WASTE

A high-growth sector around the world

**Waste Management**
- US$475 billion in 2015
- US$562 billion in 2020
  - an 18% increase

**Recycling**
- US$21 billion in 2015
- US$35 billion in 2020
  - a 67% increase

**Waste-to-Energy**
- US$23.7 billion in 2015
- US$37.7 billion in 2020
  - a 59% increase

**Québec’s expertise**
- Biomass conversion
- Recycling of polymers, including polystyrene
- Thermal treatments
- Industrial ecology
- Processing equipment
- Automated sorting facilities

**Favourable business environment**
- Application of Extended Producer Responsibility
- Disposal royalties
- Compensation scheme

**International situation**
- Construction: 39%
- Residential: 26%
- Industrial: 23%
- Commercial: 12%

**Research and organizations**
- Centre de Recherche Industrielle du Québec (CRIQ)
- Centre de Transfert Technologique en Écologie Industrielle (CTTEI)
- Centre Technologique des Résidus Industriels (CTRI)
- Chaire de Recherche sur la Valorisation des Matières Résiduelles (CRVMR) - Polytechnique Montréal
- Groupe de Recherche en Recyclage Biologique et Aquaculture (GRERBA) - Université Laval
- National Optique Institute (INO)
- Recyc-Québec
- Conseil des Entreprises en Technologies Environnementales du Québec (CETEQ)
- Québec Business Council on the Environment (CPEQ)
- Eco Entreprises Québec (EEQ)
- Recycle Médias
- Regroupement des Récupérateurs et des Recyclers de Matériaux de Construction et de Démolition du Québec (3R MCDQ)
- Réseau Environnement

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In collaboration with
Machinex designs and produces custom-made sorting and recycling technology for facilities around the world: disc screen separators, optical sorting equipment, trommels, bag openers, glass cleanup and recycling systems, over belt magnets, eddy current separators, etc. The technology can process construction and demolition debris, commercial and industrial waste as well as conventional municipal solid waste.

Polystyvert recycles polystyrene. Thanks to the natural solvent used in its concentrator, Polystyvert can reduce the volume of polystyrene to be transported to its plant by a factor of 10, thus cutting both the costs and GHG associated with transportation. Its patent-pending technology for separating the solvent and polystyrene produces a high-quality recycled product that can be reintroduced into the polystyrene production chain.

Pyrowave has developed a microwave technology for recycling mixed plastics. Modular recycling units can be rented or set up at the customer's place of business. Pyrowave then delivers the liquid generated to refiners. This business model increases the recycling rate and reduces the volatility of recycled resin prices.

Sherbrooke OEM specializes in the design, manufacture and integration of customized recycling equipment for various industries (e-waste, construction, curbside collection, metal recyclers, waste-to-energy projects, etc.).

Terragon’s unique appliances enable the Total Resource Utilization (TRU) habitat as well as the Zero Waste Discharge habitat, leading to reduced environmental impact and contributing to a revolution in resource management.

Tricentris operates a glass micronization plant that produces glass powder and aggregates from recycled glass. Glass powder can be used as a cement additive to improve concrete performance, while aggregates can be used as a sand substitute in various applications like road abrasives and backfill material.