1ST QUARTER 2016 PROJECT STATUS REPORT

TABLE OF CONTENTS:

LOCALLY FUNDED PROJECTS

- 1. Alternative Fuels for Transportation and Other Purposes
- 2. Biofuels Program
- 3. Comprehensive Resource Assessment of Philippine Low Enthalpy Geothermal Areas
- 4. Detailed Wind Resource Assessment Project
- 5. Health, Safety, Security and Environment (HSSE) Program for Natural Gas Facilities in the Philippines
- 6. Household Electrification Program (HEP) in Off-Grid Areas Using Renewable Energy
- 7. National Energy Efficiency and Conservation Program (NEECP)
- 8. Nationwide Intensification of Household Electrification (NIHE)
- 9. Ocean Energy Potential Resource Assessment
- 10. Oil Industry Deregulation Management Program

FOREIGN-ASSISTED PROJECTS

- 1. Access to Sustainable Energy Program (ASEP)
- 2. Development for Renewable Energy Applications Mainstreaming and Market Sustainability (DREAMS)
- 3. Market Transformation through Introduction of Energy Efficient Electric Vehicle Project (E-Trike)
- 4. Philippine Industrial Energy Efficiency Project (PIEEP)
- 5. Philippine-Japan Project for Introduction of Clean Energy Using Solar Power Generating System

JOINT PROGRAMS

- 1. Advancing Philippine Competitiveness
- 2. Building Low Emission Alternatives to Develop Economic Resilience and Sustainability (B-LEADERS)
- 3. Energy Policy and Development Program (EPDP)
- 4. EU-SWITCH Policy Support Component Philippines
- 5. Support Climate Change Commission in the Implementation of the National Framework Strategy on Climate Change and Climate Change Action Plans (Support CCC)
- 6. USAID Low Emissions Asian Development (LEAD) Program

LOCALLY FUNDED PROJECTS

1st QUARTER 2016 UPDATES

Project Name	ALTERNATIVE FUELS FOR TRANSFORMATION AND OTHER PURPOSES
Location	Nationwide
Implementing Unit/ Office/ Division	Alternative Fuels and Energy Technology Division – Energy Utilization Management Bureau (AFETD-EUMB)
Description	The project aims to reduce dependence on imported oil, to contribute to energy security through fuel diversification and to provide more environment-friendly alternatives to fossil fuels.
Objectives	Program implementation on the use of Compressed Natural Gas (CNG) in the transport sector initially through the pilot project;
	 Promotion of the diversification of the country's fuel resources in the transport sector; development of standards;
	3. Carrying out information, Education, and Communication (IEC) nationwide on the use of Liquefied Petroleum Gas (LPG) in transport; and
	4. Research study on the potential of hydrogen as energy source for the transport, industrial, and commercial sectors.
Funding Source	Fund 151
Project Start Date	2010
Project Completion Date	Continuing
No. of Extension and Reasons	None
Approved Appropriation	Php 18,260,000.00

for FY 2016	
% of Utilization	12.04% (as of 31 May 2016)
Updates	Accomplishments from January-May 2016:
	 Deployed 32 Units of CNG-Fuelled Buses On the establishment of two (2) units modular CNG stations of PNOC-EC, the bidding for equipment and civil works has been completed. The issuance of Notice of Award to winning bidder is awaiting approval from PNOC-EC Board of Directors. 11,977 Auto-LPG taxis registered were monitored to be operational.

Project Name	BIOFUELS PROGRAM
Location	Nationwide
Implementing Unit/ Office/ Division	Biomass Energy Management Division – Renewable Energy Management Bureau (BEMD-REMB)
Description	The project aims to promote the use of biofuels (biodiesel and bioethanol) as cleaner alternative fuel, develop the national biofuels development plan, to conduct techno-economic and viability study for expanded utilization of biodiesel (power generation, marine transport and industries) and to conduct vehicle performance testing for higher biofuel-blends and resource assessment of other viable biofuel feed stocks.
Objectives	The project aims to implement the Biofuels Law, Biofuels Manufacturing Plants Inspection and Monitoring and to conduct Sectoral Meetings, Consultations and IEC Activities.
Funding Source	Fund 151
Project Start Date	2006
Project Completion Date	Continuing
No. of Extensions and Reasons	None
Approved Appropriation for FY 2016	Php 12,947,000.00
% of Utilization	1.90% (as of 31 May 2016)

Updates

Accomplishments for 1st Quarter 2016:

- 1. Continuing conduct of monitoring, inspection/ site visit and evaluation of existing and proposed biofuels/ biomass projects and facilities nationwide.
 - 1.1.24 Biofuel Production Facilities/ Projects:

Accredited:

Biodiesel - 11

Bioethanol - 10

Registered with Notice to Proceed:

Bioethanol - 3

- 1.1.1. Conducted 16 site inspection/ monitoring/ validation and product sampling to monitor compliance to Philippine National Standard (PNS)
 - Bioethanol
 - Absolut Distillers, Inc. (2)
 - Universal Robina Corporation (2)
 - Emperador Distillers, Inc. (1)
 - Leyte Agri Corporation (1)
 - Balayan Distillery, Inc. (1)
 - Green Future Innovations, Inc. (1)
 - Biodiesel
 - Tantuco Enterprises (2)
 - Mt. Holly Coco Industrial Co., Ltd. (1)
 - JNJ Oleochemicals, Inc. (1)
 - Chemrez Technologies, Inc. (1)
 - Econergy Corporation (1)
 - Bioenergy 8 Corporation (1)
 - Phoenix Petroleum Philippines, Inc.
 (1)

*Note: Biofuel projects are monitored twice a year on PNS Compliance

1.1.2. Conducted validation of biodiesel facility for increase in capacity of Tantuco Enterprises, Inc. from 60 to 60 million liters

- 1.1.3. Awarded two (2) Certificate of Registration to bioethanol producers with total annual production capacity of 60 million liters under R.A. 9513.
 - Emperador Distillers, Inc. and
 - Absolut Distillers, Inc.
- 1.1.4. Monitored monthly production and sales of 21 accredited biofuel producers
 - Biodiesel 11
 - Bioethanol 10
- 1.2.64 Biomass Facilities/ Projects

Conducted 20 site inspection/ monitoring/validation

- 1.2.1. Biomass Renewable Energy Operating Contract (BREOC)
 - Megawatt Clean Energy, Inc. Himamaylan City
 - Megawatt Clean Energy, Inc. Ormoc City
 - Victorias Milling Company, Inc.- Victorias City
 - V. M. Agbayani Rice Mill Bongabong
 - Bicol Biomass Energy Corporation Pili
 - Malaybalay Bioenergy Corporation Malaybalay
 - Manolo Fortich Biomass Energy Corporation - Manolo Fortich
 - Crystal Sugar Company, Inc. Maramag
 - San Jose City I Power, Inc. San Jose City
 - Isabela Biomass Energy Corporation -Alicia
 - Lucky PPH International, Inc. Alicia
 - Green Future Innovations, Inc. San Mariano
 - Grass Gold Renewable Energy Corporation - Llanera
 - Green Innovations for Tomorrow Corporation - Talavera
 - Asian Carbon Neutral Power Corporation

- Tarlac City
- Central Azucarera de San Antonio Passi City

1.2.2. Own-Use

- Pag-Asa Grains Center, Inc. San Jose, Occidental Mindoro
- Busco Sugar Milling Company Quezon, Bukidnon
- Amley Natural Energy Corporation Puntod, Cagayan de Oro
- Capiz Sugar Milling Company President Roxas, Capiz
- 2. Continuing implementation of MOA with Philippine Information Agency (PIA) on IEC Campaign and Advocacy Plan for the National Biofuels Program.
- 3. Purchase of Office Supplies, collaterals, and laboratory supplies and materials.
- 4. On-going actual on-road and performance testing using brand-new vehicles for higher biofuel blends (bioethanol/biodiesel).
 - The schedule for the on-road testing activities using B2 for baseline data (2,000km) is April 2016 followed by testing using B5 (30,000 kms).
- 5. Implementation of Memorandum of Agreement with Technological University of the Philippines (TUP) on the testing of 5% and 20% biodiesel blends for in-use vehicles, validation road test.
 - The test vehicle has already covered 30,000 km using B20 and showed remarkable results. For low pressure type injection pump system, the technical viability of using such fuel for in-use vehicles such as jeepneys, delivery trucks, and buses has been proven. However, the B5 testing using 2 vehicles with high pressure injection system was discontinued due to internal issue with TUP Resident COA. The remaining fund was returned to DOE and TUP is yet to submit the project's terminal report.

- 6. Continuation of implementation of biofuels projects using alternative feedstock (sweet sorghum, cassava, and macroalgae) and biogas technology
 - 6.1. Mariano Marcos State University (MMSU) "Village Scale Production of MMSU Hydrous Ethanol as Feedstock for R&D in Biofuel Trials and Anhydrous Ethanol Production"
 - The project was completed in December 2014. The COA audited Financial Reports and disbursement was submitted on February 2016.
 - 6.2. University of the Philippines Visayas Foundation Inc. (UPVFI) "Bioethanol Production from Macroalgae and Socio-ecological Implications"
 - Project implementation extended until March 31, 2016.
 - UPLB and UPV presented draft terminal report on January 19, 2016 in the presence of Bureau of Fisheries and Aquatic Resources (BFAR) representatives.
 - BFAR was informed that the Fisheries Administrative Order 250, Series of 2014 issued on March 10, 2014 which prohibits collection, harvesting, gathering, selling, and/or exporting brown algae (Sargassum spp.) and sea grass was a deterrent in the implementation of the project. Thus, it was suggested that up-to-date information on the culture and production of Sargassum (i.e. proper way of harvesting of seaweed) and seaweed farming should be provided as a possible solution in algal harvest controversy.
 - The project implementation is undertaking finalization of the terminal report that would include sustainability and economic analysis of bioethanol production from macroalgae and seaweed farming.
 - 6.3. Xavier University "Bioethanol Production Potential of Different Cassava Carieties under Northern Mindanao Condition and Development of a Pilot-scale Cassava Bioethanol Plant"

- Project implementation was extended until March 31, 2016.
- Xavier University had its initial terminal report presentation last April 27, 2016. However, additional data such as matrix of bioethanol yield using the five (5) different cassava varieties under different agronomic conditions and yeast-enzymes combinations; result of laboratory analysis of bioethanol cassava; life cycle analysis producing bioethanol (LCA) in including the environmental cassava and analysis; impact cost performance and emission test results of gasoline engine need to be included in the terminal report to complete the project.
- 6.4. Cavite State University (CaVSU) "Biogas Technology Assessment in the Philippines"
 - Project implementation extended until March 31, 2016; CaVSU presented its draft terminal report on the same day.
- 6.5. Cavite State University "Hands-On Training on the Construction of Biogas Digester in General Santos City"
 - Project implementation extended until March 31, 2016; CaVSU presented its draft terminal report on the same day.
- 7. Approval of research/ demonstration projects for implementation
 - 7.1. Romblon Electric Cooperatives (ROMELCO) "Electrification of Sitio Bagong Silang, Baranggay Alad, Romblon, Romblon using Biomass Technology" (18kW);
 - MOA between the DOE, ROMELCO, and Municipality of Romblon, Romblon was signed on December 17, 2015 wherein the Department shall provide funding and be the over-all in-charge of the project

implementation. ROMELCO shall be the project implementer and will also provide a counterpart fund for the construction of the powerhouse. Likewise, the LGU of Romblon, Romblon shall provide a parcel of land for the powerhouse, perimeter fencing administrative assistance among others.

