

# PMR PROJECT IMPLEMENTATION STATUS REPORT (ISR)

The PMR Project Implementation Status Report should be prepared by the Implementing Country or Technical Partner, with the support of the Delivery Partner and/or the PMR Secretariat. For any questions related to the preparation of the PMR Project Implementation Status Report, please contact the PMR Secretariat at: pmrsecretariat@worldbank.org.

# 1. SUMMARY INFORMATION

Implementing Country/Technical Partner:	Argentina
Reporting Period:	From 04/22/2019 to 04/03/2020
Report Date:	04/03/2020
Implementing Agency:	Ministry of Environment and Sustainable Development
Contact Person:	María del Pilar Bueno

Grant Executed By:	World Bank
Grant Effectiveness and Closing Dates:	09/10/2018 - 12/31/2020
Grant Amount (USD):	USD 3 millions
Funding Mobilized (USD):	USD 300,000 in kind
Funding Committed (USD)	USD 1,448,997

# 2. OVERVIEW

Argentina became an Implementing Country Participant of Partnership for Market Readiness (PMR) following the presentation of its Organizational Framework for Scoping of PMR Activities at the Partnership Assembly (PA) meeting in Hanoi in October 2016. The Draft MRP was presented at the PA meeting in Kyiv in April 2018 and the PA approved electronically the final MRP and allocated implementation phase funding to Argentina in July 2018. Through the PMR platform, Argentina explores the choice of policy instruments that support meeting mitigation objectives of its NDC, such as assessing renewable energy (REC) and energy efficiency certificates (EEC) trading and scoping out RBF approaches in key sectors. PMR also provides technical support to the further developments of Argentina's carbon tax, established in December 2017.

This is the second ISR (Implementation Status Report) presented by the country and, during the reporting period, the implementation of Argentina's MRP progressed in great strides. An important share of the progress made for this reporting period has been on the implementation of the 4



components initially stated in the MRP. Components 1 (REC), 2 (EEC) and 3 (Carbon Tax) and 4 (transport) from the MRP have delivered a series of reports and capacity building activities.

There have been political developments in the country as the new administration took office on December 9, 2019. The new administration has given interest in moving forward climate change policies, including carbon pricing strategies and complementary policies to support climate action. The new authorities endorsed the PMR preliminary results so far and have set some new priorities to 2020 activities.

PMR Argentina is overseen by a Task Group composed by the Ministry of Economy, Secretariat of Energy and Ministry of Transport, chaired by the Ministry of Environment and Sustainable Development. This approach has helped in avoiding lack of continuity and alignment between climate change policies goals.

In 2019 the project was implemented at an excellent pace. In fact, since the last implementation report presented on April 23rd 2019, nearly 47% of the grant resources have been committed. However, during January, February and March 2020 the project slowed down due to the change of government and the need to re-establish processes. This context has required:

- 1. New alignment instances with partner ministries: a number of meetings have been held in order to have relevant ministries on board the project and re-establish the PMR task group in the framework of new government administration. As a result, the new government and the project partners are committed to the full fund execution, despite the narrow implementation schedule.
- 2. Redefinition of some of MRP activities: the incoming government supports the implementation of the project and validates the activities that have been carried out so far as inputs for decision-making. Additionally, the decision to reformulate MRP's activities that had not yet been committed. These changes respond to preliminary results of the studies carried out in all the components, which highlighted numerous barriers, the urgency for complementary policies as support of the climate change policy in Argentina, and the need to generate data and strengthen institutional capacities around CPIs. Therefore, the incoming government has decided to step back and place the focus of the grant's activities to overcome these barriers. Finally, the government has defined new procurement modalities in line with three new strategic objectives that will guide the project:
- Support the implementation of the National Climate Change Policy and the climate policy processes undertaken by the National Directorate for Climate Change (LTS, NDC, among others)
- Strengthen the capacities and take advantage of the Argentine Scientific-Technological System
- Strengthen the capacities of the National Directorate for Climate Change and the National Climate Change Cabinet (NCCC)



The PMR Task Team is working closely with the delivery partner in order to give continuity to the project and execute the pending contracts within the established deadlines, which are very challenging.

General progress made in each component can be summarized as follows (further detail is provided in section 3, next):

- Transport Component: Transport component activities initially outlined in the MRP are fully completed and the contract of the consulting consortium headed by Ricardo Energy and Environment concluded in January 31. Some of the results of the activities include: i) activity 1: specific measures of the Transport and Climate Change Action Plan were identified that can be incentivized by specific CPIs, as well as modifications to the carbon tax that could support uptake of the Plan. ii) activity 2: the results of the analysis supported the discussions about the country's position on the CORSIA scheme. iii) activity 3: the results of the analysis supported decision-making regarding the country's position on the initial IMO emission reduction strategy. Additionally, the remaining resources of this component were allocated to update the Transport and Climate Change Action Plan aiming to include recommendations of activity 1. This activity concluded in February 2020. There are new activities under this component (more detail provided in section 3) that will be carried out with reallocation of remaining funds from the other MRP's components. These activities are expected to be completed by December 2020.
- Renewable Energy Component: Activities are under implementation and expected to end by May 2020. This component includes 6 activities revolving around a pre-feasibility analysis that will support the government's decision on whether / how to move to the design phases of a REC national scheme. Activities 1 (assessment of key relevant international experiences on REC system, identifying potential similarities and opportunities for Argentina) and 2 (proposed and analyzed high-level possible scenarios for designing potential REC schemes in Argentina) have already been finalized and approved. Activities 3 (interaction of the REC scheme with current sector policies, other CPIs and map key relevant barriers to implementation) and 4 (develop a draft proposal for REC scheme design) are under implementation and about to finalize. Activity 5 (develop a plan for institutional, regulatory and capacity development) has just started. Finally, activity 6 (recommendations and next steps) is estimated to be completed in May 2020. There are new activities under this component (more detail provided in section 3) that will be carried out with remaining funds. These activities are expected to be completed by December 2020.
- Energy Efficiency Component: Implementation is under way and expected to end by August 2020. This component includes 4 activities revolving around a pre-feasibility analysis that will support the government's decision on whether / how to move to the design phases of an EEC national scheme. Activity 1 (assessment of key relevant international experience on EEC system) has already been finalized and approved. Activity 2 (outline potential scenarios for an EEC scheme in Argentina) is currently running. Activities 3 (interaction of the EEC scheme with current sector policies, other CPI's and map key relevant barriers to implementation), 4 (a design draft proposal for the EEC scheme in Argentina), 5 (develop a plan for institutional, regulatory and capacity development) and 6 (recommendations and next steps) are estimated to be completed by August 2020. There are new activities under this component



