

# Carbon Cycle, Carbon Market and their relation with Sustainable Development

## Carbon Cycle

To understand why is important carbon market is needed to understand what is the carbon cycle.

Useful link to understand how the global carbon cycle works:

- [https://www.youtube.com/watch?v=aLuSi\\_6Ol8M](https://www.youtube.com/watch?v=aLuSi_6Ol8M)

Also, go to the Presentation Power point named 'How the Global Carbon Cycle Works'.

## Carbon Market and their relation with Sustainable Development

Climate Change is one of the most significant global challenges of our time. Human influence on the climate system is clear, and recent anthropogenic emissions of greenhouse gases are the highest in history. It threatens to damage our environment as well as puts lives, livelihoods and economic development at risk. In order to achieve sustainable development, that meets the needs of the present without compromising the ability of future generations to meet their own needs, the carbon market emerges as an option. Carbon Market is a tool to achieve sustainable development and reduce pollution. Because of that, the principal aim of the Carbon Market is to reduce pollution and, in that way, reduce the contribution to Climate Change.

*'Today, the science is unequivocal: Humans have been driving global warming through the extensive burning of fossil fuels. We are already seeing changes in the climate that our current economies were built on. Fourteen of the 15 hottest years since record keeping began over 130 years ago have been since the turn of this century. The intensity of extreme weather-related events has also increased.'*

*Recent reports from the Intergovernmental Panel on Climate Change (IPCC) and the Turn Down the Heat reports, prepared for the World Bank by the Potsdam Institute for Climate Impact Research, provide snapshots of the science. They warn of dangerous effects on agriculture, water resources, ecosystems, and human health if countries do not take action. If the world warms by just 2°C (3.6°F)—warming which may be reached in 20 to 30 years—we could see widespread food shortages, unprecedented heat-waves, and more intense storms. Already, studies suggest that about 1.5°C warming is locked in.*

*To stay below 2°C, the IPCC says the world will need to get to zero net emissions before the end of this century. That means action now. Carbon pricing is an essential part of the solution.*

*The economic arguments for action are also compelling. Action now can open doors to opportunity, as the Adding Up the Benefits, New Climate Economy and Risky Business reports all reflect. Delaying action, the IPCC warns, will only raise the costs'.*  
(<https://www.carbonpricingleadership.org/why/>)