

CHILE: PMR PROJECT IMPLEMENTATION STATUS REPORT (ISR) – MARCH 2017

1. SUMMARY INFORMATION

Implementing Country/Technical Partner:	Republic of Chile
Reporting Period:	From 05/18/2016 to 02/10/2017
Report Date:	02/10/2017
Implementing Agency:	Ministry of Energy
Contact Person:	Juan Pedro Searle; PMR-Chile Focal Point.

Grant Executed By:	Recipient: Chilean International Cooperation and Development Agency (AGCID)
Grant Effectiveness and Closing Dates:	09/05/2014 - 09/05/2017
Grant Amount (USD):	USD 3,000,000
Funding Mobilized (USD):	Pending
Funding Committed (USD): this is what has been contracted to date (75%)	USD 2,250,000

2. OVERVIEW

In general terms, progress made focuses on the implementation of the current carbon tax, specifically, in strengthening institutional roles and capacities to address technical requirements for the operation of an MRV system to adequately implement the carbon and local pollutants tax. In addition, the project is also engaged in identifying pathways for future improvement of this carbon pricing option.

Regarding 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 sectorial policies on energy, which provided a framework for technical and regulatory analysis that is currently being implemented under Component 1, which includes options to escalate the tax to other emitting sources and the evaluation of other carbon pricing options, such as ETS and domestic carbon market development. These deliverables will be packed as policy packages of carbon pricing alternatives, which will be integrated into a roadmap for decision making on choices to opt for a future carbon pricing policy, which may also consider the current carbon tax in combination with other instruments.

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 (called "MRV 2.0"). This system is currently under development to implement the carbon and local pollutants tax and will be the basis to define a mandatory reporting system across main emitting sources, aimed at improving

this so-called MRV 2.0 (i.e., to be ETS compatible and comparable to other similar MRV approaches abroad) and to become operational with additional PMR funding activities.

Regarding 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. This Strategy has already been delivering different products and processes, including project brochures, corporate videos and training workshops.

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>Considering mandates stated under the Tax Reform for Education 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>	

Implementation Progress by Component

<p>A. Component 1: Regulatory, Institutional, Economic and Co-Benefits Analysis for Carbon Pricing Instruments</p>	
<p>Status:</p>	<p>Completed:</p> <ul style="list-style-type: none"> ▪ Technical Seminar and High-Level Dialogue on Carbon Pricing Instruments and Green Growth (June 28-30th 2016) <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</p>

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.

The implementation of the Seminar was led by the Ministry of Energy, while the Dialogue was co-organized with the Ministry of the Environment.

The events were attended by Chile's President of the Republic, Michelle Bachelet, and 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 ("Business Leaders Against 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 organizations.

Under implementation:

- **Planning and continuous review of the work plan for Component 1, PMR-Chile Project.** Following the planning process of 2015 and beginning of 2016, the work plan was revised and updated in mid-2016. The original work plan envisaged for Component 1 in the MRP and Procurement Plan was reworked conjunctly with technical counterparts from the Ministry of Energy, Ministry of Environment, and the Chilean Agency for International Cooperation and Development (AGCID), to accommodate current carbon pricing focus on carbon tax. This required a re-grouping of the initial activities set out in procurement, re-defining specific objectives and expected results, activities, roles, budget, indicators, scheduling, among other. A review, with several iterations was carried out across ministries, as well as with the PMR Secretariat, to define a final Component 1 work plan for readiness activities, which was granted approval on January 4th, 2016. Since the last approval of the work plan, new activities have been added in order to give way for the more strategic activities that envisage the long-term view for carbon pricing implementation in the country. Particularly, this refers to focusing in the analysis and design for a more comprehensive system of carbon pricing instruments and their implementation roadmap, as well as focusing on a broader MRV system in terms of compatibility with other carbon pricing mechanisms (aside from the tax currently in operation in the country) and with linking compatibility among other jurisdictions.
- **ToR preparation for the design of a robust MRV system (MRV 3.0), ETS compatible.** As mentioned in the section above, the current administration's priority focuses 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. Under Component 1, one of the main lines of the ToR under development aims to build on Measuring, Reporting and Verification for GHG emissions and considering future alternatives for carbon pricing mechanisms.

