

Global Good Practice Analysis on LEDS, NAMAs and MRV

Summary Report



International Partnership
on Mitigation and MRV



LOW EMISSION
CAPACITY BUILDING
PROGRAMME

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Summary Report

Author

Nicholas Harrison (Ecofys)

Review

Frauke Röser and Katja Eisbrenner (Ecofys)

Global Good Practice Analysis

Coordination

Nicholas Harrison (Ecofys) with Frauke Röser and Niklas Höhne (Ecofys),
Manish Kumar Shrivastava and Neha Pahuja (TERI), Ana María Majano and Maria José Gutiérrez (INCAE),
Xander van Tilburg and Lachlan Cameron (ECN)

www.ecofys.com · www.teriin.org · www.incae.edu · www.ecn.nl

Steering Committee

Steffen Menzel and Anna Pia Schreyögg (BMUB), Dr. Sebastian Wienges and Verena Bruer (GIZ),
Yamil Bonduki, Rebecca Carman, Allison Towle, James Vener and Mateo Salomon (UNDP)

Contributing Authors:

Altami Arasty (Mitigation Momentum), Cristián Mosella (ONF International), Daniel Abreu Mejía, Dang Hong Hanh (VNEEC),
Edwin Vega-Araya (INCAE), Enrique Rebolledo (Bajo Carbono), Gesine Haensel (Ecofys), James Falzon (ECN), Juan José Castillo Lugo
(Universidad de Bogotá Jorge Tadeo Lozano), Jules Chuang (South Pole Carbon), Kimberley Mees (Ecofys), Lachlan Cameron (ECN),
Lina Li (Ecofys), Manish Kumar Shrivastava (TERI), Matthew Halstead (ECN), Mauro Oliveira Pires (Instituto Chico Mendes de
Conservação da Biodiversidade), Neha Pahuja (TERI), Nicholas Harrison (Ecofys), Patana Surawatanapongs (South Pole Carbon),
Rita Effah (TERI), Swati Agarwal (TERI), Tom Mikunda (ECN), Vu Van Quang (VNEEC), Yong Eun Shin (Dong-Eui University)

Design

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1 Analysis Approach

1.1 Background and Purpose

The International Partnership on Mitigation and MRV was established to support exchange on mitigation-related activities and MRV between developing and developed countries in order to help close the global ambition gap. To this end, the Partnership's activities contribute to the design and effective implementation of Low-Emission Development Strategies (LEDS), Nationally Appropriate Mitigation Actions (NAMAs) and Measuring, Reporting and Verification (MRV) systems.

The Low Emission Capacity Building (LECB) Programme is a joint collaboration between the European Commission (EC), Germany, Australia and the United Nations Development Programme (UNDP) which aims to strengthen technical and institutional capacities in 25 countries to design and implement low-emission development at the country level through mitigation actions in the public and private sectors.

In order to increase mitigation ambition amongst partner countries and contribute to enhanced action in the relatively new fields of LEDS, NAMAs and MRV plans and systems, the Partnership and the LECB Programme commissioned Ecofys and partners (ECN, INCAE and TERI) to examine a selection of cases which demonstrate how mitigation actions are being effectively designed and implemented across a range of national contexts. The resulting good practice case studies presented here provide rich insights from 21 countries, for how mitigation actions are being effectively designed and implemented worldwide.

The initiative was supported by a variety of projects in partnering countries, carried out in the framework of the International Climate Initiative (IKI) of the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMUB).

1.2 Methodology

The study was executed in three phases. In the first phase, a checklist for assessing country mitigation architecture (i.e. institutional and policy arrangements and capacity for supporting mitigation action) and sets of good practice criteria in LEDS, NAMA and MRV were drafted, reviewed and revised. In the second phase, based on this checklist, the mitigation architecture of a sample of countries across three focus regions (Asia and the Caucasus, Africa and Middle East/North Africa (MENA), Latin America and the Caribbean) was reviewed.

