

Republic of the Philippines
HOUSE OF REPRESENTATIVES
Quezon City, Metro Manila

TWENTIETH CONGRESS
Second Regular Session

HOUSE BILL NO. 11484



Introduced by Honorable LANI MERCADO-REVILLA

EXPLANATORY NOTE

The worsening housing gap in lower- and middle-income countries is largely attributed to rapid urbanization and population growth outpacing the housing supply (Lee and Singh, 2022). In 2018, the Philippine housing backlog reached 5.7 million units and absent any significant intervention, this housing backlog is projected to reach 22 million by 2040 (Padojinog and Yap, 2020). Furthermore, with 4.1 million individuals displaced due to government infrastructure projects in 2019 alone (Bermudez et al., 2020) and an estimated 3.7 million Informal Settler Families (ISFs) residing in hazard-prone areas (UN-Habitat, 2023), addressing the housing backlog remains a priority concern of the government.

Despite ongoing government housing initiatives targeting the housing deficit, beneficiaries of socialized housing moved in to housing units without basic services such as electricity (Ebdane, 2024). Compounding this issue, plant outages and rising consumer electricity demand consistently triggered yellow and red alerts in the transmission grid, resulting in power interruptions and prompting several legislative inquiries (Baligad, 2024). While socialized housing programs are addressing the need for shelter, many resettlement communities remain unserved or underserved in terms of reliable, affordable, and sustainable energy access.

The Philippines' reliance on imported fuel makes the country highly vulnerable to external energy shocks, contributing to rising food and energy costs (De Leon, 2026). Estimated electricity rates in the country are among the highest in Asia, ranking fourth overall (Dela Peña, 2026). These conditions expose Filipino households to high energy costs, unstable power supply, or limited access to grid electricity, with greater impact to households in resettlement sites, undermining the long-term livability and sustainability of housing interventions. Coupled with the increasing frequency and intensity of climate-related hazards, the vulnerability of traditional energy systems underscores the need for resilient, decentralized, and renewable energy solutions.

Article XIII, Section 9 of the 1987 Constitution mandates the State to undertake a continuing program of urban land reform and housing which will make available at affordable cost decent housing and basic services to underprivileged and homeless citizens. Legislations, including Republic Act No. 9513 or the Renewable Energy Act of 2008, affirm the national policy to accelerate the utilization of renewable energy resources. However, despite existing policy frameworks, the integration of renewable energy systems, particularly solar home systems (SHS), into socialized housing developments remains largely dependent on project-level initiatives rather than a standardized national framework.

This bill seeks to address the policy and implementation gap by mandating the integration of SHS in all socialized housing projects, whether on-grid, off-grid, or hybrid, and by establishing a dedicated financing mechanism to ensure its feasibility and affordability. By institutionalizing SHS as a standard component of housing design and delivery, this measure ensures that energy access is no longer treated as an auxiliary concern but as an essential element of housing adequacy. It likewise integrates the SHS Financing Program into housing amortization schemes with repayment terms of up to twenty-five (25) years, while employing a mix of subsidies, grants, and concessional financing to minimize the burden on beneficiary households. The financing structure is designed to ensure that total electricity-related expenditures remain comparable to, if not lower than, conventional grid-based electricity costs over time.

The measure also establishes the technical standards, quality assurance mechanisms, and mandatory maintenance requirements to ensure system reliability and sustainability. It institutionalizes coordination among key agencies, including the Department of Human Settlements and Urban Development, Department of Energy, National Housing Authority, and Social Housing Finance Corporation, as well as Local Government Units, to ensure alignment in planning and execution. In addition, it provides for beneficiary orientation programs and a monitoring and evaluation system to track system performance, household energy savings, and broader socioeconomic and environmental impacts.

Beyond ensuring energy adequacy, this measure promotes electricity security in socialized housing communities without adding strain to the national power grid. Additionally, where systems are grid-connected and eligible for net metering, these socialized housing communities may even contribute to the overall energy stability by serving as solar farms, supplying excess power back to the grid.

