that directly lower plastic waste bleeding into the environment. Donors and investors can fund new commitments and oversee their implementation by other stakeholders. Industries and businesses can play a role in providing the properly designed products along with clear and intuitive end-of-life methods. NGOs and academic institutions can engage local communities, enter into public-private partnerships, and take on specific defined activities. Individuals can increase their impact through supporting businesses with low plastic footprints and doing their part in the waste management process.

Stakeholder Choices	Descriptions
Multi-National Governments	Commitments backed by a consortium of national governments, such as the European Union.
National Government	A sovereign nation.
Plastic & Waste Industry	These commitments included the plastics industry or waste industry as partners, or these groups have, on their own, sponsored or remain part of a commitment.
Regional/ Local Governments	Could be a state, a city, or a region.
Business or Industry	This includes individual companies who do their own commitment (e.g., business), or a number of companies who band together (e.g., industry). An industry association qualifies as "industry," whereas if it describes itself as an NGO, it falls under the NGO umbrella..
NGOs/PPPs/ Academics	Includes NGOs, by themselves, or academic institutions that work on mostly non-profit activities, or public-private partnerships that work with a local or national government.
Individuals/People	Consumers or consumer groups that actively drive forward a commitment without any formal lead involvement by other stakeholders.

Primary Intervention Focus

There are, broadly speaking, 6 types of interventions that can be the focus of the commitment. Choices take into consideration if the type of intervention is either **ACTION-ORIENTED** with the aim to change the status quo or **KNOWLEDGE-ORIENTED** with the aim to add to the knowledge base.

Interventions can be further classified based on where they occur in the plastics value chain from initial creation to end of life:

- **For the "production and use" of plastics (P&U)** -

  a focus upstream in the plastic value chain that aim to reduce and/or eliminate plastic end-of-life flows through changes in consumer behavior (i.e. avoid use, use alternatives) and developing new products, materials and business models that use less virgin plastics and more recycled plastic

- **For post-use plastics that can "enter the ocean" (EO)** -

  a focus on managing plastic end-of-flows to divert it from ending up in the ocean, such as waste management initiatives, anti-littering public measures, and increased recycling

- **For plastic already "in the ocean" (IO)** -

  a focus on the cleaning up and/or mitigating impacts of plastics already in the ocean or research impacting plastic in ocean

Here are the intervention types:

- Action-Oriented Commitments that focus on the production and use of plastics
- Action-Oriented Commitments that focus on post-use plastic that can enter the ocean
- Action-Oriented Commitments that focus on cleaning up the plastic in the ocean
- Knowledge-Oriented Commitments that focus on the production and use of plastics
- Knowledge-Oriented Commitments that focus on post-use plastic that can enter the ocean
- Knowledge-Oriented Commitments that focus on cleaning up the plastic in the ocean

Type of Initiative

The Type of Initiative is the focused action that the commitment declares to take.

Significance: Given that the world is looking at moving the needle quickly towards a noticeable reduction in marine litter and microplastics, initiatives that speed up this process are more desirable. For instance, a commitment with a focus on building a new recycling facility in a third world country will have a higher direct impact than will an initiative that focuses on coordinating a three-day symposium. In Commitments 2.0, there are currently fourteen types of initiatives that a stakeholder can focus its commitments effort towards.

Type of Initiative Choices	Descriptions
Action Plan	An initiative that describes a program, involving a set list of items to accomplish, usually over a period of time.
Collect and Recycle or Repurpose at end-use	An initiative that sets out to improve collecting and recycling waste.
Commercialization	An initiative involving the sale of a product or service for intent of profit.
Donor Funding/Investment	An initiative by a stakeholder to provide funds for a different stakeholder to perform a voluntary commitment.
Education/Awareness	An initiative that serves to make people aware or educate them in one way or another.
Emergency Response	An initiative that seeks to improve a stakeholder's response to natural and man-made disasters.
Facilitation/Coordination	An initiative of a stakeholder that describes the role of this stakeholder to further a program or project involving other stakeholders and third parties from the start to the end goal in mind.
Product Redesign	An initiative that focuses on using less virgin plastic during manufacturing process or at product deployment. Also circumstances where more recycled plastic used during product design stage.
Recollect and Reuse at end-use	An initiative where after a specific product is used, there are processes/procedures/programs to recapture and then reuse in current form, or perhaps a new form.
Reduce or eliminate uses of plastic	An initiative where the stakeholder enacts a way to reduce or eliminate uses of plastic in a product, program or at end use.
Policy/Regulations	An initiative involving government policy and/or regulations.
Research & Monitoring	An initiative that involves research and the monitoring of data for academic, government, or industry purposes.
Waste Management	An initiative involving waste management, recycling, repurposing, and disposal of waste.
Other	An initiative that cannot be easily classified into one of the above.

Location

In what targeted geographical area related to water, land, or both does the commitment take place? Location provides the ability to identify how close the given commitment is to waterways, large populations and other land or water location-based factors.

Significance: With the target to reduce plastic waste entering the environment and waterways, there are higher-impact results in focusing on locations near waterways and coastal areas. High-rainfall areas with poor waste management cause more waste to be washed out to waterways and lead into the ocean. With this understanding, companies and businesses can prioritize their investments into developing waste management systems in these areas.

Location Choices	Descriptions
Land-based	Commitments that primarily focus on land-based locations.
All	Commitments that both impact land and water areas.
Rivers and/or Coastal Areas	Commitments focused on rivers and /or coastal areas.
Ocean Only	Commitments only focused on the ocean intentionally and excluded efforts to impact land too.
Islands Only	Commitments only focused on island-based solutions, or a solution for a particular island.
None	Commitments with a focus on solving marine litter and microplastics issues, but do not directly occur in either land or water or a specific location.

Community cleanup activity, Cambodia.

MAGNITUDE/POTENTIAL IMPACT

Scalability

Replicable commitments that involve multiple participants are better than ones with one responsible entity. Unique one-off projects are not scalable. Pilot programs that have potential to be replicable are encouraged.

Significance: Once a program or solution is implemented and proven to make a difference in the amount of marine litter and microplastics, replicating that program in other regions and with various players is a strong win for the world in general. Solutions designed to be highly scalable and replicable can be favored by the global community. Replicable commitments with multiple supporting stakeholders can be most effective.

Scalability Choices	Descriptions
Multi-Stakeholder Sustainable & Replicable Programs	A sustainable program can be many types of commitments with the common denominator that it contains multiple projects or stages, over a defined period of time.
One-Stakeholder Sustainable & Replicable Programs	Same as above, except multiple stakeholders are not involved. This is the commitment authored by one stakeholder and completed by mainly one stakeholder.
Pilot with Potential to Replicate Globally	A pilot is not a larger program or a specific project; it is a new program intended to be replicated, if successful, either by the stakeholder or by a similar stakeholder in other countries.
Unique/One-off	This commitment is unique and viewed as a specific project or action. By its nature, it would be hard to replicate due to location or type of stakeholder or type of commitment being described.

Outcome/Effort and Time

The trade-off between effort, time, and outcome to recognize what it will take to complete and/or implement the commitment. There are four choices. The best option is to expect a high outcome with only a low effort to be made that will take less time to achieve the outcome.

Significance: Admittedly, as effort is not a scientific measure, it is beneficial to keep in mind the effort and time that will be required by the stakeholder to fulfill the commitment and to make sure the outcome is justifiable: that is, greater than or equal to the effort and time put into attaining these results. Note: In the future, the global community can generate specific data capture and metrics to statistically define and measure these four choices for both the initial and the ongoing scoring results.

Outcome/ Effort and Time Choices	Descriptions
High Outcome vs. Low Effort and Time	A commitment that expects a high outcome with only a low effort to be made that will take less time to achieve the outcome.
High Outcome vs. High Effort and Time	A commitment that expects a high outcome, but also will require a larger effort to be successful and as a result will take more time to achieve the outcome.
Low Outcome vs. Low Effort and Time	A commitment that expects a low outcome, yet it also does not require a big effort, or a long time spent to achieve the outcome.
Low Outcome vs. High Effort and Time	A commitment that expects a low outcome, but also will nevertheless require a big effort and a long time to achieve the outcome.

Intent

The targeted intention of a commitment is important. Is it a policy or program expected to make a long-term sustainable outcome happen? Or a specific project tailored only for the stakeholder and not replicable? Or an effort to inform or educate or do research about marine litter and microplastics?

Significance: There is a distinction between commitments that are a single project or are intended as a limited time-based event and commitments that are bigger in scale and intend to change the way plastics are made, used, handled, or processed in the long term. For example, a one-time specific project might be to hold a one-day workshop in a developing country versus setting up a long-term sustainable plastic take-back program by a national grocery chain.

Intent Choices	Descriptions
Sustainable Long-Term Program	A commitment that has more than one stage/phase and involves more than one initiative and/or location. It is not one beach cleanup, but could be a program to do 100 beach cleanups in 100 cities, for example. It is not a research effort that is geared to do one thing—that's a project—but a research effort involving more than one stakeholder, over a period of time, that requires a project plan with more than one participant (i.e., it's a program, not a project).
Policies/ Regulations/ Frameworks to Spur Behavior Change	A commitment through a governmental action or regulation, or an entity deciding to create a formal policy (announced to the world), and the result of what's proposed is leading to a reduction of plastic used or created or sent to a landfill. These can be bans, tax levies, regulatory changes, etc.

To Do Specific Project(s) or Action	The commitment focuses on a specific project or location or event where time for it is spelled out, expectations for it are clearly mentioned, and goals/milestones to complete the specific project are also very well stated. The commitment, alternatively, could be the formulation of a plan or project, such as a feasibility study or a written strategy document that references a plan of attack, and/or could seek internal approvals to get funds to start doing a specific project or gets the money to do the study and write the proposal or business plan. A beach cleanup is a specific project (on a specific date), or it could be multiple beach cleanups done on a specific date without any intention of doing others later. It can also be more of a one-off project or action, such as a funded competition, which could lead to a specific project or even a larger program. But this is the first step; it should not be tied to a larger program, although a specific project could be a pilot/prototype effort that could, if results warrant, be turned into a program.
To Inform/ Educate /Research	These commitments feature one-off campaigns and/or research efforts completed over a given period of time with the main goal of communicating whatever is found during the discovery/research effort or the educational effort made.

VELOCITY/ACCELERATION

Timeline to Completion

A specific targeted timeline provides a goal to manage towards. Commitments with shorter timelines are preferred as all interested parties have to be more engaged.

Significance: Commitments with a shorter timeline are an indicator of the stakeholder's engagement. A more aggressive completion target—say, within 1 to 3 years—indicates it will more likely be completed as described as compared to an ambiguous target such as 5 to 10 years in the future without any short-term milestones attached.

Timeline Completion Choices	Descriptions
By 2020	Time-based completion dates heralded by stakeholder in initial commitment.
By 2023	
By 2025	
By 2030	
Completed	

Continuous	There is no end date set for the completion of program, but there are implied or specifically mentioned short-term milestones to effectively complete in order to get additional funds for the upcoming years of the program.
Policy/Regulations Enforced	For a specific policy or regulation that is enacted and is being enforced by the government. As there is no specific start/end date, this is selected.

Resources Announced

The actual disclosure of the financial investment and people resources committed in advance made by the stakeholder to assure the commitment's success. The more funding/resources secured, the greater the opportunity for the stakeholder involved in accomplishing the commitment to complete on time and meet or exceed its scope of work and expected outcome versus effort/time.

Significance: The world is making many commitments requiring varying amounts of resources and funding. While the amount of the committed resources announced is unlikely to determine the impact or magnitude, the continuity and confirmation of these investments of funds/people can be a higher indicator of stakeholder intensity towards completing the commitment, its impact and success.

Resources Announced Choices	Descriptions
Significant Committed Resources Announced	The stakeholder announces commitment and it includes the significant financial/people resources required to complete the commitment in time frame and scope.
Broad level of Committed Resources Announced	The stakeholder announces commitment and it includes the financial/people resources required to complete the commitment in time frame and scope.
Reasonable Committed Resources Announced	The stakeholder announces commitment and it includes a minimum, or reasonable amount of financial/people resources to be used to complete the commitment in time frame and scope including capital funding, if needed, to meet commitment scope.
Reasonable Committed Resources Announced Without Need for Capital Funding	In certain circumstances. the stakeholder announces commitment and completion of the commitment does not involve capital, but does include all other non-financial resources required to meet commitment scope.
Not Provided/Not Disclosed	The stakeholder fails to mention how the commitment will be accomplished.

Resources Deployed

A stakeholder who updates a commitment as it progresses from announcement to action to completion is engaged. Plus, this current status can show a higher likelihood of the commitment being completed.

Significance: A funded commitment is a prime indicator that the stakeholder is truly driven to deliver this commitment in the time frame mentioned. The world can benefit from stakeholders stating their intentions not only to secure funding/resources but also the actual work is being done with these funds/resources and progress and milestones are being met.

Resource Deployed Choices	Descriptions
Completed	Commitment has reached its goal(s). For full points, the commitment met milestones that were set out to be accomplished.
Funded Work Being Done	The commitment has the allocated resources (funding, people) who are doing work on behalf of the commitment.
Resources Secured/ Funded	Resources (capital, people) has been secured for the commitment, yet the commitment project/program, itself, has not yet started.
Announced/In Planning	Commitment announced or is in planning stages after being announced.
Policy/ Regulations Enforced	For a specific policy or regulation that is enacted and is being enforced by the government. As there is no specific start/end date, this is selected.
Not Provided/ Not Disclosed	No mention of funding in commitment description or write-up.

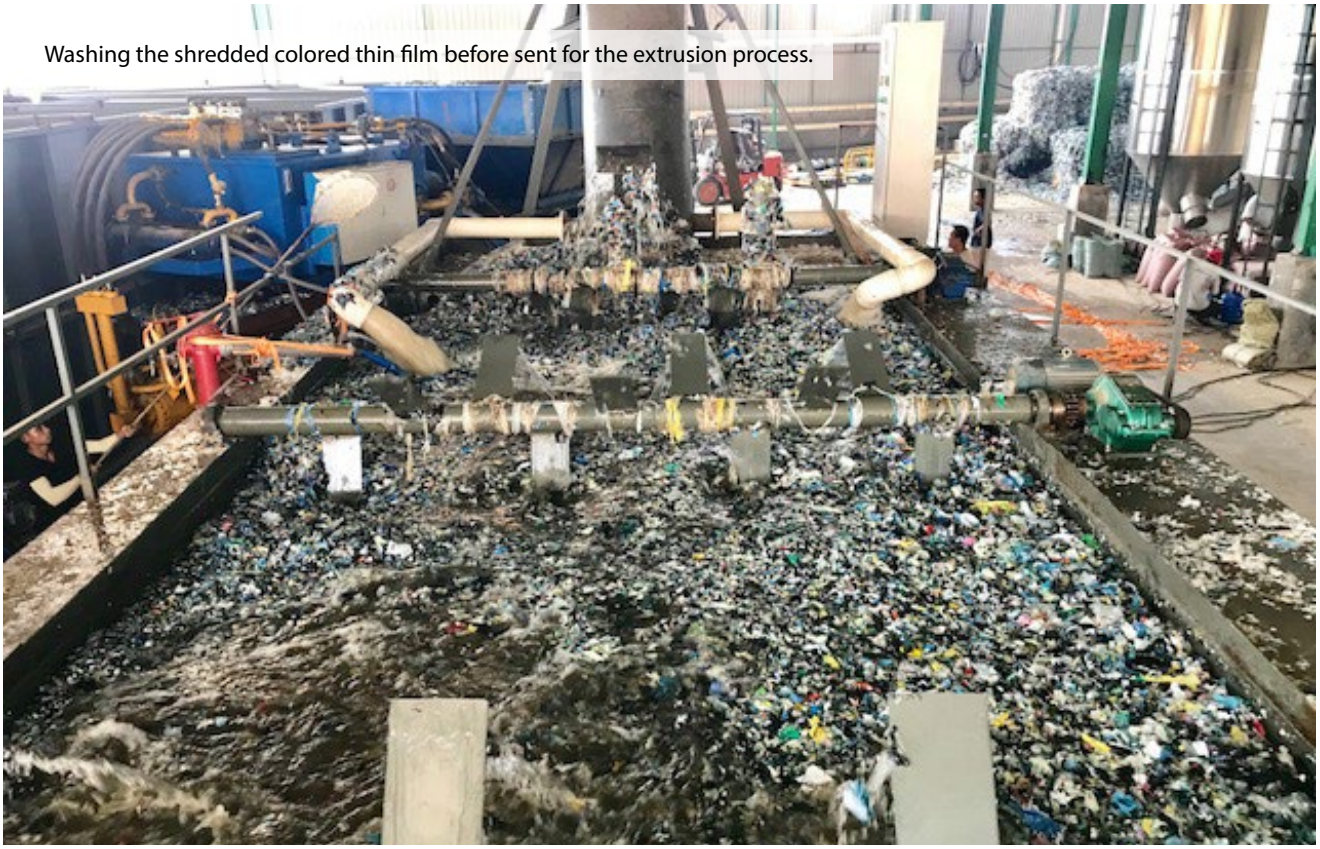
The sorting of white and colored thin film for recycling.

Data Capture

The monitoring, measuring, and sharing of data and results of a commitment for the purposes of improving commitments and replicating and scaling the proven successful ones.

Significance: The ***Commitment Scorecard*** is intended to provide a methodology to measure and manage the commitments to desired outcomes. To create meaningful projects and programs that can be replicated and scaled, all stakeholders play a key role in monitoring, measuring, and sharing the data and results. Only when equipped with a sound set of information can the world collaborate on making more effective decisions and commitments that promise meaningful results. The goal is not just to identify success stories but also to identify areas that are lacking and require the most support, expertise, and funding.

