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Global environmental issues and climate change from the perspective of economics

Sustainable development

Tourism Sustainability and Climate Change

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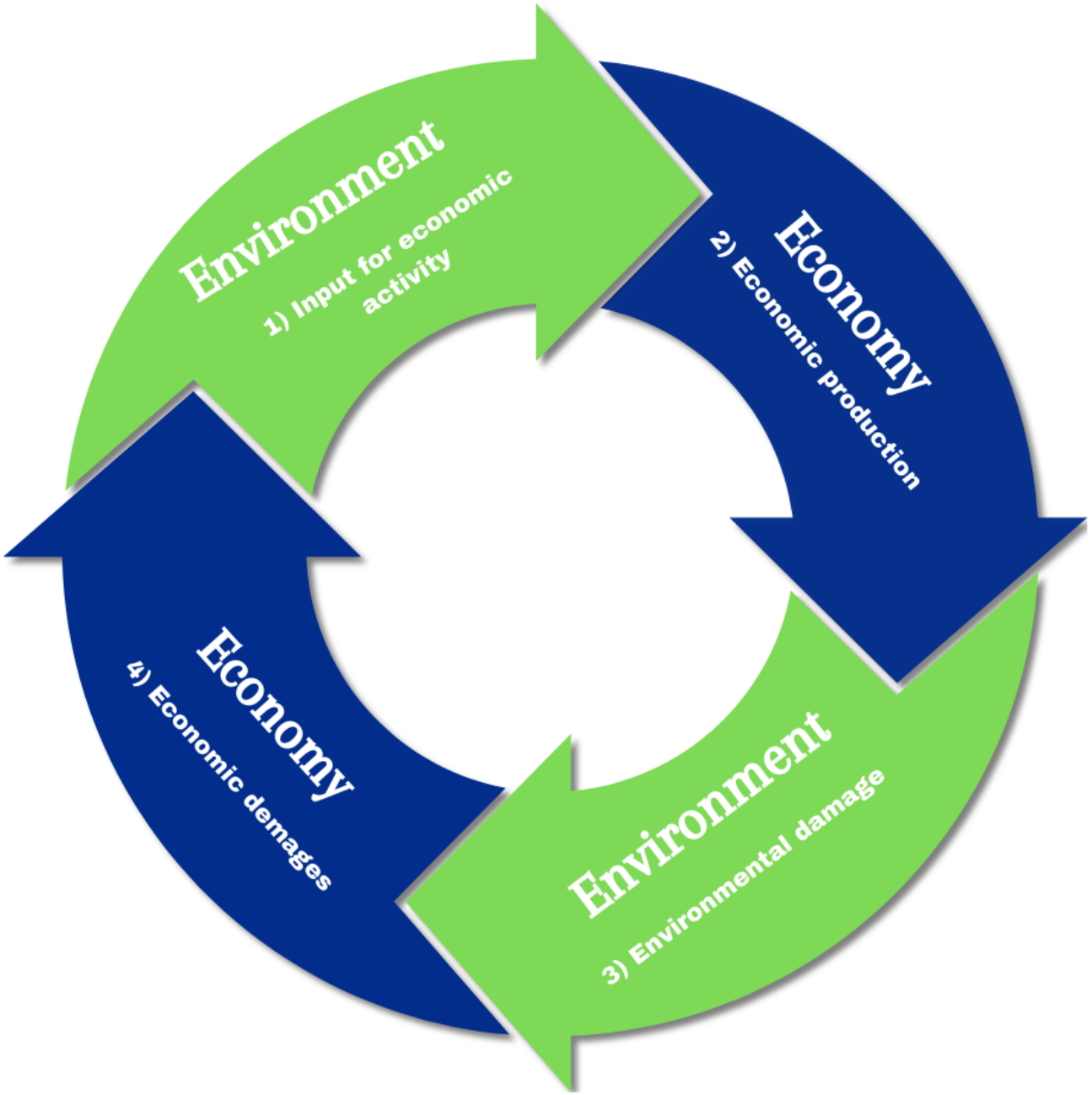
Environement versus Economy



Global Environmental Issues

- Climate change (global warming, climate change)
- Pollution (air, water, soil)
- Biodiversity loss and deforestation
- Waste production
- Natural resources depletion
- And more!

INNTERCONNECTIVITY!