The integration of solar energy systems in socialized housing represents a strategic shift toward building a climate-resilient, energy-secure, and sustainable communities, consistent with the State's commitment to inclusive development and environmental stewardship.

In view of the foregoing, the immediate passage of this bill is earnestly sought.



LANI MERCADO-REVILLA

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Introduced by Honorable LANI MERCADO-REVILLA

AN ACT
MANDATING THE INTEGRATION OF SOLAR HOME SYSTEMS IN ALL
SOCIALIZED HOUSING PROJECTS, ESTABLISHING A SOLAR HOME SYSTEM
FINANCING PROGRAM, AND APPROPRIATING FUNDS THEREFOR

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

SECTION 1. Short Title. – This Act shall be known as the “Solar Home Integration and Financing for Transformation (SHIFT) in Socialized Housing Act.”

SEC. 2. Declaration of Policy. – It is hereby declared the policy of the State to protect and promote the right of people to decent housing with access to affordable, reliable, and sustainable basic services, including electricity. The State recognizes that Informal Settler Families (ISF) residing in danger zones and those displaced by government infrastructure projects and calamities have the fundamental right to habitable, climate-resilient, and energy-secure resettlement communities.

Toward this end, the State shall promote the adoption of renewable energy systems, particularly solar energy, as a cost-efficient, reliable, and environmentally sustainable energy solution for household electrification. The State shall ensure that socialized housing projects are provided with appropriate solar energy solutions, whether off-grid, on-grid, or hybrid systems, to enhance energy access and stability, reduce long-term household expenditures, and contribute to climate change mitigation and adaptation.

SEC. 3. Definition of Terms. – As used in this Act:

- (a) *Hybrid Solar Systems* refer to electrical systems combining solar photovoltaic (PV) with a battery energy storage system (BESS) and/or grid connection;
- (b) *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 is only charged for his net electricity consumption and is credited for any overall contribution to the electricity grid;
- (c) *Off-Grid Systems* refer to electrical systems not connected to the wires and related facilities of the On-Grid Systems of the Philippines;
- (d) *On-Grid Systems* refers to electrical systems composed of interconnected transmission lines, distribution lines, substations, and related facilities for the purpose of conveyance of bulk power on the grid of the Philippines;

- (e) *Renewable Energy Systems* refer to energy systems which convert Renewable Energy resources into useful energy forms, like electrical, mechanical, etc.;
- (f) *Socialized Housing Projects* refer to housing programs and projects undertaken by the National Government, Local Government Units (LGUs), Government-Owned and Controlled Corporations (GOCCs), or the private sector intended for the underprivileged and homeless citizens;
- (g) *Solar Energy* refers to the energy derived from solar radiation that can be converted into useful thermal or electric energy;
- (h) *Solar Energy System* refers to energy systems which convert solar energy into thermal or electrical energy; and
- (i) *Solar Home System (SHS)* refers to a decentralized, stand-alone solar PV energy system supplying amenity power for lighting and household appliances providing affordable and reliable alternative to traditional electrical grids. Depending on viability, SHS may be on-grid, off-grid, or hybrid solar system.

SEC. 4. Mandatory Integration of Solar Home Systems. – All existing and future socialized housing projects shall integrate Solar Home Systems (SHS) as a standard component of housing design and delivery, whether such project is located in on-grid or off-grid areas, subject to technical feasibility, cost-efficiency standards, and suitability to the housing configuration, as determined by the Department of Human Settlements and Urban Development (DHSUD) and the Department of Energy (DOE).

For socialized housing typologies, SHS integration shall be implemented as follows:

- (a) Horizontal housing developments such as row houses, duplexes, and single-detached units shall utilize individual SHS installation; and
- (b) Vertical or multi-storey housing developments with shared roofing may utilize shared, centralized, or cluster-based SHS configuration with appropriate system design. The DHSUD and DOE shall establish a mechanism to guarantee equitable access, prevent overconsumption, and responsible use of electricity which may include installation of load management systems, including sub-metering systems and load limiters or equivalent controls to prevent system overloading and ensure fair distribution of available energy.

SEC. 5. Solar Home System Configuration. – Socialized housing SHS installation shall be configured according to service type as follows:

- (a) For socialized housing projects in on-grid areas, SHS may be installed as grid-tied or hybrid systems, with eligibility for net metering in accordance with Republic Act 9513, otherwise known as the Renewable Energy Act of 2008, and its subsequent amendments, rules, and regulations promulgated thereunder; and
- (b) For socialized housing projects in off-grid areas, SHS shall serve as the primary source of electricity. To ensure continuous power supply during periods of low or no solar production, the SHS may be installed as a hybrid system with BESS integration.

SEC. 6. Technical Standards, Quality Assurance, and Maintenance. – The DOE, in coordination with the DHSUD, shall develop and enforce a minimum technical standard for SHS, including:

- (a) System capacity and performance requirement;
- (b) Equipment certification and quality standards;
- (c) Installation, safety, and maintenance protocols; and

(d) Accreditation of suppliers and service providers.

All SHS installed under this Act shall have a mandatory warranty provision, after-sales service and maintenance support, and sustainable mechanism for lifecycle costs, including battery replacement and system upkeep.

SEC. 7. Solar Home Systems Financing Program. – An SHS Financing Program is hereby established to support the integration of SHS in all current and future socialized housing financing projects in both in-city and off-city resettlement sites.

All government housing financing mechanisms, including but not limited to those administered by the National Housing Authority (NHA), Social Housing Finance Corporation (SHFC), Home Development Mutual Fund (Pag-IBIG Fund), Government Financial Institutions (GFIs), and LGUs, shall incorporate SHS financing as an integral component of housing finance packages.

For this purpose, the cost of SHS shall be mandatorily included in the total project cost and shall form part of the loanable amount or amortization base of the housing unit, subject to affordability standards. The program shall utilize a mix of capital subsidies, grants, concessional financing, or other appropriate financial instruments to defray the upfront cost of SHS. Beneficiaries shall amortize the SHS cost together with the housing unit under concessional and affordable terms of up to twenty-five (25) years and shall be structured such that the total electricity-related expenditures of beneficiary households shall not exceed the estimated cost of conventional grid-based electricity over a reasonable period.

The annual target for SHS provision shall be based on the combined annual socialized housing targets of the LGUs, NHA, and SHFC. A corresponding per-unit allocation shall be established based on standardized benchmarks and ceilings to be determined by the DOE in coordination with the DHSUD.

SEC. 8. Solar Home Systems Orientation. – The NHA, SHFC, and LGUs shall, in coordination with the DOE, orient ISF beneficiaries of socialized housing projects on the use and benefits of SHS as an affordable, viable, accessible, and clean energy source and the integration of SHS financing program in socialized housing projects.

SEC. 9. Monitoring and Reporting. – The DHSUD shall, in coordination with concerned agencies, establish a monitoring and evaluation system and submit an annual report to Congress by March 31 of the succeeding year, including:

- (a) Number of housing units installed with SHS;
- (b) System functionality and performance rates;
- (c) Household energy cost savings; and
- (d) Other relevant socioeconomic and environmental indicators.

SEC. 10. Appropriations. – The amount necessary for the initial implementation of this Act shall be charged against the current year's appropriations of the concerned agencies. Thereafter, such sums shall be included in the annual General Appropriations Act.

SEC. 11. Implementing Rules and Regulations. – Within sixty (60) days from the effectivity of this Act, the DHSUD, NHA, and the SHFC, in coordination with the DOE, Department of the Interior and Local Government (DILG), and other government agencies concerned, shall promulgate the necessary implementing rules and regulations for the effective implementation of this Act.

SEC. 12. *Separability Clause.* – If any provision of this Act is declared invalid or unconstitutional, other provisions hereof which are not affected thereby shall remain in full force and effect.

SEC. 13. *Repealing Clause.* – All laws, presidential decrees, executive orders, letters of instruction, administrative rules and regulations or parts thereof, which are contrary to or inconsistent with the provisions of this Act, are hereby repealed or modified accordingly.

SEC. 14. *Effectivity.* – This Act shall take effect fifteen (15) days after its publication in the *Official Gazette* or in a newspaper of general circulation.

Approved,