Facilitating a Just Energy Transition through Solar Power

The 18th National Health Assembly, having considered the report on the public policy development entitled "Facilitating a Just Energy Transition through Solar Power[1]",

Recognizes that climate change is a critical crisis that significantly affects public health. The energy sector, which relies heavily on fossil fuels, is a major source of greenhouse gas emissions. Thailand, therefore, needs to accelerate the transition toward cleaner energy. Solar energy, in particular, is a high-potential alternative with increasingly competitive costs;

Observes that the energy transition is not only a matter of technology or energy security; it is central to sustainable improvements in quality of life across economic, social, and environmental dimensions. Promoting community-based technicians capable of installing and maintaining solar photovoltaic (PV) systems can create jobs and distribute income at the local level, supporting a strong economy alongside improved well-being in Thailand. However, this transition faces systemic challenges throughout the technology life cycle. Access to the benefits of solar energy—especially for individuals or communities with economic, social, health, or geographic constraints—remains limited due to financial barriers, lack of knowledge, and restrictive regulations. Expanding solar energy also strengthens national energy security and reduces dependence on imported energy;

Commends the efforts of all sectors in promoting solar energy in Thailand. This includes the government's commitment to relevant policies and targets, such as the Sustainable Development Goals, the 20-Year National Strategy, the 13th National Economic and Social Development Plan, carbon neutrality and net-zero emissions goals, and the National Energy Plan, which aims to increase the share of solar energy. Recognition is also extended to regulatory agencies for advancing standards and workforce capacity, as well as to the private sector and civil society for driving new business models. In addition, public awareness and the readiness of local administrative organizations to participate in area-based energy management are duly acknowledged;

[1] The document on the 18th National Health Assembly / Main 3

Notes that although accessibility to solar energy has improved significantly across the business, industrial, and household sectors, accessibility for the general public remains constrained by structural barriers. Key challenges include high upfront capital expenditure and limited access to funding. While the Energy Conservation Promotion fund exists, their allocation has not adequately addressed the diverse needs of the population and communities, particularly socially and economically equity-seeking groups, persons with disabilities, renters, and remote communities. As a result, the benefits of solar energy are not equitably distributed, reflecting gaps in energy governance. These gaps include limited participatory engagement through accessible knowledge, insufficient development of diverse financial mechanisms and business models, and regulatory frameworks at various levels that do not adequately support energy innovation development;

Believes that, to ensure the transition to solar energy maximizes societal benefits and promotes equitable and just energy access, a paradigm shift is essential—one that empowers and enhances access opportunities for all. This transition is central to sustainable improvements in quality of life and must be accompanied by systematic management across the entire technology life cycle, from manufacturing, installation, operation, to end-of-life waste management.

Thereby, adopts the policy statement, as follows:

Policy Statement:

Household energy security and livelihoods is a crucial social determinant of health. Thailand should promote the energy transition while ensuring effective transition management to mitigate impacts on household electricity cost structures. Solar energy should be a key tool to drive sustainable and just development, guided by a paradigm that empowers diverse population groups at the individual, group, community, and community-organization levels. Particular attention should be given to socially and economically equity-seeking groups, persons with disabilities, renters, and remote communities. This aims to ensure their responsible access to and ownership of clean energy system throughout the technology life cycle, leading to improved quality of life, reduced household expenses, increased economic opportunities, and strengthen energy security sustainably.

The core contents of the policy framework are as follows:

Part I: Empowering Communities as Energy Owners and Entrepreneurs

1.1 Promoting clean energy literacy through area-based mechanisms. The Ministry of Energy should lead the development of a modern, credible, and user-friendly central integrated

knowledge management hub accessible to all population groups. This should be complemented by strong provincial mechanisms in the form of task forces or committees chaired by provincial governors, with Provincial Energy Offices serving as secretariats. These bodies should include representatives from regional academic institutions, civil society, communities, and the media to drive tangible outcomes. At the same time, local administrative organizations (LAOs) should be strengthened as frontline advisory units, while regional educational institutions should develop curricula and knowledge tailored to different target groups. This includes guidance on appropriate technologies and installation sites suited to local geography and climate for maximum efficiency, skills training in installation and maintenance for citizens and community technicians promoting the role of relevant public agencies—such as the Department of Skill Development—in developing training curricula and competency standards to ensure the quality and promote local job creation, and instilling the knowledge about clean energy in children and youth in both formal and informal education systems.

