



Chile

Chilean MRV framework for mitigation actions

Good practice summary

[Results/insights]

Chile developed a framework which ensures MRV approaches for individual mitigation actions are developed using a uniform process based on the WRI Policy and Action Standard, using common sectoral assumptions to provide comparability with existing projections, are aligned with data and emission factors in the national GHG inventory where feasible, avoid double counting and are reported using standardized reports on implementation and impacts. The reported data provides quality information for political decision-making and reporting on implementation of mitigation action at the national level as well as input for the Biennial Update Report (BUR) compilation. The process is supported by guidance for all steps and reporting templates.

Chile is currently applying the MRV framework to Nationally Appropriate Mitigation Actions (NAMAs). It can, however, be applied to any kind of mitigation action.

Scope covered**Functions**

Measuring Reporting Verification Accounting

Administrative scope

National Regional City-level Policy/programme/project Corporate/Facility-level

Legal basis

[policies, regulations and commitments that the case study has to comply with]

At the national level, there is currently no regulation the MRV framework relates to. The MRV framework is motivated by Chile's pledge to the Copenhagen Accord¹: Pledging to reduce Business-As-Usual emissions by 20% in 2020 using nationally appropriate mitigation actions. Internationally, Chile is required to biennially provide information on mitigation actions and their progress as stipulated by the UNFCCC guidelines for Biennial Update Reports in UNFCCC decision 2/CP.17.²

Operational since

2015

How is this related to accounting?

[The following is based solely on the consultant's opinion]

» What kind of measures, policies, or commitments are a) monitored and included in an accounting system, b) only monitored, but not included in an accounting system, or c) not even monitored?

Chile does at present not have an accounting system, but is developing a carbon budget's approach, breaking down its 2020 and 2030 GHG reduction targets into intermediate targets. An accounting approach specifying which information is compared to these targets remains to be developed. Generally, the national GHG inventory is considered as the key source of information for accounting. As Chile's 2030 target, specified in its INDC, is GDP-specific, GDP data would have to be considered as well.

¹http://unfccc.int/files/meetings/cop_15/copenhagen_accord/application/pdf/chilecphaccord_app2.pdf

²unfccc.int/resource/docs/2011/cop17/eng/09a01.pdf

The data provided by the MRV framework (currently covering NAMAs in all sectors, but not domestic climate policies) will likely not be used directly for accounting, but will provide valuable insight into trends perceived in the development national GHG emission levels, allowing to understand whether further mitigation action is required or whether the existing mitigation actions need to be adjusted to ensure the achievement of targets. This could for example be done by considering the development of GHG emissions in a sector or subsector over time, comparing it with the emission reductions calculated for the mitigation actions in this sector and assessing other key drivers of emissions to understand the impact the mitigation actions have had on the emission development.

Furthermore, the data from the MRV framework might help improving data quality in the GHG inventory, e.g. by allowing to develop country-specific emission factors, thus providing more accurate data for the accounting process.

Case description

Background

» What was the need, pre-conditions, and/or experiences that motivated the country to develop this system?

Under the Copenhagen Accord Chile pledged a voluntary mitigation contribution of 20% deviation from its „Business as Usual“ emissions trajectory by 2020 using nationally appropriate mitigation actions. The country was among the first to develop NAMAs and submitted five NAMAs to the UNFCCC registry by 2014. These focused on renewable energy, waste, clean production, transport and forestry³. MRV systems were developed for each NAMA individually. Chile decided, that a standardized approach to NAMA MRV was required in order to facilitate tracking progress and steering towards the 2020 target as well as transparently reporting on the success of the NAMAs, including for international reporting.

Under its INDC Chile has set a GDP specific target for 2030. While this target was agreed after the NAMA MRV Framework had been developed, the framework will of course facilitate a standardised approach to tracking progress and steering towards this target as well.

General description of the system

[Questions below should be answered only when applicable]

» General definition/description of the system

» What are the main types of action that mitigate GHG emissions?

» What linkages to other systems/ system elements of environmental information (including adaptation to climate change or emissions trading schemes) do exist and why were they established? What linkages exist to other statistical/ monitoring systems?

» Which platforms are used to transport information and are they specific to the purpose of usage MRV information?

