

Topic- Environmental Pollution

Soil, Water and Air Pollution (SOIL-508)

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ENVIRONMENTAL POLLUTION

Environmental Pollution Includes



Water Pollution

Affects the Marine Life



Land/Soil Pollution

That Harms Land



Air Pollution

That Affects Air



Noise Pollution

That Harms the Health of People



AIR POLLUTION

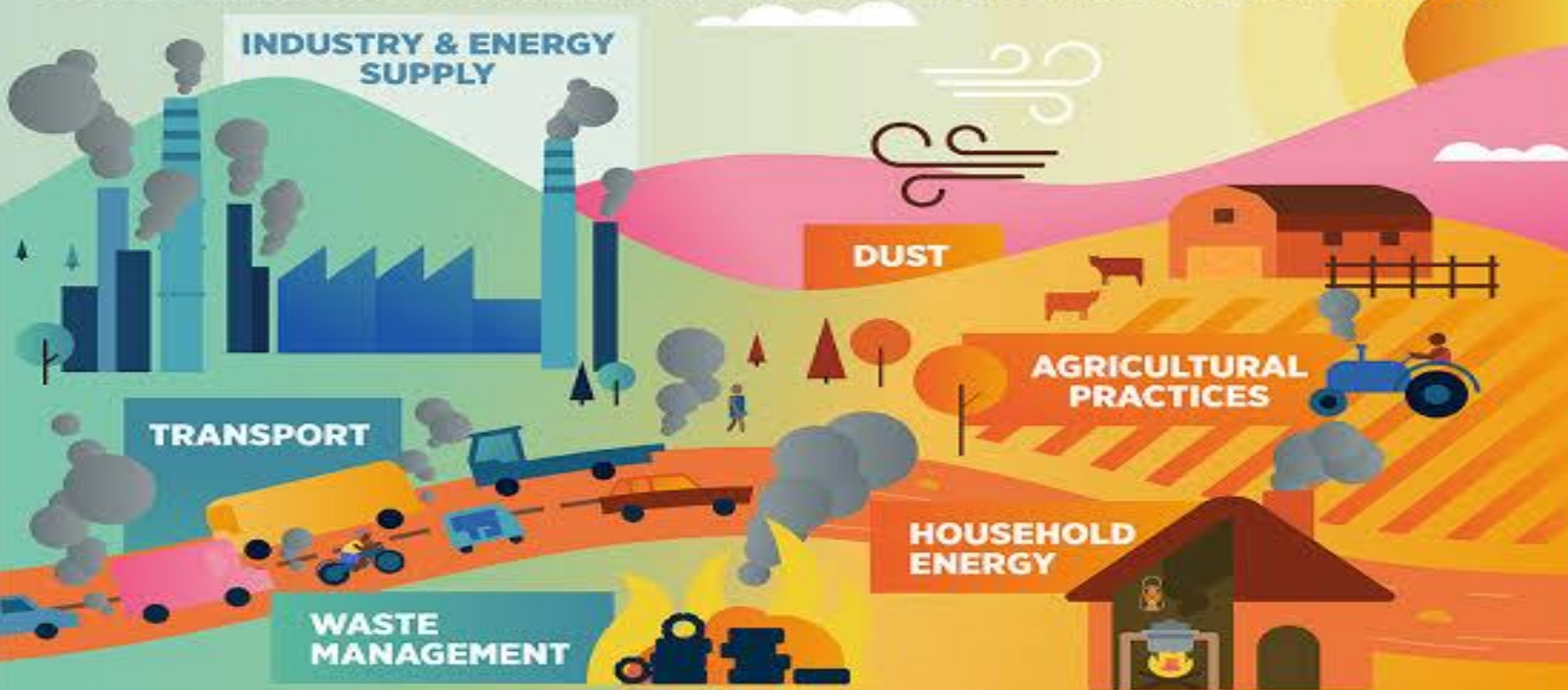
What is Air Pollution

Air pollution is the introduction of particulates, biological molecules, or other harmful materials into the Earth's atmosphere, causing disease, death to humans, damage to other living organisms such as food crops, or the natural or built environment. Air pollution may come from anthropogenic or natural sources.

The atmosphere is a complex natural gaseous system that is essential to support life on planet Earth. Stratospheric ozone depletion due to air pollution has been recognized as a threat to human health as well as to the Earth's ecosystems.

WHAT ARE THE SOURCES OF AIR POLLUTION?