Although Component 2 is currently looking at possible design alternatives an MRV system that may be ETS compatible and linkable to other jurisdictions, it does not have a thorough view of further domestic considerations regarding local conditions for unknown regulatory frameworks (what might happen with the inclusion of new carbon pricing instruments and the use of supplementary measures that relate to mitigation actions or even sinks) and precisely identify how to incorporate these outside the current institutional structure (mainly the Emissions and Pollutants Transfer Registry or RETC in Chile). This study will evaluate institutional and regulatory gaps, among others, aiming at strengthening MRV capacities needed to nest a more integral MRV, ETS compatible, system. Based on the ad-hoc guidelines developed under the PMR Technical Work Program, one of the desired outcomes of this study is to define a GHG mandatory reporting system, which would improve data collection and reporting, and will be the basis to prepare both regulated entities and government institutions, for a decision and further operation of an ETS.

- **ToR preparation for the design of an MRV Platform and a mitigation recognition program in the energy sector.** Following the identified need for MRV capacity building and complementary to study on MRV 3.0 above, this is considered rather an MRV system of actions in the energy sector. The idea behind this study is to include mitigation actions -mainly from public sector but open to incorporate private projects- into the national accounting of GHG emission reductions. The expected result is to have a system in place that may track progress towards the country's NDC regarding the Paris Agreement's guidelines for transparency and accounting robustness. Also, included in this study will be the idea of a recognition program to include private sector initiatives that play an important role in emissions reductions but are hard to count since they normally function under undisclosed principles and have no obligation to report their results to a national authority.
- **Analysis of international developments on carbon pricing and their implications on Chile's related public policies.** 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 offsets acquisition, and providing insights on the implications of the Agreement as well as recommendations for domestic policies regarding carbon pricing implementation for compliance with the country's NDC. Alongside a study for 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 in the country as a measure of tackling climate change. The analysis carried out was submitted by the consultant by December 2016 and is under the final review process. 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.
- **Detailed evaluation of Chile's participation in the CDM, considering the new scenario of commitments under the Paris Agreement.** As a second study of great importance towards defining alternatives for carbon pricing implementation and

bring forward the experience of private sector on project-based mechanisms, the aim of this study is to understand past and current situation of CDM projects in Chile and the corresponding CER 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 study is 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 may be able to continue being a contribution towards emission reductions, as part of supplementary measures that can reside within a carbon pricing system. This study began in October 2016 and to date has approximately a 60% of progress and should be fully completed by the beginning of March 2017. Initial findings from this analysis mention the importance that CDM CERs had in mobilizing funds from the private sector to produce emission reduction projects. These projects represent approximately 7.4 MtCO₂e per year, yet of those projects only half were actually verified under CDM standards and therefore awarded the corresponding CERs. The other half is still under verification. 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.

- **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. The idea behind this particular study is precisely to provide an exhaustive 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 is set to use as a basis the current carbon tax and from it build 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). Progress on this study is approaching 30% and should be concluded by the end of July 2017.
- **Coordination of the Consultative Group of Experts.** In terms of other planned activities, Component 1 leads the Technical Coordination of a Consultative Group of Experts with public (inter-ministerial Steering Committee), private and civil society representatives. It holds 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 has been established to mirror planned activities under Component 1, and therefore guide the preparation of public-private modes of collaboration, in advance to carbon pricing road mapping in 2017 based on overall studies and consultancies’ results (and on potential political outcomes). So far, the Consultative Group of Experts has been in sessions to discuss the definition of the work plan, Components 1 and 2 ToR review, give opinion on preliminary study and consultancy results, and further definition for the climate change and carbon pricing agenda of the Ministry of Energy. During the reporting period on this ISR, there have been 4 meetings held

with this Group of Experts in August, October, and November 2016 and January 2017.