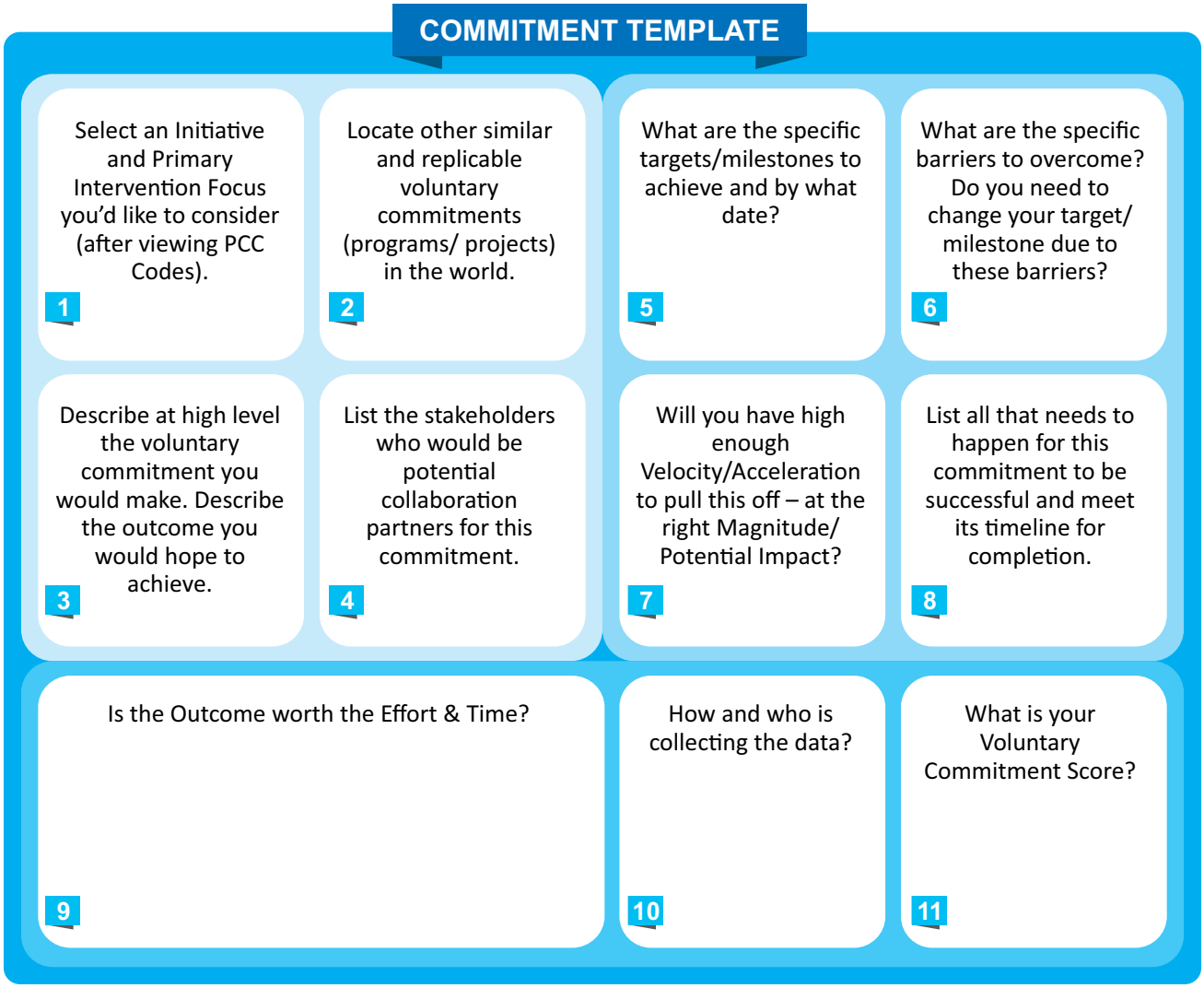
Data Capture Choices:	Descriptions
Data Shared & Measured	There is (1) a clear path to capturing and measuring data produced by the commitment that will be used for internal purposes; (2) these data may be provided, at a future point, to one or more third parties—adhering to privacy arrangements—for their reporting uses.
Data Measured & in Place	There is a clear path to capturing and measuring data produced by the commitment that will be used for defined internal and/or external purposes..
Not Disclosed/ Not Applicable	There is no mention about how data will be captured, reported, and shared. Or, data collection is not possible given the commitment itself.



Washing the shredded colored thin film before sent for the extrusion process.

C3. The *Commitment Template*

Commitment Template Step-by-Step Process Instructions:



Armed with the guiding principles, each stakeholder will be able to structure a voluntary commitment that will achieve a high score. To get started, a stakeholder can use the ***Commitment Template***, a step-by-step process to create a "best practices" commitment. Borrowing from the Business Model Canvas that is now used by start-ups throughout the world, this one-page template can easily be done by an individual but would be far more powerful if done as a collaborative team effort.

Here is a list of potential steps and questions that a stakeholder can complete and ask at each section of this exercise:

1 **Select an Initiative and Intervention Focus you'd like to consider and complete this stepped process.**

What needs to be improved? What are the plastic problem areas that you would like to solve at a high level? Are there any waste management/resource recovery or product design improvements that can be completed by you as stakeholder? Should these have priority? Look at the current commitments, if any that have been made by your organization as stakeholder. What has been working well?

To assist this process: You may want to separately rank in order the initiatives and intervention focus categories that you feel best meet your objectives and goals. Then, take a look at your highest listed ones in both categories; combine them, to create your highest Intervention focus and initiative combinations.

Initiative

- Reduce or eliminate uses of plastic
- Product redesign—less virgin plastic used; more recycled plastic used
- Action Plan/Doing the Work—Taking a project from Point A to Point B
- Commercialization—Using more recycled plastic and/or alternatives in products or packaging
- Donor Funding/Investment—Providing financial support for commitments
- Emergency Response
- Waste Management—Involving solutions for final disposal treatment
- Recollect and Reuse at end-use
- Collect, and then Recycle or Repurpose at end-use
- Facilitation/Coordination Role—Making programs and projects happen
- Research & Monitoring—Projects at many stages of marine pollution
- Policy/Regulations—Such as bans, levies
- Education/Awareness Programs—About plastics and recycling

Intervention Focus:

- Action-Oriented Commitments that focus on the production and use of plastics.
- Action-Oriented Commitments that focus on post-use plastic that can enter the ocean.
- Action-Oriented Commitments that focus on cleaning up the plastic in the ocean.
- Knowledge-Oriented Commitments that focus on the production and use of plastics.
- Knowledge-Oriented Commitments that focus on post-use plastic that can enter the ocean.
- Knowledge-Oriented Commitments that focus on cleaning up the plastic in the ocean.

Next, view the 200+ **Plastic Category Classification Codes (PCC Codes)**, which feature commitments based on both stakeholders and initiatives. Pay particular attention to your stakeholder category and look at all the possible descriptive initiatives. Do any resonate? Write down the ones that do.

Next, compare the ones that resonate against your abstract top combination of Intervention Focus and Initiatives. Are they in synch or different? Did you get new insights into potential commitments that your organization may want to take on?

One last approach may be worth doing. Review the entire list of **PCC Codes** again. Are there any new ones that resonate regardless of the stakeholder, in light of your top Intervention Focus and Initiative categories?

2 **Locate other similar and replicable PCC programs/projects in the world.**

As a courtesy, Ocean Recovery Alliance, upon request, to any stakeholder will make available a PDF of the **PCC Codes** for all the 580 voluntary commitments it scored. Review your **PCC Codes** lists from Step 1 and see what actual voluntary commitments were done by other stakeholders in the world.

Please note: The **PCC Codes** has not been academically validated and can only serve as an initial way to find similar commitments. It is up to the stakeholder to go to the appropriate ocean-related UN or conference website where the voluntary commitments reside to learn more about the commitment, or perhaps directly reach out to the stakeholder involved.

Pick one commitment that seems the most compelling. Next, complete steps 3 and 4. At any time, if you feel you are going down the wrong path, go back to your list and start with another one.

3 **Describe at the highest level the voluntary commitment you would make. Describe the outcome you would hope to achieve and look at the 11 scoring criteria in the *Commitments 2.0* Guide and Scorecard as a guide to what you can be including.**

This voluntary commitment description should not be too detailed; a couple of paragraphs at most.

One exercise to consider once this voluntary commitment is sketched out is to calculate a preliminary score, using assumptions made about the 11 scoring criteria. If the score isn't at least 70, there could be problems in the idea for the voluntary commitment and the proposed voluntary commitment may need to be reshaped. The stakeholder should also recognize it may be better to abandon it and start from scratch.

4 **List the stakeholders who would be potential collaboration partners for this commitment.**

Are there local NGOs or other organizations or companies that can be involved?

What other organizations may want to have a stake in what you are proposing?

Are their global NGOs who would add value if involved?

Is there benefit in getting the national, regional, or local government involved?

What about involving community organizations or individuals who can add value?

Are you able to copy what other stakeholders have done to involve multiple parties in similar voluntary commitments?

POP QUIZ: After completing the first four steps, the stakeholder can step back and make sure this is a voluntary commitment it wants to do. After all, limited resources will be allocated and if there are any points of hesitancy, the stakeholder can go back to Step 1 and start again or take one of the runners up commitments and return to Step 3.

5 What are the specific targets/milestones to achieve, and by what dates?

There are many ways to set targets/milestones. To achieve a high score, a voluntary commitment needs to have Magnitude and Velocity. Magnitude takes into account not only the amount of plastic that will be positively altered but also the long-term sustainability and the larger targets/milestones (i.e., outcomes) versus the effort and time to achieve the voluntary commitment's goal(s). Velocity factors in the resources required (staff, funding, volunteers, partners)—and those actually used to reach these higher targets/milestones in as short a time period as possible.

One strategy may very well be to have a series of well-resourced/funded, independent, shorter-term, and reachable projects with defined targets and milestones, and with collaboration partners. Another strategy is to create a long-term high-impact program that can become the program that others replicate and scale—with continuous deployed resources. In either case, if the commitment scores highly, it will have a structure that has been thought through and is achievable.

6 What are the specific barriers to overcome? Do you need to change your targets/milestones due to these barriers?

This may be the most important step. Here, it will be important to list all the ways the commitment can fail, that is, ask what can go wrong. This exercise will allow the stakeholder to address upfront the potential drawbacks and to find ways to either overcome the specific barriers or seek to reduce the appropriate targets/milestones to compensate for the probability of failure or underachievement as currently written/described.

A good exercise with a team is to come up with an exhaustive list of what could go wrong and also, at the same time, at least one way to fix each problem/obstacle. If finding a fix is difficult, a better route, after spending enough time looking for options, is to recalculate the targets and/or milestones to lessen the burden and possibility of the wrong occurring.

By doing these above exercises, the team is acknowledging these issues, and as a result, they will be able to spot problems more quickly and address them head if they occur.

7 Will you have high enough Velocity to pull this off at the right Magnitude?

In other words, this step forces you to confront the relationship between the targets/milestones projected based on the aspirational Velocity and Magnitude criteria selected (consisting of 7 of the 11 scoring criteria of the ***Commitments 2.0 Guide and Scorecard***). If any of these scoring criteria selections are low scores, it may be a good indication that there could be a mismatch in how the voluntary commitment is currently being structured and its ultimate success.

8 List all that needs to happen for this commitment to be successful and meet its timeline for completion.

List all the ways the commitment will be successful and surpass its targets and milestones. By creating this absolute "all goes right" list, there may be tell-tale signs where such enthusiasm is misguided. In this way, this stepped exercise may expose new ways to strengthen the areas of perceived weakness, such as the need for more staff and/or funding, or extending the due date, or resizing the expected delivery of targets/milestones to be more realistic. Interestingly, the opposite may happen where the voluntary commitment is viewed as being too easy to achieve, which could be an indicator the proposed outcome may not be large enough given the effort and time to be spent.

9 Is the outcome worth the effort and time?

Without a doubt, an expectation of a low outcome may indicate the voluntary commitment is the wrong voluntary commitment for the stakeholder. With limited resources, each stakeholder needs to seek the "best practice" that yields the highest outcome at the least amount of effort and time as possible. This high-attaining goal, if reached, should create a voluntary commitment that all involved stakeholders uphold because they all see the tangible contributions of their collective efforts.

It is important to note that what is a perceived high outcome, or a low outcome is subjective. In the document using the ***Commitment Template***, it would be worthwhile to define exactly what a high outcome is in terms of expected results to the stakeholder itself. This can be done in data capture/metric terms, if possible, as well as in terms of the objective goals and aims of the voluntary commitment.

In addition, there can be an estimate of the amount of effort and time to attain a proper outcome, and this can also be tracked, especially if there are high expectations that this voluntary commitment could be cloned by many others throughout the world.

10 How and who is collecting the data?

The stakeholder can state how data are to be collected, measured, and shared–especially relative to targets/milestones and outcome expectations, as well as capturing actual effort invested and time spent. Academic and industry guidelines can be established for data, not only for the how the data are collected, measured, and shared but also who is responsible within the commitment itself to do this work, and to make sure this work is also factored into the cost of the voluntary commitment.

11 What's your voluntary commitment score?

At this point, the commitment process is almost complete. The last step is to compute a new commitment score. The stakeholder can complete the ***Commitment Scorecard***, essentially selecting the right choices for each of the 11 scoring criteria to arrive at a score.

With a satisfactory high score, the stakeholder can write out the voluntary commitment with more depth and detail and add it to the appropriate UN Ocean voluntary commitment databases and public announcements.

Ideally, this new score should be in the high 80s and 90s. If not, the stakeholder can address possible ways to rethink and potentially improve the commitment. If that is not attainable, it may make sense to abandon it and work on other potential voluntary commitments from the list generated in Step 2.

From steps 1 through 11, this entire process is geared to make the stakeholder think through the commitment before the real work starts to actually line up the resources, the money, the people, and to make the voluntary commitment public by listing it in the UN Ocean Conference database.

C4. The *Commitment Scorecard*

COMMITMENT SCORECARD

Scoring Criteria	Selection	Points 0-5	Weighted Points
Primary Interventions			
Type of Initiative			
Primary Stakeholder			
Location			
Scalability			
Outcome/Effort & Time			
Intent			
Timeline to Completion			
Committed Resources			
Resources Deployed			
Data Capture			
Total Points			

FACTS	
Primary Intervention Focus	Action-Oriented (AO) – Production & Use (P&U) and "entering the ocean" (EO) AO, P&U or EO – by themselves as Primary – with a Knowledge-Oriented (KO) purpose, too. KO for P&U and EO (ex. New way to formulate a product with less plastic and better way to dispose of it at end of use, too) Or Action-Oriented "in the ocean" (IO) KO for either P&U or EO KO on "In the ocean" only
Initiative	Reduce or eliminate uses of plastic Product redesign – less virgin plastic used; more recycled plastic used Action Plan/Doing the Work—Taking a project from Point A to Point B Commercialization—Using more recycled plastic and/or alternatives in products or packaging Donor Funding/Investment—Providing financial support for commitments Emergency Response Waste Management—Involving solutions for final disposal treatment Recollect and Reuse at end-use Collect, and then Recycle or Repurpose at end-use Facilitation/Coordination Role—Making programs and projects happen Research & Monitoring—Projects at many stages of marine pollution Policy/Regulations—Such as bans, levies Education/Awareness Programs—About plastics and recycling Other
Primary Stakeholder	Multi-National (two or more national governments) National Government; Regional/Local Governments ;) Plastic/Waste Industries (these industries have direct impact on the life cycles of plastic products used) ; Industry or Business; NGO/PPPs Academics Individuals/People
Location	Land-Based All Rivers Coastal Area Only Ocean Only Islands
MAGNITUDE/POTENTIAL IMPACT	
Scalability	Multi-stakeholder, Sustainable and Replicable Programs One stakeholder, Sustainable and Replicable Programs Pilot with Potential to Replicate Globally Policy/Regulatory Impact Unique/One-Off
Outcome/ Effort & Time	High Outcome/Low Effort and Time .33 High Outcome/High Effort and Time .67 Low Outcome/Low Effort and Time Low Outcome/High Effort and Time
Intent	Sustainable Long-Term Program .33 Policies/Regulations to Spur Change .67 Specific Project or Action .67 To Inform/Educate/Research None

VELOCITY/ACCELERATION	
Timeline for Completion	Completed Continuous By 2020 By 2021 Policy/Regulation Enforced By 2023 By 2025 By 2030 Unknown
Committed Resources Announced	Significant Committed Resources Announced, including capital funding, to Accelerate Commitment Scope Broad Level of Committed Resources Announced, including capital funding, to Meet Commitment Scope Reasonable Committed Resources Announced, including capital funding, to meet Commitment scope pts Reasonable Committed Resources Announced without need for capital funding to meet commitment scope Not Provided/Not Disclosed
Resources Deployed (7%)	Completed Work Being Done with Committed Resources Policy/Regulations are Being Enforced Resources Secured (including funding if included in announcement) Announced/In Planning Not Provided/Not Disclosed
Data Capture (7%)	Data in Place and Sharing Data Being Measured and in Place Not Disclosed

Limitations to Methodology

Overall, the evaluation of the 580 public voluntary commitments was based solely upon publicly available information readily accessible to an interested third party. This public data was provided at the various online websites of a select group of conferences and reports where the voluntary commitments were showcased.

- **Scarcity of available data required to accurately score a voluntary commitment.**

  The information describing each commitment ranged from short high-level paragraphs without much relevant information relating to the scoring criteria to much more complete descriptions that provided enough information for making informed choices.

  For the ***Commitment Scorecard*** to have an impact in reducing marine litter and microplastics in the future, it is incumbent on the stakeholders to provide real-time updated and detailed public information about each voluntary commitment, especially relating to the scoring criteria now that the new ***Commitments 2.0 Guide and Scorecard*** are used.

  Self-reported and static information. By only using public data from the aforementioned conferences and report websites, the report takes the information provided as being completely factual at the point of time of this analysis. Double-checking facts or updates which were referred to in original commitments was not undertaken for the purpose of this report, mainly due to the lack of information originally provided by the committing parties.

The academic and scientific community, however, is taking steps to accurately measure intervention data results (http://www.plasticpeg.org). It is anticipated and expected that the required data needed for ***Commitment Scorecard*** analysis and comparisons in the future will be easier to capture. This will provide greater relevance for scores and expected outcomes.