- The transfer of fund will be effected after the election bad. Community organizing was conducted last April 26-28, 2016, wherein the proposed project beneficiaries have organized the Sitio Bagong Silang Power Association (SBSPA). Further, the Sitio Association Officers that will manage the operation/maintenance of the biomass system were elected.
- 7.2. Mariano Marcos State University (MMSU) "Establishment of a Community-Based Bioethanol Industry and Continued Research and Development on the Feasibility of Hydrous Bioethanol as Biofuel Blend;" MOA for signature of the Secretary
 - As a result of the completed DOE-funded hydrous ethanol from sweet sorghum project, MMSU has developed simple technologies that are both ADAPTABLE and ADOPTABLE at the village level to allow farmers' full participation in the vertical integration in the biofuel industry. Consequently, MMSU came up with a proposal for the said proposal as its next initiative. The project was approved for implementation and funding; start of project implementation is by 3rd Quarter 2016.
- 8. Participation/attendance on international/local seminar/workshop and other activities on biofuels/biomass:
 - Information Day on "Bioenergy in the Philippines;" Frankfurt, Germany
 - Support Climate Change Commission II Planning Workshop; Tanay, Rizal
 - Sustainable Energy for All Roundtable Discussion; SRA, Quezon City
 - 1st Working Group Meeting on Potential Study of

- Renewable Energy and its Effective Usage in EAS Countries; Jakarta, Indonesia
- USAID STRIDE "Careers in Science and Technology Innovation and Research;" Peninsula Manila, Makati City
- Biomass Conversion to Biofuels Workshop; UP Diliman, Quezon City
- Biofuels Policies and Market in the Philippines Presentation (US Grains Council); DOE, Taguig City

Project Name	COMPREHENSIVE RESOURCES ASSESSMENT OF PHILIPPINE LOW ENTHALPY GEOTHERMAL AREAS
Location	Camiguin Island, Camiguin de Babuyanes, Cagayan, El Nido Palawan
Implementing Unit / Office / Division	Geothermal Energy Management Division – Renewable Energy Management Bureau (GEMD-REMB)
Description	Project Activities:
	 Review of available data/ studies Remote sensing and aerial photo interpretation Semi-detailed to detailed geological, geochemical and geophysical surveys Resource characterization and conceptual modeling Pre-feasibility study Candidate areas:
	 Balungao, Pangasinan. Surface temperature (°C): 42-48 Anini-y, Antique. Surface temperature (°C): 30-50 Gattaran, Cagayan. Surface temperature (°C): 60-70
Objectives	The main objective of the project is the further exploration and evaluation of low enthalpy geothermal areas that might be suitable for power generation with the use of binary technology and other direct-use applications.
Funding Source	Fund 151
Project Start Date	2015
Project Completion Date	2017

No. of Extensions and Reasons	None
Total Project Cost	Php 31,995,200
Updates	Accomplishments for 1st Quarter 2016:
	IEC Campaign in Camiguin, Camiguin held on 17 February 2016
	2. IEC Campaign in El Nido, Palawan held on 02 March 2016
	3. Initial coordination for the IEC in Calayan, Cagayan held on 14-20 March 2016

Project Name	DETAILED WIND RESOURCE ASSESSMENT PROJECT (WRAP)
Location	40 sites have been pre-identified by the project: Nueva Ecija (10 sites), Nueva Vizcaya (4 sites), Pampanga (7 sites), Bulacan (2 sites), Ifugao (5 sites), Kalinga (5 sites), Bohol (2 sites), Samar (5 sites)
Implementing Unit/ Office / Division	Solar and Wind Energy Management Division – Renewable Energy Management Bureau (SWEMD-REMB)
Description	The project is targeting 40 sites in 20 provinces to be accomplished within eight (8) years. The project commenced in 2013 and will end in 2020.
	The DOE is jumpstarting a detailed wind resource assessment activity in selected areas with potential resources and no existing wind development initiatives. The activity aims to address the gaps of the country's wind energy database which would be utilized by project developers and investors in conceptualizing, designing and evaluating wind energy projects.
Objectives	Generally, the project aims to identify viable sites for wind power development in the country. Specifically, it aims to:
	Undertake and sustain the conduct of detailed wind resource assessment in potential sites of the country;
	2. Update the national wind energy database containing resource data that are necessary in planning, design and implementation of wind energy projects;
	3. Build local capability/ expertise on various activities of wind resource assessment as well as in the development of wind power projects; and

Project Start Date 2013	
	3
Project Completion 2020 Date	0
No. of Extension and Reasons	ne
Approved Appropriation for FY 2016	7,755,000
% of Utilization 0.84	1% (as of 31 May 2016)
1. S () () () () () () () () () () () () ()	SWEMD and PSAU-AREC Technical Team conducted preliminary site assessment of three (3) barangays during the first quarter, to wit: Brgy. Camachile, Doña Remedios Trinidan, Bulacan; Brgy. Rio Chico, General Tinio, Nueva Ecija; and Brgy. Paraiso, Calatagan, Batangas. The procurement of equipment, supplies, and materials including other supplies expense and parts of meteorological mast were approved by the Bids and Awards Committee under public bidding and for posting at DOE and Philippine Government Electronic Procurement System (PhilGEPS) websites. The requirements for the procurement of office and ICT supplies expense were submitted to the Bids and Awards Committee through a memorandum dated 01 February 2016 of SWEMD. The Project will install one (1) unit of 60 m metmast. The activity is on top (excess) of 2015

target under the DOE and Pampanga State Agricultural University (PSAU) Memorandum of Agreement. Moreover, the DOE will supervise installation of four (4) met-masts under the Asian Development Bank – Quantum Leap in Wind (ADB-QLW) Project, nationwide.

- 4. The Project engaged the services of landowners/tenants (of met-mast sites) for the maintenance and security of met-mast areas that include the following:
 - Brgy. Malasin, San Jose City, Nueva Ecija;
 - Brgy. East Poblacion, Pantabangan, Nueva Ecija;
 - Brgy. Malacapas, Dasol, Pangasinan; and
 - Brgy. Ibis, Bagac, Bataan.

Moreover, the Project is processing the same for the met-mast sites under the ADB-QLW Project that include:

- Brgy. Happy Valley, San Isidro, Northern Samar;
- Brgy. Mahawan, Kananga, Leyte;
- Brgy. Caridad, Culasi, Antique; and
- Brgy. Pandan, Cabusao, Camarines Sur.
- 5. SWEMD conducted the on-site monitoring and maintenance of four (4) met-mast installations spread in the Provinces of Nueva Ecija, Pangasinan and Bataan on February 16-19, 2016.
- Met-mast installed in Brgy. Malacapas, Dasol, Pangasinan is scheduled in the second semester for preventive maintenance, replacement of sensors and recalibration/ reorientation of sensor booms.
- 7. The data collection and management is continuing.
- 8. Provided assistance to ADB in the implementation of QLW Project, specifically in the supervision of installation works for four metmasts, nationwide.

Project Name	HEALTH, SAFETY, SECURITY AND ENVIRONMENT (HSSE) PROGRAM FOR NATURAL GAS FACILITIES IN THE PHILIPPINES
Location	Nationwide
Implementing Unit / Office / Division	Natural Gas Management Division – Oil Industry Management Bureau (NGMD-OIMB)
Description	The anticipated increase in number of projects for natural gas calls for an urgency to establish an HSSE standard and program in support of the policy direction of government. Gas industry networks and their associated technologies are fundamentally dependent on industry standards to ensure consistency and continuity among all the various elements. Standards are used to establish procedures and properties relevant to processes and requirements. The Health, Safety, Security, and Environmental standards to be established will provide assurance in safety, increase efficiency in operations, and strengthen the implementation of the regulatory function of DOE, through NGMD, on the construction, operation, and maintenance of existing and incoming gas facilities and ensured compliance of safety in the facilities and operations within the gas chain.
Objectives	Main Objective:
	To fully develop standards and management programs on Health, Safety, Security, and Environment (HSSE) for the existing and incoming natural gas facilities in the Philippines.

