

BUILDING CAPACITIES FOR LONG-TERM PLANNING: THE MITIGATION ACTION PLAN AND SCENARIOS (MAPS) PROGRAM

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OVERVIEW

This case study analyses the process of construction, between 2012 and 2015, of medium- and long-term mitigation scenarios in Chile as part of a South-South collaboration project aimed at generating information that would help define domestic mitigation policies and future pathways for low-carbon development. It also provides complementary insights from the Brazilian, Peruvian, and Colombian processes, which took place in parallel as part of the same program, as well as the lessons learned from cross-country collaboration. The analysis focuses on a “process” perspective, which emphasizes decisions and strategic and methodological actions that articulate the relationships and interactions among the various institutions and stakeholders involved, with the final aim of strengthening climate change policies and institutional capacities for the long run.

The country projects we consider are the following:

- ◆ MAPS Chile, 2011–15 (Chile)
- ◆ Planificación ante el Cambio Climático (PlanCC), 2012–15 (Peru)
- ◆ Estrategia Colombiana de Desarrollo Bajo en Carbono (ECDBC), 2010–15 (Colombia)¹
- ◆ Implicações Econômicas e Sociais no Brasil (IES-Brasil), 2012–15 (Brazil)

The four projects were part of the Mitigation Action Plans and Scenarios (MAPS) program, an initiative that grew out of the experience of the long-term mitigation scenarios mandated by the South African government in 2005–8, which it sought to share with selected developing countries. The South African team facilitated a collaboration to develop emissions reference scenarios and inventories to analyze mitigation actions suited to each country’s institutional, economic, and political context, and to explore future scenarios to inform policymaking processes related to climate change. The MAPS approach included a government-driven process of coproduction

Case Studies contain preliminary research, analysis, findings, and recommendations on previous long-term planning exercises. They are circulated to stimulate timely discussion and critical feedback and to influence ongoing debate on emerging issues.

All the interpretations and findings set forth in this case study are those of the authors alone.

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of evidence, involving the participation of experts, policymakers, and representatives from the private sector, labor unions, and civil society, engineered from the South for the South. The program was designed to enhance collaboration among developing countries and strengthen in-country capacities to generate robust, legitimate, and credible knowledge regarding mitigation scenarios and future pathways for low-carbon development (MAPS 2015).

The contribution of these projects to the definition of public policies that align to long-term climate objectives has been mixed, even though each of them helped define its country's nationally determined contribution (NDC) during 2015 in the lead-up to the Paris Agreement. The NDCs submitted by Peru, Brazil, and Chile to the United Nations Framework Convention on Climate Change (UNFCCC) have been assessed by the international community as “insufficient” and “highly insufficient.”² Nevertheless, these cases offer precious lessons about the value of building quantitative evidence and establishing communities of practice, even when the political will is not there. Thus, as a key result, the cases highlight the relevance of building local skills and knowledge over time in developing countries to enable the design and continuous adjustment of long-term planning and implementation of climate change mitigation efforts.

CONTEXT OF THE MAPS COUNTRY PROJECTS

Chile, like Peru and Colombia, lacks a strong tradition of long-term planning for climate change action. In the early 2000s, the three countries were at an early stage in the integration of climate change into their political agendas, in the building of institutional and individual capacities, and thus in the definition and implementation of climate change policies (Calfucoy 2015; Chávez and Bazán 2015; Lema and Tibaduiza 2015). As in other developing countries, most mitigation actions had been driven by the need to increase energy efficiency, strengthen public transport systems, reduce waste, or fight deforestation, but not necessarily to cut greenhouse gas (GHG) emissions (Boyd and Coetzee 2013; Garibaldi et al. 2014; Tyler et al. 2013).

Chile, Colombia, Peru, and Brazil have climate change authorities located in their environment ministries, which are young institutions, at least in the Spanish-speaking countries (they were created in the early 2000s in Chile and Peru and in 1994 in Colombia). In most countries, these institutions are weak politically compared to those of energy and finance.

