

Discover a new Win-Win Technology to Recover Plastic Waste and Winner of the 2006 EEP Gold Award

Polish company Tokarz has developed a recovery technology that converts plastic waste into a high-quality component of liquid fuels by employing the method of catalytic processing. An innovation which can be regarded as a promising alternative to incineration of plastic waste.

Products made of plastic and products made of petrol belong to the same hydrocarbon grouping, although the molecule line of plastics is longer than that of petroleum. The T-Technology developed by Tokarz converts plastic waste into liquid fuels through depolymerisation. In other words, this process converts the material back into its original form, that is to say "a mixture of gaseous fraction hydrocarbons which can be further processed in refineries or used in a form of a fuel oil fraction for heating houses".

T-Technology offers the following advantages:

T-Technology converts different kinds of plastic waste, such as polyethylene (PE), polypropylene waste (PP) and Polyvinyl chloride (PVC) which do not need to be separated or treated beforehand. It can accept up to 25 per cent of elements and particles other than PE and PP in the total weight of intake materials, without any prejudice to the quality of the final product:

- Between **0.57 kg and 0.62 kg** of the final product is obtained from 1 kg of plastic waste.
- This is a **low energy consumption process**, which requires only 30 litres of fuel per hour and about 30kW of electric energy.
- Unlike incineration, and because the recovery process takes place under atmospheric pressure conditions where elevated temperatures are used, **no dioxin emissions are produced**.
- The process does not produce residual waste, and therefore entails **no landfill**.
- **Nine reactors are functioning in Poland**. Financially, and as explained by the Tokarz company, **the return on investment takes place within a three-year period in Poland**.

T-Technology constitutes a safer and more environmentally sound recovery process than incineration. It recently won the 2006 EEP (European Environmental Press) Gold Award, an annual prize which recognizes the efforts of European companies that are improving the environment with their innovative environmental technologies.

For more information:

<http://www.tokarz.pl>

<http://www.eep.org/eep-award-2006-winners.htm>



Mr. Tokarz, inventor of T-technology, is presented with the 2006 EEP Gold Award