

Status of Chile's Market Readiness Proposal



Gobierno
de Chile

Informal Presentation
3rd Meeting of the PA,
Cologne, 28-29 May 2012
Juan Pedro Searle



- Overview of bidding process**
- MRP tool and Preparation Phase activities**
- Preparation Phase Activities**
- Implementation Phase**



Activities since last PMR Assembly (extraordinary) Meeting



Activity	2012											
	March				April				May			
Bidding process												
Evaluation of proposals												
Selection of consultants												
Conference calls with consultants												
Contracts processing												
1st PMR Steering Committee (May 11)												
Technical visits to ETS in operation (NZ, EU, Belgium, The Netherlands)												



Chile's Preparation Phase Proposal



Objective

1. Preparation of MRP
2. Presentation of draft MRP to PA (Oct 2012)

Duration

6 months

Components

MRV Elements

ETS elements

Scaled-up crediting

National situation

Central coordination

Technical visits





Correlation between MRP Tool and Chile's preparation of its Market Readiness Proposal



Building Block 1 – The Big picture: Policy Context



- *Climate change mitigation & low emission development policy objectives.*
- *Assessment of historic and projected emissions trends, and key drivers of GHG emissions. Key assumptions underpinning projections & modeling exercises should be highlighted.*
- *Any other circumstances, including political context relevant for country's GHG emissions trajectory & its climate change and development policies.*
- *Country's pledged mitigation actions & its plan implementation.*
- *Plan for using new market instrument(s) to achieve mitigation objectives*

Project 1:

Study on MRV, Compliance and Registry

Project 2:

Study and design proposal of an ETS

Project 3:

Study on market instruments:
Scaled-up crediting and Carbon pricing stabilization mechanisms

Project 4:

Study on the National situation



Building Block 2 – Target Area: Assessment and Rationale for Focus on Sector(s)/Sub-sector(s)/Program(s)/Region(s)

• *Rationale for focusing on the selected Target Area: taking stock of Target Area*

• *Policy context, analysis, role & implications of using market instruments to achieve the mitigation goal as:*

- *Outline of key policy context & considerations in Target Area (e.g., domestic climate policy, energy policy, social and economic policies etc.), as well as political considerations*
- *Explanation of obstacles to implementation of existing planned policies and measures that may be relevant, and consideration of a market instrument;*
- *Assessment of role of an economic instrument, i.e., responsiveness to price signals;*
- *For a given Target Area, assessment of general market readiness and familiarity with market-based approaches.*

• *Role of market instrument(s) and interaction with other policy instruments*

Project 2:

Study and design proposal of an ETS

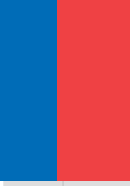
Project 3:

Study on market instruments: Scaled-up crediting and Carbon pricing stabilization mechanisms

Project 4:

Study on the National situation

Building Block 3 – Core Technical and Institutional/Regulatory Market Readiness Components



(this building block aims to assist countries in their assessment of technical, institutional and regulatory readiness for market instruments and in so doing identify capacity gaps and options to mitigate or overcome those gaps)

- Data*
- Target/Goal setting for market instruments*
- MRV system for market instruments*
- Registry/tracking tool
- Regulatory and institutional Framework*

** Implementing Countries may opt to elaborate (all or part of) these aspects under Building Block 4, as appropriate (no need for duplication)*

Project 1:

Study on MRV, Compliance and Registry

Project 2:

Study and design proposal of an ETS

Project 3:

Study on market instruments: Scaled-up crediting and Carbon pricing stabilization mechanisms



Building Block 4 – Module 4(a): Scaled-up crediting mechanism



- *Technical and policy components, including
 - General description of instrument and participation
 - Scope, coverage and boundary – determination of Target Area to be covered by instrument;
 - Defining crediting baseline; and
 - Monitoring, Reporting and Verification*
- *Estimate of emissions and potential emission reductions*
- *Preliminary plan for achieving emissions reductions including investment plan*
- *Regulatory and institutional framework*
- *Schedule for implementation*