(more detail provided in section 3) that will be carried out with remaining funds. These activities are expected to be completed by December 2020.

• Carbon Tax Component: This component is currently under implementation but with some delay, since the technical meetings held with the incoming government resulted in modification of the scope for some activities. Activities related to the potential impact of Argentina's enacted carbon tax, including (i) modelling the carbon tax several effects, (v) assessing the use of carbon taxes to replace current distortionary taxes, (vi) assessing options for expanding carbon tax coverage, (vii) developing an MRV process for ex-post assessment of impact of the carbon tax, already have preliminary results and are expected to finalize by June 2020. The TORs for the remaining activities related to the possible future extensions of that tax regime are being developed. There are new activities under this component (more detail provided in section 3) that will be carried out with remaining funds. These activities are expected to be completed in December 2020.

Overall, significant progress was made in all components as the consulting activities are nearing completion. Despite the institutional changes that occurred within the national government, specifically the change of administration, the hierarchy of the Ministries, Secretariats and Directorates, which required appointment of new focal points, the project continued to count on the interest of the stakeholders and support for implementation.

Finally, despite the fact that there are changes in the scope of the MRP activities and in the allocation of funds, there is a political decision to implement the project in its entirety within the established terms and budgets. As of March 30, 2020, approximately 46% of the resources have been committed and /or disbursed. The team is working to speed up implementation and complete the pending activities by the closing date December 2020.

#### 3. IMPLEMENTATION REPORT BY COMPONENT

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

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?

The finalized and the ongoing contracts follow the activities and the scope of the components planned for in the MRP.

There are emerging activities included in all MRP's components aimed at overcoming key barriers to the implementation of implicit carbon pricing instruments. These barriers were highlighted in preliminary results of ongoing activities and are related to the need for complementary mitigation



policies, generation of data and information, and strengthening of institutional capacities. These activities are included in the original scope of the MRP, which is the official document of the project according to the PMR operational framework.

Emerging activities of the project are also aligned with three strategic guidelines promoted by the new government:

- Support the implementation of the National Climate Change Policy and the processes that are developed in the National Directorate of Climate Change (LTS, NDC, etc.)
- Strengthen the capacities and take advantage of the Argentinean Technological Scientific System
- Strengthen the National Directorate of Climate Change and the NCCC

Therefore, emerging activities of the project aim to address the aforementioned needs and follow the strategic guidelines established by the new government. The proposed new resource allocation among the MRP's components is shown in the following figure:

# Resource allocation 2020 by project component (USD)



CC: cross-cutting

CT: Carbon Tax

Transp: Transport

EEC: Energy efficiency certificates

**REC:** Renewable energy certificates

# **Implementation Progress by Component**

A. Component 1: Transport Component	
Status:	Under implementation

The transport sector and CPI application in this area became one of the components of PMR activities in Argentina. The aim of this component was to assess the policy context and mitigation potential in Argentina's transport sector as well as evaluate and prioritize CPIs which can be applied in the sector. In addition to that, CORSIA relevance for Argentina and IMO initial climate change strategy were also in the spotlight of the project. The Ministries of Environment and Sustainable Development and Transport provided technical contributions on the review of the products generated for each activity of the consultancy.

The consulting consortium hired to support this component was headed by the consulting firm RICARDO Energy and Environment and supported by the National University of San Martin. The activities under this component have already been completed and the contract finished in January 31, 2020.

This component included 5 interlinked activities and one complementary activity, which evolved as follows:

- Activity 0: Project inception. This activity included project kick off, methodology refinement and initial action plan assessment. This activity is already complete.
- Activity 1: Plan of carbon pricing for the climate change action plan of
  the transport sector. Included review of the mitigation measures in the
  transport sector, analysis and ranking of potential CPIs, and prefeasibility assessment. This activity suggested specific modifications to
  the carbon tax regime in combination with domestic offsetting in order
  both to support achievement of the Plan's objectives and stimulate
  priority mitigation measures. An impact assessment of the proposed
  mechanisms and policy recommendations on how to move forward were
  developed.
- Activity 2: Argentina's relevance in the CORSIA scheme. This activity included assessment of Argentina's participation in the CORSIA scheme, analysis of the potential supply and demand of emissions units, analysis of potential eligibility criteria and the development of technical inputs to the regulatory framework. The results of this activity outlined possible scenarios regarding the evolution of the international negotiations on CORSIA and Article 6 concluding Argentina is unlikely to choose to voluntarily join CORSIA as the offsetting requirements and related administrative procedures would be too high in reference to the relatively small size of the country's international aviation activity.
- Activity 3: Implications of the climate change framework adopted by IMO organization for Argentina's maritime sector. This activity included assessment of potential displacement of some markets that are important for Argentina due to the implementation of the IMO strategy and potential opportunities for Argentina. This activity concluded finding a significant cost increase in the main Argentine export products related to the adoption of the measures included in the initial IMO GHG strategy.

