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#### **REPORT ON KICK-OFF WORKSHOP**

# GIZ-BMU Project "Information Matters": Capacity Building for Ambitious Reporting and Facilitation of International Mutual Learning through Peer-to-Peer Exchange

Santiago, January 15th and 16th, 2014

Hotel Plaza El Bosque, Santiago de Chile.



Sponsor:

**German Federal Ministry for the Environment (BMUB)** 

Organizer:

German Society for International Cooperation (GIZ) and Ricardo-AEA

Co-organizer:

Climate Change Office of the Chilean Ministry for Environment (OCC-MMA)

RICARDO-AEA







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#### **BACKGROUND**

The Information Matters Project, promoted by the International Climate Initiative (IKI) from the German Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety (BMUB), provides technical assistance through the German Society for International Cooperation (GIZ) with technical support from the British consulting agency Ricardo-AEA and in association with the Climate Change Office of the Chilean Ministry of Environment. This assistance translates into supporting the national governmental institutions in charge of monitoring and reporting relevant data on climate in order to improve their monitoring and communication processes, especially in the elaboration of national reports. This project is being currently developed in Chile, the Philippines, Ghana and the Dominican Republic and contributes to meeting international standards and requirements.

With this initiative we expect to improve transparency by providing the necessary information to plan and implement Chilean mitigation programs. In addition, we expect that these countries will be able to define procedures, methodologies and responsibilities that will allow them to institutionalize or enhance their information systems, focusing on what is needed to inform the UNFCCC about mitigation efforts at a national level.

The GIZ provides the Chilean Office for Climate Change at the Ministry for Environment with technical support and tends to its specific needs in terms of capacity building for the elaboration of national reports. In order to help reach that goal, the GIZ and the British consulting agency Ricardo-AEA, specialized in Measurement, Reporting and Verification (MRV), carried out an initial workshop on January, the 15<sup>th</sup>, 2014. Ricardo-AEA had previously conducted a gap analysis from January 6<sup>th</sup> to 14<sup>th</sup>.

As a result for this workshop, we expect to elaborate a work schedule for capacity building in the coming years with a focus on involving public sector staff in monitoring and communication activities.

The instruments developed during the project will reflect the lessons learned throughout the process and will be made available for other interested countries, so that they can also learn from the experiences of the current four participant countries.







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#### **BMU INTERNATIONAL CLIMATE INITIATIVE (IKI)**

Since 2008, the BMU International Climate Initiative (IKI) has funded projects seeking to contribute to climate and biodiversity protection both in developing and newly industrializing countries, as well as in countries in transition. A sum of 120 million euros is available for this initiative, based on a decision made by the German Parliament (Bundestag). This innovative funding system proves that Germany is well prepared to reliably promote long-term projects related to climate and biodiversity protection worldwide.

The IKI initiative works in the following areas: Mitigating greenhouse gas emissions, adapting to the impacts of climate change, conserving natural carbon sinks with a focus on reducing emissions from deforestation and forest degradation and conserving biological diversity.

New applicants for this program are granted the funding through an open call for new ideas, which takes place once a year. Priority is given to activities favoring the organization of an international architecture for climate protection and to those that provide innovative and transferable solutions and whose impact goes beyond the individual project. The IKI works in close cooperation with the respective countries and aims to stimulate consensus reaching so as to achieve a broad international agreement on climate issues. In addition, the IKI's goal is to gather the largest possible amount of ideas and reach an optimal synergy between climate protection and biodiversity conservation. For more information visit the IKI's website at the BMUB.

http://www.international-climate-initiative.com/en/







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#### **KICK-OFF WORKSHOP**

In the context of the Information Matters Project, a kick-off workshop co-organized by the GIZ and the Climate Change Office of the Chilean Ministry for Environment was run on January, the 15th. This workshop took place at the Hotel Plaza El Bosque, located in the commune of Las Condes, Santiago Metropolitan Region.

