

PRIVATE SECTOR INITIATED POWER PROJECTS (LUZON)

COMMITTED

As of 31 December 2016

Committed/ Indicative	Name of the Project	Project Proponent	Location	Rated Capacity (MW)	Project Status	Target Testing & Commissioning	Target Commercial Operation
	COAL			2720			
Committed	Limay Power Plant Project Phase I	SMC Consolidated Power Corporation	Brgy. Lamao, Limay, Bataan	300	<p>FEASIBILITY STUDY: Completed;</p> <p>'ARRANGEMENT FOR SECURING THE REQUIRED LAND: Completed;</p> <p>MARKETING OF GENERATING CAPACITIES:</p> <ul style="list-style-type: none"> On-going electric power supply contract negotiation with prospective off-takers (DUs); For Unit 1 - ISECO-10MW, TARELCO I-10MW, TARELCO II-15MW, PENELCO-10MW, REAL STEEL-7MW, SMC (Various Facilities)-60.3MW; For Unit 2 – PENELCO-10MW, OCEANA GOLD-12.5MW, REAL STEEL-17MW, SMC (Various Facilities)-37.1MW; 188.9 TOTAL <p>PERMITS AND OTHER REGULATORY REQUIREMENTS:</p> <ul style="list-style-type: none"> Environmental Impact Assessment completed; Topographic and Hydrographic completed; Soil Investigation completed; GIS/SIS submitted last 12 July 2013, under review of NGCP; Facility Study already sent to NGCP for review; EPC was executed in January 2013; awarded; ECC was issued on 17 September 2013; SEC issued last 19 August 2011 Clearance to Undertake GIS from DOE issued on 13 February 2013; Addendum for the re run of SIS was submitted to NGCP last Jan 30, 2015 for review; <p>GROUND BREAKING SCHEDULES:</p> <ul style="list-style-type: none"> Groundbreaking was held September 2014; <p>FINANCING ARRANGEMENTS:</p> <ul style="list-style-type: none"> Financial Arrangement Secured (65% Loan / 35% Equity); Project cost is \$622.15M / Php25.508B <p>CONSTRUCTION CONTRACTS FOR PLANTS AND EQUIPMENT:</p> <ul style="list-style-type: none"> Construction of the Project has been underway since January 2014; Construction Activities of Unit 1&2 x 150MW Power Plant - 2.30%; Design and Construction of Pier and Jetty Structure is 99.55%; <ul style="list-style-type: none"> Overall Piling Works is 52.29%; Turbine and Generator Building is 58.47%; Ash Dump Design and Construction - 100%; <p>COMMENCEMENT OF CONSTRUCTION:</p> <ul style="list-style-type: none"> March 2014; 	Unit 1 - 150 MW - November 2016 (Ongoing Testing and Commissioning) Unit 2 - 150 MW - April 2017	Unit 1 - 150 MW - January 2017 Unit 2 - 150 MW - July 2017
Committed	Pagbilao Coal-Fired Thermal Power Plant	Pagbilao Energy Corporation	Pagbilao Power Station, Nrgy. Ibabang Polo, Pagbilao, Quezon	420	<p>FEASIBILITY STUDY:</p> <ul style="list-style-type: none"> Feasibility Study completed; Estimated Net Capacity: 400MW <p>ARRANGEMENT FOR SECURING THE REQUIRED LAND: Completed;</p> <p>MARKETING OF GENERATING CAPACITIES:</p> <ul style="list-style-type: none"> Contract with off-takers completed, Supply agreement executed; 50% of the plant's capability will be sold to Therma Luzon Inc. 50% will be sold to TeAM (Phils.) Energy Corporation; <p>PERMITS AND OTHER REGULATORY REQUIREMENTS:</p> <ul style="list-style-type: none"> Environmental Compliance Certificate was issued on 18 June 2013; Secured endorsement from Sangguniang Barangay of Ibabang Polo, Sangguniang Bayan of Pagbilao, Sangguniang Panlalawigan of Quezon; ECC issued on 18 June 2013 In final negotiations with NPC, PSALM, TeAM Energy Corporation and Therma Luzon, Inc. to co-locate the plant in the existing Pagbilao Power Station; <p>GROUND BREAKING SCHEDULES:</p> <ul style="list-style-type: none"> 23 July 2014 <p>FINANCING ARRANGEMENTS:</p> <ul style="list-style-type: none"> Financial Arrangement Secured with various lenders on 30 July 2014; On-going draw downs for planned milestones and progress payments; Estimated Project Cost: US\$ 1,000,000,000.00 <p>CONSTRUCTION CONTRACTS FOR PLANTS AND EQUIPMENT:</p> <ul style="list-style-type: none"> Construction Contracts for Plant & Equipment: Completed and executed; Notice to Proceed and Commencement Notice issued to EPC Contractor; Down Payment already released to EPC contractor; Commencement of EPC and Construction: May 2014; Approximately 71% completed as of February 2016; 84.32% completion as of 25 July 2016 86.49% completion as of 26 August 2016 	Between May to November 2017	November 2017