Nature
Causes
Problem

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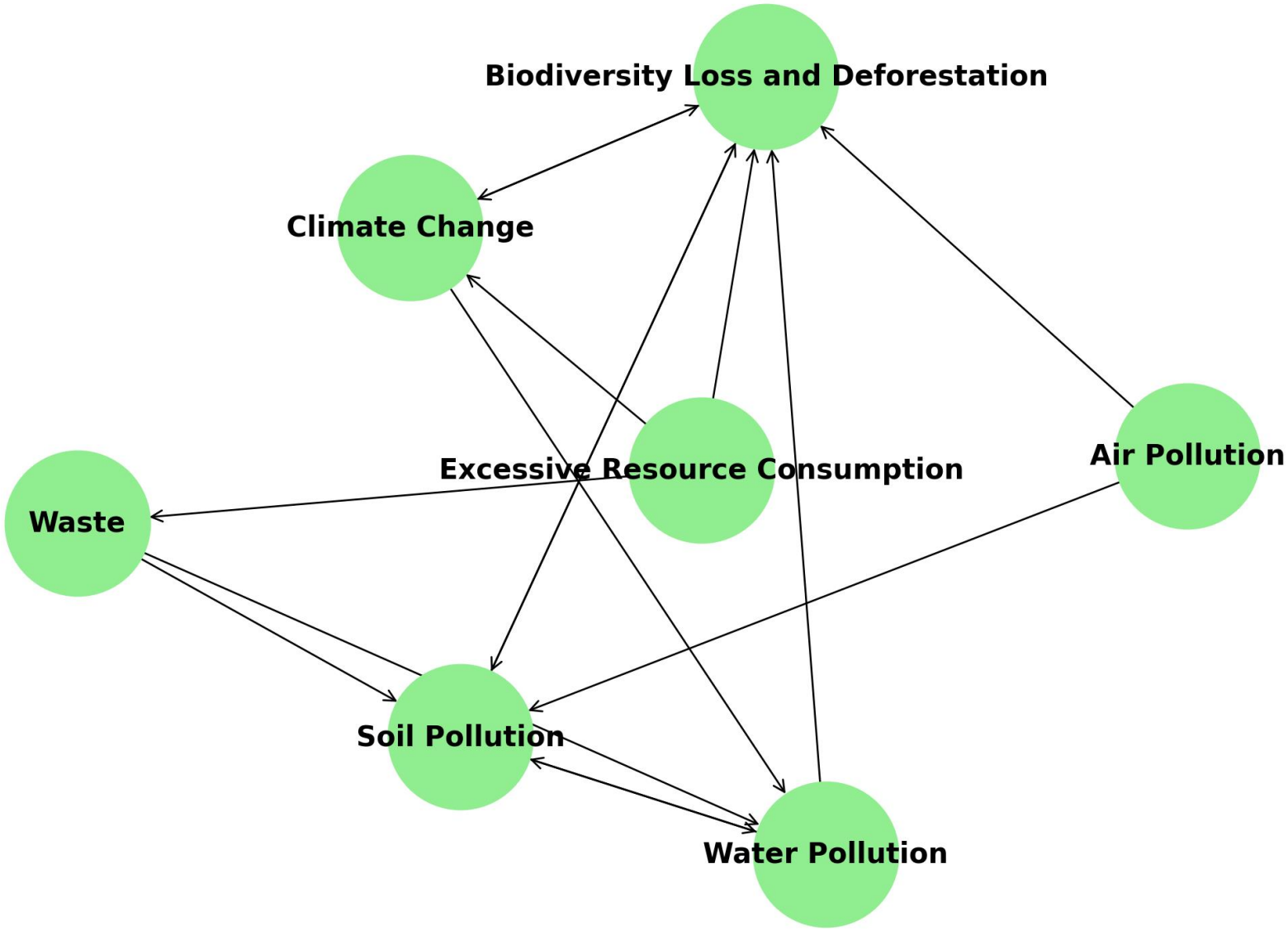
Interconnections between Environmental Issues



