

# POLICY BRIEF **01.21.21**

## How High-Income Countries Can Contribute to a More Sustainable Plastics Economy: Using the “What We Know Works” Approach

**Vilma Havas**, Ph.D. Candidate, SALT, Norway

**Brita Staal**, Researcher and Advisor, SALT, Norway

**Rachel A. Meidl, LP.D., CHMM**, Fellow in Energy and Environment, Center for Energy Studies, Baker Institute, United States

*The global plastics economy is unsustainable, nontransparent, fragmented, and highly vulnerable to shocks. Volatile oil and natural gas prices directly affect the cost of virgin plastic and therefore the value of recycled materials, interrupting circular progression and lowering the environmental value of recycling. Additionally, the COVID-19 pandemic is increasing the usage of disposable plastics while disrupting development in recycling schemes.*

If Organisation for Economic Co-Operation and Development (OECD) countries do not prioritize the development of transparent, closed loops for plastics, by 2030 it is estimated that up to 111 million metric tons of plastic waste will likely end up in landfills, in incinerators, or as exports to countries with substandard waste management infrastructure and deficient environmental regulations.<sup>1</sup> Updated data that accounts for exports, illegal dumping, and domestic littering challenges the once-held assumption that plastic waste is adequately managed through proper collection, recycling, and permitted landfilling.<sup>2</sup>

This highlights the urgency of a systems change.

If the environmental externalities are taken into account, the annual footprint on the plastic packaging industry alone is estimated at \$40 billion, exceeding the packaging industry's annual profit pool.<sup>3</sup> The reality is that we are pushing planetary boundaries and are challenged with time and resources to create sustainable economies based on circularity. Circularity is the crucial

piece of the puzzle that is needed to solve existential crises such as resource depletion, the crash of ecosystem services, and increasing environmental and social impacts exacerbated by climate change.

### FIRST THINGS FIRST

The largest contributor to the plastic waste problem is single-use plastic packaging, which is responsible for almost half of the global total.<sup>4</sup> In addition, plastic packaging is currently made of up to 90% virgin materials, rather than recycled polymers, highlighting the linearity of plastic packaging value chains.<sup>5</sup> The need to create policy frameworks around the most harmful fractions, such as packaging, has never been more urgent. There is a dire need for the standardization of materials, material innovation and product redesign, requirements for recycled content in plastic products, and the relocation of subsidies from unsustainable industries to those working with circular solutions.



**Establishing clear, long-term regulatory frameworks linked to national goals is key to developing robust supply chains that can compete with virgin plastics and will allow for greater consistency in collection, processing, and compliance.**

The three-step playbook for an economically, environmentally, and socially sustainable plastics economy is simple in theory, but requires a paradigm shift of the global plastics economy.

## 1. NATIONAL GOALS COUPLED WITH REGULATIONS

Currently, the value of recycled plastics is coupled with oil and natural gas prices, creating volatility in the demand for recycled plastics. Well-coordinated national goals and ambitions, tied to solid regulation and effective enforcement and oversight, are the only way forward to decouple plastics from fluctuating fossil fuel markets. Establishing clear, long-term regulatory frameworks linked to national goals is key to developing robust supply chains that can compete with virgin plastics and will allow for greater consistency in collection, processing, and compliance. Taxes and subsidies that account for the true cost of externalities, such as pollution and the use of scarce resources, have been shown to be efficient in environmental politics before and should therefore be assessed and applied to the plastics economy. The European Union (EU) has, for example, recently introduced a bloc-wide tax on non-recyclable plastic packaging waste to help raise funds for economic recovery from the recession caused by the pandemic.<sup>6</sup> This tax reflects the EU's economic strategy, which is based on the development of circular economies in the region. In the U.S., the Environmental Protection Agency (EPA) announced a new national recycling rate of 50% by 2030<sup>7</sup> that will be implemented through a National Recycling Strategy set to be finalized in 2021.

Regulatory frameworks that support efficient and novel material recycling and set requirements for the standardization of materials as well as for mandatory recycled content in plastic products are needed in order to develop sustainable value chains and accelerate the transition away from non-recyclable materials.

## 2. EXTENDED PRODUCER RESPONSIBILITY (EPR) AND IMPROVING THE ECONOMICS OF COLLECTION

History demonstrates that notable advances in the waste and recycling system can be achieved through the use of sound policy, such as tax incentives, fees, and a variety of other mechanisms. Plastic producers and buyers need to take responsibility, or be made responsible via regulations, for the products they place on the market to make sure that those products can be collected, separated, and recycled into new products of same or similar quality. Currently, only 2% of plastic packaging is being recycled into such materials<sup>8</sup> globally. Well-designed and targeted EPR programs, through multi-material packaging fees or eco-modulated fees complemented with disposal surcharges to equalize the cost of recycling with that of disposal, create incentives for the collection, reuse, recycling, and standardized production of materials—that is, the creation of single, high-quality plastic polymers that can easily be separated and recycled. Corporate commitments combined with product stewardship and EPR laws can incentivize and oblige producers and brand owners through financial incentives to align with circular economy principles, thus improving the economics of collection, recycling, and investments for infrastructure development.

