

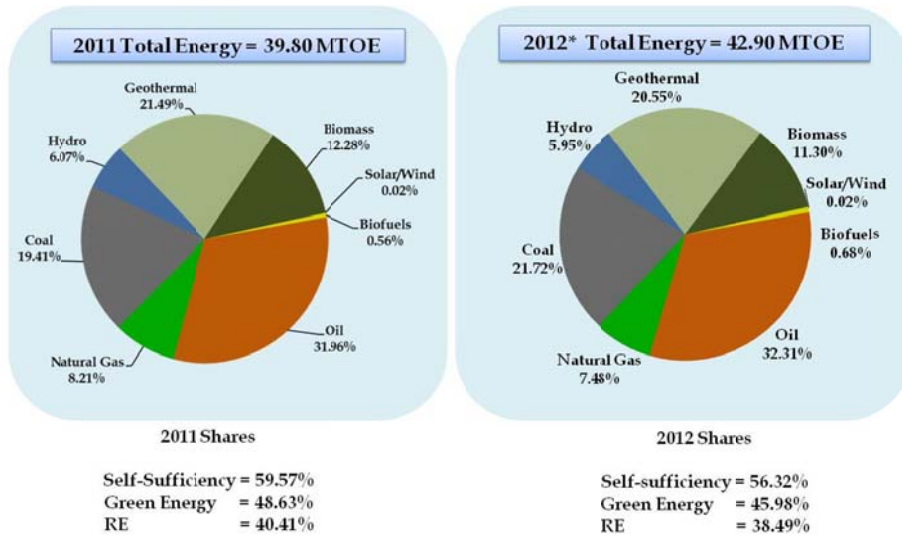
DOE : Nurturing Sustainable Growth

The formulation of energy policies and devising strategies to ensure energy supply security and reliability is within the ambit of the inclusive growth agenda of the government and adheres to the President's Social Contract with the Filipinos. Consistently, the Department of Energy has recognized the critical role of energy security in the country's journey to achieve growth and sustain development. Thus, it should always be an important component of our national security agenda. The sustained supply and access to basic energy services unquestionably helps eradicate poverty, which is the government's primary concern.

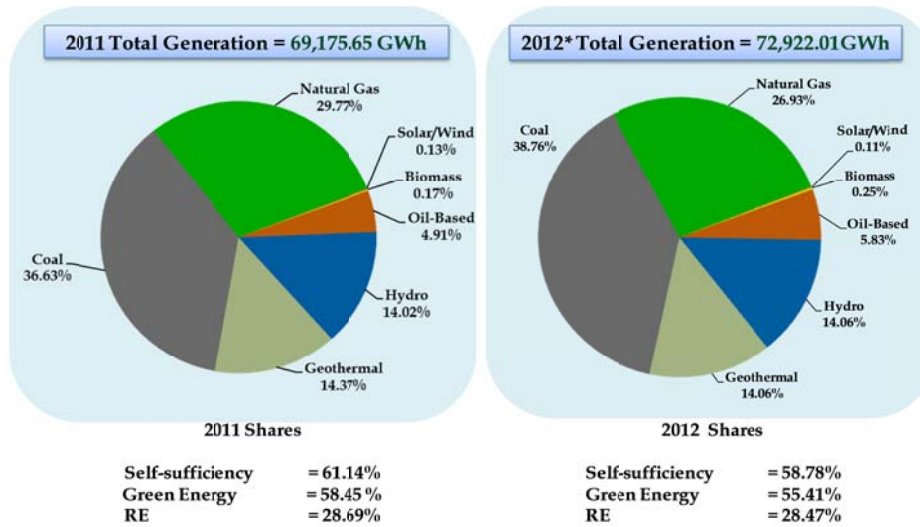
With the dramatic growth of energy demand both in domestic and international fronts, political instability in some energy producing countries, accidents, and natural disasters, among others, supply security and sustainability in the local perspective must be given the highest priority. Ensuring energy sustainability will definitely address the energy challenges and threats that could hamper economic growth and development.

In spite of the difficulties and struggles that the country is confronting, the energy sector remains steadfast in its commitment to cope with the ever-challenging energy needs. The Department has constantly exhibited a sincere and committed efforts in nurturing sustainable growth by pursuing and implementing policies and programs towards a more comprehensive and dynamic energy sector responsive to the present needs, as well as contributing to global call for low carbon economy. Investment promotion to encourage entry of private sector, good governance and transparency initiatives, and expansion of energy access shall contribute to sustained and broad-based growth of the economy.

As DOE's reaffirmation of its commitment of ensuring sufficient supply, the country's primary energy supply in 2012 reached 42.9 million tons of oil equivalent (MTOE), an increase of 7.8 percent from 39.8 MTOE in 2011. However, the share of indigenous energy declined to 56.3 percent from previous year level of 59.6 percent. The decreased share of natural gas due to maintenance shutdown, as well as in the share of renewable energy, from 40.4 percent in 2011 to 38.6 percent in 2012, and higher importation of oil caused such drop in self-sufficiency.



Meanwhile, power generated in 2012 went up to 72,922 Gigawatt-hours (GWh), roughly 5.4 percent higher than its year-ago level of 69,176 GWh. The total share of green energy, combined renewable energy and natural gas, was at 55.41 percent. Self-sufficiency in power generation stood at 58.78 percent.



I. ENHANCED INDIGENOUS ENERGY DEVELOPMENT

OIL AND GAS

The upstream energy sector aggressively continued the exploration and development of indigenous oil and gas in the country. The country's 16 sedimentary basins have a combined potential of 4,777 million barrels of fuel oil equivalent (MMBFOE) or 689.8 million tons of energy (MTOE) of oil and gas reserves.

In 2013, the DOE continuously monitored the 29 existing petroleum service contracts (SCs), two (2) of which (SCs 73 and 74) resulted from the success of the Philippine Energy Contracting Round (PECR) 4 for Petroleum conducted in 2011.

The first three quarters of 2013 yielded production from existing oil and gas fields of about 1.44 million barrels (MMB) of oil, 112 billion cubic feet (BCF) of gas and associated condensate of 3.82 MMB.

Drilling of five (5) exploratory wells have also been completed in 2013: Malampaya-11 and Malampaya-12 of Shell Philippines Exploration (SPEX) B.V. in Northwest Palawan, Galoc-5 and Galoc-6B also in Northwest Palawan and Duhat-2 in Onshore Leyte. Further, the conduct of the Extended Well Testing (EWT) of Malolos-1 well in Central Cebu under SC-44 was completed in June 2013.

In addition, a total of 2,801.57 line kilometers of two-dimensional (2D) and 1,102.31 square kilometers of three-dimensional (3D) seismic data were acquired.

COAL

With continued efforts of expanding the utilization of the country's coal deposits, indigenous coal production reached a total of 3.2 million metric ton (MMMT) (Run-of-Mine) as of June 2013. Continuously providing the biggest share came from the Semirara Mining Corporation with around 3.1 MMMT or about 95.10 percent of the total coal production. On the other hand, production from small-scale coal mines contributed a total production of 47,617 metric ton (MT).

