



KEMENTERIAN SUMBER ASLI DAN ALAM SEKITAR
(Ministry of Natural Resources and Environment)
BAHAGIAN PENGURUSAN ALAM SEKITAR DAN PERUBAHAN IKLIM
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Date: 6 October 2015

To Whom It May Concern

Endorsement of NAMA Seeking Support for Preparation

- **Detailed Study of Sustainable NAMA Financing Mechanism for Reactivating Renewable Energy-based CDM Project Activities in Malaysia**

Dear Sir/Madam,

The Ministry of Natural Resources and Environment Malaysia, as the national focal point on climate change and clean development mechanism (CDM) in Malaysia, would like to endorse the submission of the above nationally appropriate mitigation action (NAMA) to the NAMA Registry under United Nations Framework Convention on Climate Change (UNFCCC) in seeking support for preparation.

The Ministry would like to also express appreciation to United Nations Development Programme Malaysia, through the Low Emission Capacity Building (LECB) Project, for support provided in preparing the NAMA.

Yours sincerely,

(JAYA SINGAM RAJOO)

Environmental Management and Climate Change Division
for Secretary General
Ministry of Natural Resources and Environment

"Warisan Sumber Asli dan Alam Sekitar untuk Kesejahteraan Hidup"



SIRIM
PENGIKTIRAFAN MS ISO 9001 : 2008
NO. SIJIL : AR 5358



MS ISO/IEC 17021:2006
QS 02121999 CB 01



SIRIM
PENGIKTIRAFAN ISO/IEC 27001:2005
NO. SIJIL : AR 5227



074



NAMA Seeking Support for Preparation

A Overview

A.1 Party Malaysia

A.2 Title of Mitigation Action Detailed Study of Sustainable NAMA Financing Mechanism for Reactivating Renewable Energy-based CDM Project Activities in Malaysia

A.3 Description of mitigation action

Malaysia is one of the non-Annex 1 Parties at the forefront of CDM activities, having submitted a total of 253 CDM projects and 9 Programmes of Activities (PoAs) with 14 Component Project Activities (CPAs) as at April 2015. Of these numbers, 143 CDM projects and 5 PoAs with 10 CPAs have been registered with the CDM Executive Board, while 18 CDM projects and 4 PoAs are still at the validation phase of the CDM cycle. Based on the number of registered projects, Malaysia ranks 8th in the global hierarchy of CDM project pipeline, accounting for 1.9% of the total.

Like all other non-Annex 1 Parties hosting CDM projects, Malaysia's CDM activities have been much curtailed due to sharp decline of the carbon market attributed to uncertainty about the future global climate regime. Besides inactivity in validation, verification activities have largely been sporadic since 2012, essentially due to lack of demand for CERs and current carbon prices are untenable vis-à-vis the transaction costs. Without this revenue source, the cash flow of many projects has been severely affected, except for a handful of project activities with sufficient revenue-generating outputs other than solely dependent on CDM benefits still able to sustain their operations, albeit partially in some cases. As a result, most CDM activities have been terminated or very much limited due to the high monitoring and transaction costs. With the carbon market in the doldrums, substantial slowdown in CDM activities has led to the exit of CDM players and termination of emission reduction purchase agreements (ERPAs) by most CER buyers. Projects that were designed and managed by CDM consultants, and projects that were developed on BOOT basis, have been unable to sustain or have been abandoned with the withdrawal of the consultants and investors, as the project host companies lack such expertise and experience. The current scenario has resulted in a general loss of interest and confidence of the private sector in CDM.

A preliminary study supported by the Low Emission Capacity Building (LECB) Project in 2014-2015 revealed the bulk of the CDM project activities in Malaysia are associated with renewable energy (RE). These include RE generation and utilisation, involving biomass energy from agro-based residues, methane capture and destruction from landfill gas and palm oil mill effluent (POME), and hydropower. For POME, there is an ongoing initiative, known as the Palm Oil National Key Economic Area-Entry Point Project 5 (NKEA-EPP5) under Malaysia's Economic Transformation Programme, which is aimed at all palm oil mills to capture methane gas from POME treatment to be utilised as a fuel source, with a set target to achieve 100% compliance by all the mills to have implemented biogas projects by 2020. During the stakeholder consultation process of designing the NAMA, a concern was expressed of possibly creating discrimination and complication among CDM and non-CDM projects on POME methane recovery projects in the context of implementation of the Palm Oil NKEA-EPP5. To address this concern, methane capture from POME treatment is excluded for the



purpose of this NAMA. Collectively, the remaining RE-related project activities account for 35.4% of Malaysia's CDM pipeline, or 38.5% of the registered projects. These projects possess immense potential to deliver significant mitigation impact, both sector-wide and nationwide, upon rejuvenation in line with the objectives of the National Renewable Energy Policy and Action Plan 2010 and other related policies. The mitigation impact is two-fold: direct GHG emission reduction via methane avoidance and destruction, and utilisation of RE generated to displace fossil-based energy sources. It is envisaged that this mitigation action will contribute positively to Malaysia's voluntary pledge of reducing its emissions intensity of GDP by up to 40% by 2020 based on 2005 levels, conditional upon technology transfer and financial support of adequate and effective levels.