1.2 Developing integrated policy, legal, and financial mechanisms to unlock the potential of community energy. This includes advancing laws and regulations that recognize and enable diverse forms of community-led energy social energy enterprises, alongside support for collective initiatives to develop community-based solar PV initiatives; ranging from basic community solar projects in collaboration with electricity utilities and relevant agencies to advanced models such as community microgrids that allow local-level energy management. Appropriate financial mechanisms should be designed to fit local contexts, including seed funding, preferential low-interest loans, tax incentives, and effective use of existing funds in line with their mandates—such as the Energy Conservation Promotion Fund and the Power Development Fund. Access to finance should be strengthened by supporting the role of private sector and civil society in advisory services and assisting communities with project proposal development to ensure efficient and equitable benefit distribution.

1.3 Strengthening the role of local administrative organizations as coordinating and facilitation hubs. Key functions include:

1) Serving as proactive network coordinators with external experts such as academic institutions, private sector, and relevant public agencies, while building internal capacity and mobilizing local scholars to act as first-stop advisory centers using information from the central platform.
2) Publicizing and supporting training programs for community technicians to create local employment.

3) Collaborating with local agencies to implement demonstration projects in public spaces (e.g., schools and hospitals) as learning models to build confidence and advance community energy management.

4) Facilitating local end-of-life management of solar PV panels by coordinating collection once classified as hazardous waste and transferring them to provincial administrations or responsible agencies for proper treatment.

5) Preparing adequate plans, budgets, and staffing to promote alternative energy, including contingency plans for disaster and emergency energy management.

Part 2: Development of National Infrastructure and Regulatory Mechanisms

2.1 Building consumer confidence and protection through life-cycle standards by raising industrial product standards for solar equipment, both new and related products, and establishing national standards for second-hand solar PV panels that ensure safety and cost-effectiveness, developing safe installation standards, particularly for systems involving energy storage batteries, as well as creating a list of accredited installers or service providers (vendor list) to assure quality and safety for consumers. Fair market competition should be promoted to improve price and quality outcomes. Clear, accessible complaint and compensation mechanisms should be established. This must be coupled with the review and amendment of laws governing solar installation permits to ensure clarity and alignment with technological progress and the diverse applications of solar PV systems. Electricity production licensing and grid connection permitting procedures should be streamlined, and user-friendly service channels should be designed to mitigate administrative hurdles for the public. Furthermore, inter-agency coordination on land-use issues in remote areas outside of the electricity grid must be strengthened to enable solar installations in alignment with the intent of Section 56 of the 2017 Constitution of the Kingdom of Thailand.

2.2 Promoting smart grid infrastructure and technologies to enable efficient integration and management of variable renewable energy, while encouraging interoperability with distributed energy systems such as solar PV and energy storage. Infrastructure development should also foster community-level energy innovation, from basic community solar pilots to advanced microgrid systems, to enhance overall grid stability and maximize benefits.

2.3 Advancing electricity tariff reform that is equitable and support the modern energy ecosystem. This can be achieved by reviewing and reforming electricity tariff structures to fairly reflect wheeling charges (grid access charges) for all user groups; preventing undue burdens on consumers without solar installations; creating incentives for grid upgrades that accommodate

solar energy and modern energy ecosystems to ensure efficient grid utilization, appropriateness, and fair pricing.

2.4 Implementing comprehensive life-cycle management of solar PV panels to encourage closed-loop lifecycle management through enacting laws and regulations classifying end-of-life solar PV panels as electronic waste subject to mandatory recycling; applying the Extended Producer Responsibility (EPR) principle; encouraging investment in domestic solar PV panel collection and recycling industries in order to prevent environmental impacts and to create added value from waste.

Hereby, adopted the following resolutions:

1. Members of the National Health Assembly agreed on the policy statement and the core contents of the "Facilitating a Just Energy Transition through Solar Power" as proposed.
2. Members of the National Health Assembly requested a report on the progress to be presented at the 20th National Health Assembly.