Resulting from the successful launching of PECR 4 for coal in 2011 was the awarding of 11 new coal operating contracts (COCs) in 2013. The newly awarded contracts are set to develop and explore the coal resources in Catanduanes, ZamboangaSibugay, Surigaodel Sur, Agusan del Sur, Sultan Kudarat, Sarangani, Oriental Mindoro and Occidental Mindoro. In addition, the Review and Evaluation Committee has recommended approval of five (5) areas for COC.

For the development of small-scale coal areas in the country, the DOE has issued 15 small-scale coal-mining permits (SSCMPs) in 2013. Ten permits were issued to PNOC-EC for the development of coal mines in ZamboangaSibugay, while five (5) permits were issued to independent coal operators for the development of coal mines in Cebu and Negros Occidental. These additions would likely generate an aggregate annual production of 51,713 MT.

II. INVESTED IN CLEAN ENERGY

RENEWABLE ENERGY

The government continued to promote the development and utilization of renewable energy (RE) pursuant to the Renewable Energy Act of 2008. The implementing plans and programs are consistent with the National Renewable Energy Program (NREP) which aims to increase the RE-based capacity to 15,304 MW (aspirational target) by 2030. As of the end of 2012, total installed capacity of RE on grid stood at 5,521.2 MW.

For 2013, a total of 74 service contracts were awarded bringing the total number awarded contracts to 334 broken down as follows: 323 service contracts for grid connections for 6,401.96 MW and 11 service contracts for own-use for 35.81 MW. The table below shows the breakdown by resource:

Summary of Awarded RE Contracts				
Resource	Grid-use		Own-use	
	No. of Service Contracts	Capacity (MW)	No. of Service Contracts	Capacity (MW)
Hydropower	197	2,917.200	1	1.500
Geothermal	29	785.000	0	-
Wind	38	1,662.500	1	0.006
Solar	38	844.710	5	1.604
Biomass	18	187.550	3	32.700
Ocean Energy	3	5.000	1	-
Total	323	6,401.960	11	35.8100

To intensify further the use of renewable energy, the Net Metering policy mechanism of the government was promulgated and adopted. In July 2013, the ERC issued Resolution No. 9 titled "*A Resolution Adopting the Rules on Net-metering Program for Renewable Energy*".

On renewable energy market (REM), the Philippine Electricity Market Corporation conducted a study with the World Bank on "REM Development and Draft Market Design Document."

A nationwide Public consultation on "*Renewable Energy Safety, Health and Environment Rules and Regulation's*" (RESHERR) Code of Practice was held in Pampanga (23 April), Cagayan De Oro City (3 June) and Cebu City (5 June). The RESHERR, by virtue of DC No. 2012-11-0009 will serve as the policy guidelines in RE Operations, to ensure safety and protection against hazards to health, life and property as well as pollution of air, land and water in all RE projects. On 20-22 June 2013, a writeshop/consolidation of inputs was subsequently conducted in Rizal province – results were presented during the final consultation on 12 July 2013 in Metro Manila.

Geothermal

Pushing forward towards cleaner energy, the DOE has awarded six (6) Geothermal Service Contracts (GSC) as of October 2013. Four (4) of these are new geothermal power projects (GPP) which were awarded in February 2013, namely: (1) Negron Cuadrado GPP located in Zambales and Pampanga; (2) Iriga GPP in Albay and Camarines Sur; (3) Mariveles GPP in Bataan; and (4) East Mankayan GPP in Ifugao, Benguet and Mountain Province. Likewise, GSC No. 2013-04-044 and GSC No. 2013-04-045 were also awarded to the Philippine Geothermal Production (PGI) for the operation of Tiwi and Mak-Ban Geothermal steamfields, respectively.

Efforts were also made in disseminating information with regard to energy resource development. In 2013, the DOE conducted a series of IEC campaign on "*RE implementation and Geothermal Exploration, Development and Power Generation*" on areas hosting some of the geothermal projects in the country. These areas are located in the provinces of Biliran, Quezon, Batangas, Mountain province, Benguet/Ifugao, Kidapawan and Tiwi, Albay.

Under the "*Detailed Resource Assessment of Selected Low-Enthalpy Geothermal Areas in the Philippines*" – a locally-funded project, detailed Geological and Geochemical Surveys were conducted in August 2013 over Banton and Balut Islands. After which, Geophysical survey using Controlled Source Magneto Telluric (CSMT) was conducted/completed in Banton Island, Romblon in October 2013, while in Balut Island, Davao del Sur, such survey has just been started in November 2013.



Geochemical Survey at Bgy. Tinina Balut Island, Davao del Sur

Hydropower

Development of hydro as major source of electricity continues with the awarding of 58 Hydropower Service Contract in 2013. For Luzon, service contract was granted to 47 sites with an aggregate capacity of 221.4 MW. For Visayas and Mindanao, service contract was awarded to 5 sites with 12.4 MW and 6 sites with 83 MW, respectively.

On FIT application, 59 hydropower projects applied for FIT system during the year. FIT application for Luzon totaled 251.1 MW for 22 sites. FIT application for Visayas and Mindanao totaled 141.2 MW for 24 sites and 161.80 MW for 13 sites, respectively.

In terms of endorsements to the Board of Investments, a total of six (6) Duty Free Importation Endorsements were issued in 2013 to the following: (1) Hedcor Sibulan Inc. with 3 endorsements; and (2) Hedcor Tudaya Inc. with 3 endorsements.

Twenty-five projects with a total capacity of 260.15 MW were also given with Declaration of Commerciality status during the year. For Luzon, 7 sites with a total capacity of 49.7 MW received the Declaration of Commerciality status. For Visayas and Mindanao, 9 sites with a total capacity

of 67.1 MW and 9 sites with a total capacity of 43.35 MW were given the same status, respectively.

One project was also evaluated for CDM Project during the year, namely: 13.2 MW HedcorSabangan Hydroelectric Power Project.

Biomass

In 2013 (November), the DOE already awarded five (5) Biomass Renewable Energy Operating Contracts (BREOC) with total potential capacity of 50.0 MW. Of these projects, three (3) are located in Bukidnon, Misamis Oriental:

- 10 MW Kalilangan Bio-Energy Corporation Multi-Feedstock Power Generating Facility;
- 10 MW Malaybalay Bio-Energy Corporation Multi-Feedstock Power Generating Facility;
- and,
- 10 MW Don Carlos Bio-Energy Corporation Multi-Feedstock Power Generating Facility.

Likewise, four (4) Biomass Certificate of Registration for own-use were awarded, 3 of which are already operating with total generation capacity of 12.4 MW.

The obligation of the government does not end at the awarding of contracts or issuance of registration certificates. To ensure the success of each project, and continuously encourage potential investors in the development of biomass energy, the DOE conducted other support activities, IECs and project development monitoring. Relatedly, accreditations of local manufacturers and producers as provided in the RE Law were likewise undertaken and endorsed 4 biomass applications for duty free importation to BOI.

Solar and Wind

Continuing development of solar and wind power remain a priority with the awarding of one (1) Solar Energy Service Contract (SESC) and one (1) Wind Energy Service Contract (WESC) in 2013. To further encourage private sector investment in the sector, the DOE organized and conducted training programs on Solar PV and Social Preparation for various stakeholders.

