



SDG7 Energy Compact of [Company/stakeholder]
A next Decade Action Agenda to advance SDG7 on sustainable energy for all, in line with the goals of the Paris Agreement on Climate Change

SECTION 1: AMBITION

1.1. Ambitions to achieve SDG7 by 2030. [Please select all that apply, and make sure to state the baseline of each target]

(Member States targets could be based on their NDCs, energy policies, national five-year plans etc. targets for companies/organizations could be based on their corporate strategy)

| | |
|---|---|
| <input type="checkbox"/> 7.1. By 2030, ensure universal access to affordable, reliable and modern energy services. | Target(s): Time frame: Context for the ambition(s): |
| <input type="checkbox"/> 7.2. By 2030, increase substantially the share of renewable energy in the global energy mix. | Target(s): 416 m2 of solar collectors installed in three largest Public Hospitals in Panama: The first Hospital “Luis Chicho Fabregas” comprises 172m2 of solar collectors, the second Hospital “San Miguel Arcangel” comprises 122 m2 and the third Hospital “Jose Domingo Obaldia”, 122 m2 with a total of 416m2 between the three projects. Time frame: 1 years Context for the ambition(s): Currently, small solar water heaters are installed in three public hospitals, namely one in the indigenous territory of Guna Yala, one in the new built hospital for COVID (Hospital Integro Panama Solidario) and one in a large public hospital (Ciudad Hospitalaria). According to the potential solar thermal market in Panama developed by UNEP, the entire health sector of the country needs 10.099 m2 of installed area to achieve and average of 70% savings in the use of fossil fuels and electricity for water heating. Given the importance of hot water in the health sector, it becomes essential that the state implements solar thermal for that goal, hence, diminishing the demand of fossil fuel and consequently in the energy matrix. |
| <input type="checkbox"/> 7.3. By 2030, double the global rate of improvement in energy efficiency. | Target(s): Time frame: Context for the ambition(s): |
| <input type="checkbox"/> 7.a. By 2030, enhance international cooperation to facilitate access to clean energy research and technology, including renewable energy, energy efficiency and advanced and cleaner fossil-fuel technology, and promote investment in energy infrastructure and clean energy technology. | Target(s): Time frame: Context for the ambition(s): |
| <input type="checkbox"/> 7.b. By 2030, expand infrastructure and upgrade technology for supplying modern and sustainable energy services for all in developing countries, in particular least developed countries, small island developing States, and land-locked developing countries, in | Target(s): Time frame: Context for the ambition(s): |

accordance with their respective programs of support.

1.2. Other ambitions in support of SDG7 by 2030 and net-zero emissions by 2050. [Please describe below e.g., coal phase out or reforming fossil fuel subsidies etc.]

Target(s): Solar hot water systems installed in three large public health institutions in Panama, providing free carbon hot water.

Time frame: 2021 – 2050

Context for the ambition(s): Panama has recently launched a National Action Plan for solar thermal in order to phase out the use of fossil fuels in the residential, hotel, industrial and public sectors for solar water heating in all applications. The goal is to set 1 million m² of solar collectors by 2050, reaching 0,25m² per capita, a number that Barbados has reached already. Within this plan, the first sector to address should be the public health sector, which has a great need for hot water. Hence, the ambition is to have all public health institutions in the country equipped with solar thermal hot water systems by 2050 that minimize the need for alternative conventional heaters.

SECTION 2: ACTIONS TO ACHIEVE THE AMBITION

2.1. Please add at least one key action for each of the elaborated ambition(s) from section 1. [Please add rows as needed].

| Description of action (please specify for which ambition from Section 1) | Start and end date |
|--|--------------------|
| The National Energy Secretariat is steering the "Termosolar Project" to develop the solar thermal market in Panama. The project has funding from GEF and is executed by UNEP. Within this project a bidding process is being developed to provide and install solar water heaters in the three above mentioned large hospitals. The process is at the final stage of bidding and installation is expected to start before December 2021. | 2021 - 2022 |

