

- ▶ *The production of all plastics in Canada consumes just two percent of this country's oil and natural gas resources.*
- ▶ *Plastics comprise 7 percent by weight (14-20 percent by volume) of all municipal solid waste.*
- ▶ *In a world without plastics packaging, the volume of packaging waste would increase over 250 percent, its weight would increase over 400 percent, energy consumption would increase over 200 percent and costs would increase over 210 percent.*
- ▶ *Plastics are physically stable and do not contribute to groundwater contamination or gas generation when landfilled.*
- ▶ *Communities and businesses across Canada now collect plastics as part of their recycling programs.*
- ▶ *There is no single cause and no single solution to the solid waste problem. An integrated approach that selectively utilizes source reduction, reuse, recycling, recovery of energy and retention in landfills is the most balanced approach to achieving safe, economical and effective resource management results*

Plastics and the Environment Myths & Facts

Since its introduction, plastic has been portrayed in equally opposite perspectives: the revolutionary miracle materials versus the compromise of industrial progress.

Some people paint plastics as a material that somehow succeeds at nature's expense; indifferent and perhaps even hostile to the concept of conservation. Their palettes hold only blacks and whites and their brushes are broad - so broad they may inadvertently shade or obscure the facts. And the resulting portrait, though dramatic, more often represents a collage of misconceptions rather than reality.

A clearer picture is required if we are to agree upon effective solutions to our environmental challenges. And more colours must be added to the palette to balance the perspective on plastics. Indeed, the very characteristics most often cited as principal environmental faults are precisely those qualities that originally made plastics a miracle material...and will continue to make plastics an important part of our lives in the future.

Some people believe that...

The production of plastics uses much of Canada's non-renewable natural resources.

Fact is that...

The production of all plastics in Canada consumes just two percent of this country's oil and natural gas resource. Plastic resins require far less energy to produce than most alternative materials.

Some people believe that...

The largest component of all municipal solid waste is plastic.

Fact is that...

The largest component by weight is paper and paperboard (36%), followed by yard waste (20%), metals (10%), food waste (9%), glass (8%), plastics (7%) and other miscellaneous waste (10%).

Some people believe that...

If plastic packaging could be eliminated by substituting other materials, the world would be better off environmentally.

Fact is that...

One of plastics' largest contributions to the packaging industry is its ability to be made of very thin films and containers. In fact, packagers are increasingly substituting plastics for alternative packaging materials because they can achieve significant reductions in packaging weight, volume and cost for the same amount of product delivered.

The environmental impact would be severe if other materials were substituted for plastics in packaging. It has been estimated that the volume of packaging waste would increase over 250 percent, the weight of packaging waste would increase over 400 percent, energy consumption would increase over 200 percent and overall packaging costs would increase over 210 percent.

Some people believe that...

Food and beverage packaging is the primary cause of our solid waste problem. We wouldn't be facing this issue if we simply eliminated packaging.

Fact is that...

Packaging is an essential part of the public health, economic well-being, standard of living and lifestyle of modern societies. Canadians have become accustomed to safe, fresh foods and enjoy one of the lowest spoilage rates in the world (less than three percent). Countries lacking sophisticated packaging and distribution systems have food contamination and spoilage rates approaching 50 percent - a lot more trash requiring disposal.

Some people believe that...

Biodegradability in landfills is the solution to the solid waste problem.

Fact is that...

Modern landfills are managed to entomb trash so that little, if any, degradation actually occurs. Because of the lack of oxygen and moisture required for decomposition, even vegetable matter shows little decay over decades. The by-products resulting from the degradation of any material can have serious environmental consequences, including toxic leachates and atmospheric greenhouse gases.

Materials that are landfilled should be physically stable, non-degradable, and not contribute to groundwater contamination or gas generation. Plastics meet these criteria and behaves as “model citizens” in a landfill environment.

As people become better informed about solid waste issues, the focus of attention will shift away from the degradability myth and toward real solutions like source reduction, reuse, recycling and recovery of energy - solutions in which plastics play an important role.

Some people believe that...

Plastics aren't being recycled.

Fact is that...

Hundreds of communities and businesses across Canada collect plastics as part of their recycling programs. To obtain maximum scrap value, the plastics should be separated by type just as you would separate different types of paper or colours of glass. If the plastics are not separated and remain commingled, some recycling operators can use them to produce lumber-substitutes for numerous outdoor applications.

Some people believe that...

Recycling is the solution to our solid waste problem

Fact is that...

There is no single solution, just as there is no single cause. While recycling must contribute to play a vital role in diverting waste from landfill where technically and economically feasible, most solid waste officials now agree that an integrated approach to resource management is the most effective way to achieve safe, economical results.

An integrated approach selectively utilizes source reduction (making less), reuse (where appropriate), resource recovery (including materials recovery through recycling and energy recovery) and, finally, retention in landfill.

Some people believe that...

Burning garbage is not an acceptable option for managing solid waste.

Fact is that...

Energy recovery is gaining acceptance in various parts of the world as an effective option for waste disposal when combined with comprehensive recycling programs. Residual ash occupies one-tenth the space of the original refuse, weighs one-fifth as much, and revenues from the sale of steam or electricity help offset the rising costs of waste disposal. Current energy-from-waste technology and pollution controls make it possible to burn solid waste and recover its energy without undue risk. This technology is commonly employed in Switzerland, Sweden and Japan.

Some people believe that...

Plastic packaging is a major source of our litter problem.

Fact is that...

No packaging material, in itself, is a source of litter. The real sources of litter are people who toss their garbage in places where it doesn't belong. Attempts to solve litter problems by banning particular products rather than changing careless behaviour invariably fail because they don't address the root cause. People litter - not products.

Some people believe that...

Polystyrene products such as meat trays and coffee cups are manufactured with CFCs which deplete the ozone layer. These same products are clogging our landfills, and can't be recycled.

Fact is that...

Over 90 percent of polystyrene foodservice products never contained CFCs as a foaming agent in the first place. As the end of 1988, all Canadian producers of polystyrene foodservice disposables completely and voluntarily phased out fully halogenated CFCs once used to produce some products.

All "fast-food" packaging accounts for approximately one-third of one percent of landfill waste.

The Canadian Polystyrene Recycling Association (CPRA), located in Mississauga, Ontario, operates one of North America's most comprehensive polystyrene recycling operations. Opened in 1991, CPRA recycles polystyrene material collected from the industrial, commercial and institutional sector, foodservice establishments and Ontario's curbside collection program.