Outdoor air pollution affects urban and rural areas and is caused by multiple factors:



Countries cannot tackle air pollution alone.
It is a global challenge we must all combat together.

CLEAN AIR FOR HEALTH

#AirPollution



WHO IS MOST IMPACTED BY AIR POLLUTION?



Children

Pneumonia is the leading cause of death in children under five years of age. Air pollution is a major risk factor.



Women

Women working in smoky kitchens are exposed to high levels of household air pollution.



Outdoor workers

People who work outdoors, such as street vendors and traffic officers, are affected by air pollution.



Serious Effects of Air Pollution on the Environment

- Global Warming
- Climate Change
- Acid Rain
- Smog effect
- Deterioration of fields
- Extinction of animal species
- Respiratory health problems
- Deterioration in building materials
- Chemical Sensitivity
- Skin Damage



Invest in Energy-Efficient
Power Generation.



Improve Domestic, Industry
and Municipal Waste
Management.



Make greener and more
compact cities with
energy-efficient buildings.



Reduce Agricultural Waste
Incineration, Forest Fires and
Certain Agro-Forestry Activities.



Provide universal access to clean,
affordable fuels and technologies for
cooking, heating and lighting.



Build safe and affordable public
transport systems and pedestrian
and cycle friendly networks.



AIR POLLUTION – THE SILENT KILLER



Every year, around **7 MILLION DEATHS** are due to exposure from both outdoor and household air pollution.

Air pollution is a major environmental risk to health. By reducing air pollution levels, countries can reduce:



Stroke



Heart disease



Lung cancer, and both chronic and acute respiratory diseases, including asthma

REGIONAL ESTIMATES ACCORDING TO WHO REGIONAL GROUPINGS:



CLEAN AIR FOR HEALTH

#AirPollution



WATER POLLUTION



**...ENDANGERS
SEALIFE & WILDLIFE
AND
THREATENS BEACHES!**



Go Green







Water Pollution

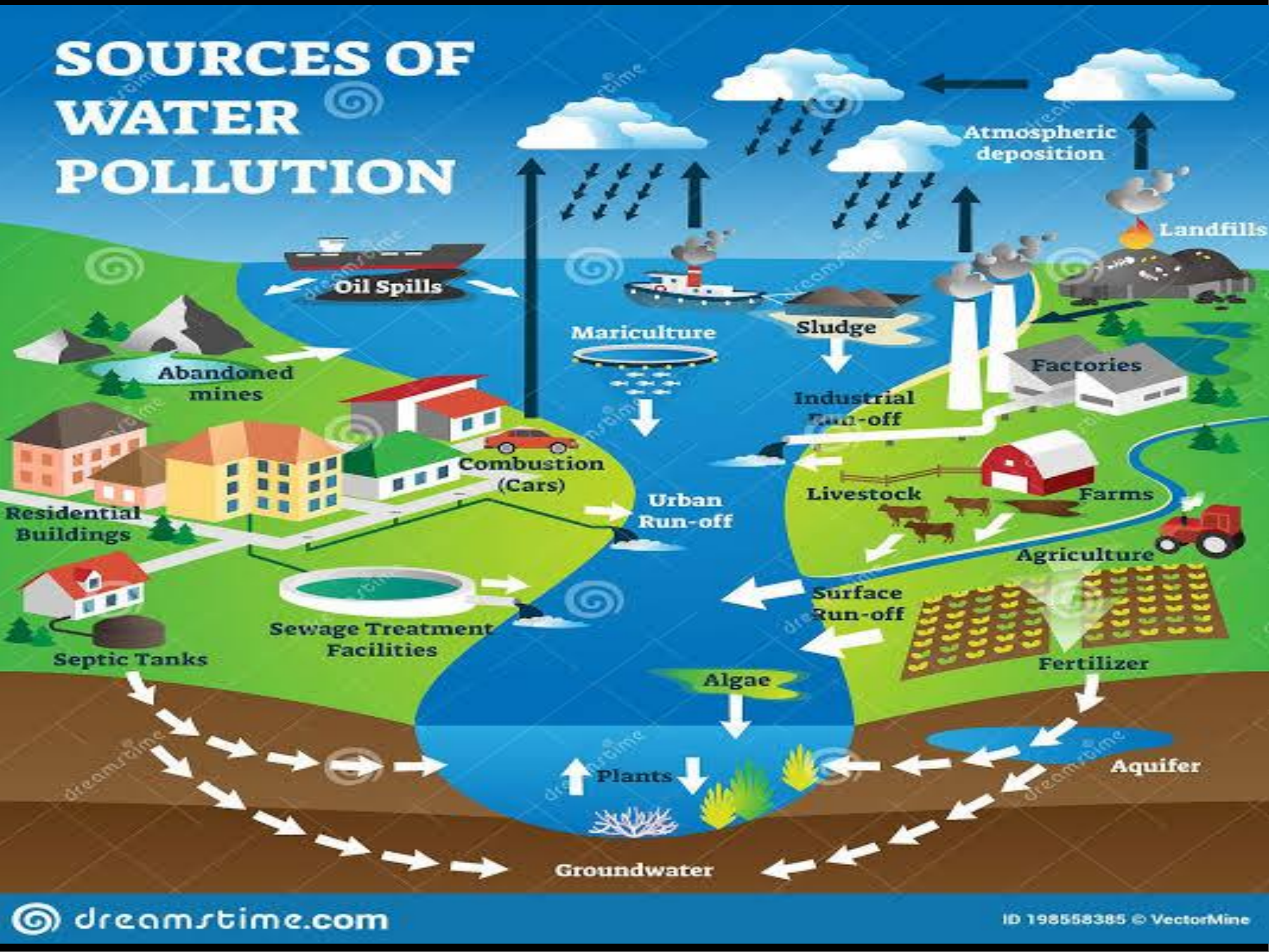
Unfortunately, pollutants enter the Earth's systems of rivers, lakes, and oceans every day. Sometimes this is due to careless acts by people, accidents, or broken equipment. More often it is considered a "normal" part of doing business.



