

Philippines Geothermal Country Profile

A. Installed capacity and generation historical trend (2011-2020)

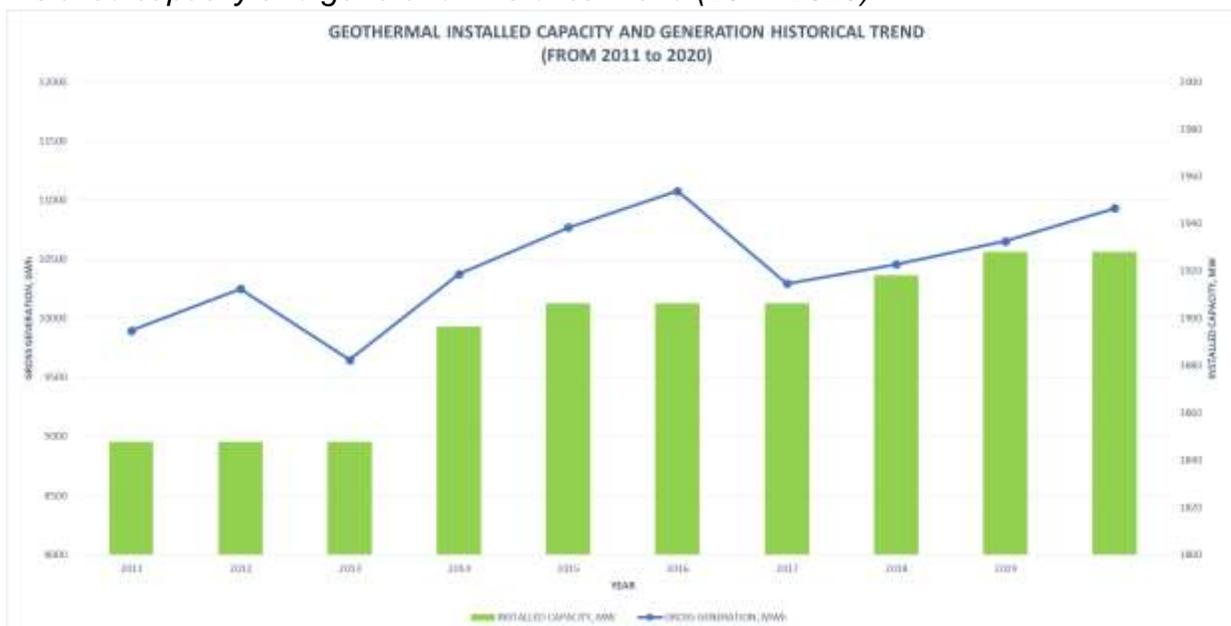


Figure 1: Installed capacity and generation historical trend. Green bar represents the installed capacity in MW and blue line is the gross generation data in MWh

Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Installed Capacity (MW)	1847.69	1847.69	1847.69	1896.19	1906.19	1906.19	1918.19	1918.19	1928.07	1928.07

B. Projects / Programmes

The National Renewable Energy Program (NREP) outlines the policy framework enshrined in Republic Act 9513. The NREP signals the country's big leap from fragmented and halting RE initiatives into a focused and sustained drive towards energy security and improved access to clean energy.

<https://www.doe.gov.ph/national-renewable-energy-program>. The current NREP planning period for 2017-2040 is under review.

C. Key Geothermal Players

The National Geothermal Association of the Philippines is an organization whose focus is to facilitate, promote and coordinate activities to R&D and deployment of geothermal resources. <https://www.ngaphil.com/>

