

CLIMACAP: Integrated CLImate Modeling And CAPacity building in Latin America

Many Latin American countries have committed to developing or have already developed Low Emission Development Strategies. An important part of their strategy development process is the analysis and quantification of costs, benefits and impacts of different mitigation options.

The CLIMACAP project, which was launched in December 2012, supports the formulation of effective climate change mitigation policies by strengthening modelling capacity in Latin America. The project does so with the aim to support factbased decision making by policy makers based on knowledge at national and regional levels, whilst also enhancing the representation of Latin America in global models. One of the project's priority objectives is the comparative analysis of climate models and scenarios in key Latin American countries up to the horizon year 2050. This analysis will enable the evaluation of the economic effects of GHG reduction strategies and plans of key countries, the costs arising from potential mitigation measures in specific sectors, and possible ways to meet certain emissions reduction thresholds.

CLIMACAP Consortium

The integrated approach required a balanced consortium to address the varying local context, provide national, regional and global models and ensure policy relevance. The CLIMACAP consortium combines leading European and Latin American academic energy institutes that is as experienced in modeling as it is in capacity building, with excellent knowledge of local context. It works in close collaboration with the Latin American Modelling Project (LAMP) initiative, financed by the US agencies for environmental protection (US EPA) and for international development (USAID).



Products

The CLIMACAP project produces a wide evidence base for policy makers and researchers, through publicly available products and reports. This includes reports on policy reviews and data gathering, scenario modelling policy briefs, databases, as well as modelling tools and improved models available in the different countries. A special issue of the scientific journal *Energy Economics* (forthcoming) is the key output of the project, and includes the following papers.

Country-specific climate policy scenarios in Argentina, Brazil, Colombia, and Mexico, by N. Di Sbroiavacca et al., A. Lucena et al., S. Calderon et al., and J. Veysey et al., respectively. This collection of four papers evaluates the impact of a variety of climate change control policies on national levels over the 2010-2050 period utilizing multimodel analysis.







Preliminary results for the average annual capacity additions (historical EU and US; short-medium future LA) for various fossil-based and low-carbon energy technologies in a high abatement scenario (van der Zwaan et al., *forthcoming*)

Agriculture and land use (including biomass) by K. Calvin et al. provides insight into the strong competition for land use in Latin America between fuel, forest and food.

Macroeconomic impacts of decarbonisation scenarios in Latin America: a model comparison by H. Pollitt et al. dissects the macroeconomic impacts of climate change control policies with a multimodel approach including both computed general equilibrium and macrosimulation economic models.

Technology Roll-Out for Climate Change Mitigation: A Multi-Model Study for Latin America, by B. van der Zwaan et al. This paper investigates energy technology deployment under climate change mitigation scenarios in Latin America utilizing a cross-model comparison. The starting points: base-year assumptions and baseline projections for Latin America by B. Van Ruijven et al., which presents an overview of baseline projections produced by the variety of models used in the CLIMACAP project.

A Multi-Model Study of Energy Investments in Latin America under Climate Control Policy by T. Kober et al., which investigates long term energy supply investment requirements in Latin America until 2050 through a multi-model approach.

Climate Policy by L. Clarke et al., looks at the impacts of a variety of a policies in a holistic manner for Brazil, Argentina, Colombia, and Mexico, as well as for the Latin-American region as a whole.

Further information and contacts

All aforementioned products and the special issue can be found on the CLIMACAP website (www.climacap.org) and the Community for Energy and Development (COMMEND) CLIMACAP portal (www.commend.org) Project Leader @ ECN Bob van der Zwaan, vanderzwaan@ecn.nl Project Co-ordinator @ ECN James Falzon, falzon@ecn.nl