However it happens, the result is the same: pollutants that enter the Earth's water system affect not only plants and animals that live in the water, but the surrounding environments as well.



SOURCES OF WATER POLLUTION



What are the impacts of water pollution?

Urban and domestic use

Increased water treatment and inspection costs, maintenance costs from scouring and premature ageing of infrastructure, increased wastewater treatment costs with implementation of more strict regulations. Emergency and clean-up costs from spills/accidents.



Ecosystem health

Damage to freshwater and marine ecosystems (e.g. fish kill, invertebrates, benthic fauna, flora, habitat degradation) and loss of ecosystem services, which may require investment in additional or different grey infrastructure alternatives to replicate these services.



Human health

Polluted water is the world's largest health risk, and continues to threaten both quality of life and public health. Associated with this are health service costs, loss life expectancy, and emergency health costs associated with major pollution events.



Industrial productivity

Exclusion of contaminated water for industrial use results in increasing water scarcity. Scouring of infrastructure, and clean-up costs from spills/accidents.



Social values and tourism

Prohibition from recreational use (e.g. swimming, fishing, seafood gathering), beach closure, impacts on aesthetics, cultural and spiritual values. Losses in fishing, boating, rafting and swimming activities to other tourism activities or to other ventures with superior water quality.



Agricultural productivity

Exclusion of contaminated water for irrigation results in increasing water scarcity. Irrigation with contaminated water causes damage to, and reduced productivity of, pasture and crops, soil contamination, impacts to livestock health and production, and scouring of infrastructure.



Commercial fisheries

Direct and indirect fish kill, contamination of shellfish.



Property values

Waterfront property values can decline because of unsightly pollution and odour.



Solutions

Water Pollution

- Prevent groundwater contamination
- Reduce nonpoint runoff
- Reuse treated wastewater for drinking and irrigation
- Find substitutes for toxic pollutants
- Work with nature to treat sewage
- Practice the three R's of resource use (reduce, reuse, recycle)
- Reduce air pollution
- Reduce poverty
- Slow population growth

LAND POLLUTION



WHAT ARE THE CAUSES OF **LAND AND SOIL** POLLUTION?

**Poor
agricultural
practices**



**Improper
solid waste
management**



**Unsafe storage
of hazardous
chemicals and
nuclear waste**



**Leachates from
mismanaged
landfills**



**Uncontrolled
dumping of waste
from: households,
industrial plants,
mining**



Solutions for Land Pollution:

- Reduce the use of fertilizers and pesticides
- reduce, recycle, and reuse.
- decrease buying package items.
- increase buying biodegradable products.
- properly dispose of garbage.
- encourage organic gardening.