In the countries examined here, climate change remained a policy issue mainly linked to environmental concerns and not fully integrated into national development agendas, either as an important constraint or as an opportunity. Colombia in 2012 defined a low-carbon emission development strategy mandated by the National Development Plan for 2010–14. And in Brazil efforts to reduce deforestation have historically brought climate policy debates closer to development concerns. In the latter case, however, since 2010 the economic decline and increasing preoccupation with development challenges have made it difficult to bring climate mitigation to the fore again (Raubenheimer and MAPS Team 2015), underscoring the lack of integration of mitigation and development.

Chile, Peru, and Colombia belong to the Association of Independent Latin American and Caribbean States (AILAC), together with Costa Rica, Panama, and Guatemala. As AILAC members, these countries have embraced the idea that even though they are developing economies with urgent needs to reduce poverty and boost growth, they can respond to climate change and encourage others to act quickly, beyond the North-South disputes about responsibilities and fair contributions (Raubenheimer and MAPS Team 2015). Brazil is a significant player in the international climate landscape, accounting for around 5 percent of global emissions. The issues of climate change, forestry, and ecology in general leaped to the forefront there as early as the 1992 Earth Summit, where Brazil became the first country to sign the UNFCCC, making itself a world leader and prominent innovator on climate issues (Raubenheimer and MAPS Team 2015).

When international negotiations required countries to define their commitments to the Paris Agreement, the MAPS program offered the opportunity to build evidence to inform decision-making on climate mitigation policy. The aim of MAPS was to achieve lasting transformation, country ownership, and long-term understanding through deep stakeholder engagement, robust evidence, and world-class modeling from the global South (Kate Hampton, Children's Investment Fund Foundation, cited in Raubenheimer and MAPS Team 2015).

The program's novel methodological approach included three key elements:

- ◆ Building evidence for developing countries by developing countries by favoring domestic research capabilities and building opportunities for training when necessary, as well as through a network of collaboration among research teams from the different countries involved.

- ◆ Implementing a participatory process involving stakeholders from all national economic sectors to coproduce evidence for building mitigation scenarios. This approach increased the legitimacy, robustness, and credibility of evidence by enriching traditional scientific research (undertaken by researchers on their own) through a facilitated process involving local experts from multiple sectors and disciplines, including nonacademics and policymakers.
- ◆ Developing a governance structure to articulate the participatory process and the interface of research activities, public policy, and stakeholders' interests.

Even though all these countries shared the same aims and methodological approach, their application of that approach was noticeably different. All of them sought to enhance the integration of climate and domestic objectives, mainly by identifying opportunities to contribute to domestic needs and advance priorities set by national authorities. Colombia integrated the MAPS approach with other climate policy-related initiatives under way at the time to build the national low-carbon development strategy and develop sectoral mitigation plans in close cooperation with government ministries. Peru defined three phases for the project, moving quickly from evidence generation to a deeper analysis of the implementation of mitigation policies, with emphasis on strengthening institutional capacities and feasibility analysis. Brazil focused on demonstrating the link between GHG emission reduction goals and gross domestic product (GDP) and other macroeconomic variables through the Brazilian Forum on Climate Change. In Chile, the focus was much more on building evidence to ground climate policy, including by defining a business-as-usual (BAU) scenario, identifying measures, and undertaking a macroeconomic analysis of their impact, without moving toward planning or analysis of potential implementation.

THE DEVELOPMENT OF THE PROGRAM: INSTITUTIONAL ARRANGEMENTS AND PUBLIC PARTICIPATION

All four countries developed the MAPS project with political support expressed in a high-level mandate signed not only by their environment ministers but also by sectoral ministers like those of energy, with the aim of building sound evidence to inform national mitigation scenarios and climate change policy. The countries' distinct institutional conditions and project

governance structures led to important differences in how the project was institutionalized and articulated with current public policy processes.

Colombia was the country where the project was most linked to an institutional planning process.³ The project integrated different sectors through the participation of professionals funded by the U.S. Agency for International Development and the UN Development Programme across the different ministries to build long-term planning sectoral plans, a key component of the Colombian strategy. Even though this structure provided human and technical resources for the task, this did not guarantee that the sectoral plans would be integrated into the ministries' agenda. As it happened, some of the plans became part of government priorities⁴ while others did not (Lema and Tibaduiza 2015).

