

PRIVATE SECTOR INITIATED POWER PROJECTS (LUZON)

COMMITTED

As of 31 October 2018

Committed/ Indicative	Name of the Project	Project Proponent	Location	Rated Capacity (MW)	Project Status	Target Testing & Commissioning	Target Commercial Operation
	COAL			3950			
Committed	Limay Power Plant Project Phase II	SMC Consolidated Power Corporation	Brgy. Lamao, Limay, Bataan	150	<p>FEASIBILITY STUDY: Completed</p> <p>ARRANGEMENT FOR SECURING THE REQUIRED LAND:</p> <ul style="list-style-type: none"> Acquisition Completed <p>MARKETING OF GENERATING CAPACITIES:</p> <ul style="list-style-type: none"> On-going electric power supply contract negotiation with prospective off-takers (DUs) <p>PERMITS AND OTHER REGULATORY REQUIREMENTS:</p> <ul style="list-style-type: none"> Final review and drafting of ECC was done last 16 August 2013 and expected to receive by end of August 2013; Submitted System Impact Study last 12 July 2013, review of the report is still on-going; Requirements for BOI will be submitted once ECC is release; Expected submission on 1st week of September 2013; Agreement for the use of the land was entered between SMC Consolidated Power Corp and leasehold rights holder <ul style="list-style-type: none"> On-going securing of other permits and other regulatory requirements SEC issued last 19 August 2011; Site Development Target: <p>GROUND BREAKING SCHEDULES:</p> <ul style="list-style-type: none"> 3rd Week of September 2013 <p>FINANCING ARRANGEMENTS:</p> <ul style="list-style-type: none"> Securing project financing 70:30 Debt-equity ratio Project cost is Under Planning and Budget Review <p>CONSTRUCTION CONTRACTS FOR PLANTS AND EQUIPMENT:</p> <ul style="list-style-type: none"> Awarded EPC to Formosa Heavy Industries (FHI) <ul style="list-style-type: none"> Issued NTP on 1 August 2014 Completed and issued construction and supply contracts on EPC's inside batter limit (main equipment) Other main contracts for review and awarding (site development/land preparation, transmission connection, pier and jetty structure, fuel handling facilities and other ancillaries, ash pond construction and water supply) <ul style="list-style-type: none"> Handover of site for Unit 1 is 31 Oct. 2014; Handover of Site for Unit 2 is 28 February 2015; Target Date for Coal Yard for Phase 2 is 31 August 2015; Transmission Target: New extra high voltage TL and SS should be ready by November 2016; <p>COMMENCEMENT OF CONSTRUCTION:</p> <ul style="list-style-type: none"> Target commencement of construction- Site development/Land preparation: 2 September 2013 (upon release of ECC) Start of Piling and Construction: 15 October 2013 	Unit 4 - October 2018	Unit 4 - February 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 aquired 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; Project cost is Php49.45B <p>CONSTRUCTION CONTRACTS FOR PLANTS AND EQUIPMENT:</p> <ul style="list-style-type: none"> POSCO Engineering and Construction Co. Ltd, Korea (Offshore - Engineering Procurement); Ventanas Philippines Construction Inc. (Onshore Construction Main Contractor) <p>COMMENCEMENT OF CONSTRUCTION:</p> <ul style="list-style-type: none"> 2nd Qtr 2014 	Unit 3 - December 2018	March 2019 (Target Testing and Commissioning)

Committed	San Buenaventura Power Ltd. Co. (SBPL) Project	San Buenaventura Power Ltd. Co. (SBPL)	Barangay Cagsiay 1, Mauban, Quezon	500	<p style="text-align: center;">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 style="text-align: center;">ARRANGEMENT FOR SECURING THE REQUIRED LAND:</p> <ul style="list-style-type: none"> • Project will be located within the existing site <p style="text-align: center;">MARKETING OF GENERATING CAPACITIES:</p> <ul style="list-style-type: none"> • 20 years + 5-year extension PSA with Meralco as offtaker; • 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 style="text-align: center;">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 <ul style="list-style-type: none"> • Request for Amendment to upgraded technology submitted to EMB on 17 February 2014 • 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; <ul style="list-style-type: none"> • 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 style="text-align: center;">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 style="text-align: center;">GROUND BREAKING SCHEDULES:</p> <ul style="list-style-type: none"> • December 10, 2015 <p style="text-align: center;">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 style="text-align: center;">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; 	October 2018	December 2019
Committed	RPEI Coal-Fired Power Plant	Redondo Peninsula Energy, Inc.	Sitio Naglatore, Cawag, Subic Bay Freeport Zone	600	<p style="text-align: center;">FEASIBILITY STUDY: Completed</p> <p style="text-align: center;">ARRANGEMENT FOR SECURING THE REQUIRED LAND:</p> <ul style="list-style-type: none"> • Project Site is leased from the Subic Bay Metropolitan Authority <p style="text-align: center;">MARKETING OF GENERATING CAPACITIES:</p> <ul style="list-style-type: none"> • Started discussions with the Manila Electric Company for sale of power <ul style="list-style-type: none"> • 52% owned by Meralco PowerGen Corp. (MPGC) • Target signing RP Energy and Meralco PSA June 2015 <ul style="list-style-type: none"> • Filing of application for PSA with ERC June 2015 <p style="text-align: center;">PERMITS AND OTHER REGULATORY REQUIREMENTS:</p> <ul style="list-style-type: none"> • Amended ECC (3rd Amendment) secured last 15 November 2012 • The Connection Agreement has been executed last October 24, 2014. • Execution after completion of NGCP's review of the revised System Impact Study and Facilities Study prepared by RPE • NGCP's application to ERC for approval of Transmission Asset has been completed and is currently awaiting decision. <ul style="list-style-type: none"> • RPE's application to the ERC for the Connection Asset has been deemed sufficient in form and substance • Revised System Impact GIS review by NGCP completed 10 May 2012 	Unit I - October 2018 Unit II - December 2018 (Target Commencement of Construction will be Dependent on Supreme Court decision on Writ of Kalikasan Case.)	2019