D. Legal and Regulatory Frameworks

Particular	Description	Date Signed
Renewable Energy Policies		

1	Republic Act No. 9513, also known as Renewable Act of 2008	An act promoting the development, utilization and commercialization of Renewable Energy Resources and for other purposes.	December 16, 2008
2	Department Circular No. DC2009-05-008	Rules and Regulations Implementing Republic Act. No. 9513	July 12, 2009
3	Department Circular NO. DC2017-12-0015	Promulgating the Rules and Guidelines Governing the Establishment of Renewable Portfolio Standards On-grid Areas.	December 22, 2017
4	Department Circular No. DC2012-11-0009	Renewable Energy Safety, Health and Environment Rules and Regulations.	November 21, 2012
5	Department Circular No. DC2018-07-0019	Promulgating the Rules and Guidelines Governing the Establishment of the Green Energy Option Program Pursuant to the Renewable Energy Act of 2008	July 18, 2018
6	Department Circular No. DC2018-08-0024	Promulgating the Rules and Guidelines Governing the Establishment of the Renewable Portfolio Standards for Off-Grid Areas	August 24, 2018
7	Department Circular No. DC 2018-09-0027	Establishment and Development of Competitive Renewable Energy Zones in the Country	September 13, 2018
8	Department Order No. DO2018-10-0018	Adopting the Guidelines for the Operationalization of the Renewable Energy Trust Fund, and for other purposes.	October 23, 2018
9	Department Circular No. DC 2019-10-0013	Omnibus Guidelines Governing the Award and Administration of Renewable Energy Contracts and the Registration of the Renewable Energy Developers	October 1, 2019
10	Department Circular no. DC2020-02-0005	Guidelines on the Duty-Free Importation and Monitoring of the Utilization of Renewable Energy Machinery, Equipment, materials and spares parts and their transfer and other disposition.	February 13, 2020
11	Department Circular No. DC2019-12-0016	Promulgating the Renewable Energy Market Rules	December 4, 2019

12	Department Circular No. DC2020-04-0009	Guidelines Governing the Issuance of Operating Permits to Renewable Energy Suppliers under the Green Energy Option Program	April 22, 2020
13	Department Circular no. DC2020-11-0024	Adopting the Guidelines Governing the 3rd Open and Competitive Selection Process (OCSP3) in the Award of Renewable Energy Service Contract, and for other purposes	October 20, 2020
14	Department Circular No. DC2020-07-0017	Promulgating the Guidelines Governing the Policy for the Conduct of Green Energy Auction in the Philippines	July 14, 2020
Other Regulatory Framework			
	Republic Act No. 11032	An Act Promoting Ease of Doing Business and Efficient Delivery of Government Services, Amending for the purpose Republic Act No. 9485, otherwise known as the Anti-red Tape Act of 2007, and other purposes.	May 28, 2018
	Joint Memorandum Circular No. 2019-001 Series of 2019	The Implementing Rules and Regulations of Republic Act No. 11032 otherwise known as the "Ease of Doing Business and Efficient Government Service Delivery Act of 2018.	July 17, 2019
	Republic Act No. 11234	An Act Establishing the Energy Virtual One-Stop Shop for the Purpose of Streamlining the Permitting Process of Power Generation, Transmission, and Distribution Projects	March 8, 2019
	Department Circular No. DC2019-05-0007	Rules and Regulations Implementing Republic Act. No. 11234 (Energy Virtual One Stop Shop Act)	May 28, 2019

E. Geothermal Power Plants

PLANT	2020 INSTALLED CAPACITY, MW	LOCATION MUNICIPALITY / PROVINCE	OPERATOR

LUZON		864.53		
	Mak-Ban	458.53	Laguna	AP Renewables Inc. (APRI)
	Maibarara	20.00	Batangas	Maibarara Geothermal Inc. (MGI)
	Maibarara Unit 2	12.00	Batangas	MGI
	Bac-Man I and II	140.00	Manito, Albay and Bacon, Sorsogon	Bacman Geothermal Inc.
	Tiwi	234.00	Tiwi, Albay	APRI
VISAYAS		955.68		
	Palinpinon I and II	192.50	Negros Oriental	Green Core Geothermal Inc. (GCGI)
	Nasulo	30.00	Negros Oriental	Energy Development Corp. (EDC)
	Tongonan I	123	Tongonan, Leyte	GCGI
	Unified Leyte	610.18	Tongonan, Leyte	EDC
MINDANAO		108.48		
	Mindanao I and II	108.48	Kidapawan, North Cotabato	EDC
TOTAL (Luzon, Visayas and Mindanao)		1,928.69		