In the third phase, a selection of good practice examples were identified across 21 countries in the three focus regions and a case-based analysis was undertaken to produce a series of in-depth case studies. These phases are described in further detail here:

1. **Criteria and checklist development:** Based on a checklist and criteria drafted by the Secretariat of the International Partnership for Mitigation and MRV with input and feedback from the UNDP-LECB Programme, the items included in each were reviewed against relevant literature and through a series of expert interviews and consultations. Amendments were then made based on a final review by the project steering group in collaboration with experts from the Center for Clean Air Policy (CCAP) and the World Resources Institute (WRI).
2. **Review of mitigation architecture:** The review was prepared with data sourced from a combination of desk research and expert input from UNDP and GIZ in-country contacts. Rather than a comprehensive in-depth assessment, the review was intended as a snapshot stocktake of conditions across a range of leading countries to identify potential good practice cases for further analysis.
3. **Case analysis:** Based on activities identified from the review undertaken in phase two and a further review of literature and expert input, a short list of potential good practice cases was developed. The selection of cases aims at representing a balance of regional and country contexts, and at providing a comprehensive range of practice examples covering LEDS, NAMA and MRV related activities. Further information was sought on a number of cases before a final shortlist of 21 country cases was agreed. Ecofys, together with its regional partners (ECN, INCAE and TERI) then undertook in-country research including interviews with experts and stakeholders across each of these 21 cases. Following review by the project steering group, authors then revised case drafts and verified the final content with interviewees to ensure accuracy.

A summary of the main success factors identified in the study is provided in the following section and further detail can be found in each of the individual case studies at www.mitigationpartnership.net/gpa.

1.3 Overview of Selected Cases

Country	Title
Bhutan	Integrating gender targets into LEDS and NAMAs
Brazil	Implementing prevention and control policies for reducing deforestation
Chile	Developing a public-private carbon management programme
China	Implementing a national energy efficiency programme
Colombia	Designing a vertically-integrated, transit orientated development NAMA
Costa Rica	Developing an integrated forestry sector MRV system
Dominican Republic	Developing a national climate compatible development plan (CCDP)
Ethiopia	Design and implementation of a climate resilient green economy strategy
Georgia	Developing municipal level mitigation action plans
India	Developing renewable energy targets and supporting strategies
Indonesia	Coordinating institutions for LEDS and NAMA development
Kenya	Prioritising mitigation and adaptation options as part of the development of a National Climate Change Action Plan
Lebanon	Collaboration to prioritise and select mitigation actions
Mexico	Building a comprehensive national MRV framework
Peru	Planning for climate change in Peru
Philippines	Coordinating national climate change action
Republic of Korea	National Green Growth Strategy of the Republic of Korea
South Africa	Integrated research and scenario building for LEDS development
Thailand	Integrating waste management and renewable energy planning
Tunisia	Collaborating to align data, information and mitigation actions
Viet Nam	Implementing a national energy efficiency programme

2 Success Factors for Mitigation Initiatives

Through analysis and assessment of the 21 cases included in this study a range of activities (and their impacts) across varied regional and country contexts were contemplated. All the cases exhibit many of the aspects of good practice identified in the criteria, and while not all approaches are readily transferable to every context, the case studies provide rich insights to guide others designing or implementing similar activities. With this in mind, dedicated summaries on lessons learned and replication are included in each case to guide the reader considering undertaking similar activities elsewhere.

By exploring the practical challenges faced in designing and implementing mitigation actions across themes including: capacity, information, institutional, financial and socio-cultural, a range of successful approaches to overcoming these barriers have been identified across all of the 21 country cases studied. This provides the reader with practical insights to aid them in replicating the success achieved in each case.

While cases were selected as exhibiting elements of good practice, some are a work-in-progress and the final impact of mitigation activities may not yet be clear. A few cases rely to some extent on relatively unique context factors (e.g. such as the governance context in China or the large renewable energy potential in India) which may not be readily transferable. However, all the cases assessed provide useful, practice-based insights into effective approaches to achieving mitigation at the country level and many offer useful, transferable approaches.

The following pages provide a summary of conclusions drawn from the case-based analysis of the 21 country examples, presented as key success factors to provide orientation for the design of similar interventions elsewhere. Each individual case study also includes further detail on lessons learned, key factors for replicating specific activities, along with further contacts and links to more information. This information is available online in case factsheets at: www.mitigationpartnership.net/gpa.

