DEPARTMENT OF ENERGY

MAJOR ACCOMPLISHMENTS FOR 2014

The 7.0 percent growth in the country's Gross Domestic Product in 2013 including investment upgrades in terms of credit rating (Fitch, Standard and Poors, Moody's) became the primary challenge for government to implement plans and accelerate programs that can sustain this brightening economic outlook. The DOE responded to this call by taking careful turns to ensure energy supply stability.

Boosting the country's economic growth were various foreign and domestic companies who poured in much-needed investments to implement energy development projects, particularly in power generation, renewable energy and fossil fuels. Add this to the fact that the country reaped benefits from a period of lower oil prices brought about by global market movements.

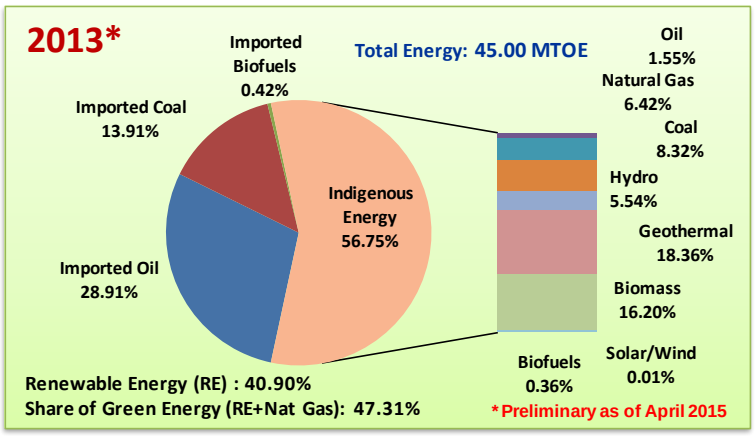
To contribute to the inclusive growth of the Aquino administration, the DOE embarked on the formulation of regional and local energy plans. This is one intervention identified by the DOE to fully address the specific concerns and challenges of each region or locality so that every Filipino will be able to enjoy the benefits of energy development.

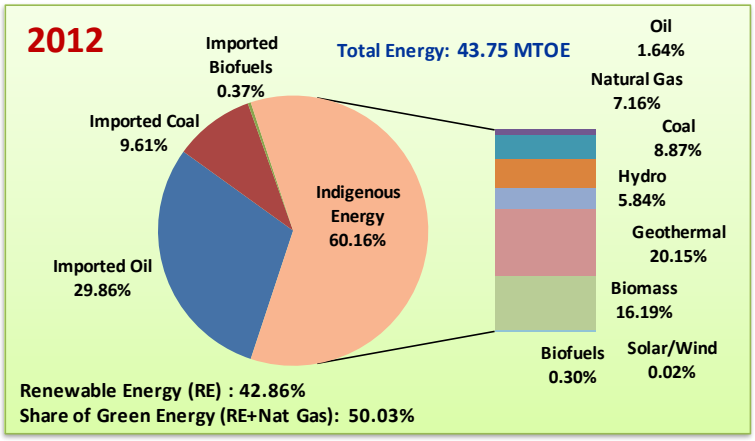
Below are the highlights of accomplishments and activities that were completed and delivered by the DOE in 2014 based on the outcomes targeted under the DOE's Planning Tool.

I ENERGY SUPPLY REQUIREMENT ATTAINED

The country's supply of energy increased to 45.00 million tons of oil equivalent (MTOE) in 2013 from the 2012 level of 43.75 MTOE. Preliminary data for 2013 showed that self-sufficiency level or the share of indigenous energy decreased to 56.7 percent in 2013 from 60.2 percent in 2012.

The bulk of oil and coal constitute the major imports of the country with oil primarily used in the transport sector and minimally for power generation. Coal, on the other hand, has both power and non-power applications.





UPSTREAM ENERGY DEVELOPMENT

- **Fossil Fuels**

To sustain the energy requirements of the country, the government continued its drive in further expanding the exploration of local fossil fuels. On 09 May 2014, the DOE launched the 5th Philippine Energy Contracting Round (PECR5) for the exploration of 11 petroleum and 15 coal potential areas in the country, mostly found in the Mindanao Region.

The launching, held at Intercontinental Hotel in Makati City, was graced by Senator Cynthia Villar and US Ambassador to the Philippines, Hon. Philip Goldberg. More than 300 participants from the petroleum industry and coal exploration companies attended the activity.

DOE Secretary Carlos Jericho L. Petilla during the launching of the 5th Philippine Energy Contracting Round conducted on 09 May 2014 at Intercontinental Hotel Makati.

COAL

In terms of coal, out of the nine (9) applications received during the Opening of Bids on 26 September 2014, seven (7) successful applications were endorsed by the DOE Review Evaluation Committee and subsequently awarded with coal operating contracts (COC) on 18 December 2014. This brought the total number of COCs to 78.

Moreover, production from the existing coal operating contractors has continuously increased over the years. As of December 2014, a total of 7.58 million metric tons (MMMT) (@10,000 BTU/lb) of local coal was produced. The open coal mine pit in Semirara, Antique contributed the majority share registering 96.9 percent. Small-scale coal mines in Negros, Surigao del Sur, Zamboanga del Sur, Bicol and in Cebu yielded about 232.1 thousand metric tons or the remaining share of 3.0 percent.

OIL AND GAS

The DOE continued to monitor the country's 29 petroleum service contracts. Total oil production reached 3.07 million barrels in 2014 which was 63.1 percent higher than the 2013 output. This was due to the additional production from new wells drilled in the Galoc field. Gas production likewise increased by 5.2 percent in 2014 totaling 130,351 million cubic feet (MMCF), coming mostly from the Malampaya gas field which produced 130,316 MMCF (or about 99.0 percent of the total gas produced in the country). Said supply provided fuel to the three (3) power plants in Batangas (Ilijan, Sta. Rita and San Lorenzo). On the other hand, production of associated condensate from the Malampaya gas field amounted to 4.2 million barrels.

Oil and condensate taken from producing fields in Northwest Palawan was either exported to South Korea, Singapore and Thailand or refined at the Shell Refinery in Tabangao, Batangas.

Also in 2014, two (2) exploration wells were drilled in offshore Northwest Palawan and onshore Southern Cebu by Nido Petroleum Philippines Pty. Ltd. and China International Mining Petroleum Co. Ltd., respectively.

Summarized on the table below are the indigenous fossil fuel developments:

SUMMARY OF INDIGENOUS FOSSIL FUEL DEVELOPMENTS

RESOURCE	UNIT	2013	2014	NO. OF CONTRACTS
Oil	Million Barrels	1.88	3.07	29
Gas	Billion Cubic Feet	124.00	130.32	
Condensate	Million Barrels	4.08	4.12	
Coal	Million Metric Tons(@10,000 BTU/lb)	7.08	7.58	78

- **Renewable Energy**

Consistent with the National Renewable Energy Program (NREP), the target for RE-based installed capacity until 2030 remained to be that of "more than double the 2010 RE installed capacity," or 15,299.7 MW by 2030 from the 2010 level of 5,542 MW with hydro having the biggest share. Hydropower energy installed capacity though remained at 3,521 MW while geothermal energy was 1,868 MW registering modest increase of 20 MW over that of 2012 installed capacity. Biomass yielded 119 MW, solar with 1 MW and wind with 33 MW or a total of 153 MW installed capacity for 2014. Locally funded projects such as ocean and wind energy resource assessments were conducted to determine potential and sustain the increase of RE in the country's installed capacity. Relatedly, the installation target for solar energy has increased from 50 MW to 500 MW.

In addition to locally funded projects, linkages with international organizations supporting RE projects were strengthened. The cooperation aims to assess the country's readiness for a higher share of variable energy sources. Some of these institutions are the Deutsche Gesellschaft fur Internationale Zusammenarbeit (GIZ, International Renewable Energy Agency (IRENA), United Nations Development Programme (UNDP), and Japan International Cooperation Agency (JICA).

RENEWABLE ENERGY SERVICE CONTRACTS AWARDED, 2014

TYPE OF RESOURCE	NO. OF SCs	CAPACITY (MW) POTENTIAL	INSTALLED	TOTAL
Geothermal	1	TBD		
Hydropower(Grid Connection)	165	2,249.98	5.13	2,255.11
Biomass	6	78.00	0.00	78.00
Wind	18	361.50	0.00	361.50
Solar (Grid Connection)	27	493.30	0.00	493.30
Solar (Own Use)	3	1.28	0.00	1.28
Ocean	0	0.00	0.00	0.00
Total	**220**	**3,184.06**	**5.13**	**3,189.19**

In 2014, a total of 220 RE Service Contracts were awarded with 3,184.1 MW of potential capacity and 5.1 MW installed capacity. These additional SCs awarded in 2014 registered an increase in potential capacity of about 43.0 percent over that of 2013 awarded SCs with estimated potential capacity of 2,225.9 MW.

GEOTHERMAL

A service contract was awarded to Filtech Energy Drilling Corporation (FEDCO) on 03 February 2014 for the pre-development of geothermal areas in Puting Lupa, Calamba, Laguna. Additional electricity generation on the other hand, was provided to the Luzon grid with the commissioning of the 20-MW Maibarara Geothermal Power Plant in Sto. Tomas, Batangas on 08 February 2014. In the Visayas region, the inauguration of the 30-MW expansion project in Southern Negros Geothermal Production Field on September 2014 is expected to boost power supply in the grid. Further south, a Certificate of Commerciality was issued on 28 December 2014 for the 50-MW Biliran Geothermal Project which will be gradually installed starting September 2016 up to November 2018. Once completed, this will definitely augment the power supply in the Mindanao region.

The 20-MW Maibarara Geothermal Power Project started commercial operations on 08 February 2014 (Photo courtesy of Maibarara Geothermal, Inc.)

To further stir awareness on the country's potential renewable energy areas, the DOE conducted stakeholders' consultations in the cities of Baguio, Cebu and Davao to promote the Open and Competitive Selection Process (OCSP) which is scheduled to be launched on February 2015. Four (4) geothermal sites were identified to be part of the offer to include: (1) Amacan, Compostela Valley, (2) Acupan-Itogon, Benguet, (3) Balut, Davao del Sur, and (4) Cabalian, Leyte.

Committed to maintaining and improving low-emission development strategy, a series of Information Education and Communication (IEC) campaign activities were conducted in 2014 on RE implementation and geothermal exploration, development and power generation. The IECs largely concentrated on areas hosting geothermal projects in the country. Moreover, four (4) Reconnaissance Geological and Geochemical Surveys were conducted in the provinces of Cagayan, Laguna, Camarines Norte and Antique for the assessment of new potential geothermal areas. Technical assistance was also extended to LGUs to monitor and validate compliance to the Geothermal Service Contract (GSC) work program.

