

## **ANNEX 1: PMR PROJECT IMPLEMENTATION STATUS REPORT (ISR)**

### **1. SUMMARY INFORMATION**

Implementing Country/Technical Partner:	Republic of Chile
Reporting Period:	From 05/09/2017 to 31/03/2018
Report Date:	09/04/2018
Implementing Agency:	Ministry of Energy
Contact Person:	Juan Pedro Searle. PMR-Chile Focal Point.

Grant Executed By:	<b>Recipient:</b> Chilean International Cooperation and Development Agency (AGCID)
Grant Effectiveness and Closing Dates:	09/05/2014 - 31/08/2019
Grant Amount (USD):	USD 4,980,000
Funding Mobilized (USD):	USD 3,077,595
Funding Committed (USD)	USD 3,608,492

### **2. OVERVIEW**

As in the previous ISR, an important share on the progress made for this reporting period has been on the implementation of the current carbon tax, specifically, in strengthening institutional capacities and technical requirements for the operation of the corresponding MRV system to adequately implement the first year of operation of the carbon and local pollutants tax. To this date we have the initial estimates from the Environmental Superintendence where the numbers indicates a total revenue of roughly 190 million US dollars with a an 88% of the share coming from the CO2 emissions.

Regarding the analysis of future implementation of other forms of carbon pricing, the project has delivered a series of reports where different mechanisms where studied under the national context, which resulted in a proposal of alternatives and identification of pathways for future development of an improved system of carbon pricing option for Chile. A summary of all studies carried out by the project can be found in Spanish in the projects website: <http://www.precioalcarbonochile.cl/documentos>.

Components 1 and 2 from the initial MRP have both ended all their committed activities, giving way to two new components to carried out under the extension phase of the pmr, components 5 and 6, whose main activities will be explained further in detail on this ISR.

Component 1 activities specified under Article II of the Grant Agreement, i.e., complementary activities related to the review of a regulatory framework needed for one or more carbon pricing instruments, commenced through the Policy Analysis Work Program. These activities analyzed carbon tax interaction with other sectoral policies on energy, which provided a framework for regulatory analysis that is currently being implemented under Component 1, including other carbon pricing options - ETS and domestic carbon market development.

Regarding Component 2 activities, in terms of institutional arrangements, closer coordination between the Ministry of Environment and the Superintendence of Environment has enabled aligning objectives and roles defined in the Tax Reform, specifically on carbon and local pollutants taxes, and for MRV capacity-building and resources required to support the sustained implementation of these taxes, together with the design and implementation of the robust MRV system needed.

Component 3 activities, a technical and policy national debate on carbon pricing has been established, and is anticipated to continue gaining traction across numerous fronts. Capacity building activities through the Consultative Group of Experts (GCE) engages public, private and civil society stakeholders, and therefore prepares a working basis for activities to be implemented under the Strategy for Communication, Consultation and Stakeholder Engagement.

There have been political developments in the Country as the new administration took office on March 11, 2018. The new administration has given a remarkable interest in moving forward climate change policies, including the draft of a Climate Change Law. Within the energy sector, priority has been given to this issue, and the Energy Minister has been emphatic in pointing out the role of the sector in the fight against climate change, were so far actions towards fostering more renewable energy capacity, promoting energy efficiency, and driving climate action are being pushed forward under the organization's agenda for 2018-2022.

Within the framework of the Pacific Alliance, the member countries of the alliance, through the Cali Declaration in 2017, announce their conviction to continue promoting green growth to face climate change, supporting the 2015 Paris Agreement and the intensification of "efforts in matters of measurement, reporting and verification (MRV) of emissions of CO<sub>2</sub> and other greenhouse gases (GHG) with a view to identifying possible voluntary market mechanisms among the region".

On the other hand, in the annual celebration of the Paris Agreement, the Paris Declaration on Carbon Pricing in the Americas was signed on December 12, 2017, where the signatory states acknowledge the importance of implementing carbon pricing instruments and call for joint work to develop collaborative work to create a cooperation platform called "Carbon Price in the Americas" (CPA) to identify and work on opportunities to increase the alignment of carbon pricing systems and promote the use of carbon markets to maximize climate action and ensure real progress in the reduction of greenhouse gases. Within the work of the CPA, emphasis is placed on collaborative work to strengthen the MRV systems of GHGs, in order to generate the general provisions that serve as a basis for the coordination of carbon markets within the Americas, to explore the development of common standards to ensure the environmental integrity of international carbon pricing mechanisms and strengthen international and regional cooperation and cooperation efforts in an effort to share

lessons and improve the technical capacities of the public and private sectors

### 3. IMPLEMENTATION REPORT BY COMPONENT

#### ***Differences between the Objectives/Activities in the Market Readiness Proposal and the Grant Agreement***

<p>Are there any important and material differences between the objectives/activities proposed in the Market Readiness Proposal and endorsed by the Partnership Assembly of the PMR and those agreed to in the Grant Agreement with the Delivery Partner and described in the Project's Results Framework?</p>	<p>Yes</p>
<p>As stated in previous ISRs, considering mandates stated under the Tax Reform and Long-Term Energy Policy, as well as recent developments under the Paris Agreement, adjustments were made on a technical level in Components 1, 2 and 3 to accommodate a shift in priorities that for now focuses on the implementation of the current carbon tax and its MRV system, but also enables to go beyond and evaluate possible carbon pricing pathways towards the future. For instance, the MRV system is being designed as "ETS compatible", in order to prepare the country for future cooperative approaches with other parties and jurisdictions that may involve international transfers of mitigation outcomes, as stated under Article 6 of the Paris Agreement. This had to be reflected in a new re-grouping of the original procurement plan sub-components. For instance, under Component 1, a focus on building on the current carbon tax (or considering carbon tax design alternatives), was a new priority compared to an original focus mostly on market mechanisms (ETS and carbon markets). Nevertheless, the perspective of moving to a more comprehensive system for carbon pricing in the future, such as an ETS or a combination of other carbon pricing instruments for the energy sector, remains as a core element of this Component (and of the PMR project as a whole), given the promising international and regional developments on these matters.</p> <p>As compared to the last ISR, the activities under the project remain the same with new components as requested for the additional funding to keep studying the move towards a more comprehensive system for carbon pricing in the future, such as an ETS or a combination of other carbon pricing instruments for the energy sector. The latter remains as a core element of this Component (and of the PMR project as a whole), given the promising international and regional developments on these matters. Therefore, as mentioned in the previous section, component 1 evolved to component 6 to keep aiding the study of alternatives for the use of carbon pricing instruments, while component 2 set the basis for component 5, which will keep providing technical assistance for the implementation of the current 'green tax' scheme and support the establishment of a mandatory reporting system for GHG fixed emitting sources.</p> <p>As an additional prospect, with the change in government in March 2018, the new legislative agenda now considers drafting a Climate Change Law. This is important, as activities under the PMR need to</p>	

consider the possibilities and furthermore push towards the incorporation of carbon pricing in the Law. This means that the focus of most of the activities under component 3 take more relevance as technical trainings and capacity building with decision makers become indispensable. Moreover, the main activity under component 6, which is the development of a climate policy modeling and simulation tool, has a substantial role to play in aiding politicians and decision makers to understand the role of carbon pricing mechanisms and the possible impacts in the economy (both positive and negative).

### **Implementation Progress by Component**

#### **A. Component 1: Regulatory, Institutional, Economic and Co-Benefits Analysis for Carbon Pricing Instruments**

Status: Completed

During its initial phase, the PMR-Chile Project focused part of its efforts on the generation of information and the strengthening of technical capacities on carbon pricing and studying the most viable options for carbon pricing instruments for Chile, with the purpose of enhancing the effectiveness of the consultation processes to be implemented during its additional phase (2017-2019) to foster an informed dialogue with decision makers (members of parliament, leaders of industry, and ministers) and other interested parties that contributes to the formulation of a Roadmap towards a political decision for the implementation of carbon pricing instruments in Chile in the future. In this context, the purpose of Component 1 of the Project has been to evaluate options for medium and long term carbon pricing instruments, their designs, impacts and applicability to the political, economic and institutional context of Chile in line with national mitigation commitments. against climate change, through a transparent process of participation with stakeholders.

In order to achieve the above, the group of activities under this component were: i) preparation of studies and/or consultancies for the generation of technical proposals and recommendations for a more comprehensive carbon price system in the future in Chile, ii) creation and strengthening of technical capacities in the public and private sectors regarding carbon pricing instruments; and iii) subscription of international cooperation agreements on carbon pricing instruments and complementary mitigation policies and actions. Component 1 helped to identify implementation challenges of the current carbon tax, as well as some design shortcomings, such as: (i) narrow scope: the current tax only covers 40 percent of the GHG emissions of the country, and does not consider other high carbon-intense sectors (i.e., transport, mining, or steel); (ii) low price level of US\$5 per ton of CO<sub>2</sub><sup>1</sup> may not be enough to

<sup>1</sup> Compared to average rates of US\$50-60 per ton of CO<sub>2</sub>e. Carbon tax rates vary greatly worldwide, ranging from 3 US\$/tCO<sub>2</sub>e in Mexico to 120 US\$/tCO<sub>2</sub>e in Sweden. Countries and jurisdictions with carbon tax schemes include: British Columbia,

