

Environmental Impacts from MSW

Vast amounts of wastes generated and disposed of every day from each of us have caused several environmental problems such as water contamination, natural resource depletion, and global climate change, placing burdens on the ecosystem in our country.

Pollution

Disposing of waste at landfills causes pollution that can contaminate the air, surface, ground water, and soil. In addition, waste produces significant amount of methane, i.e., one type of greenhouse gases, during waste treatment and disposal, and substantially contributes to global climate change.

Natural Resource Exploitation

Every time something is disposed off, more new raw materials are extracted to create replacements or new products. This cycle results in depletion of natural resources such as trees, water, and metals. For example, to make a ton of virgin paper, 24 more trees are cut down. It also consumes 5 times more water to make paper from trees than recycled materials.

Moreover, metal mining for producing new metal products invites serious environmental degradation such as groundwater contamination and deforestation.

Increased Energy & Water Consumption

Creating products from raw materials generally consumes more energy than creating the same product from recycled materials. For example, it takes 20 times more energy to produce aluminum from raw materials than from recycled aluminum. It also takes almost two times more energy to produce a cereal box from raw materials than using recycled boxboard. The increase in energy demand results in burning more fossil fuels that contribute to the increase in concentration of greenhouse gases in the atmosphere.



What we can do...



To reduce negative impact on the environment, elimination of waste we generate is critical. Three ways are suggested: 1) reducing, 2) reusing, and 3) recycling waste.

Reduce

Reducing the amount of waste you discard is the most critical method to eliminate waste. If you can avoid making waste in the first place, you can reduce waste sent to landfills and reduce your environmental foot print in the end.

Reuse

Reusing materials that you have instead of throwing them away also greatly helps avoid waste generation. Using reusable bottles for water instead of consuming disposable plastic water bottles is one example. Using rechargeable batteries is another.

Recycle

Even after you reduce and reuse waste, you may still need to discard some waste. Recycling is another way to eliminate waste. Recycling helps conserve both natural resources and space in our landfills. Recycling also saves energy and water and prevents pollution caused by the manufacturing of products from raw materials. Furthermore, recycling decreases emissions of greenhouse gases that contribute to global climate change.