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ENVIRONMENTAL POLLUTION, THE CAUSES, EFFECTS AND HOW TO LESSEN THE EFFECTS ON MANKIND.

What is pollution?

Pollution is the introduction of contaminants into the environment that cause harm or discomfort to humans or other living organisms, or that damage the environment, which can come in the form of chemical substances, or energy such as noise, heat or light. Pollutants can be naturally occurring substances or energies, but are considered contaminants when in excess of natural levels.

Environmental pollution is defined as "the contamination of the physical and biological components of the earth/atmosphere system to such an extent that normal environmental processes are adversely affected." This takes place when the environment cannot process and neutralize harmful by-products of human activities (poisonous gas emissions) in due course without any structural or functional damage to its system.

Generally speaking, there are many types of environmental pollution, but the most important ones are:

- **Air pollution** - some of the most notable are sulfur dioxide, nitrogen dioxide, carbon monoxide, ozone, volatile organic compounds and airborne particles, with radioactive pollutants probably among the most destructive ones (specifically when produced by nuclear explosions)
- **Water pollution** - includes insecticides and herbicides, food processing

waste, pollutants from livestock operations, volatile organic compounds, heavy metals, chemical waste and others

- **Soil pollution (contamination)** - hydrocarbons, solvents and heavy metals in modern industrialized societies, fossil fuels (oil, gas, coal) transcended virtually all imaginable barriers and firmly established themselves in our everyday lives. Not only do we use fossil fuels for our obvious everyday needs (such as filling a car), as well as in the power-generating industry, they (specifically oil) are also present in such products as all sorts of plastics, solvents, detergents, asphalt, lubricating oils and in a wide range of chemicals for industrial use.

What are the causes of environmental pollution?

The causes of environmental pollution vary but have basic focus points. The industries play a major part in environmental pollution, they have been polluting our environment especially since the beginning of the industrial revolution, as mentioned above, notably due to the increasing use of fossil fuels. In the 19th century and for a significant part of the 20th century, coal has been used to make machines work faster, replacing human force. Though pollution by industries mainly causes air pollution, soil and water contamination can also occur. This is particularly the case for power-generating industries, such as plants producing electricity (May they be a dam, a nuclear reactor or some other type of plant).

Transportation also plays a large part in committing to environmental pollution, ever since men abandoned animal power to travel, pollution of the environment has become higher and higher. Its levels have only been increasing until now. Similarly to industries, pollution caused by transport can mainly be attributed to fossil fuels. Indeed, humans went from horse carriages to cars, trains (which, before electricity, used to be propelled by coal), and airplanes. As traffic is increasing every day, pollution follows that evolution.

The effects of environmental pollution on the society and how to lessen them.

Environmental pollution effects go on from its effects on humans to its effects on the ecosystem, the effects of environmental pollution on humans are mainly physical, but can also turn into neuro-affectations in the long term. The best-known troubles to us are respiratory, in the form of allergies, asthma, irritation of the eyes and nasal passages, or other forms of respiratory infections. Notably, these well-spread affectations can be observed when air pollution is high in cities, when the weather gets hot, for instance. On top of that, environmental pollution has been proven to be a major factor in the development of cancer.

As for animals, plants, and especially trees, can be destroyed by acid rains (and this will also have a negative effect on animals as well, as their natural environment will be modified), ozone in the lower atmosphere block the plant respiration, and harmful pollutants can be absorbed from the water or soil. The effects on the ecosystem, In short, environmental pollution, almost exclusively created by human activities, has a negative effect on the ecosystem, destroying crucial layers of it and causing an even more negative effect on the upper layers.

Steps are already being taken to lessen the effects of environmental pollution in our society, for instance, the introduction of electric cars. If this is achieved this will bring about a drastic drop in the amount of CO₂ gas being released into the atmosphere, industries are ordered to go into the recycling of old products, creation of less chemical goods and creation of goods that are biodegradable like an egg carton that is biodegradable.