Project 1:

Study on MRV, Compliance and Registry

Project 3:

Study on market instruments: Scaled-up crediting and Carbon pricing stabilization mechanisms

Project 4:

Study on the National situation





- *Scope and coverage*
- *Cap-setting*
- *Allocation of allowances*
- *System for domestic MRV and compliance*
- *Enabling trading and fostering stability*
- *Institutional arrangements*
- *Technical and legal infrastructure*
- *Use of offsets and linking*
- *Schedule for implementation*

Project 1:

Study on MRV, Compliance and Registry

Project 2:

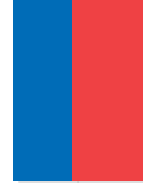
Study and design proposal of an ETS

Project 4:

Study on the National situation



Building Block 5 – Organization, communication, consultation and engagement



- Key government ministries and/or agencies in development and implementation of MRP.
- Mechanism for coordination and decision-making process;
- Training & capacity building requirements;
- Key sub-national governments and/or agencies (municipality authorities) that may be important for the consideration and/or implementation of market instrument (including market readiness component)
- Key private sector entities and/or associations
- Key civil society representatives (e.g., environmental organizations)
- Communications needs & training needs to facilitate awareness-raising and support consultations
- Consultation plans

Steering Committee

Agriculture, Energy, Economy, Environment, Finance, Mining and Transportation

Interministerial Committee on Sustainability

Environment, Energy, Agriculture, Finance, Foreign Relations and President's Secretary

Project 2:

Study and design proposal of an ETS





- Schedule (timeline)*
- Budget summarizing financial requirements to support set of activities*
- Requested donor contributions to cover financial requirements (highlight your request from the PMR)*
 - Identify priorities for PMR funding*
- Identification of other related activities and associated financial support (i.e., from sources other than the PMR, including own resources)*

Project 1:

Study on MRV, Compliance and Registry

Project 2:

Study and design proposal of an ETS

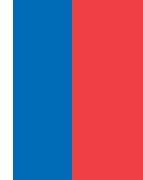
Project 3:

Study on market instruments:
Scaled-up crediting and
Carbon pricing stabilization mechanisms



Chile's MRP preparation phase studies

Project 1: MRV, Compliance and Registry



Specific Objectives



- Present a proposal for an MRV system in Chile
- Provide information of existing compliance systems for the proposed MRV,
- Describe and propose best alternatives for a central registry to be implemented in Chile
- Provide a description of the elements for the needed regulatory framework
- Define the basic requirements for the establishment of a local governance body

Budget

US\$ 70,000

Consultant

INFRAS + Deuman + Perspectives



Outline of Project 1: MRV in Chile



Technical, methodological aspects of MRV (T1)	Regulatory aspects of MRV & compliance (T2&T4)	Institutional aspects of MRV (T5)	Registry and tracking tool (T3)
1. Describe existing systems and resources in Chile			
2. Describe international best practice			
3. Formulate options and proposal for MRV in Chile			
4. Gap analysis: Identify requirements for MRV in Chile			



Project 2: Design proposal of an ETS

Specific Objectives



- Propose a detailed roadmap, including its design elements, to inform decision-making for an advanced model of an ETS in Chile, including:
 - Setting the point for regulated sectors
 - Emissions trading phases
 - Allocation of allowances
 - Linking and offsets

Budget

US\$ 100,000

Consultant

Motu + AEA Technology Plc as + CCG UC + EDF + Grasty Quintana Majlis + Nicholas Institute (Duke)

Project 2 (ETS) Output: Detailed roadmap to inform decision-making

Task 1:

Setting the point for regulated sectors

- Possible eligibility criteria for selecting regulated sectors
- Work on point of obligation → regulated sectors

Task 2:

Emissions trading phases and setting the cap

- Elaborate emissions trading phases
- Setting potential levels of emission reductions

Task 3:

Allocation of allowances

- Selecting the rationales and modalities for different options for allocation (both free allocation and auctioning)

Task 4:

Linking and offsets

- Linking to other ETS
- Linking through offsets mechanisms (domestic/international)

Task 5:

Identification of research needs

- Projected emissions and mitigation cost curves for regulated sectors in Chile; Scenarios for projected unit supply, demand and prices in the international carbon market; others.