#### **Objectives**

The main objectives of the workshop were:

- To present the preliminary results of the gap analysis carried out by the consulting agency Ricardo-AEA,
- to discuss and validate the conclusions of this gap and challenge prioritization analysis and
- to elaborate a preliminary action plan for technical support

#### **Participants**

The workshop was attended by experts from several public and private institutions that have a direct influence in the environmental field, especially regarding climate change. Please, refer to the appendix to see the complete list of participants, the majority of which can be seen on the picture below.









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#### **Opening Ceremony**

Chilean Minister of Environment, Ms. María Ignacia Benítez and Ambassador of the Federal Republic of Germany to Chile, Mr. Hans-Henning Blomeyer-Bartenstein, took part on the opening ceremony and presented their visions and expectations on this new cooperation project, whose main goal is to tackle new challenges that may arise because of climate change. On this view, the Ambassador described the Information Matters Project as a visible and important mainstay that reinforces the German government's commitment to the fight against climate change. This commitment is reflected internally in their agenda for reducing greenhouse gas emissions as stated by the Kyoto Protocol, and also externally by granting funds to other countries - including Chile – in order to encourage and benefit initiatives that help to mitigate these emissions. On the other hand, the Chilean Minister for the Environment stated that "we are very optimistic about the starting of the Information Matters Project, thus I would like to thank both German entities for considering Chile among these four countries. I would like you to know that, for us, being selected represents an acknowledgement of the serious work carried out by our institutions and our country's credibility in the international arena, which makes us immensely proud".

#### **Presentations**

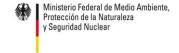
- 1. Mr. Fernando Farías (Head of the Climate Change Office, Chilean Ministry of Environment)
  - 1.1. Overview on Climate Change initiatives in Chile

The focus of the presentation was to inform about ongoing climate change initiatives and projects in Chile. It was also explained that the Chilean Climate Change Office (OCC) centralizes all actions related to climate change and works accordingly based on 6 strategic areas, two of which are directly involved in the Information Matters Project, namely:

a) Inventories and Greenhouse Gas (GHG) measurement: currently, the creation of a National Inventory System is in the works (Sistema Nacional de Inventarios, SIN) and implies important coordination efforts between ministries (Ministry of Energy, Agriculture and Environment).

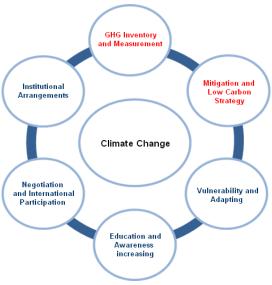






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b) Mitigation and Low-Carbon Strategy: several projects and programs are being implemented simultaneously, such as the LECB-Chile Project; the MAPS-Chile Project; NAMAs identification, design and implementation; MRV development for NAMAs, among others.



#### 1.2. Overview of registered NAMAs

Regarding actions being implemented in Chile, an overview of currently developed National Appropriate Mitigation Actions (NAMAs) was presented. Chile has been a pioneer in NAMAs development and registry and has currently 4 NAMAs recorded in the UNFCCC registry, namely:

Entity	NAMA	Duration	Total reductions (Mt CO2e)	Estimated time frame
CPL	Clean Production Agreements in Chile	5 years	2,0 (30 years)	2013 - 2017
CONAF	Implementation of a National CC and Forest Strategy, including the development and implementation of a Platform for the Generation and Trading of Forest Carbon Credits	9 years	18,4 (9 years)	2012 - 2020







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CER	Expanding self-supply renewable systems in Chile	4 years	42,6 (8 years)	2013 - 2016
ММА	National Program for Catalyzing Industrial and Commercial Organic Waste Management in Chile	5 years	12,0 (10 years)	2014 - 2018

Furthermore, Chile is currently developing 4 additional NAMAs. It is important to mention that Chile is not considered as a priority country for funding, but it is vulnerable to climate change, thus it has been able to apply for financial support for that reason.

Chile's primary focus is to initiate long-term NAMAs and is currently developing more projects for their registry. On this account, the Chilean Ministry of Environment assembled in 2013 a cooperative working group in the public sector that aims to identify new opportunities for NAMAs implementation within the country.