The analysis also identified some markets where Argentina would have a high potential to supply lower-price and less transport-intense products. Finally, it is important to highlight that the analysis supported the discussions related to Argentina's position on IMO international negotiations.

- Activity 4: Stakeholder engagement. This activity supported all tasks above through several stakeholder consultations and engagement of the Secretariat of Environment and Sustainable Development in order to gather the necessary data for completion of the activities. 3 workshops were held on March 27th and 28th 2019, July 23rd 2019 and October 16th 2019 with the aim to present and validate the results of the activities. Additionally, a final socialization meeting with the former Secretariat of Environment and Sustainable Development was held on October 16th 2019.
- Additional activity: a consultant was hired to update the mitigation measures of the Transport and Climate Change Action Plan, including the recommendations on CPI design suggested by the consulting consortium in activity number 1. This activity concluded in February 2020.

# **Emerging activities:**

There are emerging activities included in this component, which are aimed at overcoming key barriers to the implementation of a potential carbon pricing instrument in the transport sector. These barriers were highlighted in the preliminary results of activities 1, 2 and 3 and are related to the need for complementary mitigation policies, generation of data and information, and strengthening of institutional capacities. Emerging activities are detailed as follows:

1. Extension of the IMO's impact analysis to industrial products

Objective: implementation of the methodology to analyze the impact of the initial IMO strategy for reducing GHG emissions on industrial products.

Expected duration: 1 month

2. Estimation of vehicle fleets by type of vehicle and type of fuel used - Phase I

Objective: Develop the methodology for the estimation of vehicle fleets in Argentina.

Expected duration: 1 month

3. Estimation of vehicle fleets by type of vehicle and type of fuel used - Phase II

Objective: implementation of the methodology for estimating the size of the vehicle fleet by type of vehicle and type of fuel consumed.

Expected duration: 6 months

# 4. <u>Data collection for estimating electrification potential of BRT corridors</u>

Objective: Identification of electrification potential of BRT corridors in selected cities of the country.

Expected duration: 3 months

#### 5. Estimation of the modal change potential of selected transport policies

Objective: build a tool with a model for estimating modal change of a group of mitigation policies in the transport sector and its impact in terms of fuel consumption and GHG emissions.

Expected duration: 3 months

# 6. <u>Analysis of costs and national production capacity of electromobility for public transport</u>

Objective: Comparative analysis of the cost structure for the manufacture of electric public transport vehicles in Argentina and its value chain compared to selected countries and identification of local technological capacity, barriers to development and proposal of policies to reduce the costs of electric mobility in the country.

Expected duration: 3 months

#### Comments:

#### Activities are on track

The contract for the consulting consortium ended in January 31, 2020 with activities 1, 2, 3 and 4 complete.

The contract for the consultant in charge of the additional activity ended in February 2020.

The team is moving forward with TORs and procurement processes for emerging activities.

# B. Component 2: Renewable Energy Certificates (RECs) Component

#### Status:

# **Under implementation**

Argentina currently has a successful plan for promoting renewable energy. The RenovAr program is the main public procurement instrument to address the targets of the Renewable Energy Law 27.191 and the main objectives of the National Energy and Climate Change Action Plan. However, Argentina seeks to evaluate an additional instrument to promote renewable energy investments and the feasibility of a RECs scheme implementation nationally. That would focus new potential renewable energy projects not currently considered by RenovAr.

PMR support in this direction includes the pre-feasibility analysis and the instrument design.

An inception meeting was held in May 2019 to discuss the project methodology and delivery steps. Representatives from the PMR Task Team, Secretariat of Environment, Sustainable Development and Innovation and Secretariat of Energy attended the meeting. It shows the engagement among the several key relevant actors directly related with the subject. To date, the consultants have delivered 2 out of the 6 planned deliverables, which have been discussed with the Government. Regarding the stakeholder consultation process, this component has held 2 workshops on July 23th and October 17th with more than 20 representatives from different institutions of the national government to present preliminary results of the project and discuss the next steps to follow.

The consulting consortium hired to support this component is headed by the consulting firm RICARDO Energy and Environment and supported by the local consultant firm Buenos Aires Energy Solutions (BAES). The activities under this component are expected to be completed by May 2020.

This component includes 6 interlinked activities described as follows:

- Activity 0: Project inception. This activity included project kick off, methodology refinement and initial action plan assessment. This activity is already complete.
- Activity 1: Assessment of the most relevant international experience regarding the REC mechanism and identification of similarities and opportunities for Argentina. 9 countries/cities were selected for the analysis, considering political/sector background, characteristics of the REC schemes, barriers and the results. Based on the international experience, 36 potential designs for the REC scheme were outlined considering price containment, obligated subjects, among others. This activity has been completed in December 2019.
- Activity 2: Selection and analysis of scenarios for the REC scheme design in Argentina. This activity included modeling the 36 options identified in Activity 1. A model was built to simulate the implementation of a REC scheme in Argentina, varying design characteristics, obligated subjects and enabled technologies. Out of the 36 modelled options 4 were selected in order to move forward with the analysis corresponding to Activity 3. This activity was completed in February 2020.
- Activity 3: Analysis of barriers and interactions for the REC mechanism.
   This activity analyzes potential interactions of the REC scheme in Argentina with the electricity regulatory framework, current sector policies and other CPIs. The aim is to identify and understand the implementation barriers and enablers. This activity is estimated to be completed in late March 2020.

