AGO A	Senale of the Secretary
Direce	of the Secretary
-2.46	

NINETEENTH CONGRESS OF THE REPUBLIC OF THE PHILIPPINES

First Regular Session

22 JUL 12 A11:47

SENATE

S.B. No. <u>378</u>

RECEIVED BY

# **INTRODUCED BY SENATOR RISA HONTIVEROS**

# AN ACT ESTABLISHING THE SOLAR HOME SYSTEMS FINANCING FOR SOCIAL HOUSING PROGRAM, AND PROVIDING FUNDS THEREFOR

# **EXPLANATORY NOTE**

In a number of studies conducted in resettlement sites, problems with power connections were frequently mentioned, among other concerns of the residents. One extensive study conducted by the Philippine Institute for Development Studies (PIDS) in 2013¹ noted that 90% occupancy is the usual requirement of utility companies prior to connections. Utility service is part of the housing subsidy support of the National Housing Authority (NHA). However, in terms of power service, the NHA only provides either power generators for temporary power utility or advance payment to utility companies to facilitate individual household connections. <sup>2</sup>

The same review presented nine (9) case studies on the different levels of access to electricity among resettlement sites residents: 2 sites (1 in-city and 1 off-site) had available electricity and was accessible to residents; 1 in-city site had some of its portions without power connections at the time; 1 off-city site was using individual power supply; and 3 sites were using generators with electricity rationed at 5 hours, 4 hours, and nighttime only, respectively. In addition to the latter, residents had been staying in respective sites for 3 years, 2 years, and 15 years respectively. Power connections may have improved in these sites after a few more years but residents need not suffer difficulties due to lack, if not total absence, of electricity—especially if they live in an area covered by a utility franchise.

<sup>&</sup>lt;sup>1</sup>Ballesteros, Marife M.; Egana, Jasmine V. (2013): Efficiency and Effectiveness Review of the National Housing Authority (NHA) Resettlement Program, PIDS Discussion Paper Series, No. 2013-28, Philippine Institute for Development Studies (PIDS), Makati City.

<sup>&</sup>lt;sup>2</sup> Ibid. pp. 12-13

<sup>&</sup>lt;sup>3</sup> Ibid. pp. 57-58

On the other hand, aside from lack of jobs, the absence of power and water services have always been cited as primary concerns why informal settler families (ISFs) reject being relocated immediately into their assigned relocation areas until such time as these essential services are put in place.

Access to electricity is a serious problem for the poor, especially those living in remote rural areas and in small islands. World Bank data on access to electricity among the rural population shows that in 2019, of 23 countries and territories in Asia, the Philippines ranked eighth from the bottom. (It was ahead of Cambodia, Timor-Leste and Myanmar in Southeast Asia, North Korea in East Asia, and Nepal, Pakistan and Bangladesh in South Asia.) There are still an estimated 4.7 million Filipinos who do not enjoy electricity at home. (World Bank information for 2019)

Yet even for the poor who live in urban cities, affording electricity is as well a serious problem. Official statistics on 2018 family expenditures by income class show that families earning below PhP60,000 a year spent an average PhP4,170 on water, electricity, gas and other fuels. In contrast, families earning over half a million pesos a year spent an average PhP44,352 for the same expense group. The rich poor gap for water, electricity, gas and other fuels is 10.64—more than the rich-poor gap on food expenses that same year (6.56).

Poor families in 2018 earning below PhP60,000 a year spent nine percent of their total budget on water, electricity, gas and other fuels. These expenditures ate up 4.1 percent of their household income. Compare this with 2.5 percent in the US and one percent in Japan.

In recent years, the cost of solar has been declining. This should benefit poor households and communities. Accessibility to renewable energy (RE) technologies such as solar enhance affordability and efficiency of power services to peoples and communities. It also has the potential of reducing electricity costs for residents over time. Moreover, it helps address climate change issues such as reduction of greenhouse gas emissions.

Social housing financing projects provide a unique opportunity for RE installations, particularly, solar home systems, not only through potential scale of implementation sites,

but also in reducing the social and financial costs to ISFs and displaced families. However, turning to RE and energy efficiency (EF) requires up-front investment which poor Filipinos cannot afford. The government can help defray this initial cost by establishing renewable energy financing programs that leverage and augment existing RE financing options that are not accessible to the less privileged.

This bill, thus, aims to establish a solar home system financing program that shall be integrated into social housing financing programs payable in 25-30 years. The program is designed for the socialized housing sector who usually does not qualify in existing renewable energy loan packages. It aims to bring the benefits of solar to poor families and communities while generating long-term employment for repair and maintenance of solar rooftops systems.

As such, the immediate passage of this bill is earnestly sought.

RISA HONTIVEROS

Senator

3	53)	EII	ate	
Dffice	of	tire	Beeretar	"

NINETEENTH CONGRESS OF TH	E
REPUBLIC OF THE PHILIPPINES	
First Regular Session	

22 JUL 12 A11 :47

SENATE

)

S.B. No. <u>378</u>



# **INTRODUCED BY SENATOR RISA HONTIVEROS**

#### AN ACT

# ESTABLISHING THE SOLAR HOME SYSTEM FINANCING FOR SOCIAL HOUSING PROGRAM, AND PROVIDING FUNDS THEREFOR

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

Section 1. Short Title. – This Act shall be known as the "Solar Home System

Financing for Social Housing Program Act."

Sec. 2. *Declaration of Policy.* – The Constitution mandates that the State shall protect and promote the right of people to decent housing with basic services at affordable cost. The informal settler families (ISFs), particularly those located in danger zones and those displaced by government infrastructure projects and calamities deserve no less than habitable resettlement areas as well as climate-resilient communities.

Recognizing the right to have quality, reliable, affordable, safe and regular supply of electric power vis-à-vis the vulnerability of the Philippine archipelago and its local communities, particularly the poor, women, and children, to potential dangerous consequences of climate change, the State shall strengthen, integrate, consolidate and institutionalize initiatives to address climate change in the context of sustainable development, such as the prioritization of renewable sources in energy generation to reduce greenhouse gas emissions.

# Sec. 3. Definition of Terms.

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

- a) Solar Energy. refers to the energy derived from solar radiation that can be converted into useful thermal or electricity energy.
- b) Solar Energy Systems. refers to energy systems which convert solar energy into thermal or electrical energy.
- c) Solar Home System (SHS). refers to a stand-alone photovoltaic system that offers a cost-effective mode of supplying amenity power for lighting

and appliances to remote off-grid households. Depending on viability, SHS may be grid-tie, off-grid or hybrid solar PV.

- d) *Net Metering.* refers to a system, appropriate for distributed generation, in which a distribution grid user has a two-way connection to the grid and only charged for his/her net electricity consumption and is credited for any overall contribution to the electricity grid.
- e) *Off-grid Systems.* refer to electrical systems not connected to the wires and related facilities of the On-Grid Systems of the Philippines.
- f) *On-grid Systems.* refers to electrical systems composed of interconnected transmission lines, distribution lines, substations, and related facilities for the purpose of conveyance of the bilk power on the grid of the Philippines.
- g) *Renewable Energy Systems.* refer to energy systems which convert RE resources into useful energy forms, like electrical, mechanical, etc.
- h) *Rural Electrification.* refers to the delivery of basic electricity services, consisting of power generation, sub-transmission, and/or extension of associated power delivery system that would bring about important social and economic benefits to the countryside.

Sec. 4. Creating the solar home systems financing for social housing program. – All current and future social housing financing programs shall require the integration of the SHS financing program to defray up-front investment of poor families and communities on solar PV installations to provide secure, clean, and environmental-friendly power services in both in-city and off-city resettlement sites. The annual target for solar housing units shall be based on the combined annual social housing targets of the LGUs, NHA and SHFC. Per housing unit, a corresponding budget will be allocated for SHS financing based on the prevailing cost of solar home systems in the market on top of the cost for the production of the housing units. The terms of the financing program, which may be in the form of loans, grants and equity contributions from the shelter agencies shall be designed so that electricity-related expenditures of households over the medium-term will not be greater than expenditures they would incur if they were connected to the electricity grid.

The annual target for solar housing units shall be based on the combined annual social housing targets of the NHA and SHFC. Per housing unit, a corresponding budget will be allocated for SHS financing based on the prevailing cost of solar home systems in the market on top of the cost for the production of the housing units.

Sec. 5. Promotion of solar home systems as an affordable, viable, accessible, clean and cheaper energy source for social housing programs. – The NHA and SHFC shall

- incorporate education and information dissemination immediately in the first phase of the
- 2 implementation of resettlement projects to orient ISFs about the SHS financing program.
- Sec. 6. *Appropriations.* The amount necessary for the implementation of this Act shall be included in the annual General Appropriations Act.
- Sec. 7. Implementing Rules and Regulations. The Department of Housing and
- 6 Sustainable Urban Development (DHSUD), NHA and the SHFC, in coordination with the
- 7 Department of Energy (DOE), Department of Interior and Local Government (DILG), and
- 8 other government agencies concerned, shall promulgate the necessary implementing
- 9 rules and regulations within thirty (30) days upon the effectivity of this Act.
- Sec. 8. Separability Clause. If any provision, section or part of this Act shall be
- declared unconstitutional or invalid, such judgment shall not affect, invalidate or impair
- any other provisions, sections or parts thereof.
- Sec. 9. Repealing Clause. All laws, acts, decrees, executive orders, issuances,
- and rules and regulations or parts thereof which are contrary to and inconsistent with
- this Act is hereby repealed, amended or modified accordingly.
- Sec. 10. Effectivity. This Act shall take effect fifteen (15) days following its
- publication in at least two (2) newspapers of general circulation of in the *Official Gazette*.
  - Approved,