In Peru the government took less ownership of the project from the beginning. The institution in charge of the coordination and management of PlanCC was a private consulting firm knowledgeable of public policy processes. This decision was reached with policymakers in the interest of better strategic positioning. The involvement of Peru's National Center for Strategic Planning (Centro Nacional de Planeamiento Estratégico, CEPLAN) was weak and limited to the role of observer and stakeholder, without a key role in decision-making. CEPLAN was the last institution to become a member of the steering committee. The center had four different presidents during the project period, which made its involvement more difficult. In contrast, the Ministry of Economy and Finance, Peru's most powerful ministry, was involved from the beginning. As Jorge Chávez has noted, "during the initial design phases of the project's proposal, the political support of the Minister of Environment wasn't as intense as in the latter stages. In the final stages, the political context increased the awareness about the results to define the country's position and to facilitate the leadership of the COP20 in Lima. In any case the Ministry of Environment formally assumed the general supervision of the project, but not its technical conduction" (Chávez and Bazán 2015).

In Brazil the decision was reached with the Ministry of Environment to house the MAPS program within the Brazilian Forum on Climate Change, a body created by law in 2000 and chaired by Brazil's president. The forum's mission was to expand the debate on climate change issues and increase the participation of national stakeholders. The MAPS project was steered by a research team from Federal University of Rio

de Janeiro, in continuous consultation with the environment minister and the forum's executive secretary. Achieving a consolidated single mandate from the government to develop mitigation scenarios proved to be difficult.

In Chile, the MAPS project was launched under the leadership of the Ministry of Environment with a high-level mandate from six ministries, which gave strong political support and relevance from the beginning. The project was coordinated by an ad hoc executive team (MAPS Chile executive committee) made up of independent professionals and researchers from the University of Chile and Catholic University. However, the environment minister, through the participation of the head of the Climate Change Office, maintained leadership and guidance, facilitating the accomplishment of objectives and providing political insights needed to navigate the complex interface between research and public policy. The project steering committee, composed of representatives from seven ministries, provided important support throughout the process (Calfucoy 2017).

FACTORS LEADING TO THE DEVELOPMENT OF THE LONG-TERM PLANNING EFFORTS FROM THE MAPS PERSPECTIVE

With scarce domestic resources for policy design and research on mitigation and the socioeconomic impacts of climate change policies, the countries embraced the opportunity to build different long-term scenarios and accepted donors' generous offer to fund the MAPS country projects. In Peru, Colombia, and Chile, another critical factor in the decision to undertake these long-term planning efforts was the projects' methodological approach, which emphasized the drafting of alternatives and scenarios to inform public policy and not determine it, enabling the development of capacities and a community of practice as a first step to addressing policy change.

At the beginning of the MAPS project, only Chile had projections of domestic emissions, but these were insufficiently robust and not credible official emissions baselines for its economy. In all the countries studied, the absence or shortcomings of such data hampered the countries' ability to understand their current and potential GHG emissions and to set reasonable mitigation targets.

All the countries lacked information about the socioeconomic

implications and economic impact of mitigation policies. Their concern that mitigation policies might weaken national competitiveness heightened the need to apply macroeconomic models and identify mitigation policies that could boost economic growth through technological transformation and the development of new economic sectors linked to a "green economy."

The program's methodological approach increased the appetite for long-term planning and the building of scenarios whose sensitivity to different parameters would enable them to address uncertainty and changes over time. From its formulation in South Africa, the MAPS project had emphasized the construction of scenarios to feed decision-making. This made it possible to keep the construction and evaluation of alternatives within the scope of the project and, in terms of policy, to consider options based on the integration of criteria, priorities, and conditions outside the scientific evaluation. Along the same lines, the proposed methodology used expert judgment to identify validated sources of information and overcome the inadequate secondary information, a situation very typical of developing countries such as Chile. Altogether, the poor available knowledge, and the offer to build evidence that could be used by multiple actors, generated enough curiosity to enable long-term planning efforts.