F. Resources Map



Figure 2: Location map of the Philippine geothermal power plants

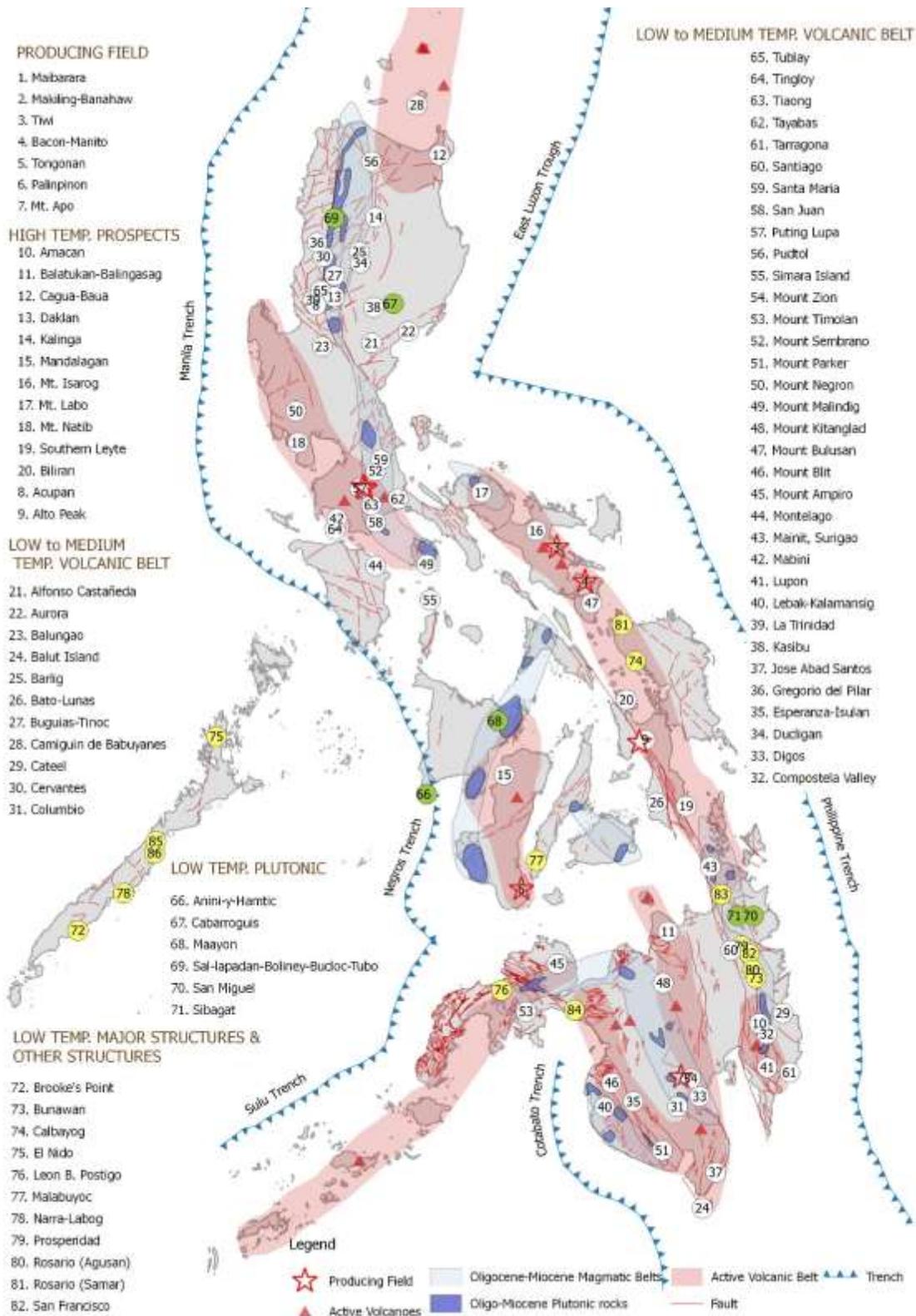


Figure 3: Approximate location of the Philippines geothermal fields/area identified with geologic setting.