	<p>incentivize the development of a cleaner energy matrix in the country; (iii) limited impact on energy dispatched, as the carbon tax is not included in the calculation of the marginal cost.</p> <p><u>Main activities under this component were:</u></p> <ul style="list-style-type: none"> <li>● <b>Technical Seminar and High-Level Dialogue on Carbon Pricing Instruments and Green Growth (June 28-30th 2016).</b></li> </ul> <p>The objective of this Seminar was to debate on the objectives, alternatives, technical work frames, and commitments established under climate change and carbon pricing initiatives at the regional level. Moreover, the High-Level Dialogue was held to summon a debate among countries of the Pacific Alliance and private sector representatives, regarding carbon pricing policies and opportunities for regional collaboration, through green growth platforms that support the reduction of emissions while contributing to low carbon, sustainable development.</p> <p>The implementation of the Seminar was led by the Ministry of Energy, but the Dialogue was co-organized with the Ministry of the Environment.</p> <p>The events had the presence of the Chilean President, Ms. Michelle Bachelet, the Ministers of Energy and the Environment of Chile, and from member countries of the Pacific Alliance. Also, both activities were attended by more than 200 representatives of the Chilean public sector, including members of the PMR-Chile Steering Committee; representatives of the Project's Consultative Group of Experts (CGE); private sector business representatives that form part of CLG ("Corporate Leaders Group on Climate Change"); other representatives of the business sector; representatives from the academia and research centers; consultants; representatives from countries of Latin America and the Caribbean, including PMR implementing countries (Argentina, Brazil, Costa Rica and Peru); representatives from British Columbia and South Africa; World Bank experts; as well as experts from Environmental Defense Fund (EDF), the International Carbon Action Partnership (ICAP), the Margaree Consultants, and Carbon Trust, among other international organizations.</p> <ul style="list-style-type: none"> <li>● <b>Analysis of the context and international developments on carbon pricing and their implications on Chile's related public policies.</b></li> </ul>
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Denmark, Estonia, Finland, France, Iceland, Ireland, Japan, Latvia, Mexico, Norway, Poland, Portugal, Slovenia, Sweden, Switzerland and UK. Source: State and Trends of Carbon Pricing, October 2016, World Bank Group - <http://documents.worldbank.org/curated/en/598811476464765822/pdf/109157-REVISED-PUBLIC-wb-report-2016-complete-161214-cc2015-screen.pdf>

In the face of future challenges, carbon pricing instruments can play a key role in implementing Nationally Determined Contributions (NDCs). Article 6 of the Paris Agreement provides a basis for facilitating international recognition of cooperative carbon pricing approaches and identifies new concepts that can pave the way for this cooperation to take place. Paragraph 136 of the first COP 21 Decision (Adoption of the Paris Agreement) recognizes the important role of providing incentives for emission reduction activities, including instruments such as national policies on carbon pricing instruments.

This consultancy consisted in having a detailed analysis of the Paris Agreement, the different parties' submissions on market instruments and the different initiatives that promote carbon pricing and crediting mechanisms, as well as providing insights and recommendations on the implications of the Agreement for domestic policies regarding carbon pricing implementation for compliance with the country's NDC. Alongside with the study of the importance of the CDM in Chile, this consultancy provides an important input for the discussion in the proposal of a country roadmap that drives the inclusion of carbon pricing instruments as a measure of tackling climate change.

Final remarks of this study do mention an important role in the future definition of rules and guidelines from the CMA regarding the implementation of Article 6 of the Paris Agreement and its global implementation mechanisms but, in that sense, the consultant puts an emphasis on the importance of acting now in the definition and capacity building on carbon accounting and the generation of information on carbon pricing instruments and the role they might play in achieving the country's expressed NDC. It also mentions that it is key to establish a coordination between complementary climate and non-climate policies (Renewable Energy Goals, Energy Efficiency Standards, R&D policies, etc.), which in turn requires efficient coordination among the institutions that lead the implementation of these policies. This way, using climate change mitigation - progress towards lower carbon development - should be an intersectoral opportunity and a duty to help reduce the levels of poverty and inequality in Chile and the region.

As a final activity of this consultancy a workshop called "Paris Agreement and the development of Carbon Pricing Instruments" was held in November 2016, and is explained in more detail below.

- **Detailed evaluation of Chile's participation in the CDM, considering the new scenario of commitments under the Paris Agreement.**

Along with the study of the international context mentioned above, a second study of great importance to level knowledge and therefore aiding towards a definition of alternatives for carbon pricing implementation, and to bring forward the experience of private sector on project-based mechanisms, this study aimed to understand past and current situation of CDM projects in Chile and the corresponding CERs issued, targeting project proponents to get first-hand opinion on past experience and suggestions of how to use this experience and results in this new “era” where Chile has concrete GHG reduction commitments and has implemented a carbon tax.

This primarily meant to shed a light on information that is mainly placed in the private sector, such as the amount of CERs that have been sold -domestically and to foreign buyers- and how they were and might have been and be able to continue being a contribution towards emission reductions in the future, as part of supplementary measures that can reside within a carbon pricing system, especially for what may come under article 6.4 of the Paris Agreement and the so called “Sustainable Development Mechanism” and the national carbon tax entry into force, which has awoken large interest in the possibility to use certified emission reductions, such as CERs from CDM projects, to be used as tax rebates for regulated entities.

The main findings from this analysis ratify the importance that CDM projects had in mobilizing funds from the private sector to produce emission reduction projects. By the time this study was being carried out, there were 102 Chilean projects registered under the CDM, ranging from renewable energies to landfill methane capture. These projects represent approximately 7.4 MtCO<sub>2</sub>e per year, yet of those projects only 63 are currently still in operation, of those there were only 30 projects that managed to verify their reductions under CDM standards and therefore awarded the corresponding CERs. The other almost half is still under verification. The 30 projects that have been verified account for approximately 4 million tonnes of CO<sub>2</sub>/year of reductions.

Yet, these results already give hints of the role that the CDM or CDM-like mechanisms could contribute to overall mitigation results in the country and therefore, what measures should the Chilean administration -or future administrations- consider regarding the use of domestically generated offsets. Four scenarios were analysed in this study, which gave way to two possibilities as recommendations under current scenarios to be able to use CERs in the national context: i) A ‘Reverse Auction Mechanism’: meaning that the

Government of Chile defines a budget to buy CERs for projects that contribute to the fulfillment of the NDC's Chile. Through this mechanism, CDM projects that stopped reducing emissions are encouraged to reactivate the activities that generated reductions. Also, a lower cost is guaranteed for GHG reduction for the government; and ii) Use of CERs as offsets of the current carbon tax: This mechanism implies that companies subject to the current tax can reduce their tax burden with CERs from their own and additional CDM projects. This mechanism turns out to be more expensive for the government, but it is a precedent to move towards an ETS system and to generate the foundations of a future carbon market.

- **Design of a mandatory reporting system and an associated MRV (3.0) system that supports the implementation of a more comprehensive carbon pricing system in Chile in the future.**

As mentioned earlier in this document and in previous ISRs, priority was given on the implementation of the current carbon tax to be enforced in 2017 and so, Component 2 has built on the need for robust MRV infrastructure on that purpose. However, the implementation of more complex carbon pricing schemes, such as an ETS, require more sophisticated MRV systems that contribute in the enhancement of quality information gathering and robust accounting protocols. Under this logic, the main objective of this consultancy was to propose the legal, institutional and technical architecture for the design of a system that contributes to the reliability, coherence, accuracy, transparency and completeness of the information on GHG emissions reported and support the implementation of a more comprehensive carbon pricing system in Chile. It is important to note that the MRV system mentioned is based on the current MRV system for the implementation of green taxes, scalable to other carbon pricing instruments in the future, led by the MMA and the SMA, hence the 3.0.

The main results from this consultancy were: i) a proposed mandatory reporting system with a broadened coverage of emitting sources. The design and implementation of this mandatory reporting system for GHG emissions and MRV system (3.0) would imply increasing coverage from 94 establishments that currently report under the green tax to approximately 400 establishments. In this way, the main emitters of GHG and local polluting gases would be covered at the national level by reducing the threshold from 50 MW to 10 MW and moving towards all emitting sources with over 15,000 tCO<sub>2</sub>/year; ii) the development of a "*Guide for the monitoring and reporting of GHG emissions*",

which establishes rules applicable to the monitoring and reporting of GHG emissions (monitoring plan, monitoring methodologies, among others) to ensure consistency, comparability, transparency and accuracy, also establishes rules on data on the activity of facilities with the obligation to report GHG (measurement systems, calculation factors, sampling plan, standards and laboratories for measurement, determination of emissions, among others ). Along with the above, a "*GHG Verification Protocol*" was developed, which regulates the verification of emission reports, whose requirements are contained in the international standard ISO 14064-3: 2006, establishing guidelines on obligations of the Technical Entities of Environmental Audits (ETFA), who should assume the verification and requirements for the accreditation of the verifiers; iii) institutional arrangements for the implementation of the proposed MRV system, consistent with current regulatory and institutional systems in place, primarily enhancing several roles for the Ministry of Environment and the Environmental Superintendence.

- **Design of an MRV system for the tracking and monitoring of mitigation actions and emission reduction projects in the energy sector and associated recognition program.**

In the current context where Chile has assumed a formal commitment to reduce GHG emission intensity by 30% in 2030 as compared to levels of 2007, it is essential to establish a MRV system to monitor mitigation measures in the energy sector through a transparent process to report, periodically, the actions that lead to emission reductions generated by policies, programs, projects and overall mitigation actions linked to this sector, to measure the impact of these interventions and the overall contribution of the energy sector to the Chilean NDC.

This consultancy was oriented to generate the bases of an applied design for an MRV system for mitigation actions within the energy sector, considering the regulatory, institutional, human, and economic requirements necessary for its implementation, as well as the development of a program that allows to recognize emission reduction initiatives in the energy sector from the private sector. The latter resulted in several methodological guidelines and proposals of institutional arrangements for an MRV platform, and technical recommendations to develop a recognition program for the private sector initiatives, that would be included in these emission reductions accounting framework.

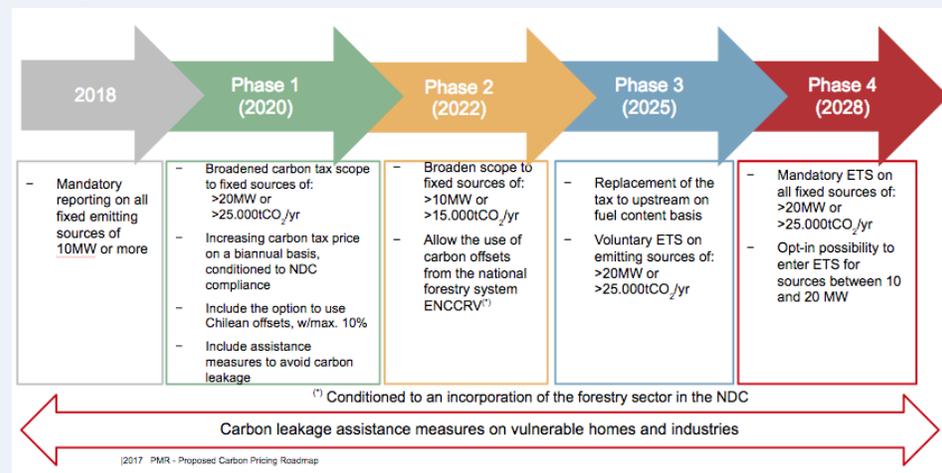
One of the most relevant results of this work was the preparation of a series of forms and methodological guidelines for the monitoring, reporting and verification of mitigation actions in the energy sector as part of the overall proposed MRV system, these guidelines are: i) *“Guide for the presentation of a mitigation action to the MRV system”*, where the basic aspects needed to define progress indicators and methodologies for quantifying GHG reductions of mitigation actions are specified; ii) *“Guide for the presentation of information on monitoring of a mitigation action”*, with the indications on basic aspects that are necessary to monitor the actions that are part of the MRV system, such as progress evaluation indicators, methods used to estimate the reduction of emissions, deadlines, costs, among others; and iii) *“Validation and verification guide of an action of mitigation”*, which addresses the objectives of validation and verification (QA/QC), role of the verifier and validator, general requirements of the validator and verifier, among others.