To assess the performance of RE developers on the basis of compliance to solar and wind service contracts, the DOE conducted regular monitoring of accomplishments of the 35 SESC and 33 WESC previously awarded.

ALTERNATIVE FUELS AND TECHNOLOGIES

Biofuels

As part of its continuing effort to diversify the country's energy mix, the DOE awarded Certificate of Registration with Notice to Proceed (NTP) to two (2) bioethanol projects in 2013. The DOE also

conducted evaluation, site inspection/validation and sampling of CME product for compliance to the Philippine National Standards (PNS) for the 2 biodiesel project applications.

Evaluation and validation of nine (9) accredited CME production plant to supply the required volume for the possible increase in biodiesel blend mandate from 2.0 percent to 5.0 percent were also accomplished during the year. The DOE also conducted sampling of esterified used vegetable oil for the project titled *"Pilot Study on the Performance of Engines of Light Vehicles Using 4.0 Percent Esterified Used Vegetable Oil"*.

A biofuel project with the University of the Philippines - Visayas Foundation Inc. (UPVFI) titled *"Bioethanol Production from Macroalgae and Socio-ecological Implications"* was launched in September 2013. Similarly, the *"B5 Testing on Public Utility Jeepneys"* project between the Philippine Coconut Authority (PCA) and UP-National Center for Transportation Studies (UP-NCTS) was also launched in July 2013.

Auto-LPG

As of November 2013, a total of 19,052 taxis are fuelled by auto-LPG. The conversion shops monitored by DOE totaled 31. The DOE also conducted four (4) on-road performance testing of alternative fuel vehicles for Auto LPG Jeepneys and electric vehicle with UP – Vehicle Research Testing Laboratory from January to April 2013.

As support to the implementation of the Auto-LPG Program, an Auto-LPG Technical Working Group Training Workshop was held in February 2013 and Capacity Building for Bureau of Fire Protection personnel was conducted in October 2013.

E-Vehicles

The DOE held eight (8) Stakeholders Consultations on the promotion of electric vehicles with the following local government units: Puerto Princesa, Palawan, Bais City, Negros Oriental, Boracay Island, Malay Aklan, Cabanatuan City, Calapan, Mindoro, Quezon City, Las Piñas City and Taytay, Rizal. The DOE also conducted review and validation activities of tricycle operations in the following areas: Taguig City, Bicutan, Mandaluyong City, Makati City, Puerto Princesa, Palawan, Balanga, Bataan and Davao City.

The *"Name this E-trike Contest"* was also launched on 15 April 2013 at SM San Lazaro and SM Pasig City, which received a total of 1,272 entries. E-trike exhibits were undertaken at Rizal Park on Independence Day Celebration and at the Makati City Hall in October 2013. By end of this year, a total of 3,000 units of e-trike will be procured, which will be programmed for deployment in 2014.

III. ENSURED SUFFICIENT SUPPLY

POWER DEVELOPMENT

The country's installed capacity as of November 2013 stood at 17,294 MW. Luzon grid totaled 12,770 MW, Visayas at 2,448 MW and Mindanao at 2,076 MW. Correspondingly, dependable capacity for the same period stood at 15,193 MW or 87.85 percent of the installed.

Seven (7) new power plants with an aggregate capacity of 935.9 MW were commissioned in Luzon during the period listed as follows: (1) 651.6 MW coal-fired power plant by GN Power located in Mariveles, Bataan; (2) 21.3 MW CIP II diesel power plant by Trans Asia in La Union; (3) 19.8 MW biomass power plant by Green Future Innovation Inc. in Isabela; (4) 1.2 MW methane gas extraction plant by Pangea in Payatas, Quezon City; and (5) 242 MW Therma Mobile power barges (formerly Duracom) by Therma Marine Inc. in Navotas.

For Mindanao, two (2) power plants with a combined capacity of 27 MW was added to the grid in 2013. These include (1) 15 MW HFO peaking plant by EEI in Davao del Norte and (2) 12 MW diesel modular power station by Mapalad Power Corp. in Koronadal, South Cotabato.

As of November 2013, system peak demand in Luzon was recorded at 8,305 MW which occurred on 08 May 2013. For Visayas, system peak demand was pegged at 1,567 MW on 06 May 2013, while highest demand in Mindanao was experienced on 21 May 2013 at 1,319 MW.

MINDANAO POWER SITUATION

Interim Mindanao Electricity Market (IMEM)

As an immediate solution to the looming power crisis in Mindanao, the DOE issued five (5) Department Circulars (DC) for the smooth implementation of IMEM. These include the following:

1. **DC2013-01-0001** on 09 January 2013 "*Directing the Philippine Electricity Market Corporation to Develop and Implement an Interim Mindanao Electricity Market (IMEM) as a Measure to Immediately Address the Power Supply Situation in Mindanao.*" The IMEM is a mandatory program for all generation capacities, directly connected customers, and distribution utilities and shall address the deficiency of supply in the grid;
2. **DC2013-05-0008** on 24 May 2013 "*Promulgating the Interim Mindanao Electricity Market (IMEM) Implementing Rules;*
3. **DC2013-09-0020** on 10 September 2013 titled "*Adopting Amendments to the Interim Mindanao Electricity Market Implementing Rules and Promulgating of the IMEM Manuals.*" IMEM Manuals consist of Billing and Settlement, Dispute Resolution, Information Provision and Confidentiality, Investigation Procedures, Metering Standards and Procedures, and Registration Criteria and Procedures.

4. **DC2013-09-0023** on 24 September 2013 "*Declaring the Launch of the Interim Mindanao Electricity Market and Terms and Conditions for the Commencement of the Full Commercial Operations of the IMEM.*" This Circular sets the initial commercial operation of IMEM on 26 September 2013 and the full commercial operation on 26 November 2013 subject to the fulfillment of the following conditions: the approval of the offer cap by the DOE, Energy Regulatory Commission (ERC) and Philippine Electricity Market Corporation (PEMC); and the constitution of the IMEM Governance Committee;

The DOE also issued together with ERC and PEMC the Joint Resolution dated 07 October 2013, "Setting the Offer Cap for the Commercial Operation of the Interim Mindanao Electricity Market." and

5. **DC2013-10-0024** on 09 October 2013 "*Directing the National Electrification Administration (NEA) to Assist the Mindanao Electric Cooperatives in Ensuring Compliance with the prudential requirements in the Interim Mindanao Electricity Market.*" NEA is directed to provide the necessary guarantee or financial assistance to qualified grid connected electric cooperatives in Mindanao on their purchases and transactions required under the IMEM Rules, until such time that the regulator has considered the prudential requirements in the ECs rates.

The ERC also approved the budget for the Establishment of IMEM on 25 February 2013, amounting to PhP24.26 Million, PhP10 Million less than the proposed amount of PhP34.26 Million. The approved amount will be refunded to the Luzon and Visayas WESM participants once IMEM starts commercial operations.

Modular Genset Program

The program involves the national government setting up a trust fund for the financing of the acquisition and/or rental of modular gensets for electric cooperatives (ECs) in Mindanao. The Office of the President issued EO 137, titled "*The Modular Generator Sets (Gensets) Program*" and directed the DBM to release P4.5 Billion from the Malampaya fund for the program. A Power Summit in General Santos City was even held on 27 March 2013 to discuss and finalize the modular genset program.

