

Chinese Strategies and Policies for Coping with Climate Change

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Abstract

There were high expectations about China's Nationally Determined Contribution (NDC) to Paris Agreement. The intensive and extensive use of coal allowed the country a long and significant growth over the last decades. From 2007, the country has become the leading global emitter of greenhouse gases (GHG). Beside this, the country has taken the lead in the production of knowledge on renewable energy sources and related technologies to track a transition to a low carbon economy. This research sought to identify technological strategies and public policies of the country focused on the theme.

Key words:

China, Climate Change, Low Carbon Economy.

Introduction

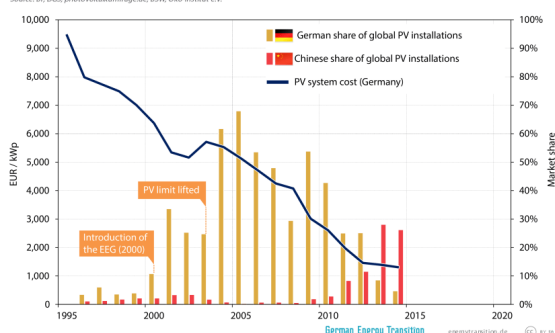
Considered a "climatic power", China is the largest emitter of GHG and a country with great impact on the climatic dynamics (VIOLA, 2010). The country's proposals and actions regarding climate change, such as its Nationally Determined Contributions (NDCs), are of great relevance in the context of global negotiations on the issue (FERREIRA, BARBI, 2016). In this sense, it is interesting to note that, since 2010, the country has been the main producer of photovoltaic panels, surpassing even countries like Germany. On the other hand, the financing granted by the two main Chinese investment banks, the Chinese Development Bank (CDB) and the Export-Import Bank of China (Ex-Im), point to the deepening of the fossil dependence of Chinese growth. This research puts these issues in perspective.

Results and Discussion

The official document on the Chinese targets for the Chinese Paris Agreement (CAIT / WRI, 2017) broadly envisions sectoral and intersectoral goals aligned with the recommendations of the Intergovernmental Panel on Climate Change (IPCC). Below, we can see the results of China's efforts to increase photovoltaic facilities, compared to Germany, the previous leader in the sector.

Figure 1. Growth of photovoltaic installations in Germany (orange) and China (red), decrease in the cost of the solar source (blue) (%) (1995 - 2015)

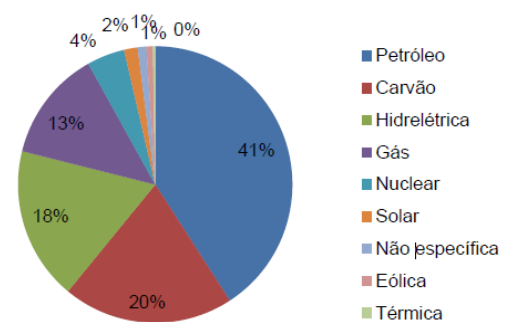
How Germany helped bring down the cost of PV for the world
When PV was still expensive, Germany built PV massively, accounting for up to two thirds of global installations
Source: BP DGS, photovoltaikumfrage.de, BSW, Öko-Institut e.V.



Fonte: SUN VULT, sítio institucional. Acesso em: 25/08/2018

Contrast these data with the investments of Chinese banks. These are the financing for the energy production sector around the world, from 2000 to 2017, as presented in Gallagher (2018).

Figure 2. Energy investments of the two Chinese development banks (2000-2017)



Fonte: prepared by authors based on Gallagher (2018).

Conclusions

China's proposals (NDC) show an alignment with the recommendations of the Intergovernmental Panel on Climate Change.

In the last two decades, Chinese investment banks have heavily financed fossil fuel sources (74% of investments have gone to oil, coal and natural gas) and only marginally alternative energy (2% for solar and 1% for wind). Investments in fossil fuels mean a structural commitment, with effects on future GHG emissions.

China's position in terms of strategies and policies for tackling climate change is apparently paradoxical: the country has become the largest producer of photovoltaic solar panel and at the same time, increased investment, production and consumption of fossil fuels.

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