HYDROPOWER

Continuous developments in hydropower sector were observed in 2014. The DOE actively partnered with the private sector in every stage of these activities. In addition to awarding of Hydropower Service Contract (HSC) and its administration, the DOE adopted related policy mechanisms to promote the development and utilization of hydropower. Certificates of Confirmation of Commerciality (CoCoC) [1] were issued to qualified projects either under the Feed-In Tariff (FIT) System or Non-FIT System. There were 28 HSCs issued with potential capacity of 248.0 MW under the FIT System and three (3) HSCs with potential of 6.5 MW under non-FIT System.

As of end-2014, eight (8) hydropower projects are undergoing plant construction with an aggregate rated capacity of 68.3 MW.

- 99.07 percent construction accomplishment for the 8.0 MW Villasiga

[1] Certificate of Confirmation of Commerciality (CoCoC) is equivalent to "Notice to Proceed Plant Construction"

Hydropower Project in Bugasong, Antique by Sunwest Water & Electric Co., Inc. 2

- 87.0 percent construction accomplishment for the 13.2-MW Sabangan Hydropower Project in Sabangan, Mt. Province by Hedcor Sabangan, Inc.

- 70.0 percent construction accomplishment for the 1.0-MW Prismc Hydropower Project in Rizal, Nueva Ecija by PNOC Renewables Corporation

- 60.0 percent construction accomplishment for the 1.0 MW Bulanao Hydropower Project in Tabuk, Kalinga by DPJ Engineers and Consultants

- 36.0 percent construction accomplishment for the 25.0-MW Lake Mainit Hydropower Project in Jabonga, Agusan del Norte by Agusan Power Corporation

- 32.0 percent construction accomplishment for the 5.0-MW Asiga Hydropower Project in Santiago, Agusan del Norte byAsiga Green Energy Corporation

- 25.0 percent construction accomplishment for the 10.0-MW Inabasan Hydropower Project in San Teodoro, Oriental Mindoro by Ormin Power, Inc.

- 14.43 percent construction accomplishment for the 5.1-MW Igbulo (Bais) Hydropower Project in Igbaras, Iloilo by Century Peak Energy Corporation

Moreover, hydropower plants were also inaugurated in 2014 and these are the Tudaya 1 and 2 Hydroelectric Power Plants and the Linao-Cawayan Upper Cascade Hydroelectric Power Plant. The Hedcor Sibulan, Inc. owns and operates the Tudaya 1 Hydroelectric Power Plant with rated capacities of 6.6 MW. It has contracted a bilateral agreement with Davao Light and Power Inc. for power distribution. On the other hand, Hedcor Tudaya, Inc. owns and operates Tudaya2 with generation capacity of 7.0 MW. Being operated under the FIT system, its power distribution is contracted with the National Grid Corporation of the Philippines (NGCP). On the other hand, the Linao-Cawayan Upper Cascade Hydroelectric Power Plants located in Baco, Oriental Mindoro is owned and operated by the Oriental Mindoro Electric Cooperative, Inc. (ORMECO) which likewise handles the power distribution of the said plant.

BIOMASS

In 2014, biomass facilities with a total of 43 MW of installed capacity were completed and commissioned. These are the following:

- 12-MW (Phase 1) San Jose City I Power Corporation located in San Jose, Nueva Ecija; currently generating 10 MW for export to the grid while the remaining 2 MW is for own use.

- 16-MW (Phase 1) Universal RobinaCorporation located in Negros Occidental; operating on bagasse cogeneration and exporting its generated power to the grid.

- 8-MW Victorias Milling Company Incorporated located in Victorias, Negros Occidental; adding to the cogeneration facility's existing installed capacity of 26 MW bringing its total to 34 MW for own use operation.

- 4-MW Hawaiian-Philippine Company located in Negros Occidental. The HPCo Bagasse Cogeneration Plant is an 8-MW cogeneration facility. In 2014, a 4-MW facility was completed and commissioned exporting 3 MW to the grid and the remaining 1 MW for own use.

- 3-MW Philippine Trade Center, Inc. located in Sultan Kudarat, Maguindanao; operating for own use with the use of rice husk as feedstock.

SOLAR

Two (2) solar-powered projects of San Carlos Solar, Inc. located in San Carlos, Negros Occidental started their commercial operation under the FIT mechanism in 2014. These are Phase 1 (1A) with 13.0 MW and Phase 2 (1B) with 9.0 MW generation capacity. On the other hand, 10 solar power projects with total estimated generation capacity of 230.1 MW were issued with CoCoCs in 2014.

WIND

Four (4) grid-connected wind power projects started commercial operations in 2014. The biggest one is the Bangui Bay Wind Power Project (Phase 3) located in Bangui, Ilocos Norte, consisting of six (6) towers each having a capacity of 3.15 MW or a total of 18.9 MW. The project's proponent is the North Wind Power Development Corporation.

Another wind power project is the Caparispisan Wind Energy Project of Northern Luzon Renewable Energy Corporation located in Brgy. Caparispisan, Pagudpud, Ilocos Norte, consisting of 27 towers each having a capacity of 3.0 MW or a total of 81.0 MW.

The Burgos Wind Power Project by the EDC Burgos Wind Power Corporation located in Nagsurot-Saoit consists of 50 towers each having a capacity of 3.0 MW or a total of 150 MW while the San Lorenzo Wind Power Project of Trans-Asia Renewable Energy Corporation located in San Lorenzo, Guimaras Island, consists of 27 towers each having a capacity of 2.0 MW or a total of 54 MW. These projects are expected to bring sustainable source of energy and livelihood opportunities for the local communities.

During the same year, four (4) pre-development wind power projects with total estimated generating capacity of 228.9 MW were converted to development stage and thereby issued with corresponding CoCoCs.

DOWNSTREAM INDUSTRY

- **Oil**

Under a deregulated downstream oil industry environment, a total of 242 oil companies are now engaged in various industry activities such as marketing, distribution and storage of petroleum products. The accumulated investment cost amounting to PhP 48 billion provide additional jobs and promote greater accessibility of consumers to quality petroleum products.

As part of its mandate, the DOE continues to monitor and maintain a database on the various activities of the sector to ensure continuous,

adequate and stable supply of oil in the country. These include information on crude and product imports and costs, local production and capabilities, product exports, industry demand, inventory levels, distribution and marketing facilities, and other downstream capability statistics. This enables the Department to assist policy makers as well as prospective investors in the downstream oil sector. Quarterly supply/ demand situationer reports are released specifically for this purpose.

Another strategy to ensure supply is the government's enforcement of the Minimum Inventory Requirement (MIR) on oil companies, bulk suppliers and LPG players operating in the country to manage risks against several factors such as geopolitical instability in the major oil producing countries, the proposed relocation of various depots and weather disturbances. 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 seven (7) days for the LPG players. The oil companies normally maintain more than the required minimum level of inventory. Supply situationers are regularly released particularly during contingencies in isolated areas affected by natural calamities.

To ensure a steady oil supply in times of natural disasters, the DOE signed a Memorandum of Agreement (MOA) on 22 October 2014 which embodies the commitments of the following entities: Metro Manila Development Authority (MMDA), Office of Civil Defence (OCD)/The National Disaster Risk Reduction and Management Council (NDRRMC) and members of the Philippine Institute of Petroleum, Inc. (PIP) namely: Pilipinas Shell, Chevron, Petron Corp, Isla LPG Corp., PTT Philippines, and Total Philippines, to develop a framework that will enable the sustainable supply of petroleum products to areas and organizations affected by emergencies, disasters and calamities (including but not limited to those resulting from earthquakes, typhoons, flood, conflagration and spills).

On the strict compliance of industry players to the required quantity and quality standards of petroleum products, the DOE conducted regular/routine or on-the-spot and complaint-initiated inspections and product sampling for liquid-petroleum products at the refineries, depots/terminals and gasoline stations and LPG establishments nationwide. The DOE inspected a total of 1,606 downstream oil facilities and 1,487 denaturing activities in 2014.

The DOE closely monitors actual oil price movements, both in the international and domestic market to prevent unreasonable adjustments and abuses to ensure reasonable price adjustments and provide the public with oil price-related information. In this regards, the DOE undertook the following:

- Estimated price adjustments of petroleum products based on the week-on-week average prices of Mean of Platts Singapore (MOPS) crude and products (i.e., gasoline, diesel, kerosene, etc.) and foreign exchange rate. Estimated adjustment for LPG is also monitored using the month-on-month LPG contract price.

- Posted the following at the DOE website: (a) Weekly Oil Monitor to provide updates on pricing and supply developments of crude and petroleum products in the international market; (b) Prevailing prices in Metro Manila, key cities in Visayas and Mindanao, which are updated after every price adjustments; and, (c) Price adjustments effected by the oil companies and dates of effectivity.

- Conducted IECs on consumer welfare and protection on oil, specifically on supply, quality, pricing and safety.

- Coordinated with oil companies on the provision of price discounts on diesel to the public transport sector and gave

regular updates on said discounts to transport associations as well as on the impact of oil price developments in the world market; and likewise, conducted inspection to verify gasoline stations giving discounts

- **Natural Gas**

Foreign and local investors exhibited interest in the capital-intensive natural gas industry of the country. Investment areas focused on infrastructure development such as LNG terminals, pipelines or gas-fired power plants. The DOE completed the following activities in 2014 with the aim of providing an environment conducive to the development of the sector:

- Commissioned the conduct of a Feasibility Study for the 105-km. Batangas-Manila Natural Gas Pipeline (BatMan 1) to the Public Private Partnership (PPP) Center and Japan International Cooperation Agency (JICA). JICA completed the FS in June 2014.
  As part of its supervisory function over the BatMan 1 Pipeline project, the Philippine National Oil Company (PNOC) availed of the Project Development and Monitoring Facility (PDMF)[2] from the PPP Center to source funds in engaging the expertise of the Rebel Group International as its Transaction Advisor.

- Monitored ongoing construction of Liquefied Natural Gas (LNG) terminal and merchant gas-fired power plant in Pagbilao, Quezon.

  The LNG infrastructure project, owned by Energy World Corporation Ltd. (EWC), is located in Barangay Ibabang Polo, Pagbilao Grande Island, Quezon Province. Said facility consists of two (2) unit storage tanks with a capacity of 130,000 cubic meters each, a jetty/receiving terminal, re-gasification plant, a storage area, receiving and discharge lines, meter and pumps, loading arms and filling equipment, motor pool and other support facilities/amenities. The project also has an on-site 600 MW merchant gas-fired power plant which will serve as an anchor load for the project. To date, the construction of LNG tank No. 1 concrete outer container has been completed.

ALTERNATIVE FUELS AND TECHNOLOGIES

To mitigate the impact of oil price hikes and reduce the country's dependence on imported fuels, the DOE promotes the use of alternative fuels for the transport sector.

- **Inter-Agency Initiatives**

The DOE drafted a MOA with the Development Academy of the Philippines to develop the Alternative Fuels Roadmap to serve as a blueprint in the Program's implementation. Said MOA is expected to be approved by the first quarter of 2015.