NEA is directed to expedite the program implementation. Thus, a private entity – Association of Mindanao Rural Electric Cooperative (AMRECO) – was engaged to do the bidding in the presence of DOE and NEA representatives so as the procurement laws timelines need not strictly be observed. The DOE issued on 05 August 2013 the DC 2013-08-0019 on the "*Implementing Rules and Regulations for the Mindanao Modular Generator Program.*"

The electric cooperatives that enrolled to the Modular Genset Program are:

- For Purchase Scheme, DANECO (3 x 1 MW), DORECO (2 x 1 MW), MORESCO 1 (1 x 2 MW); and

- For Rental Scheme, ANECO (2 x 2.5 MW), ZANECO (4 x 1 MW), ZAMSURECO 1 (3 x 1 MW), MORESCO (2 x 1 MW).

Gensets purchased through AMRECO will have a maximum capacity of 7 MW, while gensets with a capacity of 47 MW will be purchased directly by individual EC.

POWER TASK FORCE ELECTION 2013

To ensure stable supply of electricity in the 2013 Midterm Elections, the DOE issued Special Order No. SO2013-05-0011 on 10 May 2013 creating DOE-Task Force Halalan 2013 ensuring continuous power supply before, during and after election. Similarly for the October 2013 Barangay Election, Department Circular No. DC2013-10-0026 was also issued *“Enjoining the Relevant Government Agencies, the National Grid Corporation of the Philippines (NGCP) and Electric Power Industry Participants to Ensure Continuous Power Supply in the Country for the said Barangay Election.*

TASK FORCE ON EMERGENCY POWER SITUATION

In lieu of emergency situation causing disruptions and deviations to the country’s power situation brought about by disasters whether natural or man-made calamities, the DOE convened the Task Force on Emergency Situation aimed at ensuring adequate and reliable supply of power in the country. Said Task Force was immediately convened to address the impact of super typhoon Yolanda (Haiyan) right after its devastation in some provinces in the Visayas and MIMAROPA Region that cut power supply. Restoration plan has been crafted on how to repair and replace the damaged transmission and distribution lines including power generating facilities at the soonest possible time to bring back power supply that would aid recovery of these provinces.

RESPONSE TO SYSTEM INTERRUPTIONS

Several other activities done by DOE include the spearheading of investigation and immediate creation of Investigation Committee on the 08 May 2013 Luzon Cascading Blackout Incident which led to the isolation of Batangas area and widespread interruption in the Luzon Grid. The interruption was triggered by the transmission line fault occurred along the Biñan-Calaca 230 kV line which was later traced to have been caused by burning of bushes under the line between Towers Nos. 86 and 87.

SOLUTIONS TO ALECO

IEC on Albay Electric Cooperative (ALECO) franchise area was held on 2-6 September 2013 to provide options for reform/rehabilitation in lieu of the 14 September 2013 referendum. The referendum was seen as the best possible solution to save the debt-stricken utility. As of 3rd Quarter of 2013, ALECO was indebted to PSALM, National Grid Corporation of the Philippines (NGCP) and other creditors in the total amount of PHP 4 billion.

Two options that were available during the referendum include: (1) Coop-to-Coop (C2C) Partnership with an electric cooperative with track record that will bring down the system loss to 9 percent, improve collection efficiency to 99 percent and generate savings to settle all debts of ALECO without increasing the price of electricity to member-consumers and retain its structure as non-profit consumer cooperative. (2) Private Sector Participation (PSP) which was conducted through bidding for the management and operation of the cooperative. Four companies expressed interest but only San Miguel Global Power (SMGP) submitted its bid. The right to manage and operate ALECO was soon granted to SMGP.

IMPLEMENTATION OF POWER SECTOR REFORMS

Implementation of the Retail Competition and Open Access (RCOA)

Pursuant to Section 31 of the Electric Power Industry Reform Act of 2001 (EPIRA), the operating and regulatory policies and guidelines for the implementation of Retail Competition and Open Access (RCOA) were put in place to guide the retail market participants and ensure their smooth transition to the Retail Market. In consultation with the industry participants, power sector agencies and the consumers, the DOE issued several Department Circulars for RCOA implementation, among which were:

1. **DC2013-01-0002** promulgating the *“Retail Rules for the Integration of the RCOA to the Wholesale Electricity Spot Market (WESM)”* on 02 January 2013, to provide the rules for the integration of the retail competition in the operations and governance processes of the WESM, the management of the transactions of Suppliers and Contestable Customers and the operations of the Central Registration Body (CRB); and,
2. **DC No. DC2013-07-0014**, promulgated the Retail Market Manuals for the implementation of RCOA and providing for the Transitory Arrangements in the implementation of RCOA.

In support of the policies promulgated by the DOE, the ERC likewise issued various resolutions such as:

1. **Resolution No. 5, Series of 2013**, a resolution on the disclosure of capacity and energy allocation by the Distribution Utilities (DUs) and Retail Electricity Suppliers (RES) in the Luzon and Visayas grids. As required under the said Resolution, all DUs in Luzon and Visayas shall submit to the ERC data pertaining to the amount of capacity and energy that they have contracted with generators as well as the capacity and energy they have allocated for their captive customers, to their supply business segment which is their Local RES and SOLR. The same requirements were imposed upon the RES' while they have to disclose the number of their Contestable Customers (CCs) and the capacity and energy they intend to allocate to them. This required submission by the ERC shall be updated every three (3) months; and,
2. **Resolution No. 11, Series of 2013**, adopted the supplemental rules to the Transitory Rules for the implementation of RCOA. Specifically, this resolution gave some relief to the CCs

by allowing them to stay with their franchised DUs until such time that they are able to find a RES.

As regards to the Philippine Economic Zone Authority's (PEZA) proposal to implement early aggregation in the economic zones, it emphasized that PEZA should address the possibilities of having CCs which may choose not to join the early aggregation program and decide to choose its own Supplier during the implementation of RCOA. The early aggregation may be implemented in a manner that the freedom of choice shall still be rightfully accorded to Ecozone locators in accordance with the spirit of EPIRA.

The full commercial operation of RCOA commenced last 26 June 2013 with a total of 275 registered participants. To date, the number of participants increased to 308 to include 15 RES, five (5) Local RES, 23 Retail Metering Service Providers (RMSP), 263 CCs and two (2) Suppliers of Last Resort (SOLR). Currently, 58 applications from different categories are being evaluated by the Central Registration Body or PEMC.

Summary (as of 25 October 2013)			
Participants	On-going Completion of Requirements	Successfully Registered	Total Applications Received
Retail Electricity Supplier	4	15	19
Local Retail Electricity Supplier	7	5	12
Retail Metering Service Provider	4	23	27
Contestable Customer Supplier of Last Resort	38	263	301
	5	2	7
Total	58	308	366

Implementation of the Wholesale Electricity Spot Market (WESM)

To date, the WESM is in its 89th billing month of operation. As of November 2013, the integrated WESM (Luzon and Visayas) has a total of 246 participants comprised of 54 generating companies and 192 customer trading participants. There are 26 applications for registration being evaluated by PEMC – 18 bulk users, two (2) generation companies, 2 private distribution utilities, and one (1) electric cooperative.

