

CLIMATE ACTION IN MALAYSIA

Country context

In 2009, Malaysia committed to reducing, by 2020, the emissions intensity of its Gross Domestic Product from 2005 levels by as much as 40%, with international support. This voluntary aspiration demonstrated the **government's willingness to address climate change and embark on a low emission growth trajectory** while pursuing its broader development goals of achieving a high-income nation status in a sustainable manner.

Growth in GHG emissions was seen to be driven by the energy, industrial processes, and waste sectors. The government created institutional arrangements for accounting and reporting on its national greenhouse gas (GHG) inventory by establishing national committees for policy and technical guidance and five sectoral working groups to focus on inventory calculations, as published in the Second National Communication (2011).

When the Low Emission Capacity Building (LECB) project began in 2013, Malaysia's low emission development strategy was guided primarily by its national development plan, the Tenth Malaysia Plan (2011-2015), and two key policies launched in 2009, the National Policy on Climate Change and the National Green Technology Policy.

The National Policy on Climate Change sought to provide the framework to mobilise and guide stakeholders in addressing the challenges of climate change in an effective and holistic manner. It identified key actions under 10 strategic areas to facilitate the integration of climate change considerations into planning and implementation of development programmes and decision-making processes.

The National Green Technology Policy focused on promoting low emission green technology in four key sectors (building, energy, waste and transportation) to aid sustainable development and natural resource conservation. Given the importance of these two policies, a National Green Technology and Climate Change Council, chaired by the Prime Minister, was established to foster greater coordination between these two complementary areas. **The Tenth Malaysia Plan sought to continue efforts on developing a roadmap for climate resilient growth.**

In this context the LECB project activities focussed on building on the Malaysia's existing initiatives for climate action and supporting its efforts to transition to a low emission development pathway.



LECB MALAYSIA at a glance



Total financing
US \$705,095

3

Timeframe
3 years (2013-2016)



Sectors
Waste, energy, agriculture
and tourism



Counterparts
Ministry of Natural
Resources and Environment
(NRE)



Thematic areas

- Institutional frameworks
- GHG inventory systems
- NAMAs
- LEDS
- INDC support
- MRV systems
- Private sector involvement
- Climate finance

LECB ASIA

Strengthened national GHG inventory accounting and reporting

LECB strengthened capacities in key government agencies and enhanced the quality of the national GHG inventory, with a focus on the agriculture and waste sectors, complementing continuing activities on preparation of national communications. To embed capacity, in collaboration with United States Environmental Protection Agency and United States Agency for International Development, the project delivered support and training on specific technical aspects for the waste and agriculture sector inventories, including: (i) GHG inventory reporting requirements; (ii) use of 2006 Intergovernmental Panel on Climate Change Guidelines and tools; (iii) inventory data collection and archiving, quality assurance and control; and (iv) uncertainty analysis. These training materials were developed and tailored to the Malaysian context and were rolled-out through targeted workshops (they are available for use in future trainings). LECB also undertook an assessment to identify country-specific emission factors for rice cultivation, and a feasibility study to lay the groundwork for developing local emission factors for Malaysia's power sector.

Submission of NAMA proposals and studies

LECB, in collaboration with relevant sector ministries and government departments, government agencies which were nominated as lead agencies, and implementing agencies prepared and submitted six early-stage NAMA proposals including their associated monitoring, reporting and verification (MRV) elements to the NAMA Facility and United Nations Framework Convention on Climate Change (UNFCCC) Registry. These proposals covered interventions on energy efficient two-wheelers; integrated E-Waste management; improved management of peat swamp forests; implementation of renewable energy-based CDM (clean development mechanism) projects as NAMAs; and a feed-in-tariff mechanism for renewable energy. With LECB support, a number of government institutions undertook studies to assess NAMA potential in the energy, power generation, cement, and iron and steel sectors, and on the application of low emission models on Langkawi Island. Managing these studies resulted in strengthened capacities and ability to engage effectively in these sectors.

41 Government officials trained

on the technical aspects of GHG inventories for the agriculture sector and for solid waste disposal

6 NAMA proposals

developed and submitted to the NAMA Facility and UNFCCC-Registry

RESULTS

Established institutional frameworks for NAMAs and MRV endorsement and submission

To support the endorsement and submission of the NAMA and MRV documents at national level, LECB helped to establish the required institutional arrangements and frameworks. A technical working group was set up to guide and manage NAMA and MRV-related activities. Synergies were established with the Biennial Update Report/Third National Communication (BUR/NC3) process to ensure continuity of these institutional arrangements post the LECB project.