Health effects of pollution

Air pollution



CO
Particulate matter
Ozone
Lead
Nerve damage
Volatile organic compounds

Headache
Fatigue

Respiratory illness

Cardio-vascular illness

Gastroenteritis

Cancer risk

Nausea

Skin irritation

SO₂
NO_x

Water pollution



- Bacteria
- Parasites
- Chemicals

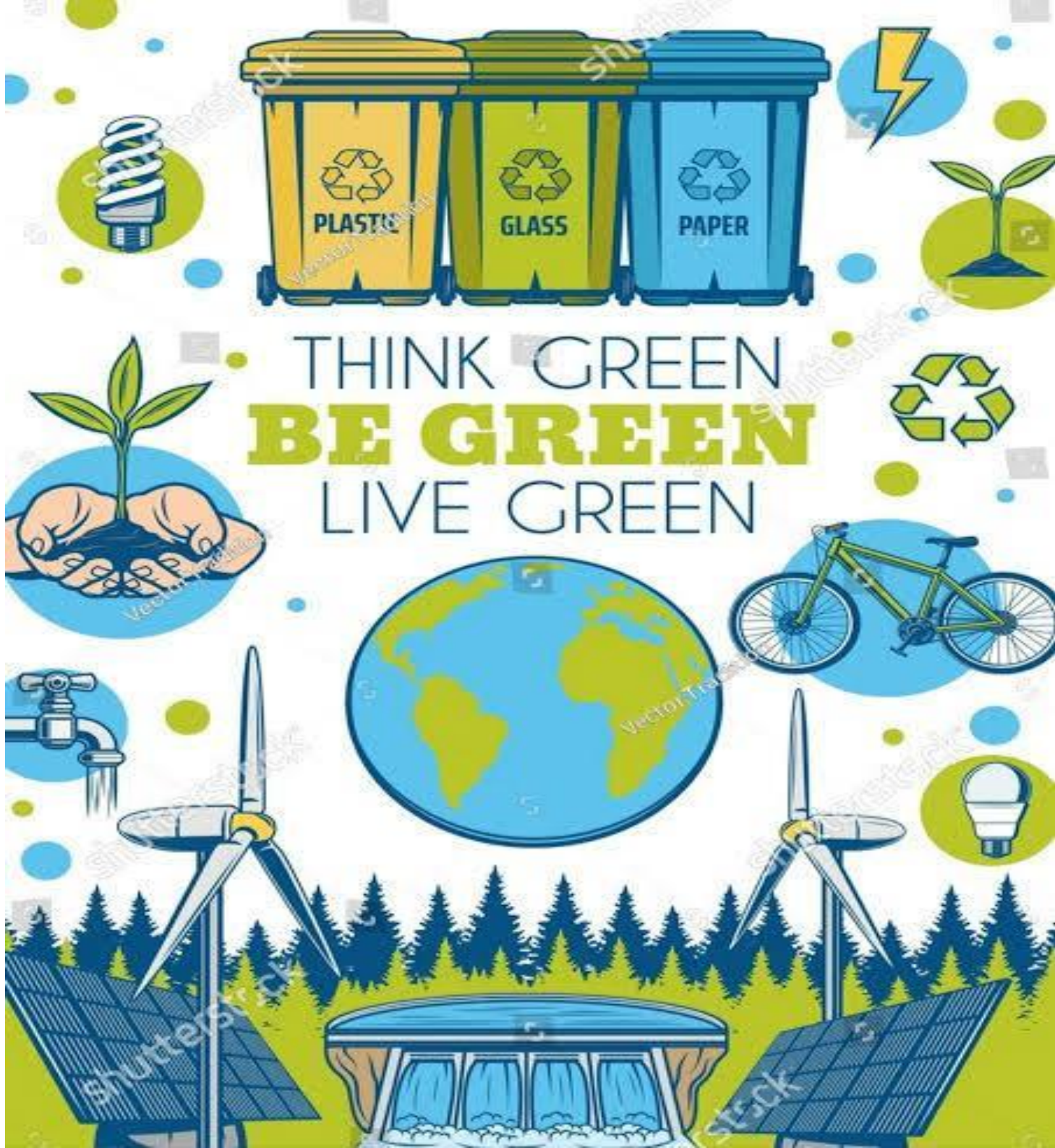
Soil contamination



Pesticides

CONCLUSION

If we adopt the measures explained in my presentation then definitely we can get rid off these types of pollution



THINK GREEN
BE GREEN
LIVE GREEN

PLASTIC

GLASS

PAPER