The second main result from this consultancy was the proposal of a recognition program for emission reduction projects, with the following core elements in its design: i) mechanisms to motivate participation, ii) mechanisms to access potential participants, iii) a certification process, iv) levels of recognition, and v) methodologies and/or standards to determine relevant variables associated with the certification process.

- **Alternatives of design and additional measures to decide on a more comprehensive carbon pricing system.**

This is the key study under Component 1, which was commissioned in November 2016 and finished in August 2017 providing the key inputs to the initial end of MRP activities. The idea behind this particular study is precisely to provide an extensive analysis of the different carbon pricing instrument alternatives and supplementary measures that may be fit for the country, and provide a long-term view, with a proposed roadmap for implementation of a carbon pricing policy to drive future policy decision making processes. The consultancy based its analysis on the current carbon tax and from it built concrete alternatives for a more comprehensive carbon pricing system, providing an analysis for, but not limited to, modifications to enhance the current carbon tax in Chile, include additional measures, such as offsets, revenue recycling, clean technology or low-income household subsidies among others, and the implementation of a domestic and linkable emissions trading scheme (ETS).

Key results from this work were technical proposals and recommendations regarding scenarios and design alternatives of carbon pricing instruments to move towards a more comprehensive system of carbon prices in Chile in the future, for which the following options were analyzed and proposed: i) proposal for the expansion of the current tax (in terms of scope, price, and points of regulation), ii) analysis of advantages, barriers and cost-efficiency of complementary compensation mechanisms (offsets), iii) assistance measures for vulnerable households and industries, iv) proposal for the design of an ETS system - as a complement to the current CO2 tax, and v) preparation of technical proposals and roadmap recommendations on an 'Options Map' for a more comprehensive carbon pricing system for Chile in the future (see figure below).



This proposed alternatives and roadmap are the key input for the additional phase work activities, as the main focus of components 3 and 6 during this period will be on consultative processes and overall stakeholder engagement to deliver a reviewed proposal to incorporate carbon pricing in climate related policies in the country, hopefully with wide sectoral and civil society validation.

- **Coordination of the Consultative Group of Experts.**

In terms of coordination and stakeholder engagement, Component 1 led the technical coordination of a Consultative Group of Experts (CGE) with public (inter-ministerial Steering Committee), private, and civil society representatives. This group held sessions on a bi-monthly basis to discuss, comment and support work in progress presented by the PMR Team. A program of activities for this Expert Group was established to mirror planned activities under Component 1, and therefore guide the preparation of public-

private modes of collaboration, to move forward on carbon pricing roadmapping in 2017 based on overall studies and consultancies' results (and on potential political outcomes).

The work sessions with the CGE took place between March 2, 2016 and August 17, 2017, meeting a total of 11 times. The first five working sessions with the GCE were of an informative nature with the purpose of providing information that would help to understand the scope, objectives, advances and substantive contents of the Project to its members. As of November 2016, a participatory work was developed, which involved a logical sequence of work, which allowed the participants to influence, gradually, their orientations and points of view in the evaluation of technical proposals and recommendations for the implementation of a more comprehensive system of carbon pricing instruments in Chile.

For the additional funding phase (Sep 2017 – Aug 2019) the group continues to session but under the coordination of Component 3, and had the first meeting for the “additional phase” in January 2018, making it a total of 12 times that this group has met to share insights and help steer the activities for the PMR.

- **Participation at PMR Technical Workshops and Trainings**

Participation by the PMR-Chile team in the international workshops was key to prepare for the technical work undertaken, especially for components 1 and 2. The team participated in Paris (May-June 2016), Hanoi (October 2016), San José (December 2016), and Barcelona (May 2017).

- **Technical Workshop on the role of the Paris Agreement and the Development of Carbon Pricing Instruments in Chile (November 2016).**

Under Component 1, and as part of the technical work being done by the different consultancies, there is a plan to carry out several technical workshops for dissemination and consultation of the information being produced. The main objective for these is to present advancements and receive feedback on intermediate products of the studies so as to refine the ideas and suggestions, and to improve acceptance of the alternatives being proposed under Component 1's activities. The first of this series of workshops took place in November 2016 and was a result of the presentation for the preliminary results of the “Analysis of international developments on carbon pricing and their implications on Chile's related public policies” study, with the participation of the consultant in charge of the study, representatives of the Ministry of

Energy, the Ministry of Environment, Ministry of Foreign Affairs, the Association of Power Generation, and the NGO America Solidaria and congregating in total 74 people from private, public sectors and civil society.

- **Technical Workshop on MRV for the Energy Sector.**

On December 12, 2016, the PMR carried out a workshop with members of the divisions within the Ministry of Energy (MoE) to: 1) train personnel in concepts and alternatives for MRV systems, and 2) set first impressions and require feedback for the drafting of the TORs for the “Design of an MRV Platform and a mitigation recognition program in the energy sector”. This workshop had an attendance of 28 people, most from the MoE but included some participants from the Ministry of Environment and the National Council for Clean Production.

- **Coordination and Synergies with Consultant Teams.**

By the end of January 2017, an internal workshop was developed to coordinate activities, share actual and expected results, and anticipate synergies with the different teams of consultants working under components 1, 2 and 3, in order to have a clear objective for the project and avoid overlaps in engagement and interaction with relevant stakeholders – since many stakeholders repeat under the different activities of the PMR’s project components and were therefore being interviewed in different occasions for each study. All teams were able to join the workshop, including foreign consultants that were currently working in Chile as a request from the PMR team. In total, 25 people participated from this intervention and helped create an environment for collaboration within the project.

- **Agreement on Climate Action with the German Ministry of Environment through the GIZ.**

Given the importance of having robust and transparent accounting systems, as well as the capacity building needs for market mechanisms, the Ministry of Energy was able to make an agreement with the German agencies to provide further technical assistance and training, for the private and public sectors of Chile, learning from the German experience, and also to place the Chilean experience in international dialogue platforms. This agreement will provide approximately EUR 400,000 under the “Global Carbon Market” (GCM) program of the BMUB, and coordinated in Chile by the GIZ, in order to achieve the above-mentioned activities that will be complementary to PMR activities. Specific activities and consulting expert are still undefined yet, nevertheless, a high degree of coordination and complementarity is expected to occur with the scope of activities under consultancy to design and MRV Platform that will record and track migration actions and develop a recognition program for the private sector, as indicated previously.

	<p>Further coordination with the GIZ on this matter continues under component 6 of the PMR-Chile.</p>
<p>Comments:</p>	<p>Between July 2016 and September 2018, Component 1 began the shift for the analysis of other carbon pricing instruments for a future national system that may include one or more of them, in addition to the current carbon tax -or future modifications of it. Also, under component 1 there has been an emphasis in the role of analyzing a more robust and flexible MRV system that allows for the interaction of multiple carbon pricing instruments and a possible link to other economies. Furthermore, activities helped to shed light into understanding more about the processes and operational requirements for the use of a national ETS, with the purpose of engaging more with private sector actors and providing more accurate information regarding the use of these schemes. Component 1 helped propose several alternatives that need to be discussed further with key stakeholders and decision makers, therefore a new component was added (component 6) for the additional funding phase and also several activities were included under component 3 to keep communications and public consultation processes active to aid in these discussions.</p> <p>In summary, it may be concluded that the green tax, beyond being a collection body, constitutes an opportunity to contribute to the fulfillment of the environmental and climate policies promoted by our country, also allowing to create the necessary foundations for the country to start building an infrastructure and technical capacity to move towards more sophisticated carbon pricing instruments in the future as a complement to the current tax, including offsets and / or tradable emission permits (ETS).</p>
<p><b>B. Component 2: Design and Implementation of a Measurement, Reporting and Verification (MRV) System and GHG Registry</b></p>	
<p>Status: Completed</p>	<p>After the approval of the green taxes included in the Tax Reform Law of 2014, Chile became the first country in South America and one of the first developing countries to pass a regulation that sets a carbon price. The growing interest that carbon taxes have experienced worldwide are expressed by the fact that more than three quarters of the signing parties have submitted their NDCs under the Paris Agreement, which is why they are exploring cost - effective alternatives for fulfilling their commitments. National GHG emissions reduction. International experience of the last twenty-five years has shown that when designed well, they are a powerful and efficient tool to reduce emissions, providing a price signal for companies, the public sector and consumers to adapt their investment, consumption and production decisions towards alternatives more sustainable and low carbon emissions, generating at the same time revenues so that governments can finance social and climate programs contributing to sustainable economic development.</p>

With the entry into force of green taxes, for the first time in Chile a regulation that established an explicit price for GHG emissions was materialized. Green taxes in Chile have focused their objectives on supporting and complementing national efforts to reduce local air pollution - the main environmental problem in Chile - as well as mitigate greenhouse gases at a lower cost. These taxes, put a levy on emissions of local pollutants (MP, NOX, SO<sub>2</sub>) and global (CO<sub>2</sub>) from fixed sources that have boilers or turbines that together add a thermal power equal to or greater than 50 thermal MW per establishment<sup>2</sup>.

In this context, the PMR decided to technically and financially support the design and implementation of green taxes in Chile and its MRV system, which was led by the Ministry of the Environment (MMA) with technical support of the Superintendence of the Environment (SMA). In this context, the purpose of Component 2 of the Project has been to strengthen the regulatory and institutional capacities for the implementation of green taxes and the design and implementation of a measurement, monitoring and verification system (MRV) for its application.