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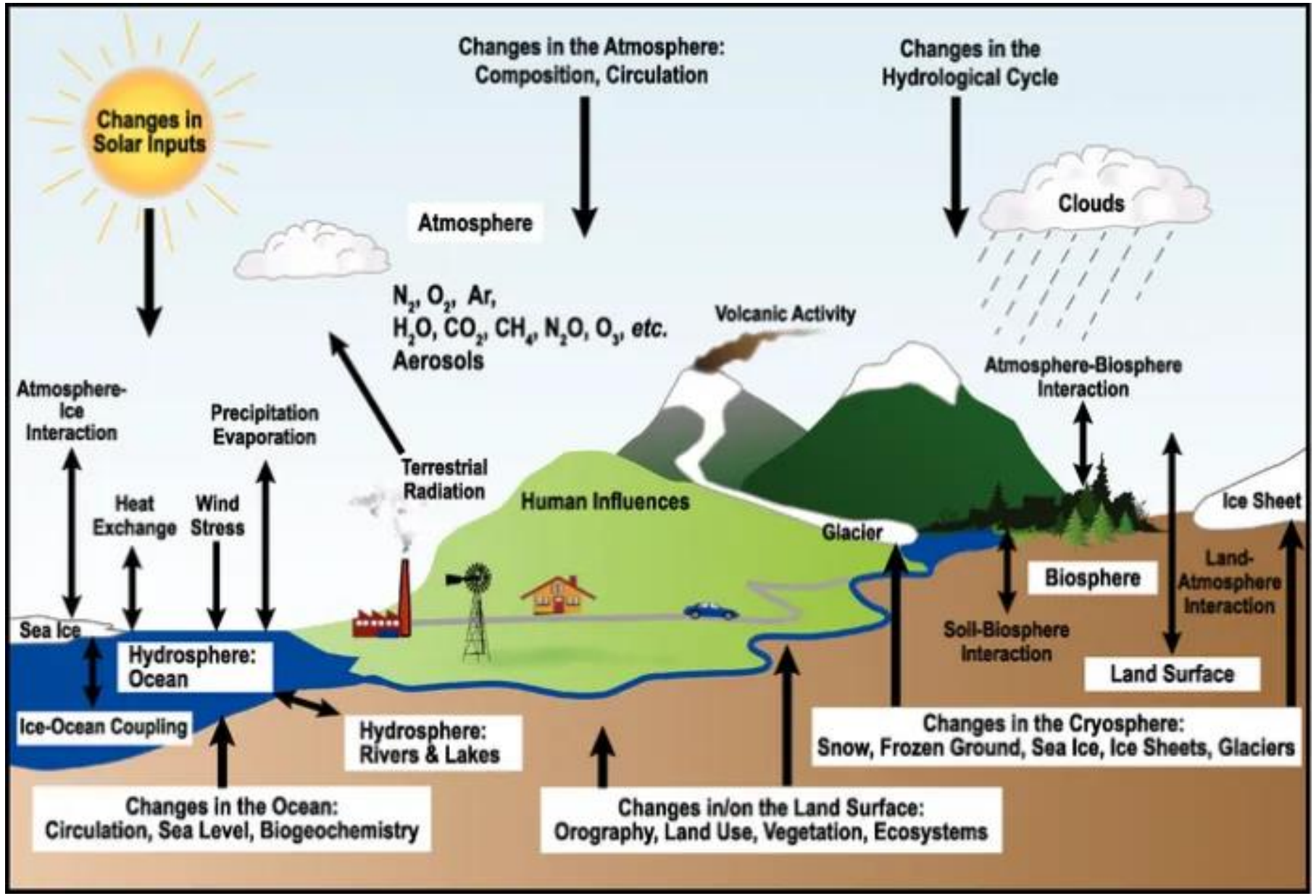
Climate change



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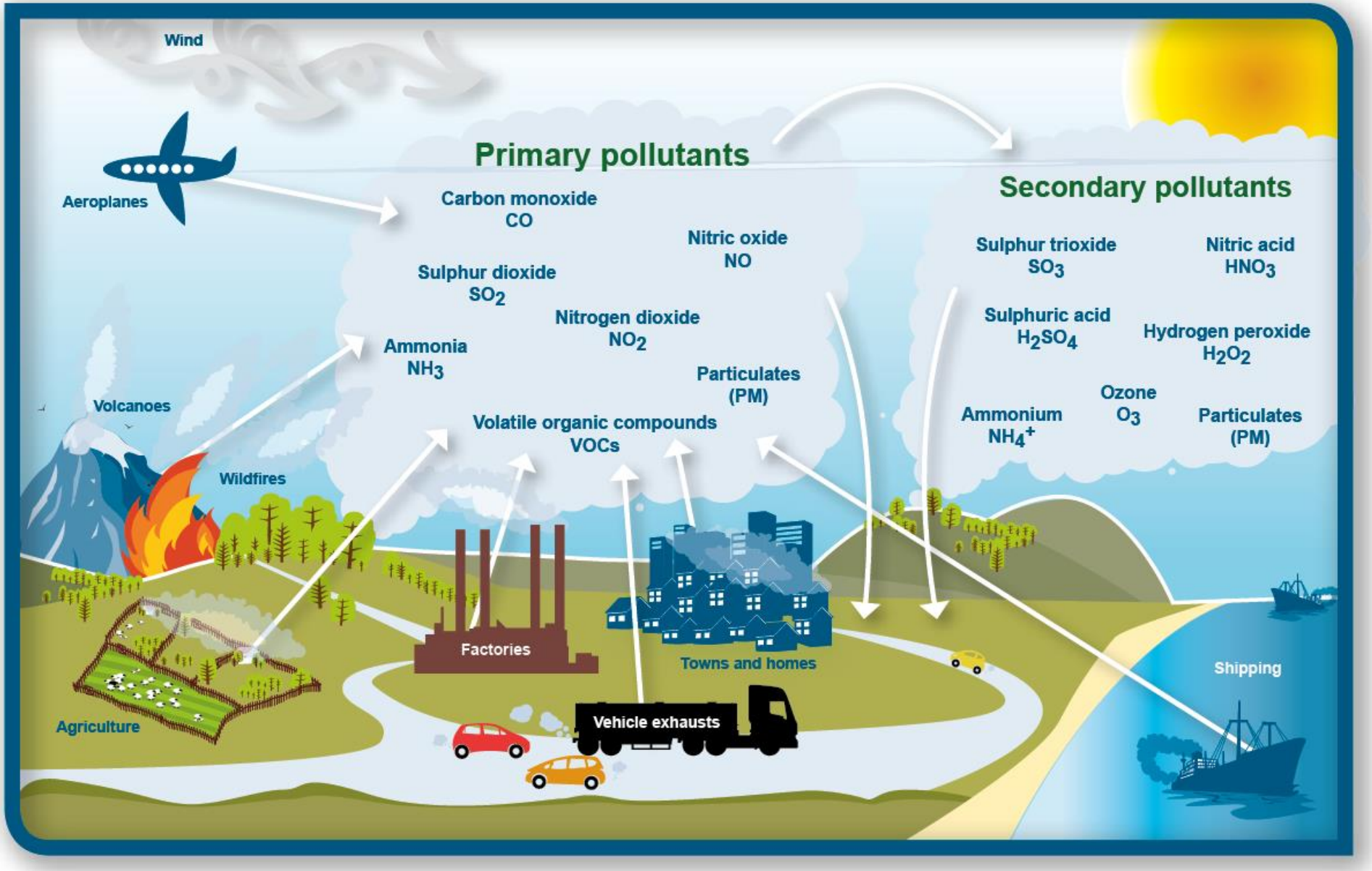
Air pollution