Committed	San Buenaventura Power Ltd. Co. (SBPL) Project	San Buenaventura Power Ltd. Co. (SBPL)	Barangay Cagsiay 1, Mauban, Quezon	500	<p>FEASIBILITY STUDY: Completed</p> <ul style="list-style-type: none"> Completed Selection Study in 2012; Technology selection study completed 2012 <ul style="list-style-type: none"> Coal Sourcing Study completed in 2012 Facility Study to be done in 2014; System Impact Study completed 2007 and revalidated 2013 <p>ARRANGEMENT FOR SECURING THE REQUIRED LAND:</p> <ul style="list-style-type: none"> Project will be located within the existing site <p>MARKETING OF GENERATING CAPACITIES:</p> <ul style="list-style-type: none"> 20 years + 5-year extension PSA with MERALCO as offtaker; Awaiting for the ERC approval of their PSA with MERALCO; SBPL has signed a PSA with Meralco on 29 May 2014; PSA approved by ERC on March 27, 2015 and released May 19, 2015 <p>PERMITS AND OTHER REGULATORY REQUIREMENTS:</p> <ul style="list-style-type: none"> Clearance to Undertake GIS from DOE issued on 7 March 2013; System Impact Study completed in 2007 and is being revalidated in 2013; <ul style="list-style-type: none"> ECC (Ref.Code 0610-012-4021) issued on 4 June 2007; ECC extension of validity issued on 31 May 2012 and valid until 4 June 2015; ECC for SBPL issued on 11 November 2014 Request for Amendment to upgraded technology submitted to EMB on 17 February 2014 <ul style="list-style-type: none"> Request to assign the ECC for new project was requested on 2 June 2014; Additional information requested by EMB on 7 August 2014; QPL is in the process of preparing the documents; <ul style="list-style-type: none"> Secured Sanggunian Bayan Resolution No. 2014-269 endorsing the project to expand; SIS completed in 2007 and is being revalidated; Municipal LGU endorsement issued April 19, 2005; <ul style="list-style-type: none"> Certificate of Non-Overlap was issued by the NCIP to Quezon Power on 5 February 2014; Request to assign the CNO was endorsed by the DOE and submitted to the NCIP on 15 July 2014; Certificate of Non-overlap issued on 29 August 2014 ERC application was filed on 2 June 2014; Financing arrangements is expected to be secured only after the ERC issues the final approval; BOI Certificate of Registration issued on 15 October 2015 <p>FINANCING ARRANGEMENTS:</p> <ul style="list-style-type: none"> Financing arrangements is expected to be secured only after the ERC issues the final approval; Financially closed December 1, 2015 <ul style="list-style-type: none"> Project cost is Php37.8B <p>GROUND BREAKING SCHEDULES:</p> <ul style="list-style-type: none"> December 10, 2015 <p>CONSTRUCTION CONTRACTS FOR PLANTS AND EQUIPMENT:</p> <ul style="list-style-type: none"> Owner's Engineer selected; EPIC bids received in November 2013 <ul style="list-style-type: none"> EPC Contract signed October 2014; <p>COMMENCEMENT OF CONSTRUCTION:</p> <ul style="list-style-type: none"> Award EPC contract estimate September 2013; <ul style="list-style-type: none"> End of 2014 Expect to commence construction only after the ERC issues the final approval <ul style="list-style-type: none"> 4 years to fully complete the construction of the plant; 	December 2018	December 2019
Committed	Masinloc Expansion Project	AES Masinloc Power Partners Co., Inc.	Zambales	300	<p>FEASIBILITY STUDY:</p> <ul style="list-style-type: none"> Completed February 2011 <p>ARRANGEMENT FOR SECURING THE REQUIRED LAND:</p> <ul style="list-style-type: none"> No additional land will be acquired as the expansion will be inside the existing Masinloc Power Plant Complex. NPC/PSALM, however, is still continuing the titling process and land registration for some parcels of land <p>PERMITS AND OTHER REGULATORY REQUIREMENTS:</p> <ul style="list-style-type: none"> Grid Impact Studies obtained on 7 January 2011 ECC Amendment was released by DENR on April 23, 2012 The amended DOE Certificate of Endorsement for BOI was released on May 7, 2012 <ul style="list-style-type: none"> Secured CoE for ERC on September 2011 On-going processing of Certificate of Precondition from NCIP <ul style="list-style-type: none"> SAPA amendment is still pending with DENR <p>FINANCING ARRANGEMENTS:</p> <ul style="list-style-type: none"> Provided bank certification for financial closing status to DOE dated 24 August 2016; <ul style="list-style-type: none"> Project cost is Php49.45B <p>CONSTRUCTION CONTRACTS FOR PLANTS AND EQUIPMENT:</p> <ul style="list-style-type: none"> Selection of EPC Contractor on going <p>COMMENCEMENT OF CONSTRUCTION:</p> <ul style="list-style-type: none"> 2nd Qtr 2014 	Unit 3 - September 2019	December 2019 (Target Testing and Commissioning)