Registration Update as of November 2013 (Luzon and Visayas)									
Category	Expected (Luzon & Visayas)	Registered				Applicant		Not Registered	
		Direct		Indirect		Luzon	Visayas	Luzon	Visayas
		Luzon	Visayas	Luzon	Visayas				
Generation Companies	54	29	17	0	0	2	3	0	1
Private DUs and LGUs	16	5	3	4	0	2	0	1	1
Customer Trading Participants	72	26	25	17	3	1	0	0	0
ECs	72	26	25	17	3	1	0	0	0
Bulk users	97	6	7	49	13	18	0	2	0
Wholesale aggregators	7	0	0	0	0	0	0	0	0
Total Customer Trading Participant	192	37	35	70	16	21	0	3	1
Total Participants/ Applicants	246	66	52	70	16	23	3	3	2

In compliance with the WESM Rules, the 1st Independent Metering Arrangements Review, covering the period 26 December 2010 to 25 December 2011 was completed under the supervision of the DOE. Said Independent Review was conducted by Isla Lipana & Co. (a Pricewaterhouse Cooper Member Firm) in partnership with Intelligent Energy System Pty Ltd. (IES), Australia and Alliance of Power & Energy Xponents Inc. (APEX), Philippines to review and assess the compliance of the Market Operator and the System Operator to the security arrangements and requirement of metering installations annually.

As regards other market developments, the DOE is undertaking preparatory activities, in coordination with PEMC, for the eventual implementation of the WESM Reserve Market and the Renewable Energy Market.

Enactment of Republic Act 10531 or the “NEA Reform Act of 2013”

On 7 May 2013, President Aquino enacted Republic Act No. 10531, otherwise known as “*An Act Strengthening the National Electrification Administration, Further Amending for the Purpose of Presidential Decree No. 269, as Amended, otherwise known as the National Electrification Administration Decree.*” The objectives of this new law are: (i) promote the sustainable development in rural areas through rural electrification; (ii) empower and strengthen NEA to pursue the electrification program and bring electricity through the electric cooperatives as its implementing arm, and to the countryside even in missionary or economically unviable areas; and, (iii) empower the electric cooperative to cope with the changes brought about by the restructuring of the electric power industry pursuant to RA 9136.

Pursuant to Section 16 of RA 10531, the DOE, in coordination with the NEA and Cooperative Development Authority (CDA) and in consultation with the Electric Cooperatives (ECs), the electric power industry participants, relevant government agencies, non-government organizations and other stakeholders, promulgated the Implementing Rules and Regulations (IRR) for the said Act through Department Circular No. 2013-07-0015. The IRR provided for the power, functions and obligations of NEA and the ECs in improving the latter’s performance in servicing their franchise areas and providing rural electrification services.

Privatization of NPC Generating Assets and IPP Contracts

On the privatization of the remaining power plants and IPP contracts, Power Sector Assets Liabilities and Management (PSALM) on 30 October 2013 offered Power Barges (PBs) 101, 102, 103 and 104 for bidding. Trans Asia Oil and Energy Corp and SPC Island Power Corporation passed the requirements and were declared eligible to submit the 2nd Bid envelope. On 7 November 2013, PSALM also facilitated the bidding of Naga Power Plant. The bidding process was declared a failure after only one (1) bidder submitted a bid.

The Unified Leyte Geothermal Power Plants (UGLPP) is also being bid out wherein eleven (11) entities were able to submit their bids of which, seven (7) passed the qualifications and were eligible for the purchase of the asset. All the bidders which passed the preliminary procedures

will be subjected for further validation of their submitted documents and actual inspection of their respective sites. PSALM targets to complete the privatization by December 15, 2013.

DOWNSTREAM OIL INDUSTRY

The uncertainty and insecurity of energy future brought about by remarkable global oil demand, supply challenges in the oil market, drastic impact of global climate change makes the country highly vulnerable to global oil market volatility being a net importer of crude oil. As such, the government has put some extraordinary national measures and continues to formulate sustainable policies and strategies to mitigate the impacts or effects on the consuming public.

Fifteen years after the implementation of the R.A. 8479, a total of 229 players (as of September 2013) are engaged in various activities in the oil industry such as marketing, distribution and storage of petroleum products. A total accumulated investment of PhP 43.11 billion in various downstream oil projects is expected to provide additional jobs and greater accessibility to quality petroleum products.

To ensure continuous, adequate and stable supply of oil in the country, the DOE also continued with its close monitoring and maintenance of database and information of the various activities of the sector, such as: crude and product imports and costs, local production and capabilities, product exports, industry demand, inventory levels, distribution and marketing facilities. Such enable the DOE to assist policy makers as well as prospective investors who are interested to participate in the downstream sector.

The continuing risks on supply availability such as geopolitical instability at the major oil producers/users, the proposed relocation of various depots, weather disturbances and calamities prompted the government to still enforce the Minimum Inventory Requirement (MIR) on the oil companies, bulk suppliers and LPG players operating in the country. Current MIR for refiners is total in-country stocks of crude and finished products equivalent to 30 days while an equivalent of 15 days in-country stock is required for the bulk marketers and 7 days for the LPG players. The oil companies normally maintain more than the required minimum level of inventory.

In response to the emergency situation brought about by super typhoon Yolanda, a Memorandum was issued to the Oil Companies reminding them to implement DOE Circular No. 211-03-003 on the Mutual Product Sharing Accommodations (MPSA) in order to provide and stabilize oil supply in the calamity affected areas. The MPSA permits the oil companies to supply petroleum products to oil facilities of other oil companies to ensure steady supply of petroleum products in the affected areas. The Memorandum also limits the sale of two liters per customer or P500.00 worth of direct fueling of vehicles to accommodate as many customers in the typhoon affected areas in the Visayas Region.

Inspection and Sampling of Petroleum Products

The strict compliance of industry players to quantity and quality standards is consistently being monitored by the DOE through the conduct of regular/routine or on-the-spot and complaint-initiated inspection and product sampling for liquid-petroleum products at the refineries, depots/terminals and gasoline stations and LPG establishments nationwide. The DOE conducted inspection in the following:

- 113 Depots;
- 626 LPG establishments (as of October 2013);
- 1,095 Gasoline Stations (as of October 2013);
- 1,546 Samples of Liquid Petroleum Products (LPP) collected (as of October 2013);
- 4327 LPG cylinders weighed & checked (as of October 2013); and,
- 890 Bioethanol Denaturing Activity.

Ensured Reasonable Price Adjustments

Amidst the increases in oil prices and consistent with its statutory mandate to protect the public, the DOE has been closely monitoring actual oil price movements, both in the international and domestic market to prevent unreasonable adjustments and abuses.

To ensure reasonable price adjustments, the DOE continues to conduct close monitoring of international prices and determining its estimated impact to domestic prices. Posting of oil pricing formulas in the DOE website, as well as the Price Monitoring Charts of basic consumer goods including petroleum products as summarized by the Office of the Presidential Communications Development and Strategic Planning Office have been consistently undertaken.

