

Waste to Energy Outlook

As we consider the options available for the utilization of the large waste resources that surround most of our cities and towns, it is apparent that more can be done to encourage best practice in how waste is managed. Experience has shown that decarbonizing the energy industry should include policy on the use of waste and to obtain the most efficient utilization of waste to energy there should be a heat component alongside power. However, not all the waste that we generate can be thermally processed in a carbon neutral way and plastic that has been derived from fossil fuel comes into this category. Clearly, a degree of sorting is required so that different waste streams can be processed in different ways in the most environmentally friendly way possible. Similarly, energy is not the sole product that can be extracted from waste and high value chemicals can also be recovered. In this plenary lecture I will explore the technologies that are currently being used or developed to ensure that we manage waste in the most appropriate manner to provide part of our energy needs into the future from an ever increasing resource.