Committed	GNPower Dinginin 2 x 660 MW Supercritical Coal-Fired Power Plant	GNPower Dinginin Coal Plant Ltd. Co.	Mariveles, Bataan	1200	<p>PERMITS AND OTHER REGULATORY REQUIREMENTS:</p> <ul style="list-style-type: none"> On-going presentation/proposal submissions to potential customers Clearance to Undertake GIS from DOE issued on 26 June 2011; Obtained LGU endorsements; BOI registration for 600 MW pre-approve <ul style="list-style-type: none"> On-going SI; On-going EIS for ECC application On-going securing DOE of Endorsement for DENR-ECC Arrangements for securing the required land will be acquired by an affiliate Filipino company of GNPower; On-going negotiation with tenders <p>FINANCING ARRANGEMENTS:</p> <ul style="list-style-type: none"> Project cost is \$1B Provided bank certification which was received by DOE-EPIMB-PPDD on 18 March 2016 With Financial Closing, agreed by GNPD and banks/financial institutions on 17 December 2015 <p>CONSTRUCTION CONTRACTS FOR PLANTS AND EQUIPMENT:</p> <ul style="list-style-type: none"> On-going finalization of EPC Contract EPC Contract was signed on Oct 27, 2015 	Unit I - Oct 2018 Unit II - 2019	Unit I - March 2019 Unit II - January 2020
Committed	NATURAL GAS			650	<p>FEASIBILITY STUDY:</p> <ul style="list-style-type: none"> Completed <p>ARRANGEMENT FOR SECURING THE REQUIRED LAND:</p> <ul style="list-style-type: none"> Land is already secured with a long lease entered into since 2007 <p>MARKETING OF GENERATING CAPACITIES:</p> <ul style="list-style-type: none"> No specific off taker yet but already have a discussion with Federation of Philippine Industries, intended to supply power into the Wholesale Electricity Spot Market but is also open to discussing potential off take arrangements as well <ul style="list-style-type: none"> 100% WESM <p>PERMITS AND OTHER REGULATORY REQUIREMENTS:</p> <ul style="list-style-type: none"> GIS for 300MW issued by NGCP on 8 August 2013 and revised on 3 July 2013 for 600MW <ul style="list-style-type: none"> Issued DOE Endorsement for Revised Capacity on 3 July 2013; Revised DOE clearance for GIS submitted to NGCP on January 2014 GIS from NGCP for the 600MW was released on August 2014; Several Resolutions has been issued on May 2014 (Sangguniang Barangay Resolution, Sangguniang Bayan Resolution and Sangguniang Panlalawigan Resolution) interposing no objection for the