- **Participation at PMR Technical Workshops in Paris (May-June 2016), Hanoi (October 2016), and San José (December 2016).**
- **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, 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 themselves and are 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

	<p>agreement will provide approximately EUR 400,000 for 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>
<p>Comments:</p>	<p>During this period, the focus on the carbon tax continued under Component 2 and its MRV design and implementation. 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 are being put in place to understand 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.</p>
<p align="center">B. Component 2: Design and Implementation of a Measurement, Reporting and Verification (MRV) System and GHG Registry</p>	
<p>Status:</p>	<p>Completed</p> <ul style="list-style-type: none"> • Internship in Sacramento (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: <ul style="list-style-type: none"> - Methodologies and protocols to estimate CO₂ 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. <p>All the information received was shared not only with professionals from the Ministry and the Superintendence of the Environment, but also with 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. 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.</p> • Green taxes domestic training and dissemination workshops During 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 in: i) Antofagasta; ii) Coquimbo; iii) Metropolitan Region (Santiago); iv) Bio Bio; v) Los Lagos; and vi) Magallanes.

Under implementation

- **Planning and continuous review of the work plan for Component 2, PMR-Chile Project.** Like Component 1, the original work plan of Component 2 (executed by the Ministry of the Environment) was modified in order to answer for the MRV requirements to implement the 'green' taxes¹ in Chile. The final plan was approved in January 4th 2016 by the PMR-Chile Project Focal Point and the World Bank.

Studies

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

The main objective of this study is to have a detailed diagnosis of the physical, logical and professional conditions available at the Ministry of the Environment to house the Register and the Superintendence of the Environment to house the Reporting System that will support the application of the carbon tax, in addition to develop a computer system and information security protocol for the carbon tax (and other potential economic instruments). The expected results of this consultancy are the diagnosis of current conditions and identification of gaps to house the carbon tax register, including a report of information vulnerability and computer system and security information protocols. Work began in November 2016 and is expected to finish the end of April 2017.

- **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.**

The main objective of this consultancy is to support the development of the Reporting System and propose an Emissions Verification System that responds to the requirements for data collection and accuracy of the information that will support the collection of 'green' taxes. The analysis will be done taking into account international experience and best practices, local conditions, and the potential transition of the tax towards a more complete carbon pricing instruments system. Among the expected deliverables, we have:

- International Experience Report and Local Conditions for an Emissions Reporting System.
- Emissions Implementation Report
- Registration and Reporting Protocol.
- Guide of Registration and Reporting for facilities affected by green taxes.
- Training Material on Reporting
- International Experience and Local Conditions for Emission Verification
- Audit Verification Protocol
- Digital Information Verification Protocol.
- Protocol and Profile for entities and individual competencies to become verifiers.
- Guide of Verification for facilities affected by green taxes.
- Report of field visits
- Training Materials for Verification

¹ The 'Green' Tax concept in Chile, refers to environmental taxes implemented by the Tax Reform Law No. 20780, and involve emissions of NO_x, SO₂, PM, and CO₂.

	<p>This consultancy began in January; therefore it's in its initial stages and is expected to go through until the end of July 2017.</p> <ul style="list-style-type: none"> • 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. <p>This consultancy is expected to help improve the Emissions Measurement Protocol, developed by the Superintendence of the Environment, and aims to propose the extension of scope to potential new areas and pollutants affected by the current tax and future carbon pricing instruments, and technically support tax implementation in the facilities affected by the 'green' tax. Deliverables from this consultancy include:</p> <ul style="list-style-type: none"> - Implementation Report of the Protocol of Measurement and Monitoring of Emissions. - Protocol of Measurement and Monitoring of Emissions 2.0. - Extended Protocol of Measurement and Monitoring of Emissions. - Guide of Measurement and Monitoring for facilities affected by green taxes. - Technical and Commercial Capacity Report. - Checklist for inspections. - Training Materials for Measurement. - Other relevant activities <p>Activities under this consultancy began in December 2016 and are expected to end by July 2017.</p>
<p>Comments:</p>	<p>After conducting several meetings and technical trainings with carbon tax regulated entities, a number of issues and room 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 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>
<p>C. Component 3: Design and Implementation of Communication, Consultation and Stakeholder Engagement Strategy</p>	
<p>Status:</p>	<p>Completed</p> <ul style="list-style-type: none"> ▪ Design and Implementation of a web platform for the PMR-Chile Project <p>In December 2016, the web platform for the PMR-Chile Project was launched (http://www.precioalcarbonochile.cl/) 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 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 &</p>