- **Subjective choices for each scoring criterion.**

  The choices created for each scoring criterion, for the most part, have qualitative definitions that provide a guide for the scorer to select one choice over another choice.

  Over time, each ***Commitment Scorecard*** choice should be based on more quantitative information and data-driven definitions. As a result, all the scoring choices for each criterion will be more clearly defined, causing the selection of alternative choices to be an objective process.

- **Bias of scorers.**

  The 580 voluntary commitments were reviewed and scored by six individuals, each with his or her own biases, whether conscience of them or not.

  To counter such bias, there was a comparative review conducted after all the voluntary commitments were scored to check for scoring criteria inconsistencies, especially for similar voluntary commitments based on the ***PCC Codes***. Corrections were made as warranted to create greater consistency of the choices and more accurate relative scores among all voluntary commitments.

Scoring Methodology and Scoring Criteria Explained

The scoring methodology, and scoring criteria were created based on the in-depth review of a large majority of public voluntary commitments made through global conferences and a variety of NGO and UN reports on the problems of marine litter and microplastics, as well as conversations with experts in the field.

From this research, the scorecard was created, based on the underlying ***Commitments 2.0***'s guiding principles and the 11 key criteria of a voluntary commitment. Each of the 11 criteria was assigned a relative weighted value in evaluating and scoring the voluntary commitments:

The scoring methodology employs two time-tested academic processes for scoring:

[1] A Likert scale is a psychometric scale commonly involved in research that employs questionnaires. It is the most widely used approach to scaling responses in survey research. In our case, all responses are from a 0 to 5 Likert scale.

[2] The Pairwise Comparison Method compares entities in pairs to judge which is preferable or has a certain level of some property. This method is particularly applicable when the choices are significantly different from one another and where a relative measurement promises to yield insight. It is therefore useful for business situations which typically involve setting priorities in the context of limited resources.

First, we assigned variable choices for each of the 11 criteria. The choices were scored on a 0 to 5 scale for each criterion. Point increments between choices varied based on the number of choices in the criterion. If four choices, the scoring was 0, 1.67, 3.33, and 5. If six choices, from 0 to 5 in increments of 1 point. Each choice was scored relative to the other choices using this point scale within the criterion itself.

Second, we assigned weighted percentages [%s] for each criterion based on using the pairwise method of comparing all the criteria in a 1-versus-1 fashion to see which criteria have more importance.

PAIRWISE COMPARISON RANKINGS (WEIGHTED)

Rank	#	KEY CRITERIA	1	2	3	4	5	6	7	8	9	10	11
6	5	1 Intervention Focus											
2	6	2 Type of Initiative	1										
8	4	3 Primary Stakeholder	3	2									
11	0	4 Location	1	2	3								
1	9	5 Scalability	5	5	5	5							
2	6	6 Outcome/ Effort & Time	6	6	3	6	5						
2	6	7 Intent	7	7	3	7	5	6					
2	6	8 Time to Completion	8	2	8	8	8	8	7				
6	5	9 Resources Committed	1	2	9	9	5	9	9	9			
8	4	10 Resources Deployed	1	2	10	10	5	6	7	10	10		
8	4	11 Data Capture	1	2	11	11	5	6	7	8	11	11	
Total=100%													

Third, for each commitment, we made the appropriate scoring criteria selections. We then multiplied the point score for each of the criteria [from 0 to 5] by the criteria weighted percentages and added up all these scores for the 11 criteria.

We then took these 11 individual criteria scores and combined them into three scoring sections for analytical purposes: (1) Facts, (2) Magnitude/Potential Impact and (3) Velocity/Acceleration

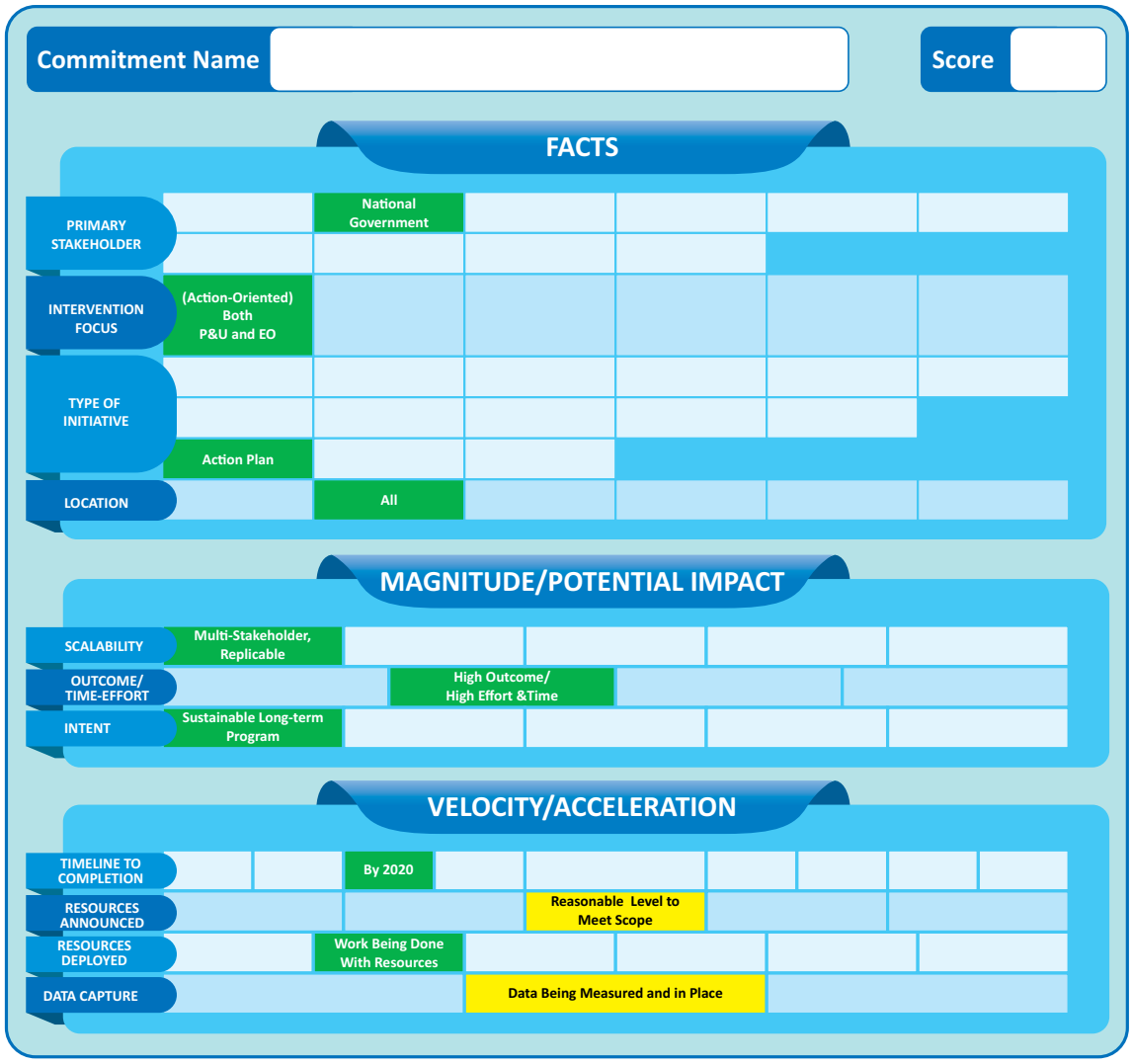
We then added these scores up to get the final commitment score—from 0 to 100 – using the ***Commitment Scorecard***.

Sorting thin film plastic for recycling, which requires economies of scale for efficient and profitable processing.

C5. Three Additional Sample Commitments—Viewing Scoring Criteria Selected

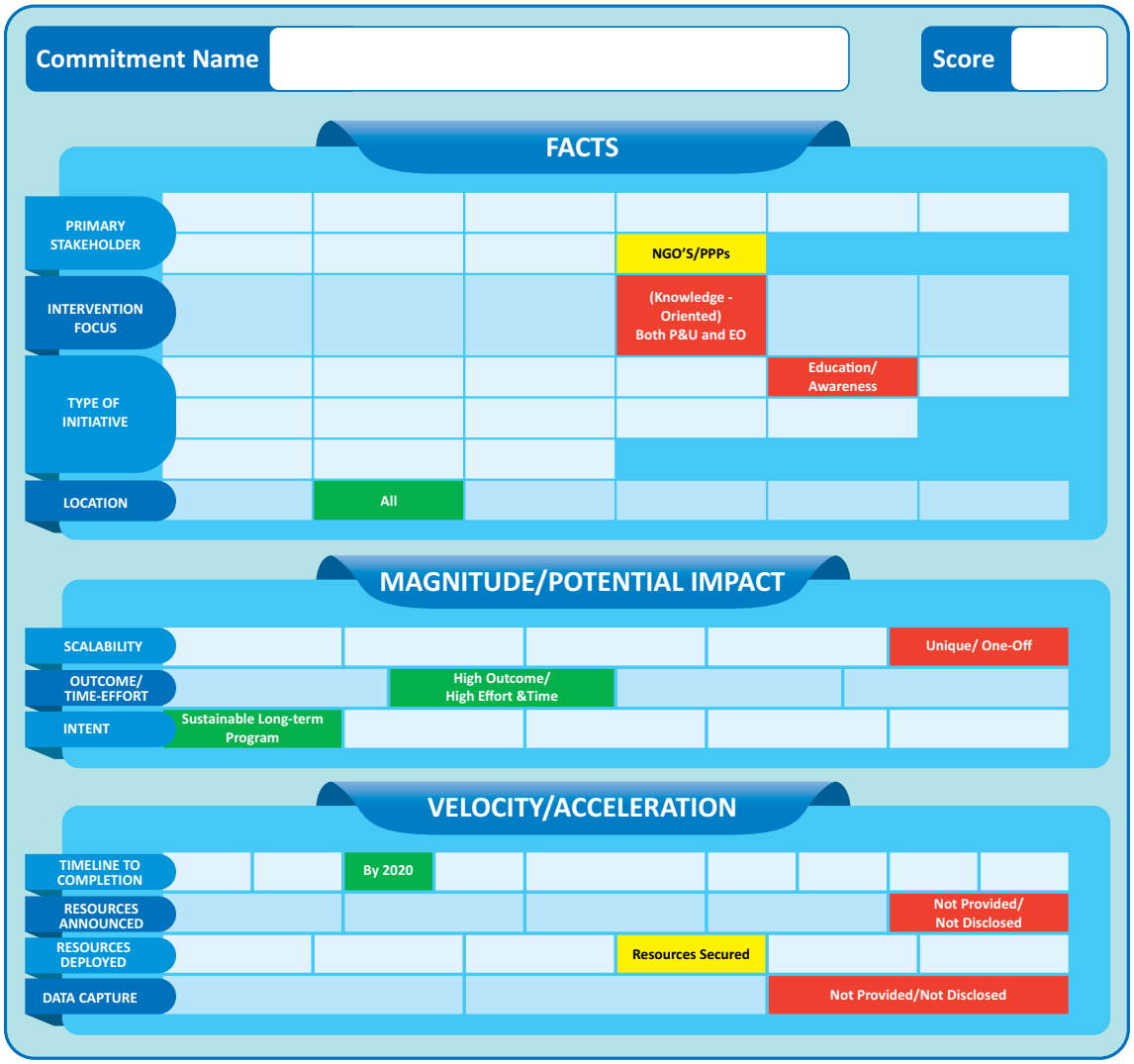
Here are three additional sample commitments, in addition to the ones listed in Section 5.4 of the report.

High-Scoring Commitment



This is an example of a national government making a commitment, with an intervention focus on waste management and product design improvements. It is an Action Plan where work is already being done with committed capital. Data is being captured. It's also a long-term sustainable, multi-stakeholder program that will require high effort and time, but yield expected high outcome results.

Middle-Scoring Commitment



This is a secured funded/resourced commitment by a NGO to educate the public about recycling in 2020. It is designed specifically for their local market, and could be turned into a sustainable long-term program. It could make a large impact in removing plastic waste, but will take effort and time to create the awareness curriculum and deploy. The NGO has not disclosed if it will capture and share data.

Bales of thin film plastic before being sorted.

Low-Scoring Commitment

Commitment Name		Score	

FACTS

PRIMARY STAKEHOLDER				NGO'S/PPPs		
INTERVENTION FOCUS				(Knowledge - Oriented) Both P&U and EO		
TYPE OF INITIATIVE					Education/ Awareness	
LOCATION		All				

MAGNITUDE/POTENTIAL IMPACT

SCALABILITY					Unique/ One-Off
OUTCOME/ TIME-EFFORT		High Outcome/ High Effort &Time			
INTENT				To Inform/ Educate/ Research	

VELOCITY/ACCELERATION

TIMELINE TO COMPLETION						By 2023		
RESOURCES ANNOUNCED							Not Provided/ Not Disclosed	
RESOURCES DEPLOYED						Announced/ In Planning		
DATA CAPTURE						Not Provided/Not Disclosed		

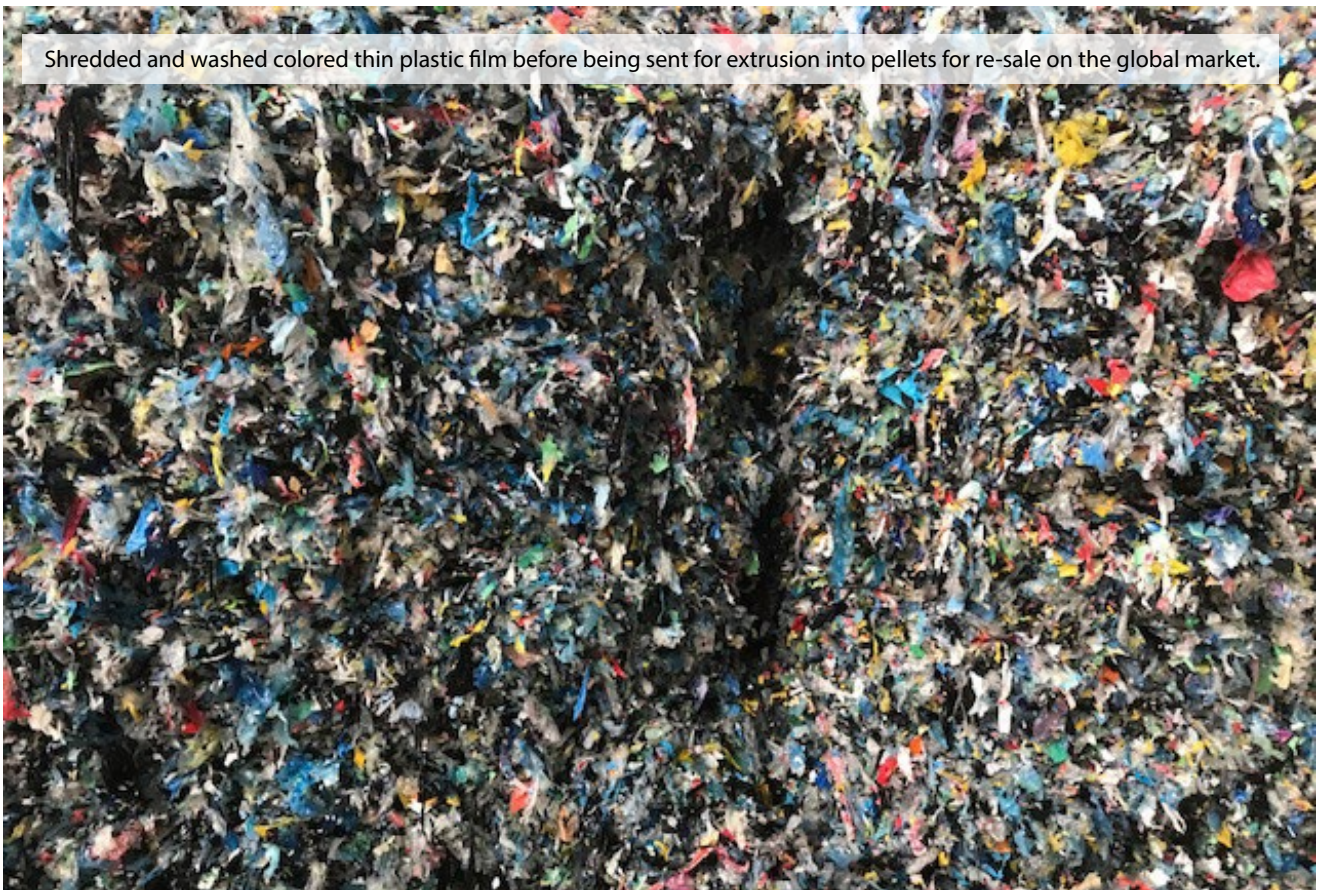
This commitment is a long-term, large-scale joint effort between a local NGO and a university to conduct local events to prepare an island for being a zero-waste region by 2023. While the program is announced, there is no public disclosure of any funding/resources committed or explanation if data will be captured. Given that the committed events will be tailored only to meet the direct needs of numerous communities on the small island archipelagos—and given that its milestone goal is due in 2023—it is deemed to be a one-time commitment that is not easily replicated.

Washing white thin film plastic after being shredded.