	Specific Objectives:
	To develop local standards for the natural gas facilities (CNG station, LNG terminal/ hub, regasification facility, pipeline and other ancillary facilities) in the Philippines
	2. To identify, assess, manage and minimize HSSE risks in natural gas facilities during construction, operation and maintenance
	3. To come up with a HSSE manual covering but not limited to the detailed procedures, standards, audit items, risk assessment and management, corrective/ preventive actions that will enable proper implementation/ management of HSSE programs by operators of natural gas facilities
	4. To have a Department Circular institutionalizing the technical standards provided in the HSSE manual that would become the basis for enforcement and compliance of operators/owners of natural gas facilities
	5. To conduct inventory of local and international HSSE best practices on natural gas facilities that will form part in the HSSE manual
	6. To organize a team that enable continual improvement of the HSSE standards and system
	7. To identify and design training programs that will effectively address the needs and implement a continuous capacity building for regulators
Funding Source	Fund 151
Project Start Date	April 2013
Project Completion Date	September 2015
Date	May 4, 2016 (revised)

No. of Extension and Reasons	Activities of the Project are largely dependent on the advice of the Consultant. The Contract for the services of the Consultant was only signed on March 5, 2015. Notice to proceed was received by the Consultant on March 17 which signaled the start of the Consultancy Service within seven (7) days from receipt of notice. The TOR provides a period of 14 months service from the Consultant. Given the timeline, the Project resulted to its extension until May 2016.
Total Project Cost	Php 6,872,000.00 (original)
	Php 6,010,000.00 (revised)
	Php 6,159,000.00 (based on SARO)
Updates	 Accomplishments for 1st Quarter 2016: Conducted the familiarization activity on the operation and maintenance activities at the existing natural gas facilities in Batangas and on-going construction of LNG facility in Pagbilao, Quezon with 33 participants Conducted the Workshop on the Harmonization of the Inspection and Monitoring Criteria and Protocol with 23 participants Conducted Seminar on Capability Building Training for the HSSE-Inspection and Monitoring Team (HSSE-IMT) of HSSE to natural gas facilities with 22 participants Reviewed and formally accepted the Inception Report as well as the First Interim Report by the HSSE Consultant

Project Name	HOUSEHOLD ELECTRIFICATION PROGRAM (HEP) IN OFF-GRID AREAS USING RENEWABLE ENERGY
Location	Nationwide
Implementing Unit / Office / Division	Solar and Wind Energy Management Division – Renewable Energy Management Bureau (SWEMD-REMB)
Description	The project serves as one of the strategies of the National Government to provide house lighting in off-grid sitios which cannot be viably connected to the conventional grid by the distribution utilities or electric cooperatives. With about 4 million potential house connections to be energized until year 2017, the HEP is expected to augment the rural electrification program target of realizing 90% house connection-level electrification by 2017.
Objectives	The HEP involves the energization of off-grid households using mature renewable energy technologies such as photovoltaic solar home systems (PV-SHS), photovoltaic streetlights and micro-hydro systems.
	While promoting judicious utilization of RE technologies for rural electrification, house beneficiaries as well as beneficiary LGUs and ECs are likewise appropriately capacitated on the technical and social (management and organizational) aspects of solar PV and MHP systems.
Funding Source	Fund 151
Project Start Date	2011
Project Completion Date	2017
No. of Extension and	None

Reasons	
Approved Appropriation for FY 2016	Php 168,723,000.00
% of Utilization	1.33% (as of 31 May 2016)
Updates	Accomplishments for 1st Quarter 2016:
	Completed the energization of 874 households in various areas nationwide under HEP 2014.
	2. Conducted technical inspection and physical inventory for 5,395 households under HEP 2013 and HEP 2014.

1ST QUARTER 2016 UPDATES

Project Name	NATIONAL ENERGY EFFICIENCY AND CONSERVATION PROGRAM (NEECP)
Location	Nationwide
Implementing Unit / Office / Division	Energy Efficiency and Conservation Division - Energy Utilization Management Bureau (EECD- EUMB)
Description	This program aims to make energy efficiency and conservation (EE&C) a way of life. Specifically, the program aims to cushion the impact of increases in prices of petroleum products and electricity through the implementation of energy efficiency and conservation measures, promote cost avoidance/ savings on fuel and electricity without sacrificing productivity, get firm savings commitments from identified sector groups and help protect the environment.
Objectives	The project aims to further strengthen and promote energy efficiency and conservation in the commercial, industrial, residential, transport, agricultural, and power industry sectors. The following are the specific objectives of the project:
	 To help contribute in achieving the energy reform agenda of the government in the aspect of ensuring energy security; To help cushion the impact of oil price volatility
	to the economy; 3. To help mitigate effect of climate change through reduced carbon dioxide emissions as a result of judicious and efficient utilization of energy;
	4. To promote and rationalize energy consumption through aggressive promotion of

	EE&C in government, industrial, commercial, residential, transport, and electric power industry sectors; and,
	5. To promote energy efficiency and conservation as a way of life.
Funding Source	Fund 151
Project Start Date	2006
Project Completion Date	Continuing
No. of Extension and Reasons	None
Approved Appropriation for FY 2016	Php 27,147,000.00
% of Utilization	0% (as of 31 May 2016)
Updates	Accomplishments as of 1st Quarter of 2016:
	Information, Education and Communication and Advocacy Campaign on Energy Efficiency and Conservation
	1.1. Earth Hour 2016
	As the world enters a new era of climate change action, the World Wide Fund for Nature (WWF) Philippine together with the Department of Energy again encouraged the consuming public to participate in the observance of the Earth Hour 2016 spearheaded by the WWF Philippines to switch-off and shines a light on climate action.
	The Earth Hour Philippines main switch-off was held at the Quezon City Memorial Circle from 7:00 PM to 10:00PM on March 19, 2016. The Earth Hour 2016 addressed the simple action of turning off the lights as

well as electrical appliances for an hour on March 19 at 8:30PM to deliver a powerful message about the need for decisive climate change solutions.

In support to this year's simple action, the Department published the print Earth Hour advertisement in broadsheets, namely: The Philippine Daily Inquirer and the Philippine Star. The print ad placement was managed by the Development Academy of the Philippines.

1.2. EC Energy Concept

With the ongoing partnership with the Philippine Information Agency on the advocacy campaign activities on energy efficiency and conservation, an EC Energy concept was developed in connection with the Department's commitment on the El Niño phenomenon where energy conservation measures are needed to avoid a national crisis caused by widespread drought during the summer months of 2016.

1.3. Fuel Economy Run

An initial meeting on fuel economy run activity was organized by the Department tapping Petron Corporation as the country's leading oil company to be its fuel partner in the first economy run using cleaner and more efficient Euro 4 fuels.

The fuel economy run event is slated on May 27 at the Petron Clark Station in Angeles City, Pampanga.

1.4. ASEAN-Japan Energy Efficiency Partnership (AJEEP) Program

The new phase of Promotion on Energy Efficiency and Conservation (PROMEEC) and Multi-Country Training Program on Energy Conservation for ASEAN Countries" (MTPEC) is called the ASEAN-Japan Energy Efficiency Partnership Program (AJEEP) which consists of three (3) schemes, namely: AJEEP-Scheme 1; AJEEP-Scheme 2; and AJEEP-Scheme 3 and Energy Conservation Workshop under AJEEP called ECAP.

AJEEP Scheme 2 forms a capacity building system for EE&C business platform/ development by which more private companies could find business opportunities to accelerate improvement in EE&C through applying effective/ advanced technologies and products under a well-established EC policy/legal framework and energy management system. Likewise, it provides ASEAN with the capacity building programs for applying the advanced technologies and products so as to create more opportunities for private sectors to promote EE&C through business.

In line with this, a survey visit and data collection was conducted at Marquee Mall, Angeles City and at Central Azucarera don Pedro, Laguna by technical experts of the Energy Conservation Center, Japan (ECCJ) led by Mr. Yoshihiro Kawaguchi including representatives from the ASEAN Centre for Energy and the DOE staff to carry out the energy performance of the industry in the way to find some opportunities to improve energy efficiency, conservation and management.

Subsequently, the outcome and recommendation, including proposal of the various improvement measures and systems for EE&C project realization was presented during the Seminar-Workshop on Energy Efficient Technologies in Industry Sector on February 5, 2016 at F1 Hotel. It was attended by 60 participants from the industry sector. This avenue provided information sharing and EE&C exchange views on the policy, regulation, best practices, efficient new

technologies and cooperation between ASEAN countries and Japan to support the development of EE&C in ASEAN Member States.

2. Recognition Award

2.1. 2016 ASEAN Energy Awards

Started in 2000, the ASEAN Energy Awards are Southeast Asia's prestigious annual awards program that recognizes outstanding work for excellence, creativity, practicality and dedication to a cause in the field of energy.

The Philippine entries for the said awards were chosen from among the winners of the 2015 Don Emillio Abello Energy Efficiency Awards under the different categories which was reviewed and endorsed by DOE to the ASEAN Centre for Energy. These include:

2.1.1. ASEAN Best Practices Competition for Energy Efficient Building

Company	Category
SM City General Santos	New and Existing Building Category
SM City North EDSA	Green Building Category
SM City Baguio	Tropical Building Category
Net Lima	New and Existing Building Category
Market! Market!	Retrofitted Building

	Category
Tower 1 Exchange Plaza	Retrofitted Building Category
Robinson's Place Palawan	Green Building Category

2.1.2. ASEAN Best Practices on Energy Management for Buildings and Industries

Company	Category
Holcim Philippines, Inc. – Bulacan Plant	Large Industry
Holcim Philippines, Inc. – La Union Plant	Special Submission Category
AGC Flat Glass Phils., Inc.	Industries, Large Category
SM Corporate Offices	Building, Small and Medium Category
6750 Office Tower	Large Building Category
One Evotech Building	Building, Small and Medium Category
North Triangle Depot Commercial Corporation (TriNoma)	Large Building Category

3. Public Consultation of the Philippine Energy Standards and Labeling Program

The PESL Program of the Department of Energy requires appliances and lighting products to meet prescribed minimum energy efficiency levels and to carry an energy label at the point of sale.

The objectives of the program are to: 1) eliminate the least efficient household appliances and lighting products in the local market; 2) reduce monthly electricity bill to end-users; 3) protection from mislabeling; 4) encourage manufacturers to improve product efficiency to make their products competitive in the local and in the world market; and 5) reduce greenhouse gas emission from power generation.

The program initially covers room air-conditioners, split-type air-conditioner, refrigerators with 5 to 8 cubic feet storage capacity, and three types of fluorescent lamp (CFL, linear and circular) and electronic ballasts.

A series of public consultations was held in Luzon, Visayas and Mindanao last February where comments and suggestions were raised and given a substantial weight in the finalization of the PESLP to make the policy more responsive to the needs of the stakeholders. Updating the PESLP is almost complete and it would cover a wide range of appliances and lighting systems and even light-duty motor vehicles.

This initiative will be a key contribution to the attainment of the country's aspirational target to reduce energy intensity by 45% by 2035.