In all cases, personal leadership was a key element in the development of long-term planning efforts. Having professional staff with technical capacity at a high level in the national administration, and with the ability to involve political leadership in the process, facilitated the implementation and the scope achieved by MAPS in all countries.

In Chile, for instance, the personal skills of the head of the Ministry of Environment's Climate Change Office, and the skills of her team, were key to obtaining international resources and to political coordination with leaders of the relevant institutions (particularly the Ministry of the Environment). They also helped build bridges of collaboration and support in strategic institutions in the country's institutional and political framework (especially the Ministries of Finance and of Foreign Affairs).

As a result, in January 2012 the interministerial mandate was signed thanks to the leadership of the environment minister. Additionally, the funds required for the execution of the project were successfully collected and the members of the scenario-building team (SBT) were invited to meetings with the environment minister. In March 2012, the MAPS Chile project was formally launched in a public event with high-level

authorities. The first meeting of the SBT took place at the end of March 2012, starting a two-year project that would later be extended to four years.

ENGAGEMENT STRATEGY: HOW SCIENTISTS, BUSINESS, CIVIL SOCIETY, AND THE PUBLIC PARTICIPATED IN THE PLANS' DEVELOPMENT

All the countries had a steering committee, a scenario-building team, and technical groups composed of experts on climate change and sectoral issues. The steering committee provided political guidance, while the SBT and technical groups coproduced information on mitigation opportunities, costs, and socioeconomic impacts, integrating expert knowledge and formal modeling expertise (Lema and Tibaduiza 2015).

During the first phase of the PlanCC project, Peru formed the National Team to Explore Mitigation of Climate Change (Equipo Nacional de Prospectiva sobre Mitigación del Cambio Climático, ENPCC) as well as a technical advisory group. These bodies, composed of representatives of the private and public sectors and civil society, gave legitimacy and credibility to results. The ENPCC included titular and alternate members from the Ministries of Environment, Finance, and Foreign Affairs, as well as the National Center for Strategic Planning (Centro Nacional de Planeamiento Estratégico, CEPLAN). It also included a representative from the consulting firm charged with technical coordination of the project. During the two years of implementation of PlanCC's first phase, this committee met a total of 23 times, or almost monthly, indicating a relatively intense monitoring (Chávez and Bazán 2015).

In Chile, the SBT was a multistakeholder group made up of nearly 70 individuals with proven experience in climate change and related topics (including mitigation, adaptation, and sustainability). The participants were from the public, private, and academic sectors, as well as civil society organizations and institutions, but they were not formally representing their employers. The group worked according to guidelines provided by a steering committee, and under the guidance of a professional facilitator. The SBT was established as an advisory group, and thus its recommendations were not binding.

Setting up the SBT was a particularly sensitive task. The criteria for selection of members included that they have knowledge and experience regarding climate change and related topics, knowledge of and access to information in the relevant sectors

(such as energy, forestry, agriculture, and technologies), strategic thinking skills, the ability to take action beyond the parameters of a specific sector, and an understanding of (and agreement with) the project rules. In short, they should be people with a known track record who were recognized for their technical leadership. One of the notable shortcomings identified was the low participation by nongovernmental organizations (NGOs). A fund was created to cover the costs of NGO participation, but it was not as successful as expected. Among the reasons cited by individuals who did not attend regularly was a need to focus on specific and contingent topics in view of the urgency and relevance of the short-term agendas for environmental issues in the country, as well as a lack of interest resulting from the overemphasis on sectoral issues and insufficient attention to local and territorial challenges. NGOs expressed their preference for being involved in implementation and political issues; the program's focus on research discouraged their participation.

Additionally, in all the countries technical working groups were formed to support technical work in each sector. The technical working groups were composed of SBT members and individuals invited in their capacities as experts. Their main contribution was to gather information about sector microdynamics in order to refine modeling and evaluations of mitigation measures, specifically where a dearth of information or records made it impossible for researchers to independently establish appropriate assumptions and methodological definitions.

