

## IS THIS "HOMO" REALLY "SAPIENS" OR IS HE A FOOL? OR HOW TO BE RESPONSIBLE FOR OWN DEEDS

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The thought that we shouldn't destroy and pollute, to not build up again and cleanse afterwards - is as old as the world. However, the humanity continues to follow the ways of destruction and pollution in its activities.

Environmental protection is one of the main problems of today.

Technological progress improves people's lives, but at the same time it causes problems which are growing in number day after day. Some of them are well known. Others are quite new.

Among the most urgent problems are the ozone layer, acid rains, global warming, toxic pollution of atmosphere, oceans, disappearance of animals and forests, destruction of soil in some areas, threat to some flora and fauna representatives, accumulation of waste, etc.

### What is the Problem with Waste?

The European Union produces 1.3 billion tonnes of waste each year. In other words, 3.5 tonnes of refuse and liquid or solid waste per European citizen. There are estimations according to which 40 million tonnes of this are classed as hazardous, or particularly dangerous. Among other things it can be:

- ✓ Ecotoxic, which causes damage to the environment.
- ✓ Carcinogenic, which causes cancer.
- ✓ Persistent, which remains dangerous for a long time.
- ✓ Bio-accumulative, which accumulates as it makes its way up the food chain.

At present our region has accumulated more than 29 million tonnes of waste that occupy 5 thousand hectares (about 120 tonnes per square metre). It also produces 650 thousand cubic measures of domestic solid waste per year (Sumy produces 420 thousand), what individuals put in their bins. Officially this garbage is placed on 320 landfills and dumps. This figure is much less in any developing country, and is higher for the US.

There are two main problems with waste:

1. We are using resources inefficiently. Every bit of excess packaging, industrial waste, or damaged goods costs resources.
2. The management and disposal of waste is not efficient or clean.

Waste does not just create an environmental impact: it also costs money. This is why industrial waste has been reduced over the last 30 years. A social cost is to show how people perceive the area in which they live.

Dealing with waste is big business: the recycling business alone has an annual turnover of \$US 160 billion and employs 1.5 million people worldwide.

The best way to tackle the problems associated with waste is to:

Prevent It. In an industrial sense, this can be looking at the way that the product is designed, manufactured or transported. For individuals - reducing food waste, buying better quality products.

Re-use It. The charity shop, that takes clothes or books that are still good for use 'as is', or places that take mainly unwanted electronic goods, repair them or get the useful parts and then sell them back on .

Recycle It. Some materials (metals, paper, glass, some types of plastic and construction/demolition waste) are now more or less systematically recycled.

Countries that have achieved a high level of recycling of waste have done so because they have been able to create a culture of doing so. In Germany, children are taught at school about the importance of properly separating their waste, and separate bins are provided and weighed. The less mixed waste you have, the less you pay.

Incinerate It and Use the Energy and Heat or use new technology – getting gas from waste via microorganism's help.

There is only one company, Elga, in Ukraine that can neutralize outdated and old pesticides and agricultural chemicals. It is located in the city of Shostka in Sumy region. The utilization of 1 ton of chemicals costs up to 25 ths hryvnias per ton. Elga can neutralize not more than 750 tons of pesticides annually.

Landfill It. In the developed world landfills must fit some standards, but, unfortunately, there are still thousands of illegal ones.

To protect nature people should change their attitude to it.

Man should stop taking from nature everything he needs and give it his love instead. Otherwise the price that mankind will have to pay will be too high.