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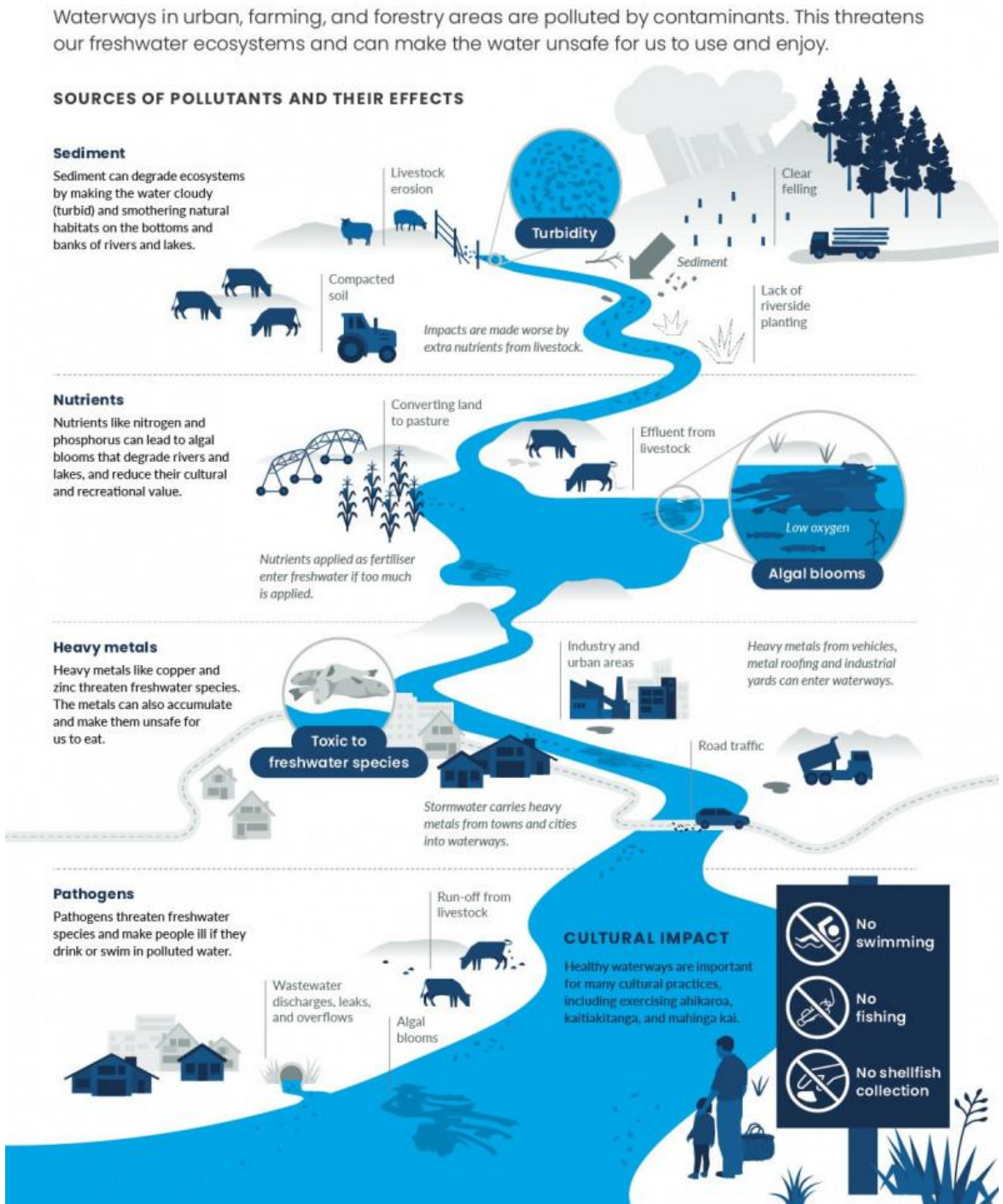
Water pollution



