



# Glossary

Atlantic Network for Coastal Risks Management





St Jean-de-Luz, Aquitaine (France)

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Galicia (Spain)

### Animal community

Group of species that live in the same region or time. They often have biotic interactions among them, such as competitiveness or predation.

### Anthropic activity

Any action or intervention made by a human being. Deforestation, fishing, agriculture, and most carbon gas emissions to the atmosphere are anthropic activities.

### Aquaculture

The science, art, and business of cultivating marine or freshwater fish or shellfish in pools, cages or other ways of confinement which allows product to be harvested directly.

### Adaptation

Adjustment in natural or human systems as a response to a predicted (climatic) stimulus or to its effects, which reduces damage or exploits beneficial opportunities.

### Adverse effects of climate change

Changes in the physical environment, or in the flora and fauna as a result of climate change which have important harmful effects on the composition, recuperation or productivity of natural ecosystems, or species, or on the operation of socioeconomic systems, or on the human health and welfare.

### Aerosol

A substance consisting of very fine particles of a liquid or solid suspended in a gas. (Source: GreenFacts)

### Anthropogenic

Caused by humans or human activity. (Source: GreenFacts).

### Atmosphere

The gaseous mass surrounding the earth. The atmosphere is composed of nitrogen (78%), oxygen (21%), and trace gases such as argon, helium, carbon dioxide and ozone. (Source: GreenFacts).

### **Biodiversity**

The number, variety and variability of organisms. It includes the diversity of a species (genetic diversity), among different species (species diversity) and among ecosystems (ecosystem diversity). (Source: GreenFacts).

### **Carbon dioxide (CO<sub>2</sub>)**

A colourless, odourless and incombustible gas present in low concentrations in the atmosphere. It is formed when any fuel containing carbon is burned. Plants use carbon dioxide in photosynthesis.

### **Climate change**

Long-term fluctuations of temperature, rainfall, wind and all the components of the earth's climate. It is also caused directly or indirectly by human activity which changes the composition of the global atmosphere.

### **Climate impacts**

Causes (positives or negatives) of climate change on the natural and human systems.

### **Climate scenario**

Credible representation, often simplified, of future climate, based on a coherent series of climate relationships. It is used to research possible consequences of anthropogenic climate changes. It is normally used as an auxiliary tool for the elaboration of impact models.

### **Climate system**

The whole atmosphere, hydrosphere, biosphere and geosphere, and their interactions.

### **Coastal exploitation**

Concentration of the economic activity in coastal areas as a result of the urban growth, industrial activities, tourism and irrigation.

### Deforestation

Change of forest lands into other kinds of lands as a result of human activities.

### Deposit

One or more components of the climatic system in which a greenhouse gas is stored, or a precursor of a greenhouse gas.

### Desertification

Deterioration of dry-lands caused by several factors, such as climate change and human activity.

### Ecosystem

A system formed by communities of plants, animals, fungi and microorganisms, as well as by the lifeless environment that surrounds them, and its interactions as an organic unit. (Source: Glossary of Climate Change Terms).

### Emissions

A discharge of greenhouse gases or their precursors into the atmosphere in a specific area or period of time.

### European Commission

The executive body that represents and defends the general interests of the Union and is the instigating force of this institutional system. The body is responsible for proposing legislation, administration and executes community policies, applies Community law (together with the Court of Justice) and negotiates international agreements.

### Eustatic change

Alteration of the global sea levels caused by the ocean. In general, there are regionally persistent movements in the long-term.

### Eutrophication

Enrichment of chemical nutrients (especially phosphorus and nitrogen) in an ecosystem.

### Exposure

Cells' contact in an organism with a substance, microorganism or radiation.

### Feedback

The process by which a system responds to a disturbance that makes it deviate from its initial state. (Source: GreenFacts).