## 2. Mr. Oscar Zarzo (GIZ Coordinator at the Information Matters Project for Chile), Mr. Luca Petrarulo (Consultant at Ricardo-AEA)

#### **Overview of the Information Matters Global Project**

Within the framework of this Project, the GIZ aims to provide technical assistance to governmental institutions in charge of monitoring and reporting relevant data on GHG and other information related to climate change. Its primary objective is to attend the specific needs of each country in terms of capacity building for the elaboration of national reports. Another important goal is to facilitate access to information for the MRV of NAMAs in Chile.

Mr. Zarzo also announced the project's schedule, which basically comprises 4 training workshops in Chile until the first half of 2015 and a final global workshop in Bonn, Germany, in September of the same year. All four participant countries should be taking part in this event.

In order to achieve these goals, the GIZ counts on the support of the British consulting agency Ricardo-AEA and its representative, Mr. Petrarulo, who added that Ricardo-AEA, apart from having a vast international experience, possesses a wide knowledge of MRV methods.







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#### 3. Ms. Sina Wartmann (Consultant at Ricardo-AEA)

#### **Presentation of Gap Analysis' Preliminary Results**

An initial objective of this project and an important part of this workshop is to present the gaps detected by consultants from Ricardo-AEA, in order to analyze them, discuss them and later identify and prioritize future challenges.

In order to present these gaps, it is necessary to know the concept of "MRV", which is an information measurement, reporting and verification system. The main aim of this process is to verify changes and to determine if a certain measure was able to reach its goal or if an environmental indicator has been managed properly.

Good practices for successful MRV include:

- Clear responsibilities,
- Formalization/institutionalization of structures and processes,
- Coherent approaches,
- Sufficient amount of human resources/adequate experience,
- QA/QC processes,
- Continual Improvement Processes,
- Exchange with other parties and
- Long-term and secure data filing systems.

Once concluded the presentation of the preliminary gap analysis, the participants worked in groups to continue with their discussion, analysis and validation. For detailed information on the gap analysis, please refer to Appendix C.

#### **Group work: Gap Analysis Validation**

All participants were divided into three work groups in order to validate the gap analysis. These groups were: MRV of GHG inventories, MRV of NAMAs and MRV of Technical and Financial Assistance Programs and Actions. Each group discussed also the gap analysis of







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each critical areas of study: institutions, capacity and technical aspects. The groups were moderated by:

- Sergio González (Focal Point for the Information Matters Project in Chile) for "MRV of GHG inventories".
- Andrés Pirazzoli (Climate Change Office) for "MRV of NAMAs" and
- Meike Siemens (Climate Change Office, Coordinator of LECB-Chile Project) for "MRV of technical and financial assistance programs and actions".

#### 1. MRV of GHG Inventories

The focus of the discussion was on the need for an institutionalization of climate change matters, that is, to integrate climate change to national policies and development strategies. In order to accomplish this, the following conditions are needed:

- Permanent funding for the inventory and the academia so that research can be conducted to determine emission rates and abatement potentials of various management strategies
- Trained permanent staff
- Implementation of interinstitutional cooperation agreements that lead to the creation of a National Inventory System

Other subjects for discussion included:

- The creation of a QA/QC system and a better estimation of uncertainty
- The availability of NIR-like reports elaborated by Annex I-countries and their usage as the base for our biennial update reports and for national communications
- The need for formalization and standardization of the inventories' statistical data using the National Statistics System; the first step should be to enlist the sectoral statistical data and parameters that the inventory requires.
- The importance of receiving support from Ricardo-AEA for the elaboration of an NIR-like report and the creation of an external inventory verification system.

For each sector, the group identified the following critical aspects:

✓ Energy:







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- Validation of the energy balance and the inclusion of this data in the inventory
- Development of national emission factors
- Regarding energy balances: Evaluation of energy consumption and efficiency, QA/QC approach, inclusion of non-conventional energy sources

#### ✓ Industrial processes:

- Access to information sources, which is critical for this sector

#### √ Forestry

- Coordination between governmental institutions working on forest management
- Improving access to satellite imagery to enhance information on land uses and changes.