construction of a 600 MW Liquefied Natural Gas (LNG) Power Plant; <ul style="list-style-type: none"> On-going processing of ECC for power plant <p>FINANCING ARRANGEMENTS:</p> <ul style="list-style-type: none"> Financial Arrangement Secured <ul style="list-style-type: none"> Syndicated Loan Project Cost:\$300M Signing of loan agreement last 18 Sep 2015 <p>CONSTRUCTION CONTRACTS FOR PLANTS AND EQUIPMENT:</p> <ul style="list-style-type: none"> Entered into a Sale and Purchase Agreement last October 2012 with Siemens Energy for two 200 MW gas turbines and the first 200MW turbine is expected to arrive by September 2014; LNG Tank is currently at 50% construction completed as of August 2014; <p>COMMENCEMENT OF CONSTRUCTION:</p> <ul style="list-style-type: none"> December 2013 Completed 	U1 - Jun 2017 U2 - Sep 2017 U3 - Dec 2017	U1 - Jun 2017 U2 - Sep 2017 U3 - Dec 2017 (Target Testing and Commissioning)
Committed	Pagbilao Combined Cycle Gas Fired Power Plant Proposed 3x200 MW CCGT Power Plant	Energy World Corporation	Brgy. Ibabang Polo, Grande Island, Pagbilao, Quezon	650			
Committed	HYDROPOWER			62.5			
Committed	Kapangan	Cordillera Hydro Electric Power Corporation	Kapangan & Kibungan, Benguet	60	<p>PERMITS AND OTHER REGULATORY REQUIREMENTS:</p> <ul style="list-style-type: none"> Issued Confirmation of Commerciality on 13 February 2014 <p>COMMENCEMENT OF CONSTRUCTION:</p> <ul style="list-style-type: none"> On-going civil works of hydro facilities 	February 2019	February 2019
Committed	Prismc	PNOC-Renewables Corporation	Rizal, Nueva Ecija	1	<p>GROUND BREAKING SCHEDULES:</p> <ul style="list-style-type: none"> Ground breaking held on 11 July 2014; Confirmed DOC on 4 September 2014; Rehabilitation <p>CONSTRUCTION CONTRACTS FOR PLANTS AND EQUIPMENT:</p> <ul style="list-style-type: none"> On-going construction activities 	September 2019	September 2019
Committed	Tubao	Tubao Mini-Hydro Electric Corporation	Tubao, La Union	1.5	<p>PERMITS AND OTHER REGULATORY REQUIREMENTS:</p> <ul style="list-style-type: none"> Issued Confirmation of Commerciality on 19 March 2015 <p>GROUND BREAKING SCHEDULES:</p> <ul style="list-style-type: none"> Ground breaking held on 8 November 2014 <p>CONSTRUCTION CONTRACTS FOR PLANTS AND EQUIPMENT:</p> <ul style="list-style-type: none"> Pending submission of requirements for construction 	March 2020	March 2020
	SOLAR			29,515			