Task 6:

ETS process considerations (insights and lessons from others)

- Identifying meetings with regulators and implementing agencies in countries with an ETS, and in countries considering an ETS
- Providing considerations for the government's process in designing an ETS



1. Draw from previous work without limiting the study's scope
 - Chilean work on ETS
 - Chilean experience with market-based approaches
 - Experience from ETS (and similar market-based approaches) elsewhere
 - Theoretical and conceptual work on ETS
2. Identify a range of options, key criteria and considerations for each core component in the context of Chile's national circumstances
3. Prepare an integrated decision making framework on the four core components for government policy makers
4. Liaise with contacts for other Activities and the PMR Secretariat



Project 3: Scaled-up crediting and Carbon pricing stabilization mechanisms

Specific Objectives



- Propose a model for a scaled-up crediting instrument to be implemented as a complementary instrument of the ETS, or as a “stand alone” model, highlighting sectors that could potentially be covered in both cases.
- Research the best alternatives and write a list of carbon pricing stabilization mechanisms that can be potentially implemented in Chile.

Budget

US\$ 50,000

Consultant

Climate Focus + Antuko Energy

Project 3: Scaled-up crediting



1. Present and assess options for mechanism's key elements, including:
 - a) Formulation of an incentive scheme
 - b) Identification of relevant actors and institutions
 - c) Technical infrastructure (MRV, baselines, accounting etc.)
2. Assessing options for linking with domestic and international emission trading systems
3. Suggesting a way forward, including:
 - a) Recommendations on design of mechanism, including most suitable options for all key elements presented
 - b) Linking recommendations
 - c) Providing selection criteria for selecting sectors for inclusion



Project 3: Price stabilization mechanisms



1. Review of potential price stabilization mechanisms within an ETS (banking and borrowing, offsets, set aside, price ceiling, price floor)
2. Analysis of investment incentives to complement ETS and/or crediting instrument (feed-in-tariffs, RE certificates, EE portfolio standards, performance standards for appliances...)
 - a) Presenting options; describing functions and key elements; outlining strengths and weaknesses
 - b) Assessing suitability of each in Chilean context and options for complementarity with potential ETS/crediting instrument (including ways to avoid double counting)
 - c) Development of performance indicators



Project 4: National Situation



Specific Objectives



- Based on previous studies, provide a general economic profile of the country along with growth projections and a special focus on the energy sector.
- Based on existing information, provide a GHG emissions profile of the country, along with growth projections, including primary sources, estimation of the reductions and a cost-benefit analysis.
- Identify key assumptions and drivers underpinning sector projections and cost assessments in order to get a better appreciation of the National Situation and outlook for different sectors.

Budget

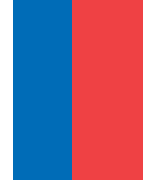
US\$ 50,000

Consultant

PwC Chile



Project 4 (National situation): Activities



Phase I: Country Profile

Phase II:

Cost Benefit Analysis

Energy & Economy

- Historical economic profile.
- Short, medium & long term economic growth projections.
- Energy sector profile and projection (supply & demand).

Greenhouse gas emissions profile

- GHG emission growth projections
- Emission reduction potential by economic sector

Cost Benefit Analysis

- BAU Scenario
- ETS implementation Scenario
- Cost Benefit analysis of achieving GHG emission reduction potential through ETS implementation.
- Estimate costs and benefits of transitioning from BAU to ETS Scenario.
- Compare costs and benefits of ETS Scenario to Alternative policy options (i.e. non-market regulation, carbon tax etc.)
- Structural impact of reducing GHG emissions
- Other benefits of GHG reduction (local, avoid trade barriers etc.)
- Identify key assumptions and drivers in projections and cost assessments.



