

United Nations Development Programme

COUNTRY: ZAMBIA
Initiation Plan

Project Title: Solar for Health Strengthening Health Sector Service Delivery

Expected UNSDCF Outcome(s):

Outcome 2: By 2027, all people in Zambia, including the marginalised and vulnerable groups, have equitable access to and utilisation of quality, inclusive, and gender and shock-responsive universal social services.

Expected CP Outcome(s)

Outcome 1: Sustainable natural resources management and resilience

Expected CPD Output(s):

Output 1.3: Strengthened capacities of institutions and communities at national and subnational levels to integrate and implement international conventions for enhanced mitigation and adaptation to climate change and disaster risk reduction.

Brief Description

Zambia is currently facing a severe energy crisis exacerbated by prolonged drought conditions, which have significantly reduced the country's hydroelectric power generation capacity. This has led to chronic power outages, with some areas experiencing load shedding for over 17 hours a day. As a result, essential health services—particularly in rural areas—are severely disrupted, affecting critical healthcare functions such as emergency response, maternal and neonatal care, vaccine storage, and diagnostic services.

The Solar for Health project is a strategic response to this crisis, designed to ensure that healthcare facilities, especially in underserved and remote communities, have access to reliable and sustainable power sources. This initiative, supported by the Global Fund, UNDP, the Government of Zambia, and private sector partners, will install solar photovoltaic (PV) systems in more than 400 rural health facilities. The project aims to mitigate the adverse effects of power shortages on healthcare delivery by providing an uninterrupted power supply, ultimately improving health outcomes for millions of Zambians.

This intervention is being implemented through the Project Initiation Plan (PIP) mechanism for a period of 18 months from the date of document signing. The PIP serves as a precursor to the development of a fully-fledged project document for the Smart Healthcare Systems project, which will integrate digital health solutions, energy-efficient infrastructure, and sustainable financing mechanisms to enhance healthcare service delivery.

By integrating clean energy solutions into the healthcare sector, the project not only enhances the resilience of Zambia's health system but also contributes to the country's broader commitments to climate adaptation, universal health coverage (UHC), and other sustainable development goals (SDGs) 3,5,7,13, and 17.

Initiation Plan Start/End Dates: April 2025- 30 September 2026

Programme Period: April 2025-September 2026 Project Number: 01004069 Gender Marker: 2	Total resources required USD 8,900,000 Total allocated resources: USD 8,900,000 • Regular • Other: - Donor: (UNDP) USD 50000 - Donor : MOH/GF. USD 8,900,000 Unfunded budget: - In-kind Contributions (UNDP) USD 50,000
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Implementing Partner: UNDP

Agreed by:

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21-Feb-2025

Signature

James Wakiaga
UNDP Resident Representative

Date

I. PURPOSE AND EXPECTED OUTPUT

The primary objective of the Solar for Health project is to enhance the resilience and efficiency of Zambia's healthcare system by ensuring continuous and reliable access to electricity in over 400 rural health facilities. This will address the critical energy challenges that have significantly impacted health service delivery, particularly in emergency care, maternal and child health, cold chain storage for vaccines, and diagnostic services.

The project is designed to provide sustainable, renewable energy solutions through the installation of solar photovoltaic (PV) systems, reducing reliance on an unstable grid and costly diesel generators. By doing so, the initiative aims to improve healthcare access for marginalized and underserved communities, ultimately supporting the achievement of universal health coverage (UHC) and the Sustainable Development Goals (SDGs).

This initiation plan is intended to jump-start project design and mobilize resources, ensuring a structured approach for effective implementation. The project will span a 18-month duration, covering key phases such as site selection, financing agreements, procurement, installation, and capacity building to sustain long-term operations.

Expected Outputs

1. Installation of Solar PV Systems in 400 Health Facilities:

- Ensure uninterrupted power supply to rural healthcare facilities.
- Enhance the reliability of essential medical equipment and cold chain storage.
- Reduce dependence on expensive and polluting fossil fuel generators.