The LECB-supported study, undertaken via a consultative approach, outlined a preliminary NAMA framework that aims to provide support for reactivating CDM projects whose activities pertain to the generation, application and utilisation of RE. The NAMA framework identified three main inputs: (1) existing policies, strategies and initiatives already in place and relevant to the action to be implemented; (2) new domestic initiatives to be introduced specifically for creating market demand for CDM project outputs, namely RE generated by the project activities; and (3) international support to be solicited in terms of technological and financial solutions for new RE applications. The support required is considered in four perspectives:

- Policy support – Policy instruments and action plans that have been formulated by the government to propel the development and growth of renewable energy and to capitalise on biomass resources in downstream value creation. These are of direct relevance to the prioritised CDM project types to be covered in the NAMA.
- Finance support – This includes financing instruments and prospective revenue which are ready to be tapped by the various project activities pertaining to the target CDM projects, and new financing initiatives which may need to be introduced in order to provide effective support to the CDM activities being targeted.
- Technology support – Certain modifications of project design, operation and diversification of activity outputs and products may need to be executed in order to breathe life into the project activities through enhancing their financial viability. The need of technology transfer in this respect from international support is much anticipated.
- Capacity building support – Capacity building is needed in the face of introducing new measures, initiatives and technology into realising the NAMA's objectives and targets.

This proposal aims to conduct a detailed study on the proposed NAMA framework above, including the inputs and support required for reactivating the RE-based CDM project activities. The output is a detailed NAMA proposal seeking support for implementation. Activities to be undertaken are as follows:

1. A detailed assessment of the targeted CDM project types, namely biomass energy, hydropower and landfill gas, vis-à-vis the current scenario of the related business sectors in particular, and the development of renewable energy as a fuel source in general.



2. Identification of activities for design of the NAMA framework and formulation of the implementation plan and approaches including MRV system.
3. Prioritisation of project activities in accordance with a set of eligibility criteria for seeking support under the NAMA to be formulated under the study based on their status in the CDM project cycle and the type of funding support received. This includes registered projects in operation but without CER issuance, registered projects with CER issuances, registered projects yet to be operationalised, length of the remaining crediting period, projects with expired crediting period, and projects still in the validation stage.
4. Estimation of the cost of implementation and specific support needs, potential GHG emission reductions achievable, and time frame for the action.

- A.4 Sector
- | | |
|---|--|
| <input checked="" type="checkbox"/> Energy supply | <input type="checkbox"/> Transport and its Infrastructure |
| <input type="checkbox"/> Residential and Commercial buildings | <input type="checkbox"/> Industry |
| <input checked="" type="checkbox"/> Agriculture | <input type="checkbox"/> Forestry |
| <input checked="" type="checkbox"/> Waste management | <input type="checkbox"/> Other <Pls enter Other text here> |

- A.5 Technology
- | | |
|--|---|
| <input checked="" type="checkbox"/> Bioenergy | <input checked="" type="checkbox"/> Cleaner Fuels |
| <input type="checkbox"/> Energy Efficiency | <input type="checkbox"/> Geothermal energy |
| <input checked="" type="checkbox"/> Hydropower | <input type="checkbox"/> Solar energy |
| <input type="checkbox"/> Wind energy | <input type="checkbox"/> Ocean energy |
| <input type="checkbox"/> Carbon Capture and Storage | <input type="checkbox"/> Low till / No till |
| <input checked="" type="checkbox"/> Land fill gas collection | <input type="checkbox"/> Other: <Pls enter Other text here> |

- A.6 Type of action
- | |
|---|
| <input type="checkbox"/> National/Sectoral goal |
| <input type="checkbox"/> Strategy |
| <input checked="" type="checkbox"/> National/Sectoral policy or program |
| <input checked="" type="checkbox"/> Project: Investment in machinery |
| <input checked="" type="checkbox"/> Project: Investment in infrastructure |
| <input type="checkbox"/> Project: Other |
| <input type="checkbox"/> Other: <Pls enter Other text here> |

- A.7 Greenhouse gases covered by the action
- | | |
|---|---|
| <input checked="" type="checkbox"/> CO ₂ | <input checked="" type="checkbox"/> CH ₄ |
| <input type="checkbox"/> N ₂ O | <input type="checkbox"/> HFCs |
| <input type="checkbox"/> PFCs | <input type="checkbox"/> SF ₆ |
| <input type="checkbox"/> Other <Pls add in text here> | |

