

United Nations Development Programme

Country: MALAYSIA

PROJECT DOCUMENT



Project Title: Low Emission Capacity Building Programme (LECB) for MALAYSIA

UNDAF Outcome(s):

As Malaysia does not have a United Nations Development Assistance Framework, UNDP's framework is based on activities that directly supports the achievement of national priorities as laid out in the 10th Malaysia Plan and in line with the *national transformation policy, government transformation programme, economic transformation programme, rural transformation programme, and political transformation programme.*

Expected CP Outcome(s):

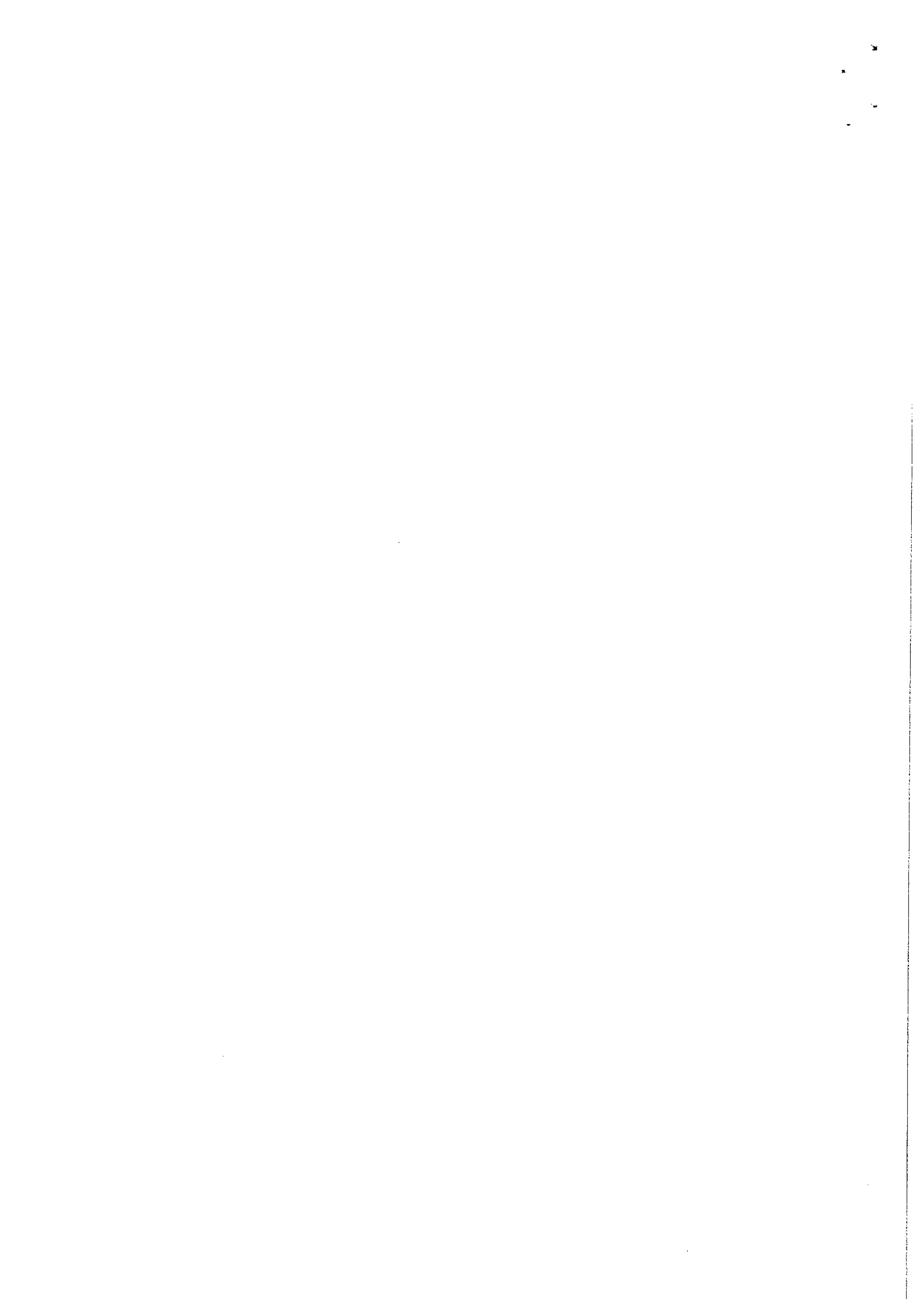
Strengthened institutional capacity in managing climate change, including achieving both the 2015 renewable energy target of 5.5% of total electricity generation mix and an enhanced national framework for biodiversity management of the central forest spine in Peninsular Malaysia and the heart of Borneo.

Expected Output(s):

National capacities in formulating national *Low Emission Development Strategy* (LEDS) strengthened with a focus on policy development, national reporting, and climate change mitigation actions which focuses on greater renewable energy and energy efficiency practices.

Implementing Partner: Ministry of Natural Resources and Environment (MNRE)

Executing Entity: Ministry of Natural Resources and Environment (MNRE)




Brief Description

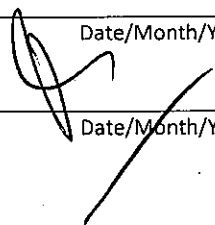
Malaysia ratified the UN Framework Convention on Climate Change (UNFCCC) on July 13, 1994 and the Kyoto Protocol on 4 September 2002. As part of the obligations assumed as a party of the UNFCCC, the Government of Malaysia submitted its Initial National Communication in 2000 and the Second National Communication was submitted in January of 2011 with the help of the UNDP/GEF. At COP 15 in Copenhagen, on the basis of transfer of technology and financial support from developed countries, the voluntary aspiration sets forward the country's overarching strategy for development in a low carbon pathway, demonstrating its commitment to address GHG emissions in the context of sustainable development. Subsequently, it is further augmented with the National Policy on Climate Change and National Green Technology Policy, which together set the foundation for low emission development strategy (LEDS) for the country. The LECB project is to assist Malaysia in enhancing national greenhouse gas (GHG) inventory systems, promoting the uptake of nationally appropriate mitigation actions (NAMA) as well as designing measurement, reporting, and verification (MRV) framework that ultimately serves national priorities for LEDS.

The key outcomes of the project shall be as follows:

1. The GHG Inventory System fulfils national sustainable development requirements and international commitments.
2. National initiatives on mitigation are enhanced through NAMAs in the main industrial GHG emitting sectors that contribute to voluntary emission reduction aspiration.
3. National and sectoral MRV systems are designed with pilot activities in the main industrial GHG emitting sectors.

Programme Period:	2013-2015	Total resources required (via UNDP HQ: Australia, EU and Germany)	
Key Result Area:	Outcome 2: Strengthening Climate Resilient Development	Total allocated resources:	USD 802,500
Atlas Award ID:	TBD after signing	• Regular	0
Project ID:	TBD after signing	• Other:	
Start date:	Jan 2013	○ Government	0
End Date:	Dec 2015	○ In-kind	USD 300,000
Management arrangements	NIM	GMS is 7 % (under F&A) and is part of the project budget as requested by UNDP BDP = USD 52,500	

Agreed by (Economic Planning Unit):  **DATUK DR RAHAMAT BIVI BT. YUSOFF**
 Director General
 Economic Planning Unit
 Prime Minister's Department
 22 APR 2013

Agreed by Resident Representative:  **Patrice Coeur-Bizot**
 Resident Representative, a.i.
 23 APR 2013

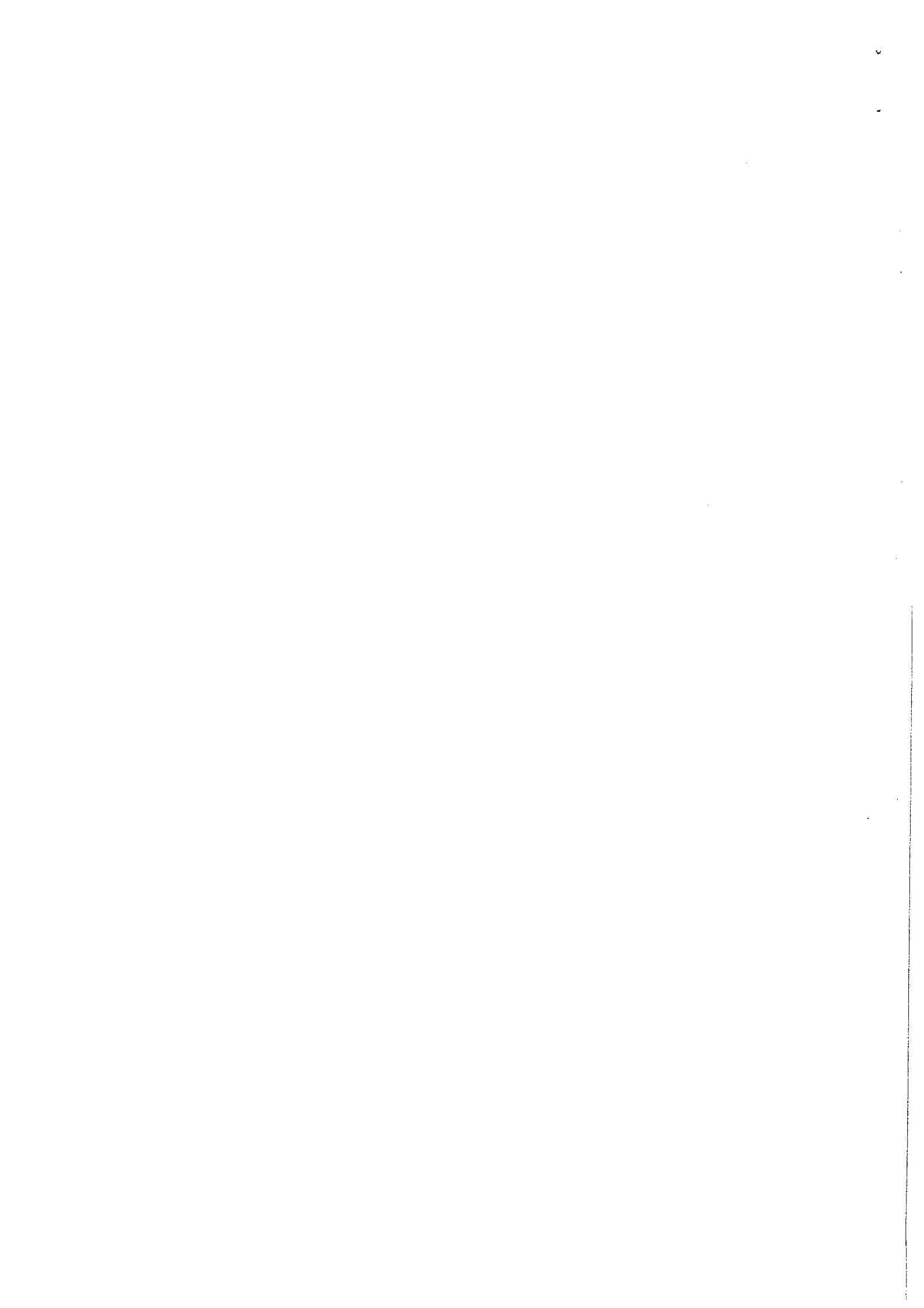


Table of Contents

I.	SITUATION ANALYSIS	5
II.	STRATEGY	11
III.	PROJECT RESULTS FRAMEWORK	16
IV.	TOTAL BUDGET AND WORKPLAN	17
V.	MANAGEMENT ARRANGEMENTS	31
VI.	MONITORING AND EVALUATION FRAMEWORK	34
VII.	LEGAL CONTEXT	36
VIII.	APPENDIX A: TECHNICAL COMPONENTS OF THE PROJECT PROPOSAL	38
IX.	APPENDIX B: VISIBILITY & OUTREACH UNDER THE LECB PROJECT	41
X.	APPENDIX C: RISKS AND MITIGATION	41
XI.	APPENDIX D: UNDP ANNUAL WORK PLAN MONITORING TOOL	43
XII.	APPENDIX E: TERMS OF REFERENCES	45
XIII.	APPENDIX F: Project Annual Report Template	48
XIV.	APPENDIX G: FACE FORM	49