2. Strengthening Healthcare Service Delivery:

- Improve maternal and neonatal health services through reliable electricity.
- Enhance laboratory and diagnostic services, ensuring timely and accurate medical testing.

- Support emergency and intensive care units with continuous power availability.

3. **Capacity Building and Technical Training:**

- Train healthcare facility staff and technicians on solar system operation and maintenance.
- Develop technical guidelines and standard operating procedures for solar PV systems.
- Establish a technical support network to ensure system sustainability.

4. **Reduction of Operational Costs and Environmental Impact:**

- Lower energy costs for healthcare facilities through the use of renewable energy.
- Minimize carbon emissions and contribute to Zambia's climate change mitigation efforts.
- Reduce dependency on unreliable national grid electricity.

5. **Integration of Solar Energy in National Health Policies:**

- Support the Ministry of Health in developing policies for sustainable energy use in healthcare.
- Promote public-private partnerships (PPPs) for long-term solar PV system maintenance and expansion.
- Advocate for increased investment in renewable energy solutions for healthcare facilities.

6. **Financial Sustainability and Carbon Credit Mechanism:**

- Develop a Public-Private Partnership (PPP) model to attract investments for long-term solar PV system maintenance.
- Facilitate carbon credit certification to generate additional funding through emissions reduction programs.
- Establish a financial sustainability framework to ensure the continued operation of solar energy infrastructure beyond the project's lifecycle.
- Encourage community engagement to support the expansion and servicing of solar PV systems in healthcare facilities.

II. **MANAGEMENT ARRANGEMENTS**

Due to the economic, and energy situation in the country, UNDP Zambia has activated a mechanism referred to as Fast Track Procedures (FTP) aimed at improving UNDP's response to crises, accelerating project initiation plan (PIP), and addressing urgent needs. In line with this mechanism, the implementation modality for the Solar for Health Project will be the Direct Implementation Modality (DIM). This approach ensures efficiency, transparency, and accountability in project execution, particularly given the critical nature of ensuring uninterrupted power supply to over 400 health facilities. The project aims to enhance access to quality healthcare services while reducing CO2 emissions, contributing to Zambia's climate resilience and sustainable development goals.

The proposed Project Implementation Plan (PIP) will include a project board, project quality assurance mechanisms, and a dedicated project team. Additionally, the PIP document will define the roles and responsibilities of the key implementing partners, ensuring a streamlined coordination process and effective delivery of project outputs.

Roles and Responsibilities of the Ministry of Health (MoH) and UNDP

Ministry of Health (MoH) Responsibilities

1. Needs Assessment and Planning

- Provide a detailed list of required health facilities, types, locations, populations, energy source, and GPS coordinates.

- Align procurement needs with national energy and health policies, ensuring compliance with technical standards and sustainability objectives.
2. **Coordination and Oversight**
 - Appoint a focal point within the Ministry of Health to coordinate day-to-day implementation activities, respond to queries within five days, and liaise with UNDP for smooth execution.
 - Facilitate site assessments and ensure health facilities meet baseline requirements for solar installations.
 - Disburse funds to UNDP within two weeks after signing the Government Finance Agreement for procurement and installation.
 3. **Regulatory Compliance and Logistics Support**
 - Expedite regulatory approvals, including import permits and tax exemptions for solar equipment and energy storage systems.
 - Ensure timely customs clearance and facilitate the release of solar equipment for deployment at designated health facilities.
 - Monitor the adherence to environmental and social safeguards, particularly regarding disposal and recycling of solar components.
 4. **Operations and Maintenance**
 - Act as the primary custodian of installed solar systems, ensuring their integration into national healthcare infrastructure.
 - Establish a maintenance framework in collaboration with the private sector, community-based organizations, and MoH technical teams.
 - Train healthcare facility managers and staff in basic troubleshooting and maintenance of solar systems.
 5. **Monitoring, Reporting, and Sustainability Planning**
 - Conduct regular performance assessments of solar installations and report on energy savings, impact on healthcare services, and emission reductions.
 - Facilitate periodic review meetings with UNDP and other stakeholders to discuss progress and challenges.
 - Develop a long-term sustainability strategy, including budget allocations for system maintenance and potential private-sector partnerships for system expansion.

