

Mapping climate and energy finance: Lessons learnt from Czechia and Germany

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Overview

The Regulation on the Energy Union Governance requires the EU Member States to design integrated national energy and climate plans to ensure the EU's 2030 energy and climate targets are achieved. The implementation of these plans demands the mobilization of significant capital by 2030. Under the EU Regulation on the Governance of the Energy Union and Climate Action Energy Union (European Parliament and the Council, 2018), the Member States are required to provide an overview of investment needs and more specifically the overview of existing investment flows related to climate and energy actions to meet the 2030 targets. However, the experience from Central European (and other) countries suggests that such overview is often missing completely or is not provided systematically. The paper aims at filling this gap by providing an overview of the climate finance flows in Czechia and Germany. It provides insight not only into the climate flows as such, but (maybe more importantly so), it also points out to the existing gaps in systematic tracking of climate related finances in various sectors.

Methods

The methodology builds on the first such assessment which was prepared by the Climate Policy Initiative (CPI) in (Juergens et al., 2012). Our work updates the methodology to the current conditions and policy frameworks (Novikova et al., 2019). By using a bottom-up approach for data collection, we map the flows of climate and energy investments which aim at reducing GHG emissions for a given year (the latest for which full data are available). The climate map tracks the sources of financing (differentiating between private and public sources), intermediaries of the finances (typically government actors, public financial institutions, and the capital market), and instruments through which the finances are provided (e.g. grants, loans, equity). Only tangible, domestic investments are counted in our research. We cover the climate finance flows for two sectors-recipients (following the definitions in (Juergens et al., 2012; Ministry of the Environment, 2017): buildings, and energy sector (with a special focus on renewable energy), which also seem to be the largest sectors attracting finance. Data for Czechia and Germany are provided.

Results

The results from German analysis show large prevalence of private financing (over 80 %) compared to public sources. The public sources take mostly the form of low cost debt and grants to a lesser extent (Fig 1 for all sectors in Germany). In Czechia (with the final results to be available in June 2019), the portfolio of public climate instruments is much less diverse compared to Germany (with a large prevalence of grants). Due to the lack of data, significant uncertainties remain about the investments delivered by other financial instruments (sheet financing, project-level equity and market-rate debt).

In both countries, the public actors play the decisive role in driving climate investments. In other words, the public sector push means more investment by the private sector, too. In both countries in energy sector the largest share of investment goes into infrastructure (for transmission and distribution of renewable energy), while in buildings, the largest share of investment relates to energy efficiency measures.

The results further point towards general difficulties with accounting for climate finance. One of the main ones would be the additionality of the investment compared to the business as usual development. For instance in buildings, when estimating only incremental investments, the investment in energy efficiency decreases by more than 70 %. Especially in new buildings, the public programmes in Germany tend to support what is becoming the business-as-usual situation. Similarly, in Czechia, the public support for new buildings went to nearly-zero energy buildings, which will become the legal requirement from now on. Only climate-specific investment have been tracked. Which means

that a wide range of climate related investments have been excluded in the present study, which may lead to underestimation of the investment flows.

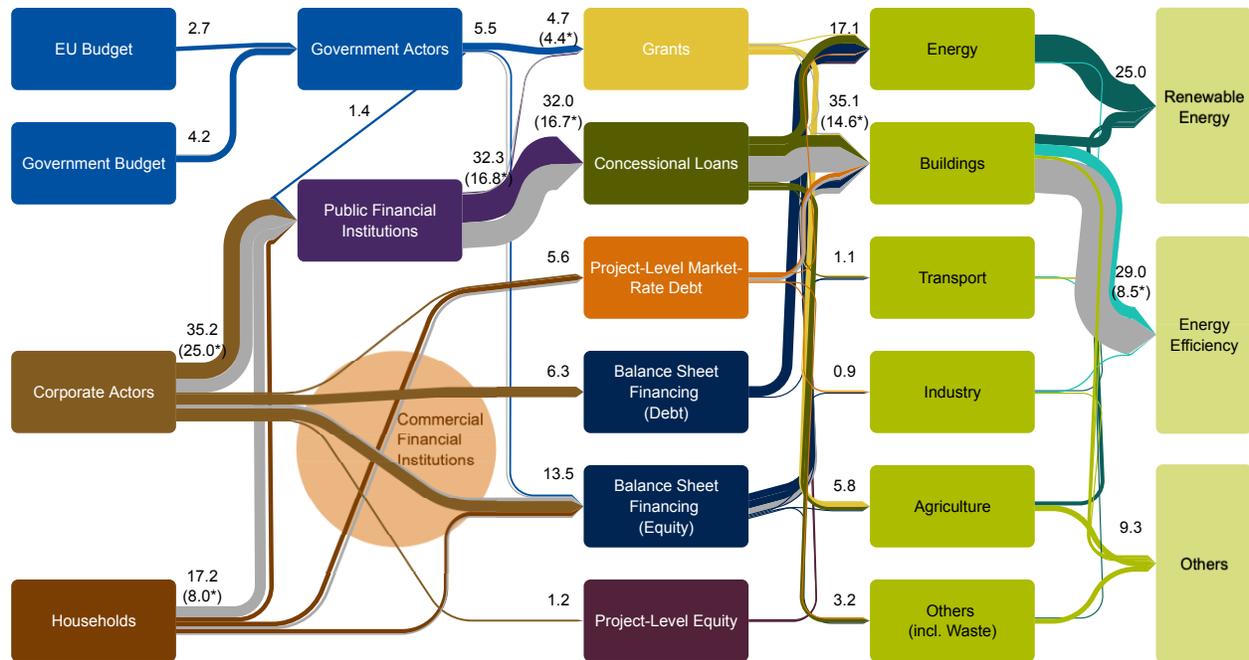


Figure 1 The 2016 Climate and Energy Investment Map for Germany (bln EUR)

Conclusions

Systemic tracking of climate finance is missing both in Germany and in Czechia (and notably in most of the other EU countries). However, data challenges may prevent the researchers and government from getting the full and right picture. Preliminary conclusions of our study suggest that there is a clear need for further discussion on what constitutes as climate finance on domestic level. Lack of consensus on the definition leads, among others, to differing methodologies used in the existing data sets.

Next, systematic tracking of domestic public finance should be introduced. For instance, introducing tagging climate investments, ideally already in the preparatory phase of the policy, would largely ease up the on-going and ex post monitoring and evaluation. In addition, introduction of systemic tracking (surveying and reporting) of existing private climate finance. While such tracking is present on an intermittent basis in Germany, such data are virtually non-existent in Czechia.

Even though we have selected the two sectors with the most investment (and large share of GHG emissions), comprehensive coverage of all sectors will shed more light into the climate investment situation. More work is also needed in the methodology related to total vs. additional cost definitions. The research has proved that using the total investment instead of additional (incremental) leads to important overestimation of the climate investment flows.

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