Public awareness of and consumer preferences toward plastics sustainability and environmental issues have never been greater, so if we lose traction now, immense investments will be lost and the path to a global, circular plastics economy may have to be recalibrated. In the meantime, millions of tons of plastic materials that have the potential to be recycled will end up in landfills, incinerated, or abandoned in the environment, where they risk migrating to the world's oceans.

**To gain greater control, we need to develop local recycling systems and treatment markets that are tailored to local and regional conditions and are aligned with national priorities and frameworks keeping in mind the global context.**

### 3. GREATER CONTROL: GLOBAL ENGAGEMENT AND LOCAL SOLUTIONS

Today's plastics economy offers little transparency and is fragmented throughout the value chain, creating uncertainty and inconsistencies around how plastic waste is actually processed or if it is even recycled. Clarity and insights about the process, movement, costs, and impact associated with recycling are needed at all levels of government, locally, nationally, and internationally. To gain greater control, we need to develop local recycling systems and treatment markets that are tailored to local and regional conditions and are aligned with national priorities and frameworks keeping in mind the global context. With over 20,000 local governments in the U.S. making decisions on what to recycle, how to collect, separate, and recycle, where to recycle, or if they should even recycle at all, a much more comprehensive and coordinated data effort is needed to inform ongoing strategic action and improvements, both locally and on a national scale.<sup>9</sup>

The same data gaps, deficiencies, and needs exist at the global scale. For decades, the OECD countries have been exporting waste to Asian countries with poor waste management infrastructure, lower environmental regulations around waste management, and weak or nonexistent health, safety, and labor laws. As Asia begins to close its doors to plastic waste imports,<sup>10</sup> other potential waste-importing regions are emerging—some of which are already struggling with the management of plastic waste or operate in corrupt regimes.<sup>11</sup>

The U.S. and the EU are proven leaders and innovators on the global stage. Rapid regional high-level dialogue to enable crisis packages for the recycling industry is now taking place. The EU and the U.S. will need to intensify engagement and push the envelope on global platforms to take the lead on the consideration of disruptive technologies like mechanical and advanced recycling, improved collection and separation, and continued

implementation of measures under the circular economy package, while also building channels that enable the system to methodically increase resilience.

### FROM POLICY TO PRACTICE—PUTTING THE MONEY WHERE THE MOUTH IS

With the systems-level nature of sustainability and circular economies, and with national and global commitments to the United Nations (UN) Sustainable Development Goals and global climate targets, we must cooperate internationally in a way that reflects that we are indeed a globally closed-loop system, with finite resources and planetary boundaries. If we want to grow the circular economy market, it will require a suite of solutions that drive process efficiencies across the entire system and supply chain and improve cost structure while enhancing plastic's overall value.

In order to be able to look back at a transformed global plastics economy, we need to see bold policy influencers make informed decisions with public policy interventions that advance sustainability, as well as ambitious corporate leaders that commit to and invest in circular solutions. Informed regulations consistent with national policies and coupled with targeted investments in infrastructure, R&D, and sustainable business models that are resilient against future global disruptions are key to a circular plastics economy.

### ENDNOTES

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## AUTHORS

**Vilma Havas** is working on an industrial Ph.D. at SALT, a Norwegian consultancy and research company. Her academic partner is the Danish Center for Environmental Assessment at Aalborg University. Havas has an M.S. in environmental, resource, and development economics from the University of Oslo, where she focused on offshore oil and gas exploration in the Arctic.

**Brita Staal** is an advisor at SALT, a Norwegian consultancy and research company. She specializes in climate and sustainability strategies for the private and the public sectors. Staal has experience in international sustainability work, environmental and climate management, environmental certification, and quality management. Staal has an M.S. in development management from the University of Agder in Norway.

**Rachel A. Meidl, LP.D., CHMM**, is the fellow in energy and environment at the Baker Institute. She was sworn into the U.S. Senior Executive Service and was previously appointed as deputy associate administrator for the Pipeline and Hazardous Materials Safety Administration, an agency of the U.S. Department of Transportation. Her research focuses on the intersection between domestic and international policy and law as it relates to the transboundary movement of hazardous wastes; the sustainability of plastics; the upstream and end-of-life management of byproducts and wastes; safety and environmental regulations for the treatment, storage, disposal, and transportation of chemicals within and outside the U.S.; and the coastal resiliency of the energy industry.

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