SECTION 3: OUTCOMES

3.1. Please add at least one measurable and time-based outcome for **each** of the actions from section 2. [Please add rows as needed].

| Outcome | Date |
|---|------|
| One large public health hospital equipped with solar thermal | 2021 |
| Outcome | Date |
| Two large public health hospitals equipped with solar thermal | 2022 |
| Outcome | Date |
| Three large public health hospitals equipped with solar thermal | 2022 |
| Outcome | Date |

SECTION 4: REQUIRED RESOURCES AND SUPPORT

4.1. Please specify required finance and investments for **each** of the actions in section 2.

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|--|

4.2. [For countries only] In case support is required for the actions in section 2, please select from below and describe the required support and specify for which action.

[Examples of support for Member States could include Access to low-cost affordable debt through strategic de-risking instruments, capacity building in data collection; development of integrated energy plans and energy transition pathways; technical assistance, etc.]

| | |
|---|-------------|
| <input type="checkbox"/> Financing | Description |
| <input type="checkbox"/> In-Kind contribution | Description |
| <input type="checkbox"/> Technical Support | Description |
| <input type="checkbox"/> Other/Please specify | Description |

SECTION 5: IMPACT

5.1. Countries planned for implementation including number of people potentially impacted.

Panama has a total of 924 health sector establishments, divide into three categories: I, II and III. Within these categories, a total amount of 9630 beds are for internation purposes with a 100% use every year. Only accounting for 1 people using 1 bed per day, total amount rises to 3,5 million persons potentially benefited with the use of solar thermal. This fact does not take into account the associated negative and positive externalities related to the improvement of air quality due to less fossil fuel burning.

5.2. Alignment with the 2030 Agenda for Sustainable Development – Please describe how **each** of the actions from section 2 impact advancing the SDGs by 2030.

[up to 500 words, please upload supporting strategy documents as needed]

Implementing solar thermal water heaters in all public health institutions in Panama will save 2.019 TonCO₂ and 7.574 MWh of energy each year, hence diversifying the energy matrix of Panama. In particular, the three large Hospitals to be implemented, the total of 416m² of solar collectors will save 270.4 MWh and 118 TonCO₂ per year. The Expected lifetime of the system is estimated in 25 years, yielding accumulated energy and emission savings of 6.760 MWh and 2.950 TonCO₂.

5.3. Alignment with Paris Agreement and net-zero by 2050 - Please describe how **each** of the actions from section 2 align with the Paris Agreement and national NDCs (if applicable) and support the net-zero emissions by 2050.

[up to 500 words, please upload supporting strategy documents as needed]

The National Plan for solar water heaters includes the public health sector. The solar thermal interventions proposed in the National Plan for solar water heaters are included in the Energy Transition Agenda of Panama and the obtained CO₂ savings due to solar thermal in all sectors was included in the last NDC.

SECTION 6: MONITORING AND REPORTING

6.1. Please describe how you intend to track the progress of the proposed outcomes in section 3. Please also describe if you intend to use other existing reporting frameworks to track progress on the proposed outcomes.

The three solar thermal systems have a control and monitoring systems with online access. Through an agreement with the National technological University of Panama, the three installations will be monitored and assessed through students and researchers that will use the data for their thesis and research goals. Each month the processed info will be sent to the National Energy Secretariat (SNE) for compiling. Thus Energy and emissions savings will be monitored on a daily basis. A yearly report on the functioning of the systems will be performed by the SNE

SECTION 7: GUIDING PRINCIPLES CHECKLIST

Please use the checklist below to validate that the proposed Energy Compact is aligned with the guiding principles.

I. Stepping up ambition and accelerating action - Increase contribution of and accelerate the implementation of the SDG7 targets in support of the 2030 Agenda for Sustainable Development for Paris Agreement

I. 1. Does the Energy Compact strengthen and/or add a target, commitment, policy, action related to SDG7 and its linkages to the other SDGs that results in a higher cumulative impact compared to existing frameworks?

Yes No

I.2. Does the Energy Compact increase the geographical and/or sectoral coverage of SDG7 related efforts? Yes No

I.3. Does the Energy Compact consider inclusion of key priority issues towards achieving SDG7 by 2030 and the net-zero emission goal of the Paris Agreement by 2050 - as defined by latest global analysis and data including the outcome of the Technical Working Groups? Yes No

II. Alignment with the 2030 agenda on Sustainable Development Goals – Ensure coherence and alignment with SDG implementation plans and strategies by 2030 as well as national development plans and priorities.

II.1. Has the Energy Compact considered enabling actions of SDG7 to reach the other sustainable development goals by 2030? Yes No

II.2. Does the Energy Compact align with national, sectoral, and/or sub-national sustainable development strategies/plans, including SDG implementation plans/roadmaps? Yes No

II.3. Has the Energy Compact considered a timeframe in line with the Decade of Action? Yes No

III. Alignment with Paris Agreement and net-zero by 2050 - Ensure coherence and alignment with the Nationally Determined Contributions, long term net zero emission strategies.

III.1. Has the Energy Compact considered a timeframe in line with the net-zero goal of the Paris Agreement by 2050? Yes No

III.2. Has the Energy Compact considered energy-related targets and information in the updated/enhanced NDCs? Yes No

III.3. Has the Energy Compact considered alignment with reaching the net-zero emissions goal set by many countries by 2050? Yes No

IV. Leaving no one behind, strengthening inclusion, interlinkages, and synergies - Enabling the achievement of SDGs and just transition by reflecting interlinkages with other SDGs.

IV.1. Does the Energy Compact include socio-economic impacts of measures being considered? Yes No

IV.2. Does the Energy Compact identify steps towards an inclusive, just energy transition? Yes No

IV.3. Does the Energy Compact consider measures that address the needs of the most vulnerable groups (e.g. those impacted the most by energy transitions, lack of energy access)? Yes No

V. Feasibility and Robustness - Commitments and measures are technically sound, feasible, and verifiable based a set of objectives with specific performance indicators, baselines, targets and data sources as needed.

V.1. Is the information included in the Energy Compact based on updated quality data and sectoral assessments, with clear and transparent methodologies related to the proposed measures? Yes No

V.2. Has the Energy Compact considered inclusion of a set of SMART (specific, measurable, achievable, resource-based and time based) objectives? Yes No

V.3. Has the Energy Compact considered issues related to means of implementation to ensure feasibility of measures proposed (e.g. cost and financing strategy, technical assistant needs and partnerships, policy and regulatory gaps, data and technology)? Yes No

SECTION 8: ENERGY COMPACT GENERAL INFORMATION

8.1. Title/name of the Energy Compact

Solar water heaters for the public health sector in Panama

8.2. Lead entity name (for joint Energy Compacts please list all parties and include, in parenthesis, its entity type, using entity type from below)

Solar water heaters for the public health sector in Panama

8.3. Lead entity type

Government

Local/Regional Government

Multilateral body /Intergovernmental Organization

Non-Governmental Organization (NGO)

Civil Society organization/Youth

Academic Institution /Scientific Community

Private Sector

Philanthropic Organization

Other relevant actor

8.4. Contact Information

Secretary of Energy Panama, Dr. Jorge Rivera Staff, jrivera@energia.gob.pa

8.5. Please select the geographical coverage of the Energy Compact

Africa Asia and Pacific Europe Latin America and Caribbean North America West Asia Global

8.6. Please select the Energy Compact thematic focus area(s)

Energy Access Energy Transition Enabling SDGs through inclusive just Energy Transitions Innovation, Technology and Data Finance and Investment.

SECTION 9: ADDITIONAL INFORMATION (IF REQUIRED)

Please provide additional website link(s) on your Energy Compact, which may contain relevant key documents, photos, short video clips etc. www.termosolarpanama.com ; youtube channel: <https://www.youtube.com/channel/UCAFdBHP4ZY1vCUplHdfXjw>