4. Energy Management and Energy Audit Services

The detailed energy audit was conducted at Bogo-Medellin Sugar Milling Co., Inc. in Cebu City in partnership with Sugar Regulatory Administration (SRA) and with the Philippine Sugar Millers Association, Inc. (PSMA) relative to their ongoing Energy Efficiency/Conservation and Commercial Cogeneration for the Sugar Industry Project.

The energy audit was also conducted in the National Transmission Corporation in Quezon City to find opportunities for the improvement and energy saving within the facility and to evaluate the facility on the effectiveness of its energy efficiency project or program.

- 5. Government Energy Management Program (GEMP)
 - 5.1. Energy Audit Spot Check

With the continued implementation of the Government Energy Management Program thru Administrative Order No. 110, the DOE conducted spot checks in 46 regional government offices in Region I, VII and Cordillera Administrative Region to remind government submission of agency's monthly energy consumption reports and compliance to other AOs (Nos. 103, 126 and 183), which have been issued in the highlighted past that conservation measures. AO 103 directs the continued adoption of austerity measures in the government particularly consumption of fuel, water, office supplies, electricity and utilities, while AO 183 also authorizes the installation and use of energy efficient lights and fixtures.

At present, there are plans to go online for the submission of government agencies' monthly energy consumption.

6. Accreditation of Energy Service Company (ESCO)

In reference to the Department of Energy Circular No. 2008-09-004 dated September 24, 2008, the Committee on Accreditation of Energy Service Companies assessed the application of TREES Corporation and Delta Dore, Inc. and found to be qualified for accreditation as ESCO. To date, a total of 17 ESCOs has been accredited by DOE.

TREES Corporation now represents over 100 years of expertise in the successful EE and RE upgrading of facilities in Australia including hospitals, universities, colleges, schools, commercial buildings, leisure/aquatic centers, entertainment facilities, administration centers, museums, libraries, courthouses and correctional facilities.

Delta Dore, Inc. for over 10 years successfully implementing Energy Management System (EMS) projects for commercial, residential and industrial establishment and guarantees energy savings.

Project Name	NATIONWIDE INTENSIFICATION OF HOUSEHOLD ELECTRIFICATION (NIHE)
Location	Nationwide
Implementing Unit / Office / Division	Rural Electrification Administration and Management Division – Electric Power Industry Management Bureau (REAMD-EPIMB)
Description	 Strengthening of DUs' marketing strategies and other measures for household electrification Streamlining of household connection procedures and requirements Conduct of policy study on slum electrification, flying connections, and related issues Improving electrification planning by DUs and implementation of DOE's area-based household electrification program Establishment of grant funds for the electricity access of the poor households Special assistance for electricity re-connections and other services for households affected by
	calamities
Objectives	The main objective of the project is to contribute in the attainment of Government's goal of 90% household electrification by 2017 through the development and implementation of specific policy measures and financial incentives to mobilize DUs in fast-tracking the connections of the remaining unelectrified households in both electrified (load centers and urban/slum areas) and unelectrified areas of their franchise areas.
Funding Source	Fund 151

Expected Outputs	Provision of grant to enable electricity connection of unelectrified poor households
	2. Provision of advice on innovative strategies to intensify HH electrification
Project Start Date	2015
Project Completion Date	2017
Approved Appropriation for FY 2016	Php 794,209,000
% of Utilization	5.14% (as of 31 May 2016)
Updates	Accomplishments for 1st Quarter 2016:
	 The HOUSE Technical Working Group discussed the strategies on strengthening the marketing of Distribution Utilities (DUs) during the HOUSE Team meeting on April 2016. Consultations with DUs and Local Government Units (LGUs) were conducted to address the
	streamlining of household connection procedures and requirements at the project level.
	3. Initial discussions on policy study on slum electrification, flying connections, and related issues have been made with the stakeholders including the members of the HOUSE team.
	4. The Distribution Development Plan Template is continually being revised, including the incorporation of household electrification plans.
	5. In relation to the establishment of grant funds for the electricity access of the poor households, the DUs' project development is on-going with Service Application Form facilitation as most time-consuming. A more detailed Implementation Procedure has been

- developed in April 2016. As of May 2016, 30, 512 household by 22 ECs were funded for FY 2015.
- 6. Cross-cutting activity in the form of focus group discussion was conducted for the LGU and DU partnerships in promoting intensified household electrification.
- 7. Initial database system of NIHE Beneficiaries is developed
- 8. Initial concept of the Household Electrification Information System was developed by DOE

1ST QUARTER 2016 UPDATES

Project Name	OCEAN ENERGY POTENTIAL RESOURCE ASSESSMENT
Location	Nationwide
Implementing Unit/ Office / Division	Hydropower and Ocean Energy Management Division - Renewable Energy Management Bureau (HOEMD-REMB)
Description	The project envisions to attain the following general objectives:
	Advance research and development of open- ocean current, wave tidal and thermal energy systems through capability building;
	2. Make available first hand data for potential ocean area for development to interested stakeholders and counterparts; and,
	3. Be able to advance the operational readiness and awareness of ocean energy technology in the country.
Objectives	The specific objectives of the project are:
	1. To develop technical capability of HOEMD personnel in the identification of potential Philippine ocean territory area, in the evaluation of project proposals, and in providing technical assistance to stakeholders for ocean energy development through a capability training program;
	To conduct resource assessment of identified areas within the PEP;
	3. To familiarize with the operation of technology and equipment;
	4. To develop and maintain a database;
	5. To establish collaboration and strategic

	partnership with various government agencies and academe; and,
	6. To conduct extensive IEC program to stakeholders.
Funding Source	Fund 151
Project Start Date	2014
Project Completion Date	2014 but was extended until 2015
No. of Extension and Reasons	The project was extended once due to the following reasons:
	1. EOil & Gas Co. Inc. (EGCI), as service contractor, has not complied with the contract for its failure to submit contract/agreement between EGCI and its consultant (Ocean energy expert)
	2. EGCI proposed consultants/lecturers have no experience in ocean energy resource assessment
Total Project Cost	Php 26,650,000.00
Updates	Accomplishments for 1st Quarter 2016:
	1. Processing of the transfer of fund to University of Eastern Philippines- AREC amounting to Php 6,400,000.00
	2. EOIL & GAS Co. Inc., the consultant for the project, submitted Reference Materials in compliance to the Basic Lecture Series requirement accompanied by a request for the release of its second tranche amounting to 30% of the contract amount.
	3. Continuation of lecture series on Ocean Energy Technology for the HOEMD-REMB staff until February 2016
	4. Continuation of database construction and

gathering of existing data by the consultant of the project
5. Presentation by the consultant of initial data gathered to HOEMD-REMB

Locally Funded Project

1ST QUARTER 2016 UPDATES

Project Name	OIL INDUSTRY DEREGULATION MANAGEMENT PROGRAM
Location	Nationwide
Implementing Unit / Office / Division	Oil Industry Management Bureau (OIMB)
Description	This program is basically earmarked to ensure effective enforcement of Executive Order 377 providing for the smooth coordination among all government agencies concerned in the implementation of RA 8479. It will provide guidance and assistance to new industry participants, and undertake activities that will contribute in strengthening consumer protection. It will continually educate and inform the public and key sectors of society on the benefits of deregulation in the oil industry and provide technical support to the programs and activities of the LPG and Liquid Fuels Task Forces.
Objectives	The main objective of the project is to successfully implement the Downstream Oil Industry Deregulation Law.
	The specific objectives of the project include:
	Advocate compliance of industry players standards on quality, quantity, safety and environment;
	Espouse consumer protection by reducing trade violations in the liquid fuels and LPG industry;
	3. Promote awareness of the different stakeholders, i.e. industry players, LGUs, concerned government agencies, etc. on the rules and regulations governing the oil industry;
	4. Espouse consumer awareness through the

	publication of press releases and primer on oil price updates;
	5. Harmonize fuel quality to international standards pursuant to the Philippine Clean Air Act of 1999;
	6. Promote retail competition through provision of capital assistance and conduct of management and skills training program for interested investors in the gasoline business; and,
	7. Conduct studies/ researches relative to the improvement of the downstream oil industry.
Funding Source	Fund 151
Project Start Date	1997
Project Completion Date	Continuing
No. of Extension and Reasons	None
Approved Appropriation for FY 2016	Php 12,925,000.00
% of Utilization	23.06% (as of 31 May 2016)
Updates	Accomplishments for 1st Quarter 2016:
	1. Policy and Communication Initiatives Under the DOE-Philippine Information Agency (PIA) Communication Initiatives, several Multi-Sectoral Advocacy (MSA campaigns commenced as part of the 2015 catch-up plan that was implemented in the 1st Quarter of 2016. Furthermore, series of Capability-Building trainings for LGUs on calibration and sealing of dispensing pumps had also been done. Below are the following places in which the said activities were held:

- Samar
- Isabela/Surigao del Norte/Agusan del Norte
- Laguna/Misamis Occidental/Lanao de Norte
- Agusan del Norte (Communication Netowor/Media)

Parallel to the abovementioned MSA and Capability Building Activities, an IEC campaign for the Academe has also been conducted which has been actively participated in by students from Manuel S. Enverga University Foundation (MSEUF) Lucena City, Province of Quezon.

2. Procurement Plan

Common Office Supplies and ICT Supplies is already on the procurement stage. Likewise, request for Other Supplies for the year 2016 is now forwarded to BAC for Public Bidding. Below are the particulars of the Other Supplies being requested:

- Field inspection gear/polo jacket/field shoes and bags
- Promotional Materials and collaterals

In addition, transfer of funds for the support activities on DOI by Field Offices will be expected in July

FOREIGN-ASSISTED PROJECTS

Foreign-Assisted Project

1ST QUARTER 2016 UPDATES

Project Title	ACCESS TO SUSTAINABLE ENERGY PROGRAMME
Implementing Unit	Rural Electrification Administration and Management Division - Electric Power Industry Management Bureau (REAMD-EPIMB)
Fund Source	The European UnionThe World Bank
Project Description	The Project aims to support the GOP in achieving inclusive economic growth by providing access to electricity and energy services by greater number of Filipinos as specified under the Philippine Development Plan (PDP) and DOE's Household Electrification Development Plan. ASEP's grants funds shall directly contribute to total electrification targets particularly the attainment of 90% household electrification in 2017 by providing basic electricity services to remote and poor households through PV mainstreaming, pre-paid metering and mini grids using RE or RE-hybrid systems in remote islands. ASEP will undertake various technical assistance in the form of policy advice, studies, trainings, and provision of tools to enhance the power sector management through capacity building of DOE and ERC towards policy and regulatory reforms; NEA and ECs with special attention to Bangsamoro areas on advice on the least cost implementation of renewable energy (RE) and energy efficiency (EE) strategies, and implementation of National Energy Efficiency Roadmap, among others.
	promote sustainable business models and partnerships linking innovative energy solutions grids with job creation, livelihood and productive uses for poor households. Promotion of the climate-resilient infrastructures shall also be part of the whole design of the ASEP activities.
Project Objective	To expand sustainable energy sources to meet the growing needs of the economy and the poor as outlined in the PDP.