C6. Five Examples of Voluntary Commitments with High Scores (Scores range from 73 to 85, out of 100))

WHY SHOWCASE THESE FIVE EXAMPLES:

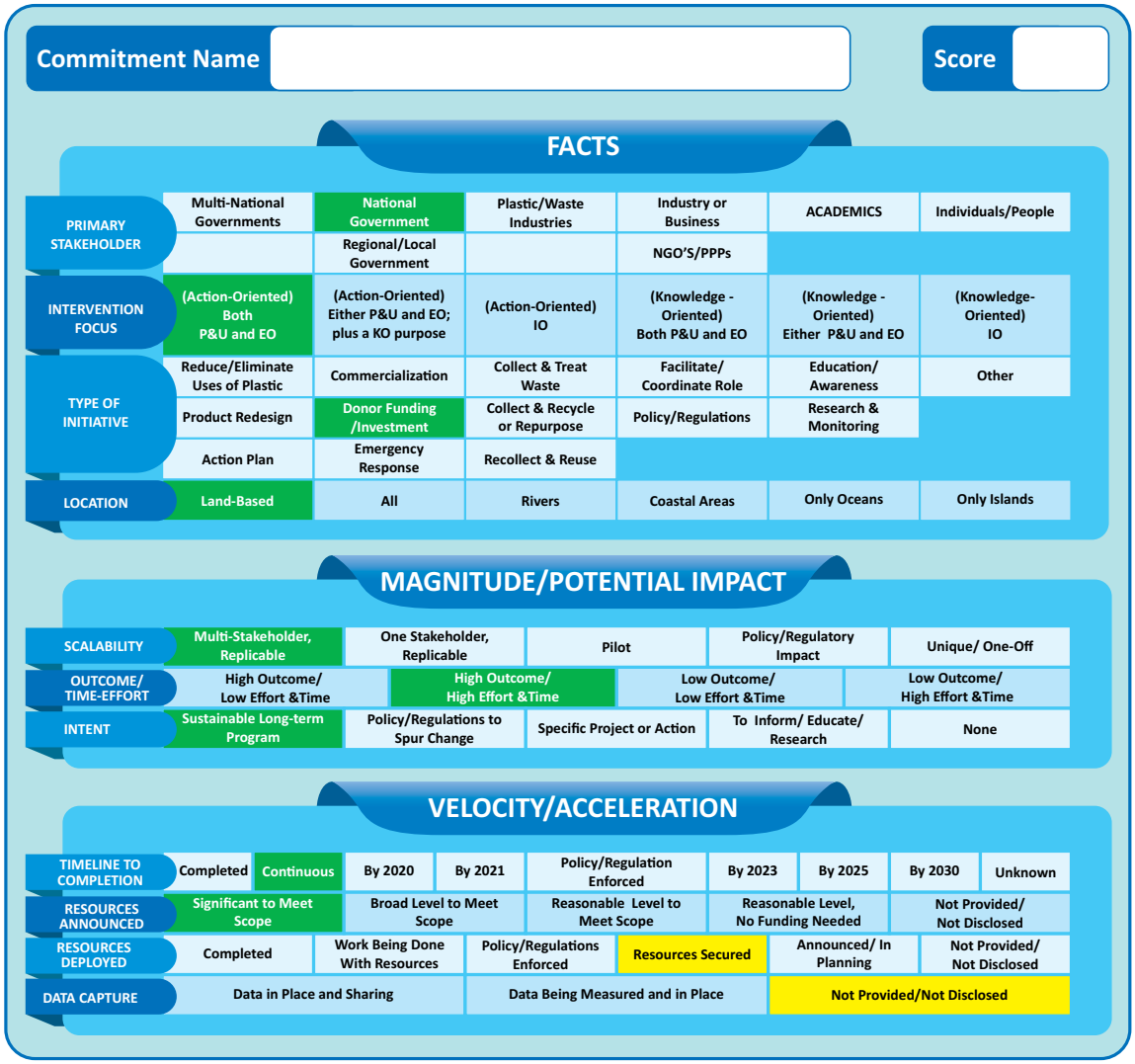
- These five voluntary commitments were among the very highest scores, yet they were chosen to illustrate the potential for stakeholders to adopt the ***Commitments 2.0's*** guiding principles and scorecard – especially through the lens of providing detailed information to ascertain the facts, velocity and magnitude of each voluntary commitment.
- In each example, there are clear ways to improve not only a voluntary commitment s score and the information shared publicly with all stakeholders, but ultimately the voluntary commitment's impact. Moreover, with standardization, stakeholders have great incentive to showcase voluntary commitments that not only score highly when first announced publicly, but also when proven, with data capture and meeting milestones. Then, these successful programs and projects can be replicated and scaled by other stakeholders around the world.
- By showcasing some of the highest scoring voluntary commitments, yet pointing out where score improvements can occur, stakeholders can see what's possible for creating their next voluntary commitments, especially in contrast to what they described and set out to complete in their previous lower scoring ones.
- Last, but certainly not least, while all five examples featured National Governments as doers or donors, the scorecard does not favor large stakeholders. A smaller stakeholder with a smaller project, with an initial high voluntary commitment score, will have the same greater probability of high-impact results, over time, and a great shot to be replicated and scaled by similarly smaller stakeholders around the world. What works, at any size, should be screamed far and wide. Every high-scoring voluntary commitment that delivers quantified high-impact matters.



Shredded and washed colored thin plastic film before being sent for extrusion into pellets for re-sale on the global market.

DONOR FUNDER - Example #1

Announced a multi-annual program to assist developing countries in improving waste management to prevent land-based litter from ending up in the ocean, including plastics and microplastics. Beach and coastal cleanups may also be part of the initiative. The program will be launched in 2018 with NOK 150 million - approximately EUR 16.2 million - set aside for the first year.



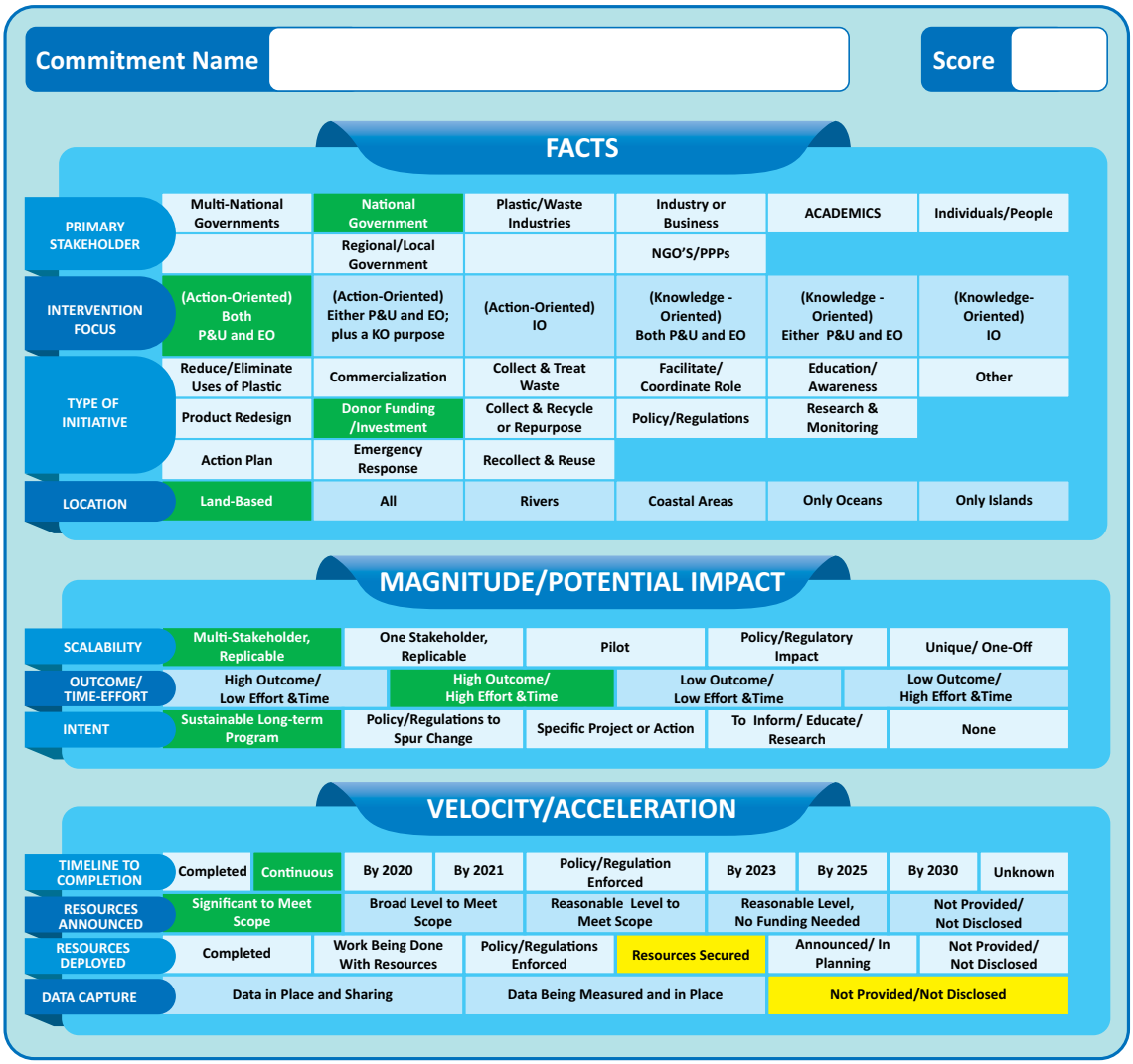
FACTS: This voluntary commitment is clearly defined, with a large amount of funds for programs established.

MAGNITUDE/POTENTIAL IMPACT: This program, once proven, can be easily replicated and scaled, assuming data are captured, and results are worth the effort/time.

VELOCITY/ACCELERATION: This voluntary commitment is well-funded and assumed to continue yearly. It, however, does not provide how data will be measured. Funding is allocated, but there is no update as to whether or not the program was initiated ("will be launched").

NATIONAL GOVERNMENT - Example #2

Announced it has set up the 2017-2021 Pollution Management Plan to maintain the quality of the marine environment and tackle marine pollution from land-based activities. It also announced the adoption of the National Master Plan on Waste Management 2016-2021 and will launch the National "3R" (Reduce, Reuse, Recycle) strategy and a Plastic Debris Management Plan to reduce plastic waste by 2021. The plan consists of three key measures, namely 1) raising awareness of plastics usage and its effect on marine environment, 2) reducing plastics usage, and 3) enhancing research capacity in field of plastic material/ plastic substitute and marine debris assessment. The first campaign will be launched in order to end the use of drinking water bottle cap-seals which will help reduce 520 tons of plastic waste annually.



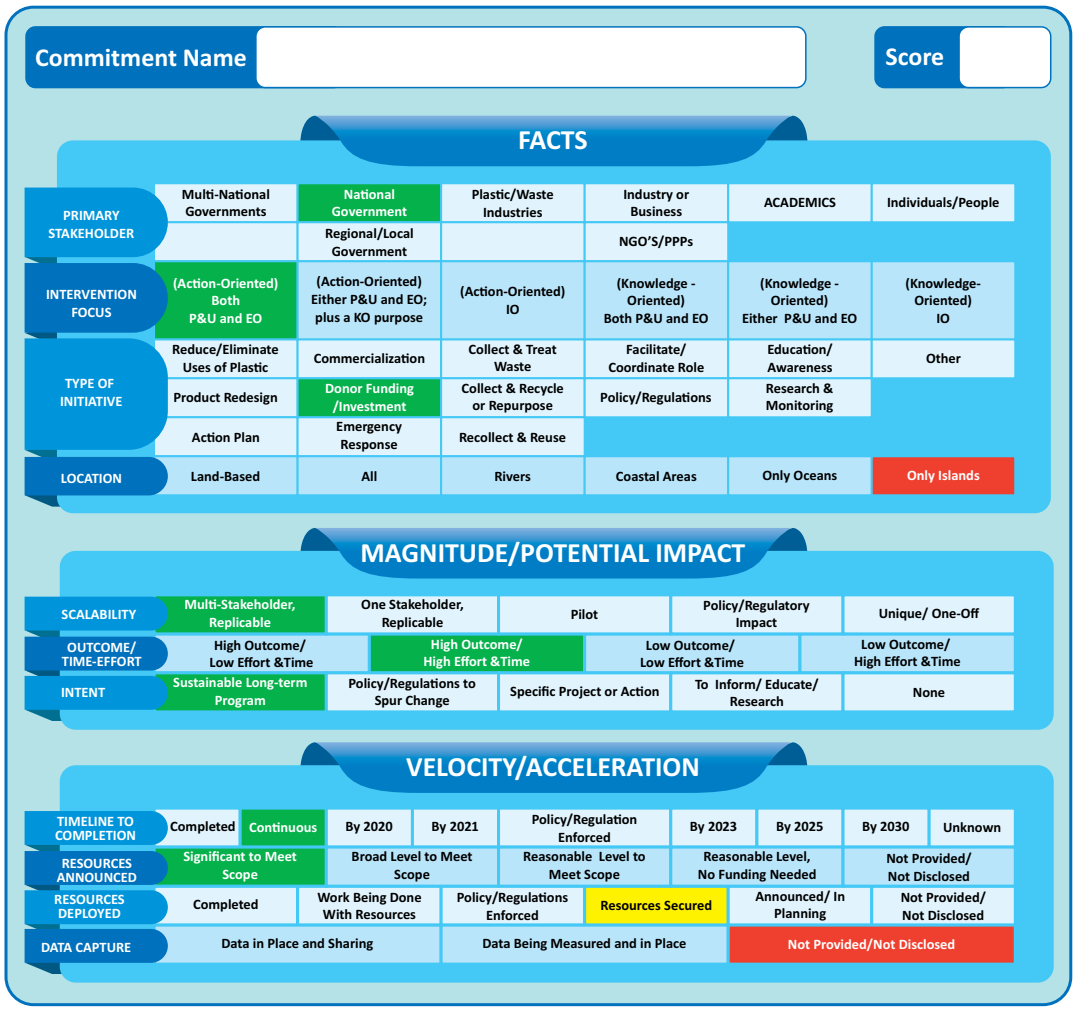
FACTS: This voluntary commitment contains possibly four voluntary commitments (three action plans and one specific program) that could be split up and live on their own as all could have timelines, attainable milestones and metrics. In fact, the first campaign is publicly announced with a definitive plastic reduction goal to meet.

MAGNITUDE/POTENTIAL IMPACT: Each of these plans should be shared with other stakeholders as programs are proven. Imagine if there was a way to share how this stakeholder achieves its drinking water bottle cap-seal milestone –and if and how it can then be quickly replicated by many other nations. That's the goal.

VELOCITY/ACCELERATION: Written as if one voluntary commitment, the information provided by the stakeholder lacks the detail required to understand how this stakeholder will achieve even its first campaign goal of reducing drinking water bottle caps by 520 tons, not to mention a lack of understanding what it required to achieve the three action plans introduced. If the stakeholder updates this voluntary commitment, or splits it into four separate ones, and structures each to maximize velocity, it will be easy to envision a far greater impact in a shorter period of time

DONOR FUNDER - Example #3

Reaffirmed EUR 13.6 million (USD 15 million) support to fund phase two of its regional solid waste initiative in Pacific Island Countries (February 2017 to February 2022) which is based on the outcomes of Phase I (February 2011 to February 2016). This Project aims to strengthen both human and institutional capacity.



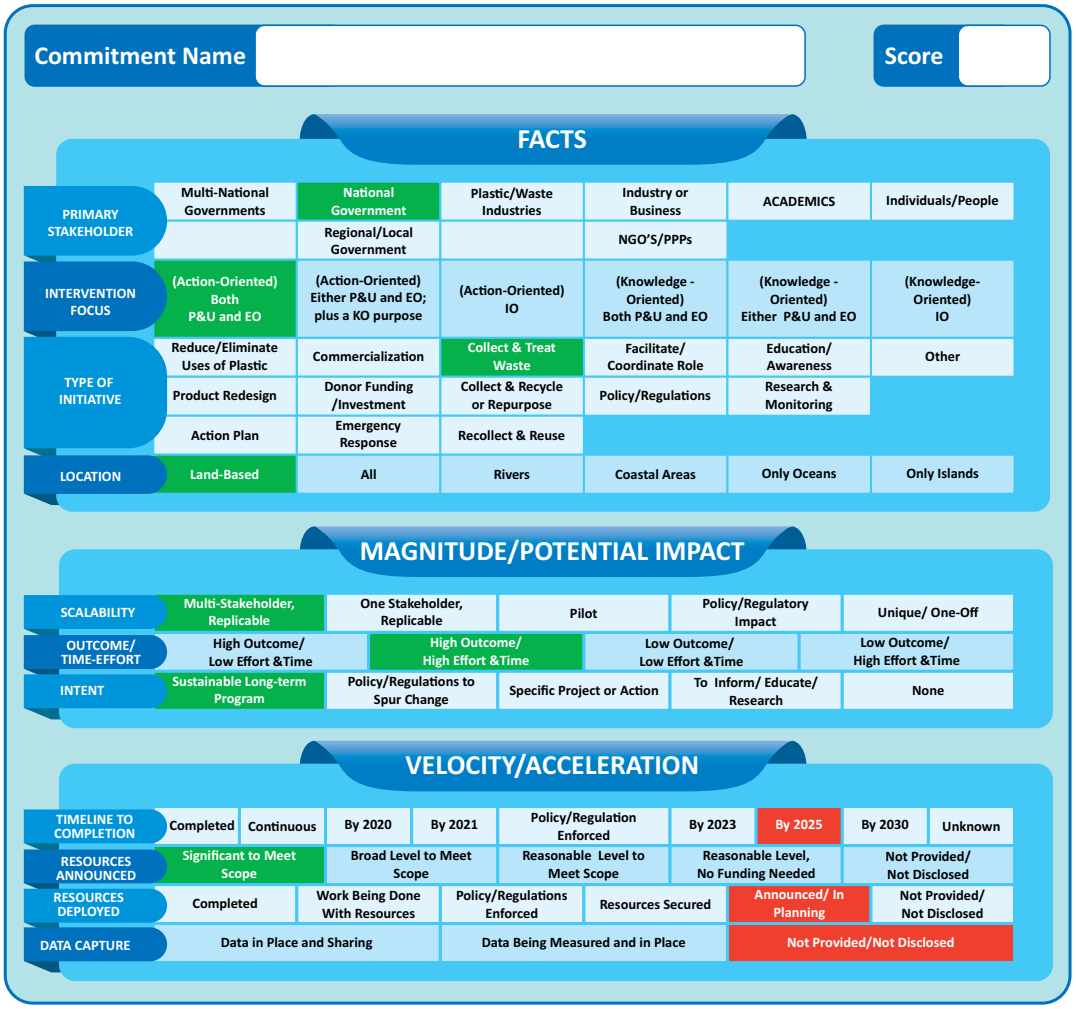
FACTS: This voluntary commitment is clearly defined to assist targeted islands. It is the (self-replicated) renewed extension of a successful program.