**Main activities under this component were:**

- **Study Tour in Sacramento (California Air Resources Board)**

On May 2016, a delegation of five professionals from the Ministry and Superintendence of the Environment went to Sacramento, California to learn from Air Resources Board experience in emissions registry, particularly, the lessons learned from implementing the ETS System and the further linking arrangements needed to link with Quebec. The program included the review of several topics, such as:

- Methodologies and protocols to estimate CO<sub>2</sub> emissions.
- Registry System (software and hardware used, processes and security, emission and allowances/offsets tracked) and Verification (Quality Assurance and Quality Control). Both MRR and CITSS.
- The implementation and the functionalities of the reporting system.
- Regulation (Law) and enforcement.
- Difficulties faced in developing the reporting system.

All the information received was shared not only with the professionals from the Ministry and the Superintendence of the Environment, but also with

<sup>2</sup> More on the Chilean Carbon Tax can be found in the pmr's "Carbon Tax Guide: A Guide for Policy Makers - Appendix: Carbon Tax Case Studies" at <https://openknowledge.worldbank.org/bitstream/handle/10986/26300/Carbon%20Tax%20Guide%20-%20Appendix%20web%20FINAL.pdf?sequence=7&isAllowed=y>

others, such as the Ministry of Energy. The information was also useful to elaborate terms of references related to both design and implementation of an MRV system to support green taxes implementation (explained further below). Furthermore, it gave the delegates a comprehensive view about policy questions that need to be addressed in the near future, in order to be prepared to either scale up the current emissions tax scheme or move towards the development of an ETS. All the above initially with the purpose of having technical and methodological tools that allow contributing to the generation of technical capacities of the professionals of the Ministry and Superintendence of Environment for the design of an MRV system for the implementation of the CO2 tax, in whose design Consider the technical feasibility of hosting other carbon pricing instruments in the future.

- **Green taxes domestic training and dissemination workshops**

The implementation of green taxes and their MRV system has involved a series of regulatory, institutional and technical challenges for which training, participation and dissemination activities have been implemented both within the public sector (regulator) and in establishments subject to the tax. (regulated) to strengthen their technical knowledge and skills on the most relevant aspects of the green tax and its MRV system, which in turn has allowed to raise information on existing information gaps to implement consultation and training mechanisms that contribute to perfect the system in terms of coherence and applicability.

In this context, within the framework of the implementation of Component 2 during the first phase of the PMR-Chile Project, a series of informative and consultative processes were implemented with representatives of industrial sectors potentially affected by the tax and representatives of the public sector to report on aspects of design of the Law on green taxes, its regulations and its measurement, reporting and verification system, which allowed exchanging opinions and points of view on these matters with the actors involved.

Between August and September 2016, the Ministry of the Environment and the Superintendence of the Environment conducted six regional workshops related to both the Registry System and the Emission Quantification Protocol. Around 250 people (professionals and representatives) from companies potentially affected by green taxes were trained. The workshops took place nationwide in the following locations: i) Antofagasta; ii) Coquimbo; iii) Metropolitan Region (Santiago); iv) Bio Bio; v) Los Lagos; and vi) Magallanes.

- **Diagnosis of the security system and computer procedures applied by the Ministry and Superintendence of the Environment.**

	<p>In order to fully understand the technical capabilities the country had in terms of MRV on its more computer-related issues, the main objective of this consultancy was to have a diagnosis of the physical, logical and professional capacities of the RETC (Emissions and Pollutant Transfers Registry in English) System administered by the MMA and the sectoral information system of the SMA to house the registry that will support the implementation of the carbon tax and develop a safety protocol computing, both for the carbon tax and also for other potential economic instruments. The previous thing considering that the Law that establishes the green taxes indicates that the report of the emissions subject to tax must enter by the System of Single Window of Entry the RETC (VU-RETC) housed in the MMA to later be derived to the information system of the SMA.</p> <p>Main results of this consultancy were: i) the diagnosis of current conditions and identification of gaps to house the carbon tax registry, including a report of information vulnerability, and ii) computer system and security information protocols. This diagnosis meant that both systems needed to increase their level of information security in order to be better protected and less prone to cyber-attacks.</p> <ul style="list-style-type: none"> <li>● <b>Design of a measurement, reporting and verification system (MRV) for the application of the carbon tax, scalable to other emissions, sectors and instruments. Linkable to other jurisdictions.</b></li> </ul> <p>For the design and implementation of the MRV System of the green taxes, there was a need to strategically think about a system that is scalable to other emissions, carbon pricing sectors and instruments, and potentially linkable to other jurisdictions. The PMR-Chile has supported the Ministry of the Environment (MMA) and the Superintendence of the Environment (SMA) in providing technical and financial support for the implementation of Component 2 of the PMR-Chile Project. This first consultancy called "Design of a Measurement, Reporting and Verification System (MRV) for the application of the carbon tax, scalable to other emissions, sectors and instruments and linked to other jurisdictions" was focused on the components linked to the Reporting (R) and Verification (V).</p> <p>Specifically, its objective has been to support the development of the reporting system and to propose an emissions verification system that responds to the collection and truthfulness requirements of the information that supports the collection of green taxes. This, considering the international experience, the local conditions and the potential extension of the tax towards more complete price instruments</p> <p>The main objective of this consultancy was to support the development of the Reporting System and propose an Emissions Verification System that responds</p>
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to the requirements for data collection and accuracy of the information that will support the collection of green taxes. The analysis was done taking into account international experience and best practices, local conditions, and the potential transition of the tax towards a more comprehensive carbon pricing instruments system.

In order to support the implementation of the reports, two visits were made to the 93 establishments subject to the tax with the purpose of reviewing the relevant information to be reported and identifying improvement opportunities for the Reporting Protocol included in the existing Instructions (Exempt Resolution No. 184/2017). Likewise, the first visit campaign (March-April 2017) included a technical advisory aimed at establishments for the implementation of methodologies contemplated in the Reporting Protocol of the current Instructions. In the second visit campaign (June-July 2017), the implementation and operation of the Emission Reporting Protocol was verified, evidencing a greater knowledge of the affected establishments about the process and the application of the selected methodologies. Also, within the framework of the analyzed consultancy, a proposal for a Registration and Reporting Guide was presented for those responsible for the regulated establishments that must register their sources and report emissions for the "Green Tax System (SIV)" in which the main requirements are explained: general registration process and the reporting scheme by quantification alternative, based on the "Instructions for the reporting of emissions from fixed sources subject to the tax of article 8 of Law No. 20,780 (Resolution Exempt N ° 184 / March 2017, SMA).

For the definition of a framework for verification of emissions from establishments subject to the tax, the SMA prepared a Verification Instructions (Exempt Resolution No. 962 / August 2017, SMA) which has contemplated the existing institutional and regulatory conditions. To this end, this instruction is framed in the ISO standards, the Organic Law of the SMA (LOSMA N ° 20.417), the supreme decrees of the MMA N ° 38/2013 on the Regulation of ETFAs (technical audit entities) and N ° 39/2013 on the Regulation of ETCAs (technical certification/accreditation entities) and the competences of the National Standardization Institute (INN). To this end, the consultancy aided in the support of the strengthening of the verification component (V) led by the MMA and the SMA for which the following activities were carried out: i) monitoring and evaluation of the emission verification process, ii) preparation of the "Verification System for Chile" proposal, iii) preparation of the Verification Guide and, iv) technical proposals and recommendations for the elaboration of a Digital Information Verification Protocol.

- **Implementation of a measurement, reporting and verification system for the application of the carbon tax, scalable to other emissions, sectors and instruments. Linkable to other jurisdictions.**

In line with the previous consultancy, the focus of the second consultancy called "Implementation of a Measurement, Reporting and Verification System (MRV) for the application of the carbon tax, scalable to other issues, sectors and instruments and linked to other jurisdictions" was focused on the measurement component (M). In this regard, its main objective has been to improve the Protocol for Measurement of emissions prepared by the SMA, propose its scope to potential new areas and polluters affected by carbon pricing instruments, and technically support establishments subject to the green tax for its implementation.

This consultancy helped improve the Emissions Measurement Protocol, developed by the Superintendence of the Environment, proposed a broadened scope to potential new areas and pollutants affected by the current tax and future carbon pricing instruments, and technically supported tax implementation in the facilities affected by the green tax. Therefore, this consultancy was key in supporting the implementation of the emissions measurement or quantification process, for which four main activities were developed: i) analysis of the level of implementation of the Emissions Measurement Protocol prepared by the SMA, ii) preparation of an improved Measurement Protocol proposal, iii) preparation of a Measurement Guide for affected establishments; and iv) preparation of a proposal for an expanded Protocol for Measurement of emissions.

Among the main technical proposals and recommendations for the improved version of the current Protocol, it was proposed to develop local Emission Factors (FE) considering that it is the most representative quantification methodology used by establishments subject to the tax (70% of the 93 establishments affections), also measures to address gaps and/or conceptual inaccuracies for establishments that use CEMS as an alternative for quantifying emissions were needed, as well as methodological proposals to facilitate the quantification of fuel consumption of regulated establishments, given the range of regulated sectors (electricity generation, agri-food processing, cellulose/paper, petrochemical, among others) that were affected under the tax levy.

- **Recruitment of Information Technology Professionals**

Following the recommendations from the security systems diagnosis consultancy and some technical capabilities' gaps within the SMA's team, there was a need for the project to aid in filing temporarily this gap. In order to do so, three technicians were hired to aid in the administration of the information system of the Green Taxes (SIV for its acronym in Spanish).

