



BEYOND RECYCLING:

*Extended Producer Responsibility
And Plastic Pollution*

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I. Summary:

The purpose of this document is to provide background information on extended producer responsibility (EPR) as it relates to plastic pollution, and to frame up the core issues in applying this policy to solve it.

EPR applies to plastic pollution mostly through packaging regulation concerning collection and recycling, although we've been involved in efforts to apply EPR more broadly to make producers responsible for preventing and mitigating plastic pollution in the environment.

II. Definitions:

Extended producer responsibility is a public policy tool whereby producers are made legally and financially responsible for mitigating the environmental impacts of their products. When adopted through legislation, it codifies the requirement that the producer's responsibility for their product extends to post-consumer management of that product and its packaging. With EPR, the responsible legal party is usually the brand-owner of the product.

EPR is closely related to the concept of "product stewardship," whereby producers take action to minimize the health, safety, environmental and social impacts of a product throughout its lifecycle stages. Producers being required to take back and recycle electronic equipment through the EU's Waste of Electrical and Electronic Equipment (WEEE) Directive is an example of EPR. The Closed Loop Fund – which accepts corporate money to loan to US municipalities to boost packaging recycling – is an example of voluntary product stewardship.

III. Background on EPR and packaging

EPR for packaging programs are the most common EPR policies in the world, more than electronics, household hazardous waste, appliances, or any of the other programs developed to date. **More than one billion people live in places where consumer goods companies pay some or all of the costs of packaging collection and recycling.**¹ With the exception of container-deposit laws ("bottle bills"), the United States is the only country out of thirty-four members to the Organization for Economic Co-operation and Development (OECD) that does not have EPR for packaging programs established.² Even non-OECD countries including Russia, Taiwan and several South American countries have passed and are implementing EPR for packaging programs.

IV. How it works:

EPR policy requires governing legislation to ensure that all producers are included (*generally above*

¹ <https://www.oecd.org/environment/waste/Global%20Forum%20Tokyo%20Issues%20Paper%2030-5-2014.pdf>

² Ibid.

a de minimus level to exempt small producers), and to prevent individual companies from getting a free ride on the work and investment of others. In practice, it means:

- Producers are accountable for meeting recycling targets and other performance measures.
- They raise funds through fees on the type and volume of packaging they produce; (up-front financing) or by paying for services rendered (PAYGO or full cost-internalization).
- They then invest in meeting recycling targets by utilizing existing infrastructure, expanding it, creating new recycling infrastructure or some combination of the above.
- They also conduct outreach & education to engage the public. Funding can be distributed across a jurisdiction aimed at targeted strategies to boost recycling *and/or other performance goals*.
- The costs are internalized into the price of the product. Depending on the governing legislation, obligations can be fulfilled:
 - individually by the companies themselves, or
 - collectively through non-profit service provider organizations commonly called producer-responsibility organizations (PROs) set up and run by the producers (*most common*), or
 - collectively through third-party organizations (TPOs) which also include governance representation from other stakeholders as determined by statute.

V. Beyond recycling: EPR and plastic pollution in the environment

In 2013, an attorney named Leila Monroe, then working for the Natural Resources Defense Council, helped advance how EPR can more directly impact plastic pollution beyond boosting collection and recycling. That year, she developed policy concepts and legislation to make the producers of products which have a high tendency to end up as plastic pollution, responsible not just for recycling, but for litter prevention and mitigation as well. [Legislation introduced in California](#) would **have a) had State Agencies identify the major sources of plastic pollution in the environment and b) required the producers of those products to reduce the total amount in the environment by 75% in six years and 95% in 11 years**. While the legislation did not advance far in California, this was a significant development and led to us incorporating provisions around litter prevention and plastics capture in future bills introduced around the country.

VI. Core Issues:

If advocates can overcome the significant political hurdles to advancing the policy, EPR can – in theory – provide a comprehensive legal framework for producers to collect and recycle the packaging they put into the marketplace; prevent and mitigate its release to the environment; and market environmental stewardship to the public.

However, like any policy which both creates a new system and interacts with existing systems, the

“devil is in the details.” **EPR policy can be used to achieve public interest goals, but also can be used to thwart them depending on the governing legislation (the rules), the performance requirements (or lack thereof), and the governance process (who makes the decisions and over what).** For example, the governing legislation can be drawn up to prevent the incineration of collected materials or encourage it for non-recyclable packaging.

In addition, EPR policies typically do not stand alone, and are generally enshrined within existing solid waste and recycling policies and norms in a given jurisdiction. These overarching policies and current market practices can sometimes be more determinative as to how an EPR system functions than the governing EPR legislation itself.

A. Money and control

From our perspective, the core issues revolve around money and control. Looking at the recycling value chain (**caveat, this is a US-focused perspective*), **most of the stakeholders in the recycling supply chain – local governments, collectors, processors and end-users, including packaging suppliers – want the increased investment that would come from producers to optimize the systems where they operate.**

However, many are concerned about losing control over the recycling systems to consumer brands, which can happen in a full-EPR system, where producers are responsible for 100% of the costs and legal obligations around performance targets. Much of the concern has to do with transitioning business relationships and impacts on existing business models.