### Fossil fuels

Geological deposits of organic fuel matters which are buried and were created by the decomposition of plants and animals, and, afterwards, were turned into crude oil, carbon, natural gas or heavy oils because they were under the heat and pressure of the earth's crust for centuries. (Source: GreenFacts).

### Greenhouse gases

Gaseous constituents of the atmosphere, both natural and anthropogenic, that absorb and emit infrared radiation.

### Global warming potential

Effect of integrated warming throughout time that produces an emission of 1 kg of a greenhouse gas, in comparison with the caused by CO<sub>2</sub>. (Source: GreenFacts).

### Groyne

A wall or jetty built of stone or wood out from a riverbank or seashore, which cuts the stream at any place in order to change its course.

### Gulf stream

Warm stream of oceanic water which flows from the Gulf of Mexico to the European coasts. It gives Europe the necessary heat to have warmer weather in winter, even warmer than in North American regions, at the same latitude. (Source: GreenFacts).

### Human Community

Group of human beings with something in common.

### Methane

It is a colourless, flammable, nontoxic gas with the chemical formula CH<sub>4</sub>. It is formed naturally by the decomposition of organic matter. Methane is also a major component of natural gas (Source: GreenFacts).

### Mitigation

Anthropogenic intervention to reduce the sources or improve the consequences of greenhouse gases emission.

### Nitrogen oxide

Colourless and incombustible gas whose formula is N<sub>2</sub>O. Bacteria produce this gas in a natural way. The cattle sector and industry are the main anthropogenic sources of emission. In the atmosphere it is a powerful greenhouse gas. (Source: GreenFacts).

### Ph

A measure of the concentration of protons (H<sup>+</sup>) in a solution and, therefore, its acidity or alkalinity. In layman's terms the "pH» value is an approximate number between 0 and 14 that indicates whether a solution is acidic (pH < 7), basic (pH > 7) or neutral (pH = 7). (Source: GreenFacts).

### Population

Group of people inhabiting a specified area or who share similar characteristics (such as occupation, age, etc).

### Poverty

Serious lack of welfare.

### Progradation

Continental growth out into the sea by the deposition of matters in the coastal region.



### Radioactive forcing

External perturbation in the radioactive energy budget of the Earth's climate system, which may lead to changes in climate parameters. It is measured in the upper edge of the troposphere as a result of internal changes in the composition of the atmosphere, or changes in the external supply of solar power. It is expressed in W/m<sup>2</sup>.

### Reforestation

Planting of forests on lands that have previously contained forest but have since been converted to some other use.

### Risk

The probability that something will cause injury or harm.

### Risk assessment

A process through which the risk components are estimated with a probability method (quantitative or qualitative).

### Salinity

A measure of the salt concentration of water. (Source: GreenFacts).

### Salinization

Accumulation process of salt in soils.

### Scenario

A plausible and often simplified description of how the future may develop, based on a coherent and internally consistent set of assumptions about key driving forces and relationships.

### Sensibility

Degree to which a system is affected, negative or positive, by stimulus related to the climate.

### Source

Any process or activity that emits a greenhouse gas, an aerosol or a precursor of a greenhouse gas into the atmosphere.

### Species

A group of organisms that differ from all other groups of organisms and that are capable of breeding and producing fertile offspring. This is the basic unit of classification of plants and animals (Source: Glossary of Common Terms and Definitions in Marine Biology).

### Storm surge

A rise in coastal water level caused by regional low pressure area and water pushed toward coastal shores by prolonged wind forces.

### Sustainability

A condition in which the necessities of current and local population can be met without compromising the ability of future generations or populations of other regions to satisfy their needs.

### Synergy

The interaction of two or more agents or forces so that their combined effect is greater than the sum of their individual effects.

### Uncertainty

An expression of the degree of our knowledge related to a risk, or the degree of ignorance of a value. It can result from lack of information or from disagreement about what is known or even knowable.

### Vulnerability

Point in which a system is capable or not of facing up to the negative effects of climate change, climate variability and extreme phenomena.





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