



Skills For Energy in Sothern Africa

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List of Acronyms and Abbreviations

CEC:	Copperbelt Energy Corporation plc
CO-Lusaka:	ILO Country Office for Zambia, Malawi, and Mozambique
COMESA:	Common Market for Eastern and Southern Africa
DAC:	Development Assistance Committee
DWT:	Decent Work Team
ECB:	Electricity Control Board (Namibia)
EE:	Energy Efficiency
EGENCO:	Electricity Generation Company of Malawi
EIZ:	Engineering Institution of Zambia
GIZ:	Deutsche Gesellschaft für Internationale Zusammenarbeit
GRES:	Gender Results Effectiveness Scale
ILO:	International Labour Organization
KGRTC:	Kafue Gorge Regional Training Centre
M&E:	Monitoring and Evaluation
MoE:	Ministry of Energy
MoTS:	Ministry of Technology and Science
NCCI:	Namibia Chamber of Commerce and Industry
NEI:	Namibia Energy Institute
P&B:	Programme and Budget
PPDP:	Public-Private Development Partnership
PSC:	Project Steering Committee
PV:	Photovoltaic
RE:	Renewable Energy
REA:	Rural Electrification Authority
REI:	Regional Energy Integration
ROAF:	Regional Office for Africa
SACREEE:	SADC Centre for Renewable Energy and Energy Efficiency
SADC:	Southern African Development Community
SDG:	Sustainable Development Goal
SESA:	Skills for Energy in Southern Africa
Sida:	Swedish International Development Cooperation Agency

TWG:	Technical Working Group
UNDP:	United Nations Development Programme
UNEG:	United Nations Evaluation Group
UNICEF:	United Nations Children's Fund
UNZA:	University of Zambia
ZCTU:	Zambia Congress of Trade Unions
ZESA:	Zimbabwe Electricity Supply Authority
ZFE:	Zambia Federation of Employers

Executive Summary

Project Background

The Skills for Energy in Southern Africa (SESA) Project by the International Labour Organization (ILO) was implemented in partnership with the Kafue Gorge Regional Training Centre (KGRTC), funded by the Government of Sweden with a budget comprising USD 3,830,480. Implemented from January 2021 to December 2024, the project covered Zambia and the SADC region. The overall aim of the project was to increase the uptake of Renewable Energy, Energy Efficiency, and Regional Energy Integration, through skills development and establishment of Public-Private Development Partnerships. The project sought to address the serious skills gap in the energy sector, supporting regional and national energy transition goals while contributing to SDGs 4 (Quality Education), 7 (Affordable and Clean Energy), and 8 (Decent Work and Economic Growth).

Evaluation Background

The final independent evaluation was conducted to assess the relevance, coherence, effectiveness, efficiency, impact, and sustainability of the project. The evaluation also analyzed cross-cutting themes such as gender equality, social dialogue, and environmental sustainability. The purpose was to promote accountability, assess achievements, identify lessons learned, and provide actionable recommendations for stakeholders including the ILO Country Office in Lusaka, KGRTC, and the Swedish Government.

Evaluation Methodology

The evaluation followed a participatory and mixed-methods approach, combining both qualitative and quantitative data collection methods. These included desk reviews, key informant interviews (KIIs), focus group discussions (FGDs), field visits, and surveys. Data was collected from diverse stakeholders, including project beneficiaries, government officials, private sector partners, and KGRTC staff. Sampling strategies such as purposive sampling, stratified sampling, and convenience sampling were employed to ensure diverse representation. Data analysis was done through question-by-method matrices with triangulation included as a key aspect of the analysis.

Evaluation Findings

Relevance: The project addressed the skills gap in the RE, EE, and REI sectors by aligning training programs with regional priorities, such as Zimbabwe's total electrification goals and SADC's renewable energy strategies. Courses developed addressed practical knowledge gaps, including battery sizing, grid integration, and renewable system maintenance. Stakeholder engagement ensured that training curricula were industry-responsive and met market demands.

Validity of Design: The project's Theory of Change (ToC) was well-structured and addressed systemic challenges, including policy gaps, limited technical capacity, and financing barriers. The design incorporated cross-cutting themes, such as gender equality and environmental sustainability. However, the short implementation timeline (4 years) limited the scalability of project activities.

Coherence: The project showed strong alignment with regional and national energy policies, including Zambia's energy diversification goals and SADC's clean energy targets. Collaboration with organizations like SACREEE, RERA, and government departments ensured synergies with existing regional energy initiatives. The PPDP model strengthened coherence by aligning training with private sector needs.

Effectiveness: The project has designed 28 training courses (exceeding the target of 25) and trained 1,151 participants - 113% of the target. Female participation was at 27%, reflecting a moderate improvement in gender inclusivity. Partnerships with academic institutions and private sector actors have been instrumental in delivering courses, but some challenges such as limited practical training time and resource constraints remain.

Efficiency: The project focused activities on well-resourced practices, including some cost-sharing partnerships and making efficient use of available digital platforms, while relying less and less over time on international experts for teaching. Delays around the development of a dedicated curriculum and COVID-19 disruption, however, hindered early progress.

Impact Orientation: The project made valuable contributions to improving policies, technical capacity, and governance frameworks within the energy sector. Participants are applying their competencies to renewable energy and energy efficiency projects, including off-grid solar installations. Institutional partners have also reported increased training capacity and curriculum delivery.

Sustainability: The project has potential for sustainability based on organizational capacity-building, integration of the training into the KGRTC core curriculum, and digitizing the training systems with the help of the e-campus platform. Partnerships with SACREEE, Siemens Energy, and other regional stakeholders can be seen as a possibility for sustaining project outcomes; however, financial sustainability partially depends on further external support.

Cross-Cutting Themes: A Gender Audit was conducted, and a policy of Gender Equality and Diversity Inclusion was developed. That led to 27% participation by females in training. The project emphasized the promotion of renewable energy technologies along with energy efficiency practices, thus addressing environmental concerns on carbon emissions. Inclusion and ownership of the project's results were ensured through consultation with governments, employers, and worker organizations.

Conclusions: The SESA Project achieved significant progress in addressing skills gaps in the RE, EE, and REI sectors through innovative partnerships, targeted training programs, and institutional strengthening at KGRTC. While the project faced challenges such as time constraints, limited resources, and COVID-19 disruptions, its outcomes have laid a strong foundation for sustainable energy skills development in the SADC region. Moving forward, continued investment in practical training, gender mainstreaming, and resource mobilization will be critical to sustaining and scaling the project's achievements

Recommendations

1. **Ensure Training Programs Remain Industry-Relevant:** Regular skills demand surveys should be conducted to keep training programs updated with evolving industry needs in renewable energy and energy efficiency.
2. **Strengthen Government Engagement for Policy Alignment:** KGRTC should deepen engagement with government ministries to align project activities more closely with national energy policies and frameworks.
3. **Enhance Real-Time Project Monitoring and Implementation Efficiency:** A dedicated project tracking dashboard should be established to monitor progress in real time.
4. **Introduce Modular Training for Flexible and Blended Learning:** Traditional in-person-only training models often limit accessibility for working professionals and those from remote areas.
5. **Expand Practical Training Through Industry Partnerships:** KGRTC should restructure courses into modular formats with extended durations to provide theoretical coursework online before engaging in face-to-face practical sessions.
6. **Expand the e-Campus Platform for Cost-Effective Hybrid and Distance Learning:** KGRTC should expand its e-Campus platform to deliver more hybrid and distance-learning programs.
7. **Strengthen Post-Training Tracer Studies for Long-Term Impact Assessment:** KGRTC should introduce structured, regular post-training impact assessments to measure how trainees are applying their skills in RE and EE projects.

8. **Develop a Resource Mobilization Strategy for Long-Term Financial Stability:** KGRTC should develop a resource mobilization plan to secure funding from regional governments, private sector actors, and international donors.
9. **Enhance Regional Outreach Through Institutional Partnerships:** KGRTC should expand partnerships with technical universities, energy utilities, and industry associations across the Southern African Development Community (SADC) region to mainstream project-developed courses into local training systems.
10. **Establish Mentorship Programs to Promote Gender Equality in RE/EE Fields:** A structured mentorship program led by successful female trainees and professionals would encourage more women to enter and advance in RE/EE fields.
11. **Integrate Solar Waste Management and Environmental Guidelines into Training Programs:** The transition to renewable energy should be facilitated by integrating solar waste management and environmental guidelines into training programs.

Lessons Learned & Good Practices

Lessons Learned

1. **Time Allocation for Inception Phase:** The inception phase requires adequate time for skills demand and supply surveys or other foundational studies.
2. **Dynamic Energy Sector Demands:** The energy transition is evolving rapidly, necessitating agility in marketing strategies, periodic market research, and regular curriculum reviews to keep training programs relevant.
3. **Value of Strategic Partnerships:** Partnerships with public, private, and academic institutions proved instrumental in expanding networks, resources, and expertise.
4. **Sustained Commitment from Partners:** Long-term commitment from partners can be challenging due to changes in priorities, leadership, or organizational focus.
5. **Strong feasibility studies for PPDPs:** Having these at the inception phases is important as they are a key success factor for minimizing future deviations from financial, economic, and social projected/anticipated contributions for project outcomes.
6. **Public Awareness and Outreach:** Communication campaigns played a vital role in increasing public awareness about Renewable Energy (RE) and Energy Efficiency (EE) initiatives.

Good Practices

1. **Integration of Blended Learning through the eCampus Platform:** This approach increased accessibility across the SADC region, but also allowed for flexible learning modalities, accommodating participants with different schedules and commitments.
2. **Strong PPDP:** Partnerships like these allowed the centre to access cost-sharing opportunities along with access to technical expertise, and resource mobilization that enables it to provide the necessary training.
3. **Digitization of the Trainee Follow-up and Monitoring Systems:** This involved tracer studies and follow-ups at the workplace, providing good feedback for improving the content and delivery of courses.
4. **Gender Mainstreaming Policy and Audit:** Mainstreaming of gender equality principles was done in the realm of training design, curriculum development, and institutional policies. This was further emphasized by specific interventions to ensure increased female participation through scholarships and sensitization campaigns.

5. **Industry Responsive Training Programs Developed through Stakeholder Engagement:** The courses responded to critical skills gaps leading to improved employability among the trainees, aligning training outcomes to industrial needs, and practical skills application in energy projects within the SADC region.

1.0 Introduction

Over 800 million people worldwide are still without access to electricity, out of which 600 million are in Sub-Saharan Africa. This lack of access to reliable energy supply hampers social development and economic activity.

Access to clean, affordable, and reliable energy is one of the main drivers for socio-economic development, which contributes to better living conditions and improved access to training opportunities, employment opportunities and enterprise development.

South Africa Development Corporation (SADC) aims at a low-carbon development path – energy use will need to increase without increasing greenhouse gas emissions (SADC Climate Change Strategy and Action Plan, 2015). This requires a higher proportion of renewable energy in the energy mix and increased energy efficiency. The goal set by SADC is that by 2022, the power generation mix in the SADC region should be: coal 36%, hydropower 26%, gas contributing 19%, wind 10%, solar 7%, while biomass and diesel should only occupy 1%, respectively (SESA Project document, 2020).

For efficient integration of renewable energy into the grid, new technologies and new skills are needed. Also, a large share of the new and intermittent power sources is expected to be operated by Independent Power Producers (IPPs) which, aside from technical aspects (e.g. installation and maintenance, software development and application, energy planning and technical development skills, grid integration skills, etc.), will also require skilled people in financial modelling, business planning and development for Renewable Energy investments.

Energy Efficiency (EE) is a key measure for SADC as it results in economic benefits, energy security, environmental protection and climate change mitigation. Enforcement of minimum efficiency standards for appliances, equipment and buildings can result in energy savings, which can offer a unique opportunity to reconcile economic competitiveness with sustainable development and provide the added benefits of reducing the cost of energy and increasing energy productivity.

Energy efficiency reduces energy expenditure and increases the affordability of energy in poorer households by bringing down the per-unit cost of electricity, hence also, reducing pollution by lowering the need for generation and associated emissions. EE will be increasingly important, particularly for industry (e.g. the extractive industries and agro-processing), utilities and the construction sector. A range of skills are required to perform energy audits and to implement effective energy efficiency strategies and practices that will be specific by sectoral and technology processes.

1.1 Project Background

The International Labour Organization (ILO), with funding provided by the Government of Sweden, is supporting the Kafue Gorge Regional Centre (KGRTC) to implement the Skills for Energy in Southern Africa (SESA) Project, a four-year intervention. The overarching development objective is to *“Increase uptake of Renewable Energy, Energy Efficiency and Regional Energy Integration interventions in Southern Africa, leading to a more sustainable and low-carbon energy mix”* through skills development and the establishment of Public-Private Development Partnerships in Zambia and in the SADC region.

The background and context of this development intervention is that reliable access to energy is vital for economic development, business, and employment. One of the factors that impede universal access to secure, clean and sustainable energy in the SADC region- and that contribute to widespread chronic poverty and lack of decent work in rural areas- is the lack of skills in renewable energy, energy efficiency and regional power pooling technologies, which reduces the ability of power producers to generate, transmit and distribute sufficient sustainable energy.

The SESA intervention, a Public-Private Development Partnership (PPDP), is facilitating the transfer of technical skills from international and local energy companies to power technicians and managers in the Southern Africa region through the SADC's Kafue Gorge Regional Training Centre (KGRTC) in Zambia.

The focus is on contributing to SDG 7 by responding to the power industry's needs for skills development in the areas of renewable energy, energy efficiency and regional energy integration, but also to SDG 4 on skills and training, and SDG 8 on sustainable economic growth, productive employment and decent work. The expected impact is an increased uptake of renewable energy, energy efficiency and regional energy integration interventions in Southern Africa, leading to a more sustainable and low-carbon energy mix.

The Project is expected to facilitate partnerships with the private sector, strengthen KGRTC's capacity to become the Centre of Excellence for energy training in the region and will result in a significantly higher number of power technicians, engineers and managers who are skilled in and able to apply up-to-date technologies in renewable energy, energy efficiency and regional energy integration.

This PPDP project addresses only one of the many factors (shortage of current skills) that contribute to the insufficient supply of sustainable energy in the region. By contributing, through Kafue Gorge Regional Training Centre, to more technicians, engineers and managers in Southern Africa's power industry being up to date with the rapidly evolving field of RE/EE/REI technologies, the SESA project complements a range of what other development agencies and investors are engaged with. The project enables KGRTC to grasp the opportunities provided by the demand, the investments and the enabling policy environment for sustainable power generation and distribution, by strengthening its institutional capacity for quality training of new target groups, its marketing and communications and its collaborative partnerships with the private sector.

1.2. Project Management Arrangement

The ILO Country Office for Zambia, Malawi and Mozambique in Lusaka (CO-Lusaka) managed the project, while KGRTC in Chikankata was the implementing partner. From the ILO side, the project team establishment is comprised of the Chief Technical Advisor, the National Project Coordinator, the National Project Officer and the Finance and Administrative Assistant. The project team received technical backstopping from the field Skills and Life-Long Learning Specialist based in DWT/Country Office - Pretoria and operational support from the Senior Programme Officer based in Country Office-Lusaka.

The Project Implementation team at KGRTC is a Project Coordinator and Digital Marketing Officer, and an Administrative Officer. The Head of Training and Research anchors their internal coordination.

The project is guided by a regional Project Steering Committee (PSC) comprising members from SADC member states' government ministries and agencies, private sector, donor, project management team, professional bodies, universities, and social partners. The PSC membership and that of the TWGs are drawn from the Democratic Republic of Congo (DRC), Botswana, Zimbabwe, South Africa, Tanzania, Mauritius, Namibia and Zambia, and Sida and the Embassy of Sweden in Zambia being observers and the ILO being the secretariat. Furthermore, a Technical Working Group (TWG) was established to ensure the direct involvement of technical officers from the tripartite constituency in the delivery of activities.

The PSC has the primary mandate to provide policy and strategic guidance and fiduciary and technical oversight to the implementation of the project.

The purpose of the TWG is to assist the Project Management Team (PMT) with the technical aspects of the project. The TWG serves as a hub of technical expertise on renewable energy, energy efficiency and

regional energy integration technology skills transfer targeting, technologists, engineers and managers along the value chain.

1.3. Project alignment with the SDG, P&B, CPO & DWCP

Being a skills development intervention in the energy sector, the PPDP on “Skills for Energy in Southern Africa” contributes directly or indirectly to the following three Sustainable Development Goals: SDG 7 on access to affordable, reliable, sustainable and modern energy for all, SDG 4 on education and training, and SDG 8 on decent work and sustained, inclusive, economic growth. The PPDP contributes to the achievement of ILO P&B Outcome 5: Skills and lifelong learning to facilitate access to and transitions in the labour market. Specifically, Outputs 5.2 and 5.3¹.