Today in the United States and much of the world, waste management companies contract with cities and municipal governments to collect and dispose of or recycle packaging waste. Under prospective EPR systems, their business relationships would potentially change to serve consortiums of producers – or third-party organizations representing broader interests – seeking to meet statutorily-obligated recycling and potentially litter reduction targets while minimizing costs.

Negotiating vendor contracts with local governments is fundamentally different than working with private industry. The uncertainty over what this change could mean for waste haulers and recyclers has led to concerns around EPR implementation, more so than the general concept.

B. Balancing control: Full versus shared responsibility

Generally when producers are paying 100% of the costs of the recycling system, they want as much control and self-determination as possible, and prefer full-EPR. However, this is not the only EPR model, and **the spectrum of how to apply the principle of EPR can run from little-to-no producer control, to shared governance models, to full-EPR** – all of which have pluses and minuses and

varying degrees of associated political challenges and opportunities.

For example, from a broad vantage point, a tax on packaging where government spends money on litter abatement and packaging collection/recycling can be seen as a form of EPR, where producers get no control and the government has full control over how to spend the funds raised.

Similarly, container-deposit laws (bottle bills) can also be seen as EPR whereby producers are required to pay collectors per container when their packaging is collected. In this system producers pay, but have little control over how the system operates.

The full-EPR model holds producers 100% responsible for meeting statutorily-set recycling targets and/or other performance measures. Producers can meet those obligations by setting up contracts with waste and recycling companies, or by putting incentives into the marketplace through credit systems that can deliver and track how a producer's obligation is being met. **This model holds that packaging waste is now the complete responsibility of the companies that put it into the marketplace, with all the liabilities and benefits that come with this level of responsibility and control.** Theoretically, if recycling rates are low, or if packaging winds up in the environment, we know who to hold accountable. If materials are impossible or costly to recycle, they're on the hook for it. If recycling markets collapse, they have to pay the increased costs for processing and sale of the commodities not government.

On the flip side, consumer goods companies have the freedom to determine their own fate and can play a significant role in organizing recycling systems across a jurisdiction because of their market power. They can also achieve efficiencies and economies of scale that local governments in a more disconnected system cannot. This model has clearly led to high packaging recycling rates in the jurisdictions where it has been pursued.

But, this level of reorganization comes with a cost, and that is usually to the existing companies large and small that currently conduct packaging recycling within a given jurisdiction. Winners and losers can be chosen by the producers*, which can create havoc with existing markets and market participants. Similarly, if local governments want to reap the benefits of having producers pay the full costs for recycling, they have to give up some level of control over the recycling systems that they have built from scratch, and potentially accept producer-driven mandates around what to collect, how to collect it, and how they will be reimbursed if they choose to remain in the collection service-provider role.

With a shared-responsibility approach, the costs and/or the control of the EPR system are shared amongst government and the producers, with governance roles potentially afforded to other

stakeholders like waste-management companies, end-users and NGOs. This model can take a number of forms. Here are just a few examples:

- Ontario, Canada - 50/50 Cost-Sharing – where local governments and producers are responsible for half of the system costs (net costs = collection costs – revenues from sold recyclables). Governance and control is somewhat balanced between the two.
- *Theoretical* – UPSTREAM Third-Party-Organization Model – where producers pay into a trust fund, which is used to fund policies and practices to boost recycling and prevent/mitigate litter/pollution, and administered by a third-party quasi-governmental organization with governance representation from producers, local and state governments, other supply-chain businesses and NGOs.

With the shared-responsibility approach, there is legitimate criticism that when responsibility is “shared” with government, producers can blame failure to achieve results on inefficient government programs. Some argue that these approaches are little more than a tax on producers, and that there is little to no producer-self-determination to create a system that can achieve efficiencies and economies of scale to boost recycling rates and lower system costs. In many ways, this approach is more messy than the 100% producer financed and controlled model, because there are a lot more economic relationships and details to sort out. In this way, a shared responsibility EPR system functions much more like a regulated utility than a free-market system.

** A brief explanation concerning ownership of the materials.* There is a misconception that under EPR systems, the producers legally “own” the materials through the supply chain. To our knowledge, this does not happen anywhere in the world. Under EPR laws, the producers are responsible for collecting and recycling a certain percentage of the packaging they put into the marketplace. Under full-EPR systems, they can exert tremendous market leverage through determining contracts, which can in turn dramatically change business relationships and the balance of power in markets. But the materials themselves are still owned by whichever party is in physical ownership over the material at a given time.

VII. Some brief thoughts on product stewardship

Product stewardship generally means voluntary “EPR-like” initiatives from industry. For example, the Ocean Conservancy’s Trash Free Seas Alliance project to raise industry money to spend on waste management projects in Asia is a form of product stewardship.

Another worthy example for discussion is the Closed Loop Fund in the United States, which has raised tens of millions of dollars from a number of consumer brands and packaging suppliers to provide zero to low-interest loans for recycling infrastructure and projects. While this is not nearly enough (UPSTREAM’s perspective [here](#)), it still is an example of consumer brands creating a fund to help productively recover the packaging they put into the marketplace.