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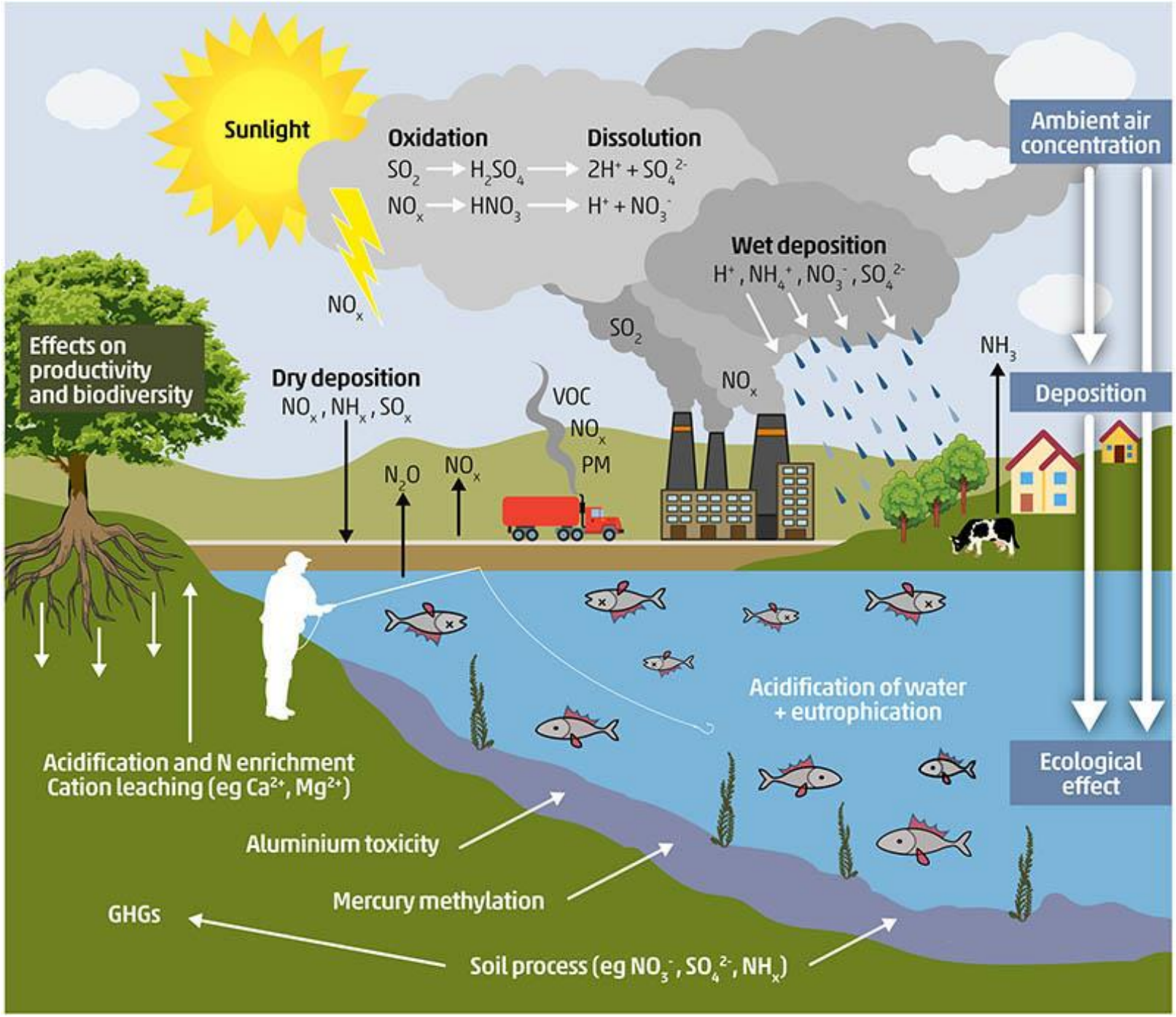
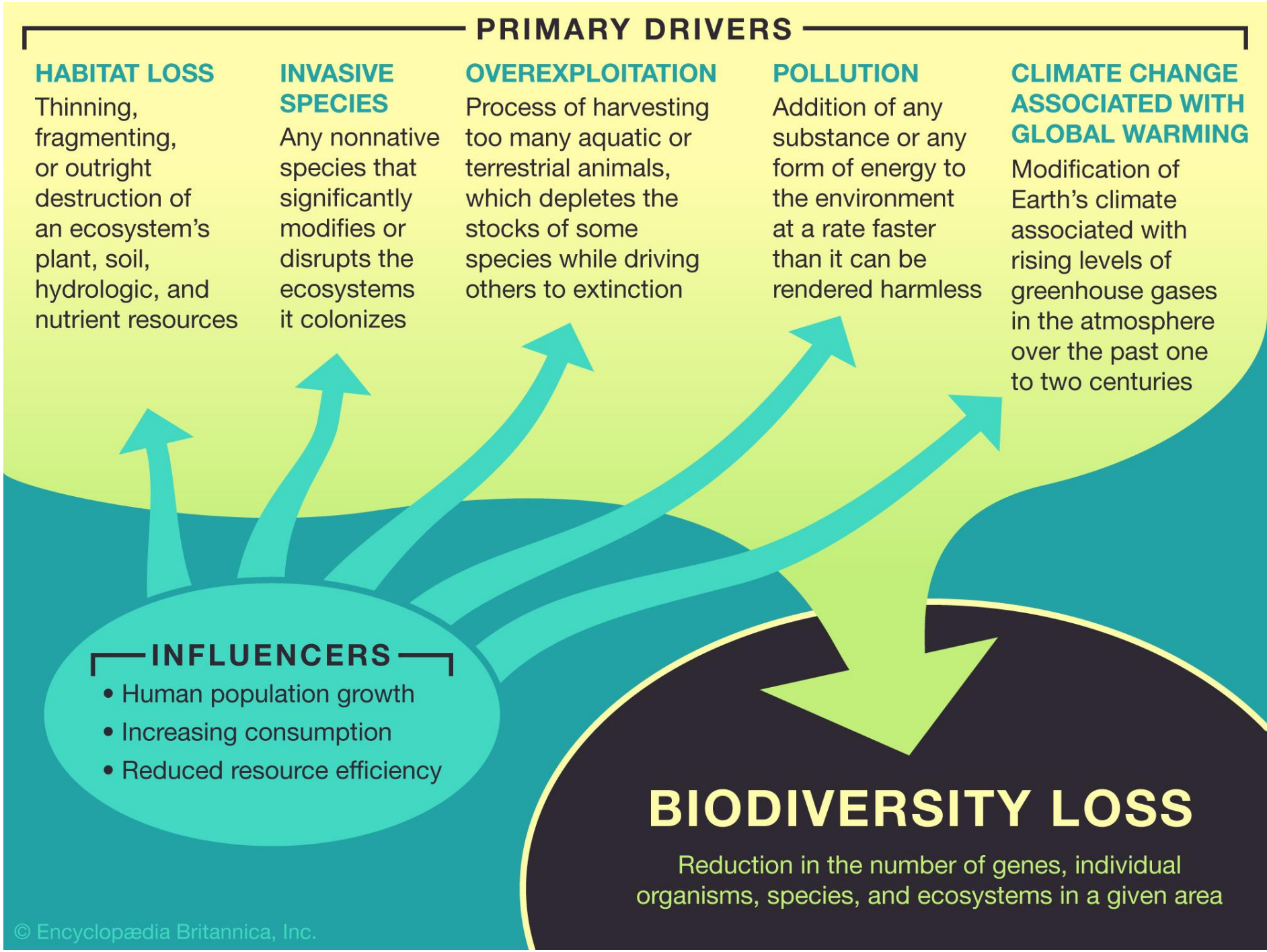
Soil pollution