INPUT INTO THE DEVELOPMENT OF INTENDED NATIONALLY DETERMINED CONTRIBUTIONS AND OTHER CLIMATE CHANGE POLICY

As an unexpected result of these processes and their timing, the MAPS program was able to add its input to the pathways informing the countries' intended nationally determined contributions (INDC), thus increasing the interest in and value of its efforts. While the teams were working with stakeholders on estimating emissions reference scenarios, analyzing nationally appropriate mitigation actions and emissions projections, the UNFCCC agreed to require all Parties to submit intended nationally determined contributions (INDCs) in 2015, with an emphasis on setting quantitative targets that would become formal commitments with the international community.

When their INDCs had to be defined, Peru, Chile, Brazil, and

Colombia already had most of the information needed for a sound discussion of target formulation, and that information was backed up by a wide range of stakeholders. Even though this situation had not been planned, the teams were able to seize the opportunity to facilitate the articulation of both processes, helping with target setting and gathering political support. The INDC process tested the relevance and applicability of the knowledge built through the MAPS processes and, fortuitously, the theory of the change underlying the MAPS approach itself (Raubenheimer and MAPS Team 2015). Thus, the generation of evidence to define the INDCs, as submitted by these countries to the UNFCCC in December 2015 before the COP21 in Paris, is among the most important results of these MAPS country processes.

Colombia

As noted in its official INDC (Gobierno de Colombia 2015), Colombia began preparing its mitigation goal in 2012, within the framework of its low-carbon development strategy. In that strategy, Colombia, with the support of MAPS and using as its methodology the coproduction of evidence, performed rigorous technical analysis to explore trajectories that would decouple GHG emissions growth from national economic growth. These analyses, cited in the INDC's official document, were based on interviews with experts from public and private entities, academia, and civil society (as represented on the SBTs), with a view to identifying and prioritizing mitigation measures aligned with sectoral development objectives. The analytical exercises and collective agreements formed the basis for the business-as-usual scenario and a set of mitigation scenarios. After this technical process, the government carried out a political process that included the participation of high-level public actors (ministers and vice ministers) and their technical staff to refine the targets and commitments to be announced to the UNFCCC. Members of the in-country MAPS team—both within and outside government—contributed to these efforts. The scenarios drawn up in the coproduction process and the macroeconomic analysis that preceded it were the basis for the political discussion. As a result, Colombia became the first country in South America to present its INDC (in August 2015) with an emission target of 20 percent respect to the BAU scenario (unilateral commitment) and an additional 10 percent target subject to international aid.

Peru

In December 2013, at the second high-level meeting of PlanCC, Peru's environment minister asked PlanCC to provide technical support for the process of defining the country's INDC. Following the mandate received from the environment minister, the Directorate General for Climate Change and Water Resources, in coordination with the PlanCC director and international donors (the Climate and Development Knowledge Network, Swiss Agency for Development and Cooperation, and Children's Investment Fund Foundation), agreed that, in addition to products and research deliverables of Phase I, the technical team of PlanCC would directly support the Directorate General for Climate Change in developing the INDC. The deputy minister of strategic resources and the director general for climate change designed the governance of the political process to define the INDC, a process that included a high-level ad hoc commission. The PlanCC steering committee would be kept away from this more political process (PlanCC 2015). On July 2014, the results of Phase I were presented. From then until February 2015, the research team revised some of the numbers underlying the scenarios, based on reactions from several stakeholders. In June 2015, the draft INDC was submitted for public consultation. It considered four scenarios and proposed a target to reduce GHG emissions with respect to a business-as-usual scenario. The one selected fell at the "ambitious but pragmatic end" of the spectrum of scenarios produced by PlanCC (Raubenheimer and MAPS Team 2015). The final INDC's target committed Peru to a GHG emissions reduction of 30 percent below the BAU scenario in 2030. Two-thirds of this reduction would be implemented through domestic investment and expenses, from public and private resources (nonconditional proposal), and the remaining third would be subject to the availability of international financing and the existence of favorable conditions (conditional proposal).