	The specific objectives are:
	 90% household electrification by 2017; Expanded national energy efficiency program; and Increased renewable generation capacity by end of 2019.
Components	Technical Assistance: Capacity Building towards policy and institutional reforms for total electrification and enhanced power sector management
	1.1.TA to DOE and Energy Sector (EUM)
	1.2.TA to NEA: Upgrading of NEA's Business Intelligence Systems (WBA)
	1.3.TA to ERC: Case Management and Business Intelligence Systems
	1.4. Renewable Energy for Rural Electrification (RE4RE)
	 Aims at designing a clod-based GIS platform which provided information on the electricity sector in the Philippines. As the title "RE4RE" indicates, the information shall mainly be used to help providing access to electricity in rural areas with renewable energy sources given priority in the electrification process
	Investment Support: Solar PV Mainstreaming and Rural Network Solar (RNS)
	2.1. Solar PV Mainstreaming (39,214 HHs target) 2.2. Rural Network Solar
	3. Call for Proposals: Facility to innovative electricity/energy solutions in support to job-creation, livelihood and climate-resilient communities
	Program Management: Project operations, monitoring and evaluation.
Project Cost	■ Total Costs: € 104,072,837.00 (PhP 4,891,423,349.00)

	Breakdown: 1. Cash: € 100,527,470.00 (PhP 4,724,791,083.00)
	2. Non-Cash: € 3,545,367.00 (PhP 166,632,266.00)
	■ EU Grants: Cash = € 60,000,000.00 (PhP 2,820,000,000.00)
	 Total GOP Contribution: € 44,072,837.00 (PhP 2,071,423,349.00)
	Breakdown:
	1. National Government: € 7,765,938.00 (PhP 364,999,102.00)
	1.1. Cash (GAA-DOE): € 5,645,938.00 (PhP 265,359,102.00)
	1.2. Non-Cash (DOE, ERC, NEA, NPC-SPUG): € 2,120,000.00 (Php 99,640,000)
	2. LGUs:
	Non-Cash = € 385,500.00 (PhP 18,118,500.00)
	3. Beneficiaries:
	3.1. Cash: € 34,881,531.00 (PhP 1,639,431,980.00)
	3.2. Non-Cash: € 1,039,867.00 (PhP 48,873,766)
	*€ 1.00 = Php 47.00
Duration	Five (5) Year. Originally scheduled October 2015 to September 2019
Updates	Updates as of May 2016:
	Upon the signing of the Financing Agreement between the Department of Finance and the European Union last December 2015, the DOE, in cooperation with the European Union (EU) and the World Bank (WB), has undertaken necessary consultation meetings among

Project Stakeholders as well as the engagement of Consultants and Experts to undertake the detailed design and preparation of the various components and activities under the Project.

DOE is currently coordinating on the establishment of the Project Steering Committee composed of NEA, NPC, DOF, NEDA, ERC, DBM, DILG, EU Manila, World Bank, and other stakeholders to oversee the implementation of the Project.

1. COMPONENT 1: TECHNICAL ASSISTANCE

1.1. Technical Assistance to DOE

On March 2016, the EU Delegation engaged and mobilized Gesellschaft Deutsche the Internationale Zusammenarbeit (GIZ) GmbH as the Technical Assistance (TA) Team to DOE implementation of the Capacity Building for: (a) Institutional Strengthening of DOE in terms of Enhanced Power Sector Management in areas of monitoring, planning and (b) Household Electrification Planning, (c) Implementation of the Energy Efficiency Action Plan 2015, (d) Promotion of renewable energy both in grid and off-grid areas.

For the month of April, the TA Team has undertaken in-depth consultation with concerned DOE line units, NEA, ERC and Electric Cooperative representatives.

An Implementation Planning Workshop with key stakeholders was conducted on the 1st week of June for the formulation of capacity building program involving trainings, provision of planning tools, policy studies, and conduct of feasibility studies. The participants are from DOE line units, NEA, ERC and Electric Cooperatives.

1.2. Technical Assistance to NEA

Priority support to NEA and the ECs shall be upgrading of NEA's Business Intelligence Systems which aims to enhance NEA's management

capacity to improve the performance of the Electric Cooperatives and facilitate the immediate processing of loan applications of the ECs in implementing Capital Expenditure projects to upgrade the electric distribution facilities and ECs' electricity services in rural areas.

With the assistance of the World Bank, the design work for the IT system upgrade project as well as the network connectivity studies have been completed in February 2016 as part of the preparatory work for ASEP.

On-going activities include the actual procurement for the implementation and support services for the full implementation of NEA-BIS under the grant funds of ASEP.

1.3. Technical Assistance to ERC

Priority assistance to ERC under ASEP is the establishment of the Case Management and Business Intelligence Systems which aims to redesign critical regulatory processes, including the immediate review and decisions on petitions of the Distribution Utilities and Generation Companies for the approval of Power Supply Agreement, Capital Expenditure Projects and the corresponding tariff adjustments.

Strong support of a Consultant has been mobilized in February 2016 and currently undertaking the detailed design of the system.

1.4. Cross Agency Renewable Energy for Rural Electrification (RE4RE) GIS System

The objective of the RE4RE system is to establish a GIS-based information system for electrification and renewable in the Philippines that is useful for the design of least-cost grid and off-grid electrification projects in remaining unelectrified areas of the country, including the use of commercially-viable renewable energy systems such solar Photovoltaic, micro-hydro, and biomass, among others.

Based on the preparatory work that started in 2015, a draft Design Report for the RE4RE system has been prepared in March 2016. Upon the finalization of the Design Report, actual establishment and implementation of the RE4RE System is expected to start on May 2016.

2. COMPONENT 2: INVESTMENT SUPPORT

2.1. Solar Photovoltaic (PV) Mainstreaming.

In this off-grid electrification scheme, the Electric Cooperative shall install, operate and maintain 50-Watt peak (Wp) solar home systems to remote areas and dispersed households in its franchise area as a new line of business. The households shall pay for the electricity service at a tariff set by the Energy Regulatory Commission. Out of 71,543 potential households initially identified for PV Mainstreaming, ASEP will support at least 39,214 households in the next four years.

As of April 30, 2016, at least seven (7) ECs have already submitted their Project Implementation Plan and Board Resolutions for their participation in the program. This corresponds to about 30,570 households as candidate beneficiaries for the first tranche of pilot implementation in 2016.

On-going activities include the mobilization of the Consultants to finalize the implementation design of the PV Mainstreaming strategy and the actual procurement of solar home systems to electrify the said households.

2.2. Rural Network Solar (RNS)

RNS aims to install up to twenty (20) Megawatt of Grid-Tied and embedded Solar Photovoltaic Power Plants to serve Electric Cooperatives. Potential areas for RNS are the franchise areas of Electric Cooperatives with strong interests by project developers, preferably in Mindanao.

A Pre-Marketing Activity for RNS was conducted in February 2016 to introduce the concept of the

RNS to Solar PV Project Developers, Distribution Utilities/Electric Cooperatives and other potential investors.

Detailed market assessment and the conceptual design of the RNS are on-going.

3. COMPONENT 3: CALL FOR PROPOSAL FACILITY

The Call for Proposals will cover poorest households especially those in disaster-prone and other remote areas of Mindanao. Possible technologies include micro-grids, 30-Wp Solar Home Systems, etc. Out of 110,996 potential households initially identified in offgrid areas for the Call for Proposals, ASEP will support at least 69,786 households in the next four (4) years.

A Team of Consultant was mobilized in April 2016 to assess the local conditions and recommend strategies for the drafting of Guidelines for the Call. The completion of the Guidelines for the call and the publication of the Call is scheduled to be completed around September 2016.

4. Program Management:

Invitation to NEA, NPC, DOF, NEDA, ERC, DBM, DILG, EU Manila, World Bank, and other agencies has already been sent to form the ASEP Project Steering Committee. GIZ (the TA Team) provides the management support for the ASEP.

Foreign-Assisted Project

1ST QUARTER 2016 UPDATES

Project Title	DEVELOPMENT FOR RENEWABLE ENERGY APPLICATIONS MAINSTREAMING AND MARKET SUSTAINABILITY (DREAMS)
Implementing Unit	National Renewable Energy Board-Technical Secretariat - Renewable Energy Management Bureau (NREB-TS-REMB)
Fund Source	United Nations Development Programme (UNDP)
Project Description	The objective of the Project is to reduce GHG emissions through the commercialization of renewable energy (RE) markets by removing RE-based power generation markets. This will be achieved through 4 components:
	Enforcement of a supportive policy and regulatory environment for leveraging investment in RE development and applications at the local level;
	Strengthened institutional capacity that leads to increased RE investment at the local level;
	3. Increasing share of RE-based power capacity; and
	4. Enhancement of confidence of local RE developers that leads to an enhanced uptake of RE projects and successful replication using proven and emerging RE technologies. The Project will lead to direct lifetime GHG emission reductions of 2.445 ktonnes CO ₂ , and indirect CO ₂ reductions ranging from 4,889 to 141,000 ktonnes CO ₂ .
Project Objective	To promote and facilitate the commercialization of the renewable energy (RE) markets through the removal
Components	1. RE Policy, Planning and Financing
	2. Institutional Strengthening for RE mainstreaming
	3. 'Capitalized' RE Market Development
	4. RE Commercialization
Project Cost	USD 43,502,222

	Total allocated resources: GEF: USD 5,200,000 UNDP: USD 200,000 DOE: USD 2,300,000 PEMC: USD 2,700,000 Local Government: USD 1,222,222 Private Sector: USD 31,880,000
Duration	48 months (01 January 2016 – 31 December 2020)
Updates	Accomplishment for 1st Quarter 2016: The Local Project Appraisal Committee (LPAC) meeting was conducted on 18 March 2016 at DOE. The agenda for the said meeting is the review and discussion of final design of the project.