UNDP Responsibilities:

1. **Procurement and Supply Chain Management**
 - Procure and supply high-quality solar energy solutions as per the agreed specifications and budget in compliance with international standards.
 - Manage tendering processes and contract reputable suppliers to ensure timely delivery and installation.
 - Provide MoH with regular procurement updates and seek no-objection approvals for major procurement decisions.
2. **Installation and Technical Support**
 - Oversee the transportation, installation, and commissioning of solar power systems in identified health facilities.
 - Ensure proper training of MoH personnel and health facility staff in system management and troubleshooting.
 - Conduct post-installation evaluations to verify functionality and efficiency.
3. **Financial Management and Accountability**
 - Provide financial oversight and reporting, ensuring transparency in fund utilization.
 - Offer regular financial statements to MoH and ensure proper documentation of expenditures.
 - Assist in reprogramming any unspent budget based on MoH recommendations.

4. Capacity Building and Awareness

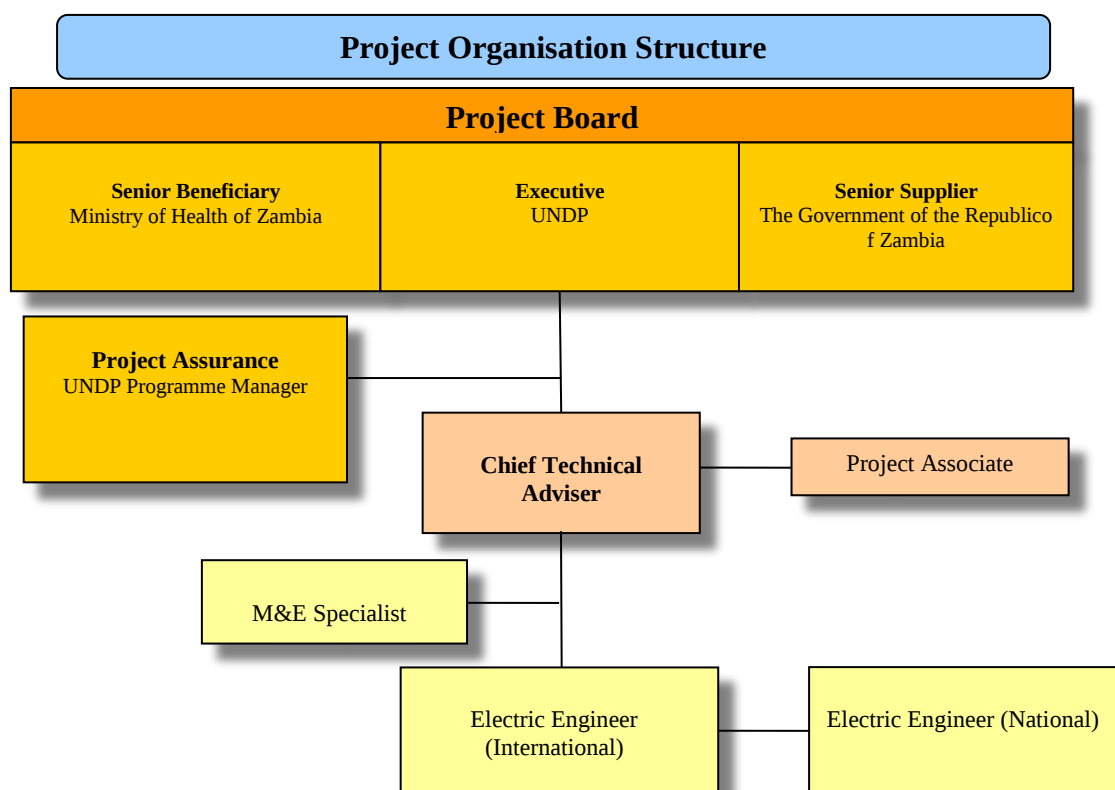
- Support capacity-building initiatives for MoH and facility staff to enhance operational sustainability.
- Implement a communication strategy to promote public awareness on the benefits of renewable energy in healthcare.
- Engage with development partners and stakeholders to foster collaboration and knowledge sharing.

