

Importance of Waste-to-Energy

By [Be Waste Wise](#) | January 11, 2016 - 4:20 am |

Waste-to-energy has been evolving over the years and there are many new developments in this technology, moving in mainly one direction – to be able to applied to smaller size waste streams. Not only is it a strategy that has real importance for the current public policy, it is a strategy that will definitely present itself to additional areas.

More than 50% of waste that is burnt in waste-to-energy facilities is already part of the short carbon cycle. In which case, it has an organic derivative and it doesn't add to climate change, to begin with. The long form carbon that is burned, things like plastics that have come out of the ground in the form of oil do add to climate change. But, they have already been used once. They have already been extracted once and what we are doing is taking the energy out of them after that physical use, capturing some of that (energy), thereby offsetting more carbon from natural gas or oil or coal. So, the net effect is a reduction in carbon emissions.

Waste-to-energy and recycling are complementary depending on the results of analyses of the First and Second Laws of Thermodynamics, which are absolutely valid. One can decide in specific situations whether waste-to-energy or whether some type of recycling technology would be more appropriate. It is not an either/or option.

In Austria, it was possible to have an absolute ban on landfilling wastes exceeding 5% organic carbon. This is written in law since 1996. There were some exceptions for some period of time, but landfills of organic wastes are just banned, not just in Austria but also in other cultures similar to Austria – like Switzerland and Germany.