IMAGINE

Modelling of greenhouse-gas emissions relevant to the Paris Agreement (informing successive NDCs in light of the Global Stocktake) CE - 2021-2023 Responsable scientifique : <u>Sandrine Mathy</u>

Résumé du projet

Economies are interconnected through a number of channels, including trade of goods, services, exchange of technologies, knowledge and financial flows. As a consequence, climate policy and regulations implemented in a small group of countries would affect other economies as well. The change in the policy landscape and the consequent adjustment in energy prices would alter competitiveness and investment decisions in the energy sector.

So, in cooperation with national modelling teams, in developing and emerging countries, we will try to improve the quality of representation of these countries in the POLES model which will integrate the impacts of their policy decisions and estimate their role in the world level:

This project will explore the linkages between Europe and the rest of the world by analyzing different scenarios of fragmented and global climate action, focusing on the energy markets (as implications of policy action on energy prices and energy trade) and clean technology diffusion. Synthesising available knowledge on mitigation at national and global levels we will estimate the implications and identify the opportunities for accelerating national and global climate action in the context of sustainable development.

Objectifs généraux du projet

This project will focus on improving the quality of the mitigation modelling tools of national modelling teams in developing and emerging countries, aiming at a mix of both major G20 emitters as well as smaller countries. The project is planned to bring together both international experts and in-country participants from developed, emerging and developing countries, with the intention of:

i) improving national-level mitigation models operated by partners in developing countries, while improving understanding among all participants of how action at a national level impacts global emissions.

ii) improving the participant countries' abilities to conduct modelling in support of their climate goals and commitments under the Paris Agreement: Nationally Determined Contributions and Mid-century strategies in the context of the Global Stocktake.

The duration of the project encompasses the Paris Agreement Global Stocktake which is due to take place in the years leading up to UNFCCC Conference of Parties at the end of 2023.

Therefore, in addition to objectives i) & ii) listed above, the project will involve:

• synthesising available knowledge on mitigation at national and global levels

• identifying opportunities for accelerating national and global climate action in the context of sustainable development

• organising events such as expert workshops and drafting material such as policy briefs in order to present this knowledge.