	<p>The work carried out by two of them was aimed at supporting the design, implementation and monitoring of the computer system and data security linked to the MRV system, specifically in relation to the design of computer platforms for the reporting of establishments subject to the green taxes through the Information System of Thermoelectric Power Plants (SICTER) and the Single Window System of the RETC (VU-RETC). The other professional provided professional support to the SMA in the design and implementation of methodologies, standards, guides, manuals and protocols that support the measurement and verification of emissions subject to the green tax. In addition, the latter supported the MMA and the SMA in the implementation of a series of training activities aimed at owners and operators of establishments subject to the green tax to strengthen their knowledge of the green tax and the use of the MRV system.</p> <p>These individual consultancies were key in the development of the 11 methodologies for monitoring, reporting and verification (MRV) of GHG and their respective customized protocols and in the generation of computer platforms (SIV and SICTER) for the initial reporting period.</p>
<p>Comments:</p>	<p>The implementation of green taxes in Chile has been seen by representatives of regulated establishments, the public sector, the business sector, academia, NGOs, parliamentarians, among others, as a first clear sign of progress on mitigation initiatives in the face of change climate, although there is still work to be done to determine the overall impact of this instrument.</p> <p>According to the latest information provided by the MMA and the SMA, 94 establishments were subject to the tax with emissions that together represent approximately 40% of total CO<sub>2</sub>eq emissions in Chile.</p> <p>In terms of competitive impact and considering the characteristics of the electricity market that establishes the marginal costs as the basis for the determination of the dispatch orders of generators, the simulations show that with the application method and current levels of the CO<sub>2</sub> tax, it is not altered the energy matrix, that is, there are no changes in the dispatch or in the investment plans.</p> <p>After conducting several meetings and technical trainings with carbon tax regulated entities, a number of issues and space for improvement of the MRV Protocol and key MRV training needs has been detected. For instance, the lack of awareness of certain industrial sectors of their liability under the tax, the lack of capacities for MRV of emissions in certain industries, and less awareness of the bylaw and MRV protocols in some industrial sectors were part of the findings. In addition, the internship in Sacramento provided good insights about the efforts and training needs on MRV, as well as on the key policy making questions underlying decisions for an ETS. With all this in mind, one of the logical steps to take is improving the current MRV system that is</p>

	<p>nesting the carbon tax, and further elaborate a mandatory reporting system to improve data on emissions and reporting capacities. This would be crucial for any decision to leapfrog to other, more comprehensive carbon pricing instruments such as an ETS.</p>
<b>C. Component 3: Design and Implementation of Communication, Consultation and Stakeholder Engagement Strategy</b>	
<p>Status: In progress</p>	<p>Communication, consultation and stakeholder engagement strategies that are defined must incorporate the early participation of stakeholders, which can generate several benefits such as: facilitating the design of carbon pricing instruments that reflect national priorities, contributing to the perception of these instruments as relevant; incorporate information and suggestions from actors with key experience and knowledge; identify knowledge gaps in sectors and entities that may not be familiar with these matters and that may require additional training, stimulate learning, innovation and continuous improvement, manage risks and even avoid future conflicts, improve corporate reputation, among others.</p> <p>On the other hand, it is essential to anticipate communication challenges regarding the development and implementation of IPREC and its contribution to national mitigation and climate policy commitments to define possible courses of action through communication interventions that can contribute to making explicit its scope, objectives, goals, -benefits associated, address negative points of view and eventual oppositions, among others.</p> <p>As such, this component aims at providing valuable information on Climate Change and Carbon Pricing to the civil society but also more targeted technical information to key stakeholders. Also, an important dedication is given to consultative and participatory processes, in order to convey the adequate level of information and take into account all sorts of feedback to provide the best possible training and communications to all relevant actors.</p> <p><b>Completed activities:</b></p> <ul style="list-style-type: none"> <li>● <b>Design and Implementation of a web platform for the PMR-Chile Project</b></li> </ul> <p>On December 2016, the web platform for the PMR-Chile Project was launched (<a href="http://www.precioalcarbonochile.cl/">http://www.precioalcarbonochile.cl/</a>) with the purpose of positioning developments on carbon pricing in Chile at the national and international levels, and also to generate spaces for interaction with users. The web page delivers information regarding the PMR-Chile Project, carbon pricing instruments in Chile and abroad, actions and policies for climate change</p>

mitigation in the energy sector, and also serves to announce workshops and events scheduled under the project's work frame, as well as training courses given by the World Bank, ICAP or other technical trainers. It also includes a section on related news, a knowledge sharing center, questions & answers regarding carbon pricing, among other contents. In addition, it considers a connection to other dissemination platform through social networks (Facebook and Twitter).

The project's web page has become a repository for all the information regarding the implementation of the project, including all the studies carried out under the technical components and summary reports of consultation events, as well as dissemination material such as videos, photographs, webinars, brochures, among others.

- **Consultancy "Design and Implementation of a Communications, Consultation and Participation Strategy"**

This consultancy began in September 2016 and ended in August 2017 giving most relevance to the positioning of the project and of the issues behind carbon pricing. Its main objective has been to install and moderate a dialogue with strategic actors of the public and private sector on carbon pricing instrument alternatives and their contribution in reducing GHG emissions in the context of compliance with national mitigation commitments to climate change that allows to advance in the definition of a Roadmap towards a political decision for the implementation of a more complete system of carbon price instruments in Chile in the future during the additional phase of the Project.

Its proposed design is being further implemented through 2017-2020, in the additional PMR funding period, in order to support and be instrumental to the implementation of the roadmap for future carbon pricing decision making and implementation. The main results and products of the consultancy were:

- ✓ **A diagnosis of communication needs and challenges under the PMR-Chile Project (December 2016).** For the elaboration of this diagnose, an in-depth interview was undertaken with relevant actors to the PMR-Chile Project (parliamentarians, National Congress advisors, entrepreneur associations, enterprises subject to carbon tax, NGOs, Ministries of Finance, Transport, Mining and Agriculture, among others). On this basis, gaps, needs and opportunities for

	<p>communication, capacity building, consultation and participation were identified for each of the interest groups defined (public and private sector, academia, civil society and the media), which enabled the elaboration of a map of key actors for the PMR-Chile Project, characterized according to their level of understanding of carbon pricing instruments, and also the impact that these topics have on their daily affairs, and also the roles that these actors may play in the decision-making process on carbon pricing instruments (empowering, collaboration, involvement, consultation, informing).</p> <p>✓ <b>Design and Implementation of a Training and Capacity-Building Plan for the PMR-Chile Project.</b> Under the diagnose work frame mentioned previously, the following capacity building areas were prioritized according to the knowledge gaps identified, and also according to each sector that was analyzed (public sector, private sector, academia, civil society, press): a) National GHG inventories (INGEI) for Chile and the origin of country and sectoral emissions (emissions sources); b) New international climate regime established by the Paris Agreement, Chile NDC; c) carbon pricing instruments as climate mitigation measures; d) role of authorities for the development of a road map for a low carbon development in Chile. Under the work frame of this Plan, the following capacity-building activities were defined: a) 4 capacity-building workshops (at the national and regional levels); b) 2 webinars; c) participative dialogue with public. These activities have considered the participation of 640 representatives at the national level. Under the Plan's work plan, on January 26, 2017 the First Capacity-Building Workshop was held under the theme "information as a keystone for climate change mitigation and carbon pricing instruments", attended by 60 representatives from the public and private sectors. Presentations were led by professionals from the Ministry of Environment, Superintendence of the Environment, Ministry of Energy, and international experts who presented on the Swiss experience in carbon pricing instruments and on specific aspects surrounding carbon taxes worldwide.</p> <p>✓ <b>Design and Implementation of a Media Plan for the PMR-Chile Project.</b> A media plan was developed to pursue communicational objectives, key messages, and audiences mapping. The plan considered the production of a series of communicational products,</p>
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	<p>and also merchandising materials, corporate materials, and a brochure describing the Project. Also, audiovisual material was developed on the themes/areas addressed by the Project (4 corporate videos). In addition, a plan for liaising with key actors (civil society, public authorities, parliamentarians, business associations' representatives, think tanks, academia, press, among other). On January 27, 2017 a workshop on strategic spokespersonship for the PMR-Chile Project was held, with the participation of key professionals from the Ministries of Energy and the Environment.</p> <p>✓ <b>Design and Implementation of the communications, consultation, and participation strategies with key decision makers (i.e. Parliamentarians, National Congress Advisors, Executive Power, Ministers of the Council of Ministers for Sustainability) to position carbon pricing instruments within the political/legislative agenda.</b> During the months of March and April 2017, meetings were scheduled with the advisors for committees on the Environment, Energy and National Resources at the National Congress to disseminate the objectives and results expected from the Project activities and to provide initial training on Climate Change, the current Carbon Tax and Carbon Pricing Schemes in general, all in order to prepare advisors and congressmen for a carbon pricing legislation if it were to move forward as expected with the inclusion of a Climate Change Law in the new administration's government programme.</p> <ul style="list-style-type: none"> <li>● <b>Alliance with the Imagen Chilean Foundation "Marca Chile"</b></li> </ul> <p>At the end of 2016, within the framework of Component 3 of the Project, an institutional alliance was established with the Imagen Chile Foundation, which manages the "Chile Brand", which is aimed at positioning the image of our country internationally to contribute to the promotion of scientific, commercial, tourist exchange and other comparative advantages of Chile. This alliance has allowed incorporating the "Chile Brand" in the graphic and audiovisual products generated within the framework of the Project through a series of audiovisual images and photographs of Chile produced by said Foundation, which have been used on the Website, corporate video "Chile Carbon Price Project", Institutional Memory, institutional and thematic brochures, corporate presentations and Project Newsletter.</p> <p><b>Under Implementation:</b></p>
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	<ul style="list-style-type: none"> <li>● <b>Advisory on Participatory mechanisms and organizational alignment for the PMR-Chile Project</b></li> </ul> <p>From January 2017, a consultancy on "Participatory Management Mechanisms and Organizational Alignment" has had the objectives to advise in the design and implementation of the participation and consultation processes carried out with the Consultative Group of Experts (GCE) and other relevant stakeholders of the Project, formulate a general relationship strategy with stakeholders and support the generation of content for the project's website and dissemination material.</p> <p>The most relevant results generated within the framework of this advisory have been the following: i) methodological design and facilitation of workshops for participation and consultation with the GCE, ii) preparation and dissemination of the Project's communication contents (notes on the Web page, Newsletter and press clipping of the Project "Carbon Price Chile, iv) support in the updating of the structure and contents of the Project's website, and v) preparation of a stakeholder map proposal and proposal of a general relationship strategy for the additional phase of the project. Project, the latter with the collaboration with the technical team of consultants of the consultancy "Strategy of communication, consultation and participation for the Project PMR-Chile".</p> <p>A set of new interviews with 27 was carried out throughout the months between January and March 2018 with representatives of the legislative branch, trade associations, companies subject to the tax, NGOs and members of relevant ministries for the project, such as the Treasury, Transportation and Agriculture. This was done to get a grasp on stakeholder perception of the project's work, new challenges faced for carbon pricing under the new administration and key messages to be delivered in this new period.</p> <p>This consultancy has aided in the continuation of the communications, consultation and participation strategy, adding the practical activities of technical and strategic workshops to relate with key stakeholders and to provide a better environment towards team work, given that several of the professionals hired under the PMR work in different organizations (MMA, SMA, Ministry of Energy, AGCID), and is key to maintain the stakeholder engagement process required to move discussions forward on the use of carbon pricing in Chile. Work has been continuing as planned until March 2017, but there are plans to split this activity into two, by keeping the participatory work through an external consultancy as it has been done so far and recruiting a journalist to internalize the work regarding communications.</p> <p><b>Pending activities:</b></p>
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	<ul style="list-style-type: none"> <li>● <b>Recruitment of a Communications Professional.</b></li> </ul> <p>As mentioned above, the idea in the remaining period of activities for the PMR-Chile project is to have a communications professional, most likely a journalist, to join the team at the Ministry of Energy, helping the team to position the project and its activities in the Ministry's public agenda. This professional will work with the communications team at the Ministry of Energy and will be in charge of keeping the website updated, as well as helping the technical team communicate the project's activities through the Minister's agenda and with the civil society.</p> <ul style="list-style-type: none"> <li>● <b>TORs and Tendering of the Consultation and Participation processes to be carried out by the project for 2018-2019.</b></li> </ul> <p>As mentioned before, the idea behind the separation of the activities for participatory processes and communications, which had been done jointly thus far, has the objective to focus on each of the subjects separately and internalize some of the activities. In this sense, having the participatory processes going is extremely important for the project, in order to keep the discussions working to keep aiding the government with carbon pricing issues and preparation for a climate-related legislative agenda.</p> <p>So far TORs are being drafted and it is expected to start activities no later than by the end of May 2018.</p>
<p>Comments:</p>	<p>The presentation of the diagnose on communicational needs and challenges of the PMR-Chile Project had some delays in terms of the initial programming, since its development considered in-depth interviews with key high level actors from the public and private sectors, for which it was complex to program these interviews due to the tight agendas of interviewees. The latter implied a delay in the delivery of products related to the Capacity Building-Plan and the Media Plan, since it was necessary to align results from the Diagnose with the products mentioned, which were established in a sequential manner in order to allow consideration of existent information gaps on carbon pricing matters in Chile.</p>
<p><b>D. Component 5: Enhancing and complementing the existing carbon tax scope and reporting system</b></p>	
<p>Status: In progress</p>	<p><b>Completed</b></p> <ul style="list-style-type: none"> <li>● <b>Recruitment of MRV support staff for the implementation of the carbon tax</b></li> </ul>

