

Executive Summary for Policy Makers

Enhancing climate change mitigation ambition after Paris - Messages from economic literature

The Paris Agreement starts a new era in global climate policy. The agreement includes a landmark target of limiting global warming to well below 2°C. Parties will take voluntary action to reduce their emissions. These national contributions are the bottom-up elements of the Paris Agreement. The agreement also includes some cooperative and top-down elements, for example related to review, transparency of action and support, technology transfer and development, and rules for the use of market mechanisms.

The climate negotiation architecture of the Paris Agreement will be a cyclical pledge-and-review process. Parties submit their Nationally Determined Contributions (NDCs) for the future every five years. The contributions will be evaluated and compared to the overall targets in global stocktaking. Realized mitigation actions will be verified before the next round of submissions. The national contributions are not legally binding in international legislation, but the Paris Agreement states that the ambition level of the subsequent national contributions cannot be weakened, only improved. The Paris Agreement also requires all Parties, for instance, to report their progress made towards achieving their targets.

Already 188 countries covering over 95 percent of global emissions have submitted their first unilateral contributions (Intended Nationally Determined Contributions, INDCs). The Parties' initial contributions will unlikely reach the well below 2 °C target set out in the agreement. This is not a surprise, as noticed by Joseph Stiglitz,¹ among many others:

"In no other area has voluntary action succeeded as a solution to the problem of undersupply of a public good. And this is especially so when there are global public goods, the benefits of which are shared by everyone in the world. There is simply insufficient "solidarity" at the global level."

Mirroring the history of climate negotiations and the political ambience, the current bottom-up approach seems to be the only politically feasible way to proceed. Parties' contributions need to be enhanced in the years to come. Additional ways and mechanisms to increase climate change mitigation ambition are required. We have analyzed the possibilities which the Paris Agreement opens up in the form of

- 1) cyclical improvements,
- 2) market mechanisms,
- 3) technology transfer and information sharing, and
- 4) low-carbon investments and finance to increase the ambition of climate change mitigation.

We have carried out a comprehensive outlook of the tools and mechanisms that could be applied in the Paris Agreement implementation to enhance the global climate mitigation commitments.

The Paris Agreement will enter into the force, when at least 55 Parties to the UNFCCC accounting at least 55 % of global greenhouse gas emissions have ratified the agreement. If, and when, entering into force, the Paris Agreement becomes effective in 2020. Before that much needs to be done. During the next few years the Parties will negotiate on more detailed questions related to the implementation of the Paris Agreement. Different UNFCCC bodies or actors are requested to develop and recommend rules, modalities and procedures for details and mechanisms of the Paris Agreement, such as a transparency framework or the Sustainable Development

¹ Stiglitz, J., 2015. Overcoming the Copenhagen failure with flexible commitments. *Economics of Energy & Environmental Policy* 4(2), 29-36.

Mechanism. Upcoming negotiations can help to shape future climate policy design towards a positive cycle of increasing climate change mitigation ambition.

Our attempt, in this report, was to bridge the realities of the UNFCCC negotiations and theoretical academic understanding, especially focusing on the fields of environmental economics and international environmental agreements, and thereby contribute to the global discussion on addressing climate change. The main drivers that could boost the climate change mitigation ambition in the Paris Agreement implementation are decreased policy uncertainty, increased solidarity and trust between parties, decreased costs of low-carbon investments and increased transparency of mitigation targets and actions. The Figure A, below, shows how the related market mechanisms, finance, technology cooperation and cyclical follow-ups of the Paris Agreement can help to increase the mitigation ambition.

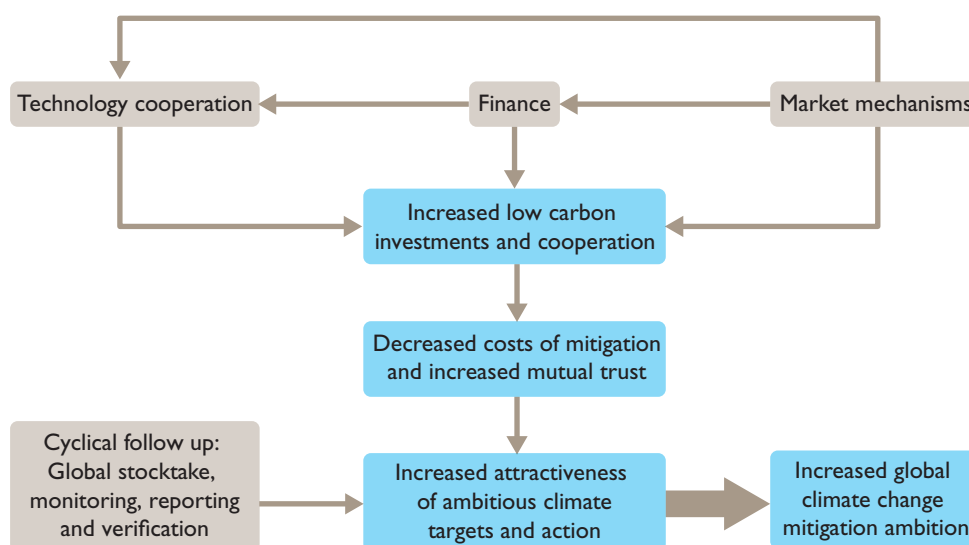


Figure A: Enhancing global climate change mitigation ambition in the Paris Agreement framework.

The Paris Agreement itself is a significant step towards more ambitious global climate policy. However, the implementation of the agreement will define how well its objectives are met. The initial reactions of interest groups are very positive and they show that the Paris Agreement decreases the climate policy uncertainty that has hindered the deployment of ambitious climate policy instruments and mechanisms.

This report presents multiple ways to enhance climate change mitigation ambition in the Paris Agreement implementation. In summary, good implementation requires

- 1) increased cooperation between Parties,
- 2) transparency of mitigation targets and actions,
- 3) clearly formulated and comparable short-term targets and long-term strategies for Parties' mitigation efforts,
- 4) a trustworthy review process,
- 5) incentive mechanisms for compliance,
- 6) new international market and non-market mechanisms and instruments, and
- 7) strengthening of UNFCCC's means of implementation (especially CTCN and GCF).

Increased cooperation and decreased costs of mitigation that result from enhanced policy can help to achieve the current contributions and also increase the ambition of future targets.