In relation to the issuance of Executive Order No. 290[3], a MOA was drafted to allow the DOE in partnership with Bureau of Fire Protection to develop an emergency response protocol as well as provide basic and advance knowledge in fire-fighting techniques involving public utility vehicles fueled by alternative fuels. Said MOA also includes a capacity building component for stakeholders.

[2] The Government of the Philippines (GOP), with assistance from the Asian Development Bank (ADB), has established a PDMF to fund **transaction advisory services** for the development of PPP projects which include energy and social projects such as road network, school building, airport, hospitals, among others.

[3] **Executive Order No. 290** was issued in 2004 which mandate the Department of Interior and Local Government (DILG) as the co-implementing agency tasked to formulate safety measures relative to the natural gas vehicle industry practices and apprehend violators of standards and safety and regulations.

- **Auto-LPG Program**

The total number of taxis running on auto-LPG decreased from 11,977 units in 2013 to about 9,957 units as of third quarter of 2014. The decrease may be attributed to the expiration of the five (5)-year franchise contracts issued by LTFRB to taxi operators utilizing auto-LPG taxi units. On the other hand, the total number of existing auto-LPG stations increased to 234 stations nationwide with 67 stations considered as garage-based while the rest are auto-LPG public filling stations.

As part of Auto-LPG's Program implementation, the DOE signed a MOA with the University of Southeastern Philippines (USeP) and Cavite State University (CSU) in December 2014. The MOA aims to establish partnerships with the academe to continuously produce proficient technicians that will be involved in the conversion, repair and maintenance of vehicle from gasoline-fed to auto-LPG fed. Likewise, it also intends to educate government agencies as well as other stakeholders involved in the program's implementation to make it more sustainable.

- **Natural Gas Vehicle Program for Public Transport (NGVPPT)**

On NGVPPT, the rebidding of two (2) modular compressed natural gas (CNG) stations in Biñan, Laguna and Port Area, Batangas City have been processed by PNOC-EC. The DOE is likewise coordinating with the Department of Transportation and Communication-Land Transportation Franchising Regulatory (DOTC-LTFRB on the confirmation of franchise availability for the remaining 169 CNG buses. As of March 2015, the DOTC-LTFRB declared the franchise availability for the remaining 169 CNG buses under NGVPPT.

- **Biofuels Program**

In 2014, biodiesel production reached 171.60 million liters with actual sales of about 163.46 million liters, while bioethanol production reached 115.11 million liters with actual sales recorded at 118.89 million liters.

Consequently, to intensify the production of our local biofuels, the DOE approved the accreditation of two (2) biofuel production plants, namely the Econergy Corporation (biodiesel plant) and the Balayan Distillery (bioethanol plant). Both plants have an annual rated capacity of about 30 million liters. Likewise, in June 2014, the DOE approved the request to increase the biodiesel production capacity of Phil. Biochem Products, Inc., from an annual rated capacity of 12 million liters to about 80 million liters of biodiesel.

In addition, a Registration with Notice to Proceed was issued to three (3) bioethanol producers namely: (1) Universal Robina Corporation with rated annual capacity of 30 million liters; (2) Far East Alcohol Corporation with annual rated capacity of 15 million liters; and, (3) Kooll Company Inc. with annual rated capacity of 14.12 million liters.

POWER DEVELOPMENT

The country has an installed capacity of 17,944 MW and a dependable capacity of 15,633 MW. Additional plants that went online in 2014 were as follows:

- 20-MW Maibarara Geothermal Power Plant (Batangas)
- 50-MW Nasulo Geothermal Power Plant (Negros Occidental)
- 22-MW SACASOL Solar Farm (Negros Occidental)
- 19-MW SoEnergy Diesel Power Plant (GenSan)
- 15-MW MPC-Digos (Davao del Sur)
- 15-MW KEGI-Panaon (Misamis Occidental)
- 13.6-MW Tudaya 1 & 2 Hydro Power Plants (Davao del Sur)

- **System Demand**

The system peak demand for Luzon grid for 2014 was recorded at 8,717 MW on 21 May 2014. This was 4.96 percent higher than the recorded demand of 8,305 MW which occurred in May 2013. For Visayas, system peak demand was at 1,636 MW which occurred on 27 May 2014, while in Mindanao the highest demand was at 1,461 MW which was recorded on 13 November 2014. Historically, system peak of Visayas and Mindanao usually occur in the month of December. The change in the occurrence of peak demand in the Visayas can be attributed to the calamities that adversely affected the performance of the industry sector in 2014.

As of October 2014, the DOE issued 237 Endorsements to the Securities and Exchange Commission for those companies that will put up power-related businesses. For those in the more advanced stage of project development in the power generation, the DOE issued 40 Certificates of Compliance to the Energy Regulatory Commission (ERC) and 84 Clearances for NGCP to conduct Grid Impact Study for the prospective power generation projects.

- **Luzon Power Situation**

In anticipation of the tight power supply situation in Luzon during the summer months of 2015 as indicated in the 2014-2020 Power Supply-Demand Outlook, the government, together with the private sector initiated the following measures to mitigate the situation:

INTERRUPTIBLE LOAD PROGRAM (ILP)

It is a mechanism which allows for the compensation of customers of a distribution utility (DU) for voluntarily taking itself off the grid during peak demand. When it takes itself off the grid, said customer is compensated. The compensation will be recovered from all customers in the franchise area of the DU. The rate recovery mechanism is patterned after the ERC approved rate mechanism for the ILP in Visayas and Mindanao. As of 13 November 2014, there are 201 ILP participants with of 660.95 MW de-loading capacity.

ADDITIONAL CAPACITY

Project proponents were also encouraged to undertake rehabilitation and uprating of their power plants to augment the tight supply of electricity:

- Rehabilitation of the 100-MW Millennium Energy, Inc. also known as Navotas Power Plant of the National Power Corporation;
- Uprating of the existing Limay Power Plant by 36 MW to be operational by March 2015;
- Uprating of Bauang Power Plant by another 20 MW to be operational by March 2015;
- Interconnection of accumulated self-generating facilities of JG Summit from Pasig, Laguna and Batangas (40 MW) to be available by January 2015;
- Interconnection of Botocan Power Plant (20 MW) to the Caliraya-Botocon Line by December 2014; and,
- Fast-tracking of committed power projects like the 21-MW Majestics Solar by January 2015 and the 100-MW Avion LNG Power Plant by April 2015 instead of October 2015.

- **Interim Mindanao Electricity Market**

As part of the roadmap for sustainable solutions in Mindanao, a market for the transparent and efficient utilization of available capacities was established to encourage participation of existing power generating facilities and interruptible loads and the entry of new generating capacities in Mindanao. To establish such market, the DOE issued D.C. 2013-05-0008 promulgating the

Interim Mindanao Electricity Market (IMEM). For 2014, the following were the highlights of IMEM implementation:

- Conduct of various multi-stakeholder meetings, public consultations and workshops (i) to resolve the issues related to the implementation of the IMEM particularly on billing and settlement; (ii) to inform and guide the owners and operators of embedded generating units and standby generating units on how to expedite and facilitate their participation in IMEM or Interruptible Load Program (ILP).
- Issuance of D.C. 2014-05-0010, *"Amending IMEM Rules to Include Demand Side Bidding and Providing for Transitory Arrangements"* dated 07 May 2014;
- Issuance of D.C. 2014-03-0006, *"Directing the Operation of All Existing Generation Capacities in Mindanao Grid"* dated 04 March 2014.
- Issuance of final reconciled billing and settlement on 30 September 2014 to trading participants covering the period 03 December 2013 to 31 March 2014 which can be paid in three tranches without interest provided they will issue post dated checks by 30 November 2014;
- As of 27 November 2014, total IMEM payables reached PhP 238.13 million and 45.5 percent or PhP 108.44 million were already received.

• Demand Aggregation and Supply Auctioning Policy

DOE has initiated the study on Demand Aggregation and Supply Auctioning Policy (DASAP) in the electric power industry to achieve greater private sector participation in the generation sector with the end-view of ensuring adequacy of electric power supply in each of the franchise areas served by the DUs, and greater transparency and reasonableness of electricity rates and charges. To solicit comments on the proposed DASAP, the DOE conducted four (4) nationwide public consultations in Cebu City, General Santos City, Legazpi City and Clark in 2014. In relation to this, a Department Circular on the "*Adoption of Demand Aggregation and Supply Auctioning Policy"* was drafted.

• Implementation of Reforms in the Power Sector

WHOLESALE ELECTRICITY SPOT MARKET (WESM) IMPLEMENTATION

To date, the WESM is on its 100th billing month of operation. As of 30 October 2014, the integrated WESM (Luzon and Visayas) has a total of 229 registered participants (comprising of 54 generating companies) and 175 customers (comprising of 13 private distribution utilities, 71 ECs, 79 bulk users, five (5) bulk users (Contestable Customers) and seven (7) Wholesale Aggregators).

In 2014, the Philippine Electricity Market Corporation (PEMC) implemented the following activities under the supervision of the DOE:

1. Preparations for Reserve Market Implementation

PEMC commenced the Trial Operations Plan (TOP) on 26 February 2014 composed of two (2) phases. The first phase facilitated the testing of protocols, procedures and interfaces that were developed for the Market Operator – System Operator (MO-SO) and Reserve Market Working Group. The pre-TOP timelines also included efforts to resolve remaining operational issues and validate the implementation of energy and reserve schedules under the market regime. The second phase, referred to as main TOP, involved activities that demonstrated the operations of the Reserve Market and familiarized the Trading Participants in all

associated processes. A Limited Live Dispatch was also implemented wherein the scheduling of energy and reserves was transferred to the live Market Management System (MMS) for actual implementation.

As early as January 2014, PEMC commenced registration of all certified ASPA providers which were nearing completion of their WESM registration. PEMC also spearheaded the disaggregation of generating units from aggregate to per unit as prescribed in the requirements set forth in facilities providing ancillary services.

In March 2014, the DOE issued Department Circular No. 2014-03-0009 *"Declaring a new commercial launch date for the WESM Reserve Market and directing PEMC to develop a protocol for Central Scheduling and Dispatch of Energy and Contracted Reserves"* to further prepare the market participants in the eventual implementation of the Reserve Market.

WESM Manuals such as the Dispatch Protocol and the Constraint Violation Coefficient (CVC) have been amended in view of the implementation of the Reserve Market. Changes to the Dispatch protocol involved provisions on the determination of the reserve requirement, offering and scheduling of each unit for only one reserve effectiveness factor. Changes to the CVC emanated from the need to re-order operational priorities upon integration of the Reserve Market into the Commercial Operations of the WESM.

PEMC likewise conducted Reserve Market Trainings for the System Operator and the Trading Participants for a better understanding of the concepts and processes involved in the pricing, scheduling, settlement, and cost recovery for reserves.

As regard the approval to its application for the Pricing and Cost Recovery Mechanism for Reserve, PEMC has continuously complied with the requirements set forth by the ERC. PEMC is currently awaiting ERC's approval of the said application.