MAGNITUDE/POTENTIAL IMPACT: This voluntary commitment is a prime example of a completed program for islands that could be replicated/scaled by other stakeholders once data results are quantified and shared.

VELOCITY/ACCELERATION: Well-funded and assumed to continue yearly for 5 years. Voluntary commitment, however, does not provide how data will be measured. Funding allocated, but no update as to if the program started, nor the impact of first phase.

NATIONAL GOVERNMENT - Example #4

The 2015-2020 National Waste Management Plan estimates there are 37 illegal dump sites in the coastal region…. Since the plan includes the establishment of a modern system of waste management, it will be necessary to solve all the existing problems caused by the existence of such facilities. This basically means that it will be necessary to rehabilitate or remove all such dumps…



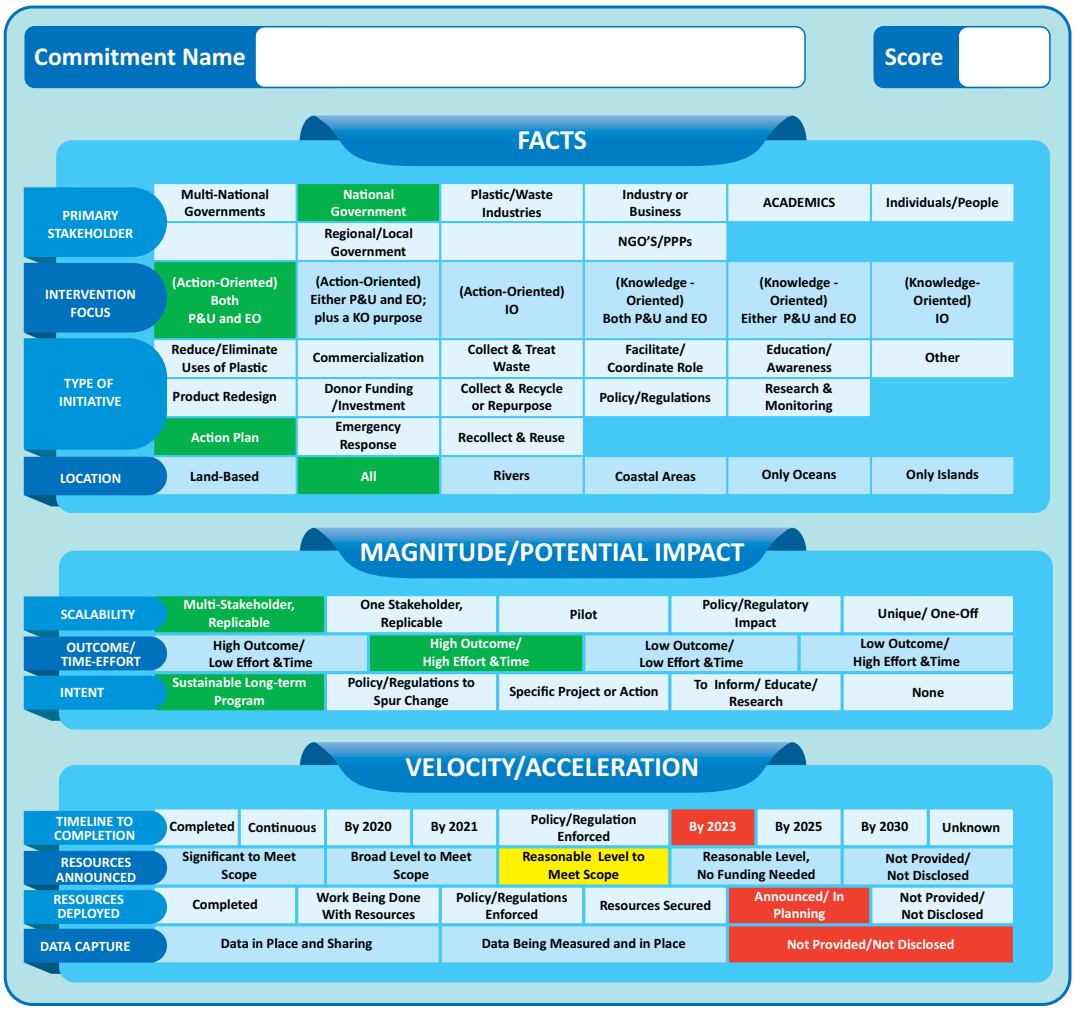
FACTS: The voluntary commitment is clearly defined, however only focused on waste management. What if, for example, the stakeholder efforts to incentivize the tourism industry to redesign single-use products used by tourists, or to encourage alternative solutions to drive down the amount of plastic waste being produced.

MAGNITUDE/POTENTIAL IMPACT: This program, once proven, can be easily replicated and scaled, assuming data are captured, and results are worth the effort/time. In fact, this program could be a very important waste management program

VELOCITY/ACCELERATION: This voluntary commitment states that the program is from 2015-2020, yet deliverables are due by 2025. Multi-million dollar estimated project value, but no mention of actual funding or how data are tracked. Update listed as 8 months late on UN site. Updated results and program effectiveness would be valuable for other stakeholders to assess their interest to replicate.

NATIONAL GOVERNMENT - Example #5

The national strategy to replace the consumption of single-use plastics with renewable and compostable alternatives…Promote and publicize municipal regulations to eliminate plastic from a single use or to replace them with renewable and compostable products… Promote the substitution of single-use plastic products...among merchants, wholesalers and retailers throughout the country. Encourage R&D…. Encourage investment in productive projects that contribute to the substitution of single-use plastic for renewable and compostable alternatives.



FACTS: This voluntary commitment is a clearly defined five-year action plan. It, however, could be split up into several voluntary commitments that all have their own timelines, attainable milestones, and data capture measures –and high scores.

MAGNITUDE/POTENTIAL IMPACT: If the stakeholder can implement each detailed program within the action plan, especially with strong supporting data, not only can each program be easily replicated and scaled, assuming results are worth the effort/time, but the overall plan can be replicated, too.

VELOCITY/ACCELERATION: With an ambitious action plan to eliminate single plastics in their country, the stakeholder's public declarations of the four velocity criteria do not seem to match with ability to execute: It only announced the voluntary commitment; the time to completion is set for 5 years later, and only a small amount of money has been committed. Furthermore, there is no mention if and how data will be captured.

C7. Using the Commitment Scorecard in the Future

IMPROVING THE COMMITMENT SCORECARD AND METHODOLOGY

It should be noted that even with the limitations mentioned above, the relative value of the scores for 580 voluntary commitments provide great analytical insights, especially related to activities and interventions, as only a small minority of voluntary commitments received relatively high scores, whereas the majority of voluntary commitments had scores that reflected a general lack of information or were not very well constructed relative to the 11 scoring criteria.

For a next iteration of the ***Commitment Scorecard***, it is therefore fully expected that many of the limitations will be addressed, a great amount of information will be available for consideration, and even more insight will be gleaned when comparing all the voluntary commitments with one another. Furthermore, it should also re-evaluate both the overall weighted contribution and the relative importance of each scoring criterion, as well as replace subjective choice alternatives with more objective, academically defined and data-driven selection choices where possible.

UPDATE EACH COMMITMENT FOR HIGHER SCORING [REWARD FOR ACHIEVING RESULTS]

As currently constructed, scores can be increased, over time, by updating the status of the commitment, especially related to data capture and funding—two very important aspects.

What if the world has a "Commitment Scoreboard" in the future that can show all the commitments made, with updated real-time scores as a result of periodic updates from all stakeholders? Final commitment results can then be achieved for each stakeholder—in a friendly competitive sort of way—with an easy way to showcase real successes.

CREATION OF COMMITMENT REPOSITORY WITH CASE STUDIES

By highlighting excellent commitments, the world can create a library/repository of voluntary commitments that can be replicated and scaled. These case studies can be created and then used by stakeholders for step-by-step program/project replication.

D ANALYSIS OF AND INSIGHTS FROM CURRENT COMMITMENTS

VIEWING ALL 580 VOLUNTARY COMMITMENTS

SOURCES: The voluntary commitments were selected from four publicly available sources and were issued between 2014 through June 2018:

UN Ocean Conference 2017

Our Ocean Conference 2016

Global Plastic Alliance's MarineLitterSolutions.com

UN Environment 2018 Single-Use Plastics Report

SELECTION PROCESS: The voluntary commitments were selected based on the following factors:

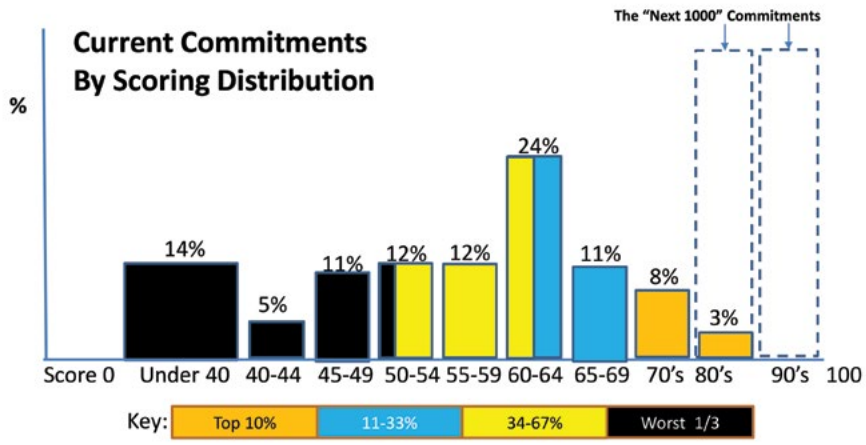
1) Marine litter, microplastics or plastic pollution was prominent or tangential in the voluntary commitment description.
2) The voluntary commitment information provided, and description were detailed enough to extract enough information to complete the Commitment Scorecard.
3) The issuance date of the commitment was after 2014, the year of the first Our Ocean Conference. This could include any voluntary commitment that was issued and already completed upon adding it into the database.

Detailed Analysis of All 580 Commitments & 11 Scoring Criteria

1) Initiatives by Score
2) Primary Stakeholder Insights
3) Scoring and Intervention Insights
4) By Magnitude Criteria
5) By Velocity Criteria

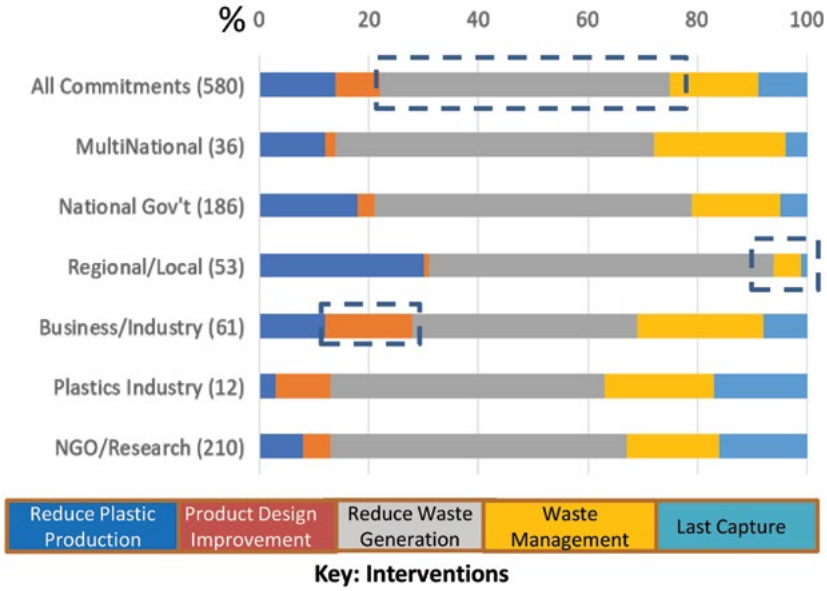
Washing shredded thin film plastic during the recycling process at large scale. The water is cleaned and recycled along the way.

D1. Various ways to view Data by Different Segmentations



Scoring Insights

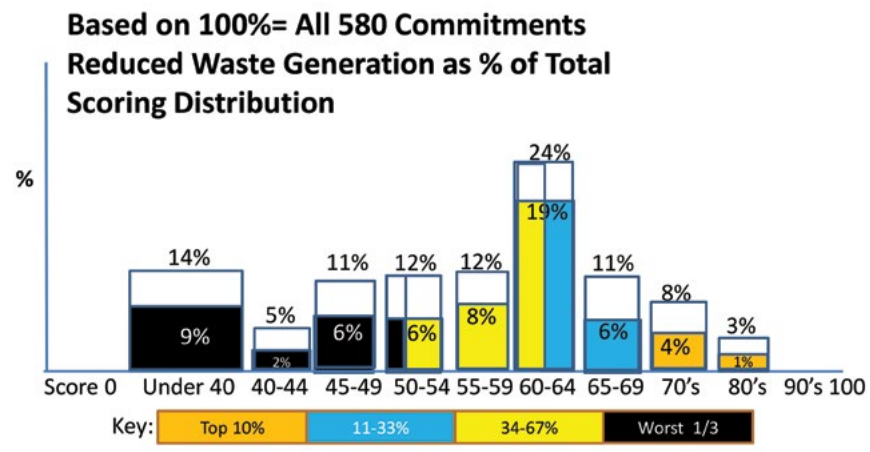
- Only 11% of all commitments scored above 70. The 'next 1000" commitments should shoot for scores in the 80s and 90s.
- Scores below 70 indicate Commitment structural problems that need to be improved for the "next 1000" commitments:
  - Poor Data Capture
  - Lack of funding updates
  - Non-disclosure of key information
  - Later end dates of commitments

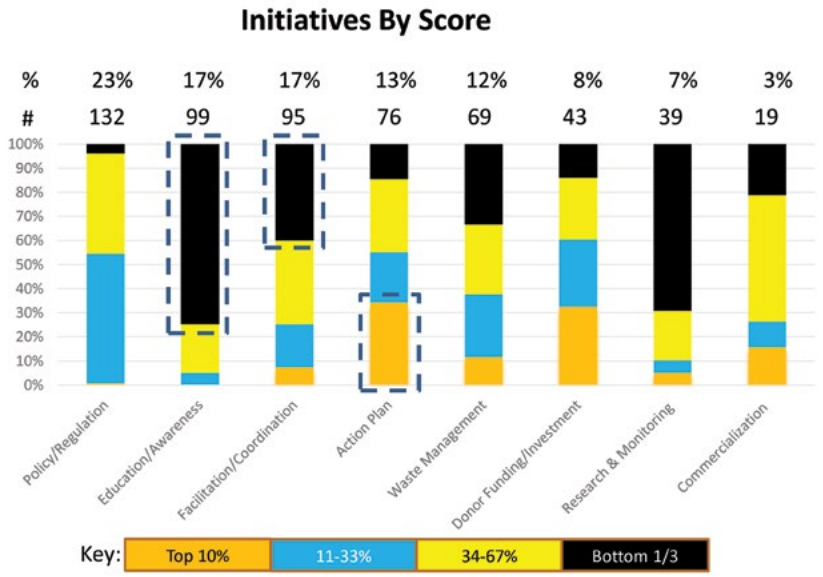


Intervention Insights

- A disproportionate 63% of all commitments were made to "Reduce Waste Generation" as the primary intervention response. This "high" percentage was similarly seen in each stakeholder across the board.

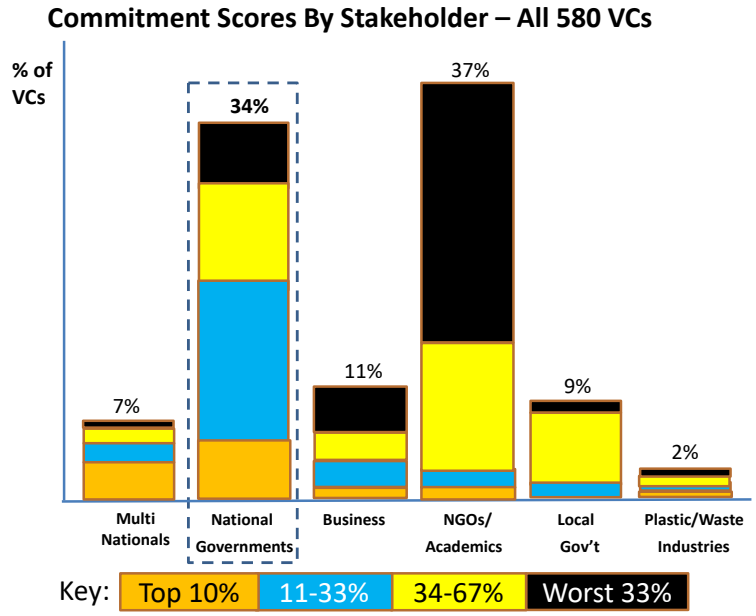
  Unfortunately, their scores were also proportionately and similarly low across each stakeholder, too, as their score distribution was similar to the overall scoring curve.
- Waste Management Improvement interventions are also noticably small in percentages and in quantity for all stakeholders. This is especially puzzling for Regional/ Local Governments which had the smallest percentage of its commitments focused on Waste Management of all stakehOlders given that waste management is often managed at the municipal level. Wrth increased focus on waste management commitments, one would expect a commensurate increase in commitment.s over time by Regional/local Governments.
- With only 9% of commitments, Product Design Improvement was not a pivotal intervention used by stakeholders. Wrth the recent commitment by 285 stakeholders to participate in the Ellen Macarthur Foundation's Circular Economy Commitment issued at the 2018 OurOcean conference, individual stakeholder commitments should be forthcoming.





