



SIERRA LEONE

Independent Evaluation of SEforALL Projects in Sierra Leone: Powering Sierra Leone's Hospitals Programme



EVALUATION BY:



PV system installed at Kabala Hospital

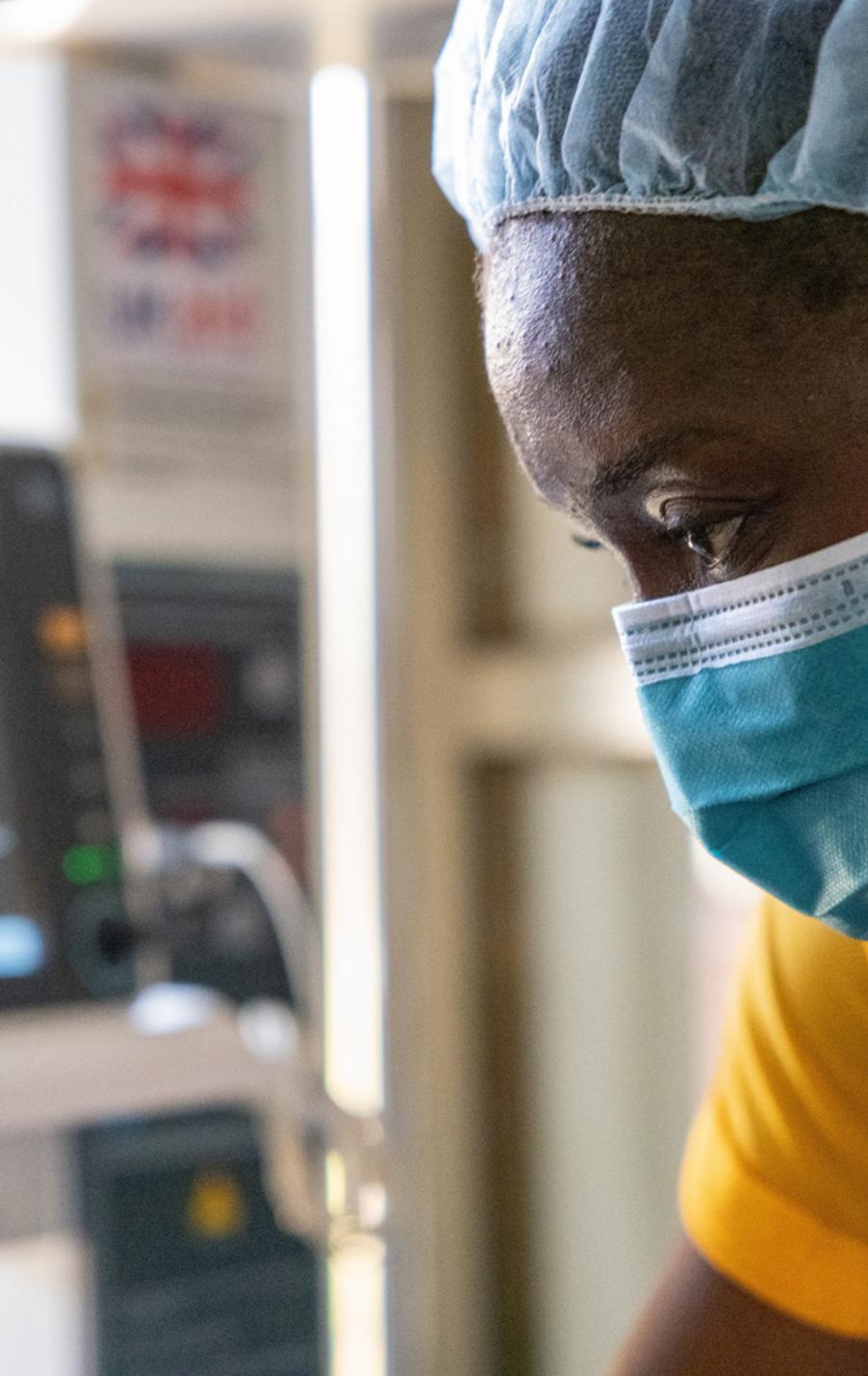


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Key takeaways from Powering Healthcare Evaluation

PHASE 1 OF THE POWERING SIERRA LEONE'S HOSPITALS PROGRAMME HAS FULLY ACHIEVED ITS PRIMARY OBJECTIVE(S) BY:



Providing six hospitals with access to renewable energy solutions through the effective deployment, commissioning and verification of 0.62MWp of PV.
Next Steps: Now moving to phase 3: solarization of 11 hospitals, following phase 2: 1 hospital and 25 community health clinics.



Clearly aligning with national priorities, SEforALL, donor commitments and implementation partners' priorities. The intervention has been and continues to be pertinent for the country and remains coherent.
SEforALL should continue alignment of support with government objectives.



Showing strong potential for sustainability and replicability and standing out for its effective integration of cross-cutting issues.
SEforALL should continue developing health sector electrification projects under a climate-health nexus approach in Sierra Leone and abroad in coordination with other SEforALL workstreams.



Demonstrating good practice in getting all the key stakeholders involved throughout the project design and its implementation – SEforALL, the Ministry of Health, the PM Firm, the EPC contractors and the donor.
SEforALL should engage these stakeholders earlier in project phases 2 and 3.



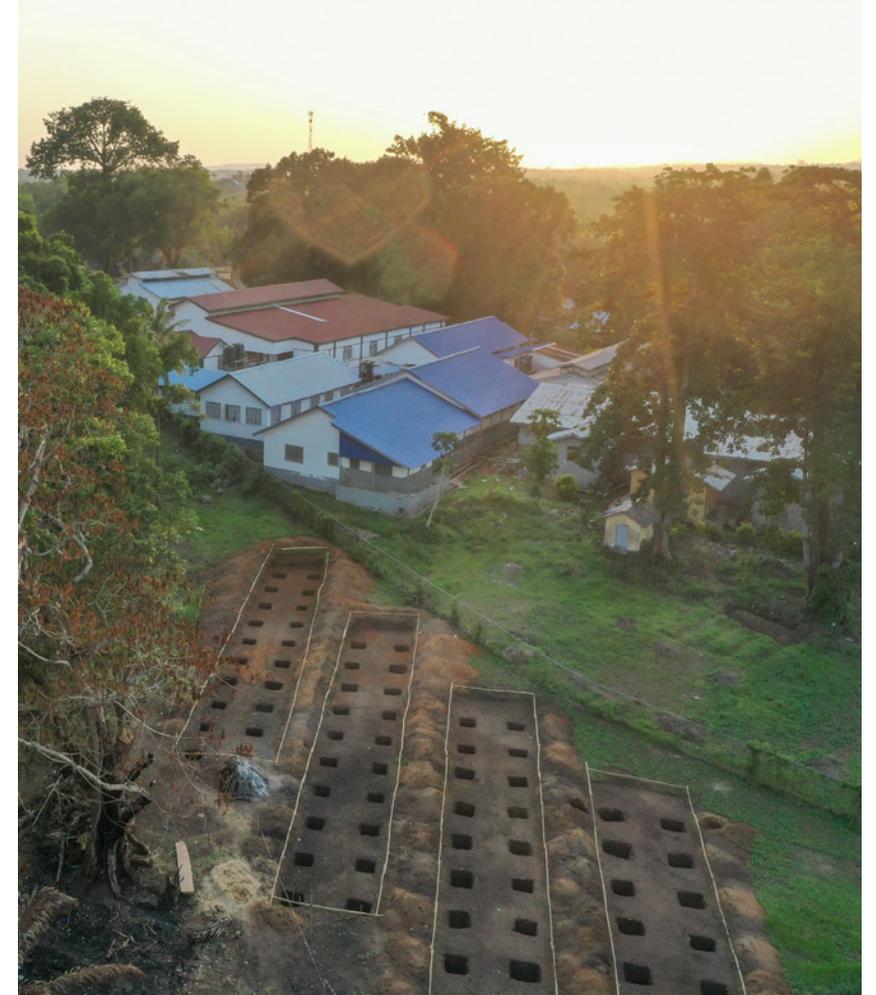
Executive Summary overview of Powering Healthcare Sierra Leone Evaluation

CONCLUSIONS

1. Overall, the evaluation team found the implementation of the Powering Sierra Leone's Hospitals Programme highly satisfactory. The project successfully achieved its primary objective and is well equipped to realize its main expected impacts.
 - The Powering Sierra Leone's Hospitals Programme has fully achieved its primary objective by providing six hospitals with access to renewable energy solutions through the effective deployment, commissioning and verification of 0.62MWp of PV.
2. The Powering Sierra Leone's Hospitals Programme is clearly aligned with national priorities, SEforALL and donor commitments, and implementation partners' priorities. The intervention has been and continues to be pertinent for the country and remains coherent.
3. Although the project suffered delays caused by external factors during its implementation, it has carried out all its activities with the budget provided, and outputs are mostly perceived to be of very good quality.
4. The project shows strong potential for sustainability and replicability and stands out for its effective integration of cross-cutting issues.