2.1 Leadership and Political Commitment

Most (18) cases identify strong, high level leadership and political commitment as key success factors. This includes support from both political leaders such as the President or Prime Minister (e.g. Indonesia, South Korea, and Ethiopia) or other senior officials (e.g. support of the Permanent Secretary of the Ministry of Environment and Mineral Resources in Kenya). The role of subnational leadership such as city Mayors was also highlighted in several cases (e.g. Georgia, Colombia, and Thailand).

Successful leadership and political commitment was manifested in various ways across the cases studied, including:

- » **Promoting a vision for the country:** In cases such as South Korea, Mexico and Ethiopia, political leaders articulated a strong national vision for the country involving mitigation actions (e.g. the Korea Green Growth Strategy and the Ethiopian Climate Resilient Green Economy).
- » **Creating new institutions:** In some cases political commitment led to the creation of whole new institutions such as in India where a Ministry for New and Renewable Energy was created, signalling the political importance at the Federal level. Similarly, in the Philippines the President established a national Climate Change Commission to oversee mitigation and adaptation activities.
- » **Providing visible proximity to leaders:** In the Dominican Republic, the Office of the President directly hosted consultation meetings on the Climate Compatible Development Plan in the National Palace, many of them introduced by the Vice-president in person. Similarly in the Philippines, the Presidential Palace provided initial logistical support for the Climate Change Commission and in Ethiopia, the Prime Minister's Office chairs the country's high level environment council.

2.2 Engaging and Managing Stakeholders

Eighteen (18) countries highlight the importance of effectively engaging and managing stakeholders in the design, development and implementation of mitigation activities.

This includes:

- » **Raising awareness:** Investing in awareness raising activities to increase stakeholders' support for, and engagement with activities is highlighted in several cases. For example in Kenya, Indonesia or Peru where considerable effort has been made to raise awareness of climate mitigation activities. In some cases awareness raising is focussed on specific programmes and activities such as energy efficiency in Vietnam, where frequent

awareness raising events are carried out including: workshops and competitions and sharing information via radio, television and internet targeting both the national and provincial levels.

- » **Facilitating dialogue:** The importance of enabling effective communication between stakeholders (e.g. sectors and levels of government) is highlighted as important for improving transparency and enabling stronger trust and collaboration. For example the dialogue across sectors in the development of the South Africa Long Term Mitigation Scenarios (LTMS), in prioritising NAMAs in Tunisia or between national and subnational government in Colombia.
- » **Collaboration across government stakeholders:** For example, in Lebanon, effective, on-going collaboration between the Ministry of Environment and Ministry of Finance has strengthened the process of developing NAMAs.
- » **Engaging the private sector:** For example, in developing mitigation actions focussed on the cement industry in Tunisia, the effective sharing of data between cement companies and the government made an important contribution to the design of effective interventions to reduce GHG emissions. Engaging private real estate developers in Colombia for developing a Transit-Oriented Development NAMA and working with energy intensive industries in China, Korea, Chile and Vietnam have been essential to designing and implementing effective mitigation activities.
- » **Ownership by stakeholders:** This has been achieved in a variety of ways. For example, through technical processes such as involving stakeholders in a NAMA prioritisation process in Lebanon; or through stronger involvement and empowerment of key actors, such as the involvement of states and municipalities in the federal strategy to reduce deforestation in Brazil. Many cases emphasised the importance of strong ownership by the country government and ensuring strong participatory approaches to engaging key actors, for example in development of a national climate change strategy in Peru, the LTMS in South Africa and through established forums such as the Philippines Development Forum or the Bhutan Mainstreaming Reference Group.

2.3 Mainstreaming and Institutionalising

Eleven (11) countries highlight the importance of integrating climate change activities into the plans and activities of national institutions.

These include:

- » **Building on existing activities:** In Tunisia, NAMA concepts were identified based on earlier Technical Needs Assessments while in Colombia, the implementation of the Transit-Oriented De-

velopment NAMA benefits from the country's previous success in implementing Bus Rapid Transit and integrating efforts between the national and subnational government.