2. WESM Rules Changes and Related Policies

The following circulars were promulgated providing new policies to improve the WESM operations:

- D.C. 2014-01-0003 *"Designating the 650-MW Malaya Thermal Power Plant as a Must-Run Unit in the Wholesale Electricity Spot Market"*
- D.C.2014-02-0004 "*Relaxation of Chapter III Section 3.1.1. of the WESM Manual on Registration, Suspension, and Deregistration Criteria and Procedures"*
- D.C. 2014-03-0007 "*Adopting Further Amendments to the WESM Rules (Procedure for Load Shedding)"*
- D.C. 2014-03-0008 *"Adopting Further Amendments to the WESM Rules (Prudential Requirements)"*
- D.C. 2014-08-0016 *"Adopting Further Amendments to the WESM Rules (Market Network Model)"*
- D.C. 2014-10-0019*"Revoking Section 1 of Department Circular No. DC 2013-12-0029 entitled "Adopting an Interim Criteria for the Declaration of Market Intervention in the Wholesale Electricity Spot Market"*
- D.C. 2014-10-0020 *"Adopting Further Amendments to the Retail Market Manuals (Compliance and Implementation with Reference to Investigation of Retail Metering Service Provider's infraction Involving Meter Data and Metering Facilities"*

- D.C. 2014-10-0021 *"Adopting Further Amendments to the WESM Rules (Provision for Must-Run Units)"*

4. WESM Mitigating Measures

The DOE, jointly with the ERC and PEMC issued a resolution adopting an interim WESM Offer Cap in the amount of PhP 32/kWh, which will still be implemented until such time that the ERC has determined a new mitigating measure to address price volatility in the WESM.

CATEGORY	REGISTERED						
	TOTAL	DIRECT			INDIRECT		
		LUZ	VIS	LUZ/VIS*	LUZ	VIS	LUZ/VIS
Generation Companies	**58**	34	22	2	0	0	0
Customers							
- Private distribution utilities & Local government utilities	**14**	8	3	0	3	0	0
- Electric cooperatives	**71**	26	27	0	17	1	0
- Bulk-users	**78**	6	6	1	51	13	1
- Bulk-users (Contestable)	**6**	0	2	0	4	0	0
- Wholesale aggregators	**7**	0	0	7	0	0	0
Total Customer Trading Participants	**176**	**40**	**38**	**8**	**75**	**14**	**1**
TOTAL PARTICIPANTS/ APPLICANTS	**234**	**74**	**60**	**10**	**75**	**14**	**1**

**The Luz/Vis column shows the number of WESM Members with facilities both in Luzon and Visayas. The registered wholesale aggregators have no facilities but they can supply to both Luzon and Visayas DUs, thus counted under the Luz/Vis column.*

WESM Members with Luzon and Visayas Facilities: (1) PSALM Corporation (Gen); (2) National Power Corporation (Gen); (3) Philippine Economic Zone Authority (Bulk User); (4) National Grid Corporation of the Philippines (Bulk User)

3. Conduct of WESM Audit

Following are updates on the conduct of WESM Audits:

- Fourth operational audit covering the period of 26 June 2012 to 25 June 2013 was concluded in March 2014. The public version of the audit findings and observations may be downloaded from the PEMC website.
- On-going conduct of 2nd Metering Arrangements Review which covers the metering arrangements and transactions in the WESM including the Retail Metering Services Providers.
- On-going selection process for the Independent Auditor to conduct the 5th WESM Operations Audit covering the period 26 June 2013 to 25 June 2014.

• Retail Competition and Open Access (RCOA)

As of December 2014, the Central Registration Body (CRB) registered a total of 234 participants, which include 74 direct registrants from Luzon, 60 from Visayas and 10 from members with facilities both in Luzon and Visayas.

• Privatization of NPC Generating Assets and IPP Contracts

As of end-2014, the privatization level of NPC generating facilities has reached 89.7 percent following the successful bid of Naga Power Plant Complex on 31 March 2014. Meanwhile, the proposed closing and turn-over schedule of Angat HEPP to Korean Water Resources, Inc. (K-Water) was officially done on 31 October 2014.

With regards to the other generating assets of PSALM, following are the developments:

- The Notice of Award (NOA) dated 13 November 2013 was issued to SPC Island Power Corporation (SIPC), the winning bidder for Package 1 (PBs 101-103) which submitted a bid of PhP 546 million. SIPC accepted the Certificate of Effectivity (COE) on 19 November 2013, commencing the Effective Date of the Asset Purchase Agreement (APA) for the sale of the PBs.

- Conduct of re-evaluation of PB 104 conditions of sale following its failed bidding in October 2013 to make it attractive to investors.

- SIPC, in its letter dated 13 March 2014, requested the termination of award because of the material change in the condition of PB 103 and likewise requested the return of its performance bond. The PSALM Office of the General Counsel (OGC) was asked to render a legal opinion on whether SIPC will forfeit its Performance Bond subject to the appraisal of the damage sustained by PB 103. This will determine whether there is material change in the condition of the asset.

- PSALM's Asset Management Group (AMG) conducted an inspection and appraisal of PB 103 after completion of the tank cleaning activities at Keppel Subic Shipyard, Inc. (KSSI). The results of the appraisal were forwarded to OGC for purposes of the issuance of the above mentioned legal opinion. PSALM is considering alternative modes for the disposal of all the PBs, including PB 104.

- In a letter dated 22 May 2014, Trans-Asia Oil and Energy Development Corporation (Trans-Asia), the second highest bidder for PBs 101–103, offered to purchase the Barges on a negotiated basis, subject to conditions. PSALM requested the opinion of the Office of the Government Corporate Counsel (OGCC) on whether PSALM may enter into negotiations for the disposal of PBs 101-103.On 02 July 2014, the OGCC issued an opinion that PSALM can conduct negotiation subject to the guidelines of the Commission on Audit (COA), which provide that in case of failed bidding, the offered price should be above the reserve price or the highest bid whichever is higher.

- The bidding for Naga Power Plant Complexes (NGPP) was conducted on 31 March 2014 with Therma Power Visayas, Inc. declared as the highest bidder with its bid of PhP 1.09 billion. However, the condition of the sale provides that SPC Power Corporation has the "right to top" the price of the winning bidder for the Naga Power Plant by 5.0 percent, as provided under the Land Lease Agreement executed between PSALM and SPC in 2009 for the Naga Land-based Gas Turbine. In this regard, SPC has exercised its Right to Top the Winning Bid prior to the deadline with Therma Power Visayas, Inc. notified through a Notice dated 29 April 2014. The matter was consulted with the OGCC which provided that SPC may exercise its "right to top" in accordance with the 2009 Land Lease Agreement (LLA). This was further affirmed by the Department of Justice (DOJ) which opined that SPC would be able to properly perform its obligations under the NPPC Asset Purchase Agreement (APA) within the 25-year period, thereby contributing to the quality, reliability, security and affordability of the supply of electric power. In addition, the privatization value of the Naga Power Plant is optimized with the exercise by SPC of its right-to-top the winning bid of TPVI by 5.0 percent. The PSALM issued the Notice of Award (NOA)

and the COE to SPC on 30 July 2014 and turned over the Naga Power Plant on 25 September 2014.

Geothermal Power Plant (ULGPP)-Strips. Currently, PSALM is working on the bid of the remaining plants subject to further policy direction by relevant government agencies.

LIST OF PRIVATIZED PLANTS AS OF SEPTEMBER 2014

NAME OF PLANT	RATED CAPACITY (MW)	LOCATION	BID DATE	WINNING BIDDER	WINNING BID PRICE (MILLION US$)
Talomo	3.5	Davao	25-Mar-04	Hydro Electric Development Corp.	1.37
Agusan	1.6	Agusan	4-Jun-04	First Generation Holdings Corp.	1.53
Barit	1.8	Camarines Sur	25-Jun-04	People's Energy Services Inc.	0.48
Cawayan	0.4	Sorsogon	30-Sep-04	Sorsogon II Electric Cooperative, Inc.	0.41
Loboc	1.2	Bohol	10-Nov-04	Santa Clara International Corp.	1.43
Pantabangan-Masiway	112	Nueva Ecija	6-Sep-06	First Generation Hydro Corp.	129
Magat	360	Isabela	14-Dec-06	SN Aboitiz Power	530
Masinloc	635	Zambales	26-Jul-07	Masinloc Power Partners Ltd.	930
Ambuklao-Binga	175	Benguet	28-Nov-07	SNAP Hydro	325
Tiwi-Makban	747.53	Albay, Laguna/Batangas	30-Jul-08	AP Renewables	446.89
Panay and Bohol *	168.5	Iloilo, Bohol	12-Nov-08	SPC Power Corporation	5.86
Amlan	0.8	Negros Oriental	10-Dec-08	ICS Renewables Inc.	0.23
Calaca Coal-Fired Thermal Power Plant	600	Batangas	8-Jul-09	DMCI Holdings Inc.	361.71
PB 117*	100	Campostela Valley	31-Jul-09	Therma Marine	14
PB 118*	100	Agusan Del Norte	31-Jul-09	Therma Marine	16
Limay*	620	Limay, Bataan	26-Aug-09	San Miguel Energy Corporation	13.5
Palinpinon-Tongonan Geothermal Power Plants	305	Negros Oriental, Leyte	2-Sep-09	Green Core Geothermal Inc.	220
Naga LGBT*	61.9	Panay	16-Oct-09	SPC Power Corporation	1.01
Angat Hydro**	218	Norzagaray, Bulacan	28-Apr-10	Korean Water Resources Dev. Corp.	440.88
BacMan	150	Albay/Sorsogon	5-May-10	Bac-Man Geothermal Inc.	28.25
Naga***	153.10	Colon, Naga City, Cebu	31-Mar-14	SPC Power Corporation	1.143
Total Privatized - Philippines				**4,515.33 MW**	$3,423.29
Total Privatized In Luzon and Visayas				4,310.23 MW	$3,420.39
Total Mw To Be Privatized In Luzon and Visayas				4,807.13 MW	
Level Of Privatization In Luzon and Visayas				89.7 %	

Meanwhile, for the IPP contracts, the privatization level reached 82.4 percent with the recent successful bid for the Unified Leyte

Following the successful bid of the strips of Energy on 07- 08 November 2013 for the ULGPP and the NOA to six (6) strip owners last 05

February 2014, PSALM and the strip owners are currently processing their respective condition precedents and documentation necessary prior to the effectivity of the IPPA Administration Agreement. The turnover of the Strips of Energy to the IPPAs happened on 26 December 2014 for the Output of the Mindanao I and II (Mt. Apo 1 and 2) Geothermal Power Plants, as well as the Strips of Energy (IPPA-Strips) portion of its contacted capacities in the Unified Leyte Geothermal Power Plants (ULGPP) to their respective Winning Bidders.