B National Implementing Entity

- B.1.0 Name Ministry of Natural Resources and Environment Malaysia
- B.1.1 Address Wisma Sumber Asli, Persiaran Perdana, Presint 4, 62574 Putrajaya, Malaysia
- B.1.2 Contact Person <Pls enter name of Contact Person here>
Alternative Contact Person <Pls enter Alternative Contact Person here>



B.1.3 Phone <Pls enter Phone Number here>
Alternative Phone <Pls enter Alternative Phone Number here>
B.1.4 Email <Pls enter Email Address here>
Alternative Email <Pls enter Alternative Email Address here>

C. Expected timeframe for the preparation of the mitigation action

C.1 Number of months for completion 6 - 8

D.1 Used Currency USD
Conversion to USD <to be filled automatically>

E Cost

E.1.1 Estimated full cost of preparation 100,000
Conversion to USD 100,000

E.1.2 Comments on full cost of preparation

The cost covers the required technical support for undertaking the detailed study as described in section A.3 and preparation of the formal NAMA Design Document after a stakeholder consultation process. The breakdown is as follows:

- Consultancy: 15,000/man-month x 5 man-months = 75,000
- Stakeholder consultation events: 10,000/event x 2 events = 20,000
- Local travel expenses (lump sum) = 5,000

F Support required to prepare the mitigation action

F.1.1 Amount of financial support 100,000
Conversion to USD 100,000

F.1.2 Type of required financial support

- | | |
|--|--|
| <input checked="" type="checkbox"/> Grant | <input type="checkbox"/> Carbon finance |
| <input type="checkbox"/> Loan (sovereign) | <input type="checkbox"/> Other <Pls enter Other text here> |
| <input type="checkbox"/> Loan (Private) | |
| <input type="checkbox"/> Concessional loan | |
| <input type="checkbox"/> Guarantee | |
| <input type="checkbox"/> Equity | |

F.1.3 Comments on Financial Support

Financial support represents the full cost of preparation as per section E.1.1, to engage consultant to undertake the study and to complete the NAMA design document. Domestic in-kind contribution will be provided to support the study.

F.2.1 Amount of Technical support 0.00
Conversion to USD <to be filled automatically>

F.2.3 Comments on Technical support <Pls enter Comments here>



F.3.1 Amount of capacity building support 0.00 \$ (Dollars)
Conversion to USD <to be filled automatically>

F.3.2 Type of required capacity building support Individual level
 Institutional level
 Systemic level
 Other <Pls enter Other text here>

F.3.3 Comments on Capacity Building Support

F.4 Financial support required

F.5 Technological support required

F.6 Capacity building support required

G Relevant National Policies strategies, plans and programmes and/or other mitigation action

G.1 Relevant National Policies

- National Renewable Energy Policy and Action Plan 2010: The policy strives to enhance the utilisation of indigenous RE resources to contribute towards national electricity supply security and sustainable socio-economic development.
- National Green Technology Policy 2009: The policy aims to promote green technology as a driver to accelerate the national economy and enhance sustainable development.
- Renewable Energy Act 2011: The act provides for the establishment and implementation of a special tariff system to catalyse the generation of RE, ushering in the Feed-in Tariff (FiT) scheme aimed at augmenting the share of RE in the power generation fuel mix from indigenous RE sources.
- National Policy on Climate Change 2009: The policy aims at, inter alia, mainstreaming climate change through wise management of resources and enhanced environmental conservation resulting in strengthened economic competitiveness and improved quality of life.

G.2 Links to other mitigation actions

- Feed-in Tariff Scheme: guaranteeing access to the grid and setting a favourable price structure for grid-connected RE to ensure that RE becomes a viable and sound long-term investment for eligible and approved RE electricity generators.
- Green Technology Financing Scheme: providing financing support in the form of soft loan guarantee and interest rate rebate in cooperation with participating financial institutions for eligible RE projects as producers and users of green technology.
- Palm Oil National Key Economic Area-Entry Point Project 5 (NKEA-EPP5) under the ETP - Developing biogas at palm oil mill: The initiative is targeted at 100% of palm oil mills in the country to



implement biogas capture projects by 2020, and to utilise the recovered methane as a RE source to generate electricity for supply to the national grid or for on-site consumption.

H Attachment

H.1 Attachment description <Pls enter attachment description>

H.2 File [Browse](#)

I Support received

I.1 Outside the Registry

The Low Emission Capacity Building (LECB) Project in Malaysia commissioned a study titled "Review of CDM Activities as Potential NAMAs" under Outcome 2 of the Project to assist Malaysia in promoting the uptake of NAMAs. This NAMA document is part of the output of the said study.

I.2 Within the Registry

Source	Amount	Date