#### ✓ Agriculture

- Prioritization of research according to the production activities' to the total emissions in this sector
- Conducting research on organic soil carbon capture and/or emissions, both for including this carbon deposit in the inventory and for turning this opportunity into a NAMA
- Accessing funding necessary to define region-specific emission factors

#### √ Waste Management

- Improvement of data quality on existing activities and gathering of missing data
- Determining waste composition
- Creation of country-specific emission factors

#### 2. MRV of NAMAs





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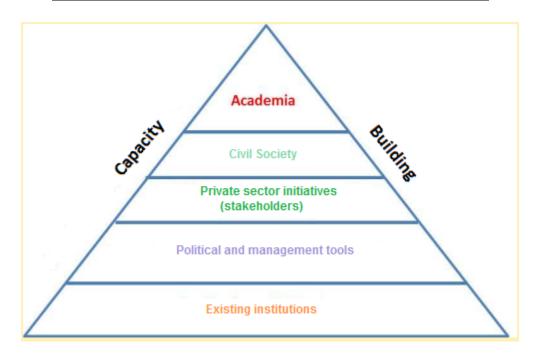
Ministerio Federal de Medio Ambiente,
Protección de la Naturaleza
y Seguridad Nuclear

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The discussion was focused mainly on the development of a General Framework for MRV of NAMAs. The main elements that should be developed to accomplish this are detailed in the following table:

### POLITICAL AUTHORITY Minimum General Development Criteria

M	R	V
Methods	Formats	Criteria
Assumptions	Spaces	Requirements
Etc.	Subject	



As it can be seen in the image above, the Political Authority can be found on top of the pyramid. This is, according to the group, because political authority must be the one in charge of developing the minimum general criteria and ensure the structuring and standardization of the MRV of NAMAs. Then, following a "bottom-up" approach, the







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existing institutions that can contribute to the development of this general framework can be found at the base of the pyramid. Basically, there are institutions that are dealing with indicators and databases; therefore it is possible to start from what we have towards the creation and development of a general framework.

It is also important to mention that there currently exist instruments and a basic public management system which can eventually be modified to better meet the MRV's requirements. The group stated that the private sector, as the main stakeholder, has much to say and contribute to this general framework. Along this line, the civil society can play an interesting role as an input contributor to this framework. The academia would fulfill the role of creating mechanisms for MRV. Finally, to enhance this work, it is essential to increase and strengthen the capacity of both the public and private sectors to ensure a consistent approach to NAMAs.

From the discussion, the following prioritized list of gaps or deficiencies was generated. This list is organized according to their urgency of implementation:

- i. General framework
- ii. Approaches and coherence
- iii. Databases and existing institutions
- iv. What do we have? What can we do?
- v. Having defined the general framework, link platforms and existing institutions
- vi. Assessment of the existing tools, as well as the future ones, as potential MRV tools

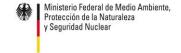
#### 3. MRV for Financial and Technical Assistance Programs and Actions

In this group, a number of important issues emerged. This confirmed the existence of the gaps initially presented by the consultants and even modify them by adding new issues.

A key point of discussion was that there are various ongoing actions around the MRV of support, but there is no actual institution that acts as a coordination entity at a central level, in order to facilitate financial and technical management. The implementation of an interministerial institutional structure to take charge of monitoring the MRVs' processes of financial support and technical assistance is a fundamental challenge in Chile. It is also fundamental for channeling information on the participating institutions in these processes, the assignment of responsibilities to each relevant stakeholder, the definition of structures







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and processes of data collection and the selection of an adequate funding method for this institutional structure, among other aspects that must be defined for its implementation.

At the same time, a second gap in the institutional area, which is related to the need to improve the management of public, private and academic information about the allocation of existing support channels, should be considered.

Regarding the analysis of the second issue, concerning "Capacity", the participants identified the integration of the Ministry of Finance in the aforementioned processes' monitoring structure as a major challenge. This is due to the need to ensure the continuity of information, which is at risk since there is only one person at the Ministry responsible for this task. Accordingly, the systematization of the existing information within the Ministry of Finance is an extremely urgent requirement to facilitate the information transfer process. On the other hand, the need to expand the capacities of the MRV of support in all sectors is also a gap of great importance.