- Activity 4: Design proposal for the REC mechanism. This activity considers
  the findings of all previous activities and outlines the design of a REC
  mechanism in Argentina. This includes a list of advantages and
  disadvantages for each key parameter of the REC mechanism and the
  recommended approach for Argentina. This activity is estimated to be
  completed in mid-April 2020.
- Activity 5: Develop a plan for institutional, regulatory and capacity development. For this activity, an institutional framework proposal for the considered REC scheme will be designed, in addition to identifying required changes or new regulations to enable implementation and assessing the impact on the overall economy and particularly on endusers. This activity is under implementation and is estimated to be completed in May 2020.
- Activity 6: Recommendations and next steps. This activity includes communication of results and preparation of a roadmap for the continuity of the project. This activity is expected to be completed in May 2020.

Regarding the stakeholder consultation process, this component has held 2 workshops on July 23rd and October 17th 2019 with more than 20 representatives from different institutions of the national government to present preliminary results of the project and discuss the next steps to follow.

# **Emerging activities:**

There are emerging activities included in this component, which are aimed at overcoming key barriers to the implementation of the REC scheme. These barriers were highlighted in the preliminary results of activities 1, 2 and 3 and are related to the need for complementary mitigation policies, generation of data and information, and strengthening of institutional capacities. Emerging activities are detailed below:

1. <u>Comparative analysis of the composition of subsidies in 1 MWh electric power generator in Argentina</u>

Objective: analyze the subsidy burden in the generation of 1 MWh from renewable energy sources compared to that of thermal origin.

Expected duration: 2 months

2. <u>Value chain analysis of selected renewable energy generation technologies</u>

Objective: know in depth the value chains of bioenergy (biomass and biogas), solar (thermal and photovoltaic), small hydroelectric and wind (on-shore)



technologies seeking to identify strategic links with potential for local production.

Expected duration: 6 months

#### Comments:

#### Activities are on track

This component experienced some initial delays associated with the WB procurement process. In order to move forward, the government made the decision to change the scope of the component, dividing the pre-feasibility analysis and the pre-design phase. Activities are expected to be completed in time and quality.

The deliverables for this component have been technically discussed by the PMR Task Team and the Government in order to seek alignment with national policies. Due to the change of government, a series of meetings were held in order to restart the project and align the component with the priorities of the incoming administration. For this component, we will continue to work with the same political focal point designated by the Secretariat of Energy in the past years.

The team is moving forward with TORs and procurement processes for emerging activities.

# C. Component 3: Energy Efficiency Certificates (EECs) Component

#### Status:

# **Under implementation**

The reduction of carbon emissions through energy efficiency policies and measures shows great potential in Argentina. In this regard, Argentina is currently discussing its first Energy Efficiency bill that should improve the institutional framework for future energy efficiency policies. A potential EECs national scheme could make a substantial contribution to Argentina's NDC mitigation goals for the energy sector, as outlined in the National Energy and Climate Change Action Plan. Under the overarch of PMR project, the feasibility of implementation of such an instrument is being assessed.

The contract started in July 2019, then an inception meeting was held in August 2019 to discuss the project methodology and delivery steps. Representatives from the PMR Task Team, the Secretariat of Energy and representatives of the Climate Change Directorate, participated in the meeting. To date, the consultants have delivered 2 out of the 6 planned deliverables, which have been technically discussed with the Government. This component has held one workshop based on International Experience on October 10th with more than 20 representatives from different institutions of the national government to present preliminary results of the project and discuss next steps for the remaining activities. The

contract is expected to finish in August 2020. The activities have been developed in accordance with the established timetable.

The consulting consortium hired to support this component is headed by the consulting firm ECONOLER and supported by South Pole, Vivid Economics and local consultants. The activities under this component are expected to be completed by August 2020.

This component includes 6 interlinked activities described as follows:

- Activity 0: Project inception. This activity included project kick off, methodology refinement and initial action plan assessment. This activity is already complete.
- Activity 1: Assessment of the international experience in EEC schemes, identifying possible similarities and opportunities for Argentina. 7 countries/cities were selected for the analysis, considering the economic and sectoral background, the design characteristics of the schemes, implementation barriers and results, among others. The activity left important lessons learned regarding the common design and implementation considerations of the schemes. This activity has been completed in October 2019.
- Activity 2: Analysis of potential scenarios for an EEC scheme design in Argentina. This activity includes the analysis of 8 design variables with different obligated subjects, target sectors and regulated energy sources. A model on the LEAP software will be developed in order to assess the impact of the scenarios. Cost-effectiveness and cost-benefit assessment of energy efficiency actions which are highly relevant for the Argentine Government. Estimation of the potential voluntary demand. This activity is under implementation and estimated to end by April 2020.
- Activity 3: Analysis of the interaction of the potential EEC scheme with sectoral policies, other CPIs and map key relevant barriers to implementation. This activity includes the analysis of the interaction of the potential EEC scheme with current regulations and sector policies in Argentina, which may constitute barriers or enablers for design and implementation of the scheme. Furthermore, includes impact assessment of the implementation of the scheme in terms of production costs and household energy bills. This activity is estimated to be completed in May 2020.
- Activity 4: Design draft proposal for the EEC mechanism in Argentina.
   This activity considers the findings of all previous activities and outlines an implementation proposal for an EEC mechanism in Argentina. It will cover all the characteristics, such as the scope of the obligated subjects and the target sectors, definition of the institutional framework, general guidelines of the MRV system, methodology for calculating energy

savings, among others. This activity is estimated to be completed in June 2020.