The MRV framework is a set of processes ensuring that MRV approaches for NAMAs in Chile are developed in a comparable and transparent manner and NAMA impacts are reported annually in a consistent format. The monitoring relies on indicators related to implementation⁴ and GHG as well as (if applicable) non-GHG impacts. The approach does not describe standard indicators, except for GHG emission reductions achieved by the NAMA. Indicators are derived for each NAMA individually in a standardised manner through a step-by-step process, which aims to ensure that indicators are selected to represent the most relevant impacts of a mitigation action – including potentially undesired impacts. The framework does not prescribe specific GHG calculation methodologies. Reporting is standardised through templates.

The set of processes for the MRV Framework is laid down in a guidance document⁵ which sets out each single process step, the responsible

³See <http://www4.unfccc.int/sites/nama/SitePages/Country.aspx?CountryId=35>

⁴While the approach does not prescribe any type of implementation related indicators, such indicators could relate to technical feasibility studies having been performed, funding having been agreed/received, technical facilities (if applicable) having been built / taken into operation, etc.

⁵See <http://operaciones.pnud.cl/Adquisiciones/2015/285-2015/ANEXO%201%20Directrices%20para%20un%20Marco%20Gen%C3%A9rico%20de%20MRV%20para%20NAMAs.pdf>

The set of processes for the MRV Framework is laid down in a guidance document⁵ which sets out each single process step, the responsible party for the step, potentially helpful external guidance and standardised formats (e.g. monitoring plan, annual report). In an annex the guidance provides further support on potential issues, e.g. MRV approaches avoiding double counting where mitigation actions overlap.

MRV and accounting systems, processes and procedures

[Questions below should be answered only when applicable]

- » How is information generated, communicated, integrated, and verified at each stage of the MRV chain?
- » What information needs to be gathered in order to quantify the effect of these actions?
- » How is such information gathered or estimated? By whom?
- » How is this information reported? How is it verified?
- » In what areas information is shared among accounting and MRV systems?
- » What kind of agreements are used to establish the relevant institutional roles?

Development of MRV approaches and approval of the MRV plan.

Developers (e.g. Ministries or research institutions responsible for designing a NAMA) are required to submit a draft MRV plan for approval to the Ministry of Environment.

In designing the MRV approach, developers are first requested to assess how a mitigation action will lead to change and what types of changes – referred to as impacts – are to be expected. For this purpose, a causal chain is constructed which shows the impacts and causalities leading to these impacts. Developers are then to select the most relevant impacts (whether desired and undesired, GHG-related or non-GHG related impacts) and, on the basis of the causal chains identified, select suitable indicators. Indicators always have to include a target value, a timeline for achieving the target value and a baseline. Where an impact itself cannot be measured, the analysis of causal relations can provide suitable proxies. Indicators have to cover GHG emissions in any case and can also include non-GHG related benefits where these have been identified as relevant.

Furthermore, activity-based indicators for the implementation of the NAMA are to be developed. A guidance document⁶ supports this step.

The assessment of impacts and causalities, the chosen indicators, indicator baselines and target values are documented in an MRV plan based on a standardized template included in the guidance document. Where possible, MRV approaches are to be aligned with data from the national GHG inventory, e.g. by using the same emission factors. Depending on the mitigation action in question, full alignment with the GHG inventory might not always be possible, e.g. where the national GHG inventory uses data from national statistics while the mitigation action uses installation-level data. The Climate Change Office can support this process.

The developer is encouraged to use sector specific assumptions and datasets (e.g. economic and technological assumptions used for sectoral baselines) wherever possible to ensure alignment with sectoral strategies and sectoral reporting. This is achieved by aligning with the relevant sectoral institutions, e.g. the department for projections in the Ministry of Energy.

The developer sends the MRV plan to the Climate Change Office for approval. The Climate Change Office reviews the plan with the help of sectoral experts identified by the relevant sectoral Ministries and their agencies. These experts should not have been involved in the development of the MRV plan, of course. Where appropriate, the developer receives comments requiring the updating of the MRV plan and the plan has to be resubmitted.