Participants agreed that, globally, there is a lack of common definitions. The concept of climate change is an example of this phenomenon. From this emerges a basic challenge: the need to set definitions, criteria and approaches in order to develop a common language between stakeholders on issues such as NAMA developments, co-benefits, difference between adaptation and mitigation, search of common aspects between the two terms, incidence of the academic and private area, methods and indicators to measure and adjust processes to the national context, among others. It is important that the relevant institutions cooperate together to set these definitions.

The importance of developing a registry of support flows was also identified. They should be reported both by donors and beneficiaries. The reason for creating MRV of support is to keep record of the donations and the money received. The ultimate goal would be to balance these money flows, see how they were used and what objectives have been achieved in order to evaluate whether they are consistent with the progress in mitigation processes implemented in the country.

Finally, the following list of critical challenges was created. This list is organized according to their urgency of implementation:

- i. Clear and common definitions and the creation of a flow-tracking structure and
- ii. conducting an inventory of technical and financial flows







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#### **Action Plan for 2014**

From the results of the working groups, a preliminary work program for 2014 was proposed. It would consist of several workshops in the country and meetings with small workgroups to convene key stakeholders. These activities would be conducted in two visits made by the Ricardo-AEA consultants in May and August. Each visit would last a week. The exact date of completion should be planned in conjunction with the people in charge of the Chilean Ministry of Environment and other participants involved. These visits aside, remote support will be delivered through videoconferences, online conferences and phone/email communication.

The Action Plan's main activities are the following:

#### 1. GHG Inventory

Initial remote support

Prior to the completion of the first workshop, methodologies and approaches used in the Chilean inventory in the areas of uncertainty and QA/QC will be reviewed.

First visit (May 2014)

The following activities will be conducted during the first visit:

- Workshop 1 GHG Inventory: 1-day workshop to discuss about uncertainty, QA/QC and the creation of a NIR. People invited to this workshop would be the ones in charge of the GHG Inventory. A portion of the day would be dedicated to the study of the experiences of Annex-I countries, such as the UK, to address these matters.
- Meetings with inventory coordinators: Two meetings with the inventory coordinators would be scheduled to discuss specific issues for each sector.

#### Remote support between visits

In between the two visits, a remote support activity should be held. This would consist of a half-day video conference with experts from the British inventory. The







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goal of this activity would be to exchange detailed experiences on issues such as approaches towards QA/QC, data standardization and NIR.

Second visit (September / October 2014)

The following activities should be conducted during the second visit:

- Workshop 2 GHG Inventory: this workshop's goal would be to provide capacity building support for future inventories and QA/QC,
- Meetings with experts: Two half-day-long meetings would be scheduled with experts to discuss the theoretical framework and basic structure to be used.

#### 2. MRV of NAMAs

Initial remote support

A preliminary preparation and exchange activity by Jenny Mager, Head of the Mitigation Area at the Climate Change Office of the Chilean Ministry of Environment would take place. This activity will verse on the subject of NAMAs' coordination structures and on a presentation on coordination approaches in other countries.

- First visit (May 2014)
  - Workshop 1 MRV of NAMA: This workshop's goal would be to define the NAMA MRV's general framework along with the NAMA team and to prepare the general requirements for the MRV system
  - Meetings with experts: Two meetings to discuss MRV's issues for each NAMA
  - Workshop 2 MRV of NAMA: In this second half-day-long workshop the discussion started in workshop 1 would continue
- Remote support between visits

One to two months after the first visit, a half-day-long videoconference to discuss the progress and the problems that could be affecting the process of MRV of NAMAs nationwide would be held.

Second visit (September / October 2014)







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 Workshop 3, MRV of NAMA: In this day long workshop, the NAMA team as well as other key stakeholders involved in the the development of NAMA MRVs will discuss the implementation of the requirements for MRV of new NAMAs.

#### 3. MRV of Technical and Financial Assistance

#### Initial remote support

A preliminary proposal of participants for a MRV of support group is to be created. The Ricardo-AEA consultants would compile definitions for the MRV of support based on the information delivered by the Ministry of Environment and the Ministry of Finance on flow management. As a final phase, a video conference would be held to present and discuss this compilation of definitions.

