

Plastics Roadmap Summary

March 2020

Plastics Action Plan



6 R's to handle the challenge of plastics in curbside recycling in Quebec

Plastics are more and more widely used to make containers and packaging as they provide a means to protect and prolong the life of products. Certain advantages make them a preferred material for packaging design due to the following characteristics:

Low cost

Lightweight

Stability

These characteristics, however, are a challenge when it comes to recovery and recycling. The apparent pollution by plastics and the lack of recycling capacities for some of them generates bad press, which leads companies to use substitute materials whose environmental impacts may be even greater and more harmful.



QUEBEC CONTEXT:

- Through municipal curbside recycling, 80,000 tonnes are recovered from the estimated yearly total pool of 200,000 tonnes.
- According to RECYC-QUÉBEC, 50% of plastics collected, i.e. 40,000 tonnes, are recovered.
- The situation varies greatly by type of plastic, from very good for clear PET (#1) and HDPE (#2) to poor for laminated plastics and PVC.

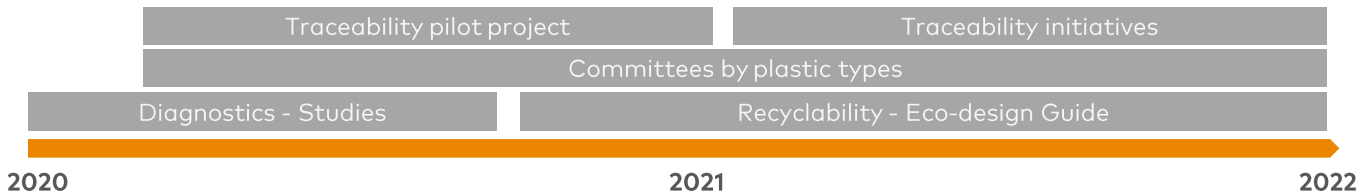
OBJECTIVES:

Through extended producers responsibility, increase recovery and recycling rates for all plastics collected via curbside recycling in order to maximize reuse of resources and minimize system costs.

Curbside recycling is a value chain in which each individual element contributes to the overall result. Improving the performance of plastics in curbside recycling is, therefore, a systemic challenge.

ÉEQ has developed an approach that takes into account all the elements in this value chain: the 6 R's.

The 6 R's: For a solution to plastics collected via curbside recycling in Quebec



RETHINK

Eco-design of containers and packaging, as well as reuse and refilling are some of the means ÉEQ recommends to reduce quantities of plastics at the source and facilitate their processing as part of curbside recycling.

REPLACE

Banishing materials induces changes in packaging. The impact of these changes on the supply chain, as well as alternative solutions, must be thoroughly evaluated in order to manage the replacement process of materials and additives.

RECOVER AND SORT

Collection methods can be optimized for each plastic type. MRFs model should be better equipped to handle the diversity of plastics, sort them and produce high quality bales.

BUILD UP RESPONSIBILITY

Companies must factor in the impact of materials they market on the sorting and recycling of plastics. The fee structure must evolve in such a way as to build up responsibility and influence the packaging designers.

RECYCLE

Processing and recycling capacities must be better qualified and quantified. Knowing technical specifications will enable a real supply chain to be set up between sorting, processing and recycling.

REGULATE

Regulations must recognize recyclable materials as a resource, provide a framework for design and traceability and stimulate innovation and market development. An obligation to recover should be implemented in Quebec.

Action Plan and Priorities

DIAGNOSE

- Analyze the performance of plastics streams;
- Determine capacities and market needs;
- Study effective systems and technologies;
- Perform a feasibility study for a dedicated plastics processing facility.

MOBILIZE

- Set up a steering committee and expert tables for each plastic types;
- Develop partnerships with international organizations;
- Implement a process to certify the recyclability of packaging;
- Organize meetings/events on eco-design, traceability and recyclability.

RETHINK

- Provide guidance for companies and train specialists in packaging eco-design;
- Develop eco-design tools, methods and guidelines;
- Design and test alternative methods for collection and measurement.

INNOVATE

- Test traceability methods;
- Contribute to research on packaging recyclability;
- Provide guidance for and support development of promising recycling projects.

RAISE ACCOUNTABILITY

- Modernize the curbside recycling system by broadening the scope of responsibilities for companies;
- Eco-modulate in real time the Schedule of Contributions for packaging taking into account the performance, environmental impacts and eco-design of materials;
- Introduce incentive and disincentive factors.

INFLUENCE

- Demand regulation to make recovery and recycling mandatory;
- Promote the use of recyclable materials in products and encourage the purchase thereof in public calls for tenders;
- Promote traceability for materials and publish related data.

COMMUNICATE

- Publish studies, tools, data and monitoring results produced by ÉEQ;
- Provide recognition for achievements in plastics recycling.