STATUS OF PRIVATIZATION OF IPP CONTRACTS AS OF SEPTEMBER 2014

POWER PANT	CONTRACTED CAPACITY(MW)	WINNING BIDDER	STATUS
Luzon	**4,516.11**		
Pagbilao Coal 1&2	700.00	Therma Luzon	
Sual Coal Units 1& 2	1,000.00	San Miguel Energy	
HEDCOR/NMHCBenguet Mini Hydros	30.75	Amlan Power Holdings	
Bakun Hydro	70.00		
San Roque Multipurpose Hydro	345.00	San Miguel Energy	
Ilijan Natural Gas Power Plant	1,200.00	San Miguel Energy	Turned Over
Enron Subic	-	Subic Enerzone	
Bauang Diesel PP	224.91	1590 Energy Corp.	Turned Over to LGU
Kalayaan I, II, III & IV	737.27		
Caliraya	35.83		For IPPA Appointment
Botocan	22.35		
Makban Binary	-		Privatized as Genco
Visayas	**160.30**		
Cebu Thermal I	106.30		
Cebu Thermal II			
Cebu Land Based Gas Turbine	54.00		
Unified Leyte (Strips of Energy)	200	Vivant Energy Corporation	
Total Luzon/Visayas	**4,360.30**		
Turned Over to IPPAs/SGC/OGA/ LGUs	**3,593.91**		
IPPA Privatization Level (LUZON/VISAYAS)	**82.42 %**		

**Turned-over IPPs*

***Supreme Court declared the sale of Angat to KWDC as valid and legal.*

**** SPC Power Corporation has exercised The condition of the sale provides that SPC Power Corporation has the "right to top" the price of the winning bidder for the Naga Power Plant by 5 percent, as provided under the Land Lease Agreement executed between PSALM and SPC in 2009 for the Naga Land-based Gas Turbine.*

Meanwhile, PSALM will continue to privatize its remaining generating assets and appointment of IPP Administrator with indicative privatization schedule summarized in the tables below.

INDICATIVE SCHEDULE FOR APPOINTMENT OF IPP ADMINISTRATORS AS OF DECEMBER 2014

GRID	PLANT NAME	CONTRACTED CAPACITY (MW)	BID DATE	TURN OVER DATE
Luzon Grid	Casecnan Multi-Purpose Hydro	140.00	Privatization is under study/evaluation	
	Benguet Mini Hydro	30.75	IPP contract to expire in January 2018	
	Caliraya-Botocan-Kalayaan Hydro	728.00	2nd Semester 2016	1st Semester 2017
	Sub-total Luzon	**898.75**		
Visayas Grid	Unified Leyte Bulk Energy	359.00	4th Quarter 2013	2nd Semester 2014
	Sub-total Visayas	**359.00**		
Mindanao Grid	SPPC Diesel	50.00	IPP contract will expire in 2016	
	Zamboanga Bunker C-Fired Thermal Power Plant	100.00	IPP contract will expire in 2015	
	General Santos Bunker C-Fired Thermal Power Plant	50.00	IPP contract will expire in 2016	
	Sub-total Mindanao	**200.00**		
	GRAND TOTAL	**1,457.75**		

INDICATIVE SCHEDULE OF PRIVATIZATION FOR GENERATION ASSETS AS OF SEPTEMBER 2014

ASSET TYPE	PLANT NAME	RATED CAPACITY (MW)	BID DATE	TURN OVER DATE
Owned Generating Plants	**Luzon Grid**			
	Malaya Thermal	650.00	Privatization is subject to DOE instruction	
	Sub-total Luzon	**868.00**		
	Visayas Grid			
	PB 101 (Diesel/Bunker)	32.00	2nd Semester 2014	1st Semester 2015
	PB 102 (Diesel/Bunker)	32.00		
	PB 103 (Diesel/Bunker)	32.00		
	Sub-total Visayas	**96.00**		
	Mindanao Grid			
	PB 104 (Diesel/Bunker)	32.00	2nd Semester 2014	1st Semester 2015
	Agus 1 & 2 Hydro	260.00	2017	
	Agus 4 & 5 Hydro	213.10	Subject to consultation with Congress as provided under the EPIRA	
	Agus 6 & 7 Hydro	254.00		
	Pulangui Hydro	255.00		
	Sub-total Mindanao	**1,014.10**		
	GRAND TOTAL	**1,978.10**		
Decommissioned Plants	Bataan Thermal	-	Sale/disposal is subject to resolution of cases involving the asset	
	Sucat Thermal	-	2nd Semester 2014	1st Semester 2015

- **Sale of Sub-Transmission Assets (STAs)**

As of 31 October 2014, TransCo has signed 109 sale contracts with 79 distribution utilities/electric cooperatives/consortia amounting to PhP 5.86 billion. These sales cover an aggregate length of about 4,000 ckt-kms of sub-transmission lines and about 36,200 sub-transmission structures and 865 MVA of substation capacity. Of the 109 sale contracts, 51 contracts with total sale price of about PhP 2.7 billion have been approved by the ERC. The rest of the sale contracts are for filing as well evaluation and approval of ERC.

In view of the EPIRA provision to extend concessional financing to electric cooperatives, TransCo implemented lease purchase arrangements under a term of 20 years. Of the 109 sale contracts already signed, 67 are under lease purchase agreements with 59 electric cooperatives/consortia, valued at about PhP 3.9 billion. The remaining 42 involved sales to private distribution utilities/consortia.

Below is the summary of the sale as of the 31 October 2014.

SUMMARY TABLE OF SUB-TRANSMISSION ASSETS SALE PER REGION AS OF 31 OCTOBER 2014			
	DUs	Sale Amount in PhP (Original Contract)	Circuit-kilometers
North Luzon	34	1,659,041,373.27	1,272
South Luzon	17	1,120,511,843.37	467
Visayas	27	1,168,202,902.00	685
Mindanao	31	1,913,027,055.63	1,598
Total	**109**	**5,860,783,174.27**	**4,022**

- **Conduct of Focused Group Discussions (FGDs) and Consultative Dialogue on EPIRA Review**

The DOE completed a series of FGDs on EPIRA review nationwide (Luzon, Visayas and Mindanao) from January to February 2014. A Consultative Dialogue was also held on 18 February 2014. Various interest groups that included power industry players, business groups and trade organizations representing power-intensive industries such as semi-conductors, construction, flour and sugar milling, consumer and labour groups, concerned government agencies as well as members of the academe participated in the said activities.

Issues that were raised during the FGDs and consultative process revolved around legislative, policy, regulatory and governance matters. Among the widely-discussed issues related to EPIRA were the Value-added tax (VAT), cross-ownership, de-monopolization and shareholding dispersal, open access, WESM rules, and privatization of Agus-Pulangi power plants in Mindanao. The Report on the Consultative Dialogue on EPIRA Review 2014 was submitted to the Office of the President and the House Committee on Energy.

- **NEA Reform Act Implementation**

The passage of Republic Act (RA) 10531 or the NEA Reform Act is aimed at enhancing the operations of NEA and the country's electric cooperatives. This Act provides greater accountability for NEA as the regulator of ECs with the additional mandate to take-over the operation of problematic ECs towards the goal of improving its operational parameters and standards.

In compliance with Section 16 of the Act, the DOE issued the following circulars:

- D.C. No. 2013-07-0015 "*Prescribing the Implementing Rules and Regulations (IRR) of Republic Act No. 10531, otherwise known as the "National Electrification Administration Reform Act of 2013"* dated 26 July 2013.

- D. C. No. 2014-01-0002 *"Amending Certain Provisions of Department Circular No. DC2013-07-0015, or the Implementing Rules and Regulations of Republic Act No. 10531 otherwise known as the National Electrification Reform* Act *of2013*"

- D.C. No. 2014-09-0017 *"Amending Certain Provisions of Department Circular No. 2013-07-0015, or the Implementing Rules and Regulations of Republic Act No. 10531 otherwise Known as the National Electrification Reform Act of 2013"*

On the other hand, the following issuances of NEA were filed with the UP Law Center and correspondingly published in leading national broadsheets and posted at the NEA website.

- Guidelines for the Classification of ECs and Provision for NEA Intervention based on Rule IV, Section 19 (b) and Section 20 of the IRR, RA 10531 approved by the DOE on 12 December 2013, filed with the UP Law Center and published in the Philippine Star on 03 and 07 January 2014, respectively.

- Policy on the Submission of Reportorial Requirements for Integrated Assessment Report based on Chapter III, Section 12, RA 10531 in relation to Rule II, Section V of IRR, RA 10531 filed with the UP Law Center and published in the Philippine Star on 21 and 28 November 2013, respectively.

- Guidelines and Simplified Bidding Procedures filed with the UP Law Center and published in the Philippine Star on 21 and 28 November 2013.

- Guidelines in the Sanitation of Master List of Member Consumers of ECs filed with the UP Law Center and published in the Philippine Star on 21 and 28 November 2013.

- Revised NEA Administrative Rules and Procedures of 2013 filed with the UP Law Center and published in the Philippine Star on 21 and 28 November 2013.

- NEA Policy on Power Supply Guarantee Program for ECs approved by the NEA Board of Administrators on 06 November 2013.

- Policy for the Establishment of a Sinking Fund to Cover Extraordinary Losses and Expenditures Arising From Force Majeure, Natural Calamities and Risk Factors filed with the UP Law Center and published in Philippine Star on 25 April 2014, respectively.

- Guidelines in the Conduct of Appeals/Protests from the Decisions of the Electric Cooperative (EC) Screening Committee filed with the UP Law Center and published in Philippine Star on April 14, and April 22, 2014, respectively.

- Guidelines in the Conduct of District Elections for ECs filed at the UP Law Center on 15 May 2014 and published in Philippine Star on 26 May 2014, respectively.

