

EARTH ENVIRONMENT POLLUTION

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Nowadays the main subject in media is the global warming, the warming of the entire earth, proved by 0.75 C degrees increase in the average temperature over the last century and by the largest rate of warming in the last 30 years.

The broad agreement among climate scientists is that the global temperatures will continue to increase leading to the global climate change of our planet Earth.

Although along the time the planet Earth encountered natural alternating periods of warming and cooling, many scientific, research, technological, climate, atmospheric, meteorological, astronomical, geological, geodesy, geophysics, physics, chemical, biology, microbiology, coral reef, oceanographic, foresters, wildlife, medical, health, statistical etc. societies agree that the human activities have become a major source of the latest environmental change.

The human activities are supposed to give to humans more than the nature can give them, respectively new materials, products, processes that would improve their life.

The humans invent and create taking examples from nature and are happy to obtain new things in different manufacturing processes, but do not care about what happens with the residual products and the used products that will accumulate as "debris" (the term "debris" depending on context).

Nature cares about its own creations after they die, for example the autumn fallen leaves do not remain on soil stopping other plants to grow, because they are built from a material that quickly breaks down into its constituent chemicals which penetrate in soil nurturing the other plants.

But nature cannot decompose all materials created by humans.

That cannot be left at random/moods/voluntarism so a new project or design should not be considered ready until it also *designs the procedure to remove the future "debris"*.

Any new project besides designing the main subject should contain the design of the way to remove the residual/undesired/used products of the manufacturing.

The design can involve automation and can create jobs.

Before the first industrial revolution (~ 1800 year) the producers used for the manufacturing of the new products the materials found in nature.

For the materials produced by it-self, nature has the ability to decompose them so the residual products of manufacturing and of course the used (not more needed or wasted) products are naturally decomposed.

As the sciences were emerging were tests/experiments to create and use new, man-made materials for new products but the good outcomes were in small quantities and the residual and wasted products were insignificant.

From the first industrial revolution the engines and the machines took the place of the horse/cattle power and the human force and the manufactured products increased very much in number and since were created new materials, not found in nature, with better proprieties from the human view point, the manufactured products increased very much in diversity too.

The social life was change in better as a consequence of the markets rich in new and useful products! But the residual, undesired, used products resulted in the new context are not at all insignificant since they increased in quantity and in diversity too and not only that the natural decomposition last much more but cannot occur at all at least at human life scale!

And so, for over 100 years quantities of detritus, remnants, rubble, wreckage, garbage, junk, litter, refuse, waste are produced daily and are daily deposited on land, wasted in waters or spread in atmosphere and since their slow rate of decomposition they are doing in silence what is called the pollution of the environment.

By definition, to pollute the land, water, atmosphere means to make it dirty, impure and dangerous for people and animals to live in or to use, especially by means of poisonous chemicals that are produced as a waste product of an industrial process.

It is very interesting that in the context of the excitement provoked by the new, diverse and rich markets, the damaging effect of the wasted materials has passed undetected for more than one century! Since the humans created the new materials, they have to create also the means to remove them!

Doing a simple analysis of the present "debris", it can be divided into three categories, function of the state of aggregation: solid, liquid and gaseous.

– The solid "debris" usually is deposited on land or wasted in waters, where it can poison/stop the life of the plants and animals.

The solid debris appears to be the most conspicuous pollutant when visibly floats on the ocean's surface as "marine debris".

It should be removed from waters by contracted divers.

In the international waters the removing of "debris" should be done by schedule.

For the solid "debris" a means of getting rid of it is by *selecting* and *burning*.

And for example, the selected metallic parts (after melting) can be used to manufacture new metallic objects and the burning of the “debris” can be efficiently used in electric power stations.

– The liquid "debris" usually is wasted in waters, where it can poison and deplete them of plants and animals. It should be filtered and neutralized before enters the waters.

– The gaseous "debris" usually is spread in atmosphere, with effects like raising the temperature, changing the composition of the oceans and so on.

The heat from Earth is trapped into the atmosphere, due to the high levels of heat-trapping gases creating a phenomenon known as the "greenhouse effect".

In connection with the gaseous residual products is very important to mention the carbon dioxide CO₂, which is a direct result of burning fossil fuels (1.2 kg CO₂/1 kg coal), broad-scale deforestation and other human activities, because about half of the greenhouse effect is caused by CO₂.

Planting trees (man-made forests) remains one of the cheapest, most effective means of drawing excess CO₂ from the atmosphere, trees acting as a carbon dioxide sink by removing CO₂ from the atmosphere during photosynthesis (210 kg CO₂/ha/summer-day) to form carbohydrates that are used in plant structure/function and releasing oxygen back into air.

The industrial producers of CO₂ should be close to natural/man-made forests and should be realized a compromise between producing CO₂ by burning fuels and consuming CO₂ by forestation.

To care about the environment, to keep clean the planet Earth involve a restless work with wise decisions and flexible solutions, following the ways of nature rather than fighting them.

Since already the Earth environment is polluted, the administration of each village/town/city/region from every country should proceed to design the way to liberate their land, waters and atmosphere of the present pollutants, parallel with preventing the damaging effect of the new ones.

For a correct analysis of the present and future pollution, to find solutions and means to remove it, the administration should allocate financial funds and contract/employ

temporary/periodically/permanently high level trained scientific, technological, research etc. staff.

The use of *electronics based devices to detect/measure/research pollution* is obvious.

“Debris” processing industrial complex could be a choice if/where necessary.

An international *establishment* concerned about *Earth Environment* based on the most advanced science and technology, with work done in background with humane, high level trained and paid staff, using the mankind knowledge accumulated in years of hard work and dedication, would assure a clean and reliable environment, the key to life of the present/future generations on Earth.

Reference: Wikipedia

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Since intense media appeals for opinions/solutions the writing was sent to
UNEP & UN Climate Change Conference 2009 / Copenhagen Summit 7-18 December 2009.

The media appeals decreased considerably after that.