Project 5: Central Coordination



Specific Objectives



- Provide assistance in the coordination of the four studies
- Report regularly to the PMR Focal Point and incorporate the feedback from the Country and the World Bank task teams, as well as the PMR expert group and Participants.
- Gather the resulting information and contribute to drafting of the MRP

Budget

US\$ 60,000

Consultant

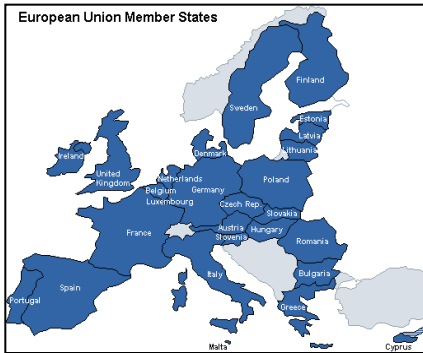
Cambio Climático y Desarrollo



Project 6: Technical visits



Specific Objectives



- Visits to implementing agencies in countries with working Emissions Trading Systems or that are currently working in their development.
- Explore potential linking options

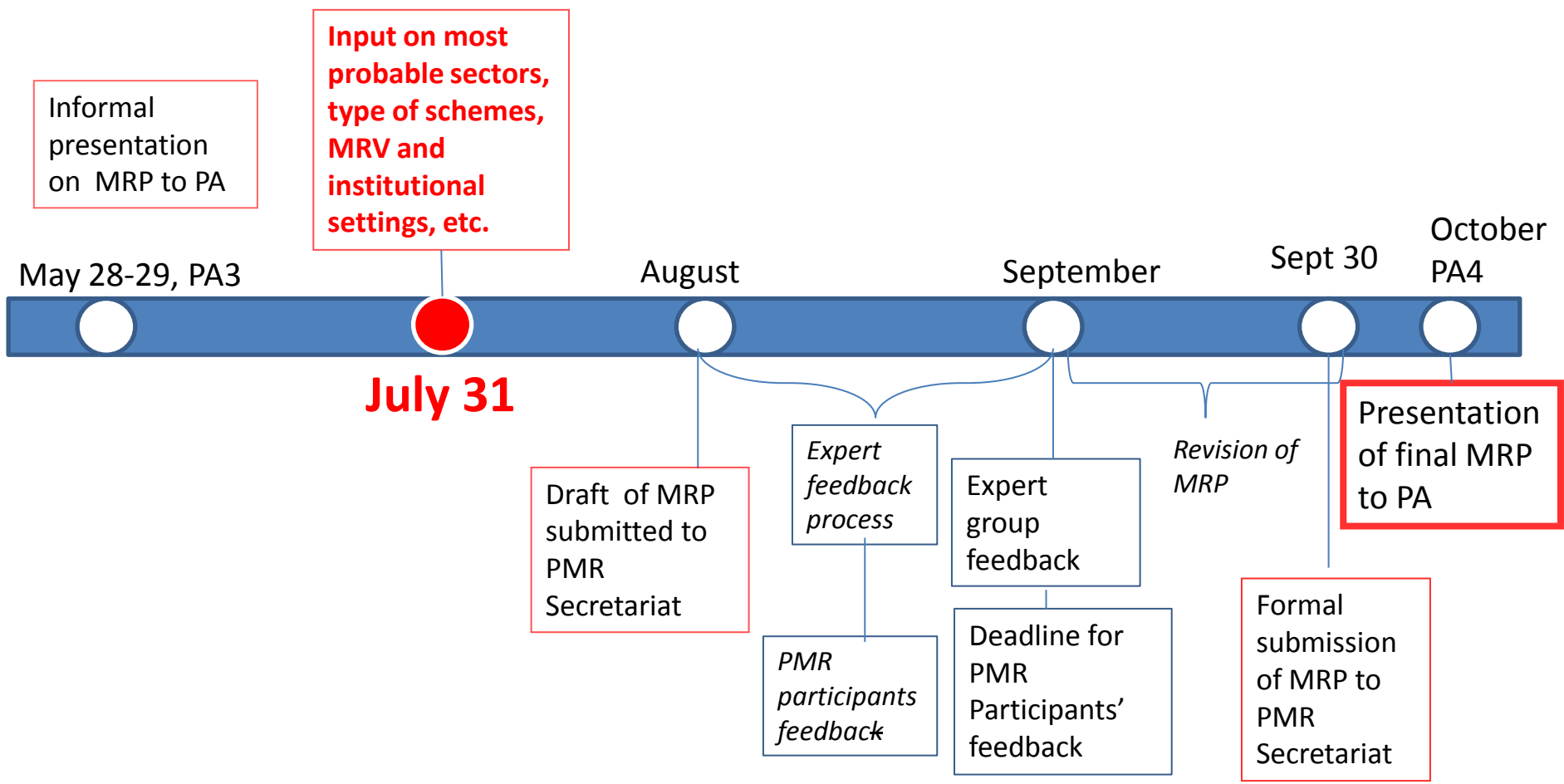
Budget

US\$ 20,000





Tentative Timeline and Inputs to Chile’s MRP preparation phase



Preparation Phase Main End products/deliverables:



MRV Elements

- **Basic requirements for an MRV system (with elements of a compliance scheme).**
- **An MRV pilot system (in a format to be included in the MRP).**
- **A central registry proposal**
- **A local governance body proposal**

ETS elements

- **A proposal for an ETS in Chile (indicators for regulated sectors, entry phases with suggested periods, an appropriate system to allocate allowances and a plan for linking and offset options).**

Scaled-up crediting

- **A scaled-up crediting instrument proposal (with all the basic elements).**
- **Complementary instruments that can be potentially implemented in Chile (how they fit and link to ETS and/or scaled-up crediting)**

National situation

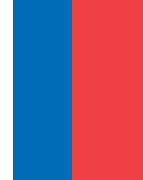
- **A report on: Chile's historical economic profile; short, medium and long term economic growth projections; and a profile of the energy sector along with supply and demand projections.**
- **A report on: primary sources of GHG emissions, an estimate of the reductions and a cost-benefit analysis.**
- **Country's situation and environment and a reference to the possible green growth routes the country might be discussing.**