answers regarding carbon pricing, among other contents. In addition, it considers a dissemination platform through social networks such as Facebook and Twitter.

Under implementation

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

This consultancy began in September 2016 and is scheduled to finalize in July 2017. Nevertheless, given its relevance to the positioning of the project and of the issues behind carbon pricing, it is expected to continue through 2017-2020, with additional PMR funding, in order to support and be instrumental to the implementation of the roadmap for future carbon pricing decision making and implementation. To date, results and products of the consultancy are the following:

- **A diagnosis of communication needs and challenges under the PMR-Chile Project (December 2016)/ completed.**

For the elaboration of this diagnosis, an in-depth interview was undertaken with relevant actors to the PMR-Chile Project (parliamentarians, National Congress advisors, entrepreneur associations, and enterprises subject to the carbon tax, NGOs, Ministries of Finance, Transport, Mining and Agriculture, among others).

Further, secondary information was reviewed related to studies on the current carbon tax under the Policy Analysis work program, OECD Environmental Performances Review 2016, National Survey on Climate Change 2016, Second Biennial Report (BUR) 2016, press notes released about carbon pricing instruments in Chile, among others. On this basis, an integrated analysis was performed to raise findings, conclusions, and recommendations on knowledge levels, perceptions, attitudes, and information gaps in topics linked to international negotiations and agreements on climate change mitigation, NDCs, policies and actions, carbon pricing instruments (green taxes, ETS, CDM), and the Monitoring, Reporting and Verification of GHG emissions.

On this grounds, gaps, needs and opportunities for 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). This 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).

- **Design and Implementation of a Capacity-Building Plan for the PMR-Chile Project:**

Based on the diagnosis 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):

- National GHG inventories (INGEI) for Chile and the origin of country and sectoral emissions (emissions sources),
- New international climate regime established by the Paris Agreement, Chile NDC,
- Carbon pricing instruments as climate mitigation measures,
- Role of authorities for the development of a road map for a low carbon development in Chile.

Under the work frame of this Capacity Building Plan, the following activities were defined:

- 4 capacity-building workshops (at the national and regional levels),
- 2 webinars,
- Participative dialogue with public.

These activities have considered the participation of 640 representatives at the national level.

Under the Plan's work frame, 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"; it was 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.

- **Design and Implementation of a Media Plan for the PMR-Chile Project.**

Under the diagnose work frame with key actors and sectors to the Project, a plan was defined for media that pursues communicational objectives, key messages, and audiences mapping. The plan has considered the production of a series of communicational products, and also merchandising materials, corporate materials, and a brochure describing the Project. Also, audiovisual material is being elaborated about the themes/areas addressed by the Project (4 corporate videos). Regarding the management of press cover, it has been defined that a communicational campaign is held in order to position carbon pricing topics at the national level, including interviews with key actors, OpEds, media stories, among others. 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 spokesman ship for the PMR-Chile Project was held, with the participation of key professionals from the Ministries of Energy and the Environment.