LEARNINGS

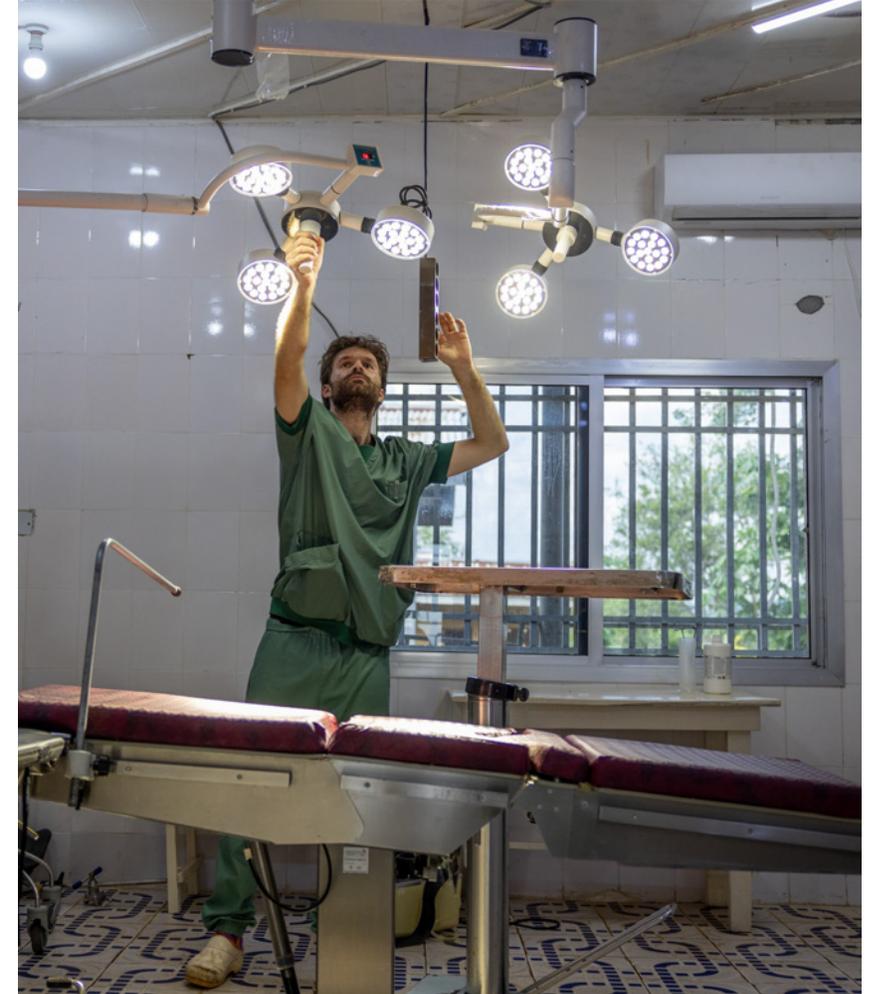
1. The project demonstrated good practice in getting all the key stakeholders involved throughout the project design and its implementation – SEforALL, the Ministry of Health, the PM Firm, the EPC contractors and the donor.
2. Incorporation of O&M plan is key to ensure project sustainability and should be included in all projects of this nature.
3. Earlier engagement of the PM firm can ensure higher efficiency in project implementation.



Executive Summary overview of Powering Healthcare Sierra Leone Evaluation

RECOMMENDATIONS

1. **Replicability and scalability:** continue developing health sector electrification projects under a climate-health nexus approach in Sierra Leone and abroad in coordination with other SEforALL workstreams and foster strong government engagement, ownership and involvement.
2. **For the design of future electrification projects:** consider key elements of systems design e.g., system sizing, O&M strategy, training of local workforce and resources availability to ensure sustainability and full impact achievement.
3. **To advance SDG7 in Sierra Leone:** SEforALL should continue the development and enhancement of the country's support strategy in alignment with key organizational plans, government goals and in consultation with key sector stakeholders.
4. **On project management and reporting:** consider, in future projects and if possible, contracting the PM firm prior to the EPC contractor to streamline project management, and ensure clear and factual progress reporting, including identification of lessons learned.
5. **For improving future project design and MEL:** consider clearly establishing linkages between projects and programmes, reflected in improved ToCs and logframes with distinctions of individual components, all supported by processes, capacity building, templates and guidance to be used across the entire organization. This would make it easier for SEforALL to be able to measure impact at organizational level and its direct contribution to SDG7 and other relevant SDGs.
6. **Consider conducting an impact evaluation** of the SEforALL Powering Healthcare Programme.





01 | The Powering Sierra Leone's Hospitals Programme

The Powering Sierra Leone's Hospitals Programme

CONTEXT

Sierra Leone has one of the lowest electricity access rates in the world. Electricity access reaches only 36% of the country's population (October 2023) and installed generation capacity as of 2024 calculated and presented at the energy sector roundtable by the Ministry of Energy (MoE), is 277 MW. However, operational capacity and availability varies between 111 MW and 165 MW depending on the season.

Sierra Leone suffers from high technical commercial and collection losses (close to 40%), poorly maintained grid infrastructure, unreliable supply characterized by long periods without electricity, and overreliance on polluting diesel generators.



Affects people's ability to conduct activities (communicating with others, studying or working) & also negatively affects the quality of basic social services, such as healthcare and education.

SEFORALL

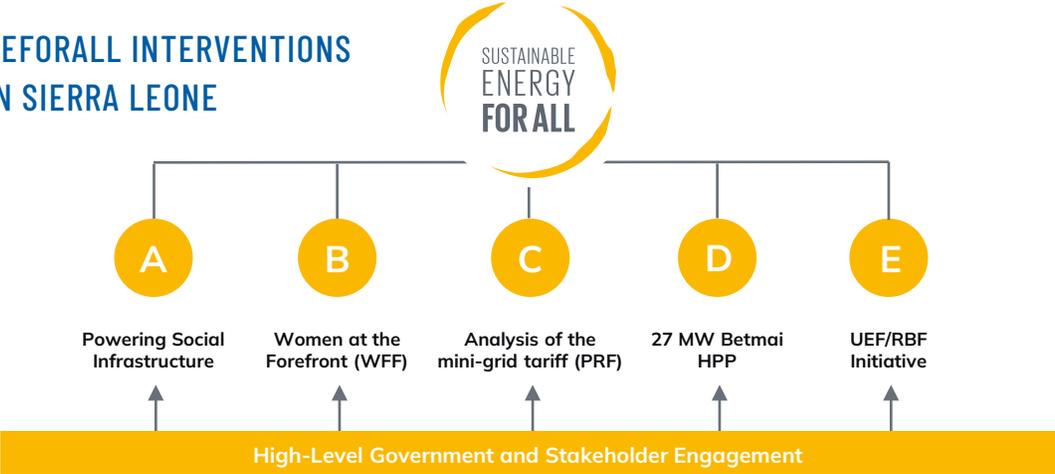
Launched in 2011 by former UN Secretary-General Ban Ki-moon, **SEforALL** aims to advance Sustainable Development Goal 7 (SDG7) by ensuring universal access to affordable, reliable, sustainable and modern energy by 2030.

Achievement of SDG7 is underpinned by large-scale social, economic and environmental impacts, including improved climate, **health**, livelihoods and job creation, gender equality and food security.

Results Offers/ Programmes, have been developed following an **energy ecosystem approach** under the different thematic areas to advance actions towards the achievement of SDG7 by 2030. Each one has at programmatic level, its own ToC and associated KPIs for the 3 years of the business plan 2021–2023, in alignment with the organizational ToC.