- Second visit (September / October 2014)
  - Workshop 1: A small group of participants, consisting of the representatives
    of the ministries involved, is expected to attend to this particular workshop.
    The first phase would be oriented towards the promotion of capacities
    whereas the second phase would focus on the discussion of the preliminary
    definitions as well as structures and procedures that need implementation.
  - Workshop 2: The same representatives will take part of this second workshop of MRV of support. The main goal of this workshop is to continue with the discussion and suggested proposals of workshop 1 in order to reach consensus and define a nationwide common strategy for the MRV of support.

#### After-visits remote support

To be able to evaluate and keep track of the progress and difficulties that emerged during this process, regular communication should be maintained with the MRV of support group.

To summarize, a tentative schedule of tasks to be performed during the first and second visits of the consultants to the country is presented.

FIRST VISIT Monday Tuesday Wednesday Thursday Friday
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(May 2014)					
Morning	Workshop 1 Inventory	Workshop 1 MRV NAMA	Meetings Inventory	Meetings MRV NAMA	Workshop 2 MRV NAMA
Afternoon	Workshop 1 Inventory	Workshop 1 MRV NAMA	Meetings MRV NAMA	Meetings Inventory	Flexible

SECOND VISIT (Sept 2014)	Monday	Tuesday	Wednesday	Thursday	Friday
Morning	Workshop 1 MRV support	Workshop 2 Inventory	Meetings Inventory	Workshop 3 MRV NAMA	Workshop 2 MRV support
Afternoon	Workshop 1 Support	Workshop 2 Inventory	Meetings Inventory	Workshop 3 MRV NAMA	Flexible

#### **APPENDICES**

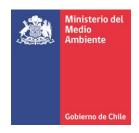






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Time	Topic/Activity	Lecturer
08:30-09:00	Reception and registration of the participants	
09:00-09:30	Opening ceremony	Ambassador of the Federal Republic of Germany, Mr. Hans-Henning Blomeyer-Bartenstein Minister of Environment, Mrs. María Ignacia Benítez
Presentation of the climate change initiative, including NAMAs existing in Chil and information about Information Matters Global Project (IM).  Andrés Pirazzoli, Ministry of Environment - Climate change office (Facilitator)  Kate Mc Innes, Paulina González and Felipe Huiza (documentalists)		
09:30-10:00	<ul> <li>Overview of the climate change initiatives in Chile</li> <li>Overview of the registered NAMAs: CER, CPL, Waste Management, CONAF</li> </ul>	Fernando Farías, Head of the Climate Change Office, Ministry of environment
Overview of "Information Matters"     Global Project, funded by BMU:     Presentation, organizational structure     Terms of reference, list of products, deadline calendar     Approach and methodology		Oscar Zarzo, GIZ Germany consultant Sina Wartmann, Ricardo-AEA consultant (in charge of IM Project Chile)
10:30-11:00	Break and snack	
Presentation of Gap Analysis' Preliminary Results:  Background of the interviews with stakeholders (January 06 to 14)  Presentation and discussion about the preliminary results, focusing on the major deficiencies and strengths detected		Sina Wartmann and Luca Petrarulo, Ricardo-AEA consultants







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12:00-13:30	Workshop - Group work: creation of the three following working groups to discuss and validate the Gap Analysis preliminary results:  • 1: MRV of GHG Inventories • 2: MRV of NAMAs • 3:MRV of Technical and Financial Assistance Programs and Actions	Conducted by Sina Wartmann, Luca Petrarulo and Sergio González (Focal Point for the Information Matters Project, GIZ Chile). Facilitators: S. Siemens, A. Pirazzoli and S. González
13:30-14:30	Lunch	
14:30-15:30	Plenary session	Presentation and discussion of the group conclusions (facilitators or group representatives)
15:30-16:00	Final comments and notes	Final comments from the participants Sergio González Fernando Farías
16:00-16:30	Snack	







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## **APPENDIX C. Initial Gap Analysis of the Information Matters Project** (presented by Sina Wartmann)