Acronyms

BUR	Biennial Update Reporting
DID	Department of Irrigation and Drainage
EC	Energy Commission (English for ST)
EE	Energy Efficiency
EPP	Entry Point Projects
EPU	Economic Planning Unit
FiT	Feed-in-Tariff
GDP	Gross Domestic Product
GTCCC	Green Technology and Climate Change Council
GTP	Government Transformation Programme
IPP	Independent Power Producer
ktoe	Kilo tons of oil equivalent
LECB	Low Emission Capacity Building Project
LEDS	Low Emission Development Strategy
MDG	Millennium Development Goals
MEGTW	Ministry of Energy, Green Technology and Water
MGTC	Malaysia Green Technology Corporation
MHLG	Ministry of Housing and Local Government
MIGHT	Malaysian Industry-Government Group for High Technology
MITI	Ministry of International Trade and Industry
MOA	Ministry of Agriculture
MOSTI	Ministry of Science, Technology and Innovation
MP	Malaysia Plan
MRRD	Ministry of Rural and Regional Development
MRV	Measurement Reporting and Verification
NAMA	Nationally Appropriate Mitigation Actions
NEB	National Energy Balance
PEMANDU	Performance Management and Delivery Unit
RE	Renewable Energy
REPPA	Renewable Energy Power Purchase Agreement
SE4ALL	Sustainable Energy for All
SEDA	Sustainable Energy Development Authority
SHS	Solar Home System
SME	Small and Medium Industries
SREP	Small Renewable Energy Projects
ST	Suruhanjaya Tenaga (Energy Commission)
TNB	Tenaga Nasional Berhad
UNDP	United Nations Development Programme
UNIDO	United Nations Industrial Development Organization

SITUATION ANALYSIS

Introduction

Malaysia ratified the UN Framework Convention on Climate Change (UNFCCC) on July 13, 1994 and the Kyoto Protocol on 4 September 2002. As part of the obligations assumed as a party of the UNFCCC, the Government of Malaysia submitted its First National Communication in 2000 and the Second National Communication was submitted in January of 2011 with the help of the UNDP/GEF. At COP 15 in Copenhagen, the Prime Minister announced that Malaysia would voluntarily reduce its emissions intensity of GDP by up to 40% based on 2005 levels by 2020, on the basis of technology transfer and financial support from developed countries. The voluntary aspiration sets forward the country's overarching strategy for development in a low carbon pathway, demonstrating willingness to address GHG emissions in the context of sustainable development. Subsequently, it is further augmented with the National Policy on Climate Change and National Green Technology Policy that together set the foundation for low emission development strategy (LEDS) for the country.

The Second National Communication (NC2) has produced several results of significant importance for the development of LEDS and nationally appropriate mitigation actions (NAMAs). Emissions inventory for the year 2000, and estimates, are showing that GHG emissions are continuously increasing. These inventories establish a solid baseline that facilitates the updating of GHG emissions and the analysis of future trends. Increases in emissions in the Energy, Industrial Processes and Waste sectors ranged between 50-184 % between the years 1994 and 2000 resulting in a significant increase in emissions of each GHG considered. At the same time, there was more than two fold increase in net removal in the LULUCF sector largely due to the increase in categories considered and better accuracy in calculations. The agriculture sector showed a reduction in emissions due to the changes in assumptions and guidelines. The NC2 also resulted in guidelines for mitigation which are a first step towards a concrete strategy. The assessments undertaken lay the groundwork for further analysis and help to promote the translation of these into concrete actions.

Mitigation actions in Malaysia are guided by national development plans and two key national policies. The national plan that is currently in implementation is the Tenth Malaysia Plan (RMK-10), while the two policies are National Policy on Climate Change and National Green Technology Policy, respectively.

RMK-10 will continue efforts on developing a roadmap for climate resilient growth. During the Plan period, Malaysia will adopt a dual strategy in addressing climate change impacts: firstly, adaptation strategies to protect economic growth and development factors from the impact of climate change; and secondly, mitigation strategies to reduce emission of GHGs. On the latter, the Plan recognises that Climate change is a global issue with significant implications for Malaysia despite the country's contribution of only 0.7% to global CO₂ emissions based on the UNDP Human Development Report 2007/2008. Major efforts will be introduced to reduce emissions intensity through several programmes aimed at reducing emission of GHGs. These initiatives include creating stronger incentives for investments in renewable energy (RE); promoting energy efficiency to encourage productive use of energy; improving solid waste management; conserving forests; and reducing emissions to improve air quality.

The National Policy on Climate Change was approved by the Cabinet in 2009 with the aim to provide the framework to mobilise and guide all key stakeholders in addressing the challenges of climate change in an effective and holistic manner. The objectives of the policy include mainstreaming climate change response through wise resource use and enhanced environmental conservation, integration of these responses into new and existing national plans and programmes, and strengthening institutional capacity, with the collective goals of strengthening economic competitiveness, improving quality of life, strengthening development resilience in the face of the potential impacts of climate change, and reducing its negative

impacts. The Policy identifies 43 key actions under 10 strategic thrust areas to facilitate the integration of climate change considerations into planning and implementation of development programmes and decision making processes. The Ministry of Natural Resources and Environment is presently implementing the Policy.

The National Green Technology Policy, launched in 2009, seeks to promote low carbon technology and ensure sustainable development while conserving the natural environment and resources. The Policy focuses on four broad sectors (building, energy, waste and transportation) with five strategic thrusts, i.e. to establish a green technology council for high-level coordination amongst key stakeholders; to provide a conducive environment for green technology development; to intensify human capital development by providing training and education programmes, and by introducing financial packages and incentives to students embarking on green technology related subjects; to intensify green technology research and innovation towards commercialisation; and to promote for public awareness on green technology. The Ministry of Energy, Green Technology and Water implements the Policy.

Stock Taking and Baseline Initiatives

There are other relevant projects and programmes that are currently and will be implemented. These initiatives are expected to provide key impetus to the design and implementation of LECB Programme in Malaysia. A stocktaking of the initiatives was undertaken and the LECB possible supports are summarised as below:

No	Initiatives	Description	Period	Implemented by	LECB possible Interventions
Pipeline					
1	Third National Communication	The project is to support Malaysia's communication to the UNFCCC. It will strengthen GHG Inventory, formulate mitigation measure, recommend adaptation actions and build capacities of public and private sectors (industries, residential and commercial developers)	2013-2016	UNDP and NRE	<ul style="list-style-type: none"> Support national and sub-national GHG inventory systems Assist in the development of Low Emission Development Strategies (LEDS) Promote the use of tools and scenario planning for mitigation actions
2	Green Technology Application for development of the Low Carbon Cities (GTALCC)	It is a GEF-supported project to promote widespread use of EE and RE in the cities. It shall build capacities of town/city planners in adopting green technologies to mitigate GHG (technical, financing and awareness). It will also focus on transport sector such as the Bus Rapid Transit and Electric-vehicle (EV).	2014-2019	UNDP, GEF and MEGTW	<ul style="list-style-type: none"> Assist in the development of Low Emission Development Strategies (LEDS) for cities / township Recommend possible city-level supported NAMAs (and its associated MRV) such as waste-to-energy, electric-vehicle and building energy efficiency.
3	GHG Bi-Annual Update Reporting (BUR)	Updates of national GHG Inventory based on COP decision	2013-2015	UNDP and NRE	Strengthening GHG Inventory systems
4	Solar Thermal for Industrial and Heating application	The project is supported by GEF with UNIDO to promote the use of solar thermal for industrial use. It will develop standard and guidelines and build stakeholder's capacities in understanding solar thermal technology	2015-2018	UNIDO and MIGHT	<ul style="list-style-type: none"> Assist in the development of Low Emission Development Strategies (LEDS) for industrial heating sectors Recommend possible city-level supported NAMAs (and its associated MRVs) such as solar drying technology for industrial processes.

On-going					
6	Economics of Climate Change Study	An initiative to build national capacity in developing necessary costing for CC mitigation and adaptation measures. It will harmonize necessary modeling tools for policy makers to be used in the national planning exercise.	2011-2013	UNDP and EPU	<ul style="list-style-type: none"> Assist in the development of Low Emission Development Strategies (LEDS) for energy, agriculture and water sectors. Recommend possible domestic or supported NAMAs from mitigation recommendation list. Utilize expertise on using energy modelling tools such as LEAP and macro-economic modelling such as AIM and GCE.
7	Roadmap on Reduction of Carbon Intensity in Malaysia	Finalize and streamline national mitigation actions in relation to PM's pledge in Copenhagen of 40% carbon intensity reduction	2012-2013	NRE and UNITEN	<ul style="list-style-type: none"> Assist in the development of Low Emission Development Strategies (LEDS) for energy, industrial, building and other GHG emitting sectors. Recommend possible domestic or supported NAMAs from mitigation recommendation list. Utilize expertise on using energy modelling tools such as LEAP and MARKAL.
8	Development of National Carbon Disclosure Programme (NCDP) Framework Study	NCDP is currently formulating the necessary building blocks for voluntary emission reduction programme in Malaysia. Malaysia's NCDP (MY Carbon) invite private sectors to support national CC initiatives by disclosing their CC actions.	2012	UNDP and NRE	<ul style="list-style-type: none"> Assist government in providing potential domestic supported NAMAs from private sectors.
9	Building Sector Energy Efficiency Project (BSEEP)	It is a GEF-supported project and focuses on EE for new and existing buildings. The project shall develop/support necessary rating tools and standards and build capacity of public and private developers on building EE design and retrofiting.	2010 – 2015	UNDP, GEF and PWD	<ul style="list-style-type: none"> Recommend possible domestic or supported NAMAs from the building sector Work hand-in-hand using building design simulation model such as IES.
10	Rapid Assessment and Gap Analysis on Sustainable Energy for All initiative (SE4ALL)	A rapid review of where the country is in terms of the three SE4ALL goals universal access, energy efficiency and renewable.	2012	UNDP, EPU and MEGTW	<ul style="list-style-type: none"> Assist in the development of Low Emission Development Strategies (LEDS) for energy sectors Possible financing for energy projects under SE4ALL initiatives.
11	Sustainable Consumption and Production (SCP)	Provide inputs for the formulation of the next Malaysia Plan towards achieving an inclusive, sustainable and high-income developed nation by 2020. Focus on areas of resource efficiency and green growth and climate change.	2012 - 2015	EU and EPU	Assist in the development of Low Emission Development Strategies (LEDS) for energy sectors
12	Industrial Energy Efficiency for Malaysian Manufacturing Sector (IEEMS)	A GEF-supported projects to promote the use of ISO50000 Energy Management System, to build capacity of SME in managing energy usage and develop guidelines and standards for industrial equipment.	2012 - 2017	UNIDO, GEF and SMIDEC	Recommend possible domestic or supported NAMAs from the industrial (SME) sector
13	Green Township (and Low Carbon Cities Framework (LCCF))	It is ongoing initiatives undertaken in supporting the national green technology policy. It focuses on a 10% saving in energy usage, development of the Green Township Guideline and Green Rating System. The Low Carbon Cities Framework (LCCF) has been currently established as voluntary guidelines for cities in reducing GHG emission. LCCF consists of passive and active measures including green initiatives such as 3R and composting.	2010 – 2015	MEGTW	<ul style="list-style-type: none"> Assist in the development of Low Emission Development Strategies (LEDS) for cities / township Recommend possible city-level supported NAMAs (and its associated MRV) such as waste-to-energy, electric-vehicle and building energy efficiency.

					<ul style="list-style-type: none"> Strengthen GHG inventory baseline for cities
14	Green Building Index (GBI)	A green building certification programme led by professionals to encourage building owners and developers to utilize resources (energy, water and materials) efficiently. For buildings and township.	Since 2007	Professionals	Recommend possible domestic or supported NAMAs from the building and township sector
15	Green PASS for buildings	A government-led mandatory rating that measures the actual impact of the quantity of greenhouse gas (GHG) by released by building during construction phase and operational phase of the building.	2012 onwards	CIDB and JKR	Recommend possible domestic or supported NAMAs from the building sector
16	Low Carbon Society (LCS)	The project is supported by the Japanese government to develop pilot research studies on low carbon society for Iskandar Malaysia. It utilizes scenario planning and modelling approach to low carbon cities and build capacity of policy makers in prioritizing EE and RE measures.	2010 -2013	JICA, EPU and Iskandar Malaysia	<ul style="list-style-type: none"> Recommend possible domestic or supported NAMAs from the township (Iskandar Malaysia), building sector, transport and WTE plants. Strengthen GHG inventory for cities
17	Entry Point Projects (Energy, O&G) EPP 9 (Energy Efficiency) and EPP 10 (Renewable Energy and Solar PV)	<p>EPP 9 focuses on five relevant levers to improve EE :</p> <ul style="list-style-type: none"> to lead by example on energy-efficiency practices and philosophy, to stimulate sales of energy-efficient appliances, the Government will work with TNB to make co-generation economically viable, to regulate better insulated buildings and to stimulate the sale of energy-efficient vehicles. <p>EPP10 promotes the wide-spread use of grid-connected solar PV. The Feed-in-Tariff (Fit) as the driver to achieve 65MW grid-connected solar PV capacity by 2015</p>	2011-2015	PEMANDU and MEGTW	Recommend possible domestic NAMAs from the energy efficiency and Solar PV grid-connected projects
18	Entry Point Projects on Palm Oil Industries: EPP5 (RE and biogas) and EPP 7 (RE and 2nd gen biofuels)	<p>EPP5 Focus on the utilization of biogas resources in the palm oil sector. Target to gradually build biogas facilities across 400 mills by 2020</p> <p>EPP7 Fast-track the commercialization of 2nd generation biofuels to leverage the biomass generated in the industry. As the technology becomes available in the next few years, Bio Oil can be converted into transportation fuels like diesel</p>	2011-2015	PEMANDU, MPIC and MPOB	Recommend possible domestic and supported NAMAs from the biogas plants and the use of 2nd generation bio-fuel
19	Entry Point Projects on Electrical & Electronic: EPP6 (solar manufacturing)	To increase production capacity of solar wafers and cells by 10 fold from 2.4GW to 23.3GW in 2020	2011-2015	PEMANDU and MITI	Recommend possible domestic and supported NAMAs from the manufacturing solar PV and cells for domestic use.