- Activity 5: develop a plan for institutional, regulatory and capacity development. This activity consists of designing the necessary institutional and regulatory framework for the implementation of the scheme and identifying the key government entities that should be involved. An assessment of the administration/operational costs of the EEC scheme and the analysis of external sources of finance for implementation. This activity is estimated to be completed in July 2020.
- Activity 6: Recommendations and next steps. This activity includes communication of results and preparation of a roadmap for the continuity of the project. This activity is expected to be completed in August 2020.

Regarding the stakeholder consultation process, this component has held 1 workshop on October 16th 2019 with more than 20 representatives from different institutions of the national government to present preliminary results of the project and discuss the next steps to follow.

#### **Emerging activities:**

There are emerging activities included in this component, which are aimed at overcoming key barriers to the implementation of the EEC scheme. Similar to the REC scheme, these barriers are related to the need for complementary mitigation policies, generation of data and information, and strengthening of institutional capacities. Emerging activities are detailed below:

#### 1. Measurement and survey of energy use in urban households

Objective: Build a Model for energy consumption in urban households in Argentina from field data.

Expected duration: 6 months

# 2. Measurement and survey of energy use in industries

Objective: Identify the energy efficiency potential of critical equipment in

industries from field data.

Expected duration: 6 months

# 3. Gap analysis for implementing Energy Management Systems in SMEs

Objective: measure, report and verify energy savings generated by Energy

Management Systems.

Expected duration: 6 months

4. Training in Long Range Energy Alternatives Planning System (LEAP) tool

Objective: Train 30 people in the use of the "Long-range Energy Alternatives

Planning System" (LEAP) tool.

Expected duration: 1 month

5. Certified Energy Manager (CEM) training

Objective: Train 30 people in energy management.

Expected duration: 1 month

#### Comments:

#### Activities are on track

This component experienced some initial delays associated with WB procurement process. In order to move forward, the Government decided to change the scope of the component, leaving out of the consulting consortium contract those activities related to the design of an MRV and a pilot phase. Activities are expected to be completed in time and quality.

The deliverables for this component have been technically discussed by the PMR Task Team and the Government in order to seek alignment with national policies. Due to the change of government, a series of meetings were held in order to restart the project and align the component with the priorities of the incoming administration. Therefore, a new political focal point at the Secretariat of Energy was appointed.

The team is moving forward with TORs and procurement processes for emerging activities.

#### **D.** Component 4: Carbon Tax Component

#### Status:

#### **Under implementation**

The Argentina's carbon tax was implemented during the 2017 fiscal reform. The full rate of this tax was based on the local currency equivalent of US\$10/tCO2e on January 1, 2018 and changes quarterly with the consumer price index. The current rate is US\$6.24/tCO2e. This tax is the subject of an upstream policy analysis under the PMR project.

This component is currently under implementation but with delay, since the technical meetings held with the incoming government resulted in modification of the scope for some activities. Activities will be adhered to, but since the carbon tax modeling activity was given priority, the contract and related deliverables are nearing completion.

The ToRs for the remaining activities are under development, and have been discussed with representatives of the Ministry of Economy and the Ministry of

Environment and Sustainable Development. Activities are expected to be completed on time and quality.

This component includes 6 activities described as follows:

- Activity 1. Modelling the carbon tax's several effects
- Activity 2. Assessing the risks of stranded assets in fossil fuel energy production
- Activity 3. Comparing car tax policy and emissions trading scheme in the context of Argentina
- Activity 4. Comparing the cost and abatement potential of the different current mitigation policies and instruments
- Activity 5. Assessing the use of carbon taxes to replace current distortionary taxes
- Activity 6. Assessing options for expanding carbon tax coverage
- Activity 7. Developing an MRV process for ex-post assessment of impact of the carbon tax
- Activity 8. Assessing the need for border tax adjustments in the long term

The potential impact of Argentina's enacted carbon tax, as well as possible future extensions to that tax, considered in activities 1, 5, 6 and 7, have almost been completed. These envisaged:

- **Sub-activity 0:** Project inception. Project kick off, methodology definition and action plan assessment. This activity was completed in August 2019.
- **Sub-activity 1:** Adaptation of a computable general equilibrium (CGE) model. A CGE model for the Argentinean economy was calibrated and opened by sector (energy, transport, agriculture, industry, building, household, external sector) and by fuel (liquid fuels, coal, coke and natural gas). A Social Accounting Matrix (SAM) for Argentina was updated from 2015 to 2017. A dynamic baseline was defined for a 2030 horizon. This activity was completed in October 2019.
- Sub-activity 2: Carbon policy simulations. The modeling exercise considered the introduction of a new carbon tax under four possible tax rates: USD 10/tCO2e, USD 25/tCO2e, USD 50/tCO2e, USD 75/tCO2e. The analysis included an impact assessment of different options of revenue recycling: Reduction of labor income tax rates; Reduction of the Value Added Tax (VAT) on food and beverages; Higher transfers to low-income households; Combination of different revenue recycling options. This activity also entailed the development of an international competitiveness simulation analysis aimed at evaluating the impacts of

the introduction of a Border Adjustment Tax (BTA) mechanism in Argentina. This activity was completed in December 2019.