Quality Standards (PNS) For Fuel and Facilities

The DOE regularly conducts its standards-setting activities guided by international/regional standards and trends on fuel and fuel-related products. The following PNS for fuel and facilities were reviewed/drafted by the Technical Committee on Petroleum Products and Additives (TCCPA), Technical Committee on Petroleum Processes and Facilities(TCPPF), respectively and for promulgation this year:

- *PNS/DOE QS 007:2013 – Anhydrous bioethanol & ethanol fuel*

This standard is an update/review of PNS/DOE QS 007:2005 with revision made primarily in the specification of color, denaturant properties, updating of the test methods and inclusion of electrical conductivity as new property

➤ *PNS/DOE QS 002:2013 – Coconut Methyl Ester (B100)*

This standard is a revision of PNS/DOE QS 002:2007 with major improvements made:

- a) Inclusion of new properties:
 - ✓ Carbon residue on 10%
 - ✓ Iodine number
 - ✓ Total contamination
- b) Oxidation stability from 6 to 10 hrs, minimum
- c) Sulfur 0.05 to 0.001 % mass, maximum

➤ *PNS/DOE QS 010:2013 – Fatty Acid Methyl Ester (FAME) – Blended Diesel Oils (B5)*

This standard addresses the technical requirements of CME for a higher blend at 5% minimum and suitable best method. This standard will support future energy policies towards the integration of higher biofuel blends in the petroleum/fuel sector.

➤ *PNS/DOE FS 8:2013 – Transportation of Petroleum Products by Pipeline – (New)*

This standard promulgated by the BPS on August 27, 2013 covers operation and maintenance, reporting requirements and other applicable provisions in the on-shore transportation via pipeline (as defined hereafter) of liquid petroleum products for white (such as but not limited to gasoline, diesel, kerosene and jet A-1) and (such as but not limited to) black (bunker fuel) products to ensure the safety of the general public and pipeline workers and the protection of the environment against the risk of petroleum contamination, fire and other similar hazards in areas where the pipeline system operates and/or traverses.

➤ *PNS/DOE FS 003:2006 – Auto-LPG (review/update)*

This standard covers the requirements for the installation of auto-LPG dispensing stations for retail operation and garage-based sites for on-vehicle dispensing of LPG for vehicles of any type.

Discount Schemes

The oil companies, in collaboration with the DOE, continued to offer price discounts on diesel and gasoline being sold in selected gasoline stations for the public transport sector. Some have regular/continuous discounts, while others offer significant amounts for promos.

Promoting Awareness on the Industry

Conducted aggressive Information, Education and Communication (IEC) Campaigns to empower consumers in making informed-choice in petroleum product purchases, among others were :

- Multi-Sectoral Advocacy Campaign (MSAC) on Downstream Oil Industry (under the DOE-Public Information Agency (PIA) Communication Initiatives) in the following areas: Zamboanga City, Cagayan de Oro City, Malolos, Dumaguete City, Cebu City, Calapan City, Batangas City and Pampanga Province;
- LGU Capacity Building. Hands-on activities were included in the advocacy strategy of the DOE in order to empower and equip the LGUs in conducting pump calibration and sealing of dispensing pumps in gas stations. The activity is in partnership with the ITDI-Department of Science and Technology (DOST) and a private sector partner, the CSI Global Service Corporation.
- Education and information drives for the academe with students as the target audience in the following academic institutions: International Electronics and Technical Institute (IETI), San Pedro, Laguna; Mariano Marcos State University (MMSU), Batac, Ilocos Norte; and, Ilocos Norte Agricultural College (INAC), Pasuquin, Ilocos Norte.

DOWNSTREAM NATURAL GAS

The development of natural gas industry remained a priority industry of the energy sector. And to further facilitate the development of natural gas industry in the country, the World Bank provided a Technical Assistance in the formulation of a Natural Gas Master Plan. The Plan will be implemented in three (3) phases. Phases 1 and 2 will be on the establishment of an investment and transactional framework, respectively, while Phase 3 will be a longer term Master Plan. The Technical Assistance kicked off in 01 October 2013.

On the other hand, Pilipinas Shell has completed in July 2013 the technical feasibility of a Floating Storage Regasification Unit (FSRU) in Batangas. In terms of pipeline development, PNOCC commissioned the Public Private Partnership (PPP) Center and Japan International Cooperation Agency (JICA) to conduct a detailed feasibility study for the 105-km Batangas-Manila (Batman 1) pipeline. JICA will provide inputs through its full version parallel study on the technical aspect (modified Japanese model/technical solution applicable to the Philippine context) of the entire chain such as LNG facility, regasification facility, pipeline and offtake facility, including the environmental and social study under "JICA's "Guideline for Environmental and Social Consideration, 2010." JICA started undertaking study in July 2013 and will complete by first quarter of 2014.

Under the government's pilot project on the Natural Gas Vehicle Program for Public Transport (NGVPPT), bidding for the equipment and civil works for the two (2) Compressed Natural Gas (CNG) stations were done in October and November 2013, respectively.

As a strategy to further promote and advocate natural gas utilization, a total of 8 information campaign activities were conducted in the areas of Cavite, Laguna and Batangas during the year. A one-day industry Mission was likewise conducted during period. The target area for this

information campaign activities were economic zones, locators and private associations and academe.

IV. INCREASED ENERGY ACCESS FOR HOUSEHOLDS

EXPANDED RURAL ELECTRIFICATION

Household electrification level as of 30 September 2013 is at 80.18 percent. About 10,042,309 out of the potential 12,523,700 are with electricity access.¹

NEA's sitio electrification program (SEP) under the Aquino Administration intends to light up 32,441 unenergized sitios². As of 8 November 2013, 11,106 out of the targeted 32,441 sitios are already with electricity translating to a 34.2 percent accomplishment in the SEP roadmap.

Overall sitio electrification level as of 8 November 2013 stands at 79.4 percent wherein 82,154 out of the potential 103,489 are already with electricity.

MISSIONARY ELECTRIFICATION

The DOE provided guidance to Palawan Electric Cooperative (PALECO), Oriental Mindoro Electric Cooperative (ORMECO), Occidental Mindoro Electric Cooperative (OMECO), and Marinduque Electric Cooperative (MARELCO) in their power supply transactions and privatization of power generation.

Likewise, certain policies on missionary electrification and their implementation guidelines vis-à-vis political interference and rent-seeking of private businesses were reviewed and articulated. Simultaneously, a review of the policy to integrate the use of renewable energy resources for missionary electrification was initiated.

Qualified Third Party (QTP) Program

Powersource Philippines, Inc. (PSPI) which operates the first QTP project in the country (RioTuba, Palawan) has increased its total connections to 1,717. PSPI provides 24-hour electricity service in their coverage area. In December 2012, they installed and commissioned a biomass gasifier system which is currently operating at 8 hours per day and is being steadily ramped up.

A QTP Service Contract for the QTP Project in Bantayan, Cebu was executed between PSPI and NPC last 19 July 2013 which covers the components and calculations of the Full Cost Recovery

¹ Based on NEA's Status of Energization as of **30 September 2013**. The figure only reflects those under the franchise areas of electric cooperatives and does not include those under private distribution utilities or DUs. Moreover, NEA's data on HH connections covers residential, commercial, industrial, public building, etc. DOE's data for HH electrification (based on 2010 Census) reflects **76.69 percent** electrification level as of **December 2012**. This translates to 16,114,213 households out of the potential 21,010,890 with electricity access leaving about 4,896,677 unenergized households.

