International climate policy

Mitigating man-made climate change is one of the biggest challenges of the 21st century. To avoid the worst consequences of global warming, profound changes in all countries and economic sectors are needed. With the signing of the Paris Agreement, all States will be taking on this task for the first time. In a first step, they jointly declared in December 2015 that global warming should be kept to below two degrees and preferably to below 1.5 degrees. Greenhouse gas (GHG) emissions should peak as quickly as possible in the next few years and then decrease significantly. At the same time, industrialized countries have acknowledged their responsibility with regard to climate change and have committed to supporting developing countries on the path towards climate protection.

The Paris Agreement will enter into force as soon as a minimum of 55 states responsible for at least 55% of global emissions have signed it. In an additional process, all states regularly submit Nationally Determined Contributions (NDCs) in which they specify their reductions of GHG emissions. The NDCs provided to date are not sufficient to keep the increase in global temperature significantly under the 2 degree target. At the same time, the Parties have committed in the Paris Agreement to embarking on a path of greater global climate protection efforts.

Expert support provided by Oeko-Institut

Experts from Oeko-Institut take part in international climate conferences in the delegations for the Federal Republic of Germany and the European Union, providing expert support on reporting, flexible market mechanisms and international aviation and shipping. The team conducts expert reports and analysis on different aspects of the conferences, accompanies the negotiations in the delegations and proposes specific improvements in the above-mentioned areas.

Reporting: Transparent review of emission reductions

One of the most important issues of the climate negotiations up to now has been the comparability of the Parties' obligations to reduce their emissions. Also: How can the progress made by States be uniformly reviewed? At the Paris conference, it was possible for the first time to set accounting rules for emissions reductions and to lay down a uniform process of review. Under the Agreement, States should submit GHG inventories every two years, which entails keeping a standardized record of their emission statistics and passing this on to the UN. In addition, they have to communicate their nationally determined contributions every five years. All reporting rules are to be transparent and consistent from now on.

Oeko-Institut is supporting governments in the analysis and transparent presentation of the often complex details of their reporting. One such complexity is that accounting rules for emission sinks like forests or other land use have a direct impact on the fulfilment of their own climate protection goals. A study conducted by Oeko-Institut on behalf of the German Society for International Cooperation (GIZ) shows, for example, how the land use sector can count towards the fulfilment of climate targets and be included in the INDCs. A further analysis focuses on the verifiability and quantifiability of the INDCs submitted to date and describes the rules that are needed to improve comparability.

Market mechanisms: Achieving emission reductions at low cost

For a considerable time experts at Oeko-Institut have been conducting research on the design and the potentials of the market mechanisms of international climate agreements. On the basis of these mechanisms, the States are allowed to realise their emission reductions in other countries (e.g. within the scope of climate projection projects implemented abroad) and have the reductions credited to their own CO_2 accounts. The Kyoto Protocol introduced the flexible mechanisms Clean Development Mechanism (CDM) and Joint Implementation (JI) – depending on whether the climate protection project is implemented in a developed or developing country – alongside emissions trading for this purpose.

One study carried out by Oeko-Institut in this area on behalf of the German Federal Ministry of Environment, Nature Conservation, Building and Nuclear Safety analyzes how carbon offset projects can be effectively financed according to their actual results. The study considered important design options – for example, how the highest possible mitigation impact can be achieved, how the projects can foster long-term transformations (e.g. of the power sector), how to ensure environmental and social safeguards and how to avoid the double counting of emissions.

Oeko-Institut's study “Delivering Results-Based Funding Through Crediting Mechanisms”

A further analysis conducted by Oeko-Institut examines the potentials of GHG abatement of industrial gas projects under the CDM/JI. Such projects aim to continuously reduce gases stemming from industrial production, e.g. HFC-23 and nitrous oxide (N_2O). The results of the analysis show that CDM/JI projects reduce large quantities of very potent greenhouse gases at low cost. On this basis 7.5 gigatons of CO_2-equivalent (CO_2e) could be abated from 2013 to 2030 at average costs of approx. 50 cent per ton of CO_2e. Oeko-Institut’s experts therefore recommend the inclusion of these gas projects in the national emission trading systems of the host countries to enable long-term abatement of these GHG emissions.

Oeko-Institut's study "Options for continuing GHG abatement from CDM and JI industrial gas projects"

International aviation and shipping

So far, both international shipping and aviation are not regulated by the new international climate agreement. For many years Oeko-Institut has been analyzing possible solutions geared to the emission abatement of international transport systems, examining, for example, how market-based instruments such as a global emissions trading system or binding efficiency standards can be used effectively.

What's next? Success factors for global climate protection

The Paris Agreement is an important step for global climate protection and at the same time the starting point for further work. Now the key points of the agreement must be fleshed out in greater depth and the relevant rules and procedures developed. The primary focus is on the further elaboration of voluntary emission reductions of the States and the development of uniform calculation rules for their review. Moreover, the new reporting of the Parties' own emission statistics must be developed and introduced in the respective countries. The States are also continuing discussions about market mechanisms in a future climate agreement.

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