Foreign-Assisted Project

1ST QUARTER 2016 UPDATES

Project Title	MARKET TRANSFORMATION THROUGH INTRODUCTION OF ENERGY EFFICIENCY ELECTRIC VEHICLE (E-TRIKE) PROJECT
Implementing Unit	Alternative Fuels and Energy Technology Division – Energy Utilization Management Bureau (AFETD-EUMB)
Fund Source	Asian Development Bank (ADB)
Project Description	Energy efficient electric vehicles is a new technology with the promise to transform the way energy is used by today's internal combustion engine (ICE) vehicles. For net energy importing countries, such as the Philippines, electric vehicles can dramatically reduce the country's dependence on imported energy resources, which in turn will reduce short term price volatility and improve long term energy security. This technology has also created the opportunity to transition into an environment, where vehicles no longer generates harmful air and noise pollution and can be powered by indigenous renewable energy resources such as solar, hydropower or geothermal.
Project Objective	 On a macro-level, project aims to reduce transport sector's annual petroleum consumption by 2.8% (based on 20 million barrels per year consumption in 2010) or an equivalent of 89.2 million liters per year; and, Avoided CO₂ emissions is estimated at 259,008 tons per year by shifting to 100,000 electric tricycles. The impact of the project will be sustainable energy use by the transport sector, and the outcome will be
	the transformation of the tricycle industry through large-scale adoption of locally made energy-efficient e-trikes.
Major Outputs	Complete e-trike units delivered to LGUs accompanied by a standard 5-year warranty and after sales services;
	2. Lithium-ion battery supply chain with associated

support services established;

- 3. Solar charging stations pilot on selected areas;
- 4. Material recovery from internal combustion engine (ICE) tricycles and used batteries; and,
- 5. Successful communication, social mobilization, and technology transfer.

Output 1

E-Trike units. The project will deliver 100,000 complete E-Trike units to selected cities and areas to replace ICE tricycles. The supply contract will include a standard warranty on mechanical and technical performance of the E-Trikes and after-sales services. The risk performance period (5 years or 80,000 km whichever comes first) will be borne by the battery manufacturer. All E-Trikes will be clearly marked with a "battery supplied by" (similar to "Intel Inside" in computers) label to make consumers aware of the brand and obligations of the suppliers under the project.

Output 2

Battery supply chain. The project will initiate creation of a lithium-ion battery supply chain in the Philippines by creating an initial substantial market. The transformation objective is to attract reputable international suppliers that have supplied at least one large global vehicle brand.

Output 3

Solar charging stations. The project will establish (1) on a pilot basis five off-grid solar charging stations – 200 kilowatts each – either as a cluster or stand-alone and (2) certain number of grid connected charging station. The solar charging stations will be sufficient to support the electricity needs of 1,000 E-Trikes. Some pilot solar charging stations will be in island locations that are easily accessible and will adopt large number of E-Trikes under the project, for example, Puerto Princesa. In all areas, certain number of grid-connected

charging stations will be included to reduce the "range anxiety" of drivers. Private sector will be encouraged to invest in solar charging stations and in some cases, where feasible, the aggravated demand of the drivers will be converted into an equivalent 5-year power purchase agreement to reduce off-take of potential private investors. In addition, existing electric utilities will be encouraged to establish charging stations as commercial operation.

Output 4

Material Recovery. The Project will ensure that mechanism for the collection and disposal of existing tricycles to be replaced with the E-Trikes supplied under the Project in each participating city or municipality (a) follows the requirements under the CDM guidelines of United National Framework Convention on Climate Change (UNFCCC); and (b) is acceptable to DOE, ADB and the respective LGU. Used batteries (lead-acid ones from ICE tricycles and lithium-ion ones from E-Trikes) will also be recovered.

Output 5

Communication, social mobilization, and technology transfer. All stakeholders will be educated about the project – its benefits, technical parameters, costs, and market potential of E-Trikes. This includes specific training of the drivers on use and maintenance of E-Trikes and technical training to other stakeholders to develop local human resources to support local industry development.

Project Cost

Total Project Cost: USD 504 million (Php 21.672 billion)

ADB Loan: USD 300 million (Php 12.9 billion)

CTF Loan: USD 100 million (Php 4.3 billion)

Gov't Counterpart: USD 99 million (Php 4.257 billion)

CTF Grant: USD 5 million (additional USD 4 million out of the USD 5 million CTF Grant shall be allocated for Solar Charging Facilities) (Php 215 million)

Duration	2014-2018
Updates	Accomplishments for 1st Quarter 2016
	 Contract Signing for the Supply and Delivery of 3,000 E-Trikes and the Project Implementation Consultants (PIC) on February 15, 2016
	 DOE issued a Notice to Proceed (NTP) both for E- Trike Goods and PIC on February 16, 2016
	 Conducted marketing activities in Taguig (Bonifacio Global City) and Laguna (Calamba and Los Baños)

Foreign-Assiste d Project

1ST QUARTER 2016 UPDATES

Project Title	PHILIPPINE INDUSTRIAL ENERGY EFFICIENCY PROJECT (PIEEP)
Implementing Unit	Energy Efficiency and Conservation Division - Energy Utilization Management Bureau (EECD-EUMB)
Fund Source	United Nations Industrial Development Organization (UNIDO) and Co-financing of the DOE, Land Bank, Bank of Philippine Islands and Development Bank of the Philippines
Project Description	The project trains Filipino national experts in both energy management, and the optimization of steam, compressed air and pumping systems while at the same time introducing these concepts to participating industrial enterprises that will directly benefit from the project implementation. Outputs will include greenhouse gas emissions reductions from savings in the use of fuel and electricity attributable to systems improvements undertaken by the participating industrial enterprises. The project will also build capacity for industries in order to introduce an energy management standard – ISO 50001– an international energy management standard. Compliance with this new ISO Standard will provide an incentive to improve energy use efficiency. System optimization will provide a method of assessing systems to identify energy performance improvement opportunities and actions that can provide significant energy savings with limited capital investments leading to more reliable operations.
Project Objective	Introduce ISO 50001 energy management standards along with system optimization approach for improvement of industrial energy efficiency of the Philippines.
Components	1. Energy Management (Integration of Energy Management System/ ISO50001)
	2. Systems Optimization (Steam, Compressed-air, Pumping Systems)
	3. Enhancement of Financial Capacity (EE Financial

	Criteria)
	4. Project Management
	5. Monitoring and Evaluation
Project Cost	Total Project Cost: US\$ 27,166,065.00
	UNIDO-GEF: US\$ 3,166,065.00
	Co-financing: US\$ 24,000.000.00 (National Commercial Banks – US\$ 20,000,000.00; Department of Energy – US\$ 4,000,000.00)
Duration	June 1, 2011 to May 1, 2017
Updates	Accomplishments for 1st Quarter 2016:
	Awareness Campaign on EnMS and SO
	 1.1. National Experts joining the international experts during plant visits to optimize exposure and learning opportunities. 1.2. National experts are being used increasingly to lead Awareness workshops and 2-Day User trainings to enhance their capabilities and raise more awareness 1.3. Organized Forum on Industrial Energy Efficiency in Manila last November 25, 2015 attended by 53 participants from relevant stakeholders and planned forum in Cebu by the 3rd quarter of 2016
	1.4. Letter sent regarding proposed partnership with Quezon City LGU to implement the project within its industrial zones and business jurisdiction.
	2. Signing of Memorandums of Agreement (MOA)
	2.1. Between host plants and the DOE
	 Already signed by host plants implementing EnMS and SO DOE to identify the signatory on their part
	2.2. Between PEZA and DOE – done last 02 May 2016

Foreign-Assisted Project

1ST QUARTER 2016 UPDATES

Project Title	PHILIPPINE-JAPAN PROJECT FOR INTRODUCTION OF CLEAN ENERGY USING SOLAR POWER GENERATING SYSTEM
Implementing Unit	Solar and Wind Energy Management Division – Renewable Energy Management Bureau (SWEMD-REMB)
Fund Source	Government of Japan- Japan International Cooperation System (GOJ-JICS)
Project Description	The project shall demonstration of the effectiveness and efficiency of net metering-connected solar photovoltaic power systems under RA 9513
Project Objective	The project aims for the adaptation to and mitigation of climate change as well as on the Improvement of access to clean energy
Major Output	Solar PV Generating Facility
Project Cost	JPY 600,000,000 (Php 264,000,000)
Updates	 Accomplishments for 1st Quarter 2016 Completed the installation and commissioning of solar PV facilities at Lung Center of the Philippine, Rizal Park, National Power Corporation – Small Power Utilities Group Luzon Office and PNP Camp Crame. Participated in the operation and maintenance training of solar PV facilities at Lung Center of the Philippine, Rizal Park, National Power Corporation – Small Power Utilities Group Luzon Office and PNP Camp Crame.