- Collective Bargaining Agreement and Collective Negotiation Agreement of ECs filed at the UP Law Center on 24 May 2014. (Newspaper publication not required)

- Consolidated Policy on the Various Frameworks of Private Sector Participation (PSP) filed at the UP Law Center and published in Philippine Star on 29 May, and June 4, 2014, respectively

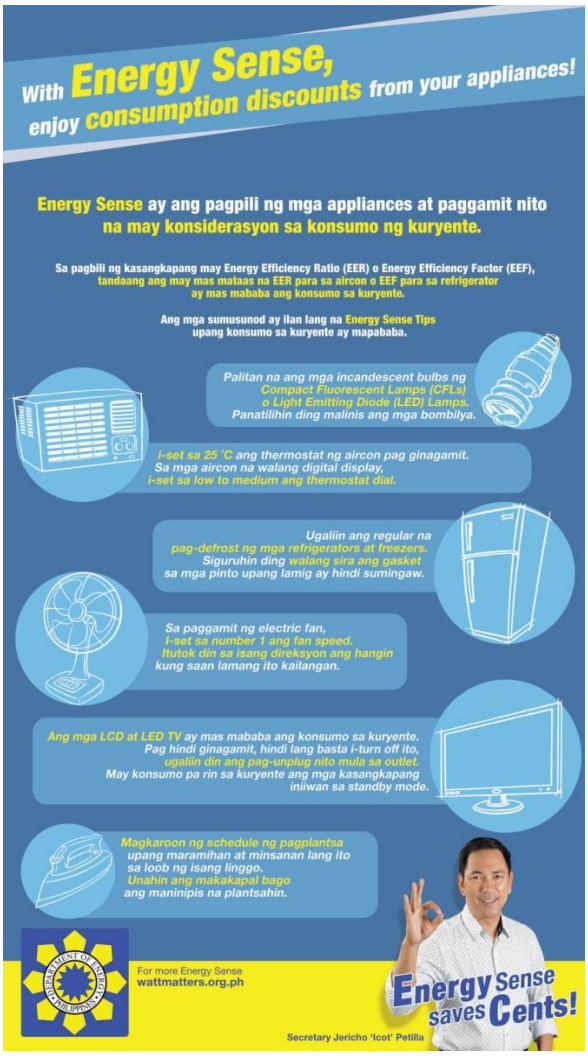
- Guidelines for NEA's Interventions and Various Options for Ailing ECS

ENERGY REGULATIONS 1-94 IMPLEMENTATION

The DOE approved the following projects covering CY 2013 and from January to November 2014:

- 353 Electrification Projects covering 365.89 ckt-kms. of distribution lines and 2,084 units of installed PV-SHS benefitting 9,655 households
- 130 Development and Livelihood Projects
- 134 Reforestation, Watershed Management, Health and/or Environment Enhancement Projects

Accrued financial benefits from the commercial operations of all power plants in the country as of November 2014 was recorded at PhP 3.84 Billion under the Electrification Fund (EF), PhP 2.63 Billion for Development and Livelihood Fund (DLF) and PhP 2.97 Billion for the Reforestation, Watershed Management, Health and/or Environment Enhancement Fund (RWMHEEF).



ENERGY EFFICIENCY AND CONSERVATION

In the midst of a looming power crisis in the summer of 2015, the government continues to implement various measures to ensure that there is sufficient and reliable power available for Filipinos. One of the most practical and less costly of these is the implementation of energy efficiency and conservation (EE&C) measures.

For over a decade, the Department has been implementing its National Energy Efficiency and Conservation Program (NEECP). And while significant progress had been obtained through this, a lot more still needs to be done to be able to address the

persisting energy situation.

Notably, in 2014, DOE has obtained 28.55 MMBFOE or 4,122.62 KTOE of total savings through NEECP and 1,270.58 megawatt deferred capacity. Below are the accomplishments in NEECP and other energy efficiency and conservation projects implemented by the DOE:

- **National Energy Efficiency and Conservation Program (NEECP)**

INFORMATION EDUCATION AND COMMUNICATION (IEC) CAMPAIGNs

DOE continues to intensify the dissemination of information and awareness on the judicious utilization of energy through the conduct of seminars, workshops, trainings, etc., to various sectors to encourage their active involvement in the government's initiative on EE&C.

In 2014, about 43 seminars were spearheaded with a total of 4,643 participants from the academe, households, commercial and industrial establishments, government office buildings, private and public transport drivers, member of transport associations and organizations, among others.

The following are other IEC activities conducted in coordination with partner agencies:

1. Usapang Klima at Enerhiya: Facilitators' Training on EE&C

   Recognizing the role of teachers and educators in shaping the minds of the youth and the future generation, the DOE in partnership with the Development Academy of the Philippines launched Usapang Klima at Enerhiya: Facilitators' Training on EE&C in 2013.The training is intended for science teachers and coordinators in secondary public schools who will then relay information on EE&C as a response to climate change to their students.

   The first two runs of the training were conducted in Subic, Zambales and Tagaytay City in 2013. And in 2014, the remaining five (5) were held in the following cities: Batangas, Baguio, Butuan, Davao, and Dumaguete.

Series of training on EE&C for science teachers and coordinators in secondary public schools were conducted nationwide

2. Promotional Materials for the Annual Earth Hour Celebration

The DOE published promotional materials on energy saving tips in major broadsheets in March 2014 in time for the annual Earth Hour celebration. The advertisement, published in the Philippine Daily Inquirer, Philippine Star, and Manila Bullet in aimed at encouraging public participation in practicing energy conserving measures to protect the environment, which is the message espoused by the event.

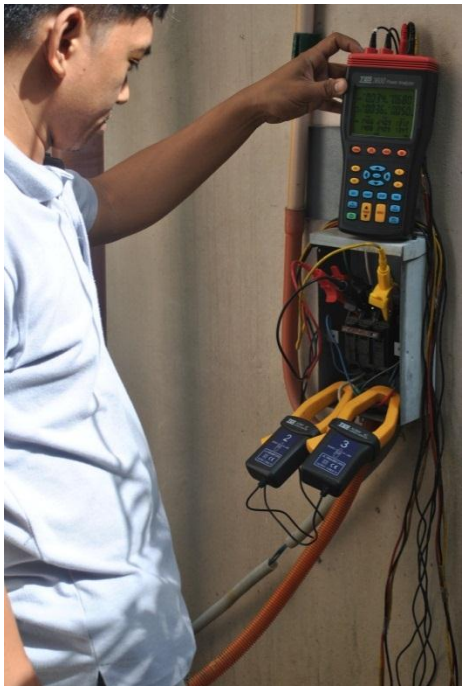
GOVERNMENT ENERGY MANAGEMENT PROGRAM

The DOE is also carrying out the Government Energy Management Program (GEMP) which mandates all government offices to reduce their monthly consumption of electricity and transport petroleum products by at least 10 percent as prescribed under Administrative Order 126 issued in 2004. Since its inception, the government was able to save over PhP 2 billion from both electricity and fuel savings.

In relation to this, five (5) seminars on GEMP and EE&C were conducted in coordination with the DOE field offices in Luzon, Visayas, and Mindanao. Spot checks were also conducted in 82 government buildings nationwide while 27 certificates of electricity savings were issued to government offices claiming energy savings.

To further reduce electricity consumption in government buildings, the DOE recommends the replacement of the existing non-Inverter Window Type and Packaged Type Air-conditioning Units with Inverter Type Units. In relation to this, the DOE conducted a study comparing an inverter with a non-inverter type of air conditioning unit. Results show that electricity consumption was reduced from 0.948 kwh to 0.535 kWh or by 43.56 percent when the thermostat was set at 25 degree centigrade. When compared to older air-conditioning units, the reduction is higher at 56.5 percent.

A survey on air-conditioning units, generators and lighting systems in government buildings is also ongoing. So far, 189 survey forms have been distributed and 74 have responded.



A DOE staff testing the efficiency and electrical parameters of inverter-type air-conditioning unit using a hand-held power analyzer

Energy Audit

DOE also provides energy audit services to companies who would like to determine their energy use patterns and identify energy conservation measures that can be implemented therein.

Energy audit is a technical service provided for a fee by the DOE to manufacturing plants, commercial buildings and other energy-intensive companies. A team of engineers from the Department evaluate the energy utilization efficiencies of equipment, processes and operations of these companies and recommend energy efficiency and conservation measures to attain energy savings.

In 2014, one (1) commercial building and seven (7) sugar mills were audited by DOE. The audits in sugar mills were conducted in partnership with Sugar Regulatory Administration (SRA) and Philippine Sugar Millers Association, Incorporated (PSMA).

The DOE's Energy Efficiency and Conservation Division (EECD) conducts energy audit activity in a sugar mill company

ENERGY SERVICE COMPANIES (ESCO) ACCREDITATION

The DOE conducts accreditation of ESCOs in the country in accordance with *D.C.* 2008-09-20004 enforcing ESCOs to apply for a certificate of accreditation with the DOE while engaging in any energy efficiency related performance contracting projects.

The accreditation intends to promote ESCO as an emerging business industry in the local market, creating more jobs that will help contribute in the country's economic development and poverty alleviation, and accelerate the implementation of the government's energy efficiency and conservation initiatives.

As of end of 2014, there are 14 ESCOs that have been accredited by the DOE:

1) Thermal Solution, Inc.
2) PhilCarbon, Inc.
3) Electro-System Industries Corp.
4) Design Science, Inc.
5) Renaissance Pacific Energy Solutions Asia
6) Schneider Electric Philippines, Inc.
7) Cofely Philippines
8) Filairco, Inc./Trane Philippines
9) OSP-ESCO International, Inc.
10) MVCP Biotechnology & Energy Resources
11) Energy and Aviation Support Corporation
12) Hi-Cool Engineering Corporation
13) Meralco Energy, Inc.
14) Philippine Integrated Energy Solutions, Inc.

RECOGNITION AWARDS

The Don Emilio Abello Energy Efficiency Awards (DEAEEA), more popularly known as the Abello Awards is a tribute to the Father of Energy Conservation in the Philippines and the brainchild of the country's Enercon Program, Don Emilio Abello.

DOE Undersecretary Donato D. Marcos (2nd to the left) with 2014 Abello Technical Evaluation Committee Members and the recipient of the Secretary's Award, ST Microelectronics, Inc.

The DEAEEA is given to companies in recognition for their significant energy savings achieved through the implementation of EE&C technologies and measures. The much-coveted annual recognition encourages strong involvement of the private sector in the government's energy efficiency and conservation initiatives.

In 2014, around 92 establishments and 50 energy managers received honors for their remarkable support and dedication to EE&C during the awarding ceremony held on 06 December 2014 at the Dusit Thani Hotel in Makati City.

This year's result of the DEAEEA accounted for the aggregate savings of more than 95 million liters of oil equivalent (LOE), which can be translated to a monetary savings of more than PhP 3 billion pesos and over 187 million kilograms of avoided carbon dioxide.

The following were also awarded during the DEAEEA Awarding Ceremony for qualifying in various categories of the 2014 ASEAN Energy Awards held in Lao PDR:

1) SM City Davao - 2nd Runner-up, Large Buildings Category
2) Alabang Town Center - Entry, Large Buildings Category
3) San Miguel Brewery, Inc.-Polo Brewery – Entry, Large Industries Category and Special Submission, Large Industries
4) Ayala Center Thermal Energy Storage Center – Special Submission, Buildings Category
5) SM City Naga – Entry, New and Existing Buildings Category

ENERGY EFFICIENCY AND CONSERVATION BILL

DOE continues to advocate for the passage of the Energy Efficiency and Conservation Bill. The draft Enercon Bill that will institutionalize energy efficiency and conservation in the country has gained endorsements from both the Senate and House of Representatives (HOR).

The HOR Chair of the Committee on Energy of the 16th Congress, Congressman Reynaldo V. Umali(2nd District, Oriental Mindoro) filed his version of the bill in June 2014 that of the HOR Deputy Speaker, Congresswoman Henedina R. Abad (Lone District, Batanes) was filed in September 2014.

