Carbon emissions from burning plastic waste

Slide by Neil Goalby. Available from rsc.li/43nPuGo

Plastic waste is increasing as the demand for plastic products increases. We dispose of some of this waste through energy-generating methods, including incineration, to reduce what ends up in landfills. In many places, municipal plastic waste is classed as a renewable energy source.

However, a new study has shown that by 2050, converting plastic waste into energy will result in more carbon dioxide emissions than burning fossil fuels. The findings show plastic waste-to-energy conversion should be a far larger concern with regards to global warming than it currently is.

Incinerating plastic might not be the clean energy source we think it is

Questions

1. Why is putting plastic waste in landfill an environmental problem?
2. What problems are caused by incinerating plastic waste?
3. Suggest how we can decrease the carbon footprint of using plastics.