VIII. Strategic Questions on EPR, Zero Waste, Asia, and the future

While most of the Global North has EPR for packaging policies in place, and more can be done to make these policies address plastic pollution, we see several core strategic questions for anti-plastic-pollution advocates to consider, including:

- How is EPR currently being pursued in the Asia-Pacific Region?
- What kind of EPR or product stewardship policies are right for Asia and the Global South?
- How can we create EPR or product stewardship models (legal or voluntary frameworks) that can be used to support Zero Waste infrastructure and policies? What are the best practices?
- How will EPR impact waste pickers and how can we ensure that it benefits them?
- How can we balance the benefits of producer funding with the appropriate governance and representation to steer that funding toward Zero Waste goals rather than pure economic expediency?

While we wanted to provide some solid background for the group, this paper and the perspectives within are by no means comprehensive. We've heard about industry-led EPR efforts in the Global South that are thinly-disguised incineration proposals, which makes our work together all the more important and timely.

We hope that this document helps to provide useful information, and we look forward to beginning to answer these strategic questions and others with the larger group.

Addendum 1: Extended Producer Responsibility in Global South

Since our June conversation, UPSTREAM has continued to gather information about the variety of EPR programs proposed, implemented or otherwise discussed outside of the Global North. We have had one conversation with Victor Bell, President of Environmental Packaging International, a consulting firm which monitors and implements compliance with international regulations for global brands, which yielded the bulk of this information. We recognize that this is incomplete, but wanted to provide this in advance of the Taygaytay meeting. We would have liked to interview individuals within these countries, but did not have the time available.

India.

- EPR legislation has been coupled with a ban on multi-material laminates (e.g. most flexible plastic pouches currently include an aluminum layer). In 2019, all flexible plastics need to be made out of single polymer (expected to be polyethylene) that would allow this form of packaging to be recycled.
- There is also a ban on recycled content in take-out food containers due to government concern about contamination by materials processors.

- By September 2016, brand owners are responsible to take individual or collective responsibility for the collection and management of their packaging.
- There are no regulations yet as to the collection goals.
- There are also no specific regulations with how the system is to treat and/or interact with existing informal waste picker network.

Chile.

- Took 3 years of advocacy to pass legislation in 2016.
- It is a form of comprehensive EPR framework legislation, and the Ministry of Environment will need to promulgate regulation establishing program specifics. Packaging was set to be the highest priority.
- The expectation is that this will take a European style program of full responsibility in order to build infrastructure.

South Africa.

- 2014 mandate for the Ministry of Environment to create an EPR for packaging program.
- There is currently no timeframe for implementation, though in October 2015, the Ministry put forward its first directive in program creation.
- Existing EPR program for tires is funded through a Value Added Tax, and there is a good chance that a similar funding model will be implemented for the packaging EPR program.

Brazil.

- 21 different trade associations have committed to developing voluntary EPR programs through independent agreements with the Ministry of Environment.
- Many of the multinational corporations that operate in Brazil are members of these trade associations and will likely drive program development to be analogous to existing programs which they operate.
- Agreements specifically require consumer education.
- The trade associations are likely to build collaborative programs rather than a diversity of systems.
- Belief is that the Olympics was a push to for the creation of these programs; development and implementation has been slow, like much of the Olympic investments.

Bolivia.

- EPR Framework has been passed with direction for the Ministry of Environment to promulgate regulations. Initial focus is on PET bottles, bags and pesticides.
- This is coupled with design and labeling requirements to standardize products and communicate clear information to consumers.

- Includes a prioritization for biodegradability of some segment of materials, which appears, initially, to be inconsistent with the infrastructure that is in place in the country.

China.

- Legislation has been passed to create an EPR framework program.
- Interest waned by the government to implement the law.
- There has been renewed interest this year likely due to regional pressure of other nations which have adopted the policy.
- No one is sure if/when regulations will be adopted.

Russia (included for reference).

- Requires producers to either a) take responsibility for managing a regulatorily mandated percentage of the product sold into Russia, or b) pay fee to Russian states to cover the cost of meeting recycling standards.
- No regulations have been set as to collection standards or fee levels.

Brief lessons learned (*not comprehensive):

1. Though legislation has passed, there are questions as to how the programs will be regulated and what environmental standards will be set by government agencies.
2. It is our understanding that none of these programs have determined how to incorporate existing waste picker community needs and local processing facilities.
3. By itself, EPR will not prevent incinerator construction. Additional laws or regulations would need to be put in place to prohibit incineration or to establish minimum recycling standards.
4. Most states need an active and invested third-party organization (outside of government) pushing for implementation. In many places this has taken the form of collective action by industry in order to avoid material bans, taxation schemes or other types of national or local regulation. However, regional pressure is building in the Asian and Pacific Island region for consistency between methods for companies that do business throughout the region.
5. Most emerging programs are modeled after European-style system due to influence of consultancy groups and experience by regulated multinational corporations.