Central coordination

- **Input for Draft Market Readiness Proposal**

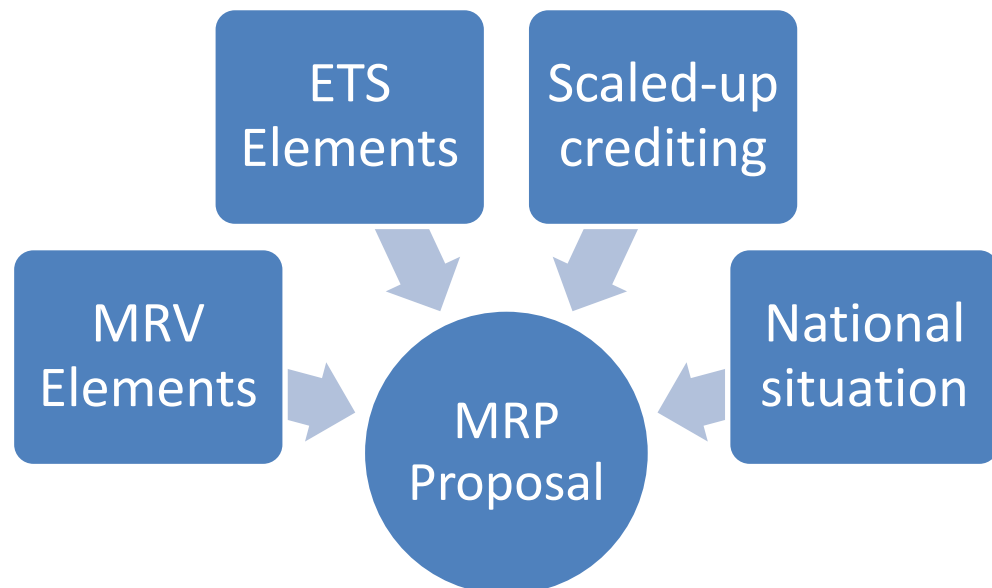


Implementation Phase



PMR

Implementation phase diagram



PMR Implementation (funding allocation)

ETS Pilot Design



Stand alone tools:

- MRV
- Registry
- Technical capacities
- RE + EE programs

Additional funding

ETS Pilot (sector or region)

Government technical & political analysis

ETS at National scale

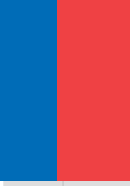
Thanks for your attention!



- MRV in the context of the Chilean ETS and crediting instruments (market mechanisms) means **Monitoring, Reporting and Verification of Greenhouse Gas** emissions and/or emission reductions.
- Monitoring for market based mechanisms is usually done on installation/project level.
- MRV forms the basis for issuing credits and is a key part of the value chain in the creation of this commodity.
- Weak MRV undermines the credibility of the system and therefore the value of credits



MRV REGULATORY AND INSTITUTIONAL SETTING



- Project 1 develops options for regulatory and institutional setting for MRV in the context of the proposed ETS and crediting schemes. In practice, the regulatory and institutional setting for MRV is part of the regulatory and institutional setting of the underlying ETS and crediting schemes (see e.g. EU-ETS or CDM).
- However, the TOR of Project 2 (ETS) and 3 (crediting mechanisms) do not include the analysis and design of the related regulatory and institutional framework.

Two options may be considered:

- a) The Chilean government provides at the start of the project an outline of the potential regulatory and institutional framework for the ETS and crediting mechanisms. Project 1 will build on this for the design of the MRV setting.
- b) No further information is provided. Project 1 will identify institutional and regulatory needs for MRV on a general level and provide preliminary recommendations.

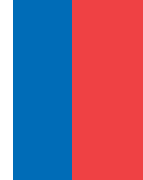


Inputs required from other activities (ETS & crediting mechanism design and national context)



- Project 1 develops a proposal for an MRV system, including a "central registry".
- In practice, the technological and methodological approaches for MRV depend heavily on the selected sectors (e.g. stationary emission sources vs. transport) and on the schemes and standards considered.
- In addition, the characteristics of the registry depend on the characteristics of the schemes (e.g. units are usually not fungible and many offsetting standards have their own centralized registries (e.g. CDM registry, GS etc.)
- Direction of MRV and registry work highly dependent – and needs to be based - on work on (i) ETS design; (ii) crediting mechanism and carbon price stabilisation mechanism; and (iii) Chile's national situation





LIMITATIONS TO DEPTH OF MRV ANALYSIS IN PREPARATION PHASE

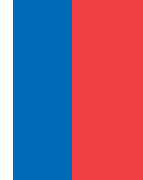
Strive to provide the necessary information in the MRP to be able to build up a robust MRV system once the scope and characteristics of the ETS and crediting mechanism are defined on a level of detail that allows for a thorough analysis of the related MRV options.

CHALLENGES TO BUILD MRV WITH LIMITED INFORMATION ON ETS AND CREDITING MECHANISMS

Strive to provide the necessary information in the MRP to be able to quickly build up an MRV system once the outline of the scope and design of the ETS and crediting mechanism is emerging.