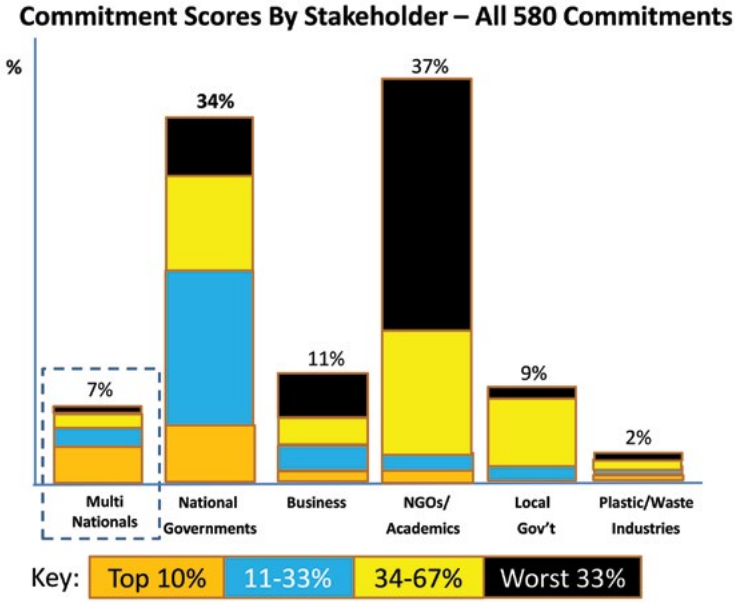
Initiative Insights:

- 34% of all Initiative-based commitments were focused on Education/Awareness, or Facilitation/Coordination. A large percentage of them received low scores.
- Action Plans received the highest percentage of Top 10% scores for any initiative.



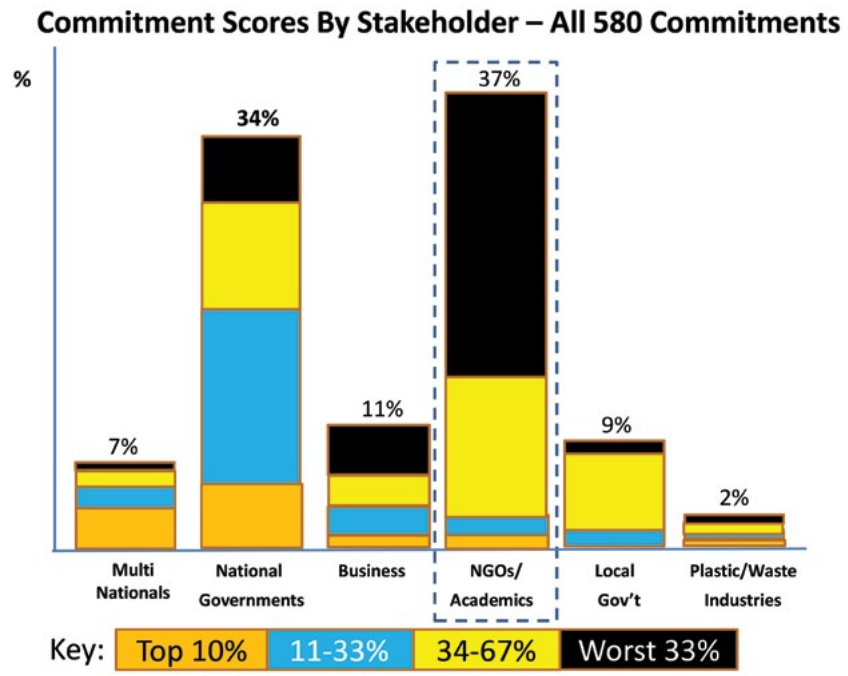
Primary Stakeholder Insights

- 34% of all commitments were made by National Governments. 50% scored in the bottom half of all scores.



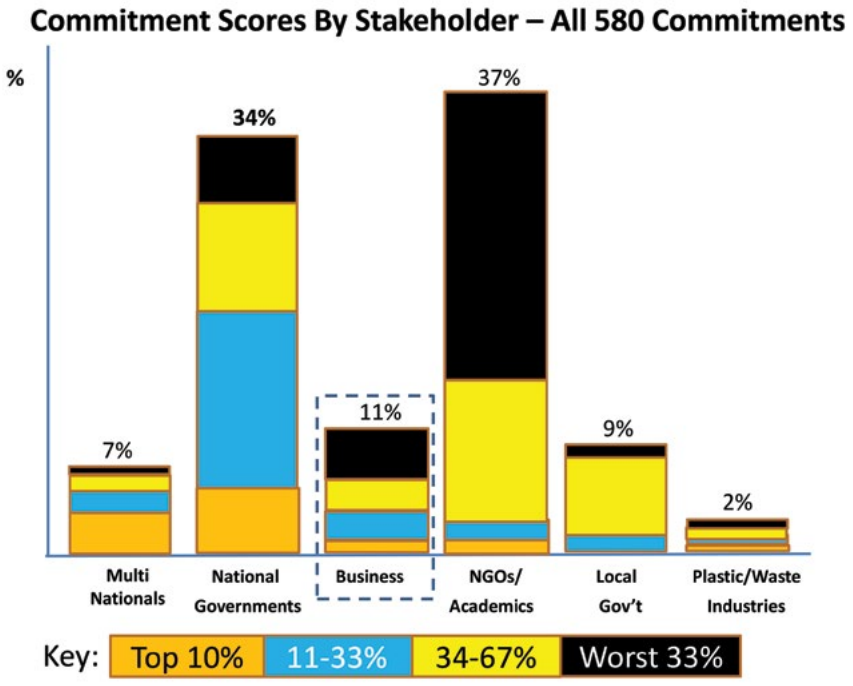
Primary Stakeholder Insights

- While only 7% of all commitments are offered by Multi Nationals, when two or more governments collaborate, they receive a far greater percentage of Top 10 Scores.



Primary Stakeholder Insights

- 37% of all commitments were made by NGOs/Academics. Not only the largest in number, they collectively had the worst stakeholder performance as a large number of commitments received low scores.

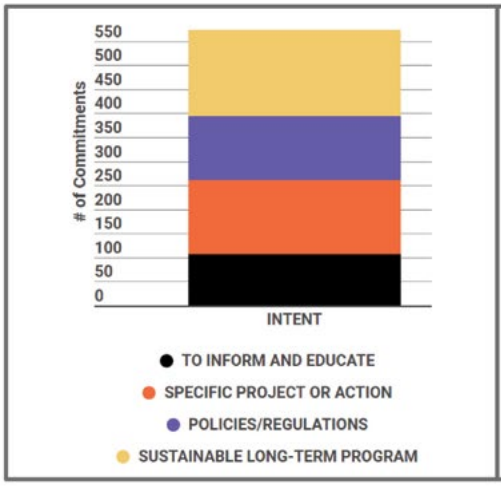


Primary Stakeholder Insights

- Industry and Business, at 11% of all commitments, should step up and issue more commitments.
- About 25% of these commitments (3% of the 11%) were for commercialization activities.

BY MAGNITUDE/POTENTIAL IMPACT

The Magnitude of a voluntary commitment provides a possible relative degree of scaled impact. Within this category are the impact criteria that should be factored into the creation of the commitment itself. Ideally, each commitment should be highly scalable with multiple actors, have high outcome potential, and be designed with long-term sustainability in mind.



Intent

Top 10%

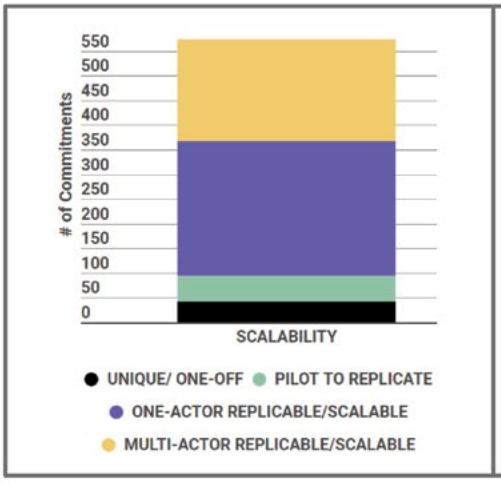
SUSTAINABLE LONG-TERM PROGRAM	Specific Project/Action
87%	6%

Remaining 90%

Policies /Regulations	Specific Project/Action	To Inform
30%	25%	20%

Insights:

87% of all Top 10% Commitments are Long-term Sustainable Program. In the Remaining 90%, it was selected as the main choice in less than 20% - which was the 4th highest choice.



Scalability

Top 10%

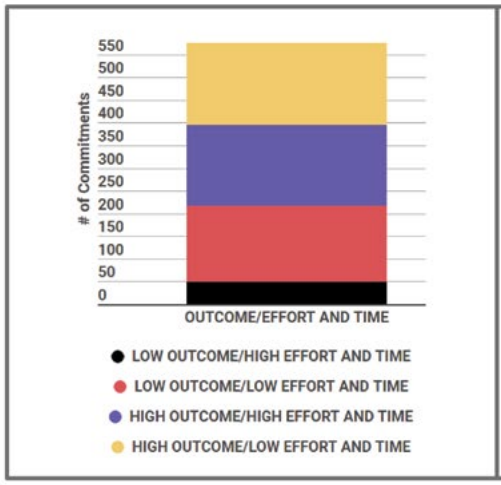
MULTI-ACTOR REPLICABLE & SCALABLE	ONE-ACTOR REPLICABLE & SCALABLE
88%	12%

Remaining 90%

MULTI-ACTOR REPLICABLE & SCALABLE	ONE-ACTOR REPLICABLE & SCALABLE
29%	49%

Insights:

Most (80%) commitments score as replicable and scalable. When Data Capture and reporting is added to them, stakeholders should have a large number of programs and projects to select.



Outcome/Effort and Time

Top 10%

High Outcome /Low Effort & time	High Outcome /High Effort & time	Low Outcomes
78%	22	0%

Remaining 90%

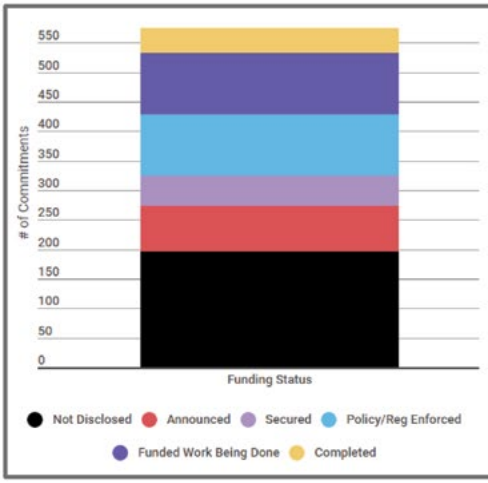
High Outcome /Low Effort & time	High Outcome /High Effort & time	Low Outcomes
32%	28%	40%

Insights:

It is paramount that stakeholders undertake new commitments that yield High Outcomes. If High Effort and Time commitments yield high scores, then a green light should occur.

BY VELOCITY/ACCELERATION

These are the criteria that are directly controllable by the stakeholder, and they can determine the speed in which results are recorded and impact happens. Ideally, each commitment should have a shorter timeline to completion, appropriate secured funding/resources, and be set to capture and measure its data. The Velocity/Acceleration can have a measurable impact on the Magnitude/Potential Impact of the commitment.



Resources Deployed

Top 10%

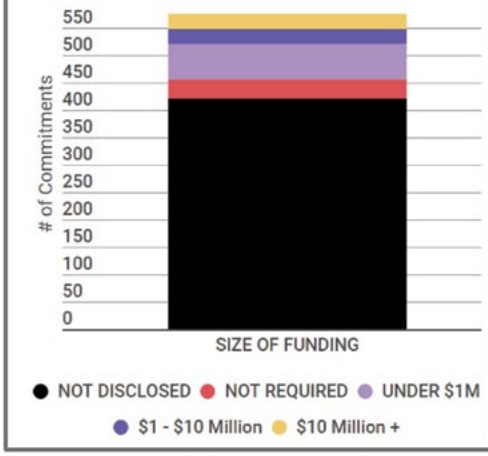
FUNDING STATUS	FUNDING SECURED	FUNDED WORK STARTED
	30%	26%

Remaining 90%

FUNDING STATUS	NOT DISCLOSED	ANNOUNCED, NOT FUNDED
	37%	12%

Insights:

To increase velocity and greater results in a shorter timeframe, it will be important to publicly declare that funding and/or resources has either been secured or funded work has already started.



Commited Resources Announced

Top 10%

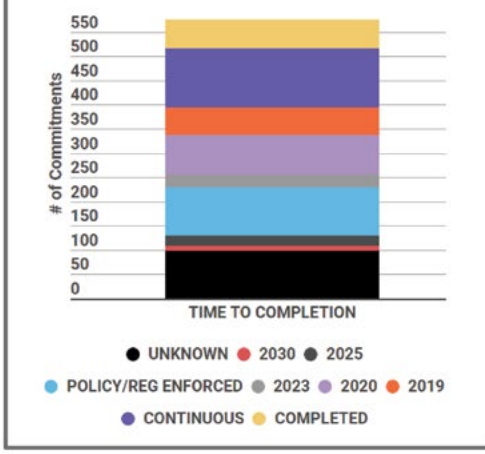
$10M+	$1-10M	Under $1M	
32%	24%	16%	

Remaining 90%

$10M+	$1-10M	Under $1M	Not Disclosed
2%	4%	10%	60%

Insights:

While the amount of funding/resources is not an indication of future impact, a case can be made that funded commitments are more thought-out, publicized, and have increased velocity (e.g. 70% of Top 10 Scores)



Timeline to Completion

Top 10%

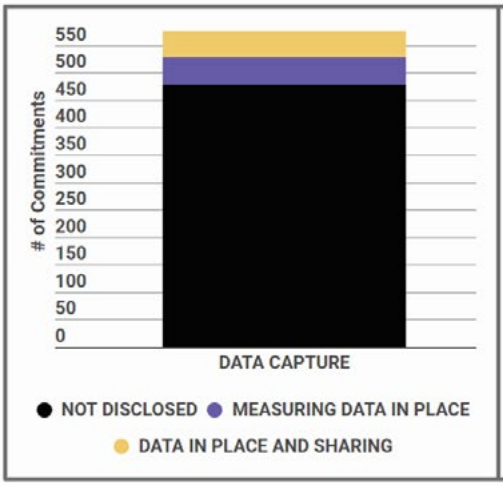
CONTINUOUS	2019	2020
46%	14%	14%

Remaining 90%

UNKNOWN	2019	2020
19%	10%	14%

Insights:

Faster velocity can be function of high-scoring commitments with shorter time to completion dates. 74% of the Top 10% show short-term time to completion milestones by 2020. In contrast, 76% of the Remaining 90% have timelines past 2020.



Data Capture

Top 10%

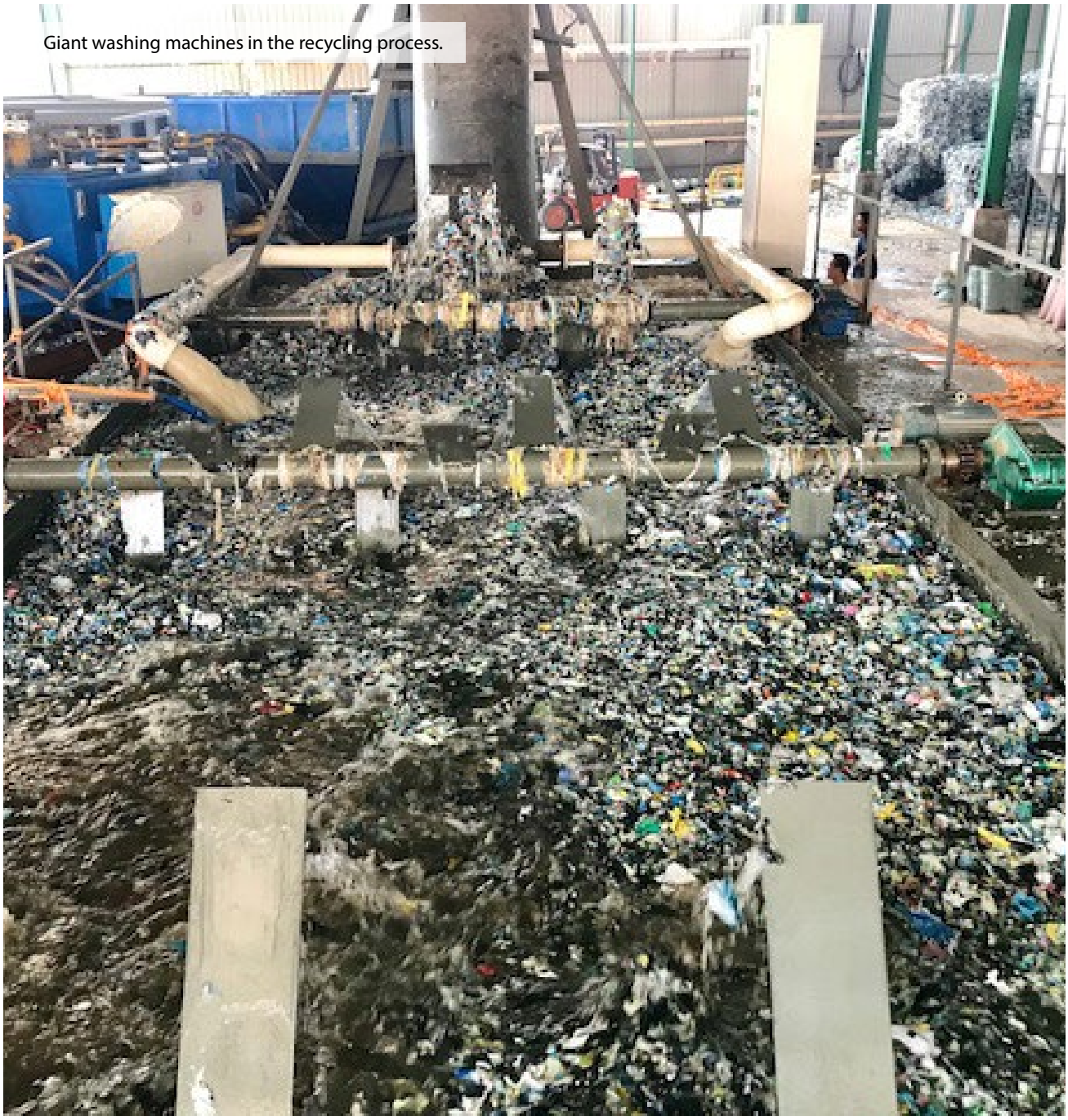
NOT DISCLOSED
78%

Remaining 90%

NOT DISCLOSED
82%

Insights:

The lack of data capture and reporting is pronounced-in over 450 of the 580 Commitments. There can be great value in quantifying the impact of a commitment, especially to determine if it should be fast-tracked to be replicated and scaled throughout the world. Currently, this is not possible.