- » **Embedding into existing strategies and plans:** In Kenya, both mitigation and adaptation activities have been integrated in the country's mid-term development plan. In India and China, mitigation activities have been integrated into the 5-year planning processes. In both Tunisia and Korea, climate mitigation planning is closely aligned with energy planning.
- » **Embedding in established institutions:** For example in Indonesia, mitigation activities have been led from the national Planning Ministry which has helped ensure integration into traditional development planning activities. In Bhutan, a dedicated Mainstreaming Reference Group has been key to integrating gender issues into mitigation activities.
- » **Vertical integration:** Several cases cited the importance of effectively integrating efforts between national and subnational levels of government, particularly where actions are implemented at subnational level (e.g. transport in Colombia, energy in Georgia and preventing deforestation in Brazil).
- » **New legislation:** For example, the creation of a climate change law in Mexico, which provides a strong (and politically durable) mandate for mitigation action and the need for MRV. Legislation focussed on specific issues is also highlighted, such as the 2003 Electricity Act in India to support renewable energy deployment or the establishment of the Korean Emissions Trading Scheme (ETS) Act to support the implementation of new market-based mitigation mechanisms. Implementing legislation at subnational level also has a key role to play. For example, new legal powers given to subnational government in Brazil through the Public Forests Management Law, Complementary Law and the new forestry law have played an important role in the success of the country's efforts to reduce deforestation.
- » **Piloting:** Piloting concepts can provide strong evidence on how to scale-up and/or integrate activities into mainstream development. For example, the successful piloting of the ETS in Korea and the Top-1,000 enterprise programme in China have provided important information for the countries to then confidently scale-up these activities.

2.4 Finance

Seven (7) countries highlight the importance of adequate financial support and mechanisms to effectively manage and coordinate dispersal of finance.

Examples include:

- » **Domestic budget support:** The Philippines set up specific funds to support different types of climate programmes, projects and activities provided through budgetary provisions and disbursed via local government units.
- » **Dedicated finance facilities:** To support the delivery of activities under Ethiopia's Climate Resilient Green Economy Strategy, a dedicated finance facility was established (the "CRGE facility"). The purpose of the facility being to provide a single pool of funds making it easier for the government to coordinate activities and disbursement of funds in accordance with identified priority areas.
- » **International financial support:** The role of international sources of finance in developing and implementing mitigation actions was highlighted in several cases. For example, international support was provided to support the preparation of Sustainable Energy Action Plans in Georgia, and the implementing of the national energy efficiency programme in Vietnam.

2.5 Technical Capacity

Six (6) country cases highlighted the importance of involving personnel with sufficient technical skills and capacity to support mitigation design and implementation.

This ranged from:

- » **Domestic capacity:** Strong domestic government knowledge of sectors was highlighted as an important success factor in a number of cases. For example, good understanding of their sectors enable government agencies in Tunisia to more easily develop inventories and MRV data for mitigation actions. In Indonesia, a good understanding of NAMAs and LEDS at the operational level, provided bottom-up technical insights and background information which lay the ground work for later high-level political support. At subnational level, the presence of motivated and capable personnel in municipal government was highlighted as an important factor in enabling Georgian cities to develop their Sustainable Energy Action Plans.
- » **External expertise:** For example, the MAPS programme (developed in South Africa) collaborates with focus countries to bring in international and regional expertise to strengthen national capacity on complex topics around mitigation scenario building and economic modelling.

2.6 Target, Incentivise and Enforce Mitigation Actions

Six (6) cases emphasised the importance of designing and implementing effective incentives and enforcement measures targeting mitigation actions.

These include:

- » **Targeting:** The importance of effectively focussing activities to target significant mitigation potential is highlighted in numerous cases. For example, the Top 10,000 programme in China targets large enterprises that are major energy consumers and have both mitigation potential and capacity to implement. In Thailand, mitigation actions targeted the problem of high volumes of waste which had already been identified as a major domestic environmental challenge, hence the action to reduce waste found greater acceptability among various stakeholders.
- » **Incentives:** Employing incentives which sufficiently motivate engagement with mitigation activities is identified as a key success factor in a number of cases. For example, in Chile, the importance of effective incentives for the involvement of the private and public sector in a voluntary carbon management programme is identified as an important factor. In the Dominican Republic, providing international visibility for the national climate compatible development strategy created an incentive for national actors (especially the government) to maintain momentum and deliver a significant result. In Brazil, the disclosure, on the internet, of properties embargoed due to illegal deforestation enabled beef and soy traders to avoid the purchase of raw materials from these areas, thus impacting demand and creating a disincentive to pursue illegal deforestation in the future. Furthermore, market based mechanisms such as Korea's Emissions Trading Scheme (ETS) or programmes such as China's Top 10,000 company programme, provide powerful financial and reputational incentives to encourage mitigation activities across a range of actors.
- » **Enforcement:** Effective enforcement of policies or laws is highlighted as a key success factor in a number of cases, most notably in Brazil, where improvements in enforcement (e.g. embargoes of products or confiscation and removal of equipment) has resulted in significant reductions in deforestation rates.