Institutional and Policy framework

Both the National Policy on Climate Change and National Green Technology Policy are important in achieving Malaysia's broader development goals of achieving a high income nation status in a sustainable manner. Strategic implementation of these policies is therefore necessary. Recognising this, a National Green Technology and Climate Change Council, chaired by the Prime Minister, was established in early 2010 to foster greater ties and coordination between these two complementary areas.

The Council comprises of several Working Committees that can play key roles on mitigation actions in the country. These Committees include Working Committee on Industry led by the Ministry of International Trade and Industry; Working Committee on Transport led by the Ministry of Transport; Working Committee on Human Capital led by Ministry of Human Resources; Working Committee on Research and Innovation led by Ministry of Science, Technology and Innovation; Working Committee on Promotion and Public Awareness led by Ministry of Information, Communication and Culture; and Working Committee on Green Neighbourhood led by Ministry of Housing and Local Government (MHLG).

Specifically on energy, energy policy in Malaysia is set and overseen by the Economic Planning Unit (EPU), with close coordination with the line ministry (MEGTW, on electricity matters) and other agencies (i.e. Energy Commission and SEDA). MEGTW regulates the non-oil and electricity sector (and gas energy and security sectors) while EC regulates the energy supply activities and enforces energy supply laws. SEDA, is a newly set up statutory body formed under the Sustainable Energy Development Authority Act 2011 whose role is to administer and manage the implementation of the feed-in tariff (FiT) mechanism mandated under the Renewable Energy Act 2011. Malaysia Green Technology Corporation (MGTC) from time to time provides promotion, policy research and awareness support to MEGTW related to green technology including RE and EE initiatives.

Energy efficiency (EE) measures (including demand side management) have been mainstreamed since the 7th Malaysia Plan period (1996-2000) and in 10th Malaysia Plan, it has been further intensified to harness energy savings potential and reduce Malaysia's carbon emissions and dependence on fossil fuels. Intrinsic barriers to energy efficiency that pose challenges in capturing this opportunity are being addressed. EE covers the efficiency of power generation, transmission and distribution of electricity as well as various end uses of energy such as in the industrial, commercial and residential. Policy on renewable energy (RE) too has been recognised as early in the year 2000. The advent of the Fifth fuel policy has further reinforced Malaysia's position in developing the RE industries. It was initially targeted to contribute 5% of the country's electricity demand by year 2005 and the Small Renewable Energy Program (SREP) was launched in May 2001 under the initiative of the Special Committee on Renewable Energy (SCORE) aimed to support the government's strategy in intensifying the development utilization of RE, where by 2005, equal to between 500 and 600 megawatt (MW) of installed capacity to be made available. 10th Malaysia plan targets for 5.5% of RE generation which is about 985MW in capacity.

Solid waste management has traditionally been under the jurisdiction of Local Authorities in Malaysia. However, the Solid Waste and Public Cleansing Management Act 2007 centralise management of solid waste by the Federal Government. The National Solid Waste Management Department was established under the Ministry of Housing and Local Government in 2007. The Solid Waste and Public Cleansing Management Corporation was established to handle the day-to-day operation of solid waste and public cleansing. The waste sector is one of the key sources of emissions after the energy sector. Among others, landfills contributed to nearly half of the total methane emission in the country in 2000. Mitigation strategies for reduction of GHGs from solid wastes therefore focus only on the organic portions of solid wastes, which can be achieved in three stages of solid waste management. From waste generation stage, the potential include reduction of organic waste generation so that the organic wastes that need to be treated or disposed are minimised. During waste treatment stage, emissions reduction can be achieved through proper treatment/recycling of organic waste to minimise the amount disposed. In the waste disposal stage, proper landfill management can ensure that GHG emissions from the site are properly captured for flaring or recovery.

In spite of the rapid rate of development, Malaysia continues to retain a highland of natural forests. The national forest policy and National Forestry Act has set aside 14.19 million out of the 33 million hectares of the country as permanent forest reserves, serving as the core forested areas of the country. Of this forested area, 10.53 million and 3.66 million hectares serve as production and protection forest respectively. There are approximately a quarter of a million hectares that have been dedicated to forest plantations and all remaining forests are designated as state land forest. A significant amount of carbon has been sequestered by existing forested areas and managed land use areas as well as through reforestation and replanting programmes, and suburban and urban tree planting. CO₂ removal occurred in the LULUCF sector. The net removal from the LULUCF sector amounted to 220.19 Mt CO₂. Climate change mitigation in the forestry sector may be accomplished by reducing the rate of forestry-related GHG emissions to the environment and taking advantage of the unique ability of living green plants to remove carbon dioxide from the atmosphere. Emissions reductions in the forestry sector can be accomplished either through harvesting fewer trees and converting less forested land to other land uses, or, alternatively, by harvesting timber or converting land in ways that result in fewer emissions of GHG to the atmosphere.

The Third National Agricultural Policy outlines the strategic directions for agricultural development from 1998 to 2010. The policy noted an expected decline in contributions from rubber, cocoa and sawn logs while the contribution from oil palm and food commodities were expected to increase. The main thrust of the policy was to focus on new approaches to increase productivity as well as conserve and utilize natural resources in a sustainable manner. Methane from rice production is the main source of emissions of the agriculture sector. Fertiliser usage and livestock management also contribute significant and growing emissions. The future emissions from rice cultivation will probably increase slightly due to production intensity and the small increase in new areas of rice cultivation. Additionally, future emissions from the livestock sector will potentially increase parallel with the government's plan to increase cattle livestock production from the present 15 to 40 percent self-sufficiency or an increase of about 1.5 million cattle.

LECB Preparation and Stakeholders' Consultation Process

Preparation for LECB project started on June 2012. Under the guidance of NRE, a national stakeholder workshop was first organized on the 13 August 2012 and followed by several bi-lateral discussions with key stakeholders. The key stakeholders include Ministry of Energy, Green Technology and Water, Ministry of Agriculture, Ministry of International Trade and Industries, Economic Planning Unit, Sustainable Energy Development Authority (SEDA), Energy Commission, Malaysian Green Technology Corporation (MGTC) and Tenaga Nasional Berhad (national electricity utility company). Some private corporations from the manufacturing, plantation and solid waste sectors were also consulted indirectly during other events held by UNDP and/or NRE workshops. Stocktaking analysis was completed in October 2012 where it reviewed at on-going, pipeline projects and initiatives and find ways where they can potential contribute to the success of LECB outcomes. In general, Government of Malaysia agreed that LECB is priority project and the activities proposed shall be in line with the national development priority, especially with the 10th Malaysia Plan which is also addressing the country's socio-economic and human development challenges.

The preparation stage allowed UNDP and NRE to develop an overview of a context assessment that looked into the systematic analysis of relevant work on-going and previously carried out; identify results, lessons learned, areas of capacity that can be built on, as well as gaps, further research and capacity needs and identify and validate priority areas, strategies and institutional arrangements for the project. Discussion however is still on-going on exact involvement of the stakeholders mentioned above.

I. STRATEGY

Project rationale

The LECB project will support the country's efforts on GHG inventory and mitigation actions through three project outcomes. It will draw on the results of the past and ongoing initiatives to identify and select the most feasible alternatives and options for low carbon development, and support key public and private stakeholders for its implementation. It will also prepare the country for developing and implementing MRV framework as well as guiding sectoral efforts in pursuing context-specific mechanisms.

Project scope

The project will cover the key GHG emitting sectors in the national communication framework. . Prioritisation on pilots for NAMAs and sectoral MRV, with a focus on the main industrial GHG emission sources, will first be done during the inception phase and later be reviewed for a decision to ensure the necessary buy-in and ownerships of the selected industries.

Project objectives, outcomes and outputs/activities

The main objective of the project is to prepare the country in the uptake of NAMAs and to enhance national capacity for GHG inventory system. The objectives will be achieved through two outcomes and associated outputs.

The following 3 outcomes have been identified:

Outcome 1: The GHG Inventory System fulfils national sustainable development requirements and international commitments.

Outcome 2: National initiatives on mitigation are enhanced through NAMAs in the main industrial GHG emitting sectors that contribute to voluntary emission reduction aspiration.

Outcome 3: National and Sectoral MRV systems are designed with pilot activities in the main industrial GHG emitting sectors.

Country ownership

The LECB project is expected to provide further impetus to the country's voluntary aspiration for reducing GHG intensity by 2020 and beyond. It will support the Ministry of Natural Resources and Environment (NRE) in implementing the National Policy on Climate Change and the achievements of the Tenth Malaysia Plan, specifically on mitigation and indirectly provide co-benefits to adaptation. The outcomes and outputs generated are input to respective ministries and agencies for designing the Eleventh Malaysia Plan (2016-2020). The project also will involve the main private sector associations and institutions and other stakeholders.

Project Institutional Arrangement

LECB project will be based at NRE where a full-time National Project Manager (NPM) will be heading the project team and he/she will be reporting to the National Project Director (NPD) who is also the Undersecretary of Climate Change and the Environmental Conservation (or PASPI) section of the NRE. The project team will consult the implementers of relevant ongoing projects and programs as mentioned in

Stocktaking and Baseline Initiates section to ensure complementarity and to build on best practices and lessons learned. During the Inception Phase, numerous stakeholders' consultation activities will be organized to discuss the issues and concerns related to the development of LEDS, NAMA and MRV including its implementation and management arrangements. Direct reporting of the project outcomes will be made to NSC and finally to the sub-committee on National GHG Inventory established under the Climate Change and Green Technology Committee which the Prime Minister's is chairing. Establishing and strengthening linkages with such initiatives will help to ensure a more focused and regular consultations with stakeholders both at national and subnational levels.

To be strategic and effective, the project will first seek to identify NAMAs as pilots from key mitigation sectors such as energy supply, industrial, waste, commercial and residential sectors. The project team via NRE will recommend and propose possible NAMAs (and their associated MRVs) in line with both the national priority and UNFCCC guidelines. Follow-up to CDM projects including RE and EE initiatives currently coordinated by MEGTW (under SEDA) and Energy Commission will be naturally part of the entry points for NAMAs and will be further explored. Initiatives in the sub-sectors of the industries such as use of methane gas in waste and palm oil industry, fuel replacement for heating processes such as in cement and wood sector and energy efficiency in generally all industrial sub-sectors will be explored further in identifying potential NAMAs. Achieving successful result in LECB will require detailed planning and close communication among ministries which will be discussed further during the Inception Phase. Results-based reporting with close monitoring by UNDP and NRE will be emphasized as stated in section V: Management Arrangements.

Sustainability and Replicability

The outcomes of the LECB project integrate specific activities that guarantee their replicability and/or sustainability. The first outcome supports the development of a sustainable national system and institutional framework for continuous preparation of GHG inventory that will be reported in the national communication and BUR. The second outcome supports establishment of the country's framework which includes NAMAs and MRV system, both at the national level and specific to key sectors respectively. Such capacity will support to continuously identify, formulate and propose NAMAs that are in conformance to national and international guidelines. The MRV system will contribute to identifying progress and challenges during NAMA implementation, therefore helping to ensure the continuity of the planned activities.

Mainstreaming Gender and Vulnerable Communities Issues

LECB project shall endeavour to ensure women, children, indigenous and the under privileged communities will be consulted and participating actively in project activities, where relevant. NRE may seek advice from UNDP, EPU and other interest groups to ensure issues related to gender and vulnerable communities are included during formulation and implementation stage of NAMA and MRV.

Where applicable, gender and community issues will be considered throughout the project implementation, including at the Inception Phase as women and men, as well as vulnerable communities can exhibit distinct differences in their perspectives and priorities concerning environmental quality and impact as well as access to energy services. Literature and studies have shown that failure to understand gender and vulnerable community dimensions within environmental projects can potentially waste development resources and negatively affect environmental sustainability. In this regard, gender and vulnerable community perspectives, will, when possible, be incorporated during policy formulation by ensuring

consultative processes include women, children, indigenous and community organizations as well as gender and specific community subject matter experts.