Giant washing machines in the recycling process.

E PLASTIC CATEGORY CLASSIFICATION (PCC) CODES

As part of the ***Commitment Template*** process, each stakeholder has the opportunity to review the ***PCC Codes*** to find relevant ones to replicate completed by a similar stakeholder, or to forge new ones completed by other stakeholders, but which can be applied to meet the stakeholder's objectives and goals. These codes are categorized based on stakeholder and initiative and descriptive purpose.

E1. PCC Codes Sorted by Stakeholder/Initiative

This view is by stakeholder. Imagine, for example, you are an NGO in a small country interested in reducing microfibers in your local area. By reviewing the list, you see under NGOs, there is a ***PCC Code*** titled "Action Plan-NGOs-Reduce Microfibers." As suggested in the report "Creating High-Impact Actions to Reduce Marine Litter," this stakeholder could search on the appropriate ***PCC Code*** and view a current voluntary commitment (if updated), or a proven completed voluntary commitment, to potentially reach out to the stakeholder and/or view available program materials that describe all aspects of what was done. Then, the stakeholder could use some of the available information as is practical to replicate the voluntary commitment, rather than create one from scratch.

MULTI-NATIONAL STAKEHOLDER

Action Plan-Multi-Nationals-Regional Blue Economy
Action Plan-Multi-National-Prevent Marine Litter
Donor/Investment-Multi Nationals Governments-Plastics Prevention Projects
Donor/Investment-Multi-National Government-Policy Support
Facilitation/Coordination-Multi Nationals-Cruise Tourism & Ports Waste
Facilitation/Coordination-Multi Nationals-Global Marine Data Network
Facilitation/Coordination-Multi Nationals-Information Platform
Facilitation/Coordination-Multi Nationals-Marine Litter Collaborations
Facilitation/Coordination-Multi-National-Information Platform
Monitoring-Multi Nationals-Marine Litter in Ocean
Policy/Regulation-Multi Nationals-Reduce Marine Litter in Ship Waste
Policy/Regulation-Multi-National-Plastic Bag Ban
Policy/Regulation-Multi-National-Reduce Plastic Leakage
Policy/Regulation-Multi-National-Reduce Ship Waste
Reducing or Eliminate Uses of Plastic -Multi Nationals Governments-Donor Funding of Plastics Prevention Projects
Reducing or Eliminate Uses of Plastic - Multi Nationals- Policy/Regulation to Reduce Marine Litter in Ship Waste

Reducing or Eliminate Uses of Plastic - Multi Nationals- Policy/Regulation to Reduce Plastic Leakage
Reducing or Eliminate Uses of Plastic - Multi Nationals- Policy/Regulation to Reduce Ship Waste
Reducing or Eliminate Uses of Plastic - Multi Nationals-Take Actions to Reduce Plastics in Use
Research-Multi Nationals-Action Plan Report for Marine Litter
Research-NGOs-microplastics
Waste Management-Multi Nationals-Take Actions to Reduce Plastics in Use

NATIONAL GOVERNMENT STAKEHOLDER

Action Plan-National Governments - Marine Debris
Action Plan-National Governments- Waste Management
Action Plan-National Governments-Aquaculture
Action Plan-National Governments-Circular Economy
Action Plan-National Governments-Fishing
Action Plan-National Governments-Marine Debris
Action Plan-National Governments-Marine Litter
Action Plan-National Governments-National Plan & Waste Strategy
Action Plan-National Governments-Reduce Plastic Waste
Action Plan-National Governments-Regional Sustainability
Action Plan-National Governments-Waste Management for Ports/Harbors
Action Plan-PPPs-Collect & Use Recycled Plastics
Commercialization-National Governments-Innovations
Commercialization-National Governments-Waste to Energy Support
Donor/Investment-Multi-National Government-Plastics Prevention Projects
Donor/Investment-National Governments - Innovation
Donor/Investment-National Governments - Product Design
Donor/Investment-National Governments-Country Program Assistance
Donor/Investment-National Governments-Marine Litter
Education/Awareness-National Governments-Awareness Campaigns
Education/Awareness-National Governments-Marine Litter
Education/Awareness-National Governments-Student Education Programs
Education/Awareness-National Governments-Surveys
Facilitation/Coordination-National Governments-Beach Cleanups
Facilitation/Coordination-National Governments-Information Platform
Facilitation/Coordination-National Governments-Marine Litter
Facilitation/Coordination-National Governments-Waste Management Community Training
Policy/Regulation-National Governments-Plastic Bag Tax
Policy/Regulation-National Governments-Plastic Bags Ban
Policy/Regulation-National Governments-Plastics Bans
Policy/Regulation-National Governments-Plastics Product Bans
Policy/Regulation-National Governments-Agree to Join a Global Program
Policy/Regulation-National Governments-Ban Styrofoam
Policy/Regulation-National Governments-Create Marine Debris National Policy
Policy/Regulation-National Governments-Microbeads Ban
Policy/Regulation-National Governments-Plastic Bags Ban
Policy/Regulation-National Governments-Plastics Product Bans
Policy/Regulation-National Governments-Tax on Fishing Revenues
Reducing or Eliminate Uses of Plastic -National Governments- Action Plan to Reduce Plastic Waste
Research-National Governments- Plastics Innovations
Research-National Governments- Seafood & Cancer Risks
Research-National Governments-Beach Cleanup & Marine Litter

Research-National Governments-Climate Change Effects on Marine Areas
Research-National Governments-Marine Litter Expeditions
Research-National Governments-Marine Litter Impact
Research-National Governments-Tourism
Waste Management-National Governments –Cleanups
Waste Management-National Governments-Coastal Areas
Waste Management-National Governments-Implementing & Improving National Waste Strategy
Waste Management-National Governments-Marine Litter
Waste Management-National Governments-Restoration Areas
Waste Management-National Governments-Ship Disposal

REGIONAL/LOCAL GOVERNMENT STAKEHOLDER

Action Plan-Regional/Local Governments-Coastal Area Marine Sustainability
Education/Awareness-Regional/Local Governments – Marketing Campaign
Facilitation/Coordination-Regional/Local Governments - Waste Management
Policy/Regulation-Regional/Local Governments - Plastic Bag Bans
Policy/Regulation-Regional/Local Governments- Plastics Product Bans
Policy/Regulation-Regional/Local Governments-Ban Styrofoam
Policy/Regulation-Regional/Local Governments-Plastic Bag Tax
Waste Management-Regional/Local Governments-Waste Management Program

INDUSTRY AND BUSINESS STAKEHOLDER

Action Plan-Companies-Recycled Products
Action Plan-Industry-Program to Reduce Waste
Collect, Recycle or Repurpose-Industry- Waste Management Programs to Recycle Plastic Products
Collect, Recycle or Repurpose-Companies- Action Plans to Recycle Products
Collect, Recycle or Repurpose-Companies – Commercializing Recycled Plastic Products
Collect, Recycle or Repurpose-Companies- Waste Management Programs to Recycle More Plastic
Commercialization-Companies-Innovations
Commercialization-Companies-Plastics Marketplace
Commercialization-Companies-Plastics Substitute Products
Commercialization-Companies-Recycled Plastic Products
Donor/Investment-Companies-Waste Innovations
Donor/Investment-Industry-Ocean Floor Cleanups
Donor/Investment-Industry-Project to Reduce Marine Litter
Donor/Investment-Industry-Waste Innovations
Education/Awareness- Industry- Ocean Plastics Problem
Education/Awareness-Companies-Local Sustainability Efforts
Facilitation/Coordination-Companies-Beach Cleanup
Facilitation/Coordination-Industry-Cleanups
Facilitation/Coordination-Industry-Collaboration to Reduce Plastics in Packaging
Facilitation/Coordination-Industry-Consortium for Ocean Business/Economy Initiatives
Facilitation/Coordination-Industry-Consortium for Reducing Litter in the North Sea
Facilitation/Coordination-Industry-Consortium to Reduce Micro-Plastics in Waste-Water
Facilitation/Coordination-Industry-Consortium to Reduce Plastics in Seafood Operations
Facilitation/Coordination-Industry-Plastics Waste Platform & Network
Facilitation/Coordination-Industry-Web Resources for Plastics Industry Professionals about Reducing Marine Litter
Policy/Regulation-Companies-Plastic Bag Tax
Policy/Regulation-Industry - Education/Awareness

Policy/Regulation-Industry - Plastic Ban Tax
Product Redesign-Companies –Commercialize Plastics Substitute Products
Product Redesign-Companies- Use More Recycled Plastic in Products
Product Redesign–Companies- Reduce Plastics Waste in Products
Reducing or Eliminate Uses of Plastic - Industry-Action Plan to Reduce Waste
Reducing or Eliminate Uses of Plastic -Industry- Donor Funding for Projects to Reduce Marine Litter
Reducing or Eliminate Uses of Plastic – Industry- Facilitation/Coordination to Collaborate to Reduce Plastic Packaging
Reducing or Eliminate Uses of Plastic –Industry- Consortium for Reducing Litter in North Sea
Reducing or Eliminate Uses of Plastic - Industry- Consortium to Reduce Micro-Plastics in Wastewater
Reducing or Eliminate Uses of Plastic - Industry- Consortium to Reduce Plastics in Seafood Operations
Reducing or Eliminate Uses of Plastic -Industry- Resources for Plastics Industry Professionals to Reduce Marine Litter
Reducing or Eliminate Uses of Plastic –Industry- Reduce Fishing Industry Marine Litter Waste
Research-Companies-Marine Litter
Waste Management-Companies- Reduce Plastics Waste in Product(s)
Waste Management-Companies- Use More Recycled Plastic in Products
Waste Management-Companies-Innovations
Waste Management-Companies-Recycle More Plastic
Waste Management-Companies-Setting Zero Waste & Recycling Milestones
Waste Management-Companies-Use More Recycled Plastic in Products
Waste Management-Industry-Program to Accredit Ports as Environmentally Friendly
Waste Management-Industry-Reduce Fishing Industry Marine Litter
Waste Management-Industry-Reduce Plastics Use in Resorts
Waste Management-Industry-EPR

NGOs—PPPs—ACADEMIA STAKEHOLDER

Action Plan-NGOs-Awareness by Art and Art Exhibitions
Action Plan-NGOs-Collecting Plastic for Fundraising Initiatives
Action Plan-NGOs-Facilitate Plastic-Free Economy
Action Plan-NGOs-Plans and Programs to Address Local Marine Litter
Action Plan-NGOs-Reduce Microfibers
Action Plan-NGOs-Sustainability Efforts
Action Plan-PPPs-Port and Harbor Waste Management Efforts
Action Plan-PPPs-Use Recycled Plastic for Products
Collect, Recycle or Repurpose-NGOs- Waste Management Programs to Recycle More Plastic
Collect, Recycle or Repurpose-NGOs - Recycling Campaign to Educate/Build Awareness
Education/Awareness-PPPs-Marine Litter
Education/Awareness-PPPs-Retail Malls Reduce Plastics Campaign
Emergency Response-PPPs-Oil Spill Prosecution
Facilitation/Coordination-NGOs-Marine Litter Research & Innovation Platform
Facilitation/Coordination-NGOs-Waste Management Improvements
Facilitation/Coordination-NGOs-Cleanups
Facilitation/Coordination-NGOs-Coastline Improvements
Facilitation/Coordination-NGOs-Events, Conferences and/or Programs about Marine Litter
Facilitation/Coordination-NGOs-Fishing & Whaling Marine Litter Issues
Facilitation/Coordination-NGOs-Local Area Marine Litter Network and/or Programs
Facilitation/Coordination-NGOs-Marine Litter Network, Research &/or Innovation Platform
Facilitation/Coordination-NGOs-Marine Litter Web-Based Platform
Facilitation/Coordination-NGOs-Reduce Marine Litter & Marine Noise
Facilitation/Coordination-NGOs-Reduce Microbead Use

Facilitation/Coordination-NGOs-Reduce Plastics Use
Facilitation/Coordination-NGOs-Waste Management Improvements
Facilitation/Coordination-PPPs-Reduce Fishing Gear Marine Debris
Facilitation/Coordination-PPPs-Reduce Marine Litter
Policy/Regulation-PPPs - Plastic Bag Bans
Policy/Regulation-PPPs-Plastic Bag Tax
Product Redesign-NGOs – Use Donors to Fund Product Design
Product Redesign--NGOs-Use More Recycled Plastic in Products
Recollect and Reuse- PPPs-Action Plans to Collect & Use Recycled Plastics
Recollect and Reuse- PPPs Action Plans to Use Recycled Plastic for Products
Recollect and Reuse- PPPs-Action Plans to Collect & Use Recycled Plastics
Reducing or Eliminate Uses of Plastic –NGOs--Hospitality Industry Reducing Plastics Use
Reducing or Eliminate Uses of Plastic -NGOs-Reduce Marine Litter & Marine Noise
Reducing or Eliminate Uses of Plastic -NGOs-Reduce Microbead Use
Reducing or Eliminate Uses of Plastic -NGOs-Reduce Plastics Use
Reducing or Eliminate Uses of Plastic -NGOs-Donor Funding of Plastics Prevention Projects
Reducing or Eliminate Uses of Plastic –NGOs-Education/Awareness Guideline for Restaurants to Reduce Plastics
Reducing or Eliminate Uses of Plastic –NGOs- Action Plan to reduce Microfibers
Reducing or Eliminate Uses of Plastic -NGOs-Reduce Plastic Waste in Rivers
Reducing or Eliminate Uses of Plastic -NGOs-Reduce Plastics Waste in Products
Reducing or Eliminate Uses of Plastic -PPPs-Reduce Plastics Waste in Product(s)
Reducing or Eliminate Uses of Plastic - PPPs-Policy/Regulation to Eliminate Microplastics
Reducing or Eliminate Uses of Plastic –PPPs- Education/Awareness Campaign for Retail Malls to Reduce Plastics
Reducing or Eliminate Uses of Plastic -PPPs-Reduce Fishing Gear Marine Debris
Reducing or Eliminate Uses of Plastic - PPPs-Reduce Marine Litter
Research-Academic Institutions-Marine Litter
Research-Academic Institutions-Waste Innovations
Research-NGOs-Biodegradable Plastics
Research-NGOs-Information Platform
research-NGOs-Marine Litter Data
Research-NGOs-Marine Litter on Beaches
Research-NGOs-Microplastics
Research-PPPs-River Cleanup Study
Waste Management-NGOs- Become Plastics-Free
Waste Management-NGOs –Cleanups
Waste Management-NGOs- Setting Zero Waste & Recycling Milestones
Waste Management-NGOs- Shipping Industry Marine Litter Tools
Waste Management-NGOs-Marine Litter
Waste Management-NGOs-Recycle More Plastic
Waste Management-NGOs-Reduce Plastic Waste in Rivers
Waste Management-PPPs- Use More Recycled Plastic in Products
Waste Management-PPPs-Coastal Areas
Waste Management-PPPs-Marine Litter
Waste Management-PPPs-Projects to Reduce Solid Waste
Waste Management-PPPs-Reduce Plastics Waste in Product(s)

E2. PCC Codes Sorted by Initiative/Stakeholder

Action Plan-Companies –Recycled Products
Action Plan-Industry-Program to Reduce Waste
Action Plan-Multi Nationals-Prevent Marine Litter
Action Plan-Multi Nationals-Regional Blue Economy
Action Plan-National Governments-Aquaculture
Action Plan-National Governments-Circular Economy
Action Plan-National Governments-Fishing
Action Plan-National Governments-Marine Debris
Action Plan-National Governments-Marine Litter
Action Plan-National Governments-National Plan & Waste Strategy
Action Plan-National Governments-Reduce Plastic Waste
Action Plan-National Governments-Regional Sustainability
Action Plan-National Governments-Waste Management
Action Plan-National Governments-Waste Management for Ports/Harbors
Action Plan-NGOs-Awareness by Art and Art Exhibitions
Action Plan-NGOs-Circular Economy
Action Plan-NGOs-Collecting Plastic for Fundraising Initiatives
Action Plan-NGOs-Facilitate Plastic-Free Economy
Action Plan-NGOs-Plans and Programs to Address Local Marine Litter
Action Plan-NGOs-Reduce Microfibers
Action Plan-NGOs-Sustainability Efforts
Action Plan-PPPs-Collect & Use Recycled Plastics
Action Plan-PPPs-Coordinated Multi-Country Raising Awareness Programs About Marine Litter
Action Plan-PPPs-Port and Harbor Waste Management Efforts
Action Plan-PPPs-Use Recycled Plastic for Products
Action Plan-Regional/Local Governments-Coastal Area Marine Sustainability
Collect, Recycle or Repurpose-Companies – Commercializing Recycled Plastic Products
Collect, Recycle or Repurpose-Companies- Action Plans to Recycle Products
Collect, Recycle or Repurpose-Companies- Waste Management Programs to Recycle More Plastic
Collect, Recycle or Repurpose-Industry- Waste Management Programs to Recycle Plastic Products
Collect, Recycle or Repurpose-NGOs - Recycling Campaign to Educate/Build Awareness
Collect, Recycle or Repurpose-NGOs- Waste Management Programs to Recycle More Plastic
Collect, Recycle or Repurpose-PPPs – Commercializing Recycled Plastic Products
Commercialization-Companies-Capital to Invest
Commercialization-Companies-Innovations
Commercialization-Companies-Plastics Marketplace
Commercialization-Companies-Plastics Substitute Products
Commercialization-Companies-Recycled Plastic Products
Commercialization-Companies-Waste to Energy
Commercialization-National Governments-Innovations
Commercialization-National Governments-Waste to Energy Support
Commercialization-NGOs-Innovations
Commercialization-PPPs-Recycled Plastic Products
Donor/Investment-Companies-Investment in Land-Based Waste Projects
Donor/Investment-Companies-Lending to Developing Countries
Donor/Investment-Companies-Waste Innovations
Donor/Investment-Industry-Ocean Floor Cleanups
Donor/Investment-Industry-Project to Reduce Marine Litter
Donor/Investment-Industry-Waste Innovations