2.7 Process and Framework

Five (5) cases highlight the importance of having a clear process or framework to guide activities and the roles of different stakeholders in what are often complex efforts of coordination.

These include:

- » **Having a clear roadmap:** Providing a clear process "road map" is cited in several cases as an important factor to enable effective coordination of multiple partners such as private sector participants in China's Top-10,000 programme or Chile's national voluntary carbon management programme.
- » **Mandates and tasks:** Ensuring stakeholders and partners are clear on how they should engage with the process is also cited in several cases as an important factor for efficient delivery. For example, in Peru's PlanCC, participating institutions are provided with clearly defined mandates and tasks, ensuring they focus on their role and the tasks assigned to them, reducing the potential for duplication of effort.
- » **Realistic timeframes:** A further important factor is that of timing. For example, during the development of Peru's PlanCC, the process anticipated and allowed time for key activities to be undertaken such as building capacities and developing the evidence-base.

2.8 Transparent, Verifiable Information

Five (5) cases also emphasised the importance of ensuring transparent, verifiable information which provides the basis for the selection, design and implementation of activities. This was highlighted as important for:

- » **Credibility:** Ensuring the use of transparent, verifiable information was highlighted in numerous cases to strengthen credibility of decisions. For example, in Costa Rica and Chile, using international information standards has been important to provide confidence of the product offered (e.g. guarantee of no double counting and delivery of planned impacts).
- » **Transparency around prioritisation processes:** For example, in Lebanon, openness in the NAMA prioritisation process (particularly the criteria) demonstrated that the leading Ministry (of Environment) was not pushing one or other approach or agenda, ensuring greater engagement and acceptance of the conclusions.

3 Conclusions and Lessons Learnt

It is encouraging to note that across all regions there is a broad diversity of mitigation actions underway and many examples of effective practice at various stages of implementation. The learning documented in the accompanying case studies provides the reader with useful background, practical insights and further resources to understand the what, when, who and how of some of these practices. The cases highlight lessons learned from country experience of designing and delivering mitigation actions across a wide range of cultural, political and socio-economic contexts. We have highlighted in the previous section a range of cross-cutting factors which appear to have contributed to success in many cases. These include having effective leadership and political commitment; engaging and managing stakeholders; using appropriate processes, frameworks, targets and incentives; mainstreaming and institutionalising mitigation actions; and having sufficient finance and technical capacity.

Although the lessons learned from the cases are often context specific, several common factors did emerge which are noteworthy when considering designing similar actions elsewhere. They include:

- » **Financial support:** Not surprisingly, securing adequate financial resources and implementing the right incentives is an important lesson highlighted across many of the cases (8). Ensuring financial transparency (e.g. Viet Nam) and active stakeholder engagement (e.g. South Korea) are also important considerations in this respect.
- » **Involving the right partners at the right time:** Having the right people and institutions on board can have a large impact on the success of projects and as experience from the cases in Chile, South Africa and Colombia emphasise, investing time in engaging the right people at the right time can avoid problems later. Deciding on ideal size of the group is also an important consideration, as highlighted in the case of Lebanon.
- » **Involvement of subnational actors:** Sub-national actors play a vital role, largely due to their proximity to local conditions and that they can implement certain actions more effectively (e.g. the role of enforcement in preventing deforestation in Brazil). The value of giving subnational governments more power to act and support delivery of national policies is noted in a number of cases (e.g. Georgia, Brazil and Colombia). The cases in Kenya and India also highlight some of the advantages of a more bottom-up approach with regards to better information for national adaptation and mitigation planning.

- » **Providing a long-term perspective:** Actions that are framed within a long-term perspective can be important to reassure and convince private companies and other stakeholders about the benefits and potential return on investments (e.g. Chile, China). Making clear links with immediate and long-term development goals can enhance political acceptability (e.g. India).
- » **Building on existing policies/structures:** Integrating actions with existing policies, for example to implement NAMAs (Colombia) or building on existing institutions or ministries ensure the necessary political buy-in and institutional ownership to secure implementation and follow up (e.g. Ethiopia, India).