The project will also, where possible, ensure the representation of women and vulnerable communities during workshops and trainings as well as public awareness programmes, as supporting their role in educational activities will help these groups access the knowledge and skills they require to be active participants in other initiatives which address climate change. Where possible, their engagement throughout the project should be reported to monitor that their perspectives have been included to achieve the outcome of the project.

Roles of Key Stakeholders in LECB Project

Stakeholder	Reasons for inclusion	Role in the Context-Assessment Process
Ministry of Natural Resources and Environment (NRE)	<ul style="list-style-type: none"> National Focal Points to the UNFCCC and GEF, leading the country's delegation to international negotiation and coordinating national initiatives on climate change; NRE is the Designated National authority for CDM projects NRE was the Implementing Agency for Initial National Communication and the Second National Communication projects. Lead partner, coordinator and facilitator for LECB projects Recommend proposed NAMAs and MRVs for endorsement by the Government Review and strengthen NAMAs / MRV framework and processes 	<ul style="list-style-type: none"> Consultation & baseline data provider. Source for environment initiatives, CDM information, LEDS information and aggregated GHG data
Economic Planning Unit, Prime Minister's Department	<ul style="list-style-type: none"> Overall policy direction on the implementation of National 5-year plan Recommend 5-year development budget to Ministry of Finance Facilitating adoption of national policies related to sustainable development and environment including outputs from LECB projects 	<ul style="list-style-type: none"> Consultation & baseline data provider. Cross-sectors policy convenor
Ministry of Energy, Green Technology and Water (MEGTW)	<ul style="list-style-type: none"> Executer and guardian of the renewable energy, energy efficiency and green technology policies. Guardian of the RE Act. Responsible in promoting Low Carbon Cities Framework (LCCF) to the cities and local authorities. Key partner in the development of NAMA and MRV in the energy sector 	<ul style="list-style-type: none"> Consultation & baseline data provider. Source for aggregated energy data (National Energy Balance, national electricity supply and demand)
Energy Commission (EC)	<ul style="list-style-type: none"> Technical input to assessment of NAMA and LEDS in the energy sector, particularly on the energy efficiency aspect. Regulator of the electricity industry including IPPs 	<ul style="list-style-type: none"> Consultation & baseline data provider. Source for primary electricity data (electricity supply and demand)
Ministry of Housing and Local Government (MHLG)	<ul style="list-style-type: none"> Executer and guardian on policies and acts related to city planning, local authorities and local development planning 	<ul style="list-style-type: none"> Consultation & baseline data provider. Source for national housing, cities and waste data

Stakeholder	Reasons for Inclusion	Role in the Context Assessment Process
Ministry of International Trade and Industry	<ul style="list-style-type: none"> • Advice and formulate policies and planning related to industry and international trade. • Advise and formulate policies related to the import and use of green technology equipment including the use electric and hybrid vehicles. • Guardian of the National Automotive policy 	<ul style="list-style-type: none"> • Consultation & baseline data provider. • Source for AP and import/export of green technology equipment/devices including on electric vehicle data
Department of Town and Country Planning	<ul style="list-style-type: none"> • Advise planning matters related to the use and development of land • Guardian of the National Physical Plan (NPP) and Green Neighbourhood Guidelines 	<ul style="list-style-type: none"> • Consultation & baseline data provider. • Source for national land use, zoning and national land development information
Ministry of Transport	<ul style="list-style-type: none"> • Policy guidance on NAMA and LEDS in the transport sector. 	<ul style="list-style-type: none"> • Consultation & baseline data provider. • Source for GHG emission for transport sector
Ministry of Agriculture	<ul style="list-style-type: none"> • Policy guidance on NAMA and LEDS in the agriculture sector. 	<ul style="list-style-type: none"> • Consultation & baseline data provider. • Source for national biomass (rice) and agriculture data
Ministry of Plantation and Industry Commodity (MPIC)	<ul style="list-style-type: none"> • Policy guidance on NAMA and LEDS in the commodity sector especially on the use of palm oil industry 	<ul style="list-style-type: none"> • Consultation & baseline data provider. • Source for national biomass and biogas (palm oil) for energy and other competitive users
Department of Environment (DOE)	<ul style="list-style-type: none"> • Technical input on air quality and industrial effluent sector for the GHG inventory. 	<ul style="list-style-type: none"> • Consultation & baseline data provider. • Source for national industrial waste information
Department of Solid Waste Management	<ul style="list-style-type: none"> • Executer of Solid Waste and Public Cleansing Management Act 2007 • Technical input on waste sector for the GHG inventory and assessment of NAMA and LEDS. 	<ul style="list-style-type: none"> • Consultation & baseline data provider. • Source for national waste (domestic and industrial) data
Malaysian Green Technology Corporation	<ul style="list-style-type: none"> • Coordination support, capacity development training and policy studies on green technology 	<ul style="list-style-type: none"> • Consultation & baseline data provider. • Source for GHG data on energy, industry, buildings and CDM
Sustainable Energy Development Authority (SEDA)	<ul style="list-style-type: none"> • Executer of the Renewable Energy Act and implementer of the Feed-in Tariff mechanism 	<ul style="list-style-type: none"> • Consultation & baseline data provider. • Source for RE data on biomass, biogas, PV and mini-hydro
PETRONAS	<ul style="list-style-type: none"> • entrusted with the entire oil and gas resources in Malaysia and is responsibility of developing and adding value to these resources • Engaged in a wide spectrum of petroleum activities, including upstream exploration and production of oil and gas to downstream oil refining; marketing and distribution of petroleum products; trading; gas processing and liquefaction; gas transmission pipeline network operations; marketing of liquefied natural gas; 	<ul style="list-style-type: none"> • Consultation & baseline data provider. • Possible source for O&G national data • Possible hosts of NAMA for O&G sector in the downstream industry

Stakeholder	Reasons for inclusion	Role in the Context-Assessment Process
	petrochemical manufacturing	
Public Works Department	<ul style="list-style-type: none"> • Implementer for the Building EE Sector project • Adopt building codes for energy efficiency 	<ul style="list-style-type: none"> • Consultation & baseline data provider. • Source for building data and energy efficiency • Hosts for NAMA pilots
Private Sector Entities (manufacturing, plantation and solid waste sectors) Including Federal Malaysian Manufacturers, Cement and Concrete Association, Iron and Steel Associations	<ul style="list-style-type: none"> • Convene members' interest on NAMA • Provide financing and host investment projects 	<ul style="list-style-type: none"> • Consultation & baseline data provider. • Hosts for NAMA pilots
Academic institutions	<ul style="list-style-type: none"> • Policy research and studies to strengthen baseline data , impact analysis, etc. 	<ul style="list-style-type: none"> • Consultation & baseline data provider. • Source for primary and secondary data on GHG, energy and waste
Local Government, city council and municipalities	<ul style="list-style-type: none"> • Local government, cities and municipalities will be partner of GTALCC for effective project implementation and hosting locations of the low carbon investments. 	<ul style="list-style-type: none"> • Consultation & baseline data provider. • Source for sub-national waste data

II. PROJECT RESULTS FRAMEWORK

UNDP Guidance: This logical framework is intended to be simple and succinct. Although it is optional, we believe it to be a valuable exercise for Project Management Unit to complete. The log frame should not exceed two pages. Please limit the information provided to a few bullet points.

<p>This project will contribute to achieving the following Country Programme Outcome as defined in CPAP or CPD: Strengthened institutional capacity in managing climate change, including achieving both the 2015 renewable energy target of 5.5% of total electricity generation mix and an enhanced national framework for biodiversity management of the central forest spine in Peninsular Malaysia and the heart of Borneo.</p>				
<p>Country Programme Outcome Indicators: Reduction of GHG, number of NAMA</p>				
<p>Primary applicable Key Environment and Sustainable Development Key Result Area: Catalyzing environmental finance</p>				
	Indicator	Baseline	Targets End of Project	Source of verification
<p>Project Objective¹ Strengthening Malaysia's low carbon development by demonstrating possible NAMAs including formulating the necessary measurement, reporting and verification system.</p>	<ul style="list-style-type: none"> Number of NAMAs undertaken. Adoption of MRV system. 	<ul style="list-style-type: none"> 0 NAMA Limited MRV development. 	<ul style="list-style-type: none"> 3 NAMAs prepared for implementation. Domestic MRV system established. 	<p>Reports</p> <p>NAMA registry</p> <p>11 MP</p>
<p>Outcome 1 The GHG Inventory System fulfils national sustainable development requirements and international commitments.</p>	<ul style="list-style-type: none"> Existence of the National GHG Repository GHG data used as development indicator 	<ul style="list-style-type: none"> Absence of National GHG Repository Absence of GHG data used as development indicator 	<ul style="list-style-type: none"> National GHG Repository established GHG data used as development indicator in 11 MP 	<p>National Reports</p> <p>Third National Communications</p>
<p>Outcome 2 National initiatives on mitigation are enhanced through NAMAs in the industrial sector</p>	<ul style="list-style-type: none"> Number of NAMAs 	<ul style="list-style-type: none"> 0 NAMA 	<ul style="list-style-type: none"> 3 NAMAs developed 	<p>Reports</p> <p>NAMA Registry</p>
<p>Outcome 3 National and Sectoral MRV systems are designed and piloted in the industrial sector</p>	<ul style="list-style-type: none"> Domestic MRV guidelines 	<ul style="list-style-type: none"> Inexistence of domestic MRV guidelines 	<ul style="list-style-type: none"> Domestic MRV guidelines established 	<p>Reports</p>

¹ Objective (Atlas output) monitored quarterly ERBM

III. TOTAL BUDGET AND WORKPLAN

Award ID:	XXX	Project ID:	XXX
Award Title:	Low Emission Capacity Building Programme (LECB) for Malaysia		
Business Unit:	MYSIO		
Project Title:	Low Emission Capacity Building Programme (LECB) for Malaysia		
Implementing Partner (Executing Agency)	Ministry of Natural Resources and Environment (MNRE)		

TOTAL BUDGET

Outcome/Atlas Activity[1]	Responsible Party	Fund ID	Donor Name	Atlas Budgetary Account Code	Atlas Budget Description	Amount Year 1 (USD)	Amount Year 2 (USD)	Amount Year 3 (USD)	Total (USD)
OUTCOME 1:GHG INVENTORY RELATED TO NAMA/MRV	NRE		UNDP (EU, Germany and Australia)	71200	International Consultants	14,000	14,000	0	28,000
				71300	Local Consultants	35,000	35,000	35,000	105,000
				71600	Travel	5,000	5,000	5,000	15,000
				75700	Workshops / Trainings	10,000	10,000	10,000	30,000
				75100	Facilities & Administration	4,480	4,480	3,500	12,460
				Subtotal		68,480	68,480	53,500	190,460
OUTCOME 2: MITIGATION ACTIONS (NAMA)	NRE		UNDP (EU, Germany and Australia)	71200	International Consultants	14,000	14,000	0	28,000
				71300	Local Consultants	42,000	42,000	35,000	119,000
				71600	Travel	3,000	3,000	3,000	9,000
				75700	Workshops / Trainings	15,000	20,000	10,000	45,000
				75100	Facilities & Administration	5,180	5,530	3,360	14,070
				Subtotal		79,180	84,530	51,360	215,070
OUTCOME 3: Measuring, Reporting and Verification (MRV)	NRE		UNDP (EU, Germany and Australia)	71200	International Consultants	0	14,000	14,000	28,000
				71300	Local Consultants	20,000	20,000	20,000	60,000
				71600	Travel	3,000	3,000	3,000	9,000
				75700	Workshops / Trainings	15,000	0	9,000	24,000
				75100	Facilities & Administration	2,660	2,590	3,220	8,470
				Subtotal		40,660	39,590	49,220	129,470
Project Management, including Monitoring and evaluation	NRE / UNDP		UNDP (EU, Germany and Australia)	71405	Contractual Services - Individual	70,000	84,000	84,000	238,000
				74500	Miscellaneous	4,000	4,000	4,000	12,000
				75100	Facilities & Administration	5,180	6,160	6,160	17,500
				Subtotal		79,180	94,160	94,160	267,500
PROJECT TOTAL						267,500	286,760	248,240	802,500