- Sub-activity 3: Analysis and results presentation. Preliminary results
  presentations were made in December 2019, analyzing and discussing
  with Government representatives different carbon policy scenarios
  (impacts of different carbon tax rates and revenue recycling options on
  energy prices, GDP, GHG emissions, investment, consumption,
  employment, competitiveness, exports, welfare and income
  distribution).
- Sub-activity 4: Facilitation of capacity building and knowledge exchange activities. This activity, entails workshops with technical teams at the Ministry of Economy, the Secretariat of Energy and Secretariat of Environment, Sustainable Development and Innovation in order to enhance understanding of key concepts, equations, features and functions of the CGE model, is estimated to be completed in May 2020.

Regarding the stakeholder consultation process, this component has held 2 socialization meetings with the Secretariat of Environment, Sustainable Development and Innovation, the Secretariat of Energy and the Ministry of Economy. These meetings were held on October 22nd and November 29th 2019 with the aim of presenting preliminary results of the project and discussing the next steps to follow.

#### **Emerging activities:**

There are emerging activities included in this component, which are aimed at overcoming key barriers to introducing modification to the carbon tax. These barriers were highlighted in the preliminary results of sub-activity 2 and is related to the need for complementary mitigation policies, generation of data and information, and strengthening of institutional capacities. Emerging activities are detailed below:

1. <u>Multicriteria assessment of sectoral climate change action plans' mitigation</u> measures to allow the implementation of the NDC

Objective: Update existing information and generate new information on the mitigation measures of the sectoral climate change action plans that allow the implementation of the Argentinian NDC in the Energy (Energy Efficiency -EE-and Renewable Energies - ER) and Transport sectors.

Expected duration: 6 months

2. 2050 projections for the Argentinian Long-Term Strategy (LTS)

Objective: provide inter-sectoral consistency to the 2050 projections of key economic sectors.

Expected duration: 6 months

# 3. Risk of stranded assets in the hydrocarbon sector

#### Objectives:

- Analyze the economic viability of allocating resources to build new infrastructure related to the production and transport of hydrocarbons facing a potential decline of hydrocarbons demand towards 2050 due to the global efforts to decarbonize the economy.
- Estimate the potential cost of electrification of energy demand and the required strengthening of power transmission lines.
- Analyze the impact in terms of: i) implications on existing contracts, ii) tax collection, iii) energy supply cost due to the disuse of existing infrastructure linked and possibly from the future to fossil fuel activities and the modification of concession periods.

Expected duration: 4 months

4. Decarbonization and energy subsidies: Towards a sustainable tariff reform

Objective: develop guidelines for a comprehensive and long-term reformulation of energy subsidies and tariff schemes, seeking coordination between the energy, macroeconomic and environmental dimensions.

Expected duration: 4 months

5. Federal fiscal impact of the energy transition

Objective: Assess the productive impact and the fiscal burden of a potential energy transition in Argentina from a federal perspective, taking into consideration the local productive chains related to hydrocarbon activities as well as income from royalties and taxes, which are key in some Argentine provinces.

Expected duration: 4 months

#### Comments:

#### Delayed

This component has experienced some delays due several recent institutional changes. The Ministry of Productive Development has absorbed the Secretariat of Energy. The PMR Task Team held engagement meetings with representatives from the Ministry of Treasury, now the Ministry of Economy, in order to designate new political focal points for the project. This new scenario has impacted the steady progress of the component as required a redesign of the remaining activities in order to be aligned with the new policy guidelines.



#### E. Cross-cutting

#### Status

# **Emerging activities:**

# 1. Communication and outreach

Objective: carry out the organization and realization of training events and/or workshops required under the project components, to be carried out in 2020.

Expected duration: 6 months

#### 2. Discussions on article 6

Objective: Carry out a participatory training and discussion on Article 6 of the

Paris Agreement.

Expected duration: 5 months

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

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

Developments: Some developments have been made regarding renewable energy policies and regulatory framework, concerning the MATER "Mercado a Término de Energías Renovables" (Corporate Purchase Agreement Legal Framework) and the renewable distributed generation, both relevant to the Grant's objectives. MATER has experienced some progress, 49 projects have been awarded dispatch priority by CAMMESA (Argentina's Wholesale Electric Market Management Company), that ensures access to the transmission grid and allows generators to sell renewable energy on a long-term basis to the Authorized Large Users. These projects account for a total amount of 1,164 MW of capacity. Additionally, to the MATER growth, there are also good expectations on the renewable energy distributed generation. On November 2018, the renewable distributed generation law was regulated complementing the original legal framework (Decree N° 986/2018 and Resolution N° 314/2018).

Another important milestone in the renewable energy sector is the new tender of renewable power that was launched in November 2018. It was named "RenovAr 3 - Mini Ren" and called for all stakeholders interested in submitting bids, for the purpose of tendering a total amount of 400 MW of installed renewable electricity capacity throughout the country. In addition, the Undersecretary of Renewable Energy and Energy Efficiency has announced recently that Argentina will hold the fourth round of tenders of the RenovAr auction program this year to procure additional renewable energy and grid capacity.