We encourage the reader to explore the cases in more detail by accessing the online resources which accompany each case and reaching out to the country contacts provided to further understand the important actions to replicate (and avoid) when designing and implementing similar mitigation actions elsewhere.

4 Annex

4.1 General Good Practice Criteria for Mitigation Initiatives

1. Aims to achieve significant GHG impact (e.g. targets key emission source/sector)
2. Contributes to sustainable development, e.g. to achieving MDGs or other development objectives
3. Aligns with existing LEDS and/or national environment and climate strategies
4. Includes a diverse set of interventions (including policies and financial mechanisms) developed from a thorough analysis of barriers
5. Has a broad scope (e.g. sector-wide or national) and is scalable
6. High level political ownership (e.g. evidenced through use of own financial resources/political champion)
7. Includes an MRV framework
8. Stimulates private investment and leverage
9. Resulted from a participatory process involving key stakeholders
10. Evidence of inter-ministerial coordination and involvement
11. Is fully institutionalised to ensure sustainability of the actions over time and permanence (e.g. cannot be reversed)
12. Includes a well-defined finance plan including national sources as well as a sustainable financing scheme (concept for phase out of international/public funds)
13. Includes a detailed implementation plan

4.2 Technical Quality Attributes for LEDS, NAMAs and MRV

Technical Quality Attributes for LEDS

1. Country driven process, linked to existing processes, national strategies and measures (e.g. inclusion of priority sectors and development goals)
2. Commitment and leadership at the highest political level
3. Coordination across different key ministries (e.g. finance, energy)
4. Involvement of stakeholders across sectors (including the private sector) aiming to build consensus amongst them
5. Long-term vision combined with clear definition of short and medium-term policy goals and measures
6. Thorough and transparent analysis of scenarios and reduction potential, costs and co-benefits, taking indirect costs/benefits into consideration
7. Balance of different policy areas including economic incentives, information systems and technology deployment and use
8. Reliable data based on scientific analyses (e.g. GHG inventories, BAU scenarios)
9. Use of professional and technical support, advice and peer-to-peer learning, both in government and private institutions
10. Dynamic document in an on-going updating process;

Technical Quality Attributes for NAMA

1. Aims to achieve significant GHG impact (e.g. targets key emission source/sector)
2. Contributes to sustainable development, e.g. to achieving MDGs or other development objectives
3. Fits into existing LEDS and/or national environment and climate strategies
4. Includes a diverse set of interventions (including policies and financial mechanisms) developed from a thorough analysis of barriers
5. Has a broad scope (e.g. sector-wide or national) and is scalable
6. High level political ownership (e.g. evidenced through use of own financial resources/political champion)

- 
7. Includes an MRV framework
 8. Stimulates private investment and leverage
 9. Resulted from a participatory process involving key stakeholders
 10. Evidence of inter-ministerial coordination and involvement
 11. Is fully institutionalised to ensure sustainability of the actions over time and permanence (e.g. cannot be reversed)
 12. Includes a well-defined finance plan including national sources as well as a sustainable financing scheme (concept for phase out of international/public funds)
 13. Includes a detailed implementation plan;

Technical Quality Attributes for MRV

1. Measuring/Monitoring GHG emissions
 - » Established systems for regular tracking of GHG emissions;
 - » Covers all economic sectors
 - » Development of emission scenarios
 - » Adequate financial and human resources
 - » Quality assurance process
2. Measuring/Monitoring measures and policies
 - » Includes methods for quantifying direct, indirect, long-term emission reductions and sustainable development co-benefits/costs
 - » Includes baselines, indicators and results chains
 - » Adequate financial and human resources
 - » Quality assurance process
3. Measuring/Monitoring support (financial, technical and capacity building)
4. Reporting
 - » Includes regular and substantiated reporting on the progress of GHG emission reduction measures
 - » Includes GHG inventories
 - » Meets the requirements of biennial update reports
5. Verification
 - » Independent experts verify the correctness and quality of the reported information
 - » Meets the standards of international consultation and analysis (Annex IV: <http://unfccc.int/resource/docs/2011/awglca14/eng/I04.pdf>)

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