PROPOSED WORKPLAN

Outcomes/Activities	Year 1			Year 2			Year 3					
	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12
Implementation arrangements and project inception:												
1. Review of the Management Arrangement segment of the Project Document												
2. Identify and contract the Project Office Staff												
1. Project Inception workshop												
3. Prepare the tenders and contract the technical teams												
2. Conclude implementation arrangements												
Outcome 1: GHG INVENTORY RELATED TO NAMA/MRV												
1.1 Institutional framework on GHG inventory is strengthened.												
1.2 Relevant tools are identified and training in use of the tools is conducted.												
Outcome 2 MITIGATION ACTIONS (NAMA)												
2.1 Implementation framework and mechanism for national and sectoral NAMAs is established.												
2.2 Pilot NAMAs in the main industrial GHG emission sources are prioritised and initiated.												
2.3 Approaches and tools to intensify NAMA implementation are developed.												
Output 3: MEASURING, REPORTING AND VERIFICATION (MRV)												
3.1 National and sectoral MRVs is designed with a focus on the main industrial sectors												
3.2 Implementation of MRVs in tandem with pilots NAMAs												
Project Management, including M&E												
1. Regular monitoring												
2. National Steering Committee Meetings												
3. Technical Working Group Meetings												
4. Communicate project status with donors and UNDP	QPR	QPR	QPR	QPR	QPR	QPR	QPR	QPR	QPR	QPR	QPR	FR

Annual Work Plan (AWP) - 2013

EXPECTED OUTPUTS <i>And baseline, associated indicators and annual targets</i>	PLANNED ACTIVITIES <i>List activity results and associated actions</i>	TIMEFRAME				RESPONSIBLE PARTY	PLANNED BUDGET	
		Q1	Q2	Q3	Q4		Budget Description	Amount (USD)
Outcome 1 GHG Inventory <i>Indicator:</i> <ul style="list-style-type: none"> Existence of the National GHG Repository GHG data used as development <i>Baseline:</i> <ul style="list-style-type: none"> Absence of a National GHG Repository Absence of GHG data used as development indicator <i>Targets:</i> <ul style="list-style-type: none"> National GHG Repository initiated <i>Related CP outcome:</i> <p>Strengthened institutional capacity in managing climate change, including achieving both the 2015 renewable energy target of 5.5% of total electricity generation mix and an enhanced national framework for biodiversity management of the central forest spine in Peninsular Malaysia and the heart of Borneo.</p>	Activity Results:: <ol style="list-style-type: none"> Institutional framework for GHG inventory is strengthened. Relevant tools are identified and training in use of the tools is conducted. Associated Actions: <ul style="list-style-type: none"> Support the establishment of national GHG data repository. Build capacity to operationalise the inventory reporting cycle in consultation with key stakeholders. Identify and support in developing appropriate enabling mechanism to ensure regular compilation of GHG data. Facilitate institutionalisation of GHG inventory activities for key agencies. Undertake awareness raising initiatives with different stakeholders 					International Consultants Local Consultants Travel Workshops / Trainings Facilities & Administration	14,000 35,000 5,000 10,000 4,480	
Outcome 2								68,480

EXPECTED OUTPUTS And baseline, associated indicators and annual targets	PLANNED ACTIVITIES List activity results and associated actions	TIMEFRAME				RESPONSIBLE PARTY	PLANNED BUDGET	
		Q1	Q2	Q3	Q4		Budget Description	Amount (USD)
<p>Nationally Appropriate Mitigation Actions (NAMAs)</p> <p><i>Indicator:</i></p> <ul style="list-style-type: none"> Number of NAMAs <p><i>Baseline:</i></p> <ul style="list-style-type: none"> 0 NAMA <p><i>Targets:</i></p> <ul style="list-style-type: none"> 1 NAMA initiated <p><i>Related CP outcome:</i></p> <p>Strengthened institutional capacity in managing climate change, including achieving both the 2015 renewable energy target of 5.5% of total electricity generation mix and an enhanced national framework for biodiversity management of the central forest spine in Peninsular Malaysia and the heart of Borneo.</p>	<p><i>Activity Results:</i></p> <ol style="list-style-type: none"> Implementation framework and mechanism for NAMAs is established. NAMA demonstrated / piloted Approaches and tools to intensify NAMA implementation are developed. <p><i>Associated Actions:</i></p> <ul style="list-style-type: none"> Review existing initiatives related to NAMA in the country. Develop National NAMA policy and criteria. Support the planning and development of NAMA secretariat. Establish a national NAMA registry. Formulate sector-specific NAMA Roadmap in collaboration with key stakeholders. Develop framework and guideline for formulating climate change strategy by state and local governments. Assess technology needs and identify relevant technological options. Explore approaches for sustaining long-term financing required for mitigation actions in the country and determine financing options for supported NAMAs. Conduct a feasibility study on legal and regulatory instruments in support of future climate change mitigation action. Reinforce domestic CDM operational entities and relevant agencies for verification of NAMAs. Determine criteria for prioritisation of pilot NAMA. Assess and explore the potential of relevant activities in national plans and policies for implementation as supported NAMA. Review CDM projects for possible adoption as NAMAs in order to ensure sustainability in delivering emission 	X	X	X	x		<p>International Consultants 14,000</p> <p>Local Consultants 42,000</p> <p>Travel 3,000</p> <p>Workshops / Trainings 15,000</p> <p>Facilities & Administration 5,180</p>	

EXPECTED OUTPUTS And baseline, associated indicators and annual targets	PLANNED ACTIVITIES List activity results and associated actions	TIMEFRAME				RESPONSIBLE PARTY	PLANNED BUDGET	
		Q1	Q2	Q3	Q4		Budget Description	Amount (USD)
	<ul style="list-style-type: none"> reduction. Conduct regular dialogue and workshops in support of continuous interfacing of different stakeholders. 							
Outcome 3								79,180,147,660
Measuring, Reporting and Verification (MRV) <i>Indicator:</i> <ul style="list-style-type: none"> Domestic MRV Guidelines <i>Baseline:</i> <ul style="list-style-type: none"> Inexistence of domestic MRV guidelines <i>Targets:</i> <ul style="list-style-type: none"> Domestic MRV Guidelines initiated. <i>Related CP outcome:</i> <p>Strengthened institutional capacity in managing climate change, including achieving both the 2015 renewable energy target of 5.5% of total electricity generation mix and an enhanced national framework for biodiversity management of the central forest spine in Peninsular Malaysia and the heart of Borneo.</p>	<i>Activity Results:</i> <ul style="list-style-type: none"> National and sectoral MRVs is designed with a focus on the main industrial sectors Implementation of MRVs in tandem with pilot NAMAs <i>Associated Actions:</i> <ul style="list-style-type: none"> Review available national and international approaches and methodologies on MRV. Formulate domestic MRV framework in consistent with the UNFCCC decisions. Develop sectoral-specific MRV guidelines in collaboration with respective industrial association. Adoption of at least one (1) MRVs in line with NAMAs in Outcome 2 Conduct regular dialogue and workshops in support of continuous interfacing of different stakeholders. 					Local Consultants Travel Workshops / Trainings Facilities & Administration	20,000 3,000 15,000 2,660	
Outcome 4								40,660

Annual Work Plan (AWP) - 2014

EXPECTED OUTPUTS <i>And baseline, associated indicators and annual targets</i>	PLANNED ACTIVITIES <i>List activity results and associated actions</i>	TIMEFRAME				RESPONSIBLE PARTY	PLANNED BUDGET	
		Q1	Q2	Q3	Q4		Budget Description	Amount (USD)
Outcome 1								
GHG Inventory <i>Indicator:</i> <ul style="list-style-type: none"> Existence of the National GHG Repository GHG data used as development <i>Baseline:</i> <ul style="list-style-type: none"> Absence of a National GHG Repository Absence of GHG data used as development indicator <i>Targets:</i> <ul style="list-style-type: none"> National GHG Repository established GHG data used as development indicator in 11 MP 	Activity Results: <ul style="list-style-type: none"> Institutional framework for GHG inventory is strengthened. Relevant tools are identified and training in use of the tools is conducted. Associated Actions: <ul style="list-style-type: none"> Support the establishment of national GHG data repository. Build capacity to operationalise the inventory reporting cycle in consultation with key stakeholders. Identify and support in developing appropriate enabling mechanism to ensure regular compilation of GHG data. Facilitate institutionalisation of GHG inventory activities for key agencies. Develop sustainable data collection system from companies contributing to key source in GHG reporting. 					International Consultants	14,000	
							Local Consultants	35,000
							Travel	5,000
							Workshops / Trainings	10,000
							Facilities & Administration	4,480
Related CP outcome: Strengthened institutional capacity in managing climate change, including achieving both the 2015 renewable energy target of 5.5% of total electricity generation mix and an enhanced national framework for biodiversity management of the central forest spine in Peninsular Malaysia and the heart of Borneo.								

EXPECTED OUTPUTS And baseline, associated indicators and annual targets	PLANNED ACTIVITIES List activity results and associated actions	TIMEFRAME				RESPONSIBLE PARTY	PLANNED BUDGET Budget Description	Amount (USD)
		Q1	Q2	Q3	Q4			
Outcome 2							68,480	
<p>Nationally Appropriate Mitigation Actions (NAMAs)</p> <p><i>Indicator:</i></p> <ul style="list-style-type: none"> Number of NAMAs <p><i>Baseline:</i></p> <ul style="list-style-type: none"> 0 NAMA <p><i>Targets:</i></p> <ul style="list-style-type: none"> 2 NAMA developed. <p><i>Related CP outcome:</i></p> <p>Strengthened institutional capacity in managing climate change, including achieving both the 2015 renewable energy target of 5.5% of total electricity generation mix and an enhanced national framework for biodiversity management of the central forest spine in Peninsular Malaysia and the heart of Borneo.</p>	<p><i>Activity Results:</i></p> <ul style="list-style-type: none"> Implementation framework and mechanism for NAMAs is established. NAMA demonstrated / piloted Approaches and tools to intensify NAMA implementation are developed. <p><i>Associated Actions:</i></p> <ul style="list-style-type: none"> Establish a national NAMA registry. Formulate sector-specific NAMA Roadmap in collaboration with key stakeholders. Develop framework and guideline for formulating climate change strategy by state and local governments. Assess technology needs and identify relevant technological options. Explore approaches for sustaining long-term financing required for mitigation actions in the country and determine financing options for supported NAMAs. Review CDM projects for possible adoption as NAMAs in order to ensure sustainability in delivering emission reduction. Prepare and disseminate relevant outreach materials. Prepare and circulate policy papers on selected issues (NAMA, GHG inventory). Conduct regular dialogue and workshops in support of continuous interfacing of different stakeholders. 					<ul style="list-style-type: none"> International Consultants 14,000 Local Consultants 42,000 Travel 3,000 Workshops / Trainings 20,000 Facilities & Administration 5,530 		
		X	X	X	X	NRE		84,530153,010

EXPECTED OUTPUTS And baseline, associated indicators and annual targets	PLANNED ACTIVITIES List activity results and associated actions	TIMEFRAME				RESPONSIBLE PARTY	PLANNED BUDGET	
		Q1	Q2	Q3	Q4		Budget Description	Amount (USD)
<p>Indicators: Number of TWG organized Number of NSC organized</p> <p>Baseline: None</p> <p>Targets: Number of TWG organized: 2 Number of NSC organized: 1</p> <p>Related CP outcome: Strengthened institutional capacity in managing climate change, including achieving both the 2015 renewable energy target of 5.5% of total electricity generation mix and an enhanced national framework for biodiversity management of the central forest spine in Peninsular Malaysia and the heart of Borneo.</p>	<p>NRE and related agencies</p> <ul style="list-style-type: none"> - Recommendation of LEDS and proposed NAMJAs and submission for TWG & NSC meetings - UNDP officers to consult and follow up in providing technical information and backstopping exercise 					Administration		
TOTAL (2014) USD							94,160	
							286,760	

