

REDUCE, REUSE, RECYCLE

The life of a recycling bin.



WHERE Challenge
2011

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THROW IT IN THE BIN

What on earth is in a recycling bin & where on earth does it come from?

What is “Recycling?”

The production of waste has always been a major part of our society. We take, we use, we throw away. The goal of recycling is to prevent the waste of potentially useful materials by reusing and reprocessing the used materials (waste). This aids the environment as it reduces the consumption of our resources and reduces the need of conventional waste disposal (landfills). Recyclable materials include glass, metal, paper, plastic, textiles and electronics. As inhabitants of earth, many of us will do what we can to aid the earth, and in the rise of the “Global Warming” crisis, many feel that recycling is just a small, easy step we can implement with a positive impact on the earth. But does saving the planet leave behind its own negative footprint.



The Recycling Bin

The recycling bin is a key component of the recycling process for civilians. You see them in food courts, in offices, in schools and at home, everyone of them covered in the recognizable logo. Though it is used to contain potentially useful waste, what is the recycling bin itself made of?



DIFFERENT TYPES OF RECYCLING BINS

The most common type of recycling bin is the kind seen in offices, schools and residential homes. It is most often a plain blue bin with the three arrow logo on its side. Also, there are bins that are usually seen in public areas such as malls, parks and streets, often paired with garbage cans.

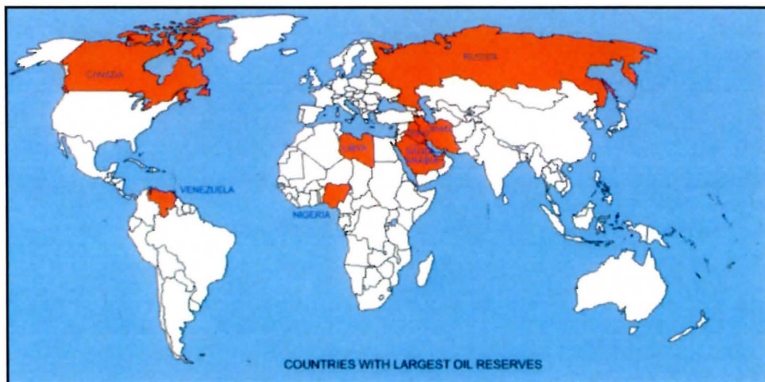
Non-Renewable Resources

One purpose of the recycling program is to lower the waste of non-renewable resources, a natural resource that cannot be generated or produced at the same rate it is being consumed. But what non-renewable resources go into the production of recycling bins.

HOW IS PLASTIC MADE?

Plastic is formed of polymers that are essentially a long chain or line of smaller molecules that are known as monomers. Monomers themselves are made of chemicals usually derived from natural or organic substances.

1. **Petroleum (crude oil)** and **natural gas** are the non-renewable resources used to make most plastics which are drilled and pumped from the ground or ocean floor
2. Monomers are then extracted from the petroleum (petrochemicals)
3. The monomers are set into the polymers and processed and through the use of heat are molded into the desired shape



Where does it come from?

There are many oil reserves throughout the world. The top oil producers are **Saudi Arabia, Russia, Canada and the United States** among others.

Canada has the second largest proven oil reserve in the world second only to Saudi Arabia. One of the largest oil reserves in the world is the **Athabasca oil sands**, located in Alberta. Canada is also home to very large natural gas reserves off the coast of the Atlantic Ocean.

Conclusion

The recycling bin may be a step towards the salvation of our resources but even if it is an helping hand, it still leaves behind its own footprint. We must preserve what resources we still have.

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