Pending:

- **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. (March- July 2017).**

Either for March or April 2017, a meeting has been scheduled with the advisors for committees on Environment, Energy and National Resources at the National

	<p>Congress to disseminate the objectives and expected results from the Project activities. Furthermore, a workshop has been planned on carbon pricing aimed at parliamentarians and their advisers during the month of April 2017, which would take place at the National Congress. Also, it has been considered that two high level missions should take place in countries and/or jurisdictions with leadership on carbon pricing (i.e. Mexico, British Columbia, California), and also the implementation of technical roundtables, public consultation processes, high level meetings, among other instances with decision-makers for the dissemination and discussion of alternatives and proposals for carbon pricing instruments in the future (in Chile). All these will become part of the roadmap for decision making on future carbon pricing pathways, envisioned to be implemented with additional PMR funding.</p>
Comments:	<p>The presentation of the diagnosis 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. Even though the latter implied a delay in the delivery of products related to the Capacity Building-Plan and the Media Plan, because it was central to address needs and gaps encountered, now the Communication, Engagement and Capacity Building Strategy is on track and is delivering products in accordance with latest adjustments to its original work program.</p>

If necessary, please add components in the table above.

4. PROGRESS, CHALLENGES, AND LESSONS LEARNED

<p>Important policy or regulatory developments related to the Grant’s objectives and activities:</p> <p>Developments:</p> <p>1. Tax Reform, Law 20.780</p> <p>This Tax Reform was approved in October 2014, and introduced a tax on CO₂ emissions from fixed sources, as a means to address environmental externalities. In practice, this carbon tax is applied on an annual basis, and levies CO₂, among other GHG gases (SO₂, NO_x, MP), based on boilers and turbines equate or surpass 50MW or more of thermic capacity. The carbon tax is applied on a US\$5 Ton/CO₂ rate, and reporting will begin in 2017.</p> <p>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 Tax Agency (SII).</p> <p>2. Bylaw, Decree No. 18 (MMA): This legal instrument enables green taxes to operate. It establishes the obligations and a procedure 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.</p> <p>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_x, SO₂ and CO₂.</p>

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

Chile's long-term energy policy "Energy for 2050" was approved on December 30, 2015 by the President of the Republic, after a broad and participatory process that lasted almost two years. The Energy Policy proposes a vision of Chile's energy sector by the year 2050 as being reliable, inclusive, competitive, and sustainable. To make this vision a reality by 2050, the Energy Policy is sustained by four pillars: Quality and Security of Supply, Energy as a Driver of Development, Environmentally-friendly Energy, and Energy Efficiency and Energy Education. The proposed measures and action plans shall be developed on the basis of these pillars between now and the year 2050.

Regarding climate change, the policy is explicit in terms of setting medium and long-term goals. For instance, for 2035, it states that this policy will contribute to the COP 21 commitment of reducing the intensity of GHG emissions in Chile by 30% compared to 2007 levels and commits the implementation of a GHG Emissions Mitigation Plan for the energy sector and of a plan to adapt the energy sector to the impacts of climate change. For 2050, it states that "GHG emissions of the energy sector are consistent with international thresholds and national NDCs".

Carbon pricing is of importance here since, in combination with an energy reform, it can provide important incentives for clean technology investments, and therefore for a transition to decarbonization of the economy. In this regard, the 2050 energy policy states the analysis of other carbon pricing instruments 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."

5. Intended National Determined Contribution (INDC) 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 CO₂ 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 CO₂ 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.

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), is conducting 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. For this purpose, a consultant team was hired to analyze and recommend a package of policy instruments in the energy sector that can contribute to the country's international commitments and, at the same time, be aligned with the various existing public policy initiatives on energy and climate change in Chile.

The main results of the plan show that meeting the country's NDC implies a bigger than expected level of effort from the sector. Some of the main messages from the plan are:

- The relevance of energy efficiency to meet the mitigation goal and to enable other mitigation actions within the sector. It is not only important that energy efficiency goals are met as expected, but also that they should be achieved on time. Otherwise, their positive impact on NDC achievement may be diminished.
- The transport sector plays a big role since its emissions are continuously growing. In consequence, if the aim is moving towards meeting the higher end of NDC, actions in this sector need to be taken sooner than later. Electrifying the sector and modal shift are among the most relevant actions.
- Renewable Energy that allows flexibility to the electric system is fundamental. The penetration of renewable energy is aligned with the long-term Energy Policy 2050, so how clean is the country's energy matrix will be a big question/challenge when the country looks at mitigation options such as electrifying the energy demand across sectors.
- The Mitigation Action Plan for the Energy Sector will be subject to public consultation in late February, and then submitted for review and approval by the Council of Ministers for Sustainability on April 2017, and afterwards, it will be published sometime before June 2017. Carbon pricing instruments are considered in this Action Plan as relevant measures that will need further assessment under the PMR initiative.