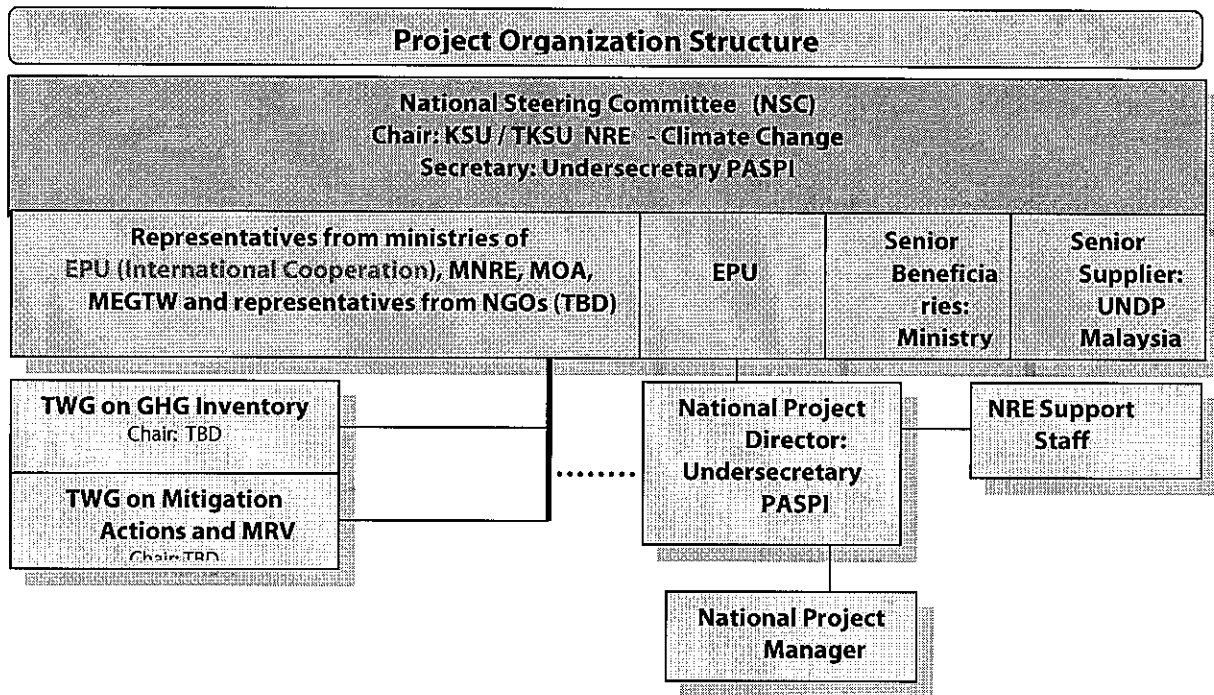
EXPECTED OUTPUTS And baseline, associated indicators and annual targets	PLANNED ACTIVITIES List activity results and associated actions	TIMEFRAME				RESPONSIBLE PARTY	PLANNED BUDGET Budget Description	Amount (USD)
		Q1	Q2	Q3	Q4			
Borneo.							53,500	
Outcome 2								
Nationally Appropriate Mitigation Actions (NAMAs)								
<p><i>Indicator:</i></p> <ul style="list-style-type: none"> Number of NAMAs <p><i>Baseline:</i></p> <ul style="list-style-type: none"> 0 NAMA <p><i>Targets:</i></p> <ul style="list-style-type: none"> 3 NAMA developed. <p><i>Related CP outcome:</i></p> <p>Strengthened institutional capacity in managing climate change, including achieving both the 2015 renewable energy target of 5.5% of total electricity generation mix and an enhanced national framework for biodiversity management of the central forest spine in Peninsular Malaysia and the heart of Borneo.</p>	<p><i>Activity Results:</i></p> <ol style="list-style-type: none"> Implementation framework and mechanism for NAMAs is established. NAMA demonstrated / piloted Approaches and tools to intensify NAMA implementation are developed. <p><i>Associated Actions:</i></p> <ul style="list-style-type: none"> Adoption of at least three one (3) NAMAs Develop relevant mechanism and tools in support of public and private sectors government agencies to measure and record GHG emission of their mitigation actions. Develop training manual in collaboration with relevant government training agencies. Prepare and disseminate relevant outreach materials. Prepare and circulate policy papers on selected issues (NAMA, GHG inventory). Conduct regular dialogue and workshops in support of continuous interfacing of different stakeholders. 					<p>Local Consultants 35,000</p> <p>Travel 3,000</p> <p>Workshops / Trainings 10,000</p> <p>Facilities & Administration 3,360</p>		
							51,360104,860	

EXPECTED OUTPUTS And baseline, associated indicators and annual targets	PLANNED ACTIVITIES List activity results and associated actions	TIMEFRAME				RESPONSIBLE PARTY	PLANNED BUDGET	
		Q1	Q2	Q3	Q4		Budget Description	Amount (USD)
Outcome 3								
Measuring, Reporting and Verification (MRV)	<p><i>Activity Results:</i></p> <ul style="list-style-type: none"> National and sectoral MRVs is designed with a focus on the main industrial sectors Implementation of MRVs in tandem with pilot NAMAs <p><i>Associated Actions:</i></p> <ul style="list-style-type: none"> Adoption of at least three (3) MRVs inline with NAMAs in Outcome 2 Prepare and circulate policy papers on selected issues on MRV Conduct regular dialogue and workshops in support of continuous interfacing of different stakeholders. 					International Consultants	14,000	
<p><i>Indicator:</i></p> <ul style="list-style-type: none"> Domestic MRV Guidelines <p><i>Baseline:</i></p> <ul style="list-style-type: none"> Inexistence of domestic MRV guidelines <p><i>Targets:</i></p> <ul style="list-style-type: none"> Domestic MRV Guidelines established. <p><i>Related CP outcome:</i></p> <p>Strengthened institutional capacity in managing climate change, including achieving both the 2015 renewable energy target of 5.5% of total electricity generation mix and an enhanced national framework for biodiversity management of the central forest spine in Peninsular Malaysia and the heart of Borneo.</p>						Local Consultants	20,000	
						Travel	3,000	
						Workshops / Trainings	9,000	
						Facilities & Administration	3,220	
		X	X	X	X	NRE		
Outcome 4							49,220	
Project Management and Monitoring and Evaluation (M&E)	<p><i>Activity Results:</i></p> <p>Timely project progress and reporting</p> <p><i>Associated Actions:</i></p> <ul style="list-style-type: none"> Project Manager is to provide day-to-day support to 					Service Contract	84,000	
						Miscellaneous	4,000	
						Facilities &	6,160	

EXPECTED OUTPUTS And baseline, associated indicators and annual targets	PLANNED ACTIVITIES <i>List activity results and associated actions</i>	TIMEFRAME				RESPONSIBLE PARTY	PLANNED BUDGET	
		Q1	Q2	Q3	Q4		Budget Description	Amount (USD)
<p>Indicators: Number of TWG organized Number of NSC organized</p> <p>Baseline: None</p> <p>Targets: Number of TWG organized: 2 Number of NSC organized: 1</p> <p>Related CP outcome: Strengthened institutional capacity in managing climate change, including achieving both the 2015 renewable energy target of 5.5% of total electricity generation mix and an enhanced national framework for biodiversity management of the central forest spine in Peninsular Malaysia and the heart of Borneo.</p>	<p>NRE and related agencies</p> <ul style="list-style-type: none"> - Recommendation of LEDS and proposed NAMAs and submission for TWG & NSC meetings - UNDP officers to consult and follow up in providing technical information and backstopping exercise 					Administration		
TOTAL (2015) USD							94,160	248,240

IV. MANAGEMENT ARRANGEMENTS

The project will be governed by the National Steering Committee (NSC) and supported by the 2 Technical Working Groups (TWG). The details of the above structure will be further discussed in the inception period.



National Steering Committee (NSC)

A National Steering Committee will provide guidance and direction to the project implementation process according to the established detailed work plan monitoring tool. The Committee will be composed of representatives from EPU, MNRE, UNDP Malaysia, and other relevant stakeholders to be identified. The Chairperson of the NSC is the Secretary General or Deputy Secretary General of NRE. NSC will endorse the list of the proposed projects in the form of project ideas, concept or PIF. Refer Appendix E for the TOR.

Technical Working Committee (TWG)

A technical working committee will be established to handle all technical matters relating to the project and will be chaired by the respective agencies head. The members of the TWG will consist of representatives from EPU (ENRES and Energy), MNRE, UNDP and other relevant stakeholders to be determined by the National Steering Committee. The overarching objective of the TWG is to screen the proposals.. Refer Appendix E for the TOR.

National Project Director (NPD)

The National Project Director is the Undersecretary of PASPI and will be responsible for coordinating project activities among the main parties to the project. Among these responsibilities are ensuring that the project document and project revisions requiring Government’s approval are verified and processed through the Government co- coordinating authority in accordance with established procedures and providing direction and guidance on project-related issues. Refer Appendix E for the TOR.

Project Assurance

The Project Assurance role supports the Project Board by carrying out objective and independent project oversight and monitoring functions. This role ensures that appropriate project management milestones are managed and completed. Risk factors as in Annex II, will be periodically reviewed to ensure the risks are mitigated and manageable. Necessary actions to overcome any project challenges will be discussed as well. A UNDP Programme Officer will hold the Project Assurance together with a representative from the Malaysian Government.

Project Manager

The Project Manager is responsible in running the day-to-day coordination of the LECB project together with an identified officer of the implementing agency. The person ensures that the project produces the results specified in the project document to the required standard of quality and within the specified constraints of time and cost.

The Project Manager will be recruited and will report administratively and programmatically to both the NPD and UNDP. The person will assist in preparing progress reports in timely and required manner, and provide the information needed for disbursement of funds. The TOR is at Annex IV

Support Staff

Support staff for Project Manager and the LECB's office will be provided by NRE on as need basis. This will include short-term secretariat services, photocopying, finalization of minutes for TWG and NSC and other administrative support where necessary.

Financial Management

Based on the approved AWP, UNDP will provide required financial resources to the Implementing Partner to carry out project activities during the annual cycle. Under the Harmonized Approach to Cash Transfer (HACT), the following modalities may be used:

- Direct cash transfers to the Implementing Partner, for obligations and expenditures to be made by them in support of activities;
- Direct payments to vendors and other third parties, for obligations incurred by the Implementing Partner;
- Reimbursement to the Implementing Partner for obligations made and expenditure incurred by them in support of activities

The FACE form as per Annex VI should be used for all of the above cash disbursements as well as for expenditure reporting.

The Implementing partner and Project Manager will work closely with UNDP to monitor the use of the financial resources and are accountable for

- Managing UNDP's/ CS resources to achieve the expected results
- Maintaining an up to date accounting system that contains records and controls to ensure the accuracy and reliability of financial information and reporting. Expenditures made should be in accordance with the, Annual Work Plans and budgets.

At the end of a quarter/year UNDP prepares a Combined Delivery Report (CDR) which records all disbursements made under the project for verification. The Implementing Partner and UNDP should sign this CDR.

A project revision shall be made when appropriate; to respond to changes in the development context or to

adjust the design and resources allocation to ensure the effectiveness of the project provided that the project remains relevant to the Country Programme. A project revision shall be supported by the record of an approval decision made by the project NSC, and an updated and signed AWP.

UNDP Support Services

In addition, UNDP may/ shall provide the following services:

- a) identification and recruitment of project personnel;
- b) procurement of goods and services including project vehicle
- c) Identification of training activities and assistance in carrying them out

The above will be carried out based on UNDP policies and procedures following the principles of best value for money, fairness, integrity, transparency, and effective competition. UNDP shall charge to the project as per the Universal Price List where required.

UNDP will also charge for the support services provided as follows:

- a. 6% cost recovery for the provision of general management support (GMS) for activities funded under Government Cost sharing, if any
- b. Direct cost for implementation support services (ISS) for activities under TRAC funding, if any

In-Kind Contribution

In addition to the financial resources through UNDP, the implementing partner will provide the following in-kind contribution:

- Assist in gaining access to all relevant data and information required to for the project that is accessible for public viewing;
- Assist in coordinating with other agencies and ministries
- Office space (i.e. room/workspace) for the Project Manager, consultants and experts at NRE
- Use of office support facilities by the Project Manager,, consultants and experts (e.g. fax machine, stationary, Xerox machine, telephone), and secretarial support where applicable;
- Facilities for convening meetings, workshops and seminars.

Any reimbursable expenses can be borne by the project fund as agreed Annual Work Plan (AWP).

Activities related to Implementation of Nationally Implementation Modality (NIM)

The below encompasses in detail of each section related to the effective implementation of NIM modality.

Sections	Roles of IP	Roles of UNDP
Procurement of Equipment/ Venue for Workshops / Publications	Finalize Specifications, Sourcing and purchasing. Issuance of Letter of Authorization	Payment according to FACE
Procurement of Local Consultants	Finalize Terms of References (TOR)	Sourcing, Advertising and Issuance of Contracts as per UNDP IC guidelines
Procurement of International Consultants	Finalize Terms of References (TOR)	Sourcing, Advertising and Issuance of Contracts as per UNDP guidelines

Sections	Roles of IP	Roles of UNDP
Recruitment of Project Teams	<ul style="list-style-type: none"> Finalize Terms of References (TOR). For interim measures, government to issue Letter of Appointment 	<ul style="list-style-type: none"> Sourcing, Advertising and Issuance of Contracts as per UNDP HR/SC guidelines For interim measures, disbursement will be according to FACE from.
Travelling and use of Subsistence Allowance and others	<ul style="list-style-type: none"> Finalize Agenda / Programme Government staff to use government 's Subsistence Allowance (SA) and others as per the Government's procedures 	<ul style="list-style-type: none"> Disbursement to Government's staff as per FACE from UNDP staff to use available UN's rate in line with UNDP's guidelines

V. MONITORING AND EVALUATION FRAMEWORK

The project activities will be closely monitored by UNDP. In compliance with UNDP regulations, the following will be conducted:

a) Project Monitoring and Review Meetings

- National Steering Committee Meetings

The National Steering Committee (NSC) will meet after the receipt of each project report or at least twice a year, whichever is greater and address project issues raised by the Project Manager, review project progress reports and provide direction and recommendations to ensure that the agreed deliverables are produced satisfactorily according to the project document. A final NSC meeting should also be held at the end of project completion to agree to and endorse the final findings and outcomes of the project and to make recommendations towards project closure.