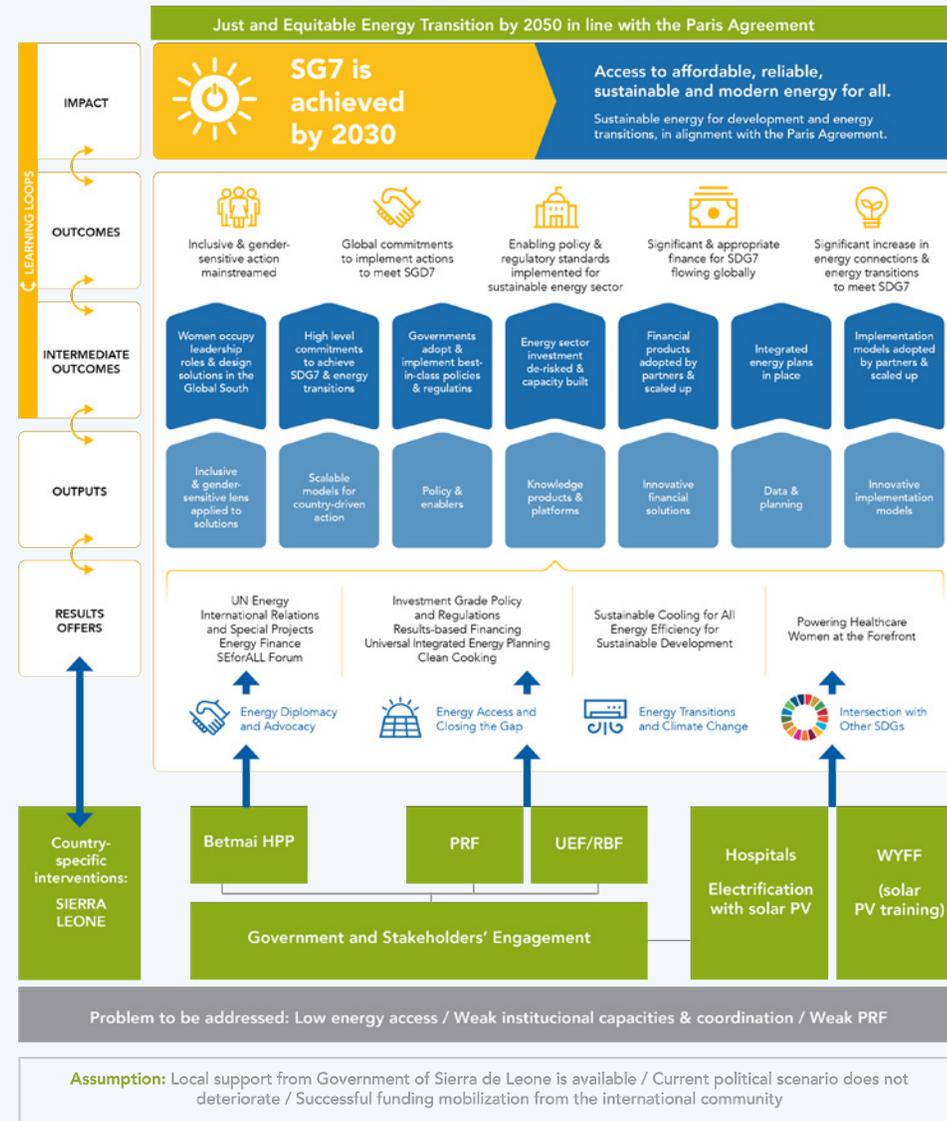
The Powering Sierra Leone's Hospitals Programme (FCDO) and the Powering Social Infrastructure workstream (RF/GEAPP) contribute to the Powering Healthcare RO

SEFORALL INTERVENTIONS IN SIERRA LEONE



The objective of this Results Offer is to drive the powering healthcare agenda by equipping governments and their development partners with the evidence and solutions to achieve universal electrification of health facilities by 2030.

SEforALL aims to implement its programmes in Sierra Leone synergistically and contribute to the delivery of the SEforALL 3.0 strategy



Strategic Partnerships



The Powering Sierra Leone's Hospitals Programme

GOAL: to enhance healthcare service delivery in Sierra Leone by providing reliable, sustainable and modern electricity to six major hospitals, focusing on areas with unreliable or insufficient power. The project aimed at deploying over **0.6 MWp of solar PV** installed capacity.

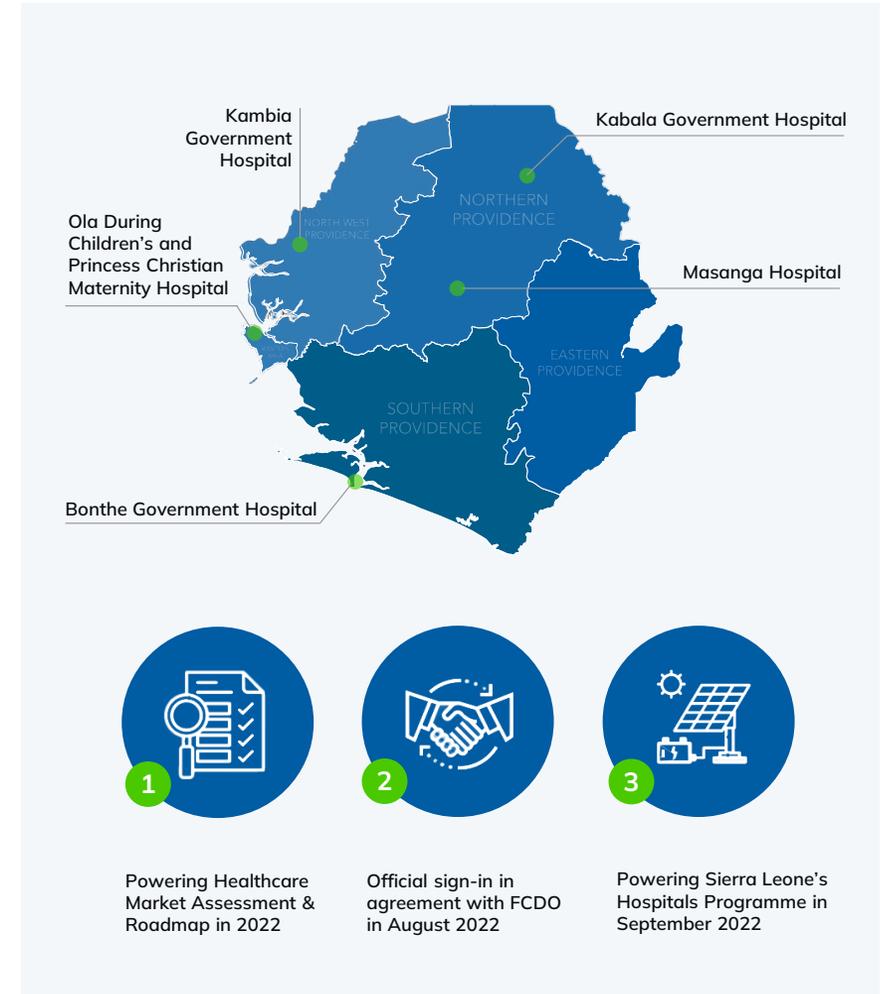
KEY BENEFICIARIES

- +8.5 million people (catchment population of the six hospitals), of which: women (~4.24 million, 49.9% of total population) and children (specifically under 5 years old).
- STEM female trainees have been engaged in practical solar PV installation training to gain employment and career opportunities in the national renewable energy sector.

THE PROJECT

- Implemented by SEforALL
- Financed by the UK FCDO with funding totalling GBP 4,950,000
- Executed by EM-ONE as the EPC contractor and Crown Agents as Project Management Support firm (PM firm)

The agreement between FCDO and SEforALL was signed in **August 2022**. Implementation of the project started in **September 2022**, and it was completed in **December 2023**.



PCMH

OBSTETRIC EMERGENCY ROOM

02

Evaluation
Purpose & Methodology

Evaluation Purpose & Methodology

Overall objective: independently and objectively assess the implementation of the Powering Sierra Leone's Hospitals Programme

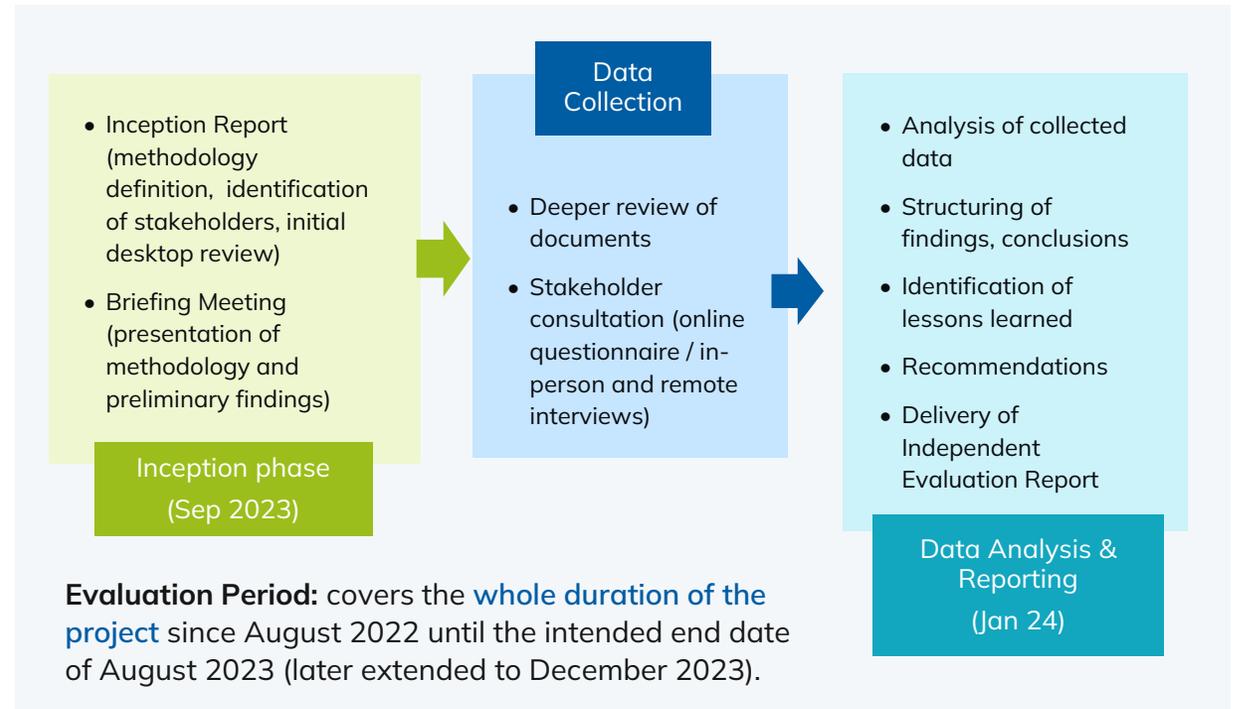
TWO SPECIFIC OBJECTIVES:

Performance Objective

1. Focus on progress made and results achieved in comparison to planned and expected outcomes, outputs and targets (accountability)
2. Assessment of projects' performance in terms of coherence, relevance, effectiveness, efficiency, sustainability and progress to impact

Learning Objective

1. Identify lessons learned and good practices as a foundation for learning
2. Provide utility-focused recommendations to inform future work of the different teams based on what worked well / not so well
3. Improve planning, coordination and enhance the design of new SEforALL projects



Evaluation Purpose & Methodology

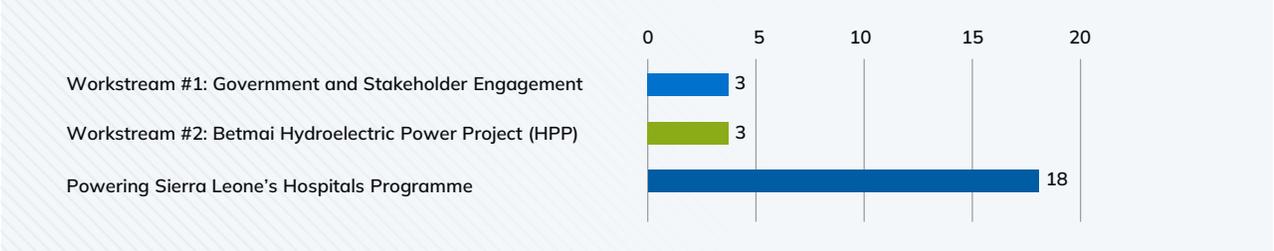
STAKEHOLDER CONSULTATION

25 in-person & virtual interviews carried out (individuals or groups):

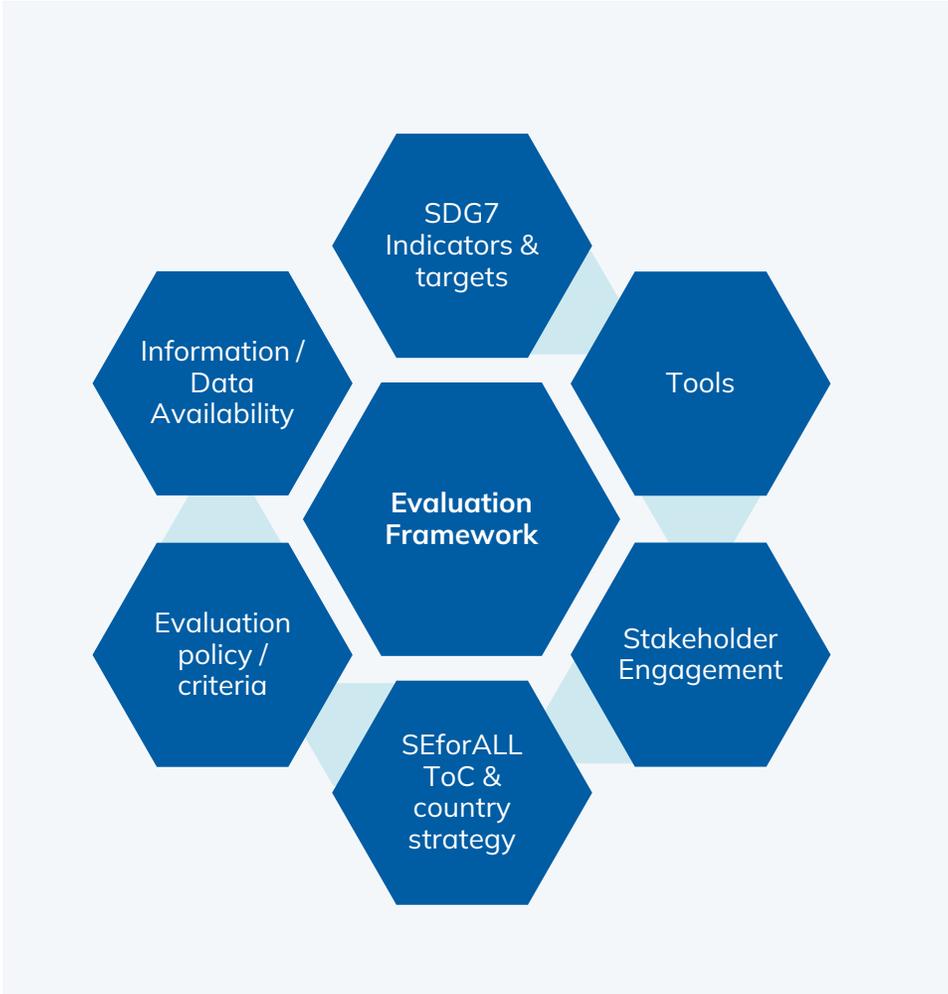
- Reached 37 stakeholders (in 16 individual meetings and 9 group meetings, covering the remaining 21 people)
- In-person interviews conducted during the mission to Sierra Leone and by the ITP Energised local consultant.

ELECTRONIC QUESTIONNAIRE

- Distributed to 51 people. Received responses from 21 people (41% response rate), with 57% women participation.
- Out of the total, 18 were related to the PHP* project.
- Responses were received from different organizations including international development agencies, private sector enterprises, financial institutions, healthcare facilities, national government, non-governmental organizations/civil society organizations.



*PHP: acronym used for the Powering Sierra Leone's Hospitals Programme





POWERING HEALTHCARE PROJECT SOLARIZATION OF 6 KEY HOSPITALS IN SIERRA LEONE

Ola During Children's Hospital and Princess Christian Maternity Hospital

Solar Capacity 300.8Wp, Battery Capacity: 547.2kWh

IN COOPERATION WITH



03

Key Findings of the Evaluation

Key Findings of the Evaluation



01 PROJECT DESIGN

Overall Design

Project Logframe

OVERALL DESIGN:

- Project design is adequate to effectively address the critical issue of healthcare sector electrification, as the project was formulated to provide sustainable energy solutions to six hospitals.
- The design was comprehensively outlined across multiple documents. The project's goals, outcomes, outputs, activities, schedule, budget, beneficiaries and expected benefits were well-defined.
- Various tools were used to monitor project implementation progress and regular reporting was consistently carried out.
- Risks were clearly identified and assessed, and mitigation measures, including adjustments to project implementation, were proactively put in place. The presence of a project manager in the country overseeing implementation added an extra layer of risk management and ensured timely responses to emergent issues.

PROJECT LOGFRAME:

- Developed initially by UK FCDO and later adapted by SEforALL, the logframe included impact, outcome and output levels with appropriate indicators.
- While some baselines and targets were initially uncertain, these were clarified during the evaluation. The logframe covers monitoring aspects of implementation, management and communications, including gender-related indicators.
- While effectively outlining project intentions and objectives, challenges arose from inconsistencies, uncertainties and gaps, impacting the overall assessment and clarity of project evaluation.

Key Findings of the Evaluation



02 PROJECT PERFORMANCE

Impact

Effectiveness

Relevance

Coherence

Efficiency

Sustainability

The Powering Sierra Leone's Hospitals Programme **demonstrated highly satisfactory impacts across various dimensions**, aiming for transformative effects on healthcare quality and energy access in Sierra Leone, thereby contributing towards global SDG7 targets.

- The installation of PV systems in six hospitals, particularly maternity and children's hospitals, ensures a clean and reliable electricity supply, significantly contributing to improved healthcare services.
- Patients, including women, children, and youth, are expected to benefit from continuous and uninterrupted electricity services, enhancing not only their experience but also staff satisfaction levels.
- The project significantly advances Sierra Leone's commitment to meeting energy access goals and global SDG7 targets by installing over 0.6 MWp of PV capacity, improving facilities' electricity access and reliability, and reducing reliance on fossil fuel-based generators, in alignment with SDG7.1 and SDG7.2 objectives.
- The adoption of PV systems promotes energy efficiency and minimizes greenhouse gas emissions, supporting progress towards SDG7.3.
- The project provided technical skills to Science, Technology, Engineering and Math (STEM) trainees, empowering them for potential roles in the renewable energy sector, enhancing confidence, improving skills and fostering employment prospects.



STEM trainees at the commissioning of the PV Systems ODCH & PCMH

Key Findings of the Evaluation



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- Despite challenges in tracking medium-/long-term impacts, the Evaluation Team (ET) believes **the project is progressing towards achieving expected positive impacts in the short term**, and this progress has already started.
- Feedback collected during the evaluation process and at the commissioning ceremony of the systems on 25 January 2024, at ODCH in Freetown, indicates satisfaction among patients, improved service delivery, and enhanced ability for doctors and nurses to provide effective care. The **overall sentiment expressed was joy, highlighting tangible benefits and potential long-term impacts on healthcare delivery.**
- The project **has influenced stakeholder capacities, coordination mechanisms, and policies related to health sector electrification**, engaging with the Ministry of Health and collaborating with development partners.
- **Results and activities of the project are already being replicated** in-country, with new initiatives considered to advance health sector electrification. Moreover, the project model has been utilized to design similar projects in other countries with different partners, such as a health facility electrification project in Somalia, targeting 114 facilities, with Save the Children.