					<ul style="list-style-type: none"> Any further development dependent on Supreme Court decision on Writ of Kalikasan case; <ul style="list-style-type: none"> Public consultations conducted in Subic on 29 June 2012 Site Preparation completed in 2013; Target Commencement of Construction will be Dependent on Supreme Court decision on Writ of Kalikasan Case <p>FINANCING ARRANGEMENTS:</p> <ul style="list-style-type: none"> Project cost Php50B / \$1.2B <p>CONSTRUCTION CONTRACTS FOR PLANTS AND EQUIPMENT:</p> <ul style="list-style-type: none"> Engineering, Procurement and Construction (EPC) contract negotiations finalized Site preparation construction on-going, construction commenced on Q3 2013 		
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 201; 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 <ul style="list-style-type: none"> FEASIBILITY STUDY <ul style="list-style-type: none"> Completed ARRANGEMENT OF SECURING REQUIRED LAND <ul style="list-style-type: none"> Secured rights over the project site MARKETING OF GENERATING CAPACITIES <ul style="list-style-type: none"> Signed Contracts with a group of electric cooperatives and retail electricity suppliers; On-going sales and marketing to electric cooperatives, private distribution utilities, RES and large end-users in the Luzon and Visayas Grid 	Unit I - Oct 2018 Unit II - Dec 2019	Unit I - March 2019 Unit II -January 2020
Committed	AOE Coal-Fired Power Plant	Atimonan One Energy	Atimonan, Quezon	1200	<p>FEASIBILITY STUDY:</p> <ul style="list-style-type: none"> Completed 21 January 2015 <p>ARRANGEMENT FOR SECURING THE REQUIRED LAND:</p> <ul style="list-style-type: none"> Acquisition of the parcels of the land in the target plant site in Atimonan, Quezon is on-going (expanding) <p>MARKETING OF GENERATING CAPACITIES:</p> <ul style="list-style-type: none"> Energy to be sold to DUs and electric cooperatives ERC Approval of PSA remains PENDING <p>PERMITS AND OTHER REGULATORY REQUIREMENTS:</p> <ul style="list-style-type: none"> On-going securing of ECC SEC already amended Clearance to Undertake GIS from DOE issued on June 2014 <ul style="list-style-type: none"> GIS on-going Ongoing discussion with LGU and there was no violent reaction from them on this proposed changes. <ul style="list-style-type: none"> EIS draft submitted to DENR in Nov. 2014 Foreshore Lease Application (FLA) submitted to DENR last March 2013 (currently on hold as the DENR does its internal organizational restructuring) Applied Certificate of Non-Overlap with National Commission on Indigenous Peoples (NCIP) <p>FINANCING ARRANGEMENTS:</p> <ul style="list-style-type: none"> Completed Paid Commitment Fee to the Senior Term Loan Lenders <p>CONSTRUCTION CONTRACTS FOR PLANTS AND EQUIPMENT:</p> <ul style="list-style-type: none"> Owner's Engineer has been appointed; EPC pre-qualification process on-going EPC Contract executed with NTP subject to ERC approval complete <p>COMMENCEMENT OF CONSTRUCTION:</p> <ul style="list-style-type: none"> ERC approval contingent to start of main construction 	Unit 1 - March 2023 Unit 2 - TBD	Unit 1 - March 2023 Unit 2 - TBD
	OIL			0			
	NATURAL GAS			650			