The Energy Efficiency sector has also experienced important developments as the Secretariat of Energy consolidated the Energy Efficiency draft Law, which was presented to Congress in November 2019. The bill lays out energy saving goals and sector obligations, including the mandate for energy and gas distributors to undertake energy efficiency actions. It also imposes the mandate to establish standards on white line products and the energy efficiency label for residential buildings. In this regard, the EEC scheme could be a way for obligated subjects of achieving these goals and obligations and would also



allow leveraging priority energy efficiency measures. Moreover, significant progress has been made in the development of the National Useful Energy Balance for the household sector. An energy model was included in the National Survey of Use in Housing (ENGHo) where 25,000 households were surveyed. This process was headed by the Secretariat of Energy supported by the National Statistics Institute (INDEC) from 2017 to 2018, who added the energy module into their regular household survey. Ultimately it is expected to obtain detailed information on energy consumption to support future policy development.

It is also worthwhile to mention on November 20th 2019 the Climate Change Law was approved by the Congress. The Law provides overall guidelines on climate change policy at a subnational level and consolidates de NCCC as the institutional scheme for coordination and decision-making regarding climate change policy. Meanwhile, Argentina is currently working towards presenting its Low Emissions Long-Term Strategy in 2020. This process has kicked off under the overarch of the NCCC and will allow Argentina to guide its climate action and short- and medium-term planning for the implementation of the NDC. A variety of policy instruments are under evaluation and CPIs would play an important role as key tool to achieve the goals.

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

There are some changes in the technical design related to the Grant's activities, which are detailed in section 3 (implementation report by component). These changes respond to preliminary results of the studies carried out in all the components, which highlighted numerous barriers to the effective CPI implementation as support of the climate change policy in Argentina, the need for complementary policies, generation of data and strengthen institutional capacities. Therefore, the incoming government has decided to step back and place the focus of the grant's activities to overcome these barriers such as data gathering, development of methodologies and analysis tools and institutional capacity building. The aforementioned is supported by budget reallocation among the MRP's components.

Finally, the government has defined new contracting modalities in line with three new strategic objectives that will guide the project:

- Support the implementation of the National Climate Change Policy and the climate policy processes undertaken by the National Directorate for Climate Change (LTS, NDC, among others)
- Strengthen the capacities and take advantage of the Argentine Scientific-Technological System
- Strengthen the capacities of the National Directorate for Climate Change and the NCCC

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

Challenges: The implementation of Argentina's MRP as a bank-executed grant has created some institutional challenges on the implementation arrangement. Several issues keep arising related to the understanding of specific roles between the government's key relevant areas and the WB.



Being a Bank Executed Project, the government's coordinating role has been dissolved, especially for activities carried out by individual consultants and which, like all MRP's activities, are key inputs to government decision-making.

Furthermore, procurement issues linked to the execution modality itself are challenging given the project's narrow overall timeline and the new government's guideline to carry out all activities through national consultants and public universities. Therefore, a high-level meeting was held between the WB and the Minister of the Environment and Sustainable Development to seek viable options to implement the new guidelines.

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

Within the alignment process of the MRP with the new government's priorities, peer learning activities with PMR member and non-member countries are considered. These activities include study tours, field missions, among others.

# Stakeholder engagement related to the Grant's activities:

The incoming government is currently redefining the role and operation mechanism of the NCCC. It is also rethinking the focus and objectives of climate policy instruments, such as sectoral plans for climate change. However, it is expected that the validation process with stakeholders for PMR activities will continue to be carried out through the new Cabinet. Additionally, all MRP activities will be associated with new cross-cutting activities in the way that result validation extends beyond the NCCC.

Developments: To date, socialization workshops and meetings have been held in all components. However, some stakeholder validation activities are delayed by the COVID-19 emergence. These activities are planned to be carried out in virtual mode. The activities carried out to date are presented below:

# Transport component

Under the Transport Component a stakeholder engagement activity supported the wider delivery of all activities. It was a key component of the project that facilitated information gathering, consultation and decision-making considering the views of key stakeholders. The following achievements took place under this cross-cutting activity:

- Inception meeting (January 23rd 2019): It was held between the project team and key relevant stakeholders from the former Secretariat of Environment and sustainable Development, Ministry of Transport, Ministry of Production, Secretariat of Energy, National Civil Aviation Administration, Ministry of Foreign Affairs and Worship in order to refine methodology and timetable and define steps to follow.
- 1st Workshop (March 27th and 28th 2019): In order to build capacity on the potential use of CPIs to achieve goals of greenhouse gas emission reduction in the transport sector, the

implications of Argentina's participation in the CORSIA scheme and its potential to provide offset units under this mechanism and the possible displacement of some international markets that are important for Argentina due to the implementation of mitigation measures under the IMO climate change strategy. The consultants presented basic concepts and the methodology approach to undertake the analysis, answered questions from the attendees and validated information sources and next steps. Finally, the workshops gave room for a very productive discussion on the feasibility of implementing a CPI for the sector in Argentina, barriers and opportunities for offsetting in Argentina making the corresponding connections with Article 6 and the NDC achievement and Argentina's shipping practices that could be potentially impacted by the IMO strategy.

