

Overview of an industry, business or problem

The **PNUMA – Programa de Las Naciones Unidas para el Medio Ambiente** look forward to increase confidence in carbon markets from a data analysis perspective considering the growing uncertainty regarding transparency in the generation of carbon credits.

There is a high diversity of projects that search to achieve voluntary objectives through the implementation of emission reduction actions in various sectors of the economy, from the forestry sector to public transportation. This diversity of actors and methodologies used bring uncertainty to the companies that buy them, the civil society and the authorities.

Define the specific problem that should be solved

The carbon markets have been developed in a mainly voluntary way (goals for reducing and offsetting emissions from companies that voluntarily decide to buy carbon credits for corporate social responsibility and to demonstrate some type of commitment to offsetting their emissions), which means that carbon markets are not standardized and those are very different from each other and it is difficult to account for their robustness.

Sectorized analysis of the carbon credit market

Comparison with the carbon emission according to the sample we take

Why does this problem matter?

The objective of this analysis is to know if the generation of carbon credits in the voluntary market has effectively contributed to changing the emission trajectories in the countries that host the projects and if the differentiation of the projects could explain the quality or robustness of the projects.

What are the datasets that you will consider to solve this problem?

- Berkeley Carbon Trading Project's Voluntary Registry Offsets Database:

Historical data of projects by country and by sector that generate carbon bonds

- Total greenhouse gas emissions (kt of CO₂ equivalent) from The World Bank:

Historical data by country and by sector of the amount of greenhouse gases emitted.