#### 1. MRV of GHG Inventories

Area	Institutional	Capacity	Technical
Landscape	<ul> <li>The responsibility for inventory and sector coordination is assigned</li> <li>Institutionalization of the national inventory system expected in 2014 through cooperation agreements between the Ministries</li> <li>Basic QA/QC already developed, including a review by external experts</li> <li>Good coordination of the inventory process</li> <li>Regular exchange with inventory experts from other Latin American countries</li> </ul>	coordinators and sectoral experts understand the IPCC requirements as well as the challenges to achieve them  External consultants hired to help with data collection and training of ministerial staff	Most sectorial inventory data have already been collected and are currently under revision







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Area	Institutional	Capacity
Challenges	<ul> <li>Institutionalization/formalization of processes and systems, including:         <ul> <li>Implementation of the Cooperation Agreements</li> <li>Formalization of inventory coordination and continuous system improvement</li> <li>Formalization and standardization of data collection processes</li> <li>Development in detail, formalization and implementation of QA / QC</li> </ul> </li> <li>Creation of a national inventory report (NIR)</li> </ul>	High-level experience for the energy inventory/balance







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Area	Technical
Challenges	a) Energy:  • Energy balance: assessment of energy consumption and energy efficiency, QA / QC approaches, incorporation of non-conventional energy sources • Standardization and validation for the energy balance process • Development of fuel emission national factors • Energy balance data transfer into the inventory b) Industrial Processes: • Confidentiality of data • Halogenated gas awareness c) Forestry Sector: • Assessment of satellite imagery from different years and resolutions • Common approach to forest plantations and coherent with other approached within the forestry sector • Understanding the role and benefits of a forest inventory verification exercise d) Agriculture: • Availability of emission factors for different regions (except for livestock farming) – Long-term studies needed • Priority areas would be: fruit and vine planting/farming, and intensive farming e) Waste management: • Availability and quantity of data on the quantities and composition of waste • Data adjustment using statistical methods • The hypothesis on the development of emissions in different climatic







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#### 2. MRV of NAMAs

Area	Institutional	Capacity	Technical
Landscape	<ul> <li>MRV approaches developed for NAMAS (NAMA forestry, renewable energy, APL)</li> <li>Discussion on new MRV approaches at the Working Table for NAMAs</li> </ul>	Experts working on MRV of NAMAs have knowledge of MRV or know where to find the pertinent experience	<ul> <li>NAMAs with MRV ready to collect data</li> <li>Renewable energy NAMA provides data access through a public data-base</li> </ul>



**Challenges** 



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 Development of a general framework for MRV of NAMAs that

- coordinates the development of new MRV approaches
- ensures
   coherent and
   robust
   approaches for
   existing and
   future NAMAs
- Better coordination for synergy use, e.g. by developing common tools

#### **General level**

- To assure that the existing MRV approaches are robust and coherent, e.g. regarding assumptions for baselines
- To develop robust and coherent MRV approaches for other NAMAs
- To evaluate the possibility of expanding the outreach of existing tools for NAMAs in general, e.g., RETC, database NAMA on renewable energy

#### **Specific level**

#### a) NAMA on Renewable Energy:

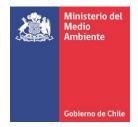
Evaluation of database function

#### b) NAMA APL:

- Development of indicators related to production for complex production processes
- How to take into account changes in the baseline
- Simplifying the MRV to lower costs for small and medium-size enterprises (SMEs)
- Norm for verifiers

#### 3. MRV of Technical and Financial Assistance

Area	Institutional	Capacity	Technical
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Landscape	<ul> <li>Ongoing study on the evaluation of "green expenditures" conducted by the Chilean Finance Ministry</li> <li>Evaluation of climate-change-related public expenditures within the LECB program (beginning on Feb/March, 2014)</li> </ul>	Deeper understanding of the international discussion and requirements for the MRV of support, including pending challenges such as missing methods and definitions	Data on relevant instruments and flows is generally available
Challenges	<ul> <li>Responsibility         assignment</li> <li>Establishing         structures and         processes for data         gathering,         evaluation and         report submitting</li> </ul>	Currently only one person has expertise on the subject – continuity challenge	<ul> <li>Development of definitions and agreement for:         <ul> <li>An overview on received and necessary support</li> <li>Comparison of support reported by donors and received support</li> </ul> </li> </ul>