The project equally contributes to one of the priorities for shaping an African Decent Work Agenda adopted by the Abidjan Declaration on 9 December 2019, which is “Strengthening the capacities of all people to benefit from the opportunities of a changing world of work through (i) investing in human capital by strengthening education, skilling, reskilling, upskilling and lifelong learning to leverage technology and the new types of jobs it helps create, and (ii) tackling gender inequality and discrimination.”

1

https://www.ilo.org/sites/default/files/wcmsp5/groups/public/@ed_mas/@program/documents/genericdocument/wcms_831162.pdf

2.0 The Evaluation Background, Purpose, Objective and Scope

2.1 Evaluation Background

The ILO considers evaluation as an integral part of the implementation of development cooperation activities. The evaluation in the ILO is for the purpose of accountability, learning and planning and building knowledge. It should be conducted in the context of criteria and approaches for international development assistance as established by the OECD/DAC Evaluation Quality Standard and the UNEG Code of Conduct for Evaluation in the UN System.

The project followed the ILO Policy on Evaluation for Development Cooperation projects and the Development Cooperation Internal Governance Manual. A project of this nature, which takes over 30 months to implement and with a budget under 5 million, needs to undergo a mid-term internally managed evaluation in year 2, and a final independent evaluation in year 3 to be conducted by an independent Evaluation Consultant. A mid-term internally managed evaluation of the project was completed in March 2023².

2.2 Evaluation Purpose, Objectives, Scope and Clients

Evaluation Purpose

The overall purpose of the final independent evaluation is to promote accountability, assess progress, bottlenecks and strengthen organizational learning among the Office, ILO constituents, and key stakeholders.

Evaluation Objectives

The specific objectives of the evaluation are to:

1. Establish the relevance of the project design and implementation strategies in relation to the SADC region national and regional policies on energy, final beneficiaries' needs, ILO and UN development frameworks and on skills development around energy-related strategies;
2. Determine the extent to which the project has achieved its stated objectives and expected results integrating gender and non-discrimination, social dialogue and tripartism, international labour standards and a fair transition related to the environment
3. Identify the supporting factors and constraints that have led to the results, including implementation modalities chosen (how and why);
4. Identify unexpected/unintended positive and negative results of the project;
5. Examine the implementation efficiency of the project;
6. Analyse the extent to which the project outcomes will be sustainable and will have potential, either positive or negative, impacts on project-targeted institutions and final beneficiaries;
7. Provide recommendations to the project's key stakeholders towards achievement of project outcomes;
8. Identify lessons learned and good practices to inform key stakeholders for future similar interventions.

Evaluation Scope

The final evaluation focused on the 48 months of the project, namely from January 2021 to the end of December 2024, assessing all the results and key outputs that have been produced in this period. The geographic scope of the evaluation includes Zambia and the broader Southern Africa Development Community (SADC) region. Field visits and data collection focused on Namibia, Botswana, Zimbabwe

² <https://wwwex.ilo.org/ordspub/prdutf8p/eitrack/files/file/210405>

and Zambia, ensuring a regional perspective on the project's outcomes and alignment with SADC strategies.

The evaluation integrated gender equality as a cross-cutting concern throughout its deliverables and process. It should be addressed in line with EVAL guidance note n° 4 and Guidance Note n° 7 to ensure stakeholder participation.

Evaluation Clients

The primary users of the evaluation are the project implementing partner KGRTC as well as the ILO tripartite constituents, ILO CO-Lusaka, the ILO DWT Pretoria, the ILO Regional Office for Africa (ROAF), the relevant technical units in ILO Headquarter and the donor, the Swedish government.

2.3 Evaluation Criteria and Questions

The evaluation covered the following evaluation criteria, in line with the DAC criteria and UNEG standards on evaluation in the UN system:

- Relevance and strategic fit;
- Coherence;
- Effectiveness of project implementation and management arrangements;
- Efficiency of resource use and project set-up;
- Impact orientation;
- Sustainability.

The evaluation considered key evaluations dimensions including Human Rights (HR), the SDGs (relevant SDGs and indicators and the principle of “no one left behind”) and ILO cross-cutting themes such as Gender and non-discrimination (i.e. persons living with disabilities), Social dialogue and tripartism, just transition to environmental sustainability and International Labour Standards. The HR perspective in the evaluation meant: (i) linking the process to people, (ii) setting tools and approaches appropriate for collecting data; (iii) setting-up processes of broader involvement of stakeholders, and (iv) enhancing access of the evaluation results and process to all stakeholders. A gender equality perspective implied: (i) applying gender analysis by involving both men and women in consultation and evaluation’s analysis, (ii) inclusion of data disaggregated by sex and gender in the analysis and justification of project documents; (iii) the formulation of gender-sensitive strategies and objectives and gender-specific indicators; (iv) inclusion of qualitative methods and use of mix of methodologies, (v) forming a gender-balanced team, and (vi) assessing outcomes to improve lives of women and men. Thus, analysis of gender-related concerns will be based on the ILO/EVAL Guidelines on Considering Gender in Monitoring and Evaluation of Projects (September 2007. See Annex). In line with the results-based approach applied by the ILO, the evaluation focused on identifying and analysing results through addressing key questions related to the evaluation criteria and the achievement of the outcomes/ objectives of the project using the mainly, but not only, indicators in the logical framework of the project. The list of questions presented below were reviewed and adjusted during the preparation of the inception report.

Key Evaluation Questions

The evaluation examined the following key issues:

1. Relevance and strategic fit

- Has the project taken into account the needs and priorities of tripartite stakeholders and beneficiaries identified in the project document and during the project implementation?
- In hindsight, was the project design realistic and purposeful towards achieving its objectives?

- How well does the project support national and regional commitment to relevant SDG targets and indicators?

2. Validity of design

- Did the project address the major issues relating to skills development in the RE and EE sub-sectors in the country/ies targeted?
- Was the project Theory of Change comprehensive, integrating external factors and is based on systemic analysis?
- Was the project design and implementation realistic (in terms of expected outputs, outcome, and impact) given the time and resources available, including performance and its M&E system, knowledge sharing and communication strategy?
- To what extent did the project integrate crosscutting themes in the design and implementation (tripartism and social dialogue, gender and non-discrimination, International Labour Standards and fair/just transition on environment)?

3. Coherence

- How well does the project complement and fit with other ongoing ILO programmes in the country?
- To what extent was the project aligned to national, regional and international frameworks related to its main thematic area?
- To what extent did the project complement and synergize with other interventions by national or international development actors?

4. Effectiveness

- To what extent did the project achieve its objectives, or is likely to by the end of its implementation?
- Have the quantity and quality of the outputs produced been satisfactory?
- What outputs have not been produced and why?
- Have unexpected results (outputs and outcomes) took place?
- To what extent does the project have specific targets for intended beneficiaries (women, youths) in an equal way?
- How effective were the backstopping support provided by the Country Office, the DWT Pretoria and HQs?

5. Efficiency of resource use

- How efficiently have resources (human resources, time, expertise, funds etc.) been allocated and used to achieve the project objectives? In general, did the results achieved justify the costs? Could the same results be attained with fewer resources?
- Were funds and activities delivered in a timely manner? If not, what were the bottlenecks encountered?
- Did the project budget make adequate provisions for addressing gender and inclusion related specific objectives/activities?
- Has an effective risk analysis and monitoring and evaluation system been established and implemented?

6. Impact orientation

- Has the project worked towards achieving the proposed impacts? Have the project strategy and project management steering towards impact?

- Is the project working at policy and practice levels (change in practices, perceptions, technical capacity, governance or enabling environment) significant contributions to gender and inclusion related concerns within the realm of promoting decent work?
- How did the project positively and negatively affect local capacities, institutions, or systems?

7. Sustainability of projects outcomes and impacts beyond the project's lifespan

- Will the project outcomes be expected to be achieved in a sustainable manner that enable continuing beyond the project's lifespan?
- To what extent will the implementing partner be likely to continue the project results without external funding or support?
- Has an effective and realistic exit strategy been developed and implemented?
- What needs to be done to enhance the sustainability of the project and strengthen the uptake of the project outcomes by stakeholders?

8. Transversal/Crosscutting Themes

Gender

- How effectively has the project addressed gender equality and non-discrimination in its objectives and outcomes?
- What mechanisms were in place to ensure equal representation and participation of women and men in project activities?
- To what extent have the project outputs contributed to reducing gender disparities in the renewable energy and energy efficiency sectors?

Tripartism

- How effectively has the project engaged tripartite stakeholders (government, employers, and workers' organizations) in its planning and implementation?
- What evidence exists of strengthened social dialogue mechanisms as a result of the project?
- To what extent has tripartism influenced decision-making and ownership of the project outcomes?

Environmental Sustainability

- How has the project contributed to promoting sustainable practices in renewable energy and energy efficiency?
- To what extent were environmental sustainability considerations integrated into project planning and implementation?
- What is the impact of the project on environmental conservation and reduction of carbon emissions within the targeted regions?

3.0 Evaluation Approach and Methodology

The Final Independent Evaluation of the Skills for Energy in Southern Africa Project was conducted using a participatory and mixed-methods approach, including consultations with ILO officers, national and regional stakeholders and donors. The evaluation framework complied with ILO and UN standards, addressing six standard evaluation criteria, including gender equality. Key stakeholders were involved in designing, and implementing, fostering transparency and ensuring compliance with UN norms and ethical guidelines.

The Evaluation Design

The evaluator used quantitative and qualitative methods in a descriptive cross-sectional, collaborative, and participatory approach, with source and technique triangulation being integral parts of the process. The evaluation followed three key approaches: a theory-based evaluation approach, a process evaluation approach, and an impact evaluation approach.

The theory-based approach involved elaborating and testing the project's theory of change through a structured contribution analysis to assess the intervention's contribution to change. The evaluator analyzed the project's Theory of Change by reviewing its components, assumptions, and logical pathways. This helped determine the project's relevance by evaluating its logic and assumptions in achieving desired outcomes.

The process/implementation evaluation approach focused on what and how results were achieved, including examining the content of the project to determine what it delivered compared to the objectives outlined in the original planning documentation (Project Document). The assessment also explored the effectiveness and efficiency of implementation processes, including whether the project delivered the planned quantity and quality of activities, whether these activities and services were utilized for optimal effect, and whether implementation was on track or faced challenges. The efficiency component assessed the use of project resources, establishing cost-effectiveness metrics and sustainability indicators to evaluate long-term financial viability and the ability to maintain project benefits without external support.

The impact appraisal investigated the project's role in achieving its intended results and its influence on broader observed impacts. The main interrogation focused on the project's progress, adjustments made during implementation, and their impact on the intended outcomes. The analysis also addressed cause-and-effect questions, examining any outcomes and assessing the difference the intervention made on outcomes. Sustainability was assessed by evaluating the project's ability to maintain its benefits and outcomes over time, even after the project ended, by assessing whether the project's impacts were likely to continue after closure and whether the project built capacity within the community or organization to sustain its results.

The evaluation process involved detailed planning, consultation, and continuous communication. A four-phase process was adopted, starting with a kick-off meeting to establish project objectives. Data collection involved interviews with stakeholders, focus groups, and site visits. Data analysis and reporting phases involved debriefing with the project team, and a stakeholder workshop was held to present preliminary findings. This was followed by reviewing the draft report and finalizing it after consolidating feedback from all stakeholders.

Data collection methodology

The evaluator used a mixed-methods approach to gather data on the project, including primary and secondary sources. Primary data was collected through interviews, focus group discussions (FGDs) and field visits. Secondary data was collected through a desk review of project documentation, including progress reports, training materials, evaluation reports, and research products. The Tracer Study was used as a key data source to assess the project's outcomes and impacts. The data collection methods included both physical and remote/virtual approaches, with most interviews conducted through physical meetings.

The desk review of project documents was carried out to assess the project's implementation and identify the problem addressed by the project.

Key informant interviews were conducted with internal and external project stakeholders, focusing on the relevance and appropriateness of project activities within the project zones.

Focus group discussions (FGDs) were employed as a data-gathering method, allowing the evaluator to pose questions and receive responses quickly. The FGDs offered insights into group dynamics and helped uncover additional information for further follow-up. The project team supported the organization of FGDs by providing technical, logistical, and administrative support, including mobilizing participants. Participants in FGDs included beneficiaries of the training programs, such as engineers, technicians, and energy managers. The discussions explored their experiences with the training, the relevance of the skills they acquired, and the practical application of these skills in renewable energy, energy efficiency, and regional energy integration. The FGDs assessed the training's effectiveness in meeting professional needs, challenges faced in applying the knowledge gained, and the overall impact on careers and organizations.

This comprehensive approach ensured that valuable insights were gathered despite potential logistical challenges and captured a wide range of perspectives while focusing on those with the most relevant experience in the project.

Table 1 Respondents Reached

Category	Respondents	Country	Gender
Private Sector	Eileen Van Der Est	Botswana	Female
Beneficiaries	Focus Group Discussions	Namibia, Botswana, Zimbabwe, Zambia	14 Males, 9 Females
Project Staff	Finance and Admin Team	Zambia	2 Males
Trainee	Gift Chindebvu	Malawi	Male
KGRTC Staff	Training team	Zambia	3 Males
Energy Regulators	ECB Representative	Namibia	Male
Engineering Bodies	EIZ Representative	Zambia	Male
Regional Agencies	SACREE Team	SADC Region	2 Males
Donor Representative	Donor representative	SADC Region	Female
Training Providers	SUSTENERGY Team, ZESA Institute staff	Zimbabwe	6 Males, 3 Females

Sampling

The project evaluation involved a thorough stakeholder mapping exercise, identifying and categorizing all relevant stakeholders involved in or impacted by the project. The population of interest included beneficiaries, project staff, government officials, private sector partners, social partners, and donors. The evaluator adopted a purposeful sampling approach, focusing on qualitative data collection, where key stakeholders with direct experience and involvement in the project were selected for interviews and discussions.

Stratified sampling was employed to ensure the representation of different groups within the project, such as engineers, technicians, and energy managers across various SADC countries. Convenience sampling was employed for focus group discussions (FGDs) when accessibility was limited. This combination of purposive, stratified, and convenience sampling ensured a diverse and balanced sample.

Data Analysis

The evaluation process involved consolidating data from interviews, discussions, and literature reviews, which were then analyzed using question-and-answer matrices. The evaluator identified and coded themes, and open-ended responses were recorded for further processing. The data was coded using NVivo software. The qualitative information was integrated using question-by-method matrices to identify common trends. Quantitative data from the Tracer Study (2023) was analyzed using statistical methods to identify patterns and measure project outcomes. The quantitative data was then triangulated with qualitative data from

interviews, focus group discussions, and program documents. This integration enhanced the evaluation's rigour by allowing cross-validation of findings and identifying discrepancies. Triangulation was a significant tool for validating data through cross-verification from multiple sources.

Ethical Considerations

The evaluation process was ethically guided, adhering to the ILO Ethical Guidelines for Evaluation and UN Evaluation Group Ethical Guidelines. Participants were informed about the purpose and consented to confidentiality. The evaluation promoted diversity, inclusion, and cultural norms. A do-no-harm approach was adopted to minimize harm. Respectful language and culturally appropriate practices were used. Transparency and accountability were emphasized, and the evaluation maintained its independence and objectivity. Local laws and cultural practices were respected, and differences between local practices and ILO guidelines were navigated with sensitivity and dialogue.

Limitations

- Selection bias: The project initially provided the stakeholders, potentially limiting diverse perspectives. In mitigation, snowball sampling was used to include additional relevant stakeholders.
- Over-reliance on primary qualitative data: Primary qualitative methods missed measurable, quantitative changes. The evaluation data was complemented with secondary quantitative data from sources like the 2023 Tracer Study and monitoring reports.
- Difficulty in attributing impact: Overlapping initiatives and partners complicated impact attribution. To mitigate this, contribution analysis was used to assess the project's role within the broader initiative.

Reporting

The evaluation report was drafted based on documents reviewed, stakeholder inputs, and workshops. The report was sent to the Evaluation Manager for a methodological and factual review, with the project manager coordinating with the evaluators. The final version was finalized, taking into account stakeholder comments. A stakeholders' workshop was organized to fill any gaps in the data. The workshop included beneficiaries, implementation partners, ILO, and government partners. The evaluation findings were shared with ILO and stakeholders, expecting them to be receptive to the recommendations. The final report was reviewed by the Evaluation Manager, Regional Evaluation Officer, and EVAL, with the ILO officer responsible for sharing it with stakeholders and providing a management response to the recommendations.

4.0 Findings

4.1 Relevance

The project effectively addressed the needs and priorities of beneficiaries by aligning its training programs with participating countries' strategic goals, such as achieving total electrification and solarising one million homes by 2025 in Zimbabwe³.

The training programs were "very, very aligned to what we want to do" and directly relevant to Zimbabwe's strategic goals, such as achieving "total electrification": **Staff at ZESA National Training Centre, Zimbabwe**

It has effectively created professional courses that are pertinent to their work, which have proven beneficial to participants. Courses in power quality and system stability and grid integration of renewable energy sources were for instance noted by the beneficiaries reached during group discussions to be particularly valuable to industry stakeholders, as they allowed for better assessment of the impact of integrating solar PV systems into existing grids. The 2023 tracer study report also highlighted the application of skills gained in the courses, particularly in addressing challenges related to solar grid integration. KGRTC now offers a wider range of training programs thanks to the project, better preparing it to meet the changing demands of the industry. The courses filled critical knowledge gaps by providing detailed technical training on battery sizing, data sizing, PV sizing, and renewable energy system integration, ensuring proper installations and addressing previously generalized knowledge among electricians.

KGRTC adopted a structured and participatory approach to curriculum development, ensuring that the courses were market-driven and industry-relevant:

"We did some studies to determine which renewable energy aspects were relevant in the region. Feedback from our customers and training needs analyses shaped the courses we developed." **Staff at KGRTC**

Through consultations with industry experts, academia, and associations such as the Solar Industry Association of Zambia and the Renewable Energy Association, KGRTC ensured that the curriculum addressed real-world needs. The validation workshops provided an additional layer of quality assurance, where feedback was integrated to refine course content.

While the project successfully bridged knowledge gaps, ZESA National Training Centre, one of the participating stakeholders, for instance highlighted the need for further investment in practical skills training to maximize impact.

Even though the project has only reached a relatively small number of participants so far, it is anticipated that the creation of a strong suite of training courses will have long-term effects. The project established avenues for ongoing skill development by empowering the KGRTC to maintain and grow these programs, effectively addressing sectoral opportunities and challenges. In Zimbabwe, it effectively equipped beneficiaries with the skills and knowledge necessary to support renewable energy and electrification goals, while fostering a foundation for ongoing capacity building.

The project provided "missing information" crucial for transitioning to renewable energy. Participants learned how to "mitigate or litigate" issues arising from renewable energy integration into existing grids. **Staff at ZESA National Training Centre, Zimbabwe**

Traditionally, KGRTC focused on hydropower training, but there was a growing realization that the energy market was transitioning toward renewable energy and energy efficiency. The project served as a "catalyst", accelerating KGRTC's capacity to move in this direction:

³ The National Renewable Energy Policy (NREP). This policy seeks to promote renewable energy adoption, improve energy access, and enhance sustainability through measures such as solarizing rural and urban households, increasing renewable energy investments, and enabling energy efficiency solutions.

“It allowed us to move faster than we would have moved... and added to our portfolio as a training institution”. **A Project Coordinator at KGRTC.**

The project also effectively addresses the needs of tripartite stakeholders, particularly in terms of capacity-building and regulatory improvement. It partnered with government ministries, private sector actors, and social partners to align training curricula with regional energy strategies and labor market demands. As affirmed by the SADC team interviewed in Botswana, the project also trained in regional strategies, addressing broader policy challenges and building technical capacity. It also provided useful regulatory tools for government stakeholders like the Electricity Control Board (ECB) in Namibia. The project's focus on developing skills in renewable energy, including business planning and licensing for IPPs, addressed key challenges such as financing and land acquisition.

The project demonstrates strong alignment with both national and regional strategies for renewable energy (RE) and energy efficiency (EE) skills development⁴. It also supports energy policies aimed at transitioning away from traditional energy sources, for instance, Zambia's strategy to reduce its reliance on hydroelectric power. Regionally, the project aligns with the Southern African Development Community (SADC) frameworks, (SADC Renewable Energy and Energy Efficiency Strategy and Action Plan (REEESAP), SADC Climate Change Strategy and Action Plan, SADC Industrialization Strategy and Roadmap (2015–2063) and SADC Energy Protocol) all which emphasize renewable energy, energy efficiency, and regional energy integration.

The priorities of the project are also closely aligned with those listed in the Swedish government's regional development cooperation strategy, especially those on the environment, climate change, and the sustainable use of natural resources. As stressed in Sweden's strategy, these initiatives help achieve the overarching objectives of promoting environmental sustainability and adaptive strategies to reduce climate-related risks.

The project's objectives and activities are still relevant in the current socio-economic context, as the rapid growth and interest in renewable energy within Namibia and the broader Southern African region align with the region's transition towards cleaner energy solutions. The project's objectives align well with national and regional strategies for skills development in renewable energy and energy efficiency, contributing to Namibia's and Southern Africa's energy transition goals. The focus on renewable energy is highly relevant in the current socio-economic context, as SADC's increasing reliance on renewable energy sources and shift away from fossil fuels necessitates skilled personnel in renewable energy and energy efficiency.

The project has made notable contributions to the achievement of several Sustainable Development Goals (SDGs), particularly in affordable and clean energy, decent work and economic growth, and industry, innovation, and infrastructure. The training of local engineers and project developers has empowered the workforce, contributing to job creation in the renewable energy sector.

The project was ambitious but realistic in identifying challenges and prioritizing training. According to a member of staff at ZESA Institute, the project was largely realistic in setting out its objectives and activities, considering the significant gaps in renewable energy (RE) and energy efficiency (EE) skills within the region.

However, limitations in project duration and resources meant that not all desired activities could be fully implemented or scaled to meet the overwhelming demand for training.

“The timeframe (4 years) was too short for achieving sustainable skills development outcomes. A longer duration of five years is recommended for better impact assessment.” **ILO Project Staff**

4.2 Validity of Design

The Theory of Change: The Theory of Change⁵ outlines a logical framework for achieving sustainable energy systems in Southern Africa through targeted interventions. The Inputs include funding, technical expertise,

⁴ Zimbabwe's National Renewable Energy Policy (NREP), Namibia's Renewable Energy and Energy Efficiency Policy, SADC Renewable Energy Strategy and the SADC Climate Change Strategy and Action Plan

⁵ Annex 7

partnerships, and training materials. These enable Activities, including capacity building for KGRTC staff, development of demand-driven training courses, stakeholder engagement, and awareness campaigns. These activities produce Outputs, such as updated training modules, increased participation, enhanced institutional capacity, and improved collaboration. The Outcomes include greater technical capacity for renewable energy and energy efficiency (RE/EE) projects, improved policy and regulatory frameworks, higher adoption rates of RE/EE technologies, and stronger public-private partnerships. Ultimately, these lead to Impact, including sustainable energy systems, reduced greenhouse gas emissions, enhanced energy security, and improved livelihoods through job creation. This structured approach ensures the alignment of resources and efforts with long-term development goals.

The project Theory of Change (ToC) incorporated systemic challenges and external factors such as policy development, skills gaps, and regional integration. The project conducted thorough assessments of skills needs within the renewable energy and energy efficiency sectors, tailoring training programs to address these gaps. It also aligned with existing regional frameworks like SADC strategies and collaborated with institutions like KGRTC for curriculum development. The Theory of Change was comprehensive, having addressed the systemic challenges such as skill gaps in the renewable energy and energy efficiency sectors. One beneficiary from Botswana, stated that the program bridged the gap between technical understanding and business application, enabling her to fully comprehend solar system components and installations. She described the training as "very relevant to the current role" and essential for aligning with market demands, particularly off-grid solar systems.

The Theory of Change (ToC) also addresses energy transitions and is comprehensive, considering systemic analysis and external factors. It considered the complexities of energy transitions, socio-economic contexts, and partnerships for sustainable outcomes. However, the project's ambitious outputs and impacts were constrained by the time frame and resources. Challenges such as delays due to COVID-19 restrictions and the rapid evolution of renewable energy technologies highlight the need for ongoing reviews and adaptability to external factors. In this regard, although the training programs imparted critical skills and technical knowledge to the beneficiaries, the high demand for training coupled with resource constraints limited the number of beneficiaries reached. The four-year project duration was limiting in terms of the scalability of activities and the ability to fully address demand. Similarly, practical skills training could have been further invested in to enhance depth and impact.

The project design integrated cross-cutting themes like gender equality, social dialogue, and fair transition, promoting gender equity through targeted strategies and multi-stakeholder partnerships. One of the beneficiaries appreciated the course's inclusivity, stating it was "relatable to everyone", regardless of gender or technical background.

The Monitoring and Evaluation (M&E) system supported the project but faced challenges due to its ambitious scope and timeline. A more robust framework with extended timelines could have strengthened the project's adaptability and long-term success.

4.3 Coherence

The project complemented other ILO programs and initiatives in the region (Skills Initiative for Africa Project – SIFA and Skills for Green Jobs in South Africa) by aligning its focus on developing skills and employability within the RE and EE sectors with the ILO's broader objectives. It integrated lessons from other ILO projects, such as those using the Public-Private Development Partnership model, while ensuring coherence with ongoing efforts in related thematic areas. The project incorporated lessons learned from ILO projects, such as Somalia Renewable Energy Skills Training (the importance of flexible scheduling and specialized courses to encourage female participation and ensuring strong project governance structures), the Inclusive Growth through Decent Work in the Great Rift Valley” Public Private Development Partnership Project in Kenya (the need for flexible partnership agreements tailored to private sector concerns), Zambia Industrial Training Academy (sustainability planning), and SkIDRES Pilot Project (focusing on youth and women's economic empowerment). The project also leveraged partnerships with regional stakeholders to enhance its relevance

and impact. The SESA project utilized various partnerships to improve its effectiveness and impact. These partnerships included Public-Private Partnerships (PPPs) with private sector stakeholders, Government partnerships with national governments, academic and vocational institutions, and regional and international organizations. For instance, KGRTC and Namibia Energy Institute (NEI) co-developed demand-driven renewable energy and energy efficiency training programs, while government partnerships e.g. Ministry of Energy in Zambia aligned project activities with national energy policies. Regional bodies like Southern African Development Community Centre for Renewable Energy and Energy Efficiency (SACREEE) and SADC promoted regional harmonization of energy training standards, and local organizations enhanced community outreach.

The project fits well within the national and international frameworks in its thematic area. This includes promoting national policies like the energy transition strategy of Zambia, and regional frameworks such as SADC strategies on energy and skills development. It addressed Zambia's energy deficits by focusing on skills development for renewable energy, aligning with the country's efforts to diversify from hydro-based energy to renewable sources. The project contributed to global clean energy goals by equipping participants with skills in off-grid solar systems, aligning with SDG 7 and broader climate action goals. The program also supported regional priorities, as highlighted by Southern African Development Community Centre for Renewable Energy and Energy Efficiency (SACREE)⁶, which points to the growing focus on regional energy access and integration within South African Development Community (SADC). The project effectively coordinated with stakeholders to avoid duplication by building on existing initiatives and engaging relevant actors. It created synergies with initiatives led by other international organizations, such as SACREE's partnerships with GIZ and IRENA, and broader international efforts, such as Germany's green hydrogen initiatives in Namibia. As pointed out by a SADC representative in Botswana, the project effectively coordinated with key stakeholders to prevent duplication and created valuable synergies with ongoing regional and international initiatives.

At the international level, besides SDG 7 on Affordable and Clean Energy, it also contributed to SDG 8 on Decent Work and SDG 4 on Quality Education.

The project brought together various stakeholders: public-private, regional institutions, and even donors. In this way, it helped share knowledge and thus reduce duplication in efforts towards sustainable energy and skills development.

As stated by a representative of the private sector in Botswana:

"There were evident synergies between this project and the work of other international organizations".

The project amplified its impact by working with partners and regional frameworks. The partnerships extended across sectors, enabling integration with broader development programs targeting climate change, energy transitions, and capacity building.

The project strategies were in line with the ILO's broader objectives of promoting decent work. It furthered some key pillars of the ILO agenda, such as employment opportunities, equitable transitions, and social protection, through skills development for employability, gender-inclusive strategies, and mechanisms for social dialogue. These strategies reinforced the mandate of the ILO while addressing critical gaps in the energy sector.

4.4 Effectiveness

The project successfully developed skills, disseminated knowledge, and enhanced careers in renewable energy and energy efficiency, addressing technical challenges like grid integration and battery sizing. Beneficiaries reported increased confidence, improved performance, and career progression, while

⁶ The regional institution established under the framework of the Southern African Development Community (SADC) to promote the adoption of renewable energy and energy efficiency technologies and practices in the region

institutions like SUSTENERGY and ZESA National Training Centre in Zimbabwe expanded training to align with national electrification goals. Despite challenges such as limited practical training and COVID-19-related disruptions, the project exceeded expectations by fostering regional collaboration, knowledge sharing, and gender empowerment, extending its impact beyond the original scope.

During the course of implementation, the target number of participants was adjusted due to feasibility issues and contextual challenges due to its limited time frame, infrastructure limitations, geographical accessibility, and socioeconomic challenges, including disruptions from COVID-19. This change was made to ensure the program maintained quality and impact while working within available resources.

Outcome 1: More power technicians, engineers and managers in the SADC region have enhanced technical capacity to apply, manage and promote the latest Renewable Energy, Energy Efficiency and Regional Energy Integration technologies

The training programs have effectively addressed knowledge and skills gaps in the energy transition, particularly in Zimbabwe and Namibia. The courses provided specific knowledge such as balancing loads, battery sizing, and maintenance, which are essential for improving solar installations and ensuring system reliability. This targeted training bridged the gap between generalized knowledge and practical technical expertise, enabling participants to design and manage solar systems more effectively. The project enhanced the capacity of technicians and engineers in renewable energy and energy efficiency sectors by providing training in critical areas like balancing loads, battery sizing, grid integration, and system maintenance. The training provided real-world insights for integrating renewable energy systems into grid strengthening and helped align programs with national electrification goals. The inclusions, as reported by participants interviewed, improved their confidence in troubleshooting and system optimization, fostering sustainable development across the SADC region. The training of technicians and engineers thus improved their ability to design, manage, and optimize renewable energy systems, bridging the gap between theoretical knowledge and practical expertise.

The project has also contributed to professional growth and career development for participants across the SADC region, enabling better communication with clients, managing installations, and improving customer trust.

Practical exposure was another key achievement, with participants in Namibia praising the inclusion of site visits and energy audits as part of their training. However, challenges remain, such as insufficient practical training time. Participants also called for further capacity building in financial modelling and large-scale renewable energy systems to better meet industry demands.

1.1. RE/EE/REI skills demand survey among energy companies in the region completed

The RE/EE/REI skills demand survey was completed, aiming to understand the current and future skills needs of renewable energy, energy efficiency, and regional energy integration sectors in the SADC region. The skills demand survey was meant to determine gaps in the skills and the level of need for training among energy firms in the regions. To determine the benchmark for this outcome, several indicators were baselined, and the result showed that 327 skilled people were trained in RE/EE/REI and among these were 87 women and 240 men.⁷ The skills demand survey revealed that there was a growing need for specialized training in off-grid solar system design and installation, financial modeling for renewable energy projects, and industrial energy efficiency. The survey also indicated that many energy companies were looking for more practical, hands-on training rather than just theoretical coursework.

According to project staff, the results greatly contributed to the baselining of project Key Performance Indicators (KPIs) and informed valuable insight that shaped KGRTC's training portfolio development to ensure appropriateness for industry requirements and market needs. KGRTC developed training programs to address market gaps, including the Off-Grid Solar System Design and Installation course. Courses were

⁷ SESA Project Baseline report, 2021.

redesigned with site visits, case studies, and industry-led sessions, catering to both beginners and experienced professionals.

Despite challenges like low response rates and imbalanced representation, the survey produced essential insights to inform KGRTC's training portfolio development. The project mitigated these issues by extending the survey period and recruiting another service provider to finalize the analysis.

1.2. Desired training portfolio determined by KGRTC based on the identified market demand

KGRTC successfully identified its desired training portfolio based on the market demand survey results and feedback from key stakeholders in the energy sector. The courses focused on priority areas in RE, EE, and REI, including solar system design, grid integration, energy management, and financial modelling. The training portfolio was shaped through market research in sample SADC countries, which guided the strategic positioning of KGRTC as a Centre of Excellence.

The finalized portfolio included 28 courses, exceeding the original target of 25, and reflects both technical and managerial training areas. These were tailored to address critical gaps identified during consultations, ensuring alignment with industry requirements.

1.3. Partners identified and MoUs established as part of the Public-Private Development Partnership

The project made substantial progress in identifying partners and establishing MoUs to strengthen the PPDP approach. The MoUs were formal agreements that defined the roles, responsibilities, and contributions of partners, ensuring long-term collaboration. Letters of Commitment served as interim agreements to secure partners' participation and contributions when delays in formalizing MoUs arose, allowing the project to maintain momentum and progress without disruption.

The Public-Private Development Partnership (PPDP) under the SESA Project aimed to strengthen collaboration between KGRTC and key stakeholders in the energy sector. For instance, Africa GreenCo partnered with KGRTC to develop and deliver specialized training courses, such as "New Market Structures and Renewable Energy IPPs" and "Financial Modelling and Bank Financing for RE IPPs in Africa". By December 2024, the project had established 34 partnerships with 40 institutions and formalized these through 20 Agreements and Memoranda of Understanding. However, only 50% of the target in private sector investment was achieved. Despite this, the partnerships improved training capacity, resource-sharing, and industry alignment.

Partnerships were made with SADC affiliates such as SACREEE (SADC Centre for Renewable Energy and Energy Efficiency), RERA (Regional Energy Regulators Association), and SAPP (Southern African Power Pool) for regional alignment and coordination. Partnerships at the government level included ministries in charge of Energy, Labour, and Technical Education, Vocational and Entrepreneurship Training Authority-TEVETA, to provide policy and regulatory support. These included the Ministry of Energy (MoE) – Zambia, Ministry of Labour – Zambia, Ministry of Technical Education, Vocational and Entrepreneurship Training Authority (TEVETA) – Zambia, Ministry of Trade and Industry – Namibia, Ministry of Mines and Energy – Namibia, Ministry of Energy and Natural Resources – Botswana, and Ministry of Infrastructure and Housing – Malawi

In the private sector, this was done with organizations such as SMARTNET Energy, Engie PowerCorner, Engie Impact, Renewable Management Services (RMS), Res4Africa, Unipower, Solvina, Siemens Energy of Sweden, ZARENA, and SIAZ through agreement, allowing for technical input, sharing of resources, and financial contribution. There were also partnerships with the workers' and employers' organizations, like NCCI (Namibia Chamber of Commerce and Industry), ZCTU (Zambia Congress of Trade Unions), ZFE (Zambia Federation of Employers), SATUCC (Southern Africa Trade Union Coordination Council), and the SADC Private Sector Forum. The project also facilitated partnerships with the academia and professional institutions which provided inputs into curriculum development, research, and skills training, including UNZA (University of Zambia), NUST/NEI (Namibia University of Science and Technology/NEI) in Zambia, WiTs (University of the Witwatersrand) in South Africa, and EIZ (Engineering Institution of Zambia).

The partnerships established under the SESA Project brought several notable contributions that significantly enhanced its outcomes and impact. Firstly, partners provided no-cost or reduced-cost expert fees, travel,

use of training sites, and access to specialized equipment and tools, minimizing financial barriers to project implementation. Additionally, shared costs between KGRTC and partners resulted in reduced training fees, enabling more participants to access training programs. The partnerships also facilitated the development of industry-responsive courses, ensuring the curriculum aligned with current market and technological demands. Work-based learning opportunities were integrated, allowing trainees to gain practical experience in real-world settings. Furthermore, the collaborations provided exposure to a diverse pool of experts, granting access to the latest knowledge and technologies in renewable energy and energy efficiency sectors. Lastly, training sponsorships from partners increased participation and accessibility for individuals who might otherwise face financial constraints. These contributions collectively enhanced the quality, reach, and sustainability of the training programs delivered under the SESA Project.

The PPDP (Public-Private Development Partnership) under the SESA project was designed to strengthen collaboration between KGRTC and key stakeholders in the energy sector by facilitating knowledge transfer, resource sharing, and industry-aligned training programs. The private sector partners contributed through curriculum development, technical expertise, and financial investments. While the partnerships enhanced training quality and market relevance, some companies faced challenges in long-term engagement due to shifting priorities and resource constraints.

To streamline and guide partnerships, a Partnership Strategy was developed, mapping potential public and private partners across the SADC region and Europe. This strategy ensures clear roles, responsibilities, and sustainability of collaborations beyond the project's lifespan. However, the process of formalizing partnerships proved lengthy due to legal and administrative requirements, leading to the acceptance of interim Letters of Commitment to avoid delays.

1.4. New RE/EE/REI training courses developed, marketed, and delivered.

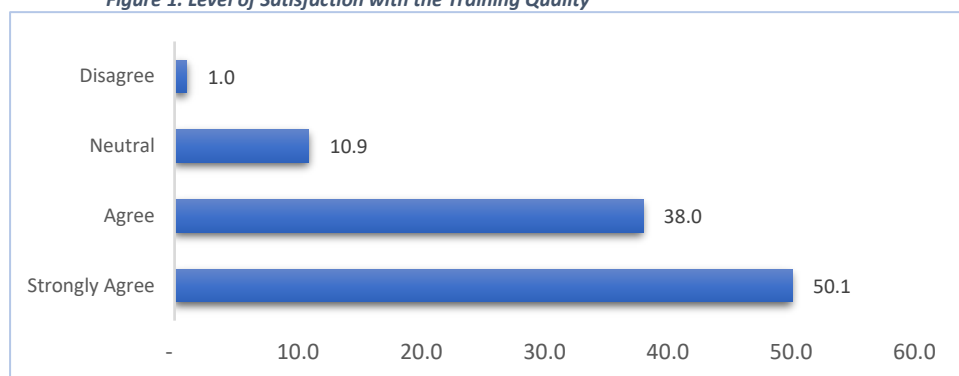
The project developed and delivered courses covering critical areas such as off-grid solar system design, grid integration of renewable energy sources, industrial energy efficiency, financial modeling and bank financing for renewable energy IPPs, gas turbine technology and green fuels.

The goal was to develop, market, and deliver 25 training courses in Renewable Energy (RE), Energy Efficiency (EE), and Regional Energy Integration (REI). By December 2024, the project exceeded this target, successfully delivering 28 courses (112%), demonstrating an impressive ability to adapt to industry needs and expand its training offerings. The project also aimed to train 1,014 individuals, and this target was surpassed with 1,151 trainees (113%) completing the courses. Notably, female participation reached 27% against a target of 25%, reflecting a strong effort toward gender inclusivity, though it indicates room for further improvement in achieving gender balance. According to a trainer at KGRTC:

"These results are a proof of the project's success in addressing skills gaps, increasing accessibility to specialized training, and contributing to a more skilled workforce in the energy sector across the SADC region".

The training programs were practical, industry-aligned, and effective in addressing skills gaps, reinforcing KGRTC's standing as a Centre of Excellence. Marketing efforts, including the launch of KGRTC's new website and eCampus platform, enhanced visibility and accessibility for trainees across the region. A tracer study revealed that 61% of trainees applied their skills to initiate or support renewable energy and energy efficiency projects. The tracer study also indicated that 89% of respondents rated the training quality positively (50% strongly agreed and 38% agreed that the training improved their skills and job performance). Only 1.0% of respondents disagreed, while 11% remained neutral.

Figure 1. Level of Satisfaction with the Training Quality



Outcome 2: KGRTC has built its brand and standing as the region's Centre of Excellence for competitive skills training in Renewable Energy, Energy Efficiency and Regional Energy Integration technologies

The training programs delivered under the project have been widely recognized for their quality, relevance, and impact, enhancing KGRTC's reputation as a leading institution for renewable energy skills development. Participants from across the SADC region highlighted the value of the training, with one participant in Zimbabwe stating that the program was *"very relevant and well-aligned to current energy challenges"* and provided technical knowledge that was previously lacking. This demonstrates the high standard of course content offered at KGRTC, which directly meets the demands of the RE and EE sectors. The majority of companies reported that their employees applied the skills gained from KGRTC courses with a 95% employer satisfaction rate recorded regarding the quality and relevance of KGRTC's training programs⁸.

The hands-on, practical components of the training further reinforced KGRTC's credibility as a Centre of Excellence. In Namibia, participants praised the inclusion of site visits and practical exercises, stating that *"real experiences during energy auditing and grid integration training were invaluable"* in applying the knowledge gained. Such practical methodologies not only enhanced the quality of the training but also distinguished KGRTC as an institution capable of delivering advanced, real-world skills critical to regional energy transitions.

KGRTC's role in supporting institutional capacity development across the region has further solidified its standing. In Zimbabwe, institutions like ZESA National Training Centre and SUSTENERGY leveraged the training to enhance their capacity to deliver solar energy skills training. For instance, SUSTENERGY replicated KGRTC's demonstration kits, enabling them to train over 150 students and 27 women in solar PV technology. Similarly, ZESA National Training Centre noted that KGRTC-trained technicians are leading Zimbabwe's ambitious solar electrification projects to bring renewable energy to 200,000 households by 2025. This cascading impact highlights KGRTC's pivotal role as a regional leader in renewable energy skills development.

The project strengthened institutional capacity, contributing to sustainability. SUSTENERGY in Zimbabwe reported that the training enabled them to replicate demonstration kits and conduct hands-on courses, leading to the training of over 150 students, including 27 women, in solar energy since 2021. ZESA National Training Centre highlighted the project's broader impact on building regional capacity for energy integration and sustainability.

While KGRTC has achieved significant progress, some challenges remain that, if addressed, could further strengthen its role. Participants from multiple countries expressed the need for longer training durations to allow for deeper practical engagement, particularly in technical skills like financial modelling and large-scale renewable energy systems. Addressing these gaps could enhance KGRTC's ability to provide comprehensive and competitive training, further consolidating its position as a Centre of Excellence.

2.1. Increased customer base among main target group of training services in public utility companies and private sector in the areas of EE, RE and REI.

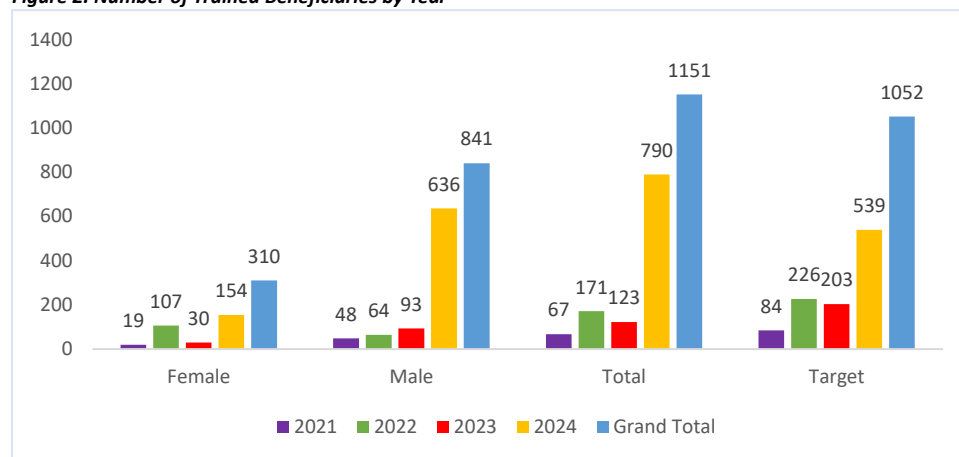
⁸ Final SESA Project 2021 : Annual TPR Donor.

The aim here was to increase the customer base among public utility companies and private sector entities for training services in Energy Efficiency (EE), Renewable Energy (RE), and Regional Energy Integration (REI).

By December 2024, the KGRTC website had become fully operational and served as a key tool for outreach and engagement. The website recorded over 27,000 visits, a significant increase from the baseline average of 800 visits, demonstrating improved visibility and accessibility to training information. The project also aimed for a 50% increase over the baseline of 715 trainees, with an annual average target of 358 trainees. This target was exceeded, achieving an average of 369 trainees (103%) annually.

The training programs attracted significant participation from both public utilities and private sector entities across the SADC region. The project has successfully expanded KGRTC's customer base among public utility companies and private sector players within the RE, EE, and REI sectors. Technicians, engineers, and managers were trained across the newly developed courses, surpassing the annual targets set for the program. Notable examples include companies such as CEC (Zambia), EGENCO (Malawi), REA (Zambia), and SUSTAINENERGY (Zimbabwe), indicating the growing market demand for KGRTC's specialized training services. During the project lifecycle, a total of 1,151 participants were trained, exceeding the initial target of 1,052 trainees. Among these, 310 were females, and 841 were males, reflecting efforts toward inclusive participation.

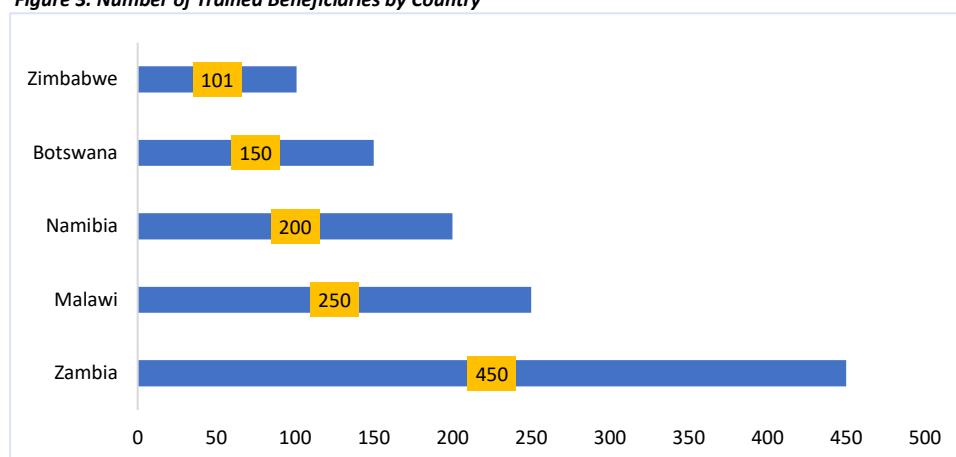
Figure 2. Number of Trained Beneficiaries by Year



The project achieved gender participation of 310 females and 841 males, with males comprising the majority of the total 1,151 participants trained.

A total of 1,151 participants were trained across five countries, with Zambia hosting the largest share at 450 participants (39%), followed by Malawi with 250 participants (22%), and Namibia with 200 participants (17%). Botswana accounted for 150 participants (13%), while Zimbabwe contributed 101 participants (9%).

Figure 3. Number of Trained Beneficiaries by Country



The tracer study revealed the effectiveness of the training, with the trainees reportedly applying their newly acquired skills to initiate or support projects in RE, EE, and REI.

Figure 4 Beneficiaries installing solar PVC



Examples of these practical applications include the CEC 34MW On-Grid Solar Plant in Zambia and impactful off-grid solar initiatives in Malawi and Zimbabwe, showcasing the real-world impact of the training. In Zambia, trainees played pivotal roles in the successful implementation of the CEC 34MW On-Grid Solar Plant, a significant contribution to the country's energy transition efforts. In Malawi, trained technicians and engineers were instrumental in delivering impactful off-grid solar electrification projects, which have improved energy access in rural areas. Similarly, in Zimbabwe, trainees supported solar mini-grid installations that are providing reliable and sustainable energy to underserved communities.

Customer engagement was further enhanced through active marketing efforts, which included strategic outreach to public utilities and private companies. KGRTC's marketing strategy,

involving partnerships with major stakeholders like Engie PowerCorner and Siemens Energy, focused on renewable energy and energy efficiency. This approach, supported by webinars, social media campaigns, email outreach, and face-to-face meetings, attracted participants from other organizations, strengthening KGRTC's customer base. These efforts have solidified KGRTC's position as a regional leader in skills development, ensuring its training programs remain relevant and widely accessible to the energy sector's evolving needs.

2.2. Enhanced differentiation of KGRTCs service portfolio, e.g. by including distance learning

Figure 5 The KGRTC website with e-learning platform



KGRTC has significantly enhanced its service portfolio to include distance learning and differentiate its offerings. A fully functional e-Campus platform was launched to support virtual and blended learning, making training programs more accessible to participants across the SADC region.

The platform includes digital content, enabling participants to engage with training modules remotely. Specific advancements include the integration of virtual classrooms and distance learning wireframes developed to support various learning modalities, enhancing accessibility and

participation. As part of this initiative, six courses were developed and delivered specifically for SACREEE (SADC Centre for Renewable Energy and Energy Efficiency), demonstrating regional alignment. By December 2024, participation had exceeded 150 trainees. The courses delivered included Off-Grid Solar System Design and Installation (OGSSDI) and Industrial Energy Efficiency (IEE), which were delivered as hybrid models combining theoretical online content with practical onsite sessions. This initiative has made training more accessible, reduced costs, and allowed flexibility for working professionals. Additionally, three specialized courses were created: CCPA (Construction Contracts and Power Purchase Agreements), OMOGSS (Operations and Maintenance of Off-Grid Solar Systems), and IEE (Industrial Energy Efficiency).

2.3. Upgraded quality control and management systems.

The SESA Project achieved significant milestones in quality assurance, staff capacity building, and trainee monitoring at KGRTC. The project supported upgrades to KGRTC's quality control and management systems (QCS/QMS) to ensure the delivery of high-quality training services. The project facilitated the digitization of the trainee follow-up system, allowing for better tracking of graduate performance and training outcomes. This system significantly improved KGRTC's ability to monitor the impact of its courses.

The project targeted conducting 62 regular quality assurance checks and successfully implemented post-training evaluations for all sessions. Each session achieved a satisfaction score exceeding 75%, reflecting a 100% success rate in meeting participant expectations and maintaining high training standards. Additionally, 29 KGRTC training staff members were trained to enhance their skills in delivering effective and industry-aligned training programs.

In terms of trainee follow-up and performance monitoring, the project facilitated the digitization of the trainee follow-up system, allowing better tracking of graduate outcomes. Through this system, 158 trainees were reached via tracer studies and onsite follow-ups, with 71% of them reporting having initiated, promoted, or supported RE, EE, and REI initiatives within their organizations or communities. Examples include Zimbabwe implementing solar-powered irrigation systems, Namibia applying energy auditing skills to improve industrial energy efficiency, and Malawi deploying off-grid solar systems for sustainable electricity access. The enhanced monitoring and evaluation framework has also identified several trainees who have advanced into leadership roles within their organizations, championing sustainable energy practices. The systematic follow-up process also demonstrates a multiplier effect, as trained **professionals transfer knowledge** and skills to their colleagues, amplifying the project's impact. These demonstrate the

effectiveness of the upgraded quality control mechanisms, ensuring that KGRTC's training programs contribute to measurable and lasting improvements in the SADC region's energy sector.

A Partnership Strategy was developed to ensure alignment of training programs with international quality standards and collaboration with industry stakeholders. While QMS enhancements were in progress, subscription to relevant certification bodies for continued validation of systems remains an ongoing activity.

2.4. Policies, initiatives, and programmes supporting cross-cutting strategy drivers developed and implemented at KGRTC.

The project made considerable progress in integrating cross-cutting strategy drivers such as gender equality, inclusivity, and sustainability at KGRTC.

The project aimed to promote inclusivity, sustainability, and workers' rights by integrating policies such as gender equality and diversity inclusion, disability inclusion, and environmental sustainability. A Gender Equality and Diversity Inclusion module was developed and delivered to 8 KGRTC staff, who were trained as gender champions. The project conducted a participatory Gender Audit, which provided critical insights into existing gaps and opportunities for gender inclusion. The participatory Gender Audit revealed underrepresentation of women in technical energy training programs, highlighting barriers like societal perceptions and limited mentorship opportunities. A Gender Audit Work-Planning Workshop was conducted, resulting in specific follow-up actions to ensure gender mainstreaming in training programs and organizational policies. Based on the audit findings, a Gender Equality and Diversity Inclusion Policy was developed and integrated into KGRTC's training programs and institutional frameworks.

This policy emphasizes gender equality, inclusivity, and sustainability, ensuring that future training and operational activities remain gender-sensitive and equitable. Particularly, the project achieved 27% female participation in training programs, surpassing initial targets and highlighting progress toward narrowing the gender gap in the EE, RE, and REI sectors.

It designed accessible training programs for individuals with disabilities, promoting equal participation. This included designing courses that accommodated different learning needs and providing accessible training environments to promote equal participation. The project also emphasized renewable energy solutions and sustainable practices, such as solar waste management policies.

Environmental sustainability was a key focus, with the project integrating renewable energy solutions and promoting sustainable practices such as solar waste management policies in Zimbabwe. Training programs emphasized energy efficiency, sustainable energy transitions, and climate-friendly technologies, aligning with broader environmental goals.

It also emphasized workers' rights and social dialogue, engaging governments, private sector actors, and workers' organizations in discussions about fair labor standards, decent work conditions, and skills development in the renewable energy industry. This involved engaging governments, private sector actors, and workers' organizations in discussions about fair labor standards, decent work conditions, and skills development within the renewable energy industry.

2.5. Collaboration and communication for RE/EE awareness, coordination within the skills sector and complementarities with other RE/EE initiatives.

The project successfully strengthened collaboration, communication, and coordination to enhance RE/EE awareness and ensure complementarity with other initiatives. Strategic partnerships were established with organizations such as SACREEE, UNZA, Smartnet Energy, Engie PowerCorner, and Siemens Energy, fostering synergies in skills development, equipment sharing, and knowledge transfer.

KGRTC developed a new organizational communication strategy and launched an upgraded website with enhanced digital content and an e-Campus platform, boosting its visibility and outreach across the region. The project leveraged joint initiatives with other international organizations, such as Africa GreenCo, to conduct specialized courses in energy financing and market structures.

Public awareness of RE/EE initiatives was strengthened through communication campaigns and collaborative efforts with industry stakeholders, ensuring broad dissemination of project outcomes and

skills-related benefits. The project conducted specialized training for 15 Zambian journalists (6 female, 9 male), resulting in published articles and increased public discourse on sustainable energy topics. It participated in major energy conferences, facilitated partnerships, and increased awareness about KGRTC's training programs. The project also utilized social media and digital outreach to disseminate information on RE and EE training opportunities, and revamped the KGRTC website, resulting in over 27,000 visits in 2024. Special awareness campaigns reached over 300 pupils at St. Monica's Girls Secondary School and Chiziye Day Secondary School. These initiatives, according to a project staff, *"facilitated the broad dissemination of project outcomes, training opportunities, and the benefits of acquired skills, reaching a wide audience across the SADC region"*.

4.5 Efficiency of Resource Use

The project provided financial, technical, and material resources that were generally sufficient and timely. The initial budget was approximately 3.9 million USD and was released in phases. The annual disbursement system ensured that funds for the following year were available by October or November, supporting project continuity. The project demonstrated effective financial planning, with key cost-saving measures such as increased reliance on local trainers, remote learning, and strategic industry partnerships ensuring sustainability.

Funds were disbursed annually, with USD 707,401.71 allocated in 2021, USD 1,443,307.35 in 2022, and USD 1,075,178.14 in 2023, supplemented by additional funding from Sida to support the project expansion.

A significant portion of the budget was directed towards training and capacity development, leading to the development and successful delivery of over 28 RE, EE, and REI courses, surpassing the initial target of 25 courses. This training initiative reached 1,151 participants, exceeding the planned target of 1,052, with female participation increasing to 27% due to targeted scholarships and inclusion programs. To strengthen public-private partnerships and stakeholder engagement, the project allocated resources for strategic missions across the SADC region, fostering institutional collaborations with key industry players such as SACREEE, Siemens Energy, Engie PowerCorner, and Smartnet Energy. These partnerships not only enhanced industry-relevant curriculum improvements but also contributed to increased enrollment in training programs.

Another critical area of investment was infrastructure development and digital training platforms, where a portion of the budget was used to upgrade the e-Campus platform and digitalize training modules. This investment significantly improved accessibility to training by reducing reliance on costly international trainers and enabling a more cost-effective, blended learning approach.

Operational expenses were managed efficiently, covering staff salaries, administrative support, and promotional campaigns. The transition to regional training hubs and blended learning models further optimized costs while expanding training reach. Through these measures, the project demonstrated prudent financial management. The adoption of local trainers, remote learning models, and strategic industry collaborations further enhanced cost-effectiveness and ensured the sustainability of project outcomes.

The project brought in diverse expertise, including international partners such as Siemens and Unipower (Sweden), which significantly elevated the quality of the training programs, particularly in solar PV, grid integration, and energy efficiency. However, there were initial delays in curriculum development due to difficulties in finding experts with multi-sectoral expertise in RE, EE, and REI.

Material resources were adequate, with the project supporting the purchase of training equipment, digital tools, and the development of an e-Campus platform, which improved course delivery and accessibility. While the project outcomes were significant, there were opportunities for more efficient resource utilization. For instance, delivering training off-site rather than at KGRTC reduced costs associated with participant travel and accommodation. Over time, reliance on expensive international experts decreased as local capacity was built. By year three, internal and local experts delivered courses that were initially taught by external trainers, thereby lowering costs while maintaining quality. The adoption of distance learning through the e-Campus demonstrated a cost-effective way to scale training and reduce delivery expenses.

The project faced several bottlenecks and delays that affected its timely delivery. Initial delays in curriculum development, such as the need to finalize a baseline study and identify course content, led to the replacement of inadequate consultants by Wits University. Finding multi-disciplinary experts was also a challenge, particularly in the early stages. The COVID-19 pandemic disrupted physical training activities, necessitating a shift to online learning. This led to the development of the e-Campus platform, which became a significant project success. Despite offering scholarships, the project initially struggled to attract young female engineers due to the low number of women in technical roles. Adjustments to include young male graduates improved participation over time.

In general, project funds and activities were utilized efficiently, particularly as the project adapted to challenges and identified cost-saving measures. The transition to regional and online delivery models reduced costs and broadened outreach, allowing KGRTC to reach over 1,000 participants annually. The decision to subsidize solar training programs ensured affordability for participants, especially in Zimbabwe, where trainees benefited from reduced costs made possible by project funds. By investing in a gender-focused scholarship program, the project increased female participation to around 27%, a notable improvement in a traditionally male-dominated sector.

The ILO Country Office, DWT Pretoria, and HQs significantly supported the SESA Project, focusing on capacity building, project management, and addressing emerging challenges. The ILO provided strong strategic oversight, facilitating critical components like the establishment of the Project Steering Committee and Technical Working Groups. Regular technical and managerial guidance ensured that KGRTC focused on achieving outcomes.

The ILO, through ITCILO, played a significant role in enhancing KGRTC's institutional capacity, upgrading quality management systems, developing e-learning capabilities, and strengthening its positioning as a Centre of Excellence. Follow-up missions validated progress and provided real-time feedback.

The ILO backstopping team effectively addressed challenges such as delays in formalizing partnerships and logistical disruptions caused by COVID-19. Support from the ILO Country Office helped KGRTC develop a Partnership Strategy to streamline collaborations with private and public sector entities, ensuring sustainability beyond the project's lifespan.

Backstopping support also contributed to the documentation of impact stories, lessons learned, and best practices to inform future interventions. However, some areas for improvement remain, such as staff turnover, the lengthy process of formalizing partnerships with private sector actors, and limited practical training time among trainees.

4.6 Impact Orientation

Institutional Impacts

The SESA Project has played a crucial role in strengthening institutional governance, training capacity, and digital learning systems, particularly at KGRTC. One of the most significant achievements was the development of the Gender Equality and Diversity Inclusion Policy, which led to a 27% increase in female participation in training programs. Additionally, KGRTC successfully integrated digital learning systems, including the e-Campus platform, enabling a shift to blended learning models that reduced costs and expanded access to training programs across the region.

Another key institutional advancement was the expansion of Public-Private Development Partnerships (PPDPs), which enabled collaboration with leading industry players such as Siemens Energy, Engie PowerCorner, SACREEE, and Smartnet Energy. These partnerships strengthened curriculum relevance, ensuring that training programs aligned with market needs and technological advancements. The project also enhanced monitoring and evaluation (M&E) systems, incorporating digital trainee follow-up processes, which improved accountability and enabled better tracking of graduates' career trajectories. As a result, KGRTC now has the institutional capacity to design, deliver, and sustain high-quality renewable energy training aligned with regional energy strategies.

Policy Impacts

Beyond institutional improvements, the project has played a pivotal role in shaping policy discussions and frameworks that support the renewable energy transition in Southern Africa. One major contribution was the advancement of solar waste management policy discussions in Zimbabwe, leading to the formulation of national standards that align with broader environmental sustainability goals.

The project also contributed to strengthening national renewable energy strategies by equipping professionals with technical expertise to support government initiatives. In Zambia, engineers trained under the project are now leading off-grid solar electrification projects for the REA, directly contributing to the country's efforts to expand energy access in rural areas. Similarly, in Malawi, project trainees have applied their skills to the EGENCO Solar Project, a flagship initiative aligned with the country's renewable energy targets.

At a regional level, the project fostered governance collaboration with SADC, COMESA, and SACREEE, ensuring that training programs were aligned with regional clean energy goals and integration frameworks. The project also supported SADC's transition toward a low-carbon energy mix, contributing to the achievement of Sustainable Development Goal (SDG) 7 (Affordable and Clean Energy) and SDG 13 (Climate Action). These policy contributions have created an enabling environment for continued investment and expansion of renewable energy initiatives in Southern Africa.

Capacity-Building Impacts

The project's core focus was enhancing technical expertise in renewable energy, energy efficiency, and regional energy integration. Through structured training programs, the project surpassed its initial training targets, delivering skills to over 1,151 professionals, exceeding the goal of 1,052 participants. One of the most notable achievements was the significant increase in female participation, rising to 27%, thanks to targeted scholarships and mentorship programs.

The project also introduced industry-responsive training programs, developed in collaboration with regional utilities, academic institutions, and private sector partners to ensure that professionals received relevant, market-driven skills. A strong emphasis was placed on technical skill-building in grid integration, equipping national utilities with the expertise to adopt best practices for integrating renewable energy into existing power grids.

Trainees have applied their newly acquired skills to tangible projects across the region. In Malawi, graduates contributed to the EGENCO Solar Project, supporting national clean energy expansion. In Zimbabwe, trained professionals played key roles in solar electrification projects, helping the country move toward its renewable energy goals. Similarly, in Namibia, project-trained experts have conducted industrial energy audits, helping companies optimize energy use and reduce carbon footprints.

By bridging the skills gap in technical and operational aspects of RE and EE, the project has successfully prepared the next generation of energy professionals, ensuring that the sector is equipped with qualified personnel to support the region's energy transition.

Socio-Economic and Gender Impacts

The project made significant contributions toward gender inclusion, employment creation, and socio-economic empowerment. One of the most notable achievements was the increase in female participation, which reached 27%, a considerable improvement in a traditionally male-dominated sector. The project also introduced targeted scholarships and mentorship programs to encourage more women to pursue technical roles in energy.

Beyond gender inclusion, the project contributed to job creation and career advancement, with many trained professionals securing roles in renewable energy companies, utilities, and private sector enterprises. The project also supported small and medium-sized enterprises (SMEs) by providing technical skills training and business model development for entrepreneurs in the solar energy sector.

Through a combination of technical training, gender-inclusive policies, and employment-focused initiatives, the project has helped create a more diverse, skilled, and empowered workforce in the renewable energy industry.

4.7 Sustainability of Project Outcomes

Institutional Sustainability

A key element ensuring the sustainability of project outcomes is the institutional strengthening of KGRTC, which has successfully built internal capacity to continue delivering RE, EE, and REI training without reliance on external technical expertise. The project facilitated the localization of training programs, allowing KGRTC to run courses at significantly lower costs while maintaining quality. This is further reinforced by the establishment of the e-Campus platform, which enables blended learning, reduces the cost burden associated with in-person training, and expands regional access to courses. A major sustainability achievement of the project is therefore the institutionalization of digital learning solutions through the e-Campus platform. This cost-effective, scalable, and accessible digital learning system ensures that training can continue beyond physical classroom limitations, making it easier to reach more participants across different regions. The digital tools and online modules developed under the project reduce dependence on international trainers and physical infrastructure, thereby lowering long-term operational costs. KGRTC has recognized the value of these digital resources, and they are expected to play a central role in the institution's long-term training strategy. Through digital learning, the project has built a sustainable model for continuous skills development, ensuring that RE and EE training remains available and relevant for years to come.

In addition to infrastructure and digital learning, KGRTC has implemented Training of Trainers (ToT) programs, ensuring that local trainers are equipped to sustain and expand training programs over time. The institution now has detailed curricula, local experts, and enhanced physical and digital infrastructure, allowing it to independently continue course delivery beyond the project's lifespan.

Furthermore, the project's exit strategy was designed with sustainability in mind, focusing on institutional integration, local capacity-building, and financial sustainability measures. By embedding these strategies into KGRTC's long-term operations, the project ensures that its outcomes will persist without requiring continuous external intervention.

Policy Sustainability

The project has played a critical role in influencing policies that support the long-term development of sustainable energy initiatives across Southern Africa. A notable achievement is the integration of gender-inclusive policies into KGRTC's institutional framework. The development and implementation of KGRTC's Gender Equality and Diversity Inclusion Policy have established structural support for increasing female participation in technical training fields. This policy ensures that gender inclusivity remains a priority for future programs, contributing to a more diverse and equitable workforce in the energy sector.

At a regional level, the project contributed to policy influence, particularly in Zimbabwe, where it catalyzed discussions on solar waste management policies. These discussions have helped shape regulatory frameworks that align with broader sustainability and environmental conservation goals.

The project also reinforced regional policy alignment by fostering collaborations with SADC, SACREEE, COMESA, and other regional energy bodies. These partnerships have mainstreamed renewable energy skills development into broader policy discussions, ensuring that the training programs and capacity-building efforts remain embedded in national and regional energy policies.

Capacity Sustainability

One of the most significant outcomes of the project is the strengthening of local technical expertise through well-structured capacity-building programs. The project trained over 1,151 professionals, exceeding its initial target, with local trainers now equipped to sustain the training efforts.

A key sustainability mechanism was the implementation of the Training of Trainers (ToT) model, which has ensured knowledge transfer to a new generation of trainers within KGRTC and partner institutions. These trained professionals are now capable of replicating and scaling up training programs, reinforcing the long-term impact of skills development in the RE and EE sectors.

In addition, the project fostered technical partnerships with industry stakeholders, allowing for continued professional development and knowledge exchange. Collaboration with entities such as Siemens Energy, SACREEE, and Wits University ensures that the latest advancements in RE and EE technology continue to be incorporated into training programs.

Financial Sustainability

While KGRTC has demonstrated strong commitment to sustaining the project's outcomes, continued external support and partnerships will further enhance its ability to scale up training programs. Strategic partnerships established during the project are expected to persist beyond the project's official closure, allowing KGRTC and other institutions to access resources, knowledge, and technical expertise.

The Partnership Strategy developed under the project strengthens collaboration with both public and private entities, opening doors for potential funding opportunities. This approach supports long-term financial sustainability, particularly for underfunded components such as gender scholarships, where progress has been made but financial gaps remain.

By embedding these financial and partnership strategies, the project ensures that it remains scalable, adaptable, and aligned with evolving energy sector demands.

4.8 Tripartism, Gender Equality, and Non-Discrimination & Environmental Sustainability

The project successfully integrated tripartism and social dialogue into its activities by involving various stakeholders, including governments, private sector actors, and social partners. This inclusivity was evident in consultations, validation workshops, and curriculum design processes. Industry experts and associations like the Solar Industry Association and Renewable Energy Association were actively engaged during the curriculum validation phase to ensure that courses met the needs of the labour market and aligned with national energy strategies. The project encouraged dialogue with government agencies, such as the Ministry of Energy in Zimbabwe, which supported policies on grid integration and solar electrification initiatives.

The project addressed gender equality and non-discrimination in capacity-building and outcomes. A gender audit was conducted at KGRTC, resulting in the development of a Gender Policy to guide inclusivity efforts within the institution. The audit revealed gaps such as limited representation of women in leadership roles, societal perceptions discouraging women from technical careers, and inadequate support systems for female trainees remain. The audit recommended policy enhancements, continued mentorship, and institutional support mechanisms to sustain and further improve gender equity in the renewable energy and energy efficiency sectors. Scholarships were provided to increase female participation in traditionally male-dominated sectors, but challenges remained due to the low number of women in engineering fields. To overcome this, the project expanded eligibility to include young male graduates while continuing to prioritize gender representation. By the mid-term evaluation, female participation reached 30%, reflecting steady progress toward gender inclusion. However, the proportion declined to 27% by the end of the project, signaling a need for sustained interventions. This decline suggests that while the Gender Strategy was effective in its early stages, additional efforts are required to reinforce long-term impact, including institutionalizing gender policies, enhancing mentorship initiatives, and addressing structural barriers that continue to limit women's participation in technical energy fields. Evidence of improved understanding or practices related to gender equality and non-discrimination among stakeholders is seen in the integration of gender-focused policies and practices at KGRTC. Following the gender audit and exposure visits to similar institutions, KGRTC adopted a Gender Policy, embedding inclusivity into its training framework. Stakeholders also demonstrated increased awareness of gender challenges in the energy sector.

The project also considered the varying skill levels of participants, designing courses to accommodate learners with basic knowledge of physics and electricity, while ensuring progression to advanced topics. This inclusivity allowed both practicing professionals and newcomers to benefit from the training. Vulnerable groups, particularly women and youth, were represented in the project's activities. Even so, it fell short in addressing the participation of persons with disabilities (PWDs). Unlike gender-focused interventions such as scholarships and mentorship programs, there were no specific measures incorporated in the project design to ensure the engagement of PWDs. Training programs, such as solar PV system design and

installation, were structured to accommodate participants with basic educational backgrounds, making them accessible to young people and new entrants into the sector. The project successfully engaged youth through inclusive entry criteria and outreach strategies, such as using social media for recruitment.

Cultural and local contexts were carefully integrated into project design and delivery. Training content was tailored to regional needs, with a strong emphasis on renewable energy solutions for rural and off-grid areas, where energy access remains a challenge. Practical learning was prioritized, ensuring that participants could address real-world energy challenges in their communities.

The project significantly promoted sustainable practices in renewable energy and energy efficiency through targeted capacity-building and practical training. Trainees applied their knowledge to implement off-grid solar projects and energy-efficient systems, improving energy access while reducing reliance on traditional energy sources. Environmental sustainability considerations were integral to project planning and implementation, particularly in the design and delivery of training programs. Specifically, the project incorporated environmental sustainability by integrating solar waste management training in Zimbabwe and promoting energy efficiency practices in industrial operations across Namibia, reducing carbon footprints and enhancing resource conservation.

5.0 Conclusions

Relevance and Strategic Fit

The project demonstrated strong relevance and alignment with regional and national priorities, particularly in addressing the critical skills gaps in RE, EE, and REI. By focusing on capacity development, the project supported SDGs 7, 8, and 4 while aligning with SADC regional frameworks and national energy policies. The project effectively complemented other ILO programs and regional initiatives by avoiding duplication and leveraging synergies. Coordination with stakeholders such as SACREEE, GIZ, and SADC energy institutions ensured consistency with ongoing energy and skills development frameworks.

Effectiveness of Project Implementation and Management Arrangements

The project achieved significant progress in developing new courses, building regional partnerships, and delivering high-quality training. However, COVID-19 disruptions and delays in course design constrained the timely implementation of activities. The use of hybrid learning approaches and local trainers helped mitigate some of these challenges, resulting in steady improvements in delivery.

Efficiency of Resource Use and Project Set-Up

Resources were utilized efficiently, with evidence of cost-saving measures, such as optimizing online platforms for marketing and training delivery. A shift toward using local experts over time further enhanced efficiency. However, delays in consultancy procurement and course rollout impacted the initial timeline.

Impact Orientation

The project contributed to significantly improving technical capacity among RE/EE professionals and tangible contributions to RE projects. Furthermore, graduates demonstrated improved employability and practical application of skills, promoting clean energy solutions and supporting national goals.

Sustainability

Measures to sustain outcomes included integrating training into KGRTC's mainstream portfolio, fostering regional partnerships, and developing gender-inclusive policies. However, concerns remain regarding the long-term financial sustainability without continued stakeholder or donor support.

Tripartism, Gender Equality, and Non-Discrimination & Environmental Sustainability

The project successfully integrated tripartism, with active engagement of governments, private sectors, and social partners in its activities. It made notable progress in gender equality and inclusion, with tangible results such as increased female participation and institutional adoption of gender policies. Local contexts were carefully considered, and cultural inclusivity was prioritized. The project also contributed significantly to promoting sustainable practices in RE and EE, with a strong focus on environmental sustainability, energy access and efficiency, and skills development to support long-term clean energy transitions across the SADC region.

6.0 Lessons Learnt

7. **Time Allocation for Inception Phase:** The inception phase requires adequate time for skills demand and supply surveys or other foundational studies. These surveys are crucial for effectively identifying industry-responsive skills development needs and aligning project objectives with real market demands.
8. **Dynamic Energy Sector Demands:** The energy transition is evolving rapidly, necessitating agility in marketing strategies, periodic market research, and regular curriculum reviews to keep training programs relevant.
9. **Value of Strategic Partnerships:** Partnerships with public, private, and academic institutions proved instrumental in expanding networks, resources, and expertise. These collaborations facilitated cost-sharing arrangements, reduced training fees, increased access to tools and facilities, and enabled knowledge exchange with global experts.
10. **Sustained Commitment from Partners:** Long-term commitment from partners can be challenging due to changes in priorities, leadership, or organizational focus. Therefore, it is crucial to regularly review and reconfirm Memoranda of Understanding (MoUs) and Letters of Commitment (LoC).
11. **Strong feasibility studies for PPDPs:** at the inception phases are a key success factor for minimizing future deviations from financial, economic, and social projected/anticipated contributions for project outcomes.
12. **Public Awareness and Outreach:** Communication campaigns played a vital role in increasing public awareness about Renewable Energy (RE) and Energy Efficiency (EE) initiatives. These campaigns helped disseminate project outcomes and amplified stakeholder engagement.

7.0 Good Practices

6. Integration of Blended Learning through the eCampus Platform

The SESA Project has successfully launched an eCampus platform together with the KGRTC website, through which blended learning programs are delivered, combining theoretical knowledge online with practical hands-on training sessions onsite. This approach increased accessibility across the SADC region, but also allowed for flexible learning modalities, accommodating participants with different schedules and commitments. This has led to increased access to training programs, reduced costs to participants, and enhancement in learning outcomes.

7. Strong PPDP

The project opted to utilize Public-Private Development Partnerships, allowing for collaboration with government ministries, private sector institutions, academic institutions, and regional institutions. Partnerships like these allowed the centre to access cost-sharing opportunities along with access to technical expertise, and resource mobilization that enables it to provide the necessary training. As a result, there is improved quality of training, increased participation due to shared costs, and alignment with industry needs and technological changes.

8. Digitization of the Trainee Follow-up and Monitoring Systems

The project introduced a digitized trainee follow-up system to track graduate performance, monitor the application of skills, and assess the effectiveness of the training programs. This involved tracer studies and follow-ups at the workplace, providing good feedback for improving the content and delivery of courses. This has led to improved accountability and better insight into the outcome of the training, consequently informing decisions on future programs.

9. Gender Mainstreaming Policy and Audit

The Gender Audit was conducted which resulted in the development and implementation of a Gender Equality and Diversity Inclusion Policy at KGRTC. Mainstreaming of gender equality principles was done in the realm of training design, curriculum development, and institutional policies. This was further emphasized by specific interventions to ensure increased female participation through scholarships and sensitization campaigns. As a result, there is increased gender inclusiveness, more women in the training programs at 27%, and commitment to institutional gender equity.

10. Industry Responsive Training Programs Developed through Stakeholder Engagement

The curriculum development was informed by comprehensive market studies, industry surveys, and stakeholder consultations to ensure that courses were industry-responsive and addressed regional energy priorities. The courses responded to critical skills gaps leading to improved employability among the trainees, aligning training outcomes to industrial needs, and practical skills application in energy projects within the SADC region.

8.0 Recommendations

Relevance and Strategic Fit

1. **Recommendation 1. Ensure Training Programs Remain Industry-Relevant:** The RE and EE sectors are rapidly evolving, driven by technological advancements, market demands, and policy shifts. Without continuous updates to training curricula, there is a risk that KGRTC's courses may become outdated or misaligned with industry needs. To ensure continued alignment with regional and national priorities, KGRTC should conduct regular skills demand surveys to keep training programs updated with evolving industry needs in RE and EE. This will ensure courses remain relevant and market-driven. The responsibility lies with KGRTC management in collaboration with industry associations and government stakeholders.

Responsible	Priority	Time Implication	Resource implication
KGRTC	Medium	Immediate	Medium

2. **Recommendation 2. Strengthen Government Engagement for Policy Alignment:** Effective skills development in the energy sector requires strong alignment with national policies and strategic frameworks. In Zambia, for instance, the government has prioritized energy diversification, aiming to reduce dependence on hydropower and increase the adoption of solar, wind, and biomass energy solutions. However, a lack of coordination between training institutions and policymakers can create gaps in workforce development, limiting the implementation of national energy strategies. KGRTC should deepen engagement with government ministries to align project activities more closely with national energy policies and frameworks, such as Zambia's energy diversification goals. KGRTC should establish a structured government engagement framework for policy integration, including through creating a Government-Energy Skills Advisory Committee, having annual policy alignment meetings, a Memorandum of Understanding with key ministries, and leveraging existing government initiatives to ensure continued policy integration and sustained impact of training programs.

Responsible	Priority	Time Implication	Resource implication
ILO and KGRTC	Medium	Immediate	Low

Effectiveness of Project Implementation and Management Arrangements

3. **Recommendation 3. Enhance Real-Time Project Monitoring and Implementation Efficiency:** Throughout the project's implementation, delays in execution, milestone tracking, and coordination challenges were observed due to the absence of a centralized project monitoring system. Without a real-time tracking mechanism, project teams often relied on periodic reporting, which sometimes led to delayed responses to emerging challenges. To improve project implementation efficiency, the project management teams should establish a dedicated project tracking dashboard to monitor progress in real time. This tool would help identify delays, track key milestones, and flag potential bottlenecks, allowing for timely corrective actions. By integrating this dashboard with reporting mechanisms and performance metrics, project managers can enhance transparency, accountability, and responsiveness in project execution.

Responsible	Priority	Time Implication	Resource implication
ILO and KGRTC	Medium	Immediate	Low

4. **Recommendation 4. Introduce Modular Training for Flexible and Blended Learning:** Traditional in-person-only training models often limit accessibility for working professionals and those from remote areas, making it difficult to balance professional, academic, and personal commitments. Furthermore, feedback from trainees indicated that short-duration training sessions sometimes resulted in

information overload, reducing retention and mastery of technical skills. By restructuring courses into modular formats, KGRTC can leverage its e-Campus platform to provide theoretical coursework online, allowing trainees to study at their own pace before engaging in face-to-face practical sessions. KGRTC should therefore restructure training courses into modular formats with extended durations, allowing participants to complete theoretical components online through the e-Campus platform before attending face-to-face practical sessions.

Responsible	Priority	Time Implication	Resource implication
KGRTC and Training Partners	Medium	Immediate	Low

5. **Recommendation 5. Expand Practical Training Through Industry Partnerships:** One of the key challenges identified in past training evaluations was the need for more hands-on, field-based training experiences. While KGRTC provides high-quality theoretical instruction, many trainees struggled with real-world application of their skills upon entering the workforce. Employers also emphasized that graduates required additional practical exposure before they could independently handle renewable energy installations and grid integration tasks. By partnering with local energy companies and renewable energy projects, KGRTC can offer structured, on-site training and live project demonstrations, bridging the gap between theoretical knowledge and industry application. KGRTC should increase the proportion of hands-on practical sessions within each course by partnering with local energy companies and renewable energy projects to offer field-based training and on-site demonstrations.

Responsible	Priority	Time Implication	Resource implication
KGRTC and Training Partners	Medium	Immediate	Low

Efficiency of Resource Use and Project Set-Up

6. **Recommendation 6. Expand the e-Campus Platform for Cost-Effective Hybrid and Distance Learning:** The traditional in-person training model at KGRTC, while effective, incurs significant logistical costs, including expenses for venue arrangements, trainer fees, travel, accommodation, and printed materials. These costs can be a barrier to scaling training programs and reaching a wider audience, particularly professionals in remote or underserved regions. To optimize resource use, KGRTC should expand its e-Campus platform to deliver more hybrid and distance-learning programs. This approach would reduce logistical costs while maintaining the quality of training.

Responsible	Priority	Time Implication	Resource implication
KGRTC and Training Partners	Medium	Immediate	Low

Impact Orientation

7. **Recommendation 7. Strengthen Post-Training Tracer Studies for Long-Term Impact Assessment:** The project's follow-up and outcome monitoring system has been recognized as functional and effective, with tracer studies already in place to track trainee outcomes. However, to further reinforce and institutionalize this system, KGRTC should introduce structured, regular post-training impact assessments to systematically measure how trainees are applying their skills in RE and EE projects. To strengthen the impact, KGRTC should conduct more regular post-training tracer studies to track how trainees are applying their skills in RE/EE projects. KGRTC should establish a standardized Tracer Study Framework for post-training assessments to evaluate trainees' career progression, job creation, and contributions to the RE/EE sector. Digital tools should be introduced for data collection, and employer and industry feedback mechanisms should be expanded. An online alumni network and knowledge hub should be established for long-term impact tracking. Tracer study findings should be incorporated into

curriculum updates and strategic decisions to align training programs with industry demands and national energy goals.

Responsible	Priority	Time Implication	Resource implication
KGRTC and Training Partners	Medium	Immediate	Low

Sustainability

- 8. Recommendation 8. Develop a Resource Mobilization Strategy for Long-Term Financial Stability:** While KGRTC has successfully integrated project-developed training programs into its core offerings, the long-term sustainability of these programs depends on continued funding for scholarships, capacity-building initiatives, and accessible training delivery. Reliance on donor funding alone is not a viable long-term strategy. A structured resource mobilization plan would allow KGRTC to diversify its funding sources by engaging regional governments, private sector actors, and international donors. To ensure long-term sustainability, KGRTC should therefore develop a resource mobilization strategy to secure funding from regional governments, private sector actors, and donors. This strategy should focus on scholarships, capacity-building programs, and affordable training delivery.

Responsible	Priority	Time Implication	Resource implication
ILO and KGRTC	Medium	Immediate	Low

- 9. Recommendation 9. Enhance Regional Outreach Through Institutional Partnerships:** KGRTC has successfully established itself as a leading training institution in RE and EE; however, its reach and impact remain largely concentrated in Zambia. To ensure long-term sustainability and scale up the benefits of the project, it is crucial to expand partnerships with regional institutions and mainstream project-developed training programs into technical universities, energy utilities, and industry associations across the SADC region. KGRTC should therefore enhance regional outreach by expanding partnerships with technical universities, energy utilities, and industry associations in the SADC region to mainstream project-developed courses into local training systems.

Responsible	Priority	Time Implication	Resource implication
KGRTC and Training Partners	Medium	Immediate	Low

Tripartism, Gender Equality, Non-Discrimination, and Environmental Sustainability

- 10. Recommendation 10. Establish Mentorship Programs to Promote Gender Equality in RE/EE Fields:** Despite progress in increasing female participation in KGRTC's training programs, women remain underrepresented in technical energy careers due to social barriers, lack of role models, and limited professional networks. A structured mentorship program led by successful female trainees and professionals would help encourage more women to enter and advance in RE/EE fields. By connecting aspiring female professionals with industry mentors, this initiative would reduce gender disparities, increase retention, and create leadership pathways for women in the energy sector. For enhanced gender equality, KGRTC should develop mentorship programs led by successful female trainees. This will encourage more women to join RE/EE fields and reduce gender disparities.

Responsible	Priority	Time Implication	Resource implication
ILO, KGRTC and Training Partners	Medium	Immediate	Low

- 11. Recommendation 11. Integrate Solar Waste Management and Environmental Guidelines into Training Programs:** The transition to renewable energy presents new environmental challenges, such as the

management of solar panel waste and the disposal of used batteries and electronic components. Currently, environmental sustainability topics are not fully embedded across all RE/EE training programs at KGRTC. Integrating solar waste management and environmental guidelines as core training modules will ensure that all trainees develop a strong understanding of sustainability principles, equipping them with the skills needed to design and implement environmentally responsible energy solutions. To enhance environmental sustainability, KGRTC should therefore integrate solar waste management and environmental guidelines as core modules across all training programs. This would build awareness and capacity among trainees to design sustainable RE solutions.

Responsible	Priority	Time Implication	Resource implication
KGRTC and Training Partners	Medium	Immediate	Low

9.0 Annexes

Annex 1. Terms of Reference

Call for Expression of Interest

ILO/EVAL is looking for a consultant to conduct the Final Independent External Evaluation of the Skills for Energy in Southern Africa Project.

Type of contract: External Collaboration Contract. The final evaluation should take about 30 working days.

Application deadline: October 15, 2024.

For further details about the consultancy, please see the ToRs below.

Candidates intending to submit an expression of interest must supply the following information:

1. A copy of the candidate's curriculum vitae including:
 - Description of the candidate's skills, qualifications, and experience, demonstrating how they best meet the required qualifications for this assignment.
 - A list of previous evaluations conducted, preferably related to the context and theme of this call, clearly indicating the role played by the consultant.
 - At least two recent references, including email and phone number.
2. A statement from the candidate attesting their availability to conduct this evaluation in Zambia.
3. A statement attesting that the candidate has not been involved in the design or implementation of the program in question or does not have a privileged personal relationship with ILO officials working in Zambia.
4. A statement specifying that the evaluation will comply with ILO and UN standards.
5. A financial offer indicating the daily fee rate (**the financial offer must be expressed in USD**).
6. Copies of two evaluation reports in which the candidate was a team leader or team member in the last five years.

The Call is open to consultants based in Zambia or in other countries. The deadline to submit expressions of interest for undertaking the evaluation is **October 15th, 2024**. Preference will be given to national qualified and women applicants.

If you are interested in this expression of interest, please send an e-mail with the subject header "SESA-Final Evaluation" to the evaluation manager,

Abderrahim El Moulat (elmoulat@ilo.org) and the Project Officer, Simon Longa (longa@ilo.org).

Terms of Reference Final Independent External Evaluation of the Skills for Energy in Southern Africa Project

Title of project to be evaluated	Skills For Energy in Sothern Africa
TC Code	RAF/20/04/SWE
Administrative Unit responsible for administrating the project	ILO Country Office-Lusaka
Technical Unit(s) responsible for backstopping the project	DWT Pretoria and SKILLS Branch
Project Duration	48 Months (January 2021 – December 2024)
Project Geographical coverage	Zambia and Southern Africa

Funder	Government of Sweden
Budget	US\$ 3,830,480
ILO P&B 2023-2024	Outcome 5.0: Skills and lifelong learning to facilitate access to and transitions in the labour market
Type of evaluation	Final Independent External Evaluation
Evaluation timing	October - December 2024
Evaluation Manager	Abderrahim El Moulart, Regional M&E Officer

I. Introduction

Over 800 million people worldwide are still without access to electricity, out of which 600 million are in Sub-Saharan Africa. This lack of access to reliable energy supply hampers social development and economic activity.

Access to clean, affordable, and reliable energy is one of the main drivers for socioeconomic development, which contributes to better living conditions and improved access to training opportunities, employment opportunities and enterprise development.

SADC aims at a low-carbon development path – energy use will need to increase without increasing greenhouse gas emissions (SADC Climate Change strategy and action plan, 2015). This requires a higher proportion of renewable energy in the energy mix, and increased energy efficiency. The goal set by SADC is that by 2022, the power generation mix in the SADC-region will be: coal 36%, hydropower 26%, gas contributing 19%, wind 10%, solar 7%, while biomass and diesel will only occupy 1%, respectively (SESA Project document, 2020)

For efficient integration of renewable energy into the grid, new technologies and new skills are needed. Also, a large share of the new and intermittent power sources is expected to be operated by Independent Power Producers (IPPs) which, aside from technical aspects (e.g. installation and maintenance, software development and application, energy planning and technical development skills, grid integration skills, etc.), will also require skilled people in e.g. financial modelling, business planning and development for Renewable Energy investments.

Energy Efficiency (EE) is key measure for SADC as it results in economic benefits, energy security, environmental protection, and climate change mitigation. Enforcement of minimum efficiency standards for appliances, equipment and buildings can result in energy savings, which can offer a unique opportunity to reconcile economic competitiveness with sustainable development and provide the added benefits of reducing the cost of energy and increasing energy productivity.

Energy efficiency reduces energy expenditure and increases the affordability of energy in poorer households by bringing down the per-unit cost of electricity, hence also, reducing pollution by lowering the need for generation and associated emissions. EE will be increasingly important, particularly for industry (e.g. the extractive industries and agro-processing), utilities and the construction sector. A range of skills are required to perform energy audits and to implement effective energy efficiency strategies and practices that will be specific by sectoral and technology processes.

II. SESA Project Background

The International Labour Organization (ILO), with funding provided by the Government of Sweden, is supporting the Kafue Gorge Regional Centre (KGRTC) to implement the Skills for Energy in Southern Africa (SESA) Project, a three-and-a-half-year intervention. The overarching development objective is to “Increase uptake of Renewable Energy, Energy Efficiency and Regional Energy Integration interventions in Southern Africa, leading to a more sustainable and low-carbon energy mix” through

skills development and the establishment of Public-Private Development Partnerships in Zambia and in the SADC region.

The background and context of this development intervention is that reliable access to energy is vital for economic development, business, and employment. One of the factors that impede universal access to secure, clean and sustainable energy in the SADC region – and that contribute to widespread chronic poverty and lack of decent work in rural areas - is the lack of skills in renewable energy, energy efficiency and regional power pooling technologies, which reduces the ability of power producers to generate, transmit and distribute sufficient sustainable energy.

The SESA intervention, a Public-Private Development Partnership (PPDP) is facilitating transfer of technical skills from international and local energy companies to power technicians and managers in Southern Africa through the SADC's Kafue Gorge Regional Training Centre (KGRTC) in Zambia.

The focus is on contributing to SDG 7 by responding to the power industry's needs for skills development in the areas of renewable energy, energy efficiency and regional energy integration, but also to SDG 4 on skills and training, and SDG 8 on sustainable economic growth, productive employment and decent work. The expected impact is an increased uptake of renewable energy, energy efficiency and regional energy integration interventions in Southern Africa, leading to a more sustainable and low carbon energy mix.

The Project is expected to **facilitate partnerships** with the private sector, **strengthen KGRTC's capacity** to become the Centre of Excellence for energy training in the region and will **result** in a significantly higher number of power technicians, engineers and managers that are skilled in and able to apply up-to-date technologies in renewable energy, energy efficiency and regional energy integration.

This PPDP project addresses only one of the many factors (shortage of current skills) that contribute to the insufficient supply of sustainable energy in the region. By contributing, through Kafue Gorge Regional Training Centre, to more technicians, engineers and managers in Southern Africa's power industry being up to date with the rapidly evolving field of RE/EE/REI technologies, the SESA project complements to a range of what other development agencies and investors are engaged with. The project enables KGRTC to grasp the opportunities provided by the demand, the investments and the enabling policy environment for sustainable power generation and distribution, by strengthening its institutional capacity for quality training of new target groups, its marketing and communications and its collaborative partnerships with the private sector.

The project has reported up to June 2024 the following key results:

Outcome 1

- Project baseline study concluded: *“Assessment of skills supply and demand in the RE EE REI sub sectors and the Market research aimed at strengthening KGRTC's position as a centre of excellence in the renewable energy space concluded and results used to influence training programme development for KGRTC”.*
- 545, engineers, technicians, and energy managers (190 female participants) trained on the energy sector in the region.
- Fifteen (17) active partnerships with organizations such as Smartnet Energy, Engie PowerCorner, Kafue Gorge Regional Training Centre, UNDP, COMESA, ITCILO, Namibia Chamber of Commerce and Industry (NCCI), Namibia Energy Institute (NEI) and Renewables Management Services (RMS). Additionally, eight (8) Letters of Commitment have been signed with Unipower, Res4Africa, Siemens Energy, Solvina, UNZA, Engie Impact, ZARENA, and SACREEE.
- In 2023, the project conducted an extensive tracer study to evaluate the impact of KGRTC training programs under the SESA project. 75 have since initiated or supported projects in Renewable Energy (RE), Energy Efficiency (EE), and Regional Energy Integration (REI).

Outcome 2

1. Development and Launch of New KGRTC Website: (<https://www.kgrtc.org.zm/>).

The eCampus (<https://www.kgrtc.org.zm/node/64>) was developed and launched at the same time to enhance e-learning.

2. Digitization of Trainee Follow-up System

III. Project management arrangement

The ILO Country office for Zambia, Malawi and Mozambique in Lusaka (CO-Lusaka) manages the project, while KGRTC in Chikankata is the implementing partner. From the ILO side, the project team establishment is comprised of the Chief Technical Advisor, the National Project Coordinator, the National Project Officer and the Finance and Administrative Assistant. The project team receives technical backstopping from the field Skills and Life-Long Learning Specialist based in DWT/Country Office -Pretoria and operational support from the Senior Programme Officer based in Country Office - Lusaka.

The Project Implementation team at KGRTC is a Project Coordinator and Digital Marketing Officer, and the Administrative Officer. The Head of Training and Research anchors their internal coordination.

The project is guided by a regional Project Steering Committee (PSC) comprising members from SADC member states' government ministries and agencies, private sector, donor, project management team, professional bodies, universities, and social partners. The PSC membership and that of the TWGs are drawn from the Democratic Republic of Congo (DRC), Botswana, Zimbabwe, South Africa, Tanzania, Mauritius, Namibia and Zambia, and Sida and the Embassy of Sweden in Zambia being observers and the ILO being the secretariat. Furthermore, a Technical Working Group (TWG) was established to ensure direct involvement of technical officers from the tripartite constituency in the delivery of activities.

The PSC has the primary mandate to provide policy and strategic guidance and fiduciary and technical oversight to the implementation of the project.

The purpose of the TWG is to assist the Project Management Team (PMT) with technical aspects of the project. The TWG serves as a hub of technical expertise on renewable energy, energy efficiency and regional energy integration technology skills transfer targeting, technologists, engineers and managers along the value chain.

IV. Project alignment with the SDG, P&B, CPO & DWCP

Being a skills development intervention in the energy area, the PPDP on "Skills for Energy in Southern Africa" contributes directly or indirectly to the following three Sustainable Development Goals: SDG 7 on access to affordable, reliable, sustainable and modern energy for all, SDG 4 on education and training, and SDG 8 on decent work and sustained, inclusive, economic growth. The PPDP contributes to the achievement ILO P&B Outcome 5: Skills and lifelong learning to facilitate access to and transitions in the labour market. Specifically Outputs 5.2 and 5.3 (https://www.ilo.org/wcmsp5/groups/public/---ed_mas/-program/documents/genericdocument/wcms_831162.pdf) .

The project equally contributes to one of the priorities for shaping an African Decent Work Agenda adopted by the Abidjan Declaration on 9 December 2019, which is "Strengthening the capacities of all people to benefit from the opportunities of a changing world of work through (i) investing in human capital by strengthening education, skilling, reskilling, upskilling and lifelong learning to leverage technology and the new types of jobs it helps create, and (ii) tackling gender inequality and discrimination."

V. Evaluation background

The ILO considers evaluation as an integral part of the implementation of development cooperation activities. The evaluation in the ILO is for the purpose of accountability, learning and planning and building knowledge. It should be conducted in the context of criteria and approaches for international development assistance as established by the OECD/DAC Evaluation Quality Standard and the UNEG Code of Conduct for Evaluation in the UN System.

The project will follow the ILO Policy on Evaluation for Development Cooperation projects and the Development Cooperation Internal Governance Manual. A project of this nature, which takes over 30 months to implement and with a budget under 5 million, needs to undergo a mid-term internally managed evaluation in year 2, and a final independent evaluation in year 3 to be conducted by an independent Evaluation Consultant. A mid-term internally managed evaluation of the project was completed in March 20231.

VI. Evaluation purpose, scope and clients Purpose and objectives of the evaluation:

The overall purpose of the final independent evaluation is to promote accountability, assess progress, bottlenecks and strengthen organizational learning among the Office, ILO constituents, and key stakeholders. The specific objectives of the evaluation are to:

1. Establish the relevance of the project design and implementation strategies in relation to the SADC region national and regional policies on energy, final beneficiaries' needs, ILO and UN development frameworks and on skills development around energy related strategies;
2. Determine the extent to which the project has achieved its stated objectives and expected results integrating gender and non-discrimination, social dialogue and tripartism, international labour standards and a fair transition related to environment
3. Identify the supporting factors and constraints that have led to the results, including implementation modalities chosen (how and why);
4. Identify unexpected/unintended positive and negative results of the project;
5. Examine the implementation efficiency of the project;
6. Analyse the extent to which the project outcomes will be sustainable and will have potential, either positive or negative, impacts on project targeted institutions and final beneficiaries;
7. Provide recommendations to the project key stakeholders towards achievement of project outcomes;
8. Identify lessons learned and good practices to inform key stakeholders for future similar interventions.

Evaluation Scope:

The final evaluation will focus on the 48 months of the project, namely from January 2021 to the end of December 2024, assessing all the results and key outputs that have been produced in this period.

1 Link to the mid-term evaluation report:
<https://wwwex.ilo.org/ordspub/prdutf8p/eitrack/files/file/210405>

The evaluation will integrate gender equality as a cross-cutting concern throughout its deliverables and process. It should be addressed in line with EVAL guidance note n° 4 and Guidance Note n° 7 to ensure stakeholder participation.

Clients:

The primary users of the evaluation are the project implementing partner (KGRTC) as well as the ILO tripartite constituents, ILO CO-Lusaka, the ILO DWT Pretoria, the ILO Regional Office for Africa (ROAF), and the relevant technical units in ILO Headquarter and the donor, the Swedish government.

VII. Evaluation criteria and questions

The evaluation will cover the following evaluation criteria, in line with the DAC criteria and UNEG standards on evaluation in the UN system:

- Relevance and strategic fit;
- Coherence;
- Effectiveness of project implementation and management arrangements;
- Efficiency of resource use and project set-up;
- Impact orientation;
- Sustainability.

The evaluation should consider key evaluations dimensions including Human rights (HR), the SDGs (relevant SDGs and indicators and the principle of “no one left behind”) and ILO cross-cutting themes such as Gender and non-discrimination (i.e. persons living with disabilities), Social dialogue and tripartism, just transition to environmental sustainability and International Labour Standards.

The HR perspective in the evaluation means: (i) linking the process to people, (ii) setting tools and approaches appropriate for collecting data; (iii) setting-up processes of broader involvement of stakeholders, and (iv) enhancing access of the evaluation results and process to all stakeholders.

A gender equality perspective implies: (i) applying gender analysis by involving both men and women in consultation and evaluation’s analysis, (ii) inclusion of data disaggregated by sex and gender in the analysis and justification of project documents; (iii) the formulation of gender-sensitive strategies and objectives and gender-specific indicators; (iv) inclusion of qualitative methods and use of mix of methodologies, (v) forming a gender-balanced team, and (vi) assessing outcomes to improve lives of women and men. Thus, analysis of gender-related concerns will be based on the ILO EVAL Guidelines on Considering Gender in Monitoring and Evaluation of Projects (September 2007. See Annex). The evaluation will be conducted following UN evaluation standards and norms and the Glossary of key terms in evaluation and results-based management developed by the OECD’s Development Assistance Committee (DAC).

In line with the results-based approach applied by the ILO, the evaluation will focus on identifying and analysing results through addressing key questions related to the evaluation criteria and the achievement of the outcomes/ objectives of the project using the mainly, but not only, indicators in the logical framework of the project. The list of questions presented below should be reviewed and adjusted during the preparation of the inception report. Any adjustment should be approved as part of the approval of the inception report by the Evaluation Manager.

Key Evaluation Questions

The evaluator shall examine the following key issues:

1. Relevance and strategic fit

- Has the project taken into account the needs and priorities of tripartite stakeholders and beneficiaries identified in the project document and during the project implementation?
- In hindsight, was the project design realistic and purposeful towards achieving its objectives?

- How well does the project support national and regional commitment to relevant SDG targets and indicators?

2. Validity of design

- Did the project address the major issues relating to skills development in the RE and EE sub-sectors in the country/ies targeted?
- Was the project Theory of Change comprehensive, integrating external factors and is based on systemic analysis?
- Was the project design and implementation realistic (in terms of expected outputs, outcome, and impact) given the time and resources available, including performance and its M&E system, knowledge sharing and communication strategy?
- To what extent did the project integrate crosscutting themes in the design and implementation (tripartism and social dialogue, gender and non-discrimination, International Labour Standards and fair/just transition on environment)?

3. Coherence

- How well does the project complement and fit with other ongoing ILO programmes in the country?
- To what extent was the project aligned to national, regional and international frameworks related to its main thematic area?
- To what extent did the project complement and synergize with other interventions by national or international development actors?

4. Effectiveness

- To what extent did the project achieve its objectives, or is likely to by the end of its implementation?
- Have the quantity and quality of the outputs produced been satisfactory?
- What outputs have not been produced and why?
- Have unexpected results (outputs and outcomes) took place?
- To what extent does the project have specific targets for intended beneficiaries (women, youths) in an equal way?
- How effective were the backstopping support provided by the Country Office, the DWT Pretoria and HQs?

5. Efficiency of resource use

- How efficiently have resources (human resources, time, expertise, funds etc.) been allocated and used to achieve the project objectives? In general, did the results achieved justify the costs? Could the same results be attained with fewer resources?
- Were funds and activities delivered in a timely manner? If not, what were the bottlenecks encountered?
- Did the project budget make adequate provisions for addressing gender and inclusion related specific objectives/activities?
- Has an effective risk analysis and monitoring and evaluation system been established and implemented?

6. Impact orientation

- Has the project worked towards achieving the proposed impacts? Have the project strategy and project management steering towards impact?
- Is the project working at policy and practice levels (change in practices, perceptions, technical capacity, governance or enabling environment) significant contributions to gender and inclusion related concerns within the realm of promoting decent work?
- How did the project positively and negatively affect local capacities, institutions, or systems?

7. Sustainability of projects outcomes and impacts beyond the project's lifespan

- Will the project outcomes be expected to be achieved in a sustainable manner that enable continuing beyond the project's lifespan?
- To what extent will the implementing partner be likely to continue the project results without external funding or support?
- Has an effective and realistic exit strategy been developed and implemented?
- What needs to be done to enhance the sustainability of the project and strengthen the uptake of the project outcomes by stakeholders?

VIII. Evaluation Methodology

The evaluation will be carried out following a participatory and mixed-methods approach, including consultation with ILO relevant officers in ILO in Zambia, ILO DWT/CO-Pretoria, ILO Country Offices in SADC, key national and regional stakeholders, and the donor; and field visits to the project sites that will cover consultations with the government, employers and workers organizations, implementing partners, beneficiaries and other key stakeholders that would include SADC regional bodies who are in the energy sector.

The evaluation will be implemented through a consultative and transparent approach and make use of, amongst others, the following methods and tools:

- Desk review of project documents and literature.
- Semi-structured interviews with key informants and stakeholders, including some of the beneficiaries of the various training programmes under the project.
- Focus-groups, if relevant, with a sample of the project's key-beneficiaries.
- Field observation visits of project results

The evaluation should ensure a triangulation of primary and secondary data sources to strengthen its findings validity and reliability and to formulate evidence-based conclusions and recommendations.

The evaluation will be conducted according to the following process:

▪ Inception Phase:

An inception meeting will be organized by the Evaluation Manager gathering the evaluation team leader and key project management staff to discuss the evaluation scope and its timelines. A desk review conducted by the selected consultant will analyse project and other project documentation including the Project logframe, M&E plan, annual workplans, annual reports project deliverables and other relevant documents. The desk review will suggest a number of initial findings that in turn may point to additional or fine-tuned evaluation questions. The desk review will include briefing interviews with the project team and the donor. This will be reflected in the inception report that will translate the TORs into an operational work plan. The Inception report will be reviewed and approved by the evaluation manager prior to the field work phase.

▪ Data Collection Phase

The consultant will apply the evaluation methodology detailed in the Inception Report by conducting individual or group interviews with a full list or a sample of stakeholders to be provided by the project

management, interviews or focus-groups with a sample of final beneficiaries, site visits to a sample of the project locations and any other data collection methodology agreed on in the inception report. Data collection should be participatory, transparent and in line with ILO and UNEG deontological and ethical principles and standards for evaluation. ILO project team will logistically facilitate the data collection process. A debriefing to the ILO Director of Lusaka CO and the project team will take place at the end of field data collection.

▪ Data Analysis Phase

A Stakeholders workshop will be organized at the end of the data collection to discuss, interpret and validate the evaluation early findings and complete data gaps with key stakeholders, ILO staff and representatives of the donor. The evaluation team will be responsible for organizing the workshop. The identification of the participants of the workshop and logistics will be the responsibility of the project team in consultation with the evaluation team leader.

The evaluation data collected during the fieldwork and discussed during the stakeholders' workshop will be further analysed to address the evaluation objectives and questions.

▪ Reporting Phase

After the field work, the evaluator will develop a draft evaluation report (see Deliverables below for the report outline its content) in line with EVAL Checklists 5 and 6. The total length of the report should be a maximum of 30 pages for the main report, excluding annexes; background and details on specific projects evaluated can be provided in the annexes. The report should be sent as one complete document. Photos, if appropriate to be included, should be inserted using lower resolution to keep overall file size low.

The Evaluation Manager will circulate the draft report to key stakeholders, the project staff and the donor for their review and forward the consolidated comments to the evaluation team. The project will translate the report into national languages, if necessary, for submission to stakeholders in the countries.

The evaluator will finalize and submit the final report to the evaluation manager in line with EVAL Checklists 5 and 6. The report should address all comments and/or provide explanations why comments were not taken into account. The quality of the report will be assessed against ILO/EVAL's Checklist 6.

The evaluation manager will review the final version and submit to the RSME0 and EVAL for final review. The evaluation report will be distributed to the key stakeholders to ensure enhanced learning and uploaded in the ILO-EVAL e-Discovery website for public use to provide easy access to all development partners, to reach target audiences and to maximise the benefits of the evaluation.

IX. Evaluation Deliverables

1. **Inception report** (with detailed work plan and data collection instruments) following ILO EVAL Checklist 3, the report should include:

- Refined evaluation scope and questions;
- Description of the evaluation methodology and instruments to be used in sampling, data collection and analysis and the data collection plan mentioned above;
- All data collection instruments, including guides for semi-structured interviews and focus group discussions and proposed approach for approaching each stakeholders' group (e.g. virtually, face-to-face, engagement modalities, etc.);
- Detailed fieldwork plan for Zambia and at least three other countries within SADC should be developed in consultation with the Evaluation Manager and project team;
- Agenda for the stakeholders' workshop;
- The proposed report outline.

2. **Draft and a Final Evaluation Reports** in English (maximum 30 pages plus annexes) as per the following proposed structure:

- Cover page with key project and evaluation data
- Executive Summary
- Acronyms
- Description of the project
- Purpose, scope and clients of the evaluation
- Methodology and limitations
- Clearly identified findings for each criterion or per objective
- Conclusions
- Recommendations (i.e. for the different key stakeholders)
- Lessons learned and good practices
- Annexes:
 - TORs
 - List of people interviewed
 - Schedule of the field work
 - Documents reviewed
 - Data Table on Project targets as per Project logical framework targets
 - ILO EVAL templates for each Lesson learned and Good Practice identified

3. **Executive Summary**, as per ILO template.

All reports, including drafts, will be written in English and follow the guidelines provided in the ILO Style Manual and other evaluation guidelines or checklists. Ownership of data from the evaluation rests jointly with the ILO and the evaluator. The copyright of the evaluation report will rest exclusively with the ILO. Use of the data for publication and other presentations can only be made with the written agreement of the ILO. Key stakeholders can make appropriate use of the evaluation report in line with the original purpose and with appropriate acknowledgement.

X. Evaluation Management & Timelines

Evaluation Management

The evaluator/s will report to the evaluation manager, with whom he/she should discuss any technical and methodological matters. The evaluation manager will supervise the evaluator. The final approval of the report will be by the Regional Monitoring and Evaluation Officer and ILO/EVAL.

The evaluation will be carried out with full logistical and administrative support of the ILO Office in Lusaka.

All draft and final outputs, including supporting documents, analytical reports and raw data should be provided to the evaluation manager in electronic version compatible with Word for Windows.

The first draft of the report will be circulated to stakeholders for a two weeks review. Comments from stakeholders will be presented to the evaluator by the evaluation manager for its integration into the final reports as appropriate or to document why a comment has not been included.

Evaluation Tentative Schedule

The evaluator will start to work tentatively in October 2024 and the assignment be completed over **30 working days**.

Output	Description	Number of workdays
Desk review Including initial interviews with the project team and key stakeholders within the ILO, and the donor	Read and review the core set of project documents. Request any additional documentation required	2 days
Virtual meetings with the project team, core staff, DWT Pretoria and the donor	2 days	

Inception report: An operational work plan which indicates the phases of the evaluation, finalises the set of evaluation questions, the approach, the timing, key deliverables and milestones, data collection tools, aligned with this TOR	2 days	
Data collection	<ul style="list-style-type: none"> • Consultations with Project staff/management in Lusaka and Namalundu • Interviews with regional and national stakeholders in Lusaka (MoE, MoTS, ZFE, ZCTU etc) and virtually with the PSC. • interviews with beneficiaries of trainings (including private companies & employees) (in Zambia and at least 3 other countries in the region) • Presentation of preliminary findings and debriefing to stakeholders. (To be a blended event – virtual and physical participants) 	15 days
Draft report	A draft report (no more than 30 pages, excluding annexes) addressing the evaluation questions.	7 days
Draft report circulated to stakeholders for comments by Evaluation Manager	Evaluation manager consolidates and forwards the feedback of the stakeholders to the evaluator. All feedback from stakeholders for the evaluator will be communicated by the Evaluation Manager in a consolidated manner.	0 days
Finalize evaluation report and submit to evaluation manager	The evaluator submits to the manager the final text of the evaluation report, the Evaluation Summary and other documents concerned with the ILO template for the review and final submission to EVAL.	2 days
Total	30 Days	

XI. Budget

A budget is allocated for this evaluation and is under the full control of the evaluation manager for engagement of the evaluator, international and domestic travels and organization of workshops and consultative meetings with stakeholders. The evaluation budget includes:

- Fees for the evaluator/s for 30 workdays;
- Cost of international travel from evaluator' home to Lusaka. In accordance with the relevant ILO rules, the ILO will provide pre-paid return air tickets in economy class and by the most direct route.
- Daily Subsistence Allowance (DSA) during the mission. The ILO will pay DSA at the standard UN rate for the dates of the trips to cover lodging, meals and incidentals while on travel, as per ILO policy;
- Local transportation in the project areas;
- Cost of meetings, workshops as per the evaluation TORs.

A detailed budget and contract with the evaluator will be prepared by the Project Team and approved by the evaluation manager.

XII. Required Experience and Qualifications

The independent External Evaluator will be selected on the basis of proven evaluation experience and should meet the following qualifications:

1. A master's degree in social sciences, Development studies, Economics, electrical engineering, Renewable energy or related graduate qualifications.
2. A minimum of 7 years of professional experience specifically in evaluating international multi-country development initiatives, including UN projects, in particular with policy level work and institutional building, theory of change approach and gender equality analysis.
3. Experience in qualitative and quantitative data collection and analysis.
4. A good understanding of ILO mandate, tripartite structure and evaluation standards.
5. Experience in facilitating workshops for evaluation findings.
6. Have no previous or current involvement – or offers of prospective employment – with the ILO project or programme being evaluated.
7. Have no personal links to the people involved in managing the project/programme (not a family member, friend or close former colleague).
8. Not have worked for the project in any manner
9. Knowledge and previous experience on the project thematic area and the country/region will be an asset.
10. Fluent in spoken and written English.

ANNEX - ILO Evaluation Guidelines and Standard Templates

1. Code of conduct form (To be signed by the evaluator)
http://www.ilo.org/eval/Evaluationguidance/WCMS_206205/lang--en/index.htm
2. Guidance note No. 7 Stakeholders participation in the ILO evaluation
http://www.ilo.org/eval/Evaluationguidance/WCMS_165982/lang--en/index.htm
3. Guidance note No. 4 Integrating gender equality in M&E of projects
http://www.ilo.org/eval/Evaluationguidance/WCMS_165986/lang--en/index.htm
4. Checklist No. 3 Writing the inception report
http://www.ilo.org/eval/Evaluationguidance/WCMS_165972/lang--en/index.htm
5. Checklist No. 5 Preparing the evaluation report
http://www.ilo.org/eval/Evaluationguidance/WCMS_165967/lang--en/index.htm
6. Checklist No. 6 Rating the quality of evaluation report
http://www.ilo.org/eval/Evaluationguidance/WCMS_165968/lang--en/index.htm
7. Template for lessons learned and Emerging Good Practices
http://www.ilo.org/eval/Evaluationguidance/WCMS_206158/lang--en/index.htm

http://www.ilo.org/eval/Evaluationguidance/WCMS_206159/lang--en/index.htm

8. Template for evaluation title page

http://www.ilo.org/eval/Evaluationguidance/WCMS_166357/lang--en/index.htm

9. Template for evaluation summary:

<http://www.ilo.org/legacy/english/edmas/eval/template-summary-en.doc>



Template 4.1: Lessons Learned

Project title: Skills for Energy in Southern Africa

Project DC/SYMBOL:RAF/20/04/SWE

Name of Evaluator: Dr. Edwin Ochieng Okul

Date: December, 2024.

The following lessons learned have been identified during the course of the evaluation. Further text explaining the lesson are included in the full evaluation report.

LESSON LEARNED ELEMENT	TEXT
Brief description of lessons learned (link to specific action or task)	Time Allocation for Inception Phase: Adequate time is essential during the inception phase for conducting comprehensive skills demand and supply surveys to effectively identify industry-responsive training needs and align project objectives with actual market requirements
Context and any related preconditions	The initial phase of the SESA project experienced delays due to insufficient time allocation for baseline surveys, impacting the timely rollout of subsequent activities.
Targeted users /Beneficiaries	Project Management Teams (ILO, KGRTC) and stakeholders involved in project planning and design.
Challenges /negative lessons - Causal factors	Time constraints and administrative bottlenecks prevented detailed baseline studies, leading to delays in aligning training programs with market needs.
Success / Positive Issues - Causal factors	When time was allocated effectively for surveys, the results informed project KPIs and guided the development of an industry-aligned training portfolio.
ILO Administrative Issues (staff, resources, design, implementation)	Improved project design frameworks and timely approvals from project oversight bodies are needed to allow adequate time for baseline studies during the inception phase.

LESSON LEARNED ELEMENT	TEXT
Brief description of lessons learned (link to specific action or task)	Rapid Evolution of Energy Sector Demands: The energy sector's rapid evolution requires agile training curricula, regular market research, and ongoing curriculum updates to ensure alignment with emerging industry trends.
Context and any related preconditions	The renewable energy sector is highly dynamic, with technologies, policies, and market needs evolving frequently. Static training models risk becoming outdated quickly.
Targeted users /Beneficiaries	KGRTC Training Department, Industry Partners, and Technical Trainers.
Challenges /negative lessons - Causal factors	Limited flexibility in course design and infrequent market research slowed the adaptation of training content to match emerging energy sector demands.
Success / Positive Issues - Causal factors	Periodic updates and engagement with industry stakeholders ensured training relevance and increased demand for courses developed under the project.
ILO Administrative Issues (staff, resources, design, implementation)	Enhanced coordination between project management teams and training facilitators is required to institutionalize periodic curriculum reviews

LESSON LEARNED ELEMENT	TEXT
Brief description of lessons learned (link to specific action or task)	Value of Strategic PPDPs: Public-Private Development Partnerships (PPDPs) play a significant role in resource-sharing, reducing training costs, and enhancing access to industry expertise and state-of-the-art equipment
Context and any related preconditions	The project relied on partnerships with government agencies, private sector players, and academic institutions to deliver quality training and expand outreach across the SADC region.
Targeted users /Beneficiaries	KGRTC, Private Sector Partners, Government Ministries, and Trainees.
Challenges /negative lessons - Causal factors	Some partners faced commitment challenges, including shifting priorