

SEVENTEENTH CONGRESS OF THE REPUBLIC  
OF THE PHILIPPINES

Second Regular Session



SENATE  
Office of the Secretary

'18 FEB 28 P5:25

SENATE  
S.B. No. 1719

RECEIVED BY

---

Introduced by Senator Poe

---

AN ACT  
TO FURTHER PROMOTE THE ADOPTION OF ROOFTOP SOLAR  
TECHNOLOGY AMONG RESIDENTIAL, COMMERCIAL, INDUSTRIAL, AND  
GOVERNMENT END-USERS, AMENDING FOR THE PURPOSE REPUBLIC ACT  
NO. 9513, OTHERWISE KNOWN AS THE "RENEWABLE ENERGY ACT OF 2008",  
AND FOR OTHER PURPOSES

*Explanatory Note*<sup>1</sup>

In 2015, a policy note entitled "Solar Power's Dawning and Promise for Inclusive Growth" was published by the Philippine Center for Economic Development (PCED).<sup>2</sup> The article, written by University of the Philippines Professor and now National Economic Development Authority (NEDA) Director General Ernesto M. Pernia took note of recent developments in solar energy and called upon the government to vigorously foster the development of solar power in its various forms.<sup>3</sup>

Rooftop solar is an emerging technology which the government should look into for of the following reasons:

- 1) Electricity from rooftop solar is becoming cheaper by the day. In 2014, then Department of Energy (DOE) Secretary Jericho Petilla stated that electricity from a coal plant costs around Php12.00 per kilowatt hour, with transmission and distribution costs factored in.<sup>4</sup> In contrast, electricity from solar panels directly installed on one's rooftop costs only Php9.00per kilowatt hour;<sup>5</sup>

---

<sup>1</sup> We acknowledge the support of Mr. Roberto Verzola in drafting this measure.

<sup>2</sup> Pernia, E.M. "Solar Power's Dawning and Promise" *PCED Policy Notes* (No. 2015-01) Retrieved from [http://www.pced.gov.ph/wp-content/uploads/2015/07/PN-2015-01\\_final-digital.pdf](http://www.pced.gov.ph/wp-content/uploads/2015/07/PN-2015-01_final-digital.pdf)

<sup>3</sup> *Ibid.*

<sup>4</sup> Verzola, R. *Crossing Over: The Energy Transition to Renewable Electricity*. Philippines: Friedrich Ebert-Stiftung, 2015.

<sup>5</sup> *Ibid.*

- 2) Rooftop solar could reduce the demand for electricity during peak hours. In 2013, the United States Agency for International Development (USAID) estimated that a 10% reduction in peak demand is expected to bring down spot prices by 20%.<sup>6</sup> Of course, peak hours are usually around 12 to 2 pm in the afternoon when the sun is hottest. In 2015, the Luzon grid recorded its highest electricity demand to date at 8,791 megawatts (MW) on May 6 at 2:08 pm.<sup>7</sup> Fortunately, solar panels work best when the sun is hottest, which coincides with when demand for electricity in the Philippines is highest;
- 3) Complete solar photovoltaic systems can be bought off-the-shelf and could be easily installed in a few hours. Larger systems may take a few days. No other technology, renewable or otherwise, could match the convenient installation attributed to rooftop solar; and
- 4) Unlike other power plants, whether fossil-based, hydro, wind or solar farms, rooftop solar does not require land conversions because it uses what is usually an underutilized and already existing resource, the roof.

The Philippines has policy mechanisms to support the development of rooftop solar. In 2008, net-metering was introduced as one of the major policy innovations under Republic Act No. 9513, otherwise known as the "*Renewable Energy Act of 2008*". In addition, MERALCO introduced the Peak/Off-Peak (POP) Program in 2014. Under the POP program, households with rooftop solar are charged a higher rate for daytime-consumption and a lower rate for night time consumption.<sup>8</sup> Finally, PAG-IBIG Fund introduced a new solar panel acquisition/installation loan in 2015.<sup>9</sup>

This representation seeks to introduce the following measures to further increase and encourage the adoption of rooftop solar in the Philippines:

- 1) Removal of the 100-Kw cap on distributed generation to allow large electricity consumers such as commercial establishments and industrial buildings to avail of the net-metering program under RA 9513;
- 2) Insertion of an explicit provision that the same reference price should be applied to both electricity imported from and exported to the grid by end-users;

---

<sup>6</sup> USAID. *Challenges in Pricing Electric Power Services in Selected ASEAN Countries*. Retrieved from <http://www.catif.org/wp-content/uploads/2013/10/Challenges-in-Pricing-Electric-Power-Services.pdf>

<sup>7</sup> Olchondra, R.T. "Summer heat drives Luzon power demand to new peak" *Philippine Daily Inquirer* (May 08, 2015). Retrieved from <http://business.inquirer.net/191467/summer-heat-drives-luzon-power-demand-to-new-peak>

<sup>8</sup> Ranada, P. "How Practical is Solar Power for PH Home Owners" *Rappler* (26 July 2014). Retrieved from <http://www.rappler.com/business/industries/power-and-energy/64165-solar-power-ph-households-net-metering>

<sup>9</sup> PAG-IBIG Fund. "Availment of PAG-IBIG Housing Loan for the Acquisition/Installation of Solar Panels. Retrieved from <http://www.pagibigfund.gov.ph/governancescorecard/Materials%20for%20uploading/Memo%20on%20Environment.pdf>

- 3) Requiring the Department of Energy, Energy Regulatory Commission, National Renewable Energy Board, Department of Interior and Local Government, to standardize permits and licenses needed to install rooftop solar panels;
- 4) Institutionalization of the rooftop solar loan program of the PAG-IBIG Fund; *and*
- 5) Mandatory installation of rooftop solar panels on government buildings, which shall increase by 5% every five years.

In view of the foregoing, approval of this measure is eagerly sought.

  
**GRACE POE**

SEVENTEENTH CONGRESS OF THE REPUBLIC  
OF THE PHILIPPINES  
*Second Regular Session*

'18 FEB 28 P5:25

SENATE  
S.B. No. 1719

RECEIVED BY



---

Introduced by Senator Poe

---

AN ACT  
TO FURTHER PROMOTE THE ADOPTION OF ROOFTOP SOLAR  
TECHNOLOGY AMONG RESIDENTIAL, COMMERCIAL, INDUSTRIAL, AND  
GOVERNMENT END-USERS, AMENDING FOR THE PURPOSE REPUBLIC ACT  
NO. 9513, OTHERWISE KNOWN AS THE "*RENEWABLE ENERGY ACT OF 2008*",  
AND FOR OTHER PURPOSES

*Be it enacted by the Senate and the House of Representatives of the Senate in Congress assembled:*

1           **SECTION 1. Short Title.**- This Act shall be known as the "*Solar Rooftop Adoption*  
2 *Act of 2017*".  
3

4           **SEC. 2. Declaration of Policy.**- The State recognizes energy security and electricity  
5 affordability as necessary components of inclusive, sustained and broad-based growth. The  
6 State further recognizes the necessity of balancing the provision of secure and affordable  
7 electricity with the right of the people to a balanced and healthful ecology in accord with the  
8 rhythm and harmony of nature. The State also recognizes the emergence of rooftop  
9 photovoltaic or solar technology as an increasingly affordable and feasible method of  
10 complementing the electricity needs of residential and commercial end-users, thereby  
11 reducing overall demand.  
12

13           To this end, it is hereby declared a policy of the State to further promote rooftop solar  
14 technology among residential and commercial end-users, and to address institutional barriers  
15 to its adoption thereof.  
16

17           **SEC. 3.** Section 4 of Republic Act No. 9513 is hereby amended to read as follows:  
18

19           "Section 4. *Definition of Terms*- As used in this Act, the following terms are  
20 herein defined:  
21

1 x x x

2  
3 “(j) "Distributed generation" refers to a system of small generation entities  
4 supplying directly to the distribution grid **OR TO END-USERS, AND WHICH**  
5 **ARE PRIMARILY USED TO MEET OR AUGMENT THE ELECTRICITY**  
6 **REQUIREMENTS OF END USERS.** [, any one of which shall not exceed one  
7 hundred kilowatts (100 kW) in capacity;]  
8

9 **SEC. 4.** Section 10 of the same Act is hereby amended to read as follows:  
10

11 “Section 10. *Net-Metering for Renewable Energy.*- Subject to technical  
12 considerations and without discrimination and upon request by distribution end-  
13 users, the distribution utilities shall enter into net-metering agreements with  
14 qualified end-users who will be installing RE system.  
15

16 The ERC, in consultation with the NREB and the electric power industry  
17 participants, shall establish net metering interconnection standards and pricing  
18 methodology and other commercial arrangements necessary to ensure success of  
19 the net-metering for renewable energy program within one (1) year upon the  
20 effectivity of this Act. **IN ESTABLISHING A PRICING METHODOLOGY,**  
21 **THE ERC SHALL ENSURE THAT THE SAME REFERENCE SHALL BE**  
22 **APPLIED TO BOTH THE ELECTRICITY IMPORTED FROM AND**  
23 **EXPORTED TO THE DISTRIBUTION GRID BY END-USERS.**  
24

25 The distribution utility shall be entitled to any Renewable Energy Certificate  
26 resulting from net-metering arrangement with the qualified end-user who is using  
27 an RE resource to provide energy and the distribution utility shall be able to use  
28 this RE certificate in compliance with its obligations under RPS.  
29

30 The DOE, ERC, TRANSCO or its successors-in-interest, DUs, PEMC and all  
31 relevant parties are hereby mandated to provide the mechanisms for the physical  
32 connection and commercial arrangements necessary to ensure the success of the  
33 Net-metering for Renewable Energy program, consistent with the Grid and  
34 Distribution Codes.”  
35

36 **SEC. 5.** *Standardization of Permits and Licensing Requirements.*- The Department of  
37 Energy, in coordination with the Department of Interior and Local Government (DILG), in  
38 coordination with the relevant Distribution Utilities and Local Government Units, shall  
39 standardize and streamline permitting and licensing requirements in the installation of rooftop  
40 solar projects.  
41

42 **SEC. 6.** *Solar Installation Loans.*- Pursuant to the declared national policy of this Act,  
43 the Board of Trustees under Republic Act No. 9679, otherwise known as the “*Home*  
44 *Development Mutual Fund Law of 2009*” shall develop a loan program for qualified members

1 for the acquisition and installation of solar panels as part of home improvement or as a  
2 component of the housing unit to be purchased, subject to the prevailing Pag-IBIG Fund rules  
3 and regulations.  
4

5 **SEC. 7. *Installation of Solar Panels on Government Buildings.***- All government  
6 agencies, in coordination with the Department of Energy (DOE), shall install solar energy  
7 systems in their respective offices and buildings. The solar panels shall supply at least five  
8 per cent (5%) of the electric power requirements of each government office or building  
9 within the three (3) years from the effectivity of this Act, which shall be further increased by  
10 five per cent (5%) every five (5) years thereafter.  
11

12 **SEC. 8. *Appropriations.***- Such funds necessary to carry out the provisions of this Act  
13 shall be included under the appropriations of the Department of Energy (DOE) in the annual  
14 General Appropriations Act.  
15

16 **SEC. 9. *Implementing Rules and Regulations.***- The Department of Energy (DOE),  
17 National Renewable Energy Board (NREB), Energy Regulatory Commission (ERC),  
18 Department of Interior and Local Government (DILG), in consultation with the concerned  
19 stakeholders in the electric power industry and renewable energy industry shall jointly  
20 promulgate the implementing rules and regulations if this Act within ninety (90) days of its  
21 effectivity.  
22

23 **SEC. 10. *Separability Clause.***- If any part or provision of this Act shall be declared  
24 unconstitutional and invalid, such declaration shall not invalidate other parts thereof which  
25 shall remain in full force and effect.  
26

27 **SEC. 11. *Repealing Clause.***- All laws, decrees, executive orders, proclamations, rules  
28 and regulations, or their parts thereof, which are inconsistent with the provisions of this Act  
29 are hereby repealed, amended or modified accordingly.  
30

31 **SEC. 12. *Effectivity Clause.***- This Act shall take effect fifteen (15) days after its  
32 publication in the Official Gazette or in a newspaper of general circulation.  
33

34 *Approved,*