A Recycling and Plastics Glossary

What's advanced recycling technology? Post-consumer recyclate? Plastic producer responsibility? In order to achieve Zero Plastic Waste, we need to understand these phrases as we implement new programs and technologies.

Industry Commitments

The phrase industry commitments refers to the benchmarks Canada's plastics industry has set to address the plastic waste problem. Industry is committed to making 100% of plastic packaging recyclable or recoverable by 2030 and by 2040 100% of plastics packaging will be reused, recycled or recovered.

Advanced Recycling Technology (ART)

Advanced recycling technologies can supplement mechanical recycling and allow us to return discarded plastic into basic plastic molecules that can be transformed into new plastics, synthetic fuel and other products. These technologies offer innovative ways to enhance the lifecycle of post-consumer plastics. Companies like INEOS Styrolution are already working on cutting-edge technology to divert waste from landfills, such as converting plastic like polystyrene into chemical building blocks for its polymerization process that turns recycled plastics into other products. Pyrowave also uses a new application of microwave technology to continuously recycle plastics.

Post-Consumer Recyclate (PCR)

PCR is material made from everyday items that consumers recycle, like plastic shampoo bottles or plastic water bottles. For example, before the plastic waste is turned into resin, the plastic materials are gathered and sent through processes to produce unique, reusable inputs for plastic products, such as plastic resin pellets. One of the goals under the Canadian Council of Ministers of the Environment Plan for Zero Plastic Waste is to set standards for how much PCR certain products should use, expanding markets for PCR and increasing the value of plastics.

Plastic Producer Responsibility

Plastic producer responsibility is derived from the broader "extended producer responsibility" (EPR) and is specific to those companies that manufacture and use plastics. EPR can be best understood as industry-led programs focused on the recycling and recovery of products. It's an approach where businesses collaborate with governments to develop systems where they manage the full lifecycle of plastics. Plastic producers have undertaken this iniative by developing economies of scale and establishing packaging and recycled-content goals which can help drive demand for recycled content and create new markets.

Recovery Rate

The rate of recovery for recycling refers to how much recyclable materials are actually getting properly sorted and retrieved and made available for recycling. Higher recovery rates are usually a reflection of efficient residential recycling programs. The Hefty® EnergyBag® Program, sponsored by Dow, offers curbside collection of hard-to-recycle plastics and has become a primary way for communities like the London, Ontario to increase recovery rates and divert from landfills. London city staff estimate the EnergyBag program could capture between 15 and 24 pounds per year from single-family households and help London reach its goal of 60% waste diversion by 2022.