Development of domestic MRV guidelines

Two domestically-applicable guidelines for MRV were developed by LECB: one for measurement and reporting and the other for verification. These documents provide step-by-step guidance for undertaking MRV in the Malaysian context. The measurement and reporting guidelines were tested on three existing national initiatives to validate their domestic applicability.

2

Domestic MRV

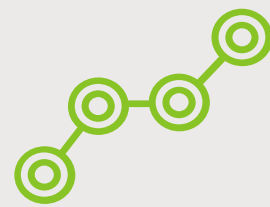
guidelines developed

IMPACTS



Enhanced inventory quality and future national communication reporting

This is a result of the strengthened institutional capacities for national GHG inventory preparation and management, and for the solid waste and agriculture sectors in particular.



Enhanced technical capacities in government around different GHG accounting methodologies and on tracking GHG mitigation impacts and other co-benefits

Tailored MRV guidelines and templates enable the monitoring and reporting on mitigation actions to support NAMA activities, which in turn will contribute to expanding the methodological framework for MRV over the long-term.



Capacitated government agencies

Those involved to date in the NAMA development and submissions have learned from the process and are better equipped to lead and collaborate on similar efforts in the future. Pursuing and refining prospective NAMA and mitigation opportunities has been bolstered by the knowledge developed, and through assessments carried out for various sectors.



General overview of the UNDP Low Emission Capacity Building Programme

Since its inception, the UNDP LECB programme has paved the way for effective and lasting climate action by building capacities of government staff to develop policies, strategies and tools that help implement their climate change goals. Focusing specifically on essential building blocks such as strengthening GHG inventory data and systems; formalization of institutional arrangement for climate actions; development and alignment of low emission development strategies (LEDS); and the creation of Nationally Appropriate Mitigation Actions (NAMAs), LECB provided much of the enabling environment necessary for countries to respond quickly to emerging needs, such as the submission of Intended Nationally Determined Contributions (INDCs) and socialization of the Paris Agreement. Given its flexible nature and strong country ownership, often the originally-envisaged and measurable LECB outputs have been exceeded, leading to some unplanned but highly welcomed additional impacts.

CASE STUDY

MALAYSIA'S DOMESTIC GUIDELINES FOR MRV ACTIVITIES

LECB in Malaysia led design of two domestic guidelines to support MRV activities. To ensure wide acceptance of the local mitigation quantification and verification exercises, the guidelines were formulated to adhere to internationally recognized principles and approaches. Stakeholder consultation and test demonstrations also helped ensure that the guidelines have high applicability in the Malaysian context.

The Malaysian Measurement and Reporting Guideline (MYGHG Mitigation-MR Guideline), including templates, was developed to provide a methodology to estimate and report GHG emission impacts resulting from the implementation of national mitigation policies and programmes. It provides step-by-step guidance for quantification of GHG impacts as well as for monitoring and reporting. Global methodologies, tools, and guidelines were reviewed before initiating design of these domestic guidelines.

The measurement and reporting guideline was tested in three demonstration cases: the SAVE rebate programme to stimulate sales of energy-efficient appliances (air conditioners, refrigerators, and industrial chillers); the feed-in-tariff mechanism; and solid waste diversion from landfill. This pilot case implementation approach helped to test the usability and practicality of the guideline and inform its design.

The verification guideline sought to ensure consistency in the verification process and to assist NAMA implementers to prepare for verification. Developing this guideline involved a review of international methodologies and approaches on verification of NAMAs and GHG emissions; a stock-take of relevant experience, lessons and best practises that can be applied in the Malaysian context; estimating costs for conducting the verification; and identifying challenges and barriers to implementing the guidelines and recommendations for its use.

The UNDP Low Emission Capacity Building (LECB) Programme was launched in January 2011 as part of a joint collaboration between the European Union, the Governments of Germany and Australia and UNDP. It is a global programme that helps countries build the public and private sector capacities needed to scale up country-driven mitigation actions.

LECB Malaysia made possible by:



Supported by:



based on a decision of the German Bundestag