JOINT PROGRAMS

Joint Program

PROJECT PROFILE

Project Title	ADVANCING PHILIPPINE COMPETITIVENESS (COMPETE) PROJECT
Implementers:	 USAID/Philippines
	The Asia Foundation (implementing partner)
Background	COMPETE assists the Philippines to improve its competitiveness to attain higher levels of trade and investment. To this end, the Project will provide technical assistance to enhance the regime for infrastructure provision, improve productivity in key industries, and increase access to credit.
	COMPETE is a USAID/Philippines project under the Partnership for Growth (PFG), a White House initiative. The PFG represents a partnership between the Philippines and the United States to promote broad-based and inclusive growth. The U.S. Government is working with the Government of the Philippines, the private sector and civil society organizations to help put the Philippines on an accelerated growth trajectory that benefits the majority of its population.
	The goal of the project is to support higher economic growth through interventions in infrastructure, energy, tourism, agribusiness, manufacturing, logistics and access to credit.
Objectives	Improve quality of crucial infrastructure, particularly for transport and energy
	Enhance competitiveness of key industries, such as tourism, manufacturing, logistics and agri-business
	Improve access to credit through direct and indirect programs in capital markets
Location (Project Office)	2/F Citibank Tower, Paseo de Roxas, Makati City
Duration	Four-year project which started in October 2012

Project Cost	Php774.5 million (USD 18.9 million)
Activities	1. Infrastructure Sector:
	 1.1. Technical assistance will enhance the viability of the Philippine Government's public-private partnership infrastructure program; 1.2. Advance a reform agenda to lower transport, logistics, and energy costs; and 1.3. Improve regulatory capacity and oversight of infrastructure development.
	2. Tourism Sector
	2.1. Activities will support the effective implementation of the 2011-2016 National Tourism Plan, particularly in efforts to develop strategic destination areas and tourism clusters.
	3. Agribusiness Sector
	 3.1. The Project will support policies to promote agrifood export competitiveness and provide technical assistance to boost productivity. 3.2. The Project will expand access to credit for small and medium enterprises (SMEs) – particularly through an improved system of credit information for SME lending, wider utilization of credit guarantees, and overall stronger borrowing capacity for entrepreneurs.
	4. By contributing to improved access to infrastructure, increased growth and productivity in key priority sectors, and better use of productive capital, project activities will improve the country's competitiveness, leading to higher levels of trade, investment, and employment.

Joint Program

PROJECT PROFILE

Project Title	BUILDING LOW EMISSION ALTERNATIVES TO DEVELOP ECONOMIC RESILIENCY AND SUSTAINABILITY (B-LEADERS)
Implementer	International Resources Group (IRG) mobilized to implement the USAID/Philippines funded project
Funding Source	USAID/Philippines
Background	The project builds upon the successes and momentum of USAID/ Philippines Clean Energy (CEnergy) Project in 2010-2014. The project's purpose is to contribute to the objectives of increasing climate change resilience and mitigation.
Objectives	Help strengthen the capacity of the Philippine Government and its key partners to plan, design and implement Low Emission Development Strategies (LEDS) contributing to the formulation of Nationally Appropriate Mitigation Actions (NAMAs) in the energy and transport sectors, and to a certain extent, the forestry/land-use sectors.
Location (Project Office)	PNB Financial Center, Macapagal Ave., Pasay City
Duration	February 2014- 31 January 2018
Project Cost	USD 14.17 million
Activities	 Major Activities: 1. Cost Benefit Analysis of Mitigation Actions Study 2. Support to Asia Pacific Economic Cooperation (APEC) 3. Energy Virtual One-Stop Shop (EVOSS) 4. Visayas and Regional Energy Plans 5. Improvement of Data Management Systems

- 6. Greening the Grid
 - Provides technical assistance to energy system planners, regulators, and grid operators to overcome challenges associated with integrating variable renewable energy into the grid.
- 7. Technical Guidance in designing distribution development plan

Contract Completion Targets and Indicators:

- 1. Task 1: In-country capacity on low emission development strengthened
 - 1.1. Establishes institutional structures, mandates, systems and methodologies
 - 1.2. Strengthens policy and regulatory support for LEDS
- 2. Task 2: Investments into clean energy projects are increased
 - 2.1. Promotes investments into clean energy projects
 - 2.2. Strengthens clean energy investment partnerships and networks

Joint Program

PROJECT PROFILE

Project Title	ENERGY POLICY AND DEVELOPMENT PROGRAM (EPDP)
Implementer	UPEcon Foundation, Inc.
Fund Source	United States Agency for International Development (USAID)
Project Description	EPDP is a four-pronged program for research, policy development and advisory, capacity-building, and communication.
	It aims to help strengthen the capacity of the Philippine government to formulate coherent and evidence-base policies and strategies for the cost-effective use of energy resources in order to achieve environmentally-sound energy development.
	EPDP's products and services are used as input by the National Economic and Development Authority, Department of Energy, other government agencies, the academe, and the private sector. EPDP is funded by the United States Agency for International Development (USAID) and implemented by the UPEcon Foundation, Inc.
Goal	To strengthen Government of the Philippines capacity to formulate evidence-based policies and strategies for cost-effective environmentally-sound energy sector development.
Project Objectives	 Create a program to guide energy sector policy- and decision-making; Strengthen the enabling environment for national frameworks for climate change mitigation and low-emission development; Inform private sector business strategies for cost-effective and sustainable and broad-based growth.
Activities	The project has four components: research to generate evidence and conceptual foundations to support

discussion of energy issues and policy formulation; policy development and advisory services for the public sector; capacity building of government and academia in dealing with energy policy concerns; and raising public awareness, disseminating findings on energy research, and mainstreaming discussion on energy and influencing policy.

Priority research areas include improving competition in the electricity market, crafting and reviewing optimal pathways for energy resource use and utilization, improving access to electricity, and studying regional market integration. EPDP partners with U.S. institutions, such as the University of Hawaii, Tufts University, International Food Policy Research Institute, Massachusetts Institute of Technology, University of California Berkeley, and University of California Energy Institute.

Joint Program

PROJECT PROFILE AND UPDATES

Project Title	EU-SWITCH POLICY SUPPORT COMPONENT - PHILIPPINES
Implementers	European Union (EU)
Background	The project, which is funded by the EU under its SWITCH-Asia Programme, aims to provide policy support to the Philippine Government in order to support the Philippine Government in implementing SCP related policy instruments, inclusive of laws. It is aligned with the Philippine Development Plan 2011-2016 (PDP).
	The incorporation of policy instruments related with the concept of Sustainable Consumption and Production (SCP) in the Philippines has actually started in the 1990s al- ready. Realizing the seriousness of climate change as a global threat, the Philippines signed the United Nations Framework Convention on Climate Change (UNFCCC) in June 1992 as one of the first countries and ratified the Convention in August 1994. Also it is a signatory to the Green Productivity Declaration in 1996 (Manila Declaration). The Philippine Agenda 21 was adopted in September 1996. It advocates a fundamental shift in development thinking and approach. In December 1999, the Philippines signed the Kyoto Protocol, which was ratified in February 2005. Being a Non-Annex I country, the Philippines promotes the implementation of Clean Development Mechanisms (CDM) under the Kyoto Protocol to encourage clean and environmental friendly technologies for greenhouse gas reduction in the country, and to bring forward the country's capability by developing sustainable business practices.
	The government has acknowledged the need to promote green growth and has equipped the country with a very comprehensive legal framework. Several laws and policy instruments have been adopted to promote SCP in the country.
	In the most recent Philippine Development Plan (PDP) 2011-2016, a broad statement has been included that emphasizes inclusive growth: "sustained growth that creates jobs, draws the majority into the economic and

social mainstream, and continuously reduces mass poverty". And the vision mentioned in President Aquino III's "Social Con- tract with the Filipino People" to be "an organized and widely-shared rapid expansion of our economy through a government dedicated to mobilizing our people's skills and energies as well as the responsible harnessing of our natural resources" draws the relations to a socially and environmentally responsible (natural resource responsible) economy.

Despite the considerable practical experience that has been gathered and new laws and strategies developed, there is still considerable need for new initiatives and technical support.

New modes of production and consumption have not yet been introduced systemically across the country. There is also raising concern about increasing resource scarcity that is affecting economic growth, in particular energy-related: The Philippine energy sector in 2011, as in the years before, was plagued with problems such as unwarranted price hikes, shortages and, consequently, protests from concerned groups. Oil and electricity are deemed highly sensitive political commodities.

While the SCP acronym is not the most commonly used in the Philippines, many initiatives exist with terminologies ranging from "clean production" to "green economy". However, no coordinated and integrated view on SCP exists so far. This strengthens the fact that matters related to clean production and consumption are rarely a political priority. As a consequence, a relatively low percentage of funds are allocated to re-source 2011 management. Cumulatively, the General **Appropriations** Act (RA 10147) has allocated approximately 5% of the overall budget to resource use and management (incl. energy, forestry, land, mineral and water, as well as agriculture) in the Philippines. This is comparable to Malaysia (4%) but a rather low investment in comparison to other economies, such as Vietnam (25%) or the European Union (42.5%).

In addition, what has been done so far is focused on sustainable production and not yet so much on sustainable consumption. While sustainable production can be considered as industrial consumption of resources, governmental consumption (e.g. green public procurement) and the consumption of private end-consumers (e.g. awareness on eco-labels) have not yet come very far in implementation.

Objectives

The overall objective of the project is to promote sustainable development in the Philippines (i.e. environmentally and socially equitable development, decoupling growth from resource use and pollution), strengthen national and regional policy frameworks to promote the shift towards more sustainable consumption and production patterns and resource efficiency.

To change the behavioral pattern of both the consumer and the producer side means a significant societal change. Experiences show that social change processes of that kind may sometimes require decades and generations.

The following objectively verifiable indicators are sought:

- Policies fostering environmentally responsible and socially equitable development are implemented effectively through government
- Philippine production and consumption moves towards more sustainable patterns, particularly with regard to energy production and consumption, air quality, green procurement and green production methods.

The specific objective (purpose) of the project is to support the Philippine Government in implementing SCP related policy instruments, inclusive of laws.

The project will address SCP at the policy level. The following objectively verifiable indicators are sought:

- Extent to which RE Act and Bio-fuels Act are implemented (i.e. implementation of policy instruments, acceptance of policy incentives and regulations)
- Increased investment in clean energy projects (grid and off grid, baseline studies)

	 Increased level of policy implementation in the area of energy efficiency in the Philippines (and in particular SMEs and Government) Extend to which eco-labelling and green procurement is implemented Extent to which Clean Air Act is implemented (i.e. implementation of policy instruments, acceptance of policy incentives and regulations) Role of DENR as coordinating agency for other crosscutting sustainable consumption and production matters is reinforced
Location (Project Office)	3RD Floor, SWITCH Philippines Room, Department of Energy, Energy Center, Rizal Drive, Fort Bonifacio Global City, Taguig
Duration	Continuing
Updates	 Newly Reported Accomplishments from July 2015 to March 2016: Result Area 1: The Implementation Of Policies And Regulations Related To Clean Energy & Energy Efficiency Is Facilitated 1. Activity 1.1: Support DOE in implementing the Renewable Energy Act and the development of renewable energy initiative Sub-activity 1.1.1: Finalizing the Draft Department Circular on QTP and approval by DOE Background and Rationale: Prior to the adoption of the amended Department Circular on QTP, the DOE in cooperation with SWITCH have conducted three public consultation sessions in Manila, Cebu and Davao in June and July 2015, respectively. The amended Department Circular proposed on the importance of harmonizing the regulations and procedures for entities utilizing renewable energy in the unviable areas with existing guidelines based on the Renewable Energy law. The fundamental

concern that should be addressed within the Department of Energy is between the Electric Power Management Bureau which qualifies entities for the unviable areas and the Renewable Energy Management Bureau, which accredits Renewable Energy Developers.