Beginning in February 2018 the project hired 5 IT professionals to aid the implementation of the carbon tax MRV system, given the importance of having a first year implementation and to determine gaps and improvements in the system to include possible upgrades. This team supports carbon tax activities within the Environmental Superintendence in the Control and Audit Unit and the Information Unit.

#### **Under implementation**

- **Acquisition of MRV hardware**

As one of the main activities of this component is in aiding the implementation of a robust mandatory reporting system, as designed by the proposal made under component 1's consultancy, a key factor to achieve this was to have good data management systems. Therefore, it was detected that the MMA needed to get additional equipment for the RETC platform, in order to adjust for the additional flow of that that would be received under a broader reporting system which has a larger number of emitting sources reporting to the system.

#### **Pending:**

- **Definition of TORs for the on the First Year of the Carbon Tax implementation**

There is an obvious need to understand well where we are under the implementation of the first year of operation of the carbon tax (or the green taxes as a whole). The idea behind this study is to determine in detail the costs of implementation, including what the PMR has already been putting to assist this implementation, and to understand what the private costs have been and what kind of results should be expected for the 2018 exercise.

TORs are still under development but the consultancy is expected to begin by early June, when most of the process for the 2017 period has been finished and data will be available to analyse.

- **Recruitment of technical information technology professionals to aid the implementation of the mandatory reporting system**

	<p>As it has been proposed, the project intends to generate 'in-house' capabilities in the institutions instead of hiring more consultancies to carry out the development of further activities and systems. This is also the case with the Mandatory Reporting implementation, as there is an evident need to complement the technical team at the MMA to manage the information systems required to harbour the whole reporting system, currently under the supervision of two professionals.</p> <p>Currently the TORs are being drafted and expected to be sent by the end of April to the AGCID to begin recruitment procedures.</p>
<p>Comments:</p>	<p>Final estimates for the collection of the Green Tax in the 2017 period show a fiscal revenue income of approximately 191 million US dollars, with CO2 accounting for 88% in the share of that income. This shows that carbon emissions are the most important when it comes to putting a price on emissions, given the high volume of this GHG, mainly from the thermoelectric power sector.</p> <p>Although initial studies showed little or no impact from the green tax system, there is evidence during the reporting period of 2017 that some of the regulated establishments showed a reduction in several local pollutants, mainly PM and SO2, so it could be inferred that they did implement some sort of control system for these pollutants. In terms of CO2 however, no reductions were seen from the initial estimates and first reporting periods. Yet, there is still belief that, even though it may not have been the main driver, it may have played a role in the electricity generation sector's decision to begin work to phase out coal power, where most thermoelectric companies have already announced that no more coal-fired power plants would be built and that some have even mentioned plans for the decommissioning of their older generating units.</p> <p>The work ahead remains in understanding further the role that the carbon tax has played on the latter and on future developments of decarbonisation of other least technically developed sectors.</p> <p>Given to the above, the PMR-Chile Project has included within its priority strategic focuses during its additional phase the preparation of a study (2018) aimed at assessing the impact on the implementation of the current carbon tax to strengthen design aspects associated with costs, challenges for regulated entities, impacts on mitigation, existing gaps in the MRV system for its application, and analysis of technical feasibility and feasibility for an eventual extension of its scope.</p>

<b>E. Component 6: Evaluation of alternative carbon pricing plans for the energy sector</b>	
<p>Status: In progress</p>	<p><b>Completed</b></p> <ul style="list-style-type: none"> <li>● <b>Recruitment of a Mitigation Actions MRV professional.</b></li> </ul> <p>Adjustments made on the original work plan for component 6 revealed the need to hire a professional to pursue the implementation of the proposed design of a Mitigation Actions MRV Platform, since this meant a broader workload on the technical advisor for this component and contracting a consultancy for this purpose was seen as unnecessary and less cost-effective to achieve. To this end, a recruitment process that began in January 2018 ended with the hiring of Francisco Dall’Orso, an Industrial Engineer with excellent background in energy consulting and who also teaches energy courses at Universidad Técnica Federico Santa María, a well-known national university that has vast background in energy engineering.</p> <p><b>Under implementation</b></p> <ul style="list-style-type: none"> <li>● <b>Planning and continuous review of the work plan for Component 6, PMR-Chile Project.</b></li> </ul> <p>Following the planning process of the initial phase, the work plan has been revised from the initial proposal for additional funding and updated in January 2018. The original work plan envisaged for Component 6 in the Additional Funding request and Procurement Plan was reworked conjunctly with technical counterparts from the Ministry of Energy and the Chilean Agency for International Cooperation and Development (AGCID), to include more specific work on mitigation actions certifications and registries. This meant including two additional activities under the “Mitigation Actions MRV” work. The latter was covered through the recruitment of an MRV professional with good understanding of the energy sector, an industrial engineer that had previous experience in energy consulting and university teaching. The second additional activity is still underway as the project is drafting a proposal for a registry based on Blockchain technology. The rest of the activities under component 6 remain as planned.</p> <ul style="list-style-type: none"> <li>● <b>Consultative Group of Experts (CGE): A participatory platform for the elaboration of a proposal of Map of Options to move towards a more comprehensive system of carbon prices in Chile in the future</b></li> </ul>

	<p>As stated under Component 1 in this ISR, the main consultative activity with stakeholders with the CGE is meant to continue now under the coordination of component 6.</p> <p>So far, the group, under this new system, has met in two occasions, the first in January and the second one in March, both 2018. The group has a strong interest in keeping participation with the PMR's work and with much intention to participate in the public agenda, therefore feel like the space that the PMR has brought is helping them channel their doubts and opinions on the current carbon tax, a future climate change law, and how the use of future carbon pricing instruments should be carried out.</p> <p>The group is meant to session on a bi-monthly basis as before, but now on the premise of the proposals already put in place by component 1 and future technical tables that may develop from the discussions that will appear under the new government's agenda and possibilities to make changes or propose new legislation regarding these topics.</p> <ul style="list-style-type: none"> <li>● <b>TORs for a Climate Policy Modelling and Simulation Tool</b></li> </ul> <p>This research study is intended to develop a macroeconomic understanding of the role and impact that climate policies can have on the country's economy but also aid in the definition of policy-mix to achieve NDC goals.</p> <p>So far, and through the collaboration with the GIZ, the project was able to initiate activities by separating this study in two parts: a design phase and an implementation one. With the support of the GIZ we are currently working on the design phase and data collection. In parallel the PMR team is working on the TORs for the implementation, which will carry the bulk of the work required for this tool to work.</p> <p>Given that this is the main activity of this component, there has been several instances of conversation and consultation with experts with regards on how this study should be carried out and to reflect the best possible those requirements on the TORs. Initial work with GIZ should help in the final drafting of the TORs to be sent to the World Bank to initiate the tendering process. This is expected to happen no later than mid-May.</p> <p><b>Pending:</b></p>
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	<ul style="list-style-type: none"> <li>▪ <b>Design and Implementation of a Mitigation Actions Certification Program and Registry.</b></li> </ul> <p>Draft proposal of a Blockchain pilot project is underway. Initial conversations with World Bank and local experts are producing a number of possible projects but the definition is close in sending a proposal for a Registry system based on Blockchain Technology to register renewable energy projects and maybe include some energy efficiency ones.</p> <ul style="list-style-type: none"> <li>● <b>Agreement on Climate Action with the German Ministry of Environment through the GIZ.</b></li> </ul> <p>Continuing coordination with Germany's GCM program, on December 2017 a delegation of Chilean public and private sector representatives went on a study tour to receive training and insights on the European ETS, with visits to the BMUB, DEHSt, and the European Energy Exchange (EEX) offices, where meetings and presentations to the delegation were held.</p>
<p>Comments:</p>	<p>The implementation of green taxes in Chile has been seen by representatives of regulated establishments, the public sector, the business sector, academia, NGOs, parliamentarians, among others, as a first clear sign of progress on mitigation initiatives in the face of change climate. Yet, despite the advantages and opportunities envisaged in the implementation of green taxes, it is essential to carry out an evaluation of the implementation of the green tax during its first year of validity, its design aspects and the implementation process. This evaluation should provide signals of the trajectory that could arise in the future in terms of its tax rate and coverage, enabling industries and consumers to gradually adapt to possible changes to adopt the necessary mitigation measures.</p> <p>Regarding possible redesigns of the current tax, it is necessary to strengthen participatory/consultative mechanisms with interested parties. In this sense, regarding the evaluation of a possible extension of the tax, it is recommended to generate participatory and/or consultative mechanisms that encourage greater deliberation with decision makers and other interested parties (i.e. trade associations of affected/potentially affected establishments, academia, NGOs, think tanks, academia, etc.) regarding the associated socio-economic, regulatory and institutional implications, as well as, regarding the importance of establishing mechanisms to define the trajectory that the tax rate should have before an eventual extension of the same, as well as the sectors to be included in a potential ETS, their emission caps, allocation methods, etc.</p>

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*If necessary, please add components in the table above.*

#### 4. PROGRESS, CHALLENGES, AND LESSONS LEARNED

##### Important policy or regulatory developments related to the Grant's objectives and activities:

###### Developments:

###### 1. Tax Reform, Law 20.780

This Tax Reform was approved in October 2014, and introduced a tax on CO<sub>2</sub> emissions from fixed sources, as a means to address environmental externalities. In practice, this carbon tax is applied on an annual basis, and levies CO<sub>2</sub>, among other GHG gases (SO<sub>2</sub>, NO<sub>x</sub>, MP), based on boilers and turbines that add to 50 MW or more of thermal capacity. The carbon tax is applied on a US\$5 Ton/CO<sub>2</sub> rate, and reporting will begin in 2017.