5. Monitoring, Evaluation, and Risk Management:

- Conduct impact assessments to evaluate improvements in healthcare services due to solar installations.
- Establish a grievance redress mechanism to address any concerns related to the project.
- Identify risks and propose mitigation strategies to ensure long-term sustainability of solar systems.

6. Finance Sustainability Framework Development:

- Provide technical expertise in developing a financial sustainability framework to ensure long-term viability of the Solar for Health project.
- Foster public-private partnership (PPP) models to attract investment and private-sector involvement in solar infrastructure maintenance and expansion.
- Develop carbon credit mechanisms to enable the monetization of CO2 emission reductions, generating additional revenue streams for project sustainability.



The Project Board will be responsible for making consensus-based management recommendations for the project when guidance is required by the Project Coordinator. The Board will also review and endorse Project Initiation Plan (PIP) documents and revisions, annual work plans, and quarterly and annual project reports.

The Board will have three key roles:

- **Executive:** Representing project ownership and responsible for chairing the group. For this project, UNDP will assume the role of Project Board Executive.
- **Senior Supplier:** Providing guidance on the technical feasibility of the project. This role will be assumed by the Government of the Republic of Zambia.
- **Senior Beneficiary:** Ensuring the realization of project benefits from the perspective of the ultimate beneficiaries. This role will be performed by designated representatives of the Ministry of Health of Zambia.

Strategic communication related to project implementation will be an integral part of the Project Board meetings agenda, ensuring alignment with key stakeholders.

Project Assurance

The Project Assurance role supports the Project Board by carrying out objective and independent oversight and monitoring functions. This role ensures appropriate project management milestones are achieved and completed. The Project Assurance function will be performed by a UNDP Zambia Senior Programme Adviser.

Project Implementation Team

The Project Implementation Team will be responsible for:

- Overall day-to-day management of project implementation;
- Coordination with stakeholders and project partners;
- Strategic, technical, and methodological backstopping to Regional Implementation Teams;
- Monitoring project implementation and ensuring quality assurance;

- Knowledge management, reporting, and visibility.

The core Project Implementation Team will consist of the following staff:

- Chief Technical Adviser (CTA) : will oversee activity monitoring and results tracking, ensuring that implementing partners adhere to project objectives
- Project Associate: Supporting coordination, documentation, and stakeholder engagement.
- Electric Engineer: Responsible for day-to-day project management, ensuring timely delivery of results within the defined quality standards, time constraints, and budget.
- Monitoring and Evaluation specialist:

Amendments to Project Documentation

The Project documentation (PIP, Cost-Sharing Agreement between UNDP and MoH, and annexes to the Agreement) may be amended through an exchange of official letters between MoH and UNDP with approval from the Project Board. Such exchanged letters shall become an integral part of the project documentation.

Through this structured implementation approach, the Solar for Health project will contribute to a resilient and sustainable healthcare system in Zambia, ensuring uninterrupted power supply, reducing healthcare operational costs, and significantly lowering carbon emissions. The partnership between MoH and UNDP will ensure effective project delivery and long-term sustainability, ultimately improving healthcare outcomes for communities across the country.

III. MONITORING

In accordance with UNDP Programme and Operations Policies and Procedures (POPP), the Solar for Health project will be systematically monitored across key areas to ensure efficiency, effectiveness, and sustainability.