Committed	Bataan Solar Power Project	Next Generation Power Technology Corp. (NGPT)	Brgy. Alas-asin, Mariveles, Bataan	18	<p>PERMITS AND OTHER REGULATORY REQUIREMENTS:</p> <ul style="list-style-type: none"> Awarded with RE Service Contract (SESC No. 2014-04-076) on 12 May 2014 Certificate of Commerciality No. SCC- 2016-03-048 dated 11 March 2016 	March 2016 (On-going Testing and Commissioning)	January 2017
Committed	CW Home Depot Solar Power Project	CW Marketing & Development Corp. (CW)	CW Home Depot, Brgy. Pulong, Sta. Rosa City, Laguna	1.675	<p>PERMITS AND OTHER REGULATORY REQUIREMENTS:</p> <ul style="list-style-type: none"> Awarded with RE Service Contract (SESC No. 2016-02-228) on 07 Mar 2016 Certificate of Commerciality No. SCC- 2016-03-054 dated 31 March 2016 	September 2016 (On-going Testing and Commissioning)	January 2017
Committed	San Rafael Solar Power Plant	SPARC Solar Powered Agri-Rural Communities Corporation	San Rafael, Bulacan	3.82	<p>PERMITS AND OTHER REGULATORY REQUIREMENTS:</p> <ul style="list-style-type: none"> Awarded with Solar Energy Service Contract (SESC No. 2012-03-012) on 03 May 2012 Certificate of Commerciality No. SCC- 2015-10-035 dated 10 November 2015 <p>CONSTRUCTION CONTRACTS FOR PLANTS AND EQUIPMENT:</p> <p>On-going construction (see FIT Monitoring Board)</p>	July 2016 (On-going Testing and Commissioning)	January 2017
Committed	Morong Solar Power Plant	SPARC Solar Power Agri-Rural Communities	Morong, Bataan	5.02	<p>PERMITS AND OTHER REGULATORY REQUIREMENTS:</p> <ul style="list-style-type: none"> Awarded with Solar Energy Service Contract (SESC No. 2012-03-012) on 03 May 2012 Certificate of Commerciality No. SCC- 2015-10-037 dated 10 November 2015 <p>CONSTRUCTION CONTRACTS FOR PLANTS AND EQUIPMENT:</p> <p>On-going construction (see FIT Monitoring Board)</p>	June 2016 (On-going Testing and Commissioning)	January 2017
Committed	Sarrat Solar Power Project	Bosung Solartec, Inc. (BOSUNG)	Brgy. Z1 San Marcos, Sarrat, Ilocos Norte	1	<p>PERMITS AND OTHER REGULATORY REQUIREMENTS:</p> <ul style="list-style-type: none"> Awarded with RE Service Contract (SESC No. 2016-02-276) on 19 Feb 2016 Certificate of Commerciality No. SCC- 2016-03-052 dated 22 March 2016 	January 2017	January 2017 (Target Testing and Commissioning)
WIND				0			
GEOHERMAL				43			
Committed	Maibarara 2 Geothermal Project	Maibarara Geothermal Inc.	Batangas	12	<p>FEASIBILITY STUDY: On-going</p> <p>MARKETING OF GENERATING CAPACITIES:</p> <ul style="list-style-type: none"> The off-taker for generated power is still under negotiation <p>PERMITS AND OTHER REGULATORY REQUIREMENTS:</p> <ul style="list-style-type: none"> Project is within the existing DOE Service Contract within GRESC # 2010-02-012 <ul style="list-style-type: none"> LGU endorsement Land Use permits DENR-ECC and water rights obtained Secured Certificate of Non-overlap from NCIP regional Office IV Confirmation of Commerciality obtained from DOE on 21 September 2015; <p>FINANCING ARRANGEMENTS:</p> <ul style="list-style-type: none"> Project cost estimated Php 1,848.30 Million 	August 2017	August 2017
Committed	Bacman 3 (Tanawon) Geothermal Project	Energy Development Corporation	Guinlajan, Sorsogon	31	<p>PERMITS AND OTHER REGULATORY REQUIREMENTS:</p> <ul style="list-style-type: none"> DOE Service Contract within GRESC # 2009-10-003; <ul style="list-style-type: none"> LGU endorsement Land Use Permits, DENR-ECC Water Rights obtained; Turnkey Contract pending result of feasibility study under negotiation; Submitted Declaration of Commerciality (DOC) on 17 June 2014, evaluation by DOE of the DOC is still on-going; <p>FINANCING ARRANGEMENTS:</p> <ul style="list-style-type: none"> Project to be finance by EDC; Project cost estimated \$140M-180M 	December 2018	December 2018 (Target Testing and Commissioning)
BIOMASS				22.9			