Institutional actors participating in the design and implementation of the carbon tax include: the National Council for Energy (CNE), the Superintendence of the Environment (SMA), the Ministry of the Environment (MMA), and the Internal Revenue Service (SII).

###### 2. Bylaw, Decree No. 18 (MMA)

This legal instrument enables green taxes to operate. It establishes the obligations and procedures related to the identification of the green taxpayers, and defines the administrative procedures needed for the application of the tax levied on emissions to the air of particulate matter, nitrogen oxides, sulfur dioxide and carbon dioxide, according to Article No. 8 of Law 20.780.

For the initial identification of potential establishments affected by the tax, the MMA prepared the first register of establishments potentially regulated entities by the tax with the support of the study "Records and characterization of establishments affected by the carbon tax in Chile" (SISTAM Ingeniería, 2016) that was financed by the "Technical Work Program" of the World Bank's PMR initiative. For this purpose, the information that came from the RETC and the SICTER was taken as a basis. From this information, visits were made to the establishments in order to identify those facilities potentially affected by sectors other than electricity generation, as well as to evaluate the way in which the electricity generating facilities were measuring their emissions.

Based on the above, the MMA prepared a Manual for the Registration of Boilers and Turbines (MMA, October 2016) that establishes the administrative procedures for the mandatory registration of fixed sources with power equal to or greater than 5 MWt. Likewise, it establishes the information for the annual determination of the establishments affected to declare emissions subject to the green tax, which must be done through the VU-RETC.

###### 3. Instructions for the quantification of emissions from fixed sources affected by Article No.8 of

**Law 20.780, Exempt Resolution 1.053 (SMA).**

Establishes the protocols (methodologies and procedures) to measure emissions of PM, NO<sub>x</sub>, SO<sub>2</sub> and CO<sub>2</sub>.

**4. Chile's long-term Energy Policy "Energy 2050" and the role carbon pricing plays**

Chile's long-term energy policy "Energy 2050" was approved on December 30, 2015. It consists in four pillars: Security and Quality of the Energy Supply; Energy as a Driving force for Development; Compatibility with the Environment and Energy Efficiency and Education.

Regarding Energy and Climate Change, carbon pricing is of particular importance here since, in combination with an energy reform, it can provide important incentives for clean technology investments, and therefore for a transition to decarbonisation of the economy. In this regard, the policy states the implementation of a "global pollution tax" in the energy sector, and the analysis of other carbon pricing instruments, in order to internalize the environmental externalities associated to existing and future energy infrastructure.

In this context, the policy explicitly notes that, "through the Partnership for Market Readiness initiative, in collaboration with the World Bank, we will evaluate these economic and market-based instruments, such as emissions trading systems (ETS or Cap & Trade), which aim to reduce carbon dioxide and other greenhouse gases in the energy sector."

Under the new administration that took office in March 2018, there will be a review and update of the Energy Policy. However, Climate Change and the role of carbon pricing instruments will be a priority of this administration, and will be mentioned in the upcoming "2018-2022 Energy Route".

**5. Nationally Determined Contribution (NDC) under the Paris Agreement (2015)**

Chile's INDC, which was submitted to the Secretariat of the UNFCCC in September 2015, is built on three key areas: "Resilience to climate change", including the pillars of Adaptation and Capacity Building; "Control of greenhouse gas emissions", comprising the Mitigation pillar; and "cross-support for climate action", including technology transfer and development pillars as well as climate finance. In the case of the mitigation pillar, Chile chose to present its contribution using the format of emissions intensity (tons of CO<sub>2</sub> equivalents per unit of gross domestic product (GDP) in millions of 2011 Chilean pesos - CLP).

Methodologically, it was decided to separate the Land Use, Land-use change and Forestry (LULUCF) sector from the national commitment to mitigation, due to the high annual variability of sinks and emissions from the sector, and for being less dependent on the trajectory of economic growth.

**The Mitigation pillar:**

- a) Chile committed to reduce its CO<sub>2</sub> emissions per GDP unit by 30% below their 2007 levels by 2030, considering a future economic growth which allows implementing adequate measures to reach this commitment.
- b) In addition, and subject to the grant of international monetary funds, the country would increase the reduction of its intensity target up to 45% with respect to the 2007 levels,

considering, in turn, a future economic growth which allows to implement adequate measures to achieve this commitment.

Among the measures included in the document presented to the UNFCCC, the carbon tax introduced by law 20.780 is considered an important instrument for the delivery of mitigation outcomes.

Chile ratified the Paris Agreement in February 2017, thus ratifying the proposed NDC. Yet, a new NDC public roundtable was established to update the current NDC, in view of the upcoming 2020 submission. This public instance is holding an initial draft to initiate a public consultation process for the review of our overall mitigation goals. It is expected that this work will go on during the present year and part of 2019.

## **6. Chile's Mitigation Action Plan for the Energy Sector**

The Ministry of Energy, in close collaboration with the PMR (through its Policy Analysis Work Program), conducted a comprehensive assessment of the measures contained in the Energy Policy for 2050, complemented by other feasible measures, in order to estimate their mitigation impact. This work ended with the publication on December 2017 of the first sectoral mitigation plan: The Mitigation Action Plan for the Energy Sector; approved by the Ministerial Council on Sustainability.

## **7. Environmental issues within the Pacific Alliance**

On March 30, 2016 the Ministers of the Environment of the Pacific Alliance signed a declaration calling for the creation of a Green Growth platform. This declaration was the basis for the creation of the Environment and Green Growth Group of the Pacific Alliance (PAEGGG). In June 2017, in Cali, Colombia, the Presidents of the Pacific Alliance agreed on an explicit commitment to promote a green growth strategy to face the challenges of climate change, as well as to move towards a voluntary carbon market for the region, including a common system to monitor, report and verify (MRV) emissions reductions.

Currently, the Ministry of the Environment has the Presidency of the Environmental Group of said Alliance. Through this group, countries are working on a common strategy based on three priority areas: i) green growth strategies, ii) carbon pricing instruments, and iii) GHG accounting.

To support the national commitments of mitigation against climate change, the countries of the Alliance are developing different approaches, among them the implementation of carbon pricing instruments (carbon taxes, ETS), advancing in turn the definition of MRV systems that accompany its implementation.

During the first phase and the continuation of the PMR-Chile Project, the Ministry of the Environment has led the following activities that were complemented by the actions of the PMR-Chile Project.

**Challenges:**

An important standing challenge for Chile is to manage an active participation of the myriad sectors involved in the implementation of the current carbon tax, but also, in assessing nationally appropriate options to build on current carbon tax design, and/or introduce other carbon pricing instruments in the post 2020 context. There remains a challenge to improve institutional coordination, including a wider representation and participation at the ministerial level, as well as opening avenues for civil society participation. Furthermore, there is yet the need to build on commitments on a decision-making level, for the definition of policies and programs for climate change in general, but specifically for carbon pricing implementation. In this sense, one key challenge is to promote the development of a national climate change policy that facilitates the implementation of instruments and policies, such as carbon pricing, that require close collaboration while avoiding inefficiencies, at the governance and implementation levels.

An important issue needed to convince current authorities is to be able to quantify the co-benefits associated with carbon pricing, such as improved health, new business opportunities, fostering technological research and innovation, among others. Also, there is a need to push forward policies that aid the development of cleaner markets for the development of a cleaner economy, therefore carbon pricing instruments should be used to enable technological transfer and innovation, rather than create a stringent inflexible command and control system. Thus, there is great opportunity to create policies that foster cleaner markets through the use of carbon pricing, specifically if the country chooses to move forward to an ETS or incorporate the use of scaled-up crediting mechanisms as a complement to the current tax scheme. These should aim to be revenue neutral and provide assistance to low-income houses and vulnerable industries in order to preserve a healthy growing economy and assist in the technological update of least technologically-developed sectors in the country.

**Lessons learned:**

It is important to integrate existing policy frameworks in the objectives and expected results over the course of the readiness phase, in order to ensure that the work on carbon pricing plays an important role in the delivery of ongoing environmental, social and developmental goals. While it has been challenging to demonstrate locally, the key role that carbon pricing can play as a driver for a low carbon, sustainable economy, analyzing and determining the nature of this contribution can facilitate important aspects on a political and technical level, at early stages.

As previously reported, the MMA made an important effort during 2017 aimed at systematizing and documenting the main learnings, knowledge and lessons learned that arise from the work done by said Ministry, the SMA and other public institutions involved during the first three years of preparation of green taxes in Chile and its MRV system which resulted in a collection of brochures on green taxes, whose information has been key in the formulation of the lessons learned that arise from the process.

Also, from the training workshops, coordination meetings with the technical team of the Project, working sessions with the GCE, workshops with consultants, it has been possible to document a series of lessons learned, which have also been complemented with the results of the consultancies carried

out under Component 2 and studies on taxes and MRV systems carried out under Component 1. In this sense, the lessons learned systematized below will be focused on reflecting what worked well, what should have been done differently, and how the process should be improved to be more effective in the future. The foregoing with the purpose of generating knowledge for the additional phase of the PMR-Chile Project through the identification of key factors of success, deficiencies or opportunities for improvement, potential solutions to replicate successes, potential courses of action to mitigate risks, which will contribute to strengthening the decision-making process and the sustainability of the Project in the future.