Loss of biodiversity



Waste production

What are the sources of food waste in Europe?

Around one third of the food produced globally is lost or wasted. Food waste represents a substantial loss of other resources such as land, water, energy and labour.

Manufacturing

By-products, such as carcasses & bones from meat production

Misshapen products

Damaged products

Overproduction

39 %

Wholesale and retail

Temperature changes

Aesthetic standards

Packaging defects

Overstocking

5 %

Households

Buying too much

Bad storage

Confusion over labels

Discarding parts of food, such as apple skins or bread crusts

Making portions that are too big

Discarding leftovers

42 %

Food services

Not offering different portion sizes, or not allowing customers to take leftovers home

Difficulty in anticipating demand

Not meeting customer preferences

14 %

Average households discard about 25 % of the food they purchase (by weight).

In the EU, around 180 kg of food waste per capita is generated each year.

1/3 of the food produced globally is lost or wasted.

Sources: European Commission preparatory study on food waste (2010), FAO
Read more: www.eea.europa.eu/waste

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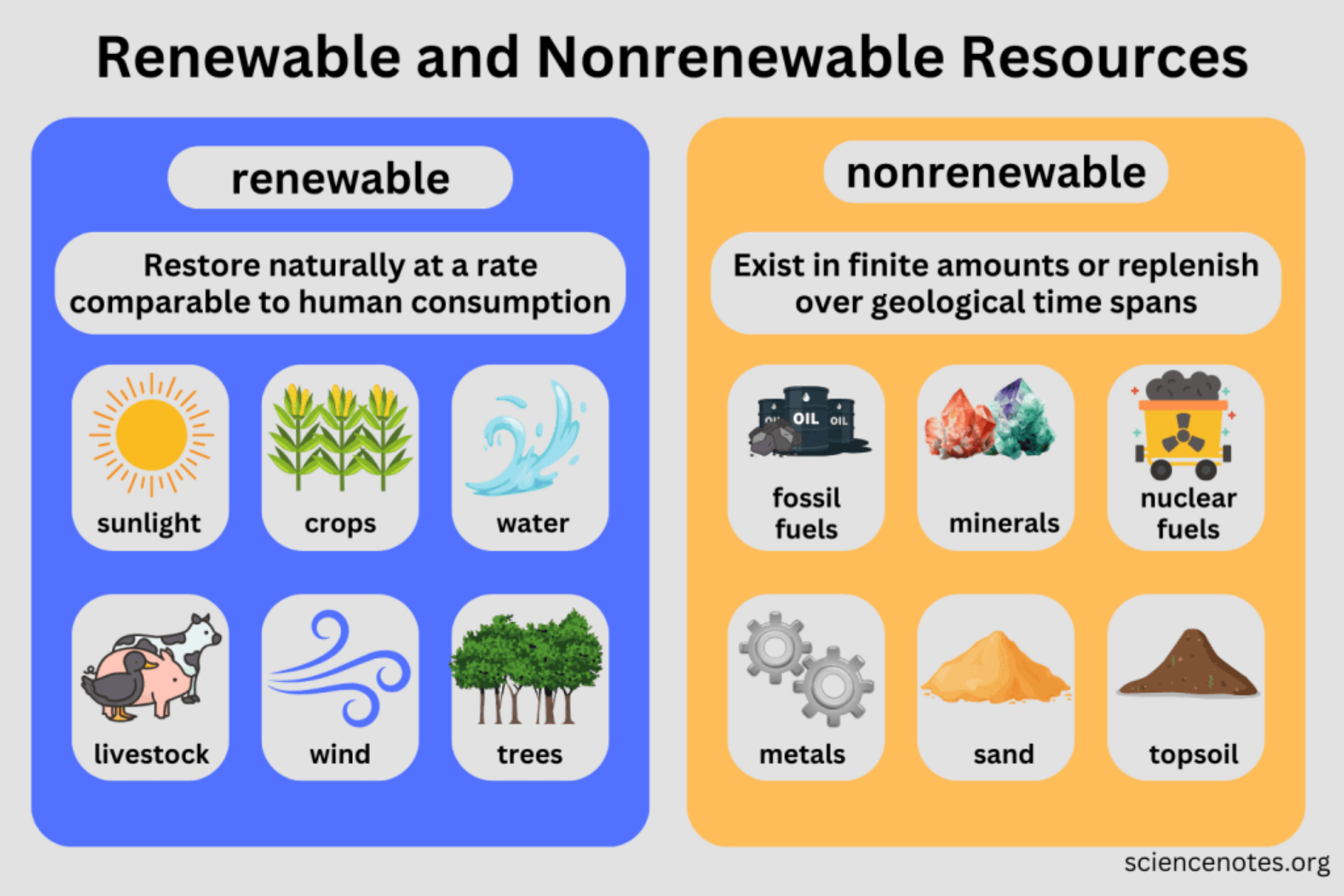
Natural resources depletion



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Specifics of the environment

- Public goods
- Externality
- Transboundary problems
- Complexity and uncertainty
- Irreversibility
- Temporal and spatial variability

Next session

Today's session

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Transboundary problems

- environmental problems are often transboundary
- cooperation between states, international cooperation required

https://commons.wikimedia.org/wiki/File:Tur%C3%B3w_Aerial_2.jpg

What are the main international organizations addressing these major global, not just environmental, issues in the world?

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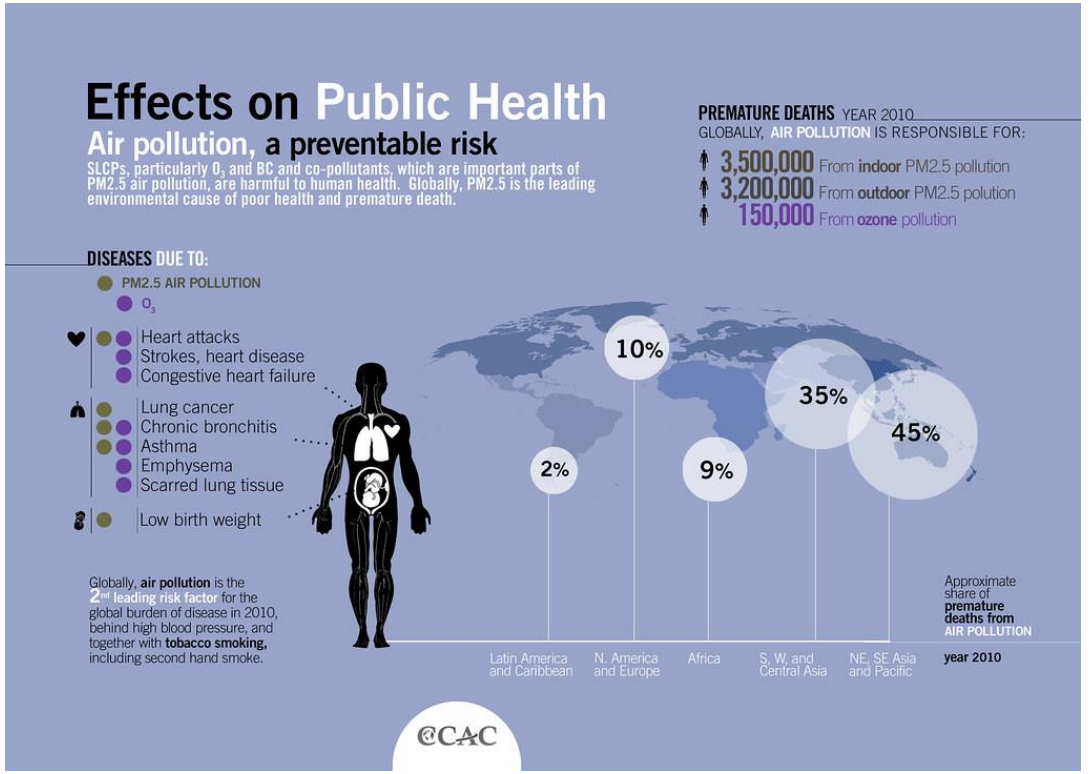
Complexity and uncertainty