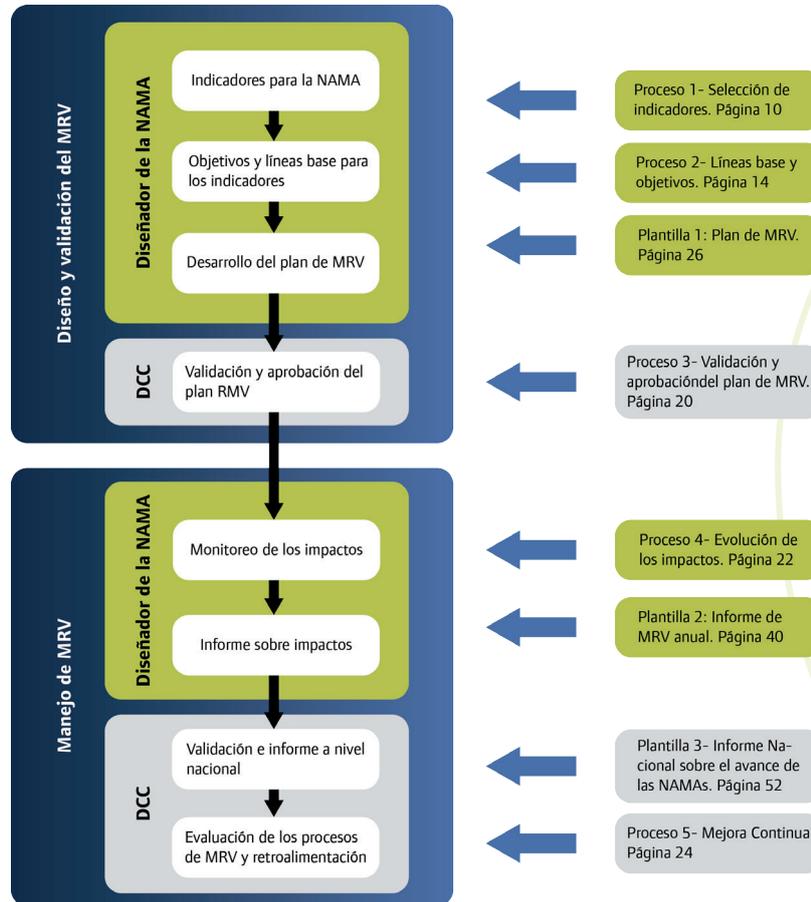


Figura 1: Resumen del proceso de MRV de NAMAs

Annual reporting

Developers are requested to annually report on NAMA implementation and impact indicators, again using a standardised template included in the guidance document. Data to be reported also includes climate finance received. Furthermore, the Climate Change Office will approach the NAMA developer biennially for a general summary of the mitigation action and its status (based on a template provided by Climate Change Office) to be used for BUR reporting.

The submitted reports will not undergo a verification. The OCC will check for completeness and consistency of the reports and compile the annual reports into a national report using a template included in the guidance document. Reports are currently sent by email. The report gives an overview of the mitigation actions, their implementation status and their impacts, including emission reductions achieved. Apart from allowing to inform the general public, the report will provide information relevant to the Ministry of Environment allowing to understand progress in NAMA implementation. Such a report has not been compiled so far.

⁶<http://portal.mma.gob.cl/wp-content/uploads/2016/05/Directrices-MRV-Namas.pdf>

Developers are requested to regularly (roughly every 4-5 years) evaluate whether the mitigation action is progressing towards its overall targets as intended. The evaluation is to consider both the indicator data and external developments, like economic and sectoral trends, temperature trends, new technological developments, etc. This allows understanding both the contribution of the mitigation action and other influencing factors to changes in emission levels and factors influencing emission levels (e.g. km driven, average age of car population) perceived.

Design and set-up

[Questions below should be answered only when applicable]

- » How was the system designed?
- » What was the overall process to set-up the system?

The Climate Change Office identified the need for more standardised NAMA MRV approaches and steered its development process. The development process was supported by the UK Foreign and Commonwealth Office's Prosperity Fund and the UNDP LECB project.

The WRI Policy and Action Standard, as the most commonly agreed on approach for the MRV of mitigation actions, was selected to serve as basis for the development of MRV approaches by the Climate Change Office. To simplify the process of MRV development, guidance was developed, which presents the key steps of the Standard in an easily digestible approach, while referring back to the Standard for technical details. In parallel, key steps, parties involved and responsibilities for the overall process (including approval, reporting, etc.) were identified and respective draft guidance developed. An extensive stakeholder consultation process involving, among other, the other ministries as well as developers, ensured buy-in as well as pragmatic and cost-effective requirements. The approach was tested on the ongoing development of the MRV system for a waste-related NAMA. This further helped refining the requirements to be cost-effective and fit for purpose.

