



Plastic Bottles

Energy Consumption

Just two per cent of Canada's oil and gas makes all of this country's plastics. Plastic bottles consume less than one-tenth of one per cent of that amount.

Plastic bottles use less total natural gas and crude oil hydrocarbons, including the raw material in the bottles, than glass bottles, metal cans or paperboard containers.

Plastic bottles conserve energy during transportation. In 1983 dollars and economic conditions, each jumbo jet saved \$15,000 in fuel costs alone when airlines converted from glass to plastic miniature liquor bottles.

Plastic bottles save energy during production and transportation when compared to alternative containers. Weight for weight, plastic bottles translate into cost savings for distributors and an energy saving for the nation.

Atmospheric Emissions

Because less energy is required to produce and transport a plastic bottle, fewer greenhouse gases are released into the atmosphere.

Plastic bottles reduce atmospheric impacts and contribute less to the increasing "Greenhouse Effect" when compared to bottles manufactured from other resources.

Landfills

All plastics are just seven per cent of municipal solid waste. (Paper and paperboard are 36 per cent, metals are ten per cent and glass is eight per cent.)

The total amount of mixed bottles and jugs in the overall waste stream is roughly one-half of one per cent.

Based on the results of a recent Australian study, a 2-litre milk jug generates much less waste for every million litres of milk bottled than either a plastic-coated paperboard container or a glass bottle, even when the glass bottle is reused ten times.

A 2-litre PET soft drink bottle will compress to about 25 cubic inches in a landfill, compared with 150 cubic inches for an unbroken 2-litre glass bottle.

Plastics actually help reduce the volume of waste that would otherwise need to be dealt with.

Environment and Plastics Industry Council www.plastics.ca/epic

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Degradability

Modern landfill sites are designed as tombs (no leachates to contaminate groundwater, no dangerous build-up of explosive methane gases).

Biodegradation is generally undesirable: biodegradables do not increase landfill capacity over reasonable periods of time (decades).

Degradation occurs very slowly, if at all, in modern landfills.

Plastic liners are used to prevent groundwater contamination in many modern landfills.

Plastics are inert. They do not release noxious gases and they help prevent groundwater contamination.

Reduction and Reuse

Waste problems would be more acute without plastics.

Plastic bottles are commonly reused by the public to store corrosive household chemicals.

The industry encourages reuse and reduction: Procter and Gamble's "Enviro-Pak" uses 80 per cent less material by refilling, from a pouch, bottles the consumer has bought once and reuses.

Recycling

The industry strongly supports the extension of Ontario's Blue Box recycling project and contributes funds to Corporations Supporting Recycling (CSR).

Mixed plastic bottles are being recycled into a wide array of household and industrial products such as fibrefill, paint brushes, agricultural tiles and construction materials.

Plastics (PET) soft drink bottles can be recycled indefinitely because the recycled plastic has the same properties as virgin material and does not disintegrate over time. Market demand for PET now exceeds supply.

Energy Recovery

Modern societies such as Switzerland and Sweden encourage energy generation from waste through incineration in modern emission-controlled incinerators.

The plastic component of post-consumer waste is sought after because its calorific value permits incinerators to be operated at the high temperatures needed to eliminate harmful emissions.

Plastics do not emit harmful toxins into the atmosphere when burned in state-of-the-art energy

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recovery incinerators.

Safety

The replacement of glass by plastic has dramatically improved home safety. As well, plastics have reduced hazards posed by broken containers in manufacturing plants, warehouses and supermarkets.

Tamper-resistant plastic seals offer obvious advantages where product integrity is concerned.

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