Chile

In its INDC (Gobierno de Chile 2015), Chile reported emissions intensity in tons of carbon dioxide equivalent (CO₂eq) per unit of GDP in million Chilean pesos, as of 2011. Two types of commitments were defined: (1) carbon intensity target, expressed in GHG emissions per GDP unit, which includes all the sectors quantified in the national greenhouse gas inventory (1990–2010) except for the land use, land use change, and forestry (LULUCF) sector, and (2) a target expressed in tons of CO₂eq from the LULUCF sector. Thus Chile committed to reduce its CO₂ emissions per GDP unit by 30 percent below 2007 levels

by 2030, considering future economic growth that would enable implementation of measures adequate to fulfill this commitment. In addition, and subject to international financial support, the country committed to reduce its CO₂ emissions per unit of GDP by 2030 until it reached a 35–45 percent reduction relative to 2007 levels, also considering future economic growth that would enable implementation of measures adequate to meet this target.

The document submitted by the Chilean government clearly showed that, to set the targets, the numbers rely on the MAPS Chile results for emissions and gross domestic product forecasts, assumptions, and methodologies for forecasting fuel and electricity prices and energy demand, as well as sectoral and macroeconomic models (Gobierno de Chile 2015, 14).

The coproduction of evidence was crucial to improving the outcomes and impact of research into public policy design. First, because the research team advised the government, which in turn relied on the team's experience and results to respond rapidly to policy demands, as part of the process of defining the national contribution. The level of knowledge achieved by the domestic research teams was critical, as was the knowledge of the policymakers responsible for defining the INDC who were part of the technical and political teams in the MAPS participatory process. In Chile, the technical and political teams that participated in the definition of the INDC knew the results and process of the MAPS program, which facilitated its credibility and the coordination among them. Additionally, the high-level committee for defining the INDC had almost exactly the same members as the MAPS-Chile steering committee, facilitating the translation of results, the understanding of its implications, and the awareness of the limits, uncertainties, and opportunities provided by the evidence generated.

After MAPS Chile, and using its results, methodological approach, and technical capacities developed, the Chilean government fed critical long-term planning processes in different sectors. This was an unexpected result of the program. In the energy sector, data, results, methodologies, and research teams from MAPS participated in the development of the national energy policy for 2050; in a similar way, the mitigation plans for the energy sector and for the agriculture, forestry, and other land uses sector were developed using the MAPS body of experience and with the involvement of some of the same professionals.

LESSONS LEARNED

Beyond participation: Social interaction processes

The participatory processes described in this case study were not a mere consultation or validation of results, based on the review of specific documents. Instead, they were social interaction processes that reached different degrees of depth in the four countries. That meant iterative discussions and contributions to develop specific products, to the extent that the final documents were presented as joint products of both researchers and stakeholders involved in the advisory and technical groups. Moreover, the participatory process enabled the countries to create communities of practice on climate change mitigation (Calfucoy and Rudnick 2017).

As already outlined above, at the core of the MAPS approach was the creation of a scenario building team and technical groups to participate in the process of building evidence. These groups sought balanced membership representing key sectors and institutions to provide technical knowledge for the process. For all the countries, this task was made challenging by the need to identify the most relevant stakeholders and the most valuable technical expertise. The primary consideration was inclusion of people from the different sectors—the public and private sectors, academia, and NGOs—but these distinctions proved inadequate, requiring greater detail and a more refined understanding of the implications of including different stakeholders and experiences.

In the case of Peru, the analysis highlights the challenges related to the inclusion of the private sector. The key actors from this sector who participated most actively were the best organized and usually the most powerful. They did not necessarily represent all voices from the private sector. Peru has a large informal economy and lacks robust business organizations able to include private actors as counterparts.

In Brazil, the concept of having an SBT, made up of highly knowledgeable experts, was innovative. The meetings of the SBT and the interim working group brought players closer together, creating a culture in which technical information was shared and decisions were made collectively. The convening power and existing structures of the Brazilian Forum on Climate Change was a foundation for the stakeholder engagement process.

In Chile, the analysis emphasized the lack of participation of NGOs and social organizations, who would have contributed to greater legitimacy of the results. The private sector was represented by associations from the key industries for the country's economy (mining and energy), but public sector representation was limited to people from the different sectoral

ministries without a direct involvement of other institutions (the National Electricity Commission, the National Investment System, etc.) that play regulatory roles and might have considerable influence on the definition of policies that can impact the lock-in of long-term processes.