- Technical Working Group (TWG) Meetings

The Technical Working Group Committee (TWG) will meet as regularly as required to assist the NSC in monitoring and advising the technical implementation of the project and its activities. The TWG acts as the technical advisors to the NSC, and regularly reviews the progress of all project components. TWG will recommend projects to be endorsed by NSC.

- Annual Project Review Meeting

This internal review meeting will be chaired by EPU during the fourth quarter of the year to assess the performance of the project based on the Annual Work Plan (AWP) submitted at the beginning of the calendar year as well as the Annual Progress Report submitted during the fourth quarter of each calendar year. The review will involve all key project stakeholders and the Implementing Partner, and will focus on the extent to which progress have been made towards achievement of the outputs and that they remain aligned to appropriate outcomes as outlined in the project document. This review should update output targets and results achieved. In the last year of the project, the review will be a final assessment.

- **Final Project Review Meeting**

A Final Project Review meeting will be conducted towards the end of the project completion. Its purpose is to assess the performance and success of the project. It should look at sustainability of the results, including the contribution to related outcomes (and the status of these outcomes) and capacity development. It will also review lessons learned and recommendations that might improve design and implementation of other UNDP-funded projects. The meeting will discuss the Final Project Review Report that should be submitted two weeks prior to the Final Project Review Meeting.

b) Progress Reporting Documents

- **Mid Year Progress Report (MYPR)**

A Mid Year Progress Report shall be prepared by the Project Manager, approved by NPD and shared with the NSC by 30 June of each project year. As a minimum requirement, the Mid Year Progress Report shall utilize the standard template for the Annual Project Report (APR) covering a six month period.

- **Annual Progress Report (APR)**

An Annual Progress Report shall also be prepared by the Project Manager and shared with the NSC by the end of the last quarter of each year. The Annual Progress Report shall highlight risks and challenges, the summary of results achieved, and lessons learnt of the project for that reporting year.

- **Final Project Review Report**

This document which is prepared by the implementing partner is a structured assessment of progress based on the chain of results initially defined in the Project Document and Annual Work plan (AWP) and will include information on financial allocations of expenditure. It may be supplemented by additional narrative to meet specific reporting needs of stakeholders, especially the donor(s). The following should be submitted together with the report:

- Lessons learnt log - summarizing the information captured throughout the implementation of the project
- Minutes of NSC meetings
- Minutes of TWG meetings
- Annual signed CDRs
- Statements of cash position (if applicable)
- Statements of assets and equipment

This report will be discussed at the Final Project Review meeting mentioned above.

- **Final Project Evaluation**

Project evaluation assesses the performance of a project in achieving its intended results. It yields useful information on project implementation arrangements and the achievement of outputs. It is at this level that direct cause and attribution can be addressed given the close causal linkage between the intervention and its effect or output. Project evaluation provides valuable information to support informed decision-making and serves to reinforce the accountability of the implementing agency. Depending on the purpose, project evaluations can be commissioned by the management at any time during the project cycle: at mid point, just before or after completion. They should ideally take place around the time of completing a project to determine the future of the project (e.g. continuation or termination of the project), to decide whether the concept should be scaled up or replicated elsewhere, and/or to generate lessons that are of strategic significance for the organization. The evaluation should be conducted by an independent consultant. This is only necessary upon request from donors and executing agency.

c) Financial Monitoring and Quality Assurance

- Combined Delivery Reports

The Combined Delivery Report (CDR) is the report that reflects the total expenditures and actual obligations (recorded in Atlas) of a Project during a period. This report is prepared by UNDP using Atlas and shared with the implementing partner on a quarterly basis and at the end of each year. The Implementing Partner is required to verify each transaction made and sign the quarterly issued CDR report. Statements of cash position as well as assets and equipment should also be submitted together with the CDR on a yearly basis.

Audit

Audit is an integral part of sound financial and administrative management, and of the UNDP accountability framework. The project will be audited at least once in its lifetime and in accordance with the threshold established for the annual expenditures by the Office of Audit and Investigations (OAI). The audit provides UNDP with assurance that resources are used to achieve the results described and that UNDP resources are adequately safeguarded

The selection of an Audit Firm shall be through a competitive Request for Proposals, in consultation with the Implementing Partner and EPU or if possible shall be performed by the National Audit Authority. UNDP procedures must be followed as per the specific Terms of Reference for Audits of NEX/NIM Projects.

The audit is expected to provide assurance related to the following broad areas:

- Project progress and rate of delivery (PP)
- Financial management (FM)
- Procurement of goods and /or services (PR)
- Human resource selection and administration (HR)
- Management and use of equipment and inventory (EQ)
- Record-keeping systems and controls (R)
- Management structure (MS)
- Auditors' comments on the implementation status of prior year audit

VI. LEGAL CONTEXT

This document together with the CPAP signed by the Government and UNDP which is incorporated herein by reference, constitute together a Project Document as referred to in the Standard Basic Assistance Agreement (SBAA); as such all provisions of the CPAP apply to this document. All references in the SBAA to "Executing Agency" shall be deemed to refer to "Implementing Partner", as such term is defined and used in the CPAP and this document.

Consistent with the Article III of the Standard Basic Assistance Agreement (SBAA), the responsibility for the safety and security of the Implementing Partner and its personnel and property, and of UNDP's property in the Implementing Partner's custody, rests with the Implementing Partner. To this end, the Implementing Partner shall:

- a) put in place an appropriate security plan and maintain the security plan, taking into account the security situation in the country where the project is being carried;
- b) assume all risks and liabilities related to the implementing partner's security, and the full implementation of the security plan.

UNDP reserves the right to verify whether such a plan is in place, and to suggest modifications to the plan when necessary. Failure to maintain and implement an appropriate security plan as required hereunder shall be deemed a breach of the Implementing Partner's obligations under this Project Document [and the Project Cooperation Agreement between UNDP and the Implementing Partner].

The Implementing Partner agrees to undertake all reasonable efforts to ensure that none of the UNDP funds received pursuant to the Project Document are used to provide support to individuals or entities associated with terrorism and that the recipients of any amounts provided by UNDP hereunder do not appear on the list maintained by the Security Council Committee established pursuant to resolution 1267 (1999). The list can be accessed via : http://www.un.org/sc/committees/1267/aq_sanctions_list.shtml. This provision must be included in all sub-contracts or sub-agreements entered into under/further to this Project Document".

VII. APPENDIX A: TECHNICAL COMPONENTS OF THE PROJECT PROPOSAL

Description of project outcomes and key activities

The global LCEB Programme is supporting 25 developing countries to build capacities in the Public Sector and Industry on Low-Emission Development Strategies (LEDS), Measurement, Reporting, and Verification (MRV), Nationally Appropriate Mitigation Actions (NAMAs), and national GHG inventory systems. Malaysia is one of the beneficiaries of this programme, where technical, financial and institutional capacities / support will be provided to achieve the following outcomes:

Outcome 1: The GHG Inventory System fulfils national sustainable development requirements and international commitments.

The development of GHG emission inventories contributes to Malaysia's existing information and data collection processes and platforms, and is a Convention obligation. A GHG national inventory system will support the development of more periodic GHG inventories and the MRV system to be designed for Malaysia's NAMAs. The technical and institutional capacity support that the LCEB Project will provide under this Outcome will result in the development of systematic and sustainable GHG emission inventory processes as well as build the capacities required for this Project, which will also benefit the country's National Communication process.

Outcome 2: National initiatives on mitigation are enhanced through NAMAs in the main industrial GHG emitting sectors that contribute to voluntary emission reduction aspiration.

Under this outcome, the project will work on the implementation of an enabling framework and mechanism for the design of NAMAs. This includes supporting processes to shortlist and engaging potential implementers of mitigation actions and assessment of feasible emission reductions. Based on this the activities under this outcome will target the piloting of NAMAs in prioritised industrial GHG emission sources and will develop/adapt tools to enable NAMA implementation.

Outcome 3: MRV systems have been designed to support implementation and evaluation of identified NAMAs

An MRV system will give transparency and confidence in the implementation of NAMAs as well as international credibility. It will also support Malaysia to comply with its Biennial Update Report obligation, which is required by the Durban climate change deal.

In the absence of specific guidance on MRV systems to be implemented for NAMAs, the Project will have to work with the available UNFCCC decisions to develop a credible and functional MRV system.

The following table shows the outcome, outputs and underlying activities of the proposed LCEB project:

Outcome	Output	Activities
Outcome 1: The GHG Inventory System fulfils national sustainable development requirements and international commitments.	1.1 Institutional framework on GHG inventory is strengthened.	<ul style="list-style-type: none"> ▪ Support the establishment of national GHG data repository. ▪ Build capacity to operationalise the inventory reporting cycle in consultation with key stakeholders. ▪ Identify and support in developing appropriate enabling mechanism to ensure regular compilation of GHG data. ▪ Facilitate institutionalisation of GHG inventory activities for key agencies. ▪ Develop sustainable data collection system from companies contributing to key source in GHG reporting.

Outcome	Output	Activities
		<ul style="list-style-type: none"> ▪ Design a periodical review system for continuous improvement of the GHG inventory system.
	1.2 Relevant tools are identified and training in use of the tools is conducted.	<ul style="list-style-type: none"> ▪ Determine suitable tools for performing uncertainty assessment, key source analysis and QA/QC procedures. ▪ Conduct training for applying the tools. ▪ Develop/adapt training manuals and guidelines. ▪ Undertake awareness raising initiatives with different stakeholders
Outcome 2: National initiatives on mitigation are enhanced through NAMAs in the main industrial GHG emitting sectors that contribute to voluntary emission reduction aspiration.	2.1 Implementation framework and mechanism for NAMAs is established.	<p><u>Policy and Institutional Framework</u></p> <ul style="list-style-type: none"> ▪ Review existing initiatives related to NAMA in the country, with a focus on the main industrial GHG emission sources. ▪ Develop national NAMA policy and criteria. ▪ Support the planning and development of NAMA secretariat. ▪ Establish a national NAMA registry. ▪ Formulate sector-specific NAMA Roadmap, with a focus on the main industrial GHG emission sources (such as in palm oil, cement, wood and waste industries), in collaboration with key stakeholders. ▪ Develop framework and guideline for formulating climate change strategy by state and local governments. <p><u>Other Supporting Instruments</u></p> <ul style="list-style-type: none"> ▪ Assess technology needs and identify relevant technological options. ▪ Explore approaches for sustaining long-term financing required for mitigation actions in the country and determine financing options for NAMAs. ▪ Conduct a feasibility study on legal and regulatory instruments in support of future climate change mitigation action.
	2.2 Pilot NAMAs in the main industrial GHG emission sources are prioritised.	<ul style="list-style-type: none"> ▪ Determine criteria for prioritisation of pilot NAMA. ▪ Prioritise high impact sectors and activities for demonstration as NAMAs. ▪ Adoption of at least three one (3) NAMAs including its associated MRV. ▪ Determine funding strategies.
	2.3 Approaches and tools to intensify NAMA implementation are developed.	<ul style="list-style-type: none"> ▪ Develop relevant mechanism and tools in support of public and private sectors government agencies to measure and record GHG emission of their mitigation actions. ▪ Assess and explore the potential of relevant activities in national plans and policies for implementation as supported NAMA. ▪ Review CDM projects for possible adoption as NAMAs in order to ensure sustainability in delivering emission reduction. ▪ Mobilise state and local governments' initiatives on NAMAs. ▪ Develop training manual in collaboration with relevant government training agencies. ▪ Prepare and disseminate relevant outreach materials.

Outcome	Output	Activities
		<ul style="list-style-type: none"> ▪ Prepare and circulate policy papers on selected issues (e.g. NAMA, MRV, GHG inventory). ▪ Conduct regular dialogue and workshops in support of continuous interfacing of different stakeholders.
<p>Outcome 3: National and Sectoral MRV systems are designed with pilot activities in the main industrial GHG emitting sectors.</p>	<p>3.1 MRV systems are designed with a focus on the main industrial GHG emitting sectors.</p>	<ul style="list-style-type: none"> ▪ Review available national and international approaches and methodologies on MRV. ▪ Formulate domestic MRV framework in consistency with the UNFCCC decisions. ▪ Develop sectoral-specific MRV guidelines in collaboration with respective industrial association, with a focus on the main industrial GHG emitting sectors (such as in palm oil industry, cement, wood and waste),. ▪ Design MRV elements for the pilot NAMAs in Output 2.2. ▪ Reinforce domestic CDM operational entities and relevant agencies for verification of NAMAs.