Committed	ACNPC WTE Biomass Power Plant Project	Asian Carbon Neutral Power Corporation	Tarlac	1.5	<p>FINANCING ARRANGEMENTS: Closed</p> <p>CONSTRUCTION:</p> <ul style="list-style-type: none"> On-going construction 	Phase 1 - January 2017 Phase 2 - TBD	Phase 1 - January 2017 (Target Testing and Commissioning) Phase 2 - TBD
Committed	Bicol Biomass Energy Corporation	Bicol Biomass Energy Corporation	Camarines Sur	4.5	<p>FINANCING ARRANGEMENTS: Closed</p> <p>CONSTRUCTION:</p> <ul style="list-style-type: none"> On-going construction 	January 2017	January 2017 (Target Testing and Commissioning)
Committed	AseaGas Biogas Power Plant Project	AseaGas Corporation	Batangas	6.1	<p>CONSTRUCTION:</p> <ul style="list-style-type: none"> On-going construction 	January 2017	January 2017 (Target Testing and Commissioning)
Committed	SJCI Power Rice Husk-Fired Biomass power Plant Project Phase 2	San Jose City I Power Corporation	Brgy. Tulat, San Jose, Nueva Ecija	10.8	<p>PERMITS AND OTHER REGULATORY REQUIREMENTS:</p> <ul style="list-style-type: none"> BREC No. 2011-01-013 ECC, LGU, Land Use Permit Secured Clearance from DOE for the conduct of GIS on 21 July 2011 Issued Certificate Confirmation of Commerciality on 2 Sept 2013 <p>GROUND BREAKING SCHEDULES:</p> <ul style="list-style-type: none"> Groundbreaking on 12 Oct 2013 <p>FINANCING ARRANGEMENTS:</p> <ul style="list-style-type: none"> Project Cost Php1.234B <p>CONSTRUCTION CONTRACTS FOR PLANTS AND EQUIPMENT:</p> <ul style="list-style-type: none"> EPC w/ Engcon of Singapore Pre-construction (100% completed as of 31 August 2014); Phase I - Estimated Accomplishment of Construction 98 % completed as of 31 August 2014) Remaining major equipment in-progress is the installation of travelling gate On-going installations of the feed water piping system, chemical dosing pipeline, three control elements of the boiler and other field instruments <ul style="list-style-type: none"> Expected arrival of switchyard is on May 2014 Interconnection (100% completed as of 31 August 2014) On-going construction as of 30 September 2014 Pre-Construction - 100%; Construction-98%; Interconnection-100% 	June 2017 (Subject to FIT)	July 2017 (Subject to FIT)
Battery				10			
Committed	AES Battery Storage - Masinloc Project	AES Philippines Power Partners Co., LTD.	Masinloc, Zambales	10	<p>PERMITS AND OTHER REGULATORY REQUIREMENTS:</p> <ul style="list-style-type: none"> Secured GIS on June 2, 2015; COE Issued 16 December 2015 (10MW BESS) Receipt of ECC dated 5 Oct 2016 Construction Substantial Completion (MPPCL) dated 11 May 2016 <ul style="list-style-type: none"> WESM Registration - 01 July 2016 Provisional Approval to Connect (NGCP) - 08 July 2016 Approval of NGCP-PGC Compliance Test Protocol for BESS (GMC) - 05 August 2016 PGC Compliance Testing and Commissioning, including NGCP witnessing of Factory Acceptance Testing (NGCP) - 22 September 2016 <ul style="list-style-type: none"> Receipt of signed Connection Agreement (NGCP) - 03 October 2016 Receipt of Signed Metering Services Agreement (NGCP) - 14 October 2016 <p>GROUND BREAKING SCHEDULES:</p> <ul style="list-style-type: none"> Ground breaking ceremony 15 December 2015 <p>CONSTRUCTION CONTRACTS FOR PLANTS AND EQUIPMENT:</p> <ul style="list-style-type: none"> Construction on going <p>COMMENCEMENT OF CONSTRUCTION:</p> <ul style="list-style-type: none"> Target Commencement of Construction: June 2016 	Jan 2017	Dec 2017

Total Committed Rated Capacity 3527.915

* Committed Project(s)

COAL		2720
DIESEL / OIL		-
NATURAL GAS		650
GEOTHERMAL		43
HYDROPOWER		62.5
SOLAR		29.515
WIND		0
BIOMASS		22.9
BESS		10
		3527.915

TRUE