

Informing Japan's G20 Chairmanship

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**Addressing
Marine Plastics**
A Systemic Approach



Background

Building upon the work led by Germany in 2017 to establish the G20 Action Plan on Marine Litter, G20 Environment Ministers agreed to move forward with the G20 Implementation Framework for Actions on Marine Plastic Litter at the June 2019 convening. In the lead-up to the June meeting, Ocean Conservancy provided technical expertise on the challenges and opportunities for reducing marine debris during stakeholder discussions that helped shape the content and focus of the Framework. Included below is an overview of the input Ocean Conservancy provided. Though the insights shared at the G20 Environment Senior Officials Prep meeting in February 2019 were tailored to the needs of the G20 forum, much of the information is relevant in other contexts and is included below for reference.

A Spectrum of Solutions is Necessary

Marine debris is a complex problem and there is no single solution. We need a full range of solutions to address the issue from developing new materials and packaging, to reducing use, improving how we manage our trash, and cleaning up what is already there. The solution set also requires a broad range of actors from government to private sector and civil society.

► Improved Waste Collection and Increase Recycling

Given that we know the bulk of plastics enter the ocean because of mismanaged waste, this is a critical part of stopping leakage now – we need to turn off the tap even as we attack the more systemic pieces of the puzzle. This is critical not only for stopping leakage today but also for creating a truly circular economy in the future. We need a collection system in place to ensure materials are recovered, reused and recycled to their highest value. There are significant investments to be made in the collection and containment of waste, and government, industry, and civil society can play a role. A critical piece, however, is making sure that the systems are designed for the places where they are implemented. While we need to improve the materials we use, we also need to develop better systems to deal with them.

► Reduction in Use

Another key piece is reducing what goes into the waste stream. We need to think about what we use and what we need and don't. Plastics aren't inherently bad, and they have brought us critical innovations – from medical devices to ways to preserve food, to ways to reduce greenhouse gas emissions. But we can be smarter about how we use and dispose of them. Some of that is being addressed through regulations and bans, some is consumer driven, and some is being led by industry. We'll need to consider what the most harmful items are and identify integrated ways to reduce usage and encourage proper disposal.

► Materials Redesign

Materials design is a hot topic and is an important part of the solution set, but has its own complexities. Reaching goals like making all packaging biodegradable or compostable does not come without challenges. Plastics that break down into smaller pieces are not biodegradable and lead to greater presence of microplastics in the environment. Similarly, many products labeled as compostable require very specific conditions for processing. Changes like creating products with fewer types of plastic, or changing glues and colors used can all help make recycling more efficient and effective. These changes not only improve the value of materials and make them more likely to be collected; it also means they are less likely to leak into the environment. The challenge is how to provide the right incentives to support this.

▶ **Clean Up**

We also need to clean up what leaks. Cleanups are part of the solution set that gets people engaged and gets them excited about doing more. Last year, International Coastal Cleanup volunteers picked up about 18 million tons of trash. There are also interventions like river and harbor collection systems, like Mr. Trash Wheel in Baltimore. This sort of river infrastructure provides immediate, tangible intervention and helps prevent trash from ever reaching our ocean.

▶ **End Lost and Abandoned Fishing Gear**

A 2015 paper by Chris Wilcox from Australia's CSIRO identified some of the most harmful debris present in marine environments. Fishing gear ranked number one. Since it is designed to trap and kill marine organisms, it continues to do so even after it has reached end-of-life. Organizations like the Global Ghost Gear Initiative are working to prevent loss, as well as recover and recycle gear. This involves working with fishers and the private sector on solutions such as marking gear so that it can be traced, and providing proper disposal facilities free of charge, to incentivize pick up and finding markets for the materials that are returned.

The G20 is well-positioned to accelerate progress

Addressing such a massive challenge is daunting, but there are opportunities to move forward, and the G20 and other governments can play important roles to accelerate solutions.

▶ **Fill funding gaps**

The key gap that has been identified to solving the marine plastic problem is a lack of funding, particularly for waste management systems. Investments from both the public and private sectors are needed to fill these gaps.

▶ **Support science**

Finally, there remains a need for basic science and monitoring. The G20 has an opportunity to help ramp up critical research and disseminate it, so that monitoring protocols or other tools are available and used consistently, and can help us understand what works where.

▶ **Involve cities**

By engaging cities directly, we ensure that the solutions we develop are implementable in the real world. Waste is often managed at the municipal or provincial level. Organizations like the G20 could foster city-to-city collaborations, and ensure the lessons learned are brought into the national and international discussions, to inform policies and actions.

Japan's leadership on highlighting opportunities to reduce marine debris is commendable and with the support of the remaining G20 members, has the potential to spur change and make a significant impact globally.