PV system installed at Kabala Hospital

Key Findings of the Evaluation



02 PROJECT PERFORMANCE

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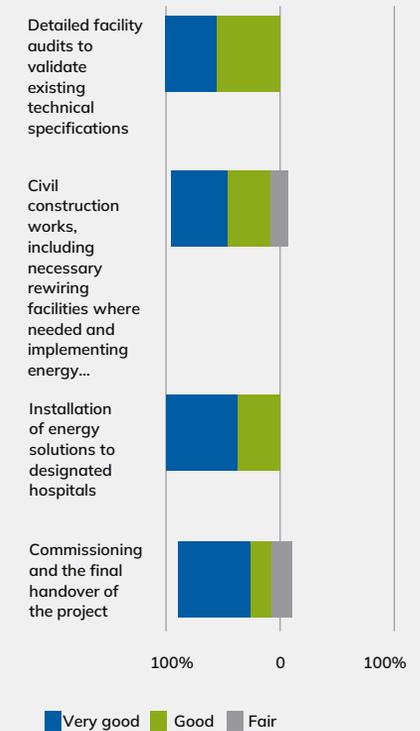
Sustainability

- The project successfully installed over 0.6 MWp of PV capacity in six hospitals, enhancing energy access and reliability in modern healthcare. Stakeholders expressed unanimous confidence in the project's ability to provide stable, clean and sustainable electricity access, particularly highlighting the significant improvement in electricity provision to hospitals, including the largest referral hospitals in Sierra Leone.

ACHIEVEMENT IN TERMS OF OUTPUT INDICATORS:

- **Systems installation:** The project fully achieved its most significant output by installing over 0.6 MWp of PV systems in six hospitals. This was crucial in providing reliable and sustainable electricity to healthcare facilities, ensuring continuous power supply for operational efficiency and patient care.
- **Project management, design and monitoring:** Essential roles, including the EPC contractor, PM firm, and communications (comms) firm, were contracted, playing pivotal roles in project execution. The PM firm's oversight indicated strong project management and design monitoring capabilities. Additionally, hands-on training was provided to 12 young women, contributing to gender equality and empowerment in the renewable energy sector.
- **Communications:** The project developed a comprehensive communication and dissemination strategy, including draft videos and communication materials to promote awareness of hospital electrification work. However, full achievement of this output was hindered by the need for feedback on the systems' operation impact, pending donor approval for public dissemination and publication, which was pending at the time of project evaluation.
- The project encountered external challenges such as delays in customs clearance, the impact of Presidential elections and the rainy season, affecting the supply-chain and installation timelines. Despite these challenges, amendments to the project execution plan did not deter overall progress towards achieving objectives.

Stakeholders rating for the delivery of the Powering Sierra Leone's Hospitals programme activities:



Key Findings of the Evaluation

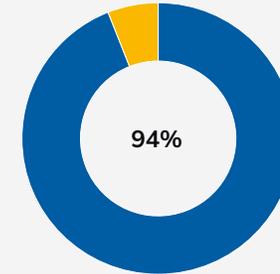


02 PROJECT PERFORMANCE

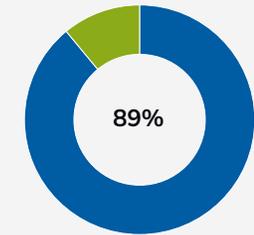
- Impact
- Effectiveness
- Relevance**
- Coherence
- Efficiency
- Sustainability

- The project was and remains highly relevant for Sierra Leone's context, addressing significant energy challenges in the healthcare sector by installing PV systems in hospitals.
- The installation of PV systems in hospitals was and remains a technically adequate solution to provide reliable and sustainable electricity, crucial for improving healthcare services.
- Alignment with SEforALL's strategic objectives and contribution to the achievement of SDG7 underscore the project's relevance. Additionally, it aligns with the FCDO's commitment to address energy supply issues in Sierra Leone's healthcare facilities and is consistent with national health policies and renewable energy targets.
- Throughout implementation, the project remained relevant and valid, adapting to changing circumstances while maintaining its core objectives.
- Stakeholder perceptions, as evidenced by the online questionnaire and interviews conducted by the ET, confirm the project's high relevance to their organizations. Stakeholders also recognize its alignment with national and regional strategies, policies, goals and plans, further affirming its significance.

Stakeholder perceptions about the relevance of the Project to their organization and its alignment and contribution to national, regional strategies, policies, goals and plans:



- 94% of the stakeholders answered that the project is "Very Relevant" for their organisation
- 6% had no opinion on the relevance of the project



- 89% of them referred that the Project is well aligned and contributes to national and regional strategies, policies, goals and plans
- 11% of them referred that the Project may be aligned and contributes to national and regional strategies, policies, goals and plans

Key Findings of the Evaluation



02 PROJECT PERFORMANCE

Impact
Effectiveness
Relevance
Coherence
Efficiency
Sustainability

- The **coherence of the Powering Sierra Leone's Hospitals Programme is highly satisfactory**, aligning with SEforALL's Powering Healthcare Programme and collaborating with the Ministry of Health to electrify six government hospitals.
- Harmonization with the Powering Healthcare logframe facilitated examination of national healthcare electrification needs and implementation of sustainable interventions through solar PV systems.
- Integration with SEforALL's workstreams in Sierra Leone, particularly the WYFF workstream (currently known as 'Gender and Youth'), provided practical training to STEM graduates, enhancing their prospects in the renewable energy sector.
- The project demonstrated coherence with SEforALL's thematic programmes and alignment with the country's energy sector goals.
- Collaboration with various donors, institutions and NGOs avoided redundancy and added value, contributing to evidence-building and tool development for powering healthcare facilities.
- Recognized as an early mover for Sierra Leone, the initiative effectively aligned with FCDO's climate-finance objectives and demonstrated synergies with the WYFF (**now Gender and Youth**) workstream.

*The WYFF workstream has been recently renamed and is now 'Gender and Youth' (G&Y).

Key Findings of the Evaluation



02 PROJECT PERFORMANCE

- Impact
- Effectiveness
- Relevance
- Coherence
- Efficiency**
- Sustainability

- **Efficiency for the Powering Sierra Leone’s Hospitals Programme is rated as satisfactory.**
 - **Budget:** The budget was executed according to two cashflow projections, with variances primarily in EPC contractor, Operation & Maintenance (O&M) and contingency costs. Disbursement of the donor's budget proceeded as planned, and the budget was never a constraint for the project.
 - **Timeline:** The timeline faced delays attributed to external factors such as global supply chain issues, Presidential elections affecting customs clearance and adverse weather conditions that resulted in a five-month extension beyond the original estimated end date of 21 August 2023.
 - **Quality of results:** Stakeholders highly praised the quality of results, particularly emphasizing the significance of reliable electricity provision through the installation of PV systems at hospitals. Positive feedback was also received for the STEM trainee training.
 - **Project management and reporting:** This involved key personnel, and while reports were generally of good quality, they could benefit from some improvements in clarity. Project management by the team (project manager, programme manager and country manager) in terms of risk identification and mitigation, stakeholder engagement and decision-making was appropriate for successful project execution.
 - **Partnerships and stakeholder engagement:** Partnerships played a crucial role in project identification and implementation. Throughout the entire execution period of the Powering Sierra Leone’s Hospitals Programme, excellent stakeholder engagement was evident, culminating in a well-attended commissioning event at Ola During Children’s Hospital, Freetown, in January 2024, where diverse groups of stakeholders expressed appreciation for the SEforALL project management team.

Key Findings of the Evaluation



02 PROJECT PERFORMANCE

Impact

Effectiveness

Relevance

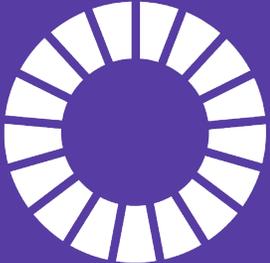
Coherence

Efficiency

Sustainability

- The sustainability of the Powering Sierra Leone's Hospitals Programme was deemed satisfactory in the evaluation, showcasing a commitment to sustainability through integrated measures:
 - Active engagement of the Ministry of Health from the project's inception promoted a sense of ownership and strengthened its capacity for coordinating electrification efforts in the healthcare sector. Collaboration resulted in the execution of the Sierra Leone Market Assessment & Roadmap and the identification of six hospitals for electrification.
 - Establishment of an O&M plan and contract ensured correct maintenance of installed PV systems post-project closure, including training for hospital maintenance staff and involvement of the EPC contractor during the warranty period.
 - Financial sustainability, however, may depend on external factors such as taxation and budget allocations to the healthcare sector in Sierra Leone.
 - Project contributed to in-country capacity building through hands-on training for STEM trainees aimed to sustain operational capacity in the future.
 - Fostered partnerships not only within Sierra Leone but also across other African nations, further enhancing project sustainability.

Key Findings of the Evaluation



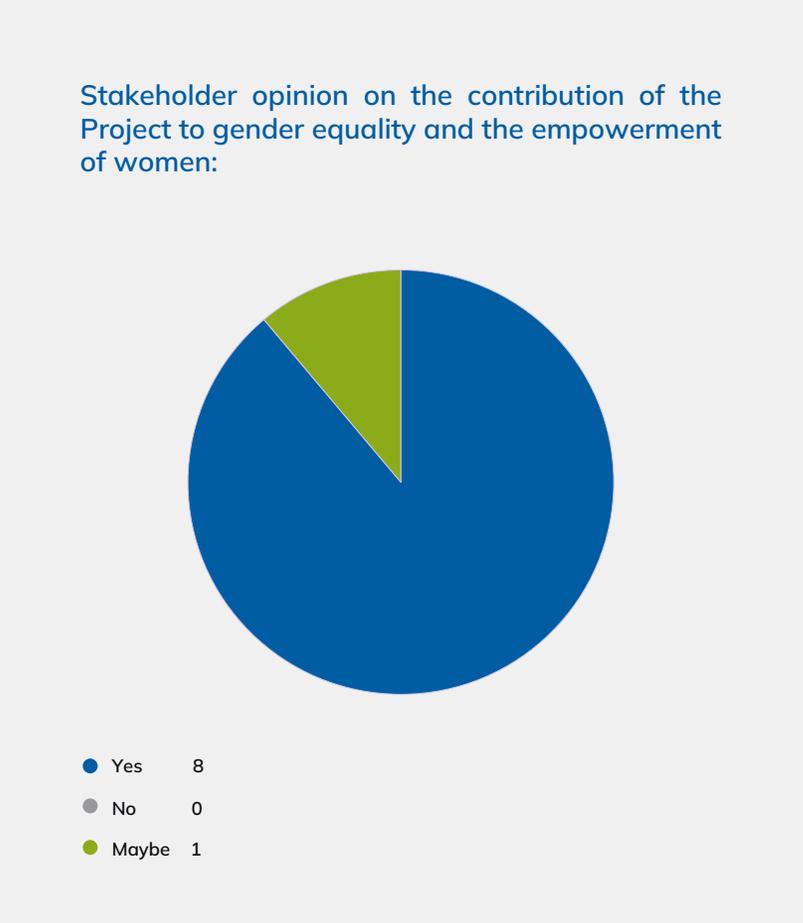
03 CROSS-CUTTING TOPICS

Mainstreaming of Gender and Youth

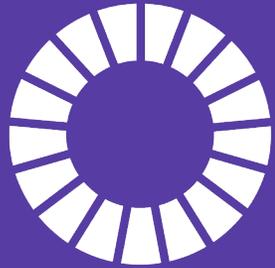
Climate Change Considerations

- The mainstreaming of gender and youth in the Powering Sierra Leone’s Hospitals Programme was evaluated as highly satisfactory, with the project incorporating a gender and youth perspective into its overarching goal and objectives.
- Emphasis was placed on supporting maternal and child health improvements through the electrification of specific hospitals, ensuring equitable benefits for both men and women as well as youth within the catchment areas.
- Collaboration with the WYFF (now G&Y) workstream facilitated STEM training as an inclusive and gender-sensitive action, influencing young women in Sierra Leone and enhancing project value.
- The logframe included indicators for gender and youth mainstreaming, such as the **number of female engineers trained*** and the impact on **births supported by improved power supply in government hospitals**.
- Commitment to the integration of gender and youth was demonstrated through SEforALL's development of internal guidance, including gender chapters in progress reports and incorporation of gender parity requirements in procurement processes.

*Note that although the indicator reads “engineers” the trainees were graduates of different STEM courses, not only of Engineering.



Key Findings of the Evaluation



03 CROSS-CUTTING TOPICS

Mainstreaming of Gender and Youth

Climate Change Considerations

- The **mainstreaming of climate change considerations in the Powering Sierra Leone's Hospitals Programme was deemed satisfactory:**
- Through the operationalization of solar PV systems, the project was anticipated to positively contribute to climate change-related impacts and environmental sustainability.
- Prioritizing solar power for electricity provision aligned with SDG3, SDG7 and SDG13, reflecting a forward-thinking approach addressing both healthcare resilience and environmental sustainability.
- The installation of solar PV systems is expected to mitigate climate change by reducing dependence on fossil fuels currently used in generators to power hospitals.
- Stakeholder insights suggested that the project would provide green and clean energy, reducing pollution and noise while lowering the carbon footprint of hospitals.





04



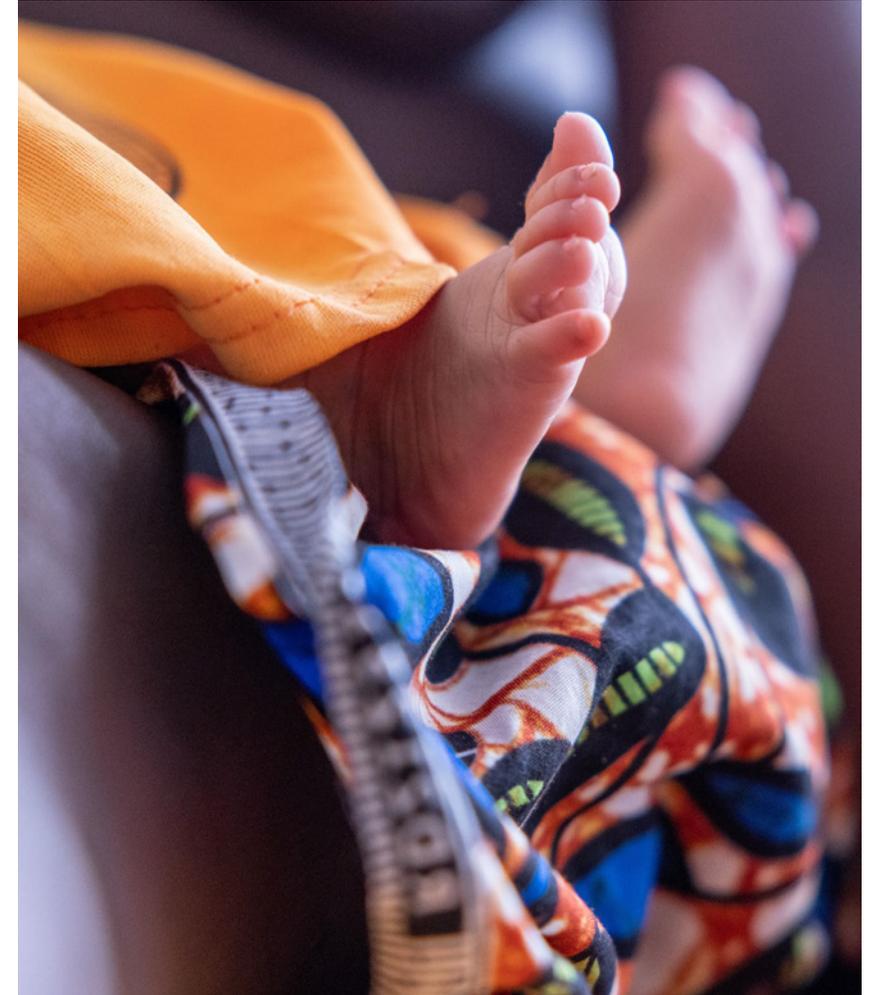
Conclusions

Conclusions

C1

Overall, the implementation of the Powering Sierra Leone's Hospitals Programme was found by the ET to be highly satisfactory. The project successfully achieved its primary objective and is well equipped to realize its main expected impacts.

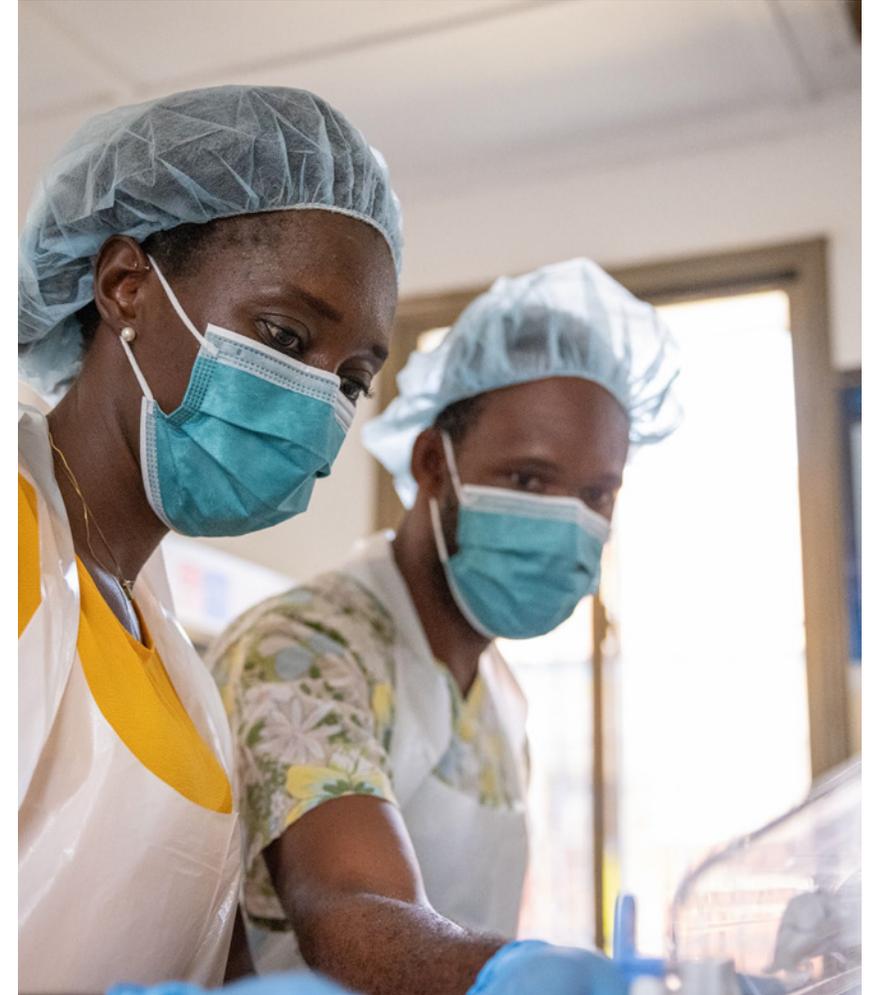
- The Powering Sierra Leone's Hospitals Programme has fully achieved its primary objective by providing six hospitals with access to renewable energy solutions through the effective deployment, commissioning and verification of 0.62 MWp of PV. The project has made significant progress in accomplishing its goals, contributing to the enhancement of healthcare services, ensuring sustainable energy access and addressing environmental objectives. Moreover, it has laid the groundwork for potential expansion and replication within Sierra Leone and beyond. It is the opinion of the ET that the project:
 - Is expected to lead to improved quality provision of healthcare services, especially in maternal and child health, as it ensures clean and reliable electricity supply to healthcare facilities, and a reduction of blackouts and diesel consumption for generator operation.
 - Aligns with Sierra Leone's commitment to SDG7 by enhancing energy sustainability, mitigating climate change, and reducing greenhouse gas emissions associated with diesel-based generation, and contributes to Sierra Leone's progress towards meeting energy access goals (SDG7.1 and 7.2) and the SEforALL Powering Healthcare Programme. The reduction in the use of fossil fuel-based generators is a key aspect, promoting sustainable and uninterrupted energy access.



Conclusions

C1

- Has successfully built capacity through hands-on training on the installation of PV systems for the STEM trainees and provided them with soft skills to improve communication capacities and CV design, all of which will help them to apply for job positions in the renewable energy field. Capacity building extended to the Ministry of Health, since it has contributed to increasing the Ministry's awareness and sectoral knowledge highlighting the importance of coordination in healthcare facilities' electrification efforts.
- Has demonstrated replicability potential through its activities, both in Sierra Leone and in other countries. Collaboration agreements with organizations such as the FCDO, and the development of proposals for the electrification of healthcare facilities with Energias de Portugal (EDP) and Save the Children, showcase the project's influence and potential for expansion to benefit more health facilities.
- The project outputs and outcomes have been highly achieved. The Powering Sierra Leone's Hospitals Programme performed highly satisfactorily in the achievement of the outputs related to implementation (Output 2) and communications (Output 3) and performed satisfactorily with regards to project management, design and monitoring (Output 1). In terms of outcomes, the project performed well with regards to the installation of the PV systems and the ET believes that the indicators related to the "Average hours per day of reliable electricity supplied at the healthcare facilities (hours/day)" and "Reduction in up-time of fuel-based generator (%)" are very likely to be achieved provided that the systems perform as planned and are maintained adequately.
- The project was affected by delays due to supply-chain issues, the Presidential elections and the intense rainy season, which impacted the timeline for project implementation. The project team tried to adapt its activities to the delays, but the project had to be extended to the end of 2023.
- The donor is highly satisfied with the project results and has already agreed to a replication of the project in other healthcare facilities in Sierra Leone.



Conclusions

C2

The Powering Sierra Leone's Hospitals Programme is clearly aligned with national priorities, SEforALL and donor commitments, and implementation partners' priorities. The intervention has been and continues to be pertinent for the country and remains coherent.

- Despite the lack of a structured project document, the project demonstrates a clear and strategic design, focusing on the critical integration of sustainable energy into Sierra Leone's healthcare infrastructure. The design incorporates a comprehensive approach to address the energy challenges in healthcare facilities, including the installation of PV systems and capacity building.
- The project's relevance is rooted in its direct response to Sierra Leone's energy challenges, particularly in rural healthcare settings. The project is highly relevant, and its relevance persists today as it contributes to mitigating the issue of uneven electricity supply across the country in the health sector, thereby impacting the performance of healthcare providers.
- The project aligns with SEforALL priorities, contributing to SDG7 and SEforALL's strategic goals. It directly supports SEforALL's Powering Healthcare programme and the Women and Youth at the Forefront (now G&Y) programme. Additionally, it aligns with FCDO's commitment to address energy challenges in healthcare facilities in Sierra Leone, with direct funding allocated to the project.
- The project's objectives, associated inputs, planned activities and expected outputs remained valid and aligned throughout the duration of implementation. This consistency underscores the project's clarity and coherence in addressing the identified energy and healthcare challenges in Sierra Leone.
- Collaboration with institutions such as the World Bank, various UN agencies, and energy and health NGOs, reflects a concerted effort to build evidence, develop tools and provide innovative solutions for powering healthcare facilities. The project actively engages with other donors in Sierra Leone, contributing to a comprehensive Market Assessment & Roadmap and ensuring that its activities add value without redundancy.



Conclusions

C3

Although the project suffered delays caused by external factors during its implementation, it has carried out all its activities with the provided budget, and outputs are mostly perceived to be of very good quality

- Delays, primarily due to external factors like global supply chain issues, the Presidential elections and the rainy season, led to an estimated five-month project extension. Stakeholders acknowledged the tight initial timeline and external factors beyond the project's control.
- The project established a robust coordination mechanism with a programme manager, project manager and country manager. Reporting structures, including monthly narrative, weekly progress and semi-annual/annual progress reports, were in place, though improvements for clarity were identified in terms of the reports' content and organization of the information and progress tracking. Although the tight execution timeline required the EPC firm to be contracted prior to the PM firm, in a future project, engaging the PM firm from the start would be beneficial to ensure a streamlined and effective management process from start to finish.
- Project management addressed risks effectively, making decisions based on available information to drive project progress.
- The project showcased efficiency in forming partnerships. Collaborations with the Ministry of Health and other stakeholders were instrumental in project identification and implementation.

C4

The project shows strong potential for sustainability and replicability and stands out for its effective integration of cross-cutting issues.

- Its model of hospital electrification using renewable energy sources is not only replicable in other healthcare facilities within Sierra Leone but also serves as an exemplary approach for similar projects in other countries, thereby enhancing its sustainability and impact.
- By empowering young women through technical training in renewable energy, the project contributes to gender equity in the energy sector. Furthermore, the shift to renewable energy aligns with global climate action efforts, reducing reliance on fossil fuels and promoting sustainable energy practices.



05 | Recommendations

Recommendations

R1

Recommendation for replicability and scalability: continue developing health sector electrification projects under a climate-health nexus approach in Sierra Leone and abroad in coordination with other SEforALL workstreams and fostering strong government engagement, ownership and involvement.

- The project emphasizes an integrated approach that considers the interconnectedness of climate action and health outcomes. More programmes should be developed jointly between SEforALL and local governments to address these climate-health nexus issues, following the same approach as in this project, using clean energy to power medical equipment and reduce the carbon footprints of healthcare facilities. The project's activities can be replicated in other healthcare facilities, both within Sierra Leone and in other countries (e.g., Nigeria, Rwanda), demonstrating the project's approach potential as a scalable and adaptable option to contexts similar to Sierra Leone.
- Aligned with project implementation, it is important that SEforALL continues to engage with key stakeholders in Sierra Leone and similar countries, through project implementation activities or through other SEforALL project workstreams – e.g., Stakeholders Engagement workstreams – so that the policy environment that supports the convergence of health, energy and environmental objectives can be strengthened. Projects/initiatives can consider the development of strategies to provide energy to healthcare facilities and policies that provide incentives for sustainable healthcare practices and facilitate the adoption of renewable energy in the healthcare sector.



Recommendations

R2

Recommendation for the design of future electrification projects: consider key elements of systems design e.g., system sizing, O&M strategy, training of local workforce and resources availability to ensure sustainability and full impact achievement.

- When designing an electrification project, the energy needs should continue to contemplate future energy demand based on projections of what they will be in 5 to 10 years (as this project did) and, to the extent possible and if feasible and appropriate, system sizing should consider potential additional loads from the future use of energy-dependent equipment that may significantly increase energy demand.
- Always include an O&M financial plan and budget or design an O&M strategy so it ensures that the systems are maintained properly, fostering their sustainability. The strategy should include appropriate awareness and socialization activities for the government to make informed decisions regarding the most cost-efficient way to keep power solutions operational and properly maintained.
- Include activities and budget for continuous learning and skills development. Develop a structured, ongoing training curriculum that covers technical skills for PV system installation and maintenance, as well as soft skills for career development in the renewable energy sector. Work with local entities to certify the provided trainings or to identify certification programmes, to which the project can contribute and/or adhere to, so as to formally recognize the acquired skills.