- Expected Output/Outcome: Draft Department Circular on QTP
- Accomplishment: July 2015 to March 2016
- 2. Activity 1.3 Support DOE and other relevant entities efforts in the development of energy efficiency standards in public, commercial and industrial

<u>Sub-activity 1.3.1: Policy support to DOE on energy efficiency measures in buildings</u>

Background and Rationale: Buildings represent a significant proportion of energy use and GHG emissions in the Philippines. They represent an opportunity for the Government to lead by example and demonstrate the economic viability and the social and environmental advantages of energy efficient buildings. This will lead to a reduction in related energy expenses in the long term, reduction of energy demand and reduction of GHG emissions. A concerted effort to make buildings energy efficient will also create a vibrant domestic EE services sector and could stimulate investment from the private sector. This activity is aligned with the recommendations of the mid-term evaluation. The activity will provide recommendations on energy efficiency measures for key building sub-sectors including government, commercial and residential. The building sectors will be selected based on the most common types and scale of likely impact.

Expected Output/Outcome : TOR for the activity

Accomplishment: January to March 2016

3. Activity 1.4: Explore opportunities to promote energy efficiency in products

<u>Sub-activity 1.4.1: Competence of LATL, Department of Energy and BPS, Department of Trade and Industry clarified</u>

- Background and Rationale: There is a need to streamline currently fragmented energy standards labelling and clarify role and responsibilities between LATL-DOE and BPS DTI. SWITCH plans to support the setting-up of a coordination body that shall be composed of staff of the LATL-DOE and BPS-DTI.
- Expected Output/Outcome: Minutes of meeting on DOE's position regarding their coordination mechanism
- Accomplishment: On-going

<u>Sub-activity 1.4.2: Provide policy guidance in the drafting of Department Circular on the Institutionalization of the Philippine Energy Standards and Labelling Program</u>

 Background and Rationale: One of the proposed policy measures in the objective of this subactivity is the drafting of a Department Circular directing the institutionalization of the Philippine Energy Standards and Labelling Program (PESLP).

This Circular shall apply to all importers, manufacturers, distributors and dealers of PESLP-covered household appliances, lighting products, vehicles and other energy consuming equipment to comply with following: 1) mandatory attachment of the prescribed energy label; 2) Minimum Energy Performance Standards; and 3) other performance requirements in the Particular

Product Requirements (PPR).

- Expected Output/Outcome: Draft Department Circular on Directing the Institutionalization of the Philippine Energy Standards and Labelling Program.
- Accomplishment: On-going
- 4. Activity 1.5 Support DOE in conducting information and education campaigns on energy efficiency and renewable energy

<u>Sub-activity 1.5.1: Information campaign for DOE on EE and RE</u>

- Background and Rationale: The objective of this sub-activity is to strengthen DOE policy initiatives with an information campaign on EE and RE initiatives. The information campaign will focus on creating short to medium-term awareness on policy measures, their benefits (for government, industry and the public) and practical action that target groups can take to adopt EE and RE measures in their daily life.
- Expected Output/Outcome: TOR for information campaign on EE & RE
- Accomplishment: January to March 2016

<u>Sub-activity 1.5.2: Education campaign for DOE on EE and RE</u>

Background and Rationale: Education is an important policy instrument to create strong and long lasting mind-set change, amongst the public and industry towards adopting EE and RE measures. The objective of this sub-activity is to support the DOE policy initiatives with an education campaign on EE and RE initiatives. The education campaign will focus on creating short,

medium and long-term awareness on the EE and RE measures, their economic and environmental benefits to the nation and practical action that target groups can take to adopt EE and RE measures in their daily life. The education campaign will consider social and cultural values which can support the mind-set change required. This activity is aligned with the recommendations of the mid-term evaluation.

- Expected Output/Outcome: TOR for education campaign on EE & RE; Education campaign strategy available on EE & RE targeting students from education sectors and subjects with the largest social, cultural and environmental impact (e.g. primary schools, secondary schools, high schools and colleges); Development of education materials for use in appropriate education sectors and subjects; Dissemination and piloting of materials in selected schools.
- Accomplishment: On-going
- 5. Sub-activity 1.5.3: Update existing DOE energy conservation series booklets for industry
 - Background and Rationale: The objective of this sub-activity is to assist EECD, DOE in updating the contents of the Energy Conservation Series Booklets (total of 5 booklets) for use in the industrial, commercial, residential and transport sectors. The updating and reproduction of Energy Conservation Series Booklets is essential to keep the energy using sectors abreast on new developments on energy efficient technologies and other energy management measures. This activity is aligned with the recommendations of the mid-term evaluation enhance visibility of the project communication of policy initiatives.
 - Expected Output/Outcome: TOR finalized with partners and EUD; Booklets on energy conservation for industry series updated; Consultations with DOE and stakeholders; Booklet content finalized and professionally edited; Booklets formatted, visually

designed and printed (1000 copies each); Presentation on key elements of booklets professionally copy written and visually designed; Leaflet summarizing key messages of booklets copy written/edited, visually designed and printed (5000 copies)

Accomplishment: On-going

Joint Program

PROJECT PROFILE

Project Title	SUPPORT TO THE PHILIPPINES IN SHAPING AND IMPLEMENTING THE INTERNATIONAL CLIMATE CHANGE
Implementing Unit	National Renewable Energy Board –Technical Secretariat (NREB-TS) – Renewable Energy Management Bureau
Project Partners	Climate Change Commission (CCC), DOE, NEDA.HLURB, DOF,LGUs, GIZ
Fund Source	German Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety (BMUB)
Project Description	Support CCC II Project Components 4: Renewable Energy and Energy (Power) Planning The project continues its support to DOE in the implementation of an effective regulatory framework to promote the use of renewable energy. Furthermore, the project aims at improving national energy planning to better accommodate the increasing amount of energy from variable renewable sources such as solar and wind energy in the Philippine power system.
Project Objective	Strengthening the Climate Change Commission and other key actors in implementing and coordinating the national climate change regime as well as developing and operationalizing national contributions to the international climate change discussion.
Project Duration	September 2015-February 2019
Project Cost	€ 4.5 million + € 0.25 million (local in-kind contribution)
Major Output	Renewable Energy Policy Implementation and Energy Market Design

Joint Program

PROJECT PROFILE

Droin of Title	LICAID Low Emissions Asian Davidson and (LEAD) Drawn
Project Title	USAID Low Emissions Asian Development (LEAD) Program
Partners	Implementing Partners: ICF International (prime contractor Asian Institute of Technology (AIT), Greenhouse of Management Institute (GHGMI), International Resource Group (IRG), Nexant, Agriculture and Land Use (ALU) Group (IRG), Nexant, Agriculture and Land Use (IRG), Nexant, Agricu
	Energy Laboratory, USDA/FS, U.S. Department of State
Fund Source	United States Agency for International Development (USAID)
Project Description	USAID's regional LEAD program helps Asian governments, businesses, and institutions develop frameworks for sustained low-carbon development across all economic sectors. This five-year program is designed to build capacity in LEDS development and implementation, GHG inventories, and carbon market development in up to 11 countries: Bangladesh, Cambodia, India, Indonesia, Laos, Malaysia, Nepal, Papua New Guinea, Philippines, Thailand, and Vietnam. LEAD complements the U.S. Government's global initiative for Enhancing Capacity for Low Emissions Development Strategies (EC-LEDS), and draws on specialized expertise from the U.S. Department of Energy (USDOE), U.S. Environmental Protection Agency (USEPA), and U.S. Department of Agriculture's Forest Service (USDA/FS).
Approach	LEAD takes a regional approach in facilitating cooperation and knowledge-sharing, building capacity, replicating best practices, and encouraging public-private partnerships. The program is demand-driven and tailors its activities to specific country circumstances. LEAD supports the adoption of low-carbon policies, plans, and practices and enhanced human and institutional capacity in four interrelated areas:

- 1. LEDS development and implementation: LEDS is a country-led and country-specific national strategic analysis and planning process. LEAD supports the LEDS development process by providing training and technical assistance on analytic and decision-making tools, models, and demonstrations at both national and subnational levels. For example, the program provides training on energy models that assist in long-term planning that considers multiple technology and policy alternatives, enabling countries to better assess the costs, benefits, and impacts of different energy development options.
- 2. **GHG** inventories and accounting: Many Asian countries soon will prepare national GHG inventories every two years. LEAD provides training on developing and managing national and corporate-level GHG inventory systems and emission calculations consistent with international best practices, such as the guidelines and methodologies of the Intergovernmental Panel on Climate Change (IPCC).

Accurate understanding of GHG emissions will enable governments, companies, and other entities to identify opportunities and develop effective solutions to manage emissions, enhance removals, and evaluate low-carbon growth strategies over time. LEAD also works to increase the capacity of GHG accounting service providers.

3. Carbon development: market Carbon market mechanisms are important vehicles for green growth and investment. Along with support for corporate GHG accounting, the LEAD program provides training and technical assistance for countries to develop carbon market platforms and systems. GHG reporting registries, for example, enable businesses to record emissions, emission reductions, and transactions with accuracy and transparency, enhancing market confidence for investment and trade.

4. Regional cooperation: LEAD works with regional and international partners to facilitate regional cooperation, capacity building, and knowledge sharing by extending new partnerships, platforms and networks across Asia. LEAD also supports engagement of the LEDS Global Partnership in order to increase regional access to extensive international resources on LEDS.