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	<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 	2018	2018
HYDROPOWER				22.6			
Committed	Majayjay	Majayjay Hydro Power Company, Inc.	Majayjay, Laguna	3	<p>PERMITS AND OTHER REGULATORY REQUIREMENTS:</p> <ul style="list-style-type: none"> Submission of lacking requirements e.g. permits in progress <p>CONSTRUCTION CONTRACTS FOR PLANTS AND EQUIPMENT:</p> <ul style="list-style-type: none"> On-going pre construction activities 	November 2018	December 2018
Committed	Labayat River (Upper Cascade)	Repower Energy Development Corporation	Real, Quezon	3	<p>PERMITS AND OTHER REGULATORY REQUIREMENTS:</p> <ul style="list-style-type: none"> Issued Confirmation of Commerciality on 8 January 2016 <p>CONSTRUCTION CONTRACTS FOR PLANTS AND EQUIPMENT:</p> <ul style="list-style-type: none"> Ongoing pre-construction activities 	November 2019	December 2019
Committed	Man-Asok	Benguet Electric Cooperative	Buguias, Benguet	3	<p>PERMITS AND OTHER REGULATORY REQUIREMENTS:</p> <ul style="list-style-type: none"> Issued Confirmation of commerciality on 22 September 2015; <p>CONSTRUCTION CONTRACTS FOR PLANTS AND EQUIPMENT:</p> <ul style="list-style-type: none"> Pending submission of requirements for under development stage 	November 2020	December 2020
Committed	Laguio Malaki 1	Enervantage Suppliers Co., Inc.	Mauban, Quezon	1.6	<p>PERMITS AND OTHER REGULATORY REQUIREMENTS:</p> <ul style="list-style-type: none"> Issued Confirmation of commerciality on 9 October 2015; <p>CONSTRUCTION CONTRACTS FOR PLANTS AND EQUIPMENT:</p> <ul style="list-style-type: none"> Pending submission of requirements for under development stage 	November 2020	December 2020

Committed	Matuno	Epower Technologies Corporation	Bambang, Nueva Ecija	8	<p>PERMITS AND OTHER REGULATORY REQUIREMENTS:</p> <ul style="list-style-type: none"> • Issued Confirmation of commerciality on 24 June 2015; <p>CONSTRUCTION CONTRACTS FOR PLANTS AND EQUIPMENT:</p> <ul style="list-style-type: none"> • Pending submission of requirements for construction 	November 2020	December 2020
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 	November 2021	December 2021
Committed	Colasi	Colasi Mini Hydro Electric Power Plant Corporation	Mercedes, Camarines Norte	1	<p>PERMITS AND OTHER REGULATORY REQUIREMENTS:</p> <ul style="list-style-type: none"> • Submission of lacking requirements e.g. permits in progress • Clearance to Undertake GIS from DOE issued on 3 December 2012 <p>CONSTRUCTION CONTRACTS FOR PLANTS AND EQUIPMENT:</p> <ul style="list-style-type: none"> • On-going rehabilitation 	November 2021	December 2021
Committed	Rangas	Clean and Green Energy Solutions, Inc.	Goa & Tigaon, Camarines Sur	1.5	<p>PERMITS AND OTHER REGULATORY REQUIREMENTS:</p> <ul style="list-style-type: none"> • Submission of lacking requirements e.g. permits in progress 	November 2021	December 2021
	SOLAR			115			
Committed	Concepcion 1 Solar Power Project	Solar Philippines Tarlac Corporation	Concepcion, Tarlac	115	<p>PERMITS AND OTHER REGULATORY REQUIREMENTS:</p> <ul style="list-style-type: none"> • Awarded with RE Service Contract (SESC No. 2017-07-442-AF1) on 15 Aug 2017 • Certificate of Commerciality No. SCC-2017-11-062 dated 06 Dec 2017 • ERC granted interim relief of the PSA between MERALCO and SPTC (PHP 2.9999 per kWh - without escalation) 	December 2018	December 2018
	WIND			0			
	GEOTHERMAL			31			
Committed	Bacman 3 (Tanawon) Geothermal Project	Energy Development Corporation	Guinlajon, Sorsogon	31	<p>PERMITS AND OTHER REGULATORY REQUIREMENTS:</p> <ul style="list-style-type: none"> • DOE Service Contract within GRESA # 2009-10-003; <ul style="list-style-type: none"> • LGU endorsement • Land Use Permits, <ul style="list-style-type: none"> • 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 	November 2022	December 2022
	BIOMASS			6.2			
Committed	Isabela La Suerte Rice Husk-Fired Power Project	Isabela La Suerte Rice Mill Corporation	Camarines Sur	5	<p>FINANCING ARRANGEMENTS: Closed</p> <p>CONSTRUCTION:</p> <ul style="list-style-type: none"> • On-going testing and commissioning • Interconnection Issue 	January 2018	December 2018
Committed	FQBC Biogas Power Plant Project	First Quezon Biogas Corporation	Quezon	1.2	<p>CONSTRUCTION CONTRACTS FOR PLANTS AND EQUIPMENT:</p> <ul style="list-style-type: none"> • On-going construction 	November 2018	December 2018

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) <ul style="list-style-type: none"> 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>GRONDBREAKING 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 	2018	2018
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Total Committed Rate:
Capacity 4774.8

* Committed Project(s)

COAL	3950
DIESEL / OIL	0
NATURAL GAS	650
GEOTHERMAL	31
HYDROPOWER	22.6
SOLAR	115
WIND	0
BIOMASS	6.2
BESS	10
	4774.8
	TRUE