The guidance served as basis for the implementation of the framework in the Climate Change Office, where sectoral responsibilities were allocated to staff members. Annual reporting has so far only taken place for one NAMA – the so called "Clean Production NAMA", as other NAMAs have not moved into the implementation phase. A transport-related NAMA ("Zona Verde") is partly under implementation since 2015 and is expected to provide a first annual report in 2017.

Improvement over time

- » Is there an internal evaluation of the systems established aiming to enable improvement over time?

The framework includes an annual improvement process. During its day to day work with the framework and based on feedback from developers, the Climate Change Office will document potentials for improvement – for example the need for adapting templates to include additional relevant information, or for providing clarifications in the guidance - throughout the year. It will discuss them at an annual meeting. Potentials for improvement are then ranked according to relevance and are used as basis for a long-term improvement plan consistent with available budgets. The identification of potentials for improvement is not based on specific criteria, but aimed at ensuring smooth, user-friendly processes.

Institutions involved

- » What institutional arrangements allow for the flow and integration of this information?
- » What types of entities take a role in the above structures?

Lead: Climate Change Office in the Ministry of Environment of Chile ⁷

Institutional arrangements: Institutional structures remain to be formalised. This is among other the case because the Climate Change Office is about to undergo a structural change and will potentially be integrated into the Ministry of Environment's department for air quality. The Climate Change Office leads the process and, depending on the sector the NAMA is related to, involves one of the following institutions to provide experts for the review of the monitoring plan:

- » Ministerio de Energía (for energy-related NAMAS)
- » Ministerio de Transporte y Telecomunicaciones) (for transport-related NAMAs)
- » Ministerio de Agricultura de Chile,(for agriculture-related NAMAs)
- » Ministerio de Agricultura de Chile and Corporación Nacional Forestal (CONAF) (for forestry related NAMAs)
- » Ministerio de Industria, Comercio y Economía (for industry-related NAMAs)

Case Learning

Why is it good practice

- » Making the assessment of impacts more comparable among NAMAs and more in line with sectoral assumptions by Ministries and the national GHG inventory, and thus allowing to more easily identify the need for further steering of mitigation actions to achieve the 2020 and 2030 mitigation goals.
- » The request for regular evaluation of the NAMA impacts further ensures an understanding of the NAMA's impacts on sectoral GHG emissions compared to external influencing factors, allowing better steering of the NAMA as well as improved design of future NAMAs.
- » The approach provides comparable, transparent data of high quality in standardised format, thus providing better inputs for policy decision-making as well as reporting at the national and international level.
- » The stakeholder consultation and testing processes showed that the assessment of impacts and causalities improves the developer's understanding of how the NAMA achieves change and thus can improve the design of the NAMA and its steering during the implementation phase.
- » Extensive stakeholder consultation as well as testing allowed the development of cost-effective, pragmatic requirements.

⁷For more information see <http://portal.mma.gob.cl/oficina-de-cambio-climatico-del-ministerio-del-medio-ambiente/>

Barriers that have been overcome

[barriers that have been overcome till date]

N/A

Barriers to overcome

[barriers that are still present and needed to overcome]

Capacity: Once the framework had been developed, it was shared with all relevant ministries. The Climate Change Office found it difficult to ensure sufficiently broad awareness of the framework, so developers would use the framework early on in the design of NAMAs.⁸

Information: The Climate Change Office currently plans to simplify the reporting process by developing an integrated platform of information for emission reductions and sinks (National registry of Mitigation Actions). Such a platform would also allow easier management of the reported data.⁹ The Climate Change Office is also considering sharing the MRV framework guidance through the registry to increase awareness, which would allow addressing the abovementioned capacity-related barrier. An additional database presenting national GHG inventory data is planned. This database would facilitate aligning MRV approaches with GHG inventory data.

Quantitative information

Funding obtained

60,000 GBP for development of the framework guidance

Funding required

Further funding requirements have not been estimated.

Staff

[Number of staff involved in the design and implementation of the case study]

Chile currently only has one NAMA under implementation which was already under implementation when the MRV framework was developed, the first annual report for a NAMA which is related to transport is only expected in the coming year. Time required for the approval process and the compilation of the national report, could therefore not be estimated at this point.

Time

[Time required to get to this stage]

The development of the framework guidance took 1 year.

⁸https://unfccc.int/files/focus/indc_portal/application/pdf/mrv_framework_in_chile.pdf

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Further information

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<http://portal.mma.gob.cl/oficina-de-cambio-climatico-del-ministerio-del-medio-ambiente/>

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