In terms of technical contributions, there is much more to do to include more people with the right expertise. After and before the definition of the mitigation actions, there was incomplete information to foresee the kinds of experts needed. In the future, the configuration of technical groups should be adjusted to respond to the changing demands for knowledge encountered throughout the process.

Finally, there was the question of the role of the people to be invited. In Colombia the first meetings included high-level policymakers and representatives from the public sector, assuming that such people would best strengthen the relevance of the results. Over time, however, it became difficult to guarantee their active and committed participation. In Chile, the team focused on midlevel experts and policymakers, under the assumption that they could devote more time to participating in a demanding process that included many meetings and considerable document review and email correspondence. In some cases, members were able to contribute valuable information from their institutions and experience and to bring what they learned in the MAPS process to their professional activities. In Peru, the most influential people were also included in the working groups because of their potential political leadership in facilitating change.

There is no particular recipe for the best composition of stakeholders groups, but it seems at least useful to think carefully and critically about the contribution (legitimacy, technical knowledge, amplification of information, leadership, innovation) and commitment expected of members.

The value of time

To satisfy the MAPS program's expectations of building robust evidence and transforming societal capacities to lead low-carbon development, one must take into account the factor of time. Time to build meaningful relationships, time to learn and to understand the complexities and implications of implementing mitigation actions and planning low-carbon development, time to reflect on and discuss complex and technical issues, and time to listen to the different contributions from the different actors involved. Additionally, this requirement of time must be mediated with the urgent demands of public policy.

The value of cross-country spaces

The regional collaboration among the four countries worked at different levels, including those of governments, researchers, and practitioners. This approach offered the potential to generate innovation and a South-driven approach, thereby developing trust and a distinct approach to mitigation (one that notes development and infrastructure gaps, unstable economic dynamics, etc.).

Collaboration enhanced the cost-effectiveness of these complex and time-intensive processes. The collaboration was structured as a kind of "lab program" and served different purposes: from pure technical assistance to reflection and blue-sky thinking spaces, to exchanges of best practices, intelligence sharing, and even simply as spaces to let off steam and get an energy boost (Raubenheimer and MAPS Team 2015).

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ENDNOTES

1. The ECDBC, still ongoing in Colombia, is now focused on implementing mitigation actions.
2. Information available at <https://climateactiontracker.org>.
3. Colombia's national development plan is a formal instrument approved by Congress that defines the priorities for the four-year presidential term. Colombia also has National Planning Department charged with integrating policies and articulating sectoral efforts, as well as monitoring and evaluating the different components of the national development plan.
4. The sectoral plan was adopted by decree, giving it important political and financial support that helped facilitate its implementation.

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Marta Torres Gunfaus is senior researcher on climate and energy at IDDRI. Her responsibilities include bridging research and policy-making and quantitative analysis with social sciences disciplines. Marta is responsible for the implementation of the Deep Decarbonisation Initiative in the large emerging economies, with a research focus on in-country policy and stakeholder engagement. She served as Head of Climate Mitigation for the Government of Catalonia (Spain), as well as co-Director of the MAPS Programme, a collaboration amongst developing countries employing over hundred experts to establish the evidence base for long term transition to robust economies that are carbon efficient.

ABOUT THE LONG-TERM STRATEGIES PROJECT

World Resources Institute and the United Nations Development Programme, working closely with UN Climate Change, are developing a set of resources to help policymakers integrate long-term climate strategies into national policy making.



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This project contributes to the 2050 Pathways Platform and is undertaken in collaboration with the NDC Partnership.



This vision and direction of the project is guided by the project's advisory committee: Monica Araya, Richard Baron, Ron Benioff, Pankaj Bhatia (co-chair), Yamil Bonduki, Rob Bradley, Carter Brandon, Hakima El Haite, Claudio Forner, Stephen Gold (co-chair), Emmanuel Guerin, Ingrid-Gabriela Hoven, Dr. Martin Kipping, Carlos Nobre, Siddharth Pathak, Samantha Smith, Marta Torres Gunfaus, Laurence Tubiana, and Pablo Vieira.

For more information about the project, and to view the expanding set of resources, visit www.longtermstrategies.org.