To gather inputs from experts of concerned government agencies and private organizations in relation to the revisions of Cong. Abad, the DOE in partnership with the Development Academy of

the Philippines conducted an Experts' Writeshop on Energy Efficiency and Conservation Bill on 15 and 18 July 2014 at Astoria Plaza in Ortigas Center, Pasig City.

- **Foreign Assisted Project and other International Collaborations**

PHILIPPINE INDUSTRIAL ENERGY EFFICIENCY PROJECT (PIEEP)

The DOE in partnership with the United Nations Industrial Development Organization (UNIDO) and the Department of Trade and Industry (DTI) is presently implementing the Philippine Industrial Energy Efficiency Project (PIEEP). Funded by the Global Environment Fund, the PIEEP aims to improve energy efficiency in the industrial sector through the provision of tools and capacity building on energy management system and energy system optimization.

Specifically, PIEEP will introduce, among others, the application of ISO 50001 Energy Management Standard and System Optimization Frameworks to selected industrial sectors such as chemicals, food & beverage, iron & steel, and pulp & paper. Another major component of the project is the identification of financing opportunities for energy efficiency initiatives implemented in said industries. Through this, the PIEEP is expected to generate about two (2) million MWh of energy savings.

In 2014, about 29 activities including seminars, training, workshops and meetings were held pertaining to PIEEP (15 in relation to energy management and 14 on systems optimization). A total of 894 participants from industrial associations, professional organizations, equipment vendors, energy service companies and energy consultants benefited from these activities. Sixteen (16) plant visits were also conducted through this project.

Likewise, ten (10) certificates of recognition were awarded in 2014 to four (4) steam and six (6) compressed air system optimization experts who completed the PIEEP certification and who will form the PIEEP pool of experts on systems optimization. To date, a total of 29 (19 EnMS and 10 System Optimization) national experts have been certified through PIEEP.

JOINT DEVELOPMENT PROGRAM FOR CLIMATE CHANGE IN THE PHILIPPINES

DOE, in partnership with KEMCO, is implementing the Joint Development Program for Climate Change in the Philippines, which intends to develop investment projects on improving energy efficiency and new and renewable energy, and in turn mitigate the effects of climate change.

The scope of the program includes information exchange, expert meeting and site visit, identification of applicable technologies for project development, and support in performing pre-feasibility study including the development of financing plans.

KEMCO is soliciting energy efficiency project proposals and is currently funding one in Steel Asia Bulacan Works with expected energy savings of 819,379 Liters of Bunker-C[4] (L-BC) oil per year and 813,375 kWh electricity per year and reduction of 3,032.355 tCO2e annually.

ENERGY EFFICIENCY AND CONSERVATION ROADMAP

As part of the ongoing EU-funded SWITCH-Asia Policy Support Programme in the Philippines, the DOE is revising its Energy Efficiency and Conservation Roadmap with the assistance from EU-SWITCH. The Programme aims to promote sustainable development, strengthen national and regional policy frameworks to shift towards more sustainable consumption and production patterns and resource efficiency in the Philippines.

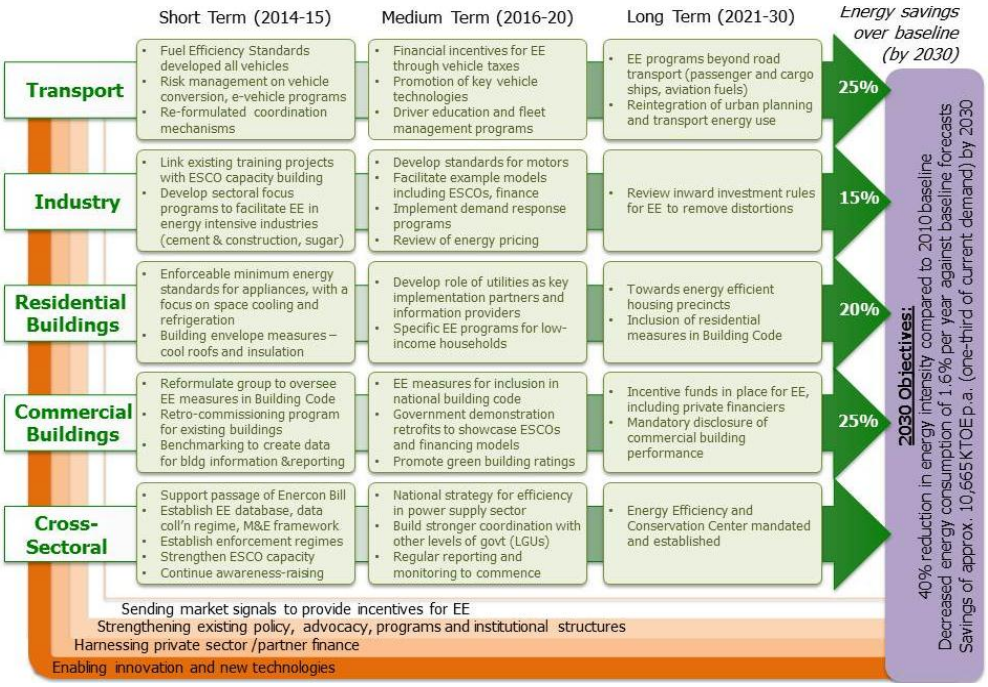
[4] Fuel oil with the highest grade (No. 6) and heating value (151,300++ Btu/US gallon)

The improvement of the EE&C Roadmap is needed to enhance the implementation of the NEECP and will provide more sustainable and long-term policy directions on energy efficiency and conservation for the Philippine Government.

SECOND PEER REVIEW ON ENERGY EFFICIENCY IN THE PHILIPPINES

As a follow-up to the Peer Review on Energy Efficiency (PREE) held in the Philippines in February 2012, another PREE activity was hosted by the DOE in coordination with the Asia Pacific Energy Research Center (APERC) on 15-19 September 2014 at F1 Hotel in Bonifacio Global City, Taguig City.

The Energy Efficiency Roadmap for the Philippines



DOE partnered with the European Union through its SWITCH Policy Support Program to revise said Roadmap. Among its salient features, the new Roadmap is focused on stakeholders' consultation and implementing energy efficiency and conservation in identified target sectors such as transport, industrial, residential, and commercial.

After several revisions and consultations with experts from concerned sectors, the final version of the Roadmap was approved by Secretary C. J. Petilla on 21 July 2014.

The five-day visit centered on information sharing on energy efficiency performance and policies among member economies, providing opportunities for learning from other member economies, exploring how energy efficiency overall/sectoral goals and action plans could be effectively formulated, monitoring progress toward attaining energy efficiency goals, and providing recommendations for voluntary implementation. This time, the PREE was focused on energy sectors such as commercial, glass, sugar, and cement.

During the activity, DOE officials informed APERC delegates and Peer Review Team of the country's energy situation as well as its ongoing EE&C projects and activities. Best practices in the focused sectors were also presented. Plant visits were also held in these focus sectors. Recommendations from the review team were noted for future improvements of the country's EE&C strategy.

Director Patrick T. Aquino of the Energy Utilization and Management Bureau (left) presented the country's Energy Efficiency and Conservation Program during the Peer Review on Energy Efficiency conducted in September 2014 in Taguig City while Mr. Ramon Rufino of the Net Property presented the BERDE Green Building Rating System.

II ENERGY ACCESS EXPANDED

With the approval of the Household Electrification Development Plan (HEDP) 2013-2017 which outlines the policies and strategies for achieving the 90.0 percent household electrification by 2017, the country has witnessed increased household electrification level from 79.12 percent in 2013 to 80.9 percent in December 2014 with total households now enjoying the benefits of electricity growing to 17,657,971 in 2014. With the mandate of reaching 90.0 percent household electrification by 2017, the Department seeks to increase total number of energized households to 20,801,839.

Meanwhile, NEA's Sitio Electrification Program (SEP) aims to energize 32,441 sitios throughout the country. As of December 2014, a total of 20,513 sitios are already with electricity access translating to a 63.2 percent accomplishment in the SEP Roadmap. Likewise, NEA achieved the 10 millionth household connections in the countryside in 2013 through its 119 ECs. And as of December 2014, about 483,276 new connections were implemented by ECs in the province.

Last year, the Department conducted IEC campaign activities as well as planning workshops on the HEDP 2014-2017. The activity was conducted in Palawan, Cebu, Davao City, Baguio City and Naga City and had the objective of assisting the DOE in firming up the household electrification plans of various DUs. It also had the intent of identifying and assessing potential barriers and issues in the accelerated implementation of household electrification. Moreover, the outputs in these activities served as inputs to the on-going preparation of a Detailed Execution Plan for the government's household electrification program.

Relatedly, the Household Unified Strategic Electrification (HOUSE) Team composed of DOE, NEA, NPC, DBM and DILG had its kick-off meeting on 19 November 2014. The HOUSE Team will oversee the implementation of HEDP onwards to 2017 goal of achieving 90.0 household electrification by 2017.

III GOOD GOVERNANCE ACHIEVED

- **Investment Promotion**

Along the platforms of good governance espoused by the Aquino Government, the Department carried out programs to promote the welfare of its stakeholders, improve transparency of energy information, as well as promote ease of doing business in the sector. One way of ensuring this is by constantly improving the Department's various websites, such as kuryente.org.ph, wattmatters.org.ph and langis.org.ph.

The DOE through its Investment Promotion Office (IPO) successfully conducted the Inter-Agency Meetings among focal persons from government agencies involved in the approval of energy projects. In addition, energy investment fora and Briefings both in regional and national levels were conducted in 2014.Equally important were the Department's relentless efforts in providing assistance to investors in addressing their specific concerns and providing the necessary information within the Department and with other agencies as well.

The Inter-Agency Meeting was conducted mainly to solicit updates in the Energy Investors' Guidebook which will be published for dissemination and address the concerns by investors in the implementation of their respective energy projects.

An Energy Investment Briefing was conducted in General Santos City, Iloilo City and Tagaytay City on 13 May, 28 May, and 10 June, respectively. The activity was attended by representatives from the Local Government Units particularly the Local Economic Investment and Promotion Officer (LEIPO), electric cooperatives and existing and prospective project proponents. They were provided with information on the requirements and procedures involved in the implementation of energy projects, as well as the benefits of a community in hosting an energy project.

On 31 July 2014, a Visayas Energy Investment Forum took place in Cebu at the Parklane International Hotel. This activity gathered the participation of project developers, electric cooperatives, local government units, banking and other financial institutions, distribution utilities, and other power generation companies. The Forum provided updates on the Visayas Power Outlook including investment opportunities, Overview of the Philippine Electricity Market, Energy Regulatory Framework, Financing Facilities available for energy projects, and the Experience of San Carlos Solar Energy, Inc. in the development and implementation of its solar energy project.