Recommendations

R3

Recommendation to advance SDG7 in Sierra Leone: SEforALL should continue the development and enhancement of the country's support strategy in alignment with key organizational plans and government goals and in consultation with key sector stakeholders.

- Considering the achieved results and the experience gained so far through the Powering Sierra Leone's Hospitals Programme financed by UK FCDO and through the workstreams implemented with the RF grant, SEforALL should consider continue developing a country-support strategy to advance SDG7 in Sierra Leone in alignment with the three strategic pillars defined in SEforALL's Strategic Plan for 2024–2026, the organizational TOC 2020–2030, and in consultation with key local energy sector stakeholders.
- The country-support strategy may include a baseline country assessment similar to the one that was initially envisaged as part of Workstream #2 of the RF grant.

R4

Recommendation on project management and reporting: consider, in future projects and if possible, contracting the PM firm prior to the EPC contractor to streamline project management, and ensure clear and factual progress reporting, including identification of lessons learned.

- While the circumstances surrounding this grant did not allow for it, the PM firm should be contracted before the EPC contractor, so as to ensure that the PM firm can review technical specifications, timing and scope of engagement, ensuring a streamlined and effective management process from start to finish of the project.
- Make sure that progress reporting is clear including:
 - Clear summaries with indication of times for achievement and a work plan for future action
 - Factual reporting and clear reporting on activities: the summary section on the monthly narrative progress reports could be clearer in presenting progress of actions in the month in a more factual way – for example presenting the dates in which the PV panels were actually installed – as well as a summary of the delays to the implementation scheduled and the proposed next actions. Additionally, the tables reporting on the progress of implementation should be better structured as some of them are a bit confusing in terms of connecting the dates to the actions.
 - Clear identification of lessons learnt through the implementation process.

Recommendations

R5

Recommendation for improving future project design and MEL: consider clearly establishing linkages between projects and programmes, reflected in improved ToCs and logframes with distinctions of individual components, all supported by processes, capacity building, templates and guidance to be used across the entire organization. This would facilitate SEforALL to measure impact at organizational level and its direct contribution to SDG7 and other relevant SDGs.

- SEforALL should, in its project design and programmatic approach, establish clear linkages specifically between projects (“on-the-ground” initiatives) and the programme they respond to, and thus to the organizational KPIs and TOCs. This could be done through the adoption of a standardized MEL framework for projects that link to the KPIs and MEL framework for programmes and to SEforALL's overarching strategy. This will enhance internal and external MEL activities, providing a consolidated and replicable framework.
- SEforALL should make a clearer distinction between ToCs and logframes (at the project level and programmatic level). Both tools are used in project planning and evaluation, but they serve different functions. While ToCs provide a conceptual overview of how a change might occur, logframes offer the structured format for project execution and assessment:
 - ToCs are about the "big picture". They outline the rationale and sequence of steps leading to a desired outcome, focusing on the underlying assumptions and causal linkages. They help understand and describe how and why a desired change is expected to happen in a particular context. They focus on the causal relationship between activities and the overall goal. They are like a roadmap that shows how the change will unfold over time. ToCs are usually more flexible and can be adapted as the project progresses.
 - Logframes, on the other hand, are more structured. A logframe is a tool used for planning, implementing and monitoring a project, detailing indicators, resources/sources of information, baselines, targets and assumptions, built usually in a table format, for which impact, outcome and output levels are provided. Logframes are conceived at project design and then revised and kept up to date during project implementation to account for any potential deviations or changes. Guidance provided by UKaid can be followed to build logframes. Donor organizations usually provide suggestions in terms of what they would like to see in the logframes developed for the projects they support and are very similar to the logframe provided by UK FCDO for the Powering Sierra Leone's Hospitals Programme (e.g., GEF, GCF).



Recommendations

R5 (continuation)

Recommendation for improving future project design and MEL: consider clearly establishing linkages between projects and programmes, reflected in improved ToCs and logframes with distinctions of individual components, all supported by processes, capacity building, templates and guidance to be used across the entire organization. This would facilitate SEforALL to measure impact at organizational level and its direct contribution to SDG7 and other relevant SDGs.

- The SEforALL MEL and Grant Management team should co-develop the ToC and logframes for the project, ensuring that these tools are aligned with both SEforALL and the grant provider organizational MEL practices and requirements, and thus aligned with the organization's overarching strategies.
- SEforALL should consider establishing guidance or templates to ensure consistency in on-the-ground activity implementation across projects. This could encompass key information such as project components, activities and sub-activities, resources allocation, budget, timelines, baselines, indicators, targets, responsible parties, expected benefits, risks, sources of verification and any other relevant information. Such an organized approach could potentially offer several advantages:
 - Ensure alignment with the organizational TOC 2020–2030 and BPs.
 - Facilitate the quantification of impact and progress against targets for individual interventions.
 - Simplify aggregate of project benefits across countries or sectors.
 - Ensure inclusion of only indicators/targets falling under the implementation responsibility of SEforALL and project partners.
 - Incorporate SEforALL project KPIs connecting interventions with the SEforALL programme and overall strategy.
 - Streamline MEL process and reporting against organizational targets and SDG7 impacts and other co-benefits, e.g., contributing to improving community well-being.
 - Enhance SEforALL's future planning.
- Provide recurrent training to project coordinators/managers on MEL, covering aspects of reporting, including how, what, when and where they should report upstream on project implementation.



Recommendations

R6

Consider conducting an impact evaluation of the SEforALL Powering Healthcare Programme

- Bearing in mind that the medium- and long-term impact of the project is difficult to assess at such an early stage, SEforALL should consider conducting an impact evaluation of the project in the future. The time when the impact evaluation should take place should be discussed and defined by SEforALL in consultation with the Ministry of Health, the contractor responsible for the O&M and any other stakeholder considered relevant, to ensure that enough time is allowed for the systems to enter normal operation as well as for the hospitals to mainstream the use of electricity in their daily activities. This would enable the evaluation to capture key findings and learnings from the project.
- SEforALL should consider conducting an impact evaluation not only for the Powering Sierra Leone's Hospitals Programme but for its entire Powering Healthcare Programme involving other countries too. This would give SEforALL the opportunity to measure the actual impact of all the interventions at once and easily identify their joint contribution to the organizational ToC and SDGs.





COMMISSIONING EVENT

Powering Healthcare in Sierra Leone Solarisation of 6 Key Hospitals

📍 Ola During Children Hospital 📅 25th January 2024

06 | Lessons Learned

Learnings

L1

The project demonstrated good practice in getting all the key stakeholders involved throughout the project design and its implementation – SEforALL, the Ministry of Health, the PM Firm, the EPC contractors and the donor

- Alignment and collaboration with key stakeholders during project design and implementation ensured that the project's design was effectively aligned with the specific energy challenges and healthcare needs of Sierra Leone. This alignment ensured the relevance and potential impact of the project.
- Implementing over 0.6 MWp of PV in six hospitals demonstrated the importance of adopting technically adequate solutions that fit the local context and can mitigate critical barriers, such as uneven electricity supply. In fact, the replication and scale up of the Powering Sierra Leone's Hospitals Programme approach is already being sought for Sierra Leone as well as for other countries, through SEforALL-led activities as well as activities led by other donors. This approach includes a combination of the following activities:
 - I. engagement of key stakeholders (e.g., Ministry of Health) from design stage onwards to ensure ownership and sustainability;
 - II. installation of renewable energy systems to satisfy current and future energy demand in the healthcare sector;
 - III. clearly designed O&M plan that ensures long-term sustainability of the systems;
 - IV. development of local capacity for the installation and maintenance of the systems.

L2

Incorporation of O&M plan is key to ensure project sustainability and should be included in all projects of this nature.

The inclusion of an O&M plan in electrification projects is crucial for ensuring the sustainability of systems. In this project, the incorporation of an O&M plan, extending maintenance for an additional 18 months, post-project closure, and the PM firm's contractual commitment to monitor project impact contribute significantly to project sustainability. This approach guarantees on the one hand that the systems will be maintained after project closure, giving time for people to be trained to maintain the systems correctly, and on the other hand, the ongoing assessment of indicators that require time for monitoring and evaluation, such as the reduction in diesel generators' operation and the impact on the provision of healthcare services.

L3

Earlier engagement of the PM firm can ensure higher efficiency in project implementation.

The project underscores the importance of involving the PM firm at an early stage. In this instance, the PM team was engaged in January 2022, by which time technical specifications and procurement processes were already in progress. Consequently, SEforALL had to assume the project management role initially and proceed with contracting the EPC firm. Although it was not feasible in the context of this project due to the tight timelines and the need to act rapidly in getting the EPC firm on board, an earlier engagement of the PM firm would have led to a more streamlined and effective project management process throughout the entire project duration.