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.

Moreover, the mitigation action plan for the energy sector is considered a very first step in the process of defining measures to achieve the sector's share of GHG mitigation commitments. There is still a lot more to do in order to be in line with the Paris Agreement's commitments realization, including the continuous monitoring and reporting of NDCs. A thorough understanding of possible trajectories to 2030 (and corresponding measures), along with the determination of sectoral responsibilities, a better understanding of the costs and roles of private and public sector, as well as a profound understanding of carbon pricing as a facilitative instrument in this package, is still needed. The PMR initial phase has been instrumental to help installing the discussion, including strengthening the understanding of the

infrastructure needed to implement the carbon tax; nevertheless, those critical readiness gaps are pending to be resolved. Article 6.2 of the Paris Agreement opens a significant space for cooperation between parties to enhance mitigation by using market instruments in the context of NDCs and Chile is preparing the needed infrastructure --through the PMR-- to make use of these arising opportunities. Nevertheless, it is critical to understand and address the gaps associated to the use of mitigation outcomes stemmed from different carbon market approaches, and how these outcomes/transfers are being reflected in the NDCs or national inventories, or both.

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.

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 at a technical level in Components 1, 2 and 3, 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).

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:
 - A standardized procedure for procurement associated to PMR activities. It requires generating a manual for procedures and annexes, in order to match formats for World Bank-AGCID procedures.
 - Moreover, the need remains to define a single-entry point for financial and procurement management in AGCID (currently, a number of actors are involved). Also, there is a need to improve monitoring procedures to track progress in AGCID. Overall, there is still space for improvement in terms of applying World Bank procedures that are adapted to national regulations at AGCID.
 - Need to train AGCID staff at the start of projects with the World Bank (administrative and technical topics).
 - Strengthening the acquisitions team at AGCID through the contracting of at least 2 consultants (a finance consultant- accountant, a support consultant for the acquisitions unit), 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
 - Maximizing the result of consultancies by identifying the synergies and collaborative spaces, with a design, and with monitoring procedures managed closely by the coordinating team.
 - 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.
- Need to establish synergies between consultant entities to maximize results of the PMR-Chile Project.

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

Developments:

As described in previous sections, ToRs implemented under Policy Analysis work, which focus on ex-post analysis of the current carbon design, have been useful source of inputs for the development of ToRs focusing on alternative design options to guide the next stage of policy work for this instrument

(Component 1). Moreover, another set of ToRs under PAW focuses on INDC implementation in the energy sector (including the development of a sectorial strategy for climate change mitigation), which should complement work on carbon pricing as defined under PMR Components.

As stated before, in close collaboration with the PMR (through its Policy Analysis Work Program), the Ministry of Energy is conducting 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 and recommend a package of policy instruments in the energy sector that can contribute to the country's international commitments. The Mitigation Action Plan complements the work on carbon pricing as defined under PMR Components.

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 and 3, several meetings with the CGE were held during the second half of 2016 and on January 18, 2017. Besides informing progress on each component, discussions on the role of carbon pricing and the PMR started within this group. A periodic meeting agenda is schedule from March 2017.
- 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.
- The implementation of a Consultation and Participation Plan with relevant actors to the Project (Steering Committee, Consultative Group of Experts, 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 under Component 1, 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 high-level 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.
- Working 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.

Other issues related to the Grant's activities

N/A

5. ADDITIONAL INFORMATION

N/A