

# Climate Change

## Landmarks

1896: The chemist Svante Arrhenius realized the imminence of global warming but he considered that it would be beneficial for humanity

1975: The world population reached four billion. First appearance of the term "global warming"

1995: It was officially acknowledged that temperature increase is related to anthropogenic warming

1997: The Kyoto Protocol in which developed nations promised to reduce emissions by 5% over the next 15 years was ratified but the US Senate refused to sign the treaty

2009: China overtook the US as the worst greenhouse gas emitter, but the US still surpasses China in per capita emissions.

2016: The signatory countries of the Paris agreement have agreed to limit global warming to 2 degrees below its pre-industrial level.

2016: The first 'negative emissions' plant opened in Iceland

## Vocabulary

Climate change denying : refers to the way of thinking that counters the arguments and the scientific clues granting that climate change doesn't exist. Donald Trump, for instance, belongs to the climate deniers, slowing down the international attempts to tackle the world ecological footprint. He said « climate change is a hoax ».

an imbalance : un déséquilibre

to wreak havoc : faire des ravages

a flood : une inondation

a drought : une sécheresse

to flee one's home : fuir son domicile

the floe melt : la fonte de la banquise

greenhouse gas : les gaz à effets de serres

ecological transition : la transition écologique

## What can be done to fight climate change?

Even though climate change denying exists, the fact that humanity has to act now is not questionable anymore. Three main scales of action can be distinguished.

The larger and most important scale concerns international action. Since the Kyoto protocol has been ratified in 1997, many summits took place in order to establish a global strategy and set common goals in the fight against climate change. Nevertheless, the lack of involvement from the US as well as the absence of true sanctions weaken the impact of such summits. However, those meetings aim at finding long-term solutions, and a more local and direct action is needed.

Indeed, national and regional measures can be taken to reduce local carbon emissions: hard taxes on fossil fuels, investment on renewable resources and more generally promoting of an eco-friendly lifestyle. Those measures have to be progressive though, in order to avoid social issues.

Eventually, all of those measures rely on the cooperation of every citizen, and individual involvement is necessary for short-term change. A general change of habits could be far more efficient than any policy, and even minor actions could be determining: using public transport, sorting out garbage, recycling, saving water, or even boycotting big brands and turning to more eco-friendly products.

## Bonus

Global warming threatens our future on Earth. That notion lifts the question of the conquest of outer space: could humanity settle to another planet?

Recently, scientists have found microorganisms that have been lying dormant in the soil of South America's Atacama desert for decades. These creatures have been able to put themselves in a deep sleep, until conditions reunited for them to wake up. As there is water on Mars, specialists now wonder if this phenomenon could have happened on its surface, permitting us to wonder about life on this Earth's neighbour. Indeed, the desert of our planet is quite similar to the surface of Mars.