² The basis for the 32,441 sitios targeted by NEA is the 30 June 2011 planning base year wherein 71,048 out of the potential 103,489 sitios are energized.

Rate (FCRR). The DOE issued the endorsement in 24 October 2013 upon review of PSPI's Technical and Financial Proposal. The proposal together with the endorsement has already been forwarded to the ERC for their issuance of final qualification, authorization, necessary permits and approval of tariffs.

In September 2012, SMC has expressed its intent to serve as QTP for Semirara Island, Antique. The company has been providing electricity thru ANTECO to the island since 1999. To date, DOE is still awaiting the submission of the full technical and financial details of the proposal and the creation of the company affiliated with SMC that will operate as QTP.

BENEFITS TO HOST COMMUNITIES

Energy Regulations (ER) 1-94 ensures that benefits that cultivate progress and development are given to communities hosting generating facilities and energy resource development projects.

The total accrued financial benefits under ER 1-94 (from its inception in 1995 up to November 2013) have already reached PhP 8.87 billion. Of the total amount, PhP 5.87 billion have been obligated to fund the implementation of various projects falling under the different fund components of ER 1-94.

Accrued Financial Benefits under ER 1-94				
	EF	DLF	RWMHEEF	Total
Accrued	3.64	2.45	2.78	8.87
Approved	3.11	1.24	1.52	5.87
Available/Collectible Balance	0.53	1.21	1.26	3.00

From January to November 2013, 228 projects were approved amounting to PhP 278.31 million. Most of the projects fall under the Electrification Fund (EF) wherein this was used for electrification of sitios within Metro Manila, Rizal, Bulacan, Quezon, Laguna, Batangas, Pangasinan, Cebu, Davao del Sur, Iloilo, Cagayan de Sulu and Tawi-Tawi.

Approved DLF projects for the same period totaled 62 which amounted to PhP 71.21 million. Most DLF projects concern the provision of street lighting (23) and road construction/concreting (12). On the other hand, sixty-nine (69) projects amounting to PhP 74.14 million were approved for funding under the RWMHEEF. Projects under said fund include the construction of sanitation facilities such as public toilets and washroom (21), health center facility (15) and water system (12).

Approved ER 1-94 Projects, January to November 2013		
Fund Type	Number	Amount (in Million Pesos)
EF	97	132.96
DLF	62	71.21
RWMHEEF	69	74.14
Total	228	278.31

Being the fund administrator of ER 1-94, the DOE has already established 694 Trust Accounts covering the three (3) fund types.

V. PROMOTED ENERGY EFFICIENCY AND CONSERVATION AS A WAY OF LIFE

NATIONAL ENERGY EFFICIENCY AND CONSERVATION PROGRAM (NEECP)

With the growing energy requirements of the country, the government is compelled to accelerate its energy efficiency and conservation program. Under the Bright Now! Advocacy program, 36 seminar-workshops were held nationwide in 2013 to promote efficient utilization and conservation of electricity and fuel. Stakeholders from the academe, households, government offices, private companies, and transport groups participated in the seminar-workshops with total attendance of around 4,907.

Following the signing of a Memorandum of Agreement (MOA) on 17 April 2012, between the Department of Energy and the University of the Philippines on "*Alternative Fuels Vehicle Tests & Research Program and Energy Efficiency in Road Transport*," a series of seminars were conducted in 2013. Prior to the said seminar, a dry-run was held on December 14, 2012 at the UP-National Engineering Center with 40 participants composed mainly of jeepney operators and drivers. The seminar aimed to educate vehicle owners and/or users on proper driving habits and vehicle maintenance.

From January to July 2013, 12 seminars on "*Fuel Efficiency and Conservation*" were conducted in the cities of Cagayan de Oro, Davao, Cebu, Tacloban, Iloilo, Laoag, Legaspi, Pampanga, Baguio, Leyte, General Santos and Metro Manila including a "*Forum on Alternative Fuels Vehicles Test and Energy Efficiency in Road Transport*" which were attended by 2,324 participants mainly from academe, private and government fleet and public transport groups.

In support for the 2013 Earth Hour campaign of the World Wide Fund for Nature-Philippines (WWF-Philippines), the DOE conducted a tri-media campaign with the publication of the Earth Hour advertisement and energy saving tips in using electrical appliances and efficient driving tips in major broadsheets. Said advertisement was published in the Philippine Daily Inquirer, Philippine Star and Manila Bulletin. The campaign was aimed to encourage the participation of the various sectors such as government, civil society, business, church, Academe and the youth in supporting the WWF-Philippines-initiated annual light switch-off event.

Recognition Awards

Under the *ASEAN Best Practices Competition for Energy Management of Buildings and Industries*, San Miguel Brewery, Inc. – San Fernando Brewery (Carbon Neutral) was awarded the prestigious ASEAN Energy Awards in the Special Submission Industries Category, while Toshiba Information Equipment (Phils.), Inc. – Calmeray Industrial Park (CIP) site received the 1st runner-up in the Large Industries Category. The ASEAN Energy Awards is a regional competition that provides international recognition to entities that apply the concepts, systems and technology of energy efficiency and conservation.

Government Energy Management Program (GEMP)

The GEMP aims to integrate energy efficiency concepts into the operation of government agencies to realize the reduction target of 10.0 percent in electricity and fuel consumption in

compliance with the Presidential Directive under A.O. 126. For 2013, the DOE was able to monitor and conduct energy audit-spot checked in 159 government offices nationwide.

The monthly electricity and fuel consumption reports submitted by government agencies showed cumulative savings of 233 GWH or Php1.8 Billion in electricity and 7,524,783.94 liters of gasoline and diesel, translated to monetary savings of Php279 Million from September 2005 to May 2013. Further, 60 certificates of the claimed savings for 2012 were issued to complying government agencies with total energy savings of 4,464,343.24 kWh equivalent to Php28 million.

Energy Management and Energy Audit Services

Jointly with the Sugar Regulatory Administration's project on "*Energy Efficiency/Conservation and Commercial Cogeneration*" in the Sugar Milling Sector, the Energy Audit Team conducted energy audits in the following sugar mills:

- Lopez Sugar Central in Sagay City, Negros Occidental (Sept. 30 – Oct. 5, 2013)
- Central Azucarera dela Carlota in La Carlota City, Negros Occidental (Oct. 6-13, 2013)
- Victoria Milling Company in Victorias City, Negros Occidental (Nov. 4-13, 2013)

Energy Service Company (ESCO) Accreditation

The application of Thermal Solutions, Inc. (TSI) was evaluated for the renewal of ESCO Accreditation with DOE. TSI is a service-oriented company primarily engaged in industrial air-conditioning and refrigeration trading and services. Likewise, the DOE reviewed financial statements of MERALCO Energy, Inc. and endorsed for ESCO accreditation in pursuant to DOE Circular No. 2008-09-0004.