**Important changes in the technical design or approach related to the Grant's activities:****Developments:**

Considering mandates stated under the Tax Reform and Long-Term Energy Policy, and more recently the challenges posed by the Paris Agreement, adjustments were made on a technical level in Components 1 and 2, to accommodate a shift in priorities that now focus on the implementation of the current carbon tax and its MRV system, without losing the opportunity to evaluate other more comprehensive alternatives for carbon pricing in Chile, such as an ETS across main sectors, given the window opened by the Paris Agreement for cooperative approaches under Article 6, in addition to take a close look to progress made in carbon pricing developments in countries such as Mexico, Brazil (with its ETS simulator) and jurisdictions such as California, Quebec and British Columbia. This reflects in a new re-grouping of the original procurement plan sub-components. For instance, under Component 1, a focus on building on the current carbon tax (or considering carbon tax design alternatives), was a more recent priority, compared to an original focus mostly on market mechanisms (ETS and carbon markets).

New opportunities now lay ahead with a Climate Change Law being put in the legislative agenda of the new administration. This provides a unique space to push forward carbon pricing as an alternative to pursue the move towards a low-emissions development and achieve the countries NDC goals. PMR work has already begun focusing activities to position the topic with decision and policy makers in the country.

**Challenges:**

It is important to avoid duplicating efforts across the comprehensive range of PMR (and other donor) support work programs. For instance, while Policy Analysis work has been an important source of inputs informing the assessment of future carbon tax development under Component 1, work is still underway to delineate the scope of INDC implementation work (envisioned under a new phase for PAW work) and the scope of general carbon pricing modelling work planned under Component 1.

**Lessons learned:**

Inter-ministerial and intra-ministerial coordination is fundamental at early stages of readiness, when work plans should be discussed and defined with close participation of the technical teams that will participate during the implementation phase.

**Key capacity issues (implementation, technical, financial management, procurement) related to the Grant's activities:**

**Developments:**

**Management of the PMR-Chile Project by AGCID:**

- It is worth mentioning that the team for the administration of the Project's fund requirements at AGCID, with experience in procurement procedures for the management of international cooperation initiatives, has been strengthened with PMR support.
- Technical capacity at AGCID for procurement and financial administrative tasks has been improved.
- Formats for the management of processes associated to the contracting of consultancies (TORs, contracts, technical bases, administrative tasks, etc.) have been created.
- Optimized management procedures for procurement (reduction of time frames associated to the evaluation of consultancies, and of individual consultants, no objection procedures by the World Bank, revision of TORs, etc.), have been designed and applied.

**Challenges:**

- **Management of PMR-Chile Project by AGCID:**
  - Need to train further AGCID staff at the start of projects with the World Bank (administrative and technical topics). Many times processes are slowed down due to administrative processes that require repeated actions regarding confirmation and conformities from the administrative and representatives of the organizations working together. A unified management system for administrative procedures and resource planning could aid in this topic in the future.
  - Strengthening the coordination and acquisitions team at AGCID through the contracting of an additional consultant (an administrative one), due to the high number of projects that AGCID manages with the WB, and with other international cooperation sources.
- **Articulation/coordination of consultancies implemented under the Project's Components' work frames**
  - Toward these aims, refining the schedule of activities and generating a flow of procedures— with agreed targets- to share information regarding progress made by parts (including an analysis shared previously on the final conclusions generated by each consultancy), and also altogether, having as a reference the deadlines defined for the achievement of each of the targets.
  - The need (already identified by the PMR) persists in terms of generating a repository for information that is useful to the PMR-Chile Project and/or to consultants, or to strengthen

the use of an existing repository.

- To share a map of stakeholders, a database, and other materials for shared capacity building and common use.

**Lessons learned:**

- As described above, PMR project implementation needs building on human technical capacities from the onset. Establishing templates (formats) for project documentation, for example, at early stages, facilitates, and makes coordination more efficient in the development of deliverables such as TORs and contracts, in view that the support for project management represent a key factor for project expected results. An operations manual for all procedures relevant to the project has been established following both World Bank and AGCID standards.
- Procedures were implemented to establish synergies between consultant entities to maximize results of the PMR-Chile Project. Monthly meetings with the whole PMR team and weekly coordination meetings with AGCID have proven essential to achieve close relations and coordination on PMR activities.

**Coordination with other carbon pricing initiatives, including those funded by other donors:**

**Developments:**

As stated before, in close collaboration with the PMR (through its Policy Analysis Work Program), the Ministry of Energy managed to publish “The Mitigation Action Plan for the Energy Sector”, which complements the work on carbon pricing as defined under PMR Components.

Also, the PMR is working in close relation with the NDC Partnership projects, aiding the main MRV components that are being required by the programme.

Equally important and also mentioned before, the PMR is working together with the GIZ’s Global Carbon Market programme, where most of the activities complement in spaces where the PMR hadn’t planned to work but have shown to be important in terms of positioning of carbon pricing instruments, such as the role that Climate Finance is playing in the national and international contexts.

**Stakeholder engagement related to the Grant’s activities:**

**Developments:**

- After the establishment of the Consultative Group of Experts (GCE), on September 2015, and with the objectives to address the need of creating a “critical mass” of stakeholders that collaborates with Chile’s PMR Team on a regular basis, and following a structured program of work to achieve expected results specified under Components 1,2,3, meetings continue to be scheduled to keep stakeholder engagement and consultation with key stakeholders.

- The Implementation of the Technical Seminar and High Level Dialogue on Carbon Pricing Instruments and Green Growth (June 28-30th 2016, the workshop “Information as a keystone for carbon pricing instruments” (January 2017), and participatory and consultative workshops (November 2016-January 2017) under Component 1, which all together added a critical mass of more than 550 participants, was relevant to contribute to the generation of a debate about objectives, alternatives, available technical frameworks and established commitments on climate change and carbon pricing instruments at the regional level, and to initiate talks on a potential role for carbon pricing within a broader context of green growth within the Pacific Alliance countries.
- Implementation of a Consultation and Participation Plan with relevant actors to the Project (Steering Committee, Consultative Group of Experts (GCE), other actors) in matters related to options and proposals in carbon pricing in the medium and long term in Chile, that emerge from the studies undertaken now under Components 3 and 6, with the purpose of contributing to the transparency, relevance, credibility, and legitimacy of the process.

**Challenges:**

- Ensuring the coordination and generation of effective channels of communication with and between relevant actors of the PMR-Chile Project (Steering Committee, Consultative Group of Experts, Ministries of Environment, Energy and Finance; and other relevant actors) that participate in instances for dissemination, consultation and participation, for which proposals must be formulated to strengthen the integration, announcement, and governance of these instances.
- Strengthening instances for communication, consultation and participation with decision makers (i.e. National Congress, Executive Power, Council of Ministers for Sustainability) to position carbon pricing instruments within the political/legislative agendas.
- Aligning the components Capacity Building and Communication of the consultancy regarding “Strategy for Communication, Consultation and Participation” with the needs to inform, build capacities and level information with the Steering Committee and the Consultative Group of Experts.
- Work closely with key actors that are (and probably will be) local references or key stakeholders in climate change matters and carbon pricing decision making, to endow the Project with continuity. Decision makers, private sector, think tanks and technical teams working with parliamentarians, should be included.
- Distinguishing instances for technical discussion from the discussions and political definitions required by the PMR-Chile Project, in order to maximize results, and to clarify intersecting instances. Making the spaces for technical feedback and information explicit, and political feedback, and to link these with the milestones and final product needs of the current phase.

**Lessons learned:**

It is important to address misperceptions and misinformation on carbon pricing on a general public level, from early stages of readiness, in order to allow for enough time in securing stakeholder engagement and create required capacities on such matters.

In terms of coverage, the training activities carried out under the initial phase (2015-2017) added to that over 600 participants. The overall results of the effectiveness of the face-to-face training activities produced positive results on the part of the participants who show a high value with respect to the contents addressed (86% of the respondents evaluated this factor with a "high" level, while the remaining 14% evaluate with a "medium" level. Likewise, 91% of respondents said they had improved their understanding of the contribution of carbon pricing instruments in the mitigation measures implemented. Another relevant result is that 96% of the participants who responded to the evaluation indicated that Chile should continue to explore the implementation of carbon pricing to support national efforts on mitigation against climate change under the Paris Agreement, which could reflect a good result in terms of the awareness that exists regarding the issue in our country. The same evaluations yield results to maximize the results of the training actions during the additional phase, among them, strengthen the participation of NGOs, academia, increase training activities in regions, and advance in the deepening of training activities on carbon pricing according to detect gaps.

To improve the effectiveness of the learning processes in terms of implementation of carbon pricing, it is recommended to analyze the relevance of implementing courses on carbon pricing and mitigation policies and actions against climate change. To this end, alliances with universities, GIZ, UNDP and / or other international organizations could be generated to have technical and financial support for their implementation. Likewise, an alliance with the AGCI could be established within the framework of its South-South Cooperation Scholarship Program, which could expand the diploma's coverage to professionals from Latin America and the Caribbean and countries of the Pacific Alliance.

Likewise, in order to broaden the coverage of training actions and improve efficiency in the use of resources, it is recommended to systematize graduates and / or magister who integrate the topic on climate change, evaluating the possibility of including a module or presentation on carbon pricing instruments given by the technical team of the Project and / or professionals from the ministries and services involved in its technical execution. Along with the above, we can analyze the feasibility of including a presentation on carbon pricing in any of the educational establishments of secondary education that from 2019 must integrate the subject of climate change and sustainability in its curriculum.

Also, it is recommended to include representatives of Parliament in high level technical missions that are implemented during the additional phase of the Project in leading countries in the design and implementation of carbon pricing. A good instance in this regard will be the exchange activities that will be carried out with Mexico within the framework of the Project "Strengthening capacities in carbon pricing instruments for compliance with national commitments to mitigate climate change" that will be executed by the Ministry of Energy, which contemplates within its activities to know the Mexican experience with respect to its General Law of Climate Change that includes within its national mitigation policy guidelines, carbon pricing instruments and measurement, reporting and

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verification systems.

**Other issues related to the Grant's activities**

N/A

## 5. ADDITIONAL INFORMATION

N/A