Project 2 (ETS) Strategic considerations



1. A successful ETS in Chile must be aligned with Chile's national circumstances, including its economic, environmental and social objectives, and integrated with a wider suite of existing and proposed domestic climate change, energy and land-use policy initiatives.
2. While will draw on experience in proposed and existing ETSs, there is no active ETS in a developing country and no national-scale proposal at an advanced stage in Latin America.
3. Open minded and creativity needed in how to tailor an ETS to the specific conditions; need to reassess each task from first principles; aim to maximise learning.
4. There are interdependencies between ETS design features that need to be managed carefully to ensure the development of a cohesive and effective policy framework that meets the government's needs.
5. An effective government policy-making process will be vital to a successful ETS in Chile, and the study will identify key process considerations based on lessons learned in Chile and elsewhere.



Project 3 (scaled-up and price stabilization)



Divided into two components:

1. Developing key elements for a scaled-up crediting mechanism

 Feeds into Module 4a of MRP

2. Developing carbon price stabilization mechanisms

 Contributes to Module 4b and overall viability and success of MRP, while supporting Chile's overall GHG reduction strategy



Project 3: Relevance of Component 1 (Scaled-up)



1. Feeds into several components of Module 4a, in particular - Will take into account questions, issues and required information outlined in MRP Tool in order to maximise contribution
2. Serves as basis for MRP decisions – Provides background, case studies, options and recommendations while leaving flexibility for decisions to factor in political choices
3. Provides options that can be applied both with and independently of a domestic ETS



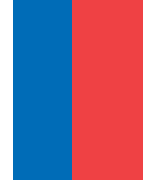
Project 3: Relevance of Component 2 (price stabilization)



1. This component contributes to overall viability and success of MRP through:
 - a) ETS price stabilization mechanisms foster stability and increase effectiveness of proposed ETS
 - b) Options to avoid double counting ensure integrity of market mechanisms
 - c) Institutionalizes GHG mitigation in Chilean economy, facilitating viability and acceptance of market mechanisms
2. Also contributes to Chile's overall GHG mitigation targets through facilitating stable, long-term incentives not dependent on carbon market



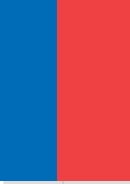
Project 3: examples of price stabilisation mechanisms



Mechanism	Function
Banking and borrowing	Banking allows entities to carry over unused allowances from one crediting period to another; whilst borrowing enables the use of allowances from future periods for current compliance.
Offsets	Making offsets available from sectors not covered in the domestic ETS allows participating entities to avoid excessively high costs of compliance under a cap-and-trade scheme. A limit can be set on the percentage of offsets to be used for compliance
Set aside	Allows regulating entities to set aside emissions allocations from one period to the next, helping to mitigate against an oversupply of carbon credits and their resulting low cost. Set aside emissions can be released (through auction) into the market; in addition regulating entities can also buy allowances from the market and put them into the set aside pool.
Price ceiling	Defines an upper limit for the price of emissions allowances to prevent an excessive costs being forced on regulated entities.
Price floor	Defines a minimum limit for the price of emissions allowances to provide certainty to investors employing abatement technology in a predefined upper and lower limit, enabling a more flexible response and reduced price uncertainty.



Project 3: examples of stable investment incentives



Sector	Investment Incentive
Energy	<ul style="list-style-type: none">– Feed-in-tariffs– Renewable portfolio standards e.g (Renewables Obligation Certificates/Renewable Energy Certificates)– Green credit lines– Government guarantees for technology development
Energy Efficiency	<ul style="list-style-type: none">– Energy efficiency portfolio standards (e.g. White certificates)– Performance standards for appliances
Industry	<ul style="list-style-type: none">– Industry intensity targets
Transport	<ul style="list-style-type: none">– Subsidies for efficient vehicles– Fuel tax
Buildings	<ul style="list-style-type: none">– Building codes– Green mortgages
Waste	<ul style="list-style-type: none">– Government guarantees for technology development/purchase of energy generated from methane
Land-use	<ul style="list-style-type: none">– A/R subsidies (renewal of subsidies formulated under the Forestry Promotion Law of 1974)– Participation in REDD+