Donor/Investment-Multi Nationals Governments-Plastics Prevention Projects
Donor/Investment-Multi Nationals Governments-Policy Support
Donor/Investment-Multi Nationals-Information Platform
Donor/Investment-National Governments-Country Program Assistance
Donor/Investment-National Governments-Innovation
Donor/Investment-National Governments-Marine Litter
Donor/Investment-National Governments-Product Design
Donor/Investment-National Governments-Waste Recycling Efforts
Donor/Investment-National Governments-Waste to Energy
Donor/Investment-NGOs-Innovation Funds
Donor/Investment-NGOs-Marine Debris
Donor/Investment-NGOs-Plastics Prevention Projects
Donor/Investment-NGOs-Product Design
Donor/Investment-NGOs-Support Awareness Exhibit
Donor/Investment-NGOs-Support Research Study
Donor/Investment-PPPs-Marine Litter Support Plastics Programs
Donor/Investment-PPPs-Monitoring Marine Pollution
Donor/Investment-PPPs-Policy & Regulations
Donor/Investment-PPPs-Startup Competition
Education/Awareness-Academic Institutions-Sharing Marine Litter Learnings
Education/Awareness-Companies-Fishing
Education/Awareness-Companies-Local Sustainability Efforts
Education/Awareness-Industry-Youth Education Programs
Education/Awareness-Industry- Ocean Plastics Problem
Education/Awareness-National Governments-Awareness Campaigns
Education/Awareness-National Governments-Marine Litter
Education/Awareness-National Governments-Student Education Programs
Education/Awareness-National Governments-Surveys
Education/Awareness-NGOs-Awareness Programs
Education/Awareness-NGOs-Awareness Through Music
Education/Awareness-NGOs-Events, Conferences and/or Programs About Marine Litter
Education/Awareness-NGOs-Guideline for Restaurants to Reduce Plastics
Education/Awareness-NGOs-Innovation
Education/Awareness-NGOs-Ocean Education
Education/Awareness-NGOs-Promote Ban Campaigns
Education/Awareness-NGOs-Recycling Campaign
Education/Awareness-NGOs-Sports Event
Education/Awareness-NGOs-Surveys
Education/Awareness-NGOs-Waste Education Programs
Education/Awareness-NGOs-Youth Education Programs
Education/Awareness-PPPs-Awareness Contest
Education/Awareness-PPPs-Events
Education/Awareness-PPPs-Marine Litter
Education/Awareness-PPPs-Retail Malls Reduce Plastics Campaign
Education/Awareness-Regional/Local Governments – Marketing Campaign
Emergency Response-PPPs-Oil Spill Prosecution
Facilitation/Coordination-Companies-Beach Cleanups
Facilitation/Coordination-Industry-Cleanups
Facilitation/Coordination-Industry-Collaboration to Reduce Plastics in Packaging
Facilitation/Coordination-Industry-Consortium for Ocean Business/Economy Initiatives
Facilitation/Coordination-Industry-Consortium for Reducing Litter in the North Sea

Facilitation/Coordination-Industry-Consortium to Reduce Micro-Plastics in Wastewater
Facilitation/Coordination-Industry-Consortium to Reduce Plastics in Seafood Operations
Facilitation/Coordination-Industry-Plastics Waste Platform & Network
Facilitation/Coordination-Industry-Web resources for plastics industry professionals to reduce marine litter
Facilitation/Coordination-Multi Nationals-Cruise Tourism & Ports Waste
Facilitation/Coordination-Multi Nationals-Global Marine Data Network
Facilitation/Coordination-Multi Nationals-Information Platform
Facilitation/Coordination-Multi Nationals-Marine Litter Collaborations
Facilitation/Coordination-National Governments-Beach Cleanups
Facilitation/Coordination-National Governments-Information Platform
Facilitation/Coordination-National Governments-Marine Litter
Facilitation/Coordination-National Governments-Regional Sustainability Consortium
Facilitation/Coordination-National Governments-Sea Pollution
Facilitation/Coordination-National Governments-Waste Management Community Training
Facilitation/Coordination-NGOs-Cleanups
Facilitation/Coordination-NGOs-Coastline Improvements
Facilitation/Coordination-NGOs-Events, Conferences and/or Programs About Marine Litter
Facilitation/Coordination-NGOs-Fishing & Whaling Marine Litter Issues
Facilitation/Coordination-NGOs-Hospitality Industry Reducing Plastics Use
Facilitation/Coordination-NGOs-Local Area Marine Litter Network and/or Programs
Facilitation/Coordination-NGOs-Marine Litter Network, Research &/or Innovation Platform
Facilitation/Coordination-NGOs-Marine Litter web-based Platform
Facilitation/Coordination-NGOs-Reduce Marine Litter & Marine Noise
Facilitation/Coordination-NGOs-Reduce Microbead Use
Facilitation/Coordination-NGOs-Reduce Plastics Use
Facilitation/Coordination-NGOs-Waste Management Improvements
Facilitation/Coordination-PPPs-Marine Litter Conference and/or Network
Facilitation/Coordination-PPPs-Reduce Fishing Gear Marine Debris
Facilitation/Coordination-PPPs-Reduce Marine Litter
Facilitation/Coordination-Regional/Local Governments-Waste Management
Monitoring-Individuals-App Development
Policy/Regulation-Companies-Plastic Bag Tax
Policy/Regulation-Industry - Education/Awareness
Policy/Regulation-Industry - Plastic Ban Tax
Policy/Regulation-Multi Nationals-Plastic Bag Ban
Policy/Regulation-Multi Nationals-Reduce Marine Litter in Ship Waste
Policy/Regulation-Multi Nationals-Reduce Plastic Leakage
Policy/Regulation-Multi Nationals-Reduce Ship Waste
Policy/Regulation-National Governments-Agree to Join A Global Program
Policy/Regulation-National Governments-Ban Styrofoam
Policy/Regulation-National Governments-Create Marine Debris National Policy
Policy/Regulation-National Governments-Microbeads Ban
Policy/Regulation-National Governments-Plastic Bag Tax
Policy/Regulation-National Governments-Plastic Bags Ban
Policy/Regulation-National Governments-Plastics Bans
Policy/Regulation-National Governments-Plastics Product Bans
Policy/Regulation-National Governments-Ship Waste
Policy/Regulation-National Governments-Tax on Fishing Revenues
Policy/Regulation-NGOs-Noise Reduction Targets
Policy/Regulation-PPPs-Eliminate Microplastics
Policy/Regulation-PPPs-Plastic Bag Bans

Policy/Regulation-PPPs-Plastic Bag Tax
Policy/Regulation-Regional/Local Governments-Ban Styrofoam
Policy/Regulation-Regional/Local Governments-Plastic Bag Bans
Policy/Regulation-Regional/Local Governments-Plastic Bag Tax
Policy/Regulation-Regional/Local Governments-Plastics Product Bans
Product Redesign-Companies –Commercialize Plastics Substitute Products
Product Redesign–Companies- Reduce Plastics Waste in Products
Product Redesign-Companies- Use More Recycled Plastic in Products
Product Redesign-NGOs – Use Donors to Fund Product Design
Product Redesign--NGOs-Use More Recycled Plastic in Products
Recollect and Reuse- PPPs Action Plans to Use Recycled Plastic for Products
Recollect and Reuse- PPPs-Action Plans to Collect & Use Recycled Plastics
Reducing or Eliminate Uses of Plastic - Industry- Consortium to Reduce Micro-Plastics in Wastewater
Reducing or Eliminate Uses of Plastic - Industry- Consortium to Reduce Plastics in Seafood Operations
Reducing or Eliminate Uses of Plastic – Industry- Facilitation/Coordination to Collaborate to Reduce Plastic Packaging
Reducing or Eliminate Uses of Plastic - Multi Nationals- Policy/Regulation to Reduce Marine Litter in Ship Waste
Reducing or Eliminate Uses of Plastic - Multi Nationals- Policy/Regulation to Reduce Plastic Leakage
Reducing or Eliminate Uses of Plastic - Multi Nationals- Policy/Regulation to Reduce Ship Waste
Reducing or Eliminate Uses of Plastic - Multi Nationals-Take Actions to Reduce Plastics in Use
Reducing or Eliminate Uses of Plastic - PPPs-Policy/Regulation to Eliminate Microplastics
Reducing or Eliminate Uses of Plastic - PPPs-Reduce Marine Litter
Reducing or Eliminate Uses of Plastic –Industry- Consortium for Reducing Litter in North Sea
Reducing or Eliminate Uses of Plastic -Industry- Donor Funding for Projects to Reduce Marine Litter
Reducing or Eliminate Uses of Plastic –Industry- Reduce Fishing Industry Marine Litter Waste
Reducing or Eliminate Uses of Plastic -Industry- Resources for Plastics Industry Professionals to Reduce Marine Litter
Reducing or Eliminate Uses of Plastic -Multi Nationals Governments-Donor Funding of Plastics Prevention Projects
Reducing or Eliminate Uses of Plastic -National Governments- Action Plan to Reduce Plastic Waste
Reducing or Eliminate Uses of Plastic –NGOs- Action Plan to reduce Microfibers
Reducing or Eliminate Uses of Plastic -NGOs-Donor Funding of Plastics Prevention Projects
Reducing or Eliminate Uses of Plastic –NGOs-Education/Awareness Guideline for Restaurants to Reduce Plastics
Reducing or Eliminate Uses of Plastic –NGOs--Hospitality Industry Reducing Plastics Use
Reducing or Eliminate Uses of Plastic -NGOs-Reduce Marine Litter & Marine Noise
Reducing or Eliminate Uses of Plastic -NGOs-Reduce Microbead Use
Reducing or Eliminate Uses of Plastic -NGOs-Reduce Plastic Waste in Rivers
Reducing or Eliminate Uses of Plastic -NGOs-Reduce Plastics Use
Reducing or Eliminate Uses of Plastic -NGOs-Reduce Plastics Waste in Products
Reducing or Eliminate Uses of Plastic –PPPs- Education/Awareness Campaign for Retail Malls to Reduce Plastics
Reducing or Eliminate Uses of Plastic -PPPs-Reduce Fishing Gear Marine Debris
Reducing or Eliminate Uses of Plastic -PPPs-Reduce Plastics Waste in Product(s)
Research-Academic Institutions-Marine Litter
Research-Academic Institutions-Waste Innovations
Research-Companies-Marine Litter
Research-Companies-Marine Litter
Research-National Governments-Beach Cleanup & Marine Litter
Research-National Governments-Climate Change Effects on Marine Areas
Research-National Governments-Marine Litter Expeditions
Research-National Governments-Marine Litter Impact
Research-National Governments-Monitoring Pollutants & Data Capture
Research-National Governments-Plastics Innovations
Research-National Governments-Seafood & Cancer Risks
Research-National Governments-Tourism

Research-NGOs-Biodegradable Plastics
Research-NGOs-Information Platform
Research-NGOs-Marine Litter Data
Research-NGOs-Marine Litter on Beaches
Research-NGOs-Microplastics
Research-PPPs-River Cleanup Study
Waste Management-Companies-Commit to EPR
Waste Management-Companies-Innovations
Waste Management-Companies-Recycle More Plastic
Waste Management-Companies-Reduce Plastics Waste in Product(s)
Waste Management-Companies-Setting Zero Waste & Recycling Milestones
Waste Management-Companies-Use More Recycled Plastic in Products
Waste Management-Companies-Use More Recycled Plastic in Products
Waste Management-Individuals-Beach Cleanups
Waste Management-Industry-Program to Accredit Ports as Environmentally Friendly
Waste Management-Industry-Reduce Fishing Industry Marine Litter
Waste Management-Industry- Recycled Plastic Products
Waste Management-Industry-EPR
Waste Management-Industry-Innovations
Waste Management-Multi Nationals-Take Actions to Reduce Plastics in Use
Waste Management-National Governments –Cleanups
Waste Management-National Governments-Coastal Areas
Waste Management-National Governments-Fishing & Ports
Waste Management-National Governments-Implementing & Improving National Waste Strategy
Waste Management-National Governments-Innovations
Waste Management-National Governments-Marine Litter
Waste Management-National Governments-Restoration Areas
Waste Management-National Governments-Ship Disposal
Waste Management-NGOs-Become Plastics-Free
Waste Management-NGOs–Cleanups
Waste Management-NGOs-Coastal Areas
Waste Management-NGOs-Fishing & Ports Program
Waste Management-NGOs-Marine Litter
Waste Management-NGOs-Recycle More Plastic
Waste Management-NGOs-Reduce Plastic Waste in Rivers
Waste Management-NGOs-Reduce Plastics Waste in Product(s)
Waste Management-NGOs-Restoration Areas
Waste Management-NGOs-Setting Zero Waste & Recycling Milestones
Waste Management-NGOs-Ship Disposal
Waste Management-NGOs-Shipping Industry Marine Litter Tools
Waste Management--NGOs-Shipping Industry Marine Litter Tools
Waste Management-NGOs-Use More Recycled Plastic in Products
Waste Management-PPPs-Become Plastics-Free
Waste Management-PPPs-Cleanups
Waste Management-PPPs-Coastal Areas
Waste Management-PPPs-Fishing & Ports
Waste Management-PPPs-Marine Litter
Waste Management-PPPs-Reduce Plastics Waste in Product(s)
Waste Management-PPPs-Restoration Areas
Waste Management-PPPs-Ship Disposal
Waste Management-PPPs-Use More Recycled Plastic in Products
Waste Management-Regional/Local Governments-Waste Management Program

ENDNOTES

[1] IISD, "Our Ocean Conference 2018" (Bali: International Institute for Sustainable Development, 2019), http://sdg.iisd.org/events/our-ocean-conference-2018/

[2] United Nations, "Growing at a slower pace, world population is expected to reach 9.7 billion in 2050 and could peak at nearly 11 billion around 2100", (New York: United Nations Department of Economic and Social Affairs, 2019), https://www.un.org/development/desa/en/news/population/world-population-prospects-2019.html

[3] Kaza, Silpa., et al., "What a Waste 2.0 : A Global Snapshot of Solid Waste Management to 2050" (Washington DC: World Bank, Urban Development, 2018), License: CC BY 3.0 IGO, https://openknowledge.worldbank.org/handle/10986/30317

[4] Geyer, Jambeck., "Production, Use and Fate of All Plastics Ever Made" *Science Advances Vol. 3, no. 7, e1700782* (Kuala Lumpur: Science Advances, 2017)

[5] ibid

[6] Jambeck, J R., et al., "Plastic Waste Inputs from Land into Ocean" Science Vol. 347, Issue 6223 (February 13, 2015), https://science.sciencemag.org/content/347/6223/768

[7] Kaza Silpa, et al., "What a Waste 2.0 : A Global Snapshot of Solid Waste Management to 2050" (Washington DC: World Bank, Urban Development, 2018), License: CC BY 3.0 IGO, https://openknowledge.worldbank.org/handle/10986/30317

[8] ibid

[9] OECD, "OECD Companion to the Inventory of Support Measures for Fossil Fuels 2018" (Paris: Organisation for Economic Co-operation and Development, 2018), https://www.oecd-ilibrary.org/energy/oecd-companion-to-the-inventory-of-support-measures-for-fossil-fuels-2018_9789264286061-en

[10] ibid.

[11] Ise-Shima Summit, "G7 Ise-Shima Leaders' Declaration" (Japan: Ise-Shima Summit, 2016)

[12] IISD, "Our Ocean Conference 2018" (Bali: International Institute for Sustainable Development, 2018), http://sdg.iisd.org/events/our-ocean-conference-2018/

[13] Wahlén, Catherine B., "Our Ocean Conference Generates US$10.7 Billion in Pledges" (United States of America: International Institute for Sustainable Development, 2018), https://sdg.iisd.org/news/fifth-our-ocean-conference-generates-us10-7-billion-in-pledges/

[14] Wahlén, Catherine B., "Our Ocean Conference Participants Pledge USD 64 Billion to Protect Oceans" (United States of America: International Institute for Sustainable Development, 2019), https://sdg.iisd.org/news/our-ocean-conference-participants-pledge-usd-64-billion-to-protect-oceans/

[15] Wahlén, Catherine B., "UN Ocean Conference Concludes with Call for Action and 1,300 Commitments" (United States of America: International Institute for Sustainable Development, 2017), https://sdg.iisd.org/news/un-ocean-conference-concludes-with-call-for-action-and-1300-commitments/

[16] World Economic Forum, Ellen MacArthur Foundation and McKinsey & Company, "The New Plastics Economy — Rethinking the future of plastics" (Ellen MacArthur Foundation, 2016), http://www.ellenmacarthurfoundation.org/publications

[17] The UNEP 2016 Report debunked the term and clarified the misconceptions caused by calling this a "Great Pacific Garbage Patch." UNEP (2016). Marine plastic debris and microplastics – Global lessons and research to inspire action and guide policy change. United Nations Environment Program, Nairobi.

[18] Jambeck J Geyer, R & Law, "Production, Use and Fate of All Plastics Ever Made" *Science Advances Vol. 3, no. 7, e1700782* (Kuala Lumpur: Science Advances, 2017)

[19] https://www.strategyzer.com/canvas/business-model-canvas

[20] https://www.osha.gov/pls/imis/sic_manual.html







For more information or if you would like to help support our efforts, please contact us

Ocean Recovery Alliance

20th Floor,Central Tower, 28 Queen's Road Central,Hong Kong
Tel: (852) 2803-0018

1230 Clay St. #203, San Francisco, CA 94108
Tel: (415) 307-7720

info@oceanrecov.org

www.oceanrecov.org