- 2nd Workshop (July 23rd 2019): In order to present preliminary results on the potential CPI combination to promote uptake of mitigation actions in the transport sector, preliminary results of the analysis on the convenience or not for Argentina to participate voluntarily in CORSIA and the potential cost increase for Argentina's main export products due to the implementation of mitigation measures under the IMO climate change strategy. The discussion revolved around the impact of offset supply to CORSIA on the performance of Argentina's NDC and the need to extend the IMO's impact analysis to Argentine industrial products.
- 3rd Workshop (October 16th 2019): With the aim of presenting and validating activities' final results. The consultants presented the main barriers to CPI implementation in the transport sector and the proposed CPI combination to promote uptake of mitigation actions, results on the impact assessment of Argentina's voluntary adhesion to CORSIA and the potential markets where Argentina could position itself due to the global implementation of the IMO GHG strategy. The answered questions from the participants and validated information sources and next steps. Finally, the workshops gave room for a very productive discussion on potential CPI interactions, barriers and opportunities for offsetting in Argentina making the corresponding connections with Article 6 and the NDC achievement and potential carbon price range in the medium and long term.
- Socialization meeting (October 16th 2019): The aim was to validate the results of the analysis
  carried out for the three activities with all team members of the National Climate Change
  Directorate.
- Interview process with stakeholders: Following the first workshop and in coordination with
  the Ministry of Transport, a wide list of stakeholders' interviews was consolidated, and the
  consultation process based on the interviews was successfully completed. The interviews
  allowed the consultants to gather relevant information required for the completion for the
  activities.

#### REC component

Under the REC Component the stakeholder engagement component was included in all the activities in order to permanently support result validation, information gathering and decision-making. The following achievements took place under this cross-cutting activity:

• **Inception meeting:** It was held between the project team and key stakeholders from the Secretariat of Energy and the Climate Change Directorate in order to refine methodology and timetable and define steps to follow.

- 1st workshop (July 23rd 2019): In order to build capacity on international experience on REC scheme implementation. Representatives from the Secretariat of Energy, the Secretariat of Environment, Sustainable Development and Innovation and the Wholesale Market Management Company (CAMMESA) attended the workshop. The consultants presented basic concepts on REC schemes, the main design elements in the analyzed countries and the advantages and disadvantages of each of them. The consultants developed a group discussion activity on the possible obligated subjects for a potential REC scheme in Argentina.
- 2nd workshop (October 27th 2019): The objective of the workshop was to present the preliminary results of the Argentine energy market model and to generate capacities on the modeling of the main design elements of a REC scheme. Representatives of the Secretariat of Energy, the Secretariat of Environment, Sustainable Development and Innovation and CAMMESA attended the workshop. The discussion revolved around the potential impact of different design elements in terms of cost to generators and cost to the end user. The consultants carried out a live voting activity to select, together with the attendees, scenarios with different design elements to move forward with the analysis.
- Follow-up meetings: In order to permanently facilitate information exchange, align the analysis
  with national policies and support decision-making, the PMR Task Team and the government
  decided to hold biweekly meetings with the consulting team. These meetings are considered as
  a good practice that facilitates the validation of the results and speeds up the approval of the
  consultant's deliverables.

# • EEC component

Under the EEC Component the stakeholder engagement component was included in all the activities in order to permanently support result validation, information gathering and decision-making. The following achievements took place under this cross-cutting activity:

- **Inception meeting:** It was held between the project team and key stakeholders from the Secretariat of Energy and the Climate Change Directorate in order to refine methodology and timetable and define steps to follow.
- 1st workshop (October 16th 2019): In order to build capacity on international experience on EEC scheme implementation. Representatives from the Secretariat of Energy, the Secretariat of Environment, Sustainable Development and Innovation and CAMMESA attended the workshop. The consultants presented basic concepts on ECC schemes, the main design elements in the analyzed countries and the advantages and disadvantages of each of them. The consultants implemented a live-voting activity to identify the potential obligated subjects and sector for an EEC scheme in Argentina.
- Follow-up meetings: In order to permanently facilitate information exchange, align the analysis
  with national policies and support decision-making, the PMR Task Team and the government
  decided to hold biweekly meetings with the consulting team. These meetings are considered as
  a good practice that facilitates the validation of the results and speeds up the approval of the
  consultant's deliverables.

Other issues related to the Grant's activities



Being a bank-executed grant, several issues related to the understanding of coordination roles between the government's key relevant areas and the WB have arisen. A procedural manual, signed between both parties (Government and Delivery Partner) to clarify some operational procedures and standards, would have been helpful to avoid procurement issues which the project went through.

A proactive role of the WB local partners would be fruitful in building a joint vision for the project, facilitating implementation aspects and drawing on the expertise of sector specialists within the WB on specific aspects related to CPIs and climate policy instruments.

#### 5. ADDITIONAL INFORMATION

Along with the change of government, the political focal point within the Secretariat of Environment, Sustainable Development and Innovation was also modified. Additionally, there was a change in the project's technical focal point as the professional in charge of this role requested the termination of her contract. These changes were notified to the PMR Secretariat via email on February 21st 2020. Regarding the quarantine status related to COVID-19, various impacts associated with the execution of the activities of some contracts are anticipated. Some of these may be mitigated and others may not:

- i) <u>Limitations to travel or hold meetings:</u> since the consultations for the EEC and REC schemes started, follow-up meetings have been held online with the consulting team using the WB's Webex system. The socialization workshops with stakeholders that were considered within the work plan will be carried out in this same modality, adjusting the methodology
- ii) <u>Delay of activities that require consultation with stakeholders:</u> some of the new activities require information gathering that will only be achieved through face-to-face meetings with key actors in the public or private sector. However, the schedule of activities is intended to start once the quarantine status is lifted.
- iii) <u>Contracts that require information gathering in the field:</u> greater delays are anticipated due to the staggered removal of the quarantine, due to the difficulties of making trips and the closure of companies. To date it is not clear that the full execution of activities would require an extension of the contract beyond December 2020.