Philippine Energy Efficiency Project

Efficient Lighting Initiative

➤ *Retrofitting of Government Buildings*

To reduce wasted energy in government office buildings resulting from the use of inefficient lighting equipment involves the conduct of lighting surveys in identified government buildings, procurement and installation of new T5 fluorescent lamps, CFLs, and electronic ballasts to replace older-style fluorescent lamps (T8), incandescent bulbs, and inefficient magnetic ballasts. In 2013, the DOE initially completed the retrofitting of the targeted 35 government office buildings in Metro Manila. Subsequently, a total of additional 115 private/government buildings consisting of hospitals, schools and universities nationwide were also retrofitted during the year.

➤ *National Residential Lighting Program*

Aimed at reducing peak demand by promoting efficient lighting in the residential sector, the DOE has completed the distribution of 3.6 million CFLs through identified congressional districts and party list representatives and the Department of Social Welfare and Development (DSWD) offices.

On the other hand, disposal of 1,512,400 pieces of incandescent bulbs (IBs) collected from the storage sites of the electric cooperatives and distribution utilities in Visayas and Mindanao areas was completed in 2013. In addition, 2,647,614 pcs. IBs were disposed by Cleanway Technology Corporation. The IBs were collected from the storage sites of the GRM Warehouse in FTI, Taguig City, various NHA Resettlement sites and DOE Multi-Purpose Hall.

➤ *Public Retrofit Lighting Program*

In June 2013, Philips Electronics and Lighting, Inc. completed the installation, testing and commissioning of 1,484 LED lamps for the retrofitting of Metro Manila Development Authority (MMDA) streetlights within Metro Manila. Said retrofitting covered the cities of Pasig, Mandaluyong, Marikina, Quezon, Makati, Pasay and Manila. Meanwhile, the installation of retrofitted LED traffic lights in 102 intersections in Metro Manila was likewise completed by DY Infotech Innovation Corporation in March 2013 and currently subject for validation and inspection by DOE.

Efficiency Initiatives in Buildings and Industries

➤ *DOE and Philippine Green Building Council (PHILGBC) Activities*

On 30 January 2013, public consultation on BERDE Green Building Rating System on New Construction and Retrofits and Renovations for Clustered Residential Development, Vertical Residential Development, and Educational Institutions was conducted at Dusit Thani Hotel, Makati City.

Series of BERDE Roadshows were also conducted in 2013 in the cities of Tagaytay, Dumaguete, Davao and Baguio with a total of 500 participants to promote green building rating system among property developers and other stakeholders in the country. The roadshow, which started since February 2013 is a one-day awareness seminar attended by property developers, building owners, building industry professionals, building material suppliers, academe and local government agencies. It is part of the council's Building for Ecologically Responsive Design Excellence (BERDE) program that intends to help the real estate industry in addressing the negative impacts of climate change.

➤ *Building Green 2013 Conference*

The Department of Energy (DOE), together with the PHILGBC, conducted the Building Green 2013 Conference and Awarding Ceremony on 25 – 26 June 2013 at the New World Hotel, Makati City. Officials and representatives from different government agencies, architects and engineers, academe, and building practitioners graced the said event.

The conference will further educate private practitioners and professional groups, regulatory agencies of the government and other stakeholders in building design and constructions on the latest green building processes and technologies. Local and International Green Building

projects were presented to further inform the public on the benefits of building greener projects.

Highlighting the event was the Turn-Over Ceremonies of PHILGBC Board, launching and releasing of nine (9) BERDE Green Building Rating Schemes for New Construction, Retrofits and Renovations and Operations, and the DOE-Philippine Energy Efficiency Project (PEEP)-Efficient Building Initiative (EBI) Awarding Ceremonies, which included the awarding of 12 registered BERDE Buildings recognized under DOE-PEEP and 31 government buildings under the DOE-PEEP Efficient Lighting Certification.

PHILIPPINE INDUSTRIAL ENERGY EFFICIENCY PROJECT

The DOE in cooperation with the Department of Trade and Industry (DTI) and the United Nations for Industrial Development Organization (UNIDO) conducted 15 training seminars including National Awareness Workshop for Energy Management System/ISO 50001; Industrial Users' Training and Experts' Training in the field of EnMS/ISO 50001, Steam Systems Optimization, Compressed Air Systems, and Pumping Systems Optimization in the cities of Cagayan de Oro, Cebu, Pampanga, Bulacan, Laguna including Metro Manila. These training seminars gathered 716 professionals from industries, government and energy efficiency practitioners. Part of the seminar was the conduct of an energy audit in 23 companies from steel & metal, pulp & paper, chemicals and food & beverage sectors with the involvement of the National Experts Team and project consultants.

VI. PROMOTED INVESTMENTS FOR ENERGY INFRASTRUCTURE

The Investment Promotion Office (IPO) of the Department conducted a training workshop for the Mindanao Field Office (MFO) back in March to capacitate the field office in line with the acceptance of projects applications for both power and RE.

The Energy Investment Forum for Mindanao was conducted in Davao City last 25 September 2013. The forum primarily focused on the power outlook for Mindanao, the Department's programs and investment opportunities in the region. Related presentations were also done on DENR's procedures on energy projects, financing facilities for energy projects and experience sharing from a private company (STEAG) in putting up a power facility in Misamis Oriental. For Visayas, the same forum was done in Cebu City at the Parklane International Hotel last 23 October 2013. Said forum gathered stakeholders from project developers and generators, financing and donor institutions, electric cooperatives, non-government organizations, distribution utilities (DUs), business groups and government institutions.

The first in a series of Energy Investment Briefing for LGUs kicked-off in Cagayan de Oro City last 11 October 2013. This was done in partnership with the Mindanao Development Authority (MinDA). The briefing focused on the LGUs in Region 10 (Northern Mindanao) particularly the local economic investment and promotion officer (LEIPO) on the various requirements and procedures in the implementation of energy projects as well as the benefits of hosting an energy

project. This is to encourage the entry of more energy investors in the region. In the Visayas, the said investment briefing was conducted in partnership with the Regional Development Council (RDC) 7 last 18 November 2013.

VII. TRANSPARENCY AND E-GOVERNANCE INITIATIVES

In support of the government's thrusts for open government and good governance, the DOE has undertaken initiatives to further enhance operational efficiency and data transparency and exchanges among energy stakeholders. The integration of ICT in the Department's services and operations has improved the quality of information and services offered to the public and stakeholders.

With the improved Geographic Information system, several energy contract application areas can now be easily verified and processed. Contract/application maps, technical descriptions, certifications of overlap/non-overlap and thematic maps can also be generated. Likewise, updating of geo-spatial databases of coal, petroleum, geothermal, solar, wind, hydro and small-scale coal has been expedited.

Apart from the development of significant websites such as *kuryente.org.ph*, *wattmatters.org.ph* and *langis.org.ph*, the Department is also keen on improving further its services by developing Renewable Energy Project's website, Database Processing System for Lubes Product Importation, Bioethanol Denaturing Monitoring System and Demand Forecasting System. Further, the structure and lay-out of microsites for DOE's Visayas and Mindanao Field offices were designed using iGov government website template. Creation of similar microsite is currently underway for our Luzon Field Office.

To allow faster and real-time exchange of information among DOE field offices and various stakeholders, the Department has installed a video conferencing system facility. Said facility will improve coordination among DOE units and field offices and stakeholders, and will facilitate faster transfer of data, updates and developments in the energy sector.