

Climate Change – The risks and opportunities for Brazil

Climate change and the future of Brazil

Scientists and governments recognize that Climate Change is one of the greatest challenges of the 21st century. How a country faces this challenge can determine its future. Climate change, contrary to what many people think, is not just an environmental issue. It is a strategic issue that involves decisions that impact the economy, technology, international trade, natural resources, energy model, food security, water security, national security, among others. For Brazil it brings risks but also economic opportunities. Brazil needs to know them to make the best decisions that guarantee a future of prosperity and independence. Brazil has abundant natural resources and much accumulated knowledge in government, academia and the productive sector, as well as a long experience of cooperation among the various actors involved in this theme.

Science unequivocally proves that global warming is inexorable and caused by greenhouse gas emissions from fossil fuels and deforestation. The average temperature of the planet has already risen to a degree since the beginning of the industrial age. The consequences or impacts are already very devastating and include extreme events such as hurricanes, floods, heatwaves, forest fires and rising sea levels, with increasing frequency and intensity, leading to loss of life and severe damage to the economy.

In addition to extreme events, it will change the climate pattern we know (the distribution and quantity of rainfall, dry periods, temperatures, etc.) and in which we develop our agriculture, our cities, road and coastal infrastructure, our energy sources. We will need to prepare and adapt to these changes. Brazil will be impacted in many areas, it will suffer more frequent, intense and prolonged floods and droughts, its electricity generation will be affected by the reduction of the average flow of the rivers, there will be modifications in the agricultural areas for our main crops, expansion and desertification of the semi- arid, rising sea with flooding of coastal areas. All this will require adaptation measures.

In addition to adapting it is necessary to deal with the causes of global warming contributing with other countries to keep the temperature rise at a least below two degrees, by the end of the century. Nowadays, the trend is more than three degrees higher, reaching more than four, which will have catastrophic consequences for future generations, even in the lifetime of our children and grandchildren. It will be necessary to make a transition to a low carbon economy, to plant more than to deforest, to use renewable energy - including in transport - to promote low carbon agriculture (ABC) and to replace certain industrial and construction processes.

The opportunities

In a context of global mobilization to address climate change, Brazil has some great competitive advantages: huge areas (more than 60 million hectares of degraded pasture) capable of absorbing carbon via reforestation and afforestation - both native forests and economically - and recovery of pastures, leadership in the techniques of low carbon agriculture (ABC), a cleaner energy matrix than that of most other countries, which contributes to an industrial production that is less carbon intensive. These attributes translate into opportunities to attract various types of investments, from countries and companies with more difficulty to get rapid results in their own economies. Millions of new jobs can be generated in reforestation, sustainable agricultural and forestry practices, decentralized installation of solar panels, and promotion of energy efficiency at various levels.

The inexorable decarbonization path of the planet can put countries in dispute, set the technological race, change competitiveness. As big corporations, technologies, and countries are planning their strategies, and Brazil just cannot ignore the issue. We will need to choose the ones that most benefit us by maximizing our competitive advantage. The worst case scenario is one in which Brazil suffers from the devastating consequences of climate change without being properly prepared and without taking advantage of its natural competitive advantages and opportunities.

Our sovereignty and the Paris Agreement

Because it is a global issue that affects everyone it can only be confronted with the involvement of all countries. It is treated within the United Nations. Its main legal framework is the Climate Convention, signed in Rio de Janeiro in 1992 and ratified by more than 195 countries. Brazil was the first country to sign it. The Paris Agreement, which is an instrument of the Climate Convention, has been drawn up with the active participation of Brazilian diplomacy, which has always been attentive to aspects of sovereignty and national interests. The Paris Agreement is based on voluntary commitments made by the countries themselves. Brazil was the first nation to ratify it with congressional approval. We have presented our own contribution (NDC) in a sovereign way and based on scientific studies.

Our NDC includes a reduction of greenhouse gas emissions by 37% in 2025 and 43% in 2030 compared to its 2005 level. It is based on studies that have evaluated the impacts on the economy, consumption. Thanks to our renewable resources, technologies and our competitive differentials, we can achieve this in several ways. The Brazilian Forum on Climate Change (FBMC) has prepared an *Initial Proposal for the Implementation of the Nationally Determined Contribution of Brazil (NDC)* with the participation of more than 340 government entities, private sector, third sector and academia, which suggests practical measures to do it more efficiently and advantageously.

Fighting climate change is a twenty-first century imperative. All countries will have to engage. Not doing so means staying on the sidelines of future technological development that will dictate our international competitiveness, expose our exports and prestige. Strengthening the development of a low carbon economy will open great opportunities in the economy, generating jobs and consolidating the image of Brazil as an international power.

The Brazilian Forum on Climate Change (FBMC)