VIII. APPENDIX B: VISIBILITY & OUTREACH UNDER THE LECB PROJECT

Context

The Low Emission Capacity Building Programme is considered by its donors as an innovative pathfinder project – allowing national governments to build capacities to plan their own low-emission development pathways within the context of national circumstances and national development goals. National teams are in the best position to identify on-the-ground experiences that can be collated and disseminated.

As such, national LECB project teams are encouraged to program approximately 5% of their budget for learning, knowledge sharing, communication and outreach activities and materials². Visibility is a major criterion from donors for measuring success and national teams are encouraged to develop an outreach strategy the beginning of the project that is regularly monitored. At times, national teams may be called upon to provide updates on their project progress for featuring in donor publications.

Required Visibility Products

National Fact Sheet/Case Study

Each national team is expected to prepare a National Factsheet/Case study that can be used at the national and global levels (via the LECB Programme’s global website, newsletter, and other outreach tools) to promote national project results and activities.

Lesson Learned/Best Practices Documents

Each national team is expected to produce a lessons learned/best practices document at the completion of each project component to showcase their results and impacts. The Global Support Unit will provide guidance on how to develop these best-practice documents, which will also be used as guidance for other developing countries embarking on a LEDS/NAMA process.

Contributions to LECB Programme newsletter

The Global Support Unit will prepare a quarterly newsletter. National teams are required to contribute with at least one newsletter article during the life of the project.

Recommended Visibility Products

National web page

National teams are requested to develop a web page or, at minimum, post relevant project activities on the most appropriate institutional website. The Global Support Unit will link to the national page from the global programme site, www.lowemissiondevelopment.org, and encourages similar linkages to the global site wherever programme promotion is featured.

National media reports

National teams are requested to liaise with the communications focal point in the UNDP Country Office regarding any media produced by or about the project, and to share media reports with the Global Support Unit for global promotional efforts, including featuring on the programme website, www.lowemissiondevelopment.org.

IX. APPENDIX C: RISKS AND MITIGATION

² It is noted that these funds may be embedded in other activities, such as producing a Lessons Learned document at the end of a project component, or developing a joint webpage with the government ministry implementing the project and need not appear as a separate budget line or activity.

Description	Type	Impact & Probability	Mitigation Measures
The value of US Dollars foreign exchange against the Ringgit may reduce during the project cycle.	Financial	Probability: Low Impact: Medium	There will be a need to regularly monitor the exchange rate to ensure that it does not affect the budget of the project. If there are major changes, the budget will be adjusted accordingly and approved by the NSC.
Lack of awareness from the public and private sectors on LEDS and NAMA	Management	Probability: Medium Impact: Medium	Aggressive promotional exercises will need to be organized. Having a comprehensive visibility programme and by engaging a full-time project coordinator in the project will help.
Weak support from the executing agency due to conflicting priority	Management	Probability: Low Impact: Medium	Consistent periodical meetings as laid out in the M&E will assist NRE to increase communication and oversight to the project
Gaps in terms of baseline data may still exist.	Others	Probability: Medium Impact: High	There will be a need to consult relevant agencies in identifying the gaps and address it.

X. APPENDIX D: UNDP ANNUAL WORK PLAN MONITORING TOOL

Together with project issue/ risk logs, the following AWP Monitoring Tool should be used for the project review purpose.

Expected Outputs and Indicators: List all CP outputs and indicators, including annual targets

Planned Activities: List all the activities including monitoring and evaluation activities, including evaluations, field monitoring visits, technical backstopping missions, and audits to be undertaken during the year towards stated CP outputs

Expenditures: List actual expenditures against activities complete

Results of Activities: For each activity, state the results of the activity

Progress towards Achieving CP Outputs: Using data on annual indicator targets, state progress towards achieving the CP outputs. Based on the updated project issue/risk logs, comment on factors that facilitated and/or constrained achievement of results including:

- Whether risks and assumptions as identified in the CP M&E Framework materialized or whether new risks emerge
- Internal factors such as timing of inputs and activities, quality of products and services, coordination and/or other management issues

The Annual Work Plan (AWP) Monitoring Tool

Year _____

CP Component _____
 Implementing Partner _____

EXPECTED OUTPUTS AND INDICATORS including annual targets	PLANNED ACTIVITIES <i>List all the activities including monitoring and evaluation activities to be undertaken during the year towards stated CP outputs</i>	EXPENDITURES <i>List actual expenditures against activities completed</i>	RESULTS OF ACTIVITIES <i>For each activity, state the results of the activity</i>	PROGRESS TOWARDS ACHIEVING OUTPUTS Using data on annual indicator targets, state progress towards achieving the CP outputs. Where relevant, comment on factors that facilitated and/or constrained achievement of results including: <ul style="list-style-type: none"> ▪ <i>Whether risks and assumptions as identified in the CP M&E Framework materialized or whether new risks emerged</i> ▪ <i>Internal factors such as timing of inputs and activities, quality of products and services, coordination and/or other management issues</i>
OUTPUT 1: INDICATOR 1.1 WITH TARGET FOR THE				

<p>YEAR: INDICATOR 1.2 WITH TARGET FOR THE YEAR: INDICATOR 1.3 WITH TARGET FOR THE YEAR:</p>							
<p>OUTPUT 2: INDICATOR 2.1 WITH TARGET FOR THE YEAR: ETC.</p>							

XI. APPENDIX E: TERMS OF REFERENCES

National Steering Committee (NSC)

The National Steering Committee (NSC) will monitor the conduct of the project and provide strategic guidance to the project team on the implementation of the project. The NSC will be chaired by the Secretary General or Deputy Secretary General of NRE

Members of the NSC may include EPU (International Cooperation), MNRE, MoA, MEGTW, MOF, DOS and other related agencies. The NSC will meet at least twice a year or when necessary. The NSC will have the following duties and responsibilities:

- Provide policy guidance on matters pertaining to the implementation of the project;
- Monitor and evaluate the implementation of the project towards fulfilment of the objectives stated in the project document;
- Review, approve and endorse proposed work plan and budget or any change of activities and budget;
- Initiate remedial actions to overcome all constraints in progress of the project;
- Review and approve relevant changes to the project design;
- Endorse analysis of GHG inventory for recommendation to a higher level government's committee before submission to UNFCCC
- Endorse any suitable LEDS, NAMAs and MRVs for national adoption
- Endorse any project outputs as stipulated in the project document
- Coordinate the roles of the various organizations involved in the execution of the project and ensure harmony with related activities;
- Advice on the long term sustainability strategy of the project;
- Review and approve all related reports to the projects.

Technical Working Group (TWG)

The Technical Working Group (TWG) will assist the NSC in monitoring and guidance on the implementation of the project as per given thematic area. The TWG will act as technical advisors to the NSC. The members of the TWG will consist of representatives from the EPU (ENRES and Energy), MNRE, MEGTW, UNDP and other relevant stakeholders to be determined by the NSC.

The TWG Inventory will be specifically responsible for:

- Recommend possible GHG methodologies to be used
- Finalize list of key critical sectors to be included in the GHG inventory list
- Finalize working arrangement for collection of GHG data
- Recommend and endorse GHG analysis sectorally and nationally for adoption by NSC

The TWG on Mitigation will be specifically responsible for

- Endorse LEDS, propose NAMAs and MRVs for potential adoption by NSC
- Review, filter/screen NAMAs / MRVs as per UNFCCC guidelines

Common responsibilities for both TWGs

- Provide guidance and decisions on matters pertaining to the technical aspects of the project such as the data collection exercise, lists of projects, priority mechanism, promotion strategy and other activities to ensure that they meet with the objectives set in the project document and with international good practices and standards ;
- Monitor and evaluate the technical implementation of the project towards fulfilment of the objectives stated in the project document;
- Review and comment on the proposed technical work plan and budget and AWP; and

- Regular monitoring of the progress of the project and recommend approved technical reports to the NSC
- Review policy recommendations to be endorsed in the NSC
- Besides NPD, the chairperson of the TWG will be mandated to approve financial transaction related to its thematic activities

National Project Director (NPD)

National Project Director is a staff member of the Government of Malaysia's implementing agency of a UNDP-supported project and in this case will be the LECB project. His/her main responsibility is to coordinate project activities among the main parties to the project: the Government co-coordinating authority, the consultant, and UNDP.

Specifically, he/she works in close collaboration with the Project Manager as well as UNDP and his/her responsibilities include:

- Endorse recommendations on LEDS/ NAMAs /MRVs and any other LECB project outputs as stipulated in the project documents
- Ensure that the project document and project revisions requiring Government's approval are processed through the Government co- coordinating authority , in accordance with established procedures;
- Preparing work plans in discussion with the Project Manager, UNDP and consultants;
- Mobilizing national institutional mechanisms for smooth progress of project;
- Reviewing project status reports;
- Providing direction and guidance on project-related issues;
- Providing advice and guidance to the project team.
- Approve financial transaction where appropriate.
- Report LECB project progress and financial status for endorsement by NSC including EPU

Project Manager

The Project Manager will be primarily focusing on the administrative, financial and operational aspects of the project. The person role is to provide managerial support and coordinates the implementation of various LECB activities in ensuring quality and timeliness of activities and delivery of outputs. It is foreseen that he/she will be based at 50% MNRE and 50% at UNDP's office, upon discussion with the NPD.

The specific tasks of the Project Manager are:

- Liaise and work closely with the project partners and beneficiaries
- Prepare and submit report regularly to NPD, the NSC and TWG on the project's progress
- Maintain close contact with designated focal points from UNDP and other stakeholders, indicating any estimated changes to the work plan, and proposing a budget revision when appropriate
- Ensure that the requisite allocations are available in accordance with the agreed budget and established schedules of payment, if any, in consultation with EPU and UNDP
- Analyze and review consultant's report and/or propose possible intervention for recommendation to NPD for approval
- Coordinate and facilitate the work of multiple component teams engaged in the implementation of project activities
- Work closely with UNDP in drafting and preparation of relevant Terms of Reference (TOR) for consultants / project advisors.
- Monitor the project funds and resources. Prepare progress and financial reports of the project when required.
- Maintain an up-to-date accounting system and information system to ensure accuracy and reliability of country reporting
- Be actively involved in the preparation of relevant knowledge products (including publications and reports)
- Where necessary and upon advice by UNDP, perform the function of ATLAS External User, creating requisitions and vouchers, and other relevant ATLAS processes

Duration: Two years with possible extension for the third year.

Reports to: National Project Director, under the guidance of UNDP and NRE

Qualifications and skills:

- Master's degree or equivalent in Environmental Science, Engineering, Business or a related discipline. Bachelor's degree with sufficient project experience will be considered.
- At least 3 year's experience in project management.
- Preferably a person with a deep understanding of UNDP procedures and government's inter relationship, especially in implementing climate change mitigation programme.
- Has sufficient knowledgeable in the UNFCCC COP outcomes (especially on LEDS, NAMA and MRV), GHG Inventory and national communications.
- Project management experience with government and industries will be an asset.
- Candidate must be able to multitask and work independently.
- Be proactive, energetic, committed and innovative
- Have good interpersonal skills, diligent, open-minded and dedicated. Flexible and mature person.
- Excellent writing and organization skills. Strong command of English and Bahasa Malaysia.

XII. APPENDIX F: PROJECT ANNUAL REPORT TEMPLATE

DATE:

Award ID:

Description:

Implementing Partner:

Period Covered:

1. Project Issues:

Status of Project Risks:	Open Project Issues:
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2. Project Performance

OUTPUT 1:						
ID						
Description:						
YYYY target:						
YYYY Achievement:						
Activity ID:						
Deliverable Description:						
Start and End Date:						
% Progress to date						
Quality Criteria		Date	Results of Activities			
			User Perspective	Resource Status	Timeliness	
Financial						
Account	Fund	Donor	R. Party	Budget	Expenditure	Balance
OUTPUT 2:						
Project ID						
Description:						
YYYY Target:						
YYYY Achievement						
Activity ID:						
Deliverable Description:						
Start and End Date:						
% Progress to date						
Quality Criteria		Date	Results of Activities			
			User Perspective	Resource Status	Timeliness	
Financial Summary						
Account	Fund	Donor	R. Party	Budget	Expenditure	Balance

3. Lessons Learned

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