- identification of mutual relations
- the impossibility of isolated solutions
- causes and effects of environmental problems



https://www.flickr.com/photos/gridarendal/31514621884

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Irreversibility

- irreversible damage to the environment
  - depletion of scarce resources
  - extinction of species

https://commons.wikimedia.org/wiki/File:Water_pollution_0025.jpg

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Temporal and spatial variability

- spatial variability
- temporal variability

https://www.flickr.com/photos/unwomenasiapacific/48857249183

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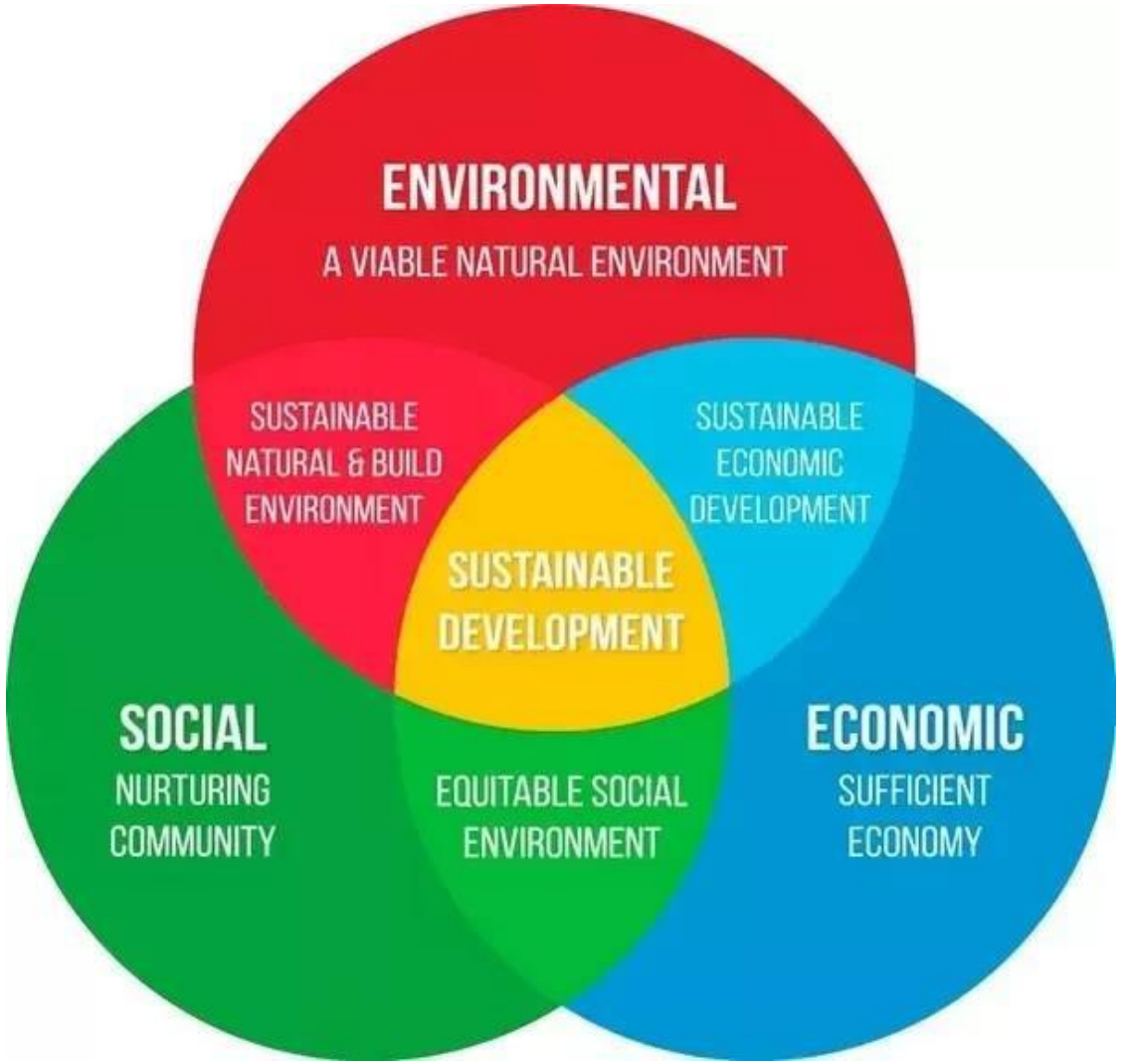
Sustainable development

- 1987: United Nations World Commission for Environment and Development - **Our Common Future:**

Development that meets the needs of the present without compromising the ability of future generations to meet their own needs.

Sustainable development



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The 2030 Agenda for Sustainable Development

17 Sustainable Development Goals

Agenda 2030

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Sources of pictures

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