In Davao City, the Mindanao Energy Investment Forum was conducted on 16 October 2014 at the Grand Regal Hotel. More than a hundred stakeholders attended this annual regional investment gathering composed of delegates from the chamber of commerce and industry, power companies, distribution

utilities, banking and financial institutions, local government units, project developers and other private organizations. The activity provided updates on the Investment Opportunities in the Energy Sector, NWRB's Water Permit Procedures, Mindanao Development Authority's Web-based One-stop Processing and Facilitation Center for Renewable Energy Projects, Banco de Oro's Financing Program for Energy Projects, and Aboitiz Power Corporation's experience in the development and implementation of their energy project in Mindanao.

The regular and sustained conduct of Energy Investment Forum and Briefing in Luzon, Visayas and Mindanao has opened more windows of opportunities for investors and stakeholders in the energy sector today, thus, ensuring a level playing field and a conducive environment for them.

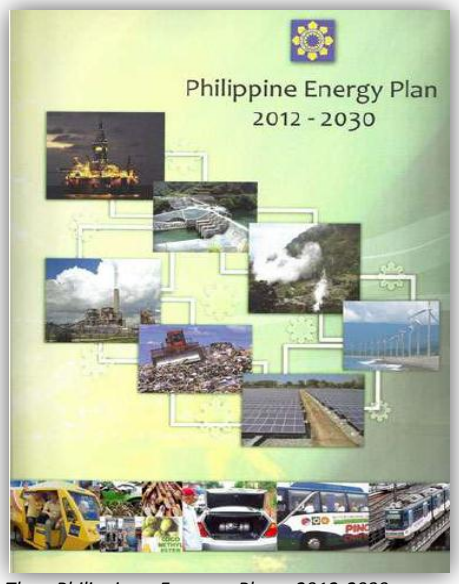
With the existing activities and programs, as well as the 145 requests of clients both from the external and internal clients which were satisfactorily served, the IPO has further strengthened partnership and networking among different partners and stakeholders.

Energy Investment Fora were conducted in various locations nationwide.

- **Responsive Regional Energy Plans (REPs)**

The Department also recognizes the need for regional planning to explore potential energy sources and promote regional energy security across the country. The formulation of REPs aims to define the clustered regions' potential energy sources that can be harnessed to address specific area-based energy issues and concerns. Said plans will also facilitate the execution of the programs and projects cited in the recently published **Philippine Energy Plan (PEP) 2012-2013**.

Currently, the DOE has completed the **Mindanao Energy Plan (MEP)** to address the looming power supply crisis facing the Mindanao region. The MEP has identified key strategies and considered all available options to ensure an adequate energy



The Philippine Energy Plan 2012-2030 was published in 2014 and copies are already available at the Department of Energy

DOE Undersecretary Raul B. Aguilos presented the Mindanao Energy Plan during the public consultation/IEC campaign in Butuan City.

supply in the region. Series of public consultations/IEC campaigns were conducted in Cagayan de Oro, Davao, Butuan, Zamboanga and General Santos in 2014 to inform the stakeholders of the Government's policy thrusts, plans and programs to address pertinent issues and energy challenges in the region.

Apart from the MEP, the DOE has commenced activities in the development of the **Visayas Energy Plan (VEP)**. A *Visayas Energy Forum* was conducted on 26-27 June 2014 in Malay, Aklan, which is a joint undertaking between the DOE and the DILG to enjoin the local government and all concerned stakeholders and initiate a dialogue on the concept of formulating a Visayas-wide Energy Development Plan. The two-day forum was attended by around 300 key players in the industry including distribution utilities, electric cooperatives, power generators, legislators, local government units as well as representatives from the local government and DOE attached agencies. The forum was a start of a series of consultative meetings among stakeholders in the region.

Bringing energy planning process down to the local level, the Department also embarked on a multi-sectoral participative local power development planning which main objective is to attain adequate, reliable and affordable power supply for provinces under off-grid areas. Such effort is in collaboration with LGUs, ECs, Business Sector stakeholders, NGOs and Academe which established a *"Joint Energy Development Advisory Group"* (JEDAG) being co-chaired by the DOE. Presently, three (3) local power development plans are being formulated:

- **Palawan Island Power Development Plan (PIPDP)**

The PIPDP outlines the province's response to the power supply requirements for the next 20 years. As one of its major activities, the first Palawan Power Summit was conducted in January 2014 which paved the way for the adoption of joint executive orders (EOs) of Palawan Province Governor and Puerto Princesa City Mayor creating the said JEDAG. Also, in order to empower the competence of the local energy planning group, the DOE facilitated a series of capacity building workshops which were conducted from January to September of 2014. Consequently, in December 2014, the first draft of PIPDP was completed.

DOE Secretary Carlos Jericho L Petilla presented the draft Palawan Island Power Development Plan during the Palawan Power Summit held in January 2014.

- **Mindoro Island Power Development Plan (MIPDP)**

MIPDP is another local power development plan formulated to respond to the current and future power supply requirements of the major islands in Mindoro. The plan formulation was highlighted with the conduct of the first "*Power 101 Workshop"* in the province in August 2014. This was followed by a meeting on "*Plan Framework Setting"* as well as initial training on *"Power Development Planning*" in September 2014 in order to set direction for the local energy planning group of the province. To date, a series of capacity building workshops are being held to uplift the technical competency of the local energy planning group of Mindoro with regards to energy planning.

- **Bohol Island Power Development Plan (BIPDP)**

The BIPDP on the other hand, was initiated by the Provincial Government of Bohol to address the power shortage brought about by calamities (earthquake and Typhoon Yolanda) that affected the province in 2013 and 2014. The plan is guided with four (4) objectives – *security of supply (available when needed), reliability, resiliency and affordability (least-cost)*.

Series of Power Supply Planning Workshops were conducted in 2014 for the Technical Working Group (TWG) of the Bohol Energy Development Advisory Group (BEDAG) which the DOE co-chairs. Subsequently, on 10 October 2014, the final BIPDP was presented by the BEDAG-TWG during the Provincial Development Council (PDC) – Executive Committee (ExCom) Meeting. To fully realize the BIPDP, the next steps to be undertaken by the BEDAG include development of guidelines (i.e. project implementation and monitoring), aggregation of distribution utilities (DUs) and power supply contracting, local resource assessment, completion of the development and distribution plan (DDP), transmission development plan (TDP), process institutionalization (i.e. integration of BIPDP into the Philippine Energy Plan) and IEC campaigns.

- **Focused Group Discussions (FGDs) on Energy Plans**

As part of the government thrust of having a dynamic and robust energy sector, in April 2014, the Department conducted a series of FGDs among energy stakeholders to draw out views and opinions on issues and challenges confronting the energy sector. Representatives from NGAs and LGUs, Academe, NGOs, Development partners and energy industry players participated in the said FGDs. Results were then presented during the conduct of Performance Planning and Review Conference in July 2014 at F1 Hotel, Bonifacio Global City. Said conference also served as a venue to firm-up the implementation and monitoring mechanism of the energy sectoral targets for the remaining years of the present administration.

- **Task Force to Reduce Electricity Prices**

The Task Force (TF) to Study Ways to Reduce the Price of Electricity was created with the issuance of Department Order No. 2014-05-0009 which aimed to gather proposals and ideas from relevant industry players and stakeholders, government and non-government organization, and academic institution on possible ways and solutions to reduce the soaring electricity prices in the country. The inaugural meeting of the TF members was chaired by Secretary Carlos Jericho L. Petilla on 18 June 2014 to set the goals and direction of the TF as well as to ensure the wholeness of the TF member's participation and regularity of its would be activities. The chairmanship of the TF was eventually turned to the Philippine

Institute for Development Studies (PIDS) with President Gilberto M. Llanto as permanent member and Dr. Adoracion Navarro as alternate member.

Series of meetings among the TF members was subsequently conducted, which involved proposal's presentations, open forum, and discussions on the reliability of the proposed issues to tackle the ways to reduce the electricity rate in viable manner. Among the recommendations identified are as follows:

1. Streamline the approval processes for new generating plants and address permitting issues and other bureaucratic impediments
2. Fast-track the tender of banked gas
3. Auction long-term power supply agreements (PSAs)
4. Pursue long-term contracting of ancillary services including prospective plants
5. Upgrade or add transmission lines in the areas affected by the NGCP's N-1 contingency requirement and congestion
6. Strictly enforce RA 7832 (the law on system losses) and aim for a long-term goal of single-digit losses

Inaugural Meeting of the Task Force held on 18 June 2014 at Discovery Suite in Ortigas, Pasig City

A total of six (6) consultative meetings were conducted prior to the official Hand-over Ceremony of the Task Force Final Report to DOE on 02 December 2014. The Final Report is currently being reviewed by the TF Technical Secretariat.

- **Fuel Policy Mix**

The DOE is currently formulating the fuel mix policy for power generation. It involves determining the reliable long-term power generation mix model that can be used as a framework or guide to influence the development of the power sector towards sustainable manner of achieving stable, secure, and sufficient power supply.

In adopting a fuel mix policy, the simulation of long-term power outlook should be addressed by laying down the different scenarios. It should contain a *Reference Scenario* that indicates the most likely situation of the power sector in the future based on the feasible programs and projects of the sector. It should also contain other scenarios that may indicate interference of policy constraints from the government to curb the power mix to a certain trend based on the policy goals of the energy sector. These scenarios are options that could serve as a guide to the decision makers on what ideal fuel mix the country should adopt based on the sector's priority goal.

The DOE prepared the fuel mix policy model with the assistance of the Japan International Cooperation Agency (JICA) in August 2014. The results of the model comprised of the *Reference Scenario* and *Clean Energy Scenario* (RE30NG30; 30.0 percent Renewable Energy and 30.0 percent Natural Gas) was

presented to the Secretary for approval. After which, an FGD on the proposed fuel mix policy was held on 09 September 2014 at the DOE-Audio Visual Room. It aimed to present and discuss the initial results of simulations for the proposed fuel mix policy as directed by the Secretary to the invited experts to be able to gather comments, suggestions, and recommendations, for the validity and consistency of the model framework in pursuing the fuel mix policy in the Philippines. Currently, the DOE is still in the process of completing the fuel mix policy report.

- **Inter-agency on APEC**

In preparation to the Department's hosting of the 12th Meeting of the APEC Energy Ministers' Meeting (EMM12) to be held in October 2015, an inter-agency technical fora was created to undertake the substantive and administrative preparations that will ensure successful outcomes of the meeting. To gather wide range and broad based support and cooperation of the energy stakeholders, various consultations were held to determine national energy priorities that can be elevated at the level of APEC.

Three (3) workshops were organized in 2014 to discuss the proposed EMM12 theme *"Towards an Energy Resilient APEC Community".* There are four (4) sub-themes that will support the main theme, to wit:

- Climate-Proofing Energy Infrastructures
- Cutting Edge Energy Efficiency Technologies
- Community-Based Energy in "Energy-Poverty-Stricken" Areas
- Energy Trade and Investment through Energy Market Integration

The B-LEADERS USAID project is providing technical assistance to DOE in all of these outcomes.