Key Monitoring Areas

Procurement Progress Monitoring

Procurement activities will be tracked against the Project Initiation Plan (PIP) to ensure timely and effective procurement of solar equipment. Data collection and analysis will be conducted quarterly, utilizing the remote monitoring System for real-time tracking and performance evaluation.

Quality Assurance Monitoring

Quarterly assessments will be conducted to measure the project's adherence to UNDP quality standards, identify strengths and areas for improvement, and inform management decisions for continuous optimization.

Budgetary Oversight

Financial tracking mechanisms will ensure the efficient allocation and utilization of funds, preventing mismanagement and ensuring compliance with financial guidelines.

Regulatory Compliance Monitoring

Challenges related to the importation, registration, and clearance of solar equipment under the UNDP Finance Agreement will be closely monitored to mitigate delays and ensure compliance with national regulations.

Risk Management

A structured risk management framework will be employed to identify and mitigate potential risks threatening project outcomes. Risks will be documented in a Risk Log, updated regularly, and integrated with social and environmental safeguards. Audits will be conducted in line with UNDP policies.

Quarterly Monitoring

- **Quality Assessments** will be conducted to track progress against key project results using established quality criteria.
- An Issue Log will be maintained and updated in Quantum project management system, with the Project Chief Technical Adviser tracking and resolving potential challenges.
- A Risk Log in Quantum project management system will assess external risks affecting implementation and inform proactive risk mitigation.
- A Project Progress Report (PPR) will be submitted by the CTA to the Project Board through Project Assurance, following the standard UNDP reporting format.
- A **Lessons-Learned Log** will be maintained to support adaptive learning and best practice documentation.
- A **Monitoring Schedule Plan** will be implemented and updated in **Quantum** to track key management actions and project milestones.

Annual Monitoring

- **Annual Review Report:** Compiled by the CTA and submitted to the Project Board, incorporating quarterly progress updates and financial reports.
- **Annual Project Review:** Conducted in Q4, led by the Project Board, to assess overall project performance and realign the Annual Work Plan (AWP) for the upcoming year.

Reporting and Audits

- Interim and final progress and financial reports will be submitted to the donor, outlining achievements relative to project outcomes.
- Internal and external audits will be conducted in accordance with UNDP Financial Regulations and Rules to ensure financial accountability and compliance.

Impact and Sustainability

Through this structured monitoring and evaluation approach, the Solar for Health project will ensure a resilient and sustainable healthcare system in Zambia by:

- Guaranteeing uninterrupted power supply to health facilities.
- Reducing operational costs and reliance on fossil fuels.
- Lowering carbon emissions and supporting climate resilience.

The strategic partnership between MoH and UNDP will facilitate effective project delivery and ensure long-term sustainability, ultimately enhancing healthcare outcomes for communities across Zambia.

1. SESP Attachment 1. Social and Environmental Risk Screening Checklist

Checklist Potential Social and Environmental Risks	
Principles 1: Human Rights	Answer (Yes/No)
1. Could the Project lead to adverse impacts on enjoyment of the human rights (civil, political, economic, social or cultural) of the affected population and particularly of marginalized groups?	No
2. Is there a likelihood that the Project would have inequitable or discriminatory adverse impacts on affected populations, particularly people living in poverty or marginalized or excluded individuals or groups? ¹	No

¹ Prohibited grounds of discrimination include race, ethnicity, gender, age, language, disability, sexual orientation, religion, political or other opinion, national or social or geographical origin, property, birth or other status including as an indigenous person or as a member of a minority. References to "women and men" or similar is understood to include women and men, boys and girls, and other groups discriminated against based on their gender identities, such as transgender people and transsexuals.

3.	Could the Project potentially restrict availability, quality of and access to resources or basic services, in particular to marginalized individuals or groups?	No
4.	Is there a likelihood that the Project would exclude any potentially affected stakeholders, marginalized groups, from fully participating in decisions that may affect them?	No
5.	Is there a risk that duty-bearers do not have the capacity to meet their obligations in the Project?	No
6.	Is there a risk that rights-holders do not have the capacity to claim their rights?	No
7.	Have local communities or individuals, given the opportunity, raised human rights concerns regarding the Project during the stakeholder engagement process?	No
8.	Is there a risk that the Project would exacerbate conflicts among and/or the risk of violence to project-affected communities and individuals?	No
Principle 2: Gender Equality and Women's Empowerment		
1.	Is there a likelihood that the proposed Project would have adverse impacts on gender equality and/or the situation of women and girls?	No
2.	Would the Project potentially reproduce discriminations against women based on gender, especially regarding participation in design and implementation or access to opportunities and benefits?	No
3.	Have women's groups/leaders raised gender equality concerns regarding the Project during the stakeholder engagement process and has this been included in the overall Project proposal and in the risk assessment?	No
4.	Would the Project potentially limit women's ability to use, develop and protect natural resources, taking into account different roles and positions of women and men in accessing environmental goods and services?	No
Principle 3: Environmental Sustainability: Screening questions regarding environmental risks are encompassed by the specific Standard-related questions below		
Standard 1: Biodiversity Conservation and Sustainable Natural Resource Management		
1.1	Would the Project potentially cause adverse impacts to habitats (e.g. modified, natural, and critical habitats) and/or ecosystems and ecosystem services?	No
1.2	Are any Project activities proposed within or adjacent to critical habitats and/or environmentally sensitive areas, including legally protected areas (e.g. nature reserve, national park), areas proposed for protection, or recognized as such by authoritative sources and/or indigenous peoples or local communities?	No
1.3	Does the Project involve changes to the use of lands and resources that may have adverse impacts on habitats, ecosystems, and/or livelihoods? (Note: if restrictions and/or limitations of access to lands would apply, refer to Standard 5)	No
1.4	Would Project activities pose risks to endangered species?	No
1.5	Would the Project pose a risk of introducing invasive alien species?	No
1.6	Does the Project involve harvesting of natural forests, plantation development, or reforestation?	No
1.7	Does the Project involve the production and/or harvesting of fish populations or other aquatic species?	No
1.8	Does the Project involve significant extraction, diversion or containment of surface or ground water?	No
1.9	Does the Project involve utilization of genetic resources? (e.g. collection and/or harvesting, commercial development)	No
1.10	Would the Project generate potential adverse transboundary or global environmental concerns?	No

1.11	Would the Project result in secondary or consequential development activities which could lead to adverse social and environmental effects, or would it generate cumulative impacts with other known existing or planned activities in the area?	No
Standard 2: Climate Change Mitigation and Adaptation		
2.1	Will the proposed Project result in significant ² greenhouse gas emissions or may exacerbate climate change?	No
2.2	Would the potential outcomes of the Project be sensitive or vulnerable to potential impacts of climate change?	No
2.3	Is the proposed Project likely to directly or indirectly increase social and environmental vulnerability to climate change now or in the future (also known as maladaptive practices)?	No
Standard 3: Community Health, Safety and Working Conditions		
3.1	Would elements of Project construction, operation, or decommissioning pose potential safety risks to local communities?	No
3.2	Would the Project pose potential risks to community health and safety due to the transport, storage, and use and/or disposal of hazardous or dangerous materials (e.g. explosives, fuel and other chemicals during construction and operation)?	No
3.3	Does the Project involve large-scale infrastructure development (e.g. dams, roads, buildings)?	No
3.4	Would failure of structural elements of the Project pose risks to communities? (e.g. collapse of buildings or infrastructure)	No
3.5	Would the proposed Project be susceptible to or lead to increased vulnerability to earthquakes, subsidence, landslides, erosion, flooding or extreme climatic conditions?	No
3.6	Would the Project result in potential increased health risks (e.g. from water-borne or other vector-borne diseases or communicable infections such as HIV/AIDS)?	No
3.7	Does the Project pose potential risks and vulnerabilities related to occupational health and safety due to physical, chemical, biological, and radiological hazards during Project construction, operation, or decommissioning?	No
3.8	Does the Project involve support for employment or livelihoods that may fail to comply with national and international labor standards (i.e. principles and standards of ILO fundamental conventions)?	No
3.9	Does the Project engage security personnel that may pose a potential risk to health and safety of communities and/or individuals (e.g. due to a lack of adequate training or accountability)?	No
Standard 4: Cultural Heritage		
4.1	Will the proposed Project result in interventions that would potentially adversely impact sites, structures, or objects with historical, cultural, artistic, traditional or religious values or intangible forms of culture (e.g. knowledge, innovations, practices)? (Note: Projects intended to protect, and conserve Cultural Heritage may also have inadvertent adverse impacts)	No
4.2	Does the Project propose utilizing tangible and/or intangible forms of cultural heritage for commercial or other purposes?	No
Standard 5: Displacement and Resettlement		
5.1	Would the Project potentially involve temporary or permanent and full or partial physical displacement?	No
5.2	Would the Project possibly result in economic displacement (e.g. loss of assets or access to resources due to land acquisition or access restrictions – even in the absence of physical relocation)?	No
5.3	Is there a risk that the Project would lead to forced evictions? ³	No

² In regards to CO₂, 'significant emissions' corresponds generally to more than 25,000 tons per year (from both direct and indirect sources). [The Guidance Note on Climate Change Mitigation and Adaptation provides additional information on GHG emissions.]

³ Forced evictions include acts and/or omissions involving the coerced or involuntary displacement of individuals, groups, or communities from homes and/or lands and common property resources that were occupied or depended upon, thus eliminating the ability of an individual, group, or community to reside or work in a particular dwelling, residence, or location without the provision of, and access to, appropriate forms of legal or other protections.

5.4	Would the proposed Project possibly affect land tenure arrangements and/or community-based property rights/customary rights to land, territories and/or resources?	No
Standard 6: Indigenous Peoples		
6.1	Are indigenous peoples present in the Project area (including Project area of influence)?	No
6.2	Is it likely that the Project or portions of the Project will be located on lands and territories claimed by indigenous peoples?	No
6.3	Would the proposed Project potentially affect the human rights, lands, natural resources, territories, and traditional livelihoods of indigenous peoples (regardless of whether indigenous peoples possess the legal titles to such areas, whether the Project is located within or outside of the lands and territories inhabited by the affected peoples, or whether the indigenous peoples are recognized as indigenous peoples by the country in question)?	No
6.4	Has there been an absence of culturally appropriate consultations carried out with the objective of achieving FPIC on matters that may affect the rights and interests, lands, resources, territories and traditional livelihoods of the indigenous peoples concerned?	No
6.5	Does the proposed Project involve the utilization and/or commercial development of natural resources on lands and territories claimed by indigenous peoples?	No
6.6	Is there a potential for forced eviction or the whole or partial physical or economic displacement of indigenous peoples, including through access restrictions to lands, territories, and resources?	No
6.7	Would the Project adversely affect the development priorities of indigenous peoples as defined by them?	No
6.8	Would the Project potentially affect the physical and cultural survival of indigenous peoples?	No
6.9	Would the Project potentially affect the Cultural Heritage of indigenous peoples, including through the commercialization or use of their traditional knowledge and practices?	No
Standard 7: Pollution Prevention and Resource Efficiency		
7.1	Would the Project potentially result in the release of pollutants to the environment due to routine or non-routine circumstances with the potential for adverse local, regional, and/or transboundary impacts?	No
7.2	Would the proposed Project potentially result in the generation of waste (both hazardous and non-hazardous)?	Yes
7.3	Will the proposed Project potentially involve the manufacture, trade, release, and/or use of hazardous chemicals and/or materials? Does the Project propose use of chemicals or materials subject to international bans or phase-outs?	No
7.4	Will the proposed Project involve the application of pesticides that may have a negative effect on the environment or human health?	No
7.5	Does the Project include activities that require significant consumption of raw materials, energy, and/or water?	No

7.2. E-Waste Generation in the Solar for Health Project

The Solar for Health project involves the deployment of solar photovoltaic (PV) systems to health facilities to enhance energy access and sustainability. While this initiative significantly improves healthcare infrastructure, it also introduces potential e-waste generation, categorized into hazardous and non-hazardous waste.

Sources of E-Waste in the Project:

1. **Solar Panels** – Over time, degraded or damaged photovoltaic panels will require disposal.
2. **Batteries** – Energy storage solutions, particularly lead-acid and lithium-ion batteries, have limited lifespans and pose hazardous waste concerns.
3. **Inverters and Charge Controllers** – Electronic components involved in power conversion and regulation may become obsolete or non-functional.

4. **Cabling and Electrical Components** – Worn-out wires, connectors, and switches contribute to electronic waste.

Environmental and Health Risks:

- **Hazardous waste** (e.g., Lithium-ion batteries, certain electronic components) can leach toxic substances like lead and lithium if improperly disposed of.
- **Non-hazardous waste** (e.g., glass, plastic casings, aluminum frames from solar panels) still requires proper management to prevent environmental pollution.

Mitigation and Sustainable E-Waste Management:

- **Recycling & Recovery** – Implementing partnerships with certified e-waste recyclers to extract valuable materials.
- **Extended Producer Responsibility (EPR)** – Encouraging suppliers to take responsibility for end-of-life disposal.
- **Safe Disposal & Storage** – Developing protocols for hazardous waste handling within health facilities.
- **Circular Economy Approach** – Exploring repurposing of decommissioned components into secondary applications.

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IV. WORK PLAN

Period⁴: April 2025-September 2026

EXPECTED OUTPUTS <i>And baseline, indicators including annual targets</i>	PLANNED ACTIVITIES <i>List activity results and associated actions</i>	TIMEFRAME						RESPONSIBLE PARTY	PLANNED BUDGET		
		Q2	Q3	Q4	Q5	Q6	Q7		Funding Source	Budget Description	Amount (USD)
Output 1: Installation of Solar PV Systems in 400 Health Facilities <i>Baseline:0</i> <i>Indicators:</i> Installation of Solar PV Systems in 400 Health Facilities Baseline: 0 Indicators: Number of health facilities equipped with operational solar PV systems <i>Targets:400</i> <i>Related CP outcome: 1</i>	1. Activity Result: Procure and install solar PV systems in 400 targeted health facilities -Activity action: Conduct site assessments and feasibility studies for installations -Activity action: Ensure system integration with existing health facility infrastructure	X	X					UNDP	GF	Procurement of Solar PV systems	7,642,583
	2. Activity Result: Conduct training for 1000 healthcare facility staff and technicians on solar system operation and maintenance. -Activity action: Develop and distribute technical guidelines -Activity action: Establish national technical support network			X	X			UNDP	GF	Capacity Development	
	3. Activity Result: 30% Reduction in operational energy costs for healthcare facilities - Action: Conduct energy cost assessment pre and post solar installation - Action: Monitor and evaluate environmental impact			X	X			UNDP	GF	Cost Efficiency	60,000

⁴ Maximum 18 months

	4. Activity Result: Financial Sustainability -Action: Develop a Public-Private Partnership (PPP) model for long-term solar PV maintenance -Action: Facilitate carbon credit certification to generate additional funding through emissions reduction programs		X	X							125,000
Output 2: Project management Support	HR cost.	X	X	X	X	X	X	UNDP	GF	HR	310,000
	Monitoring and Evaluation	X	X		X	X	X	UNDP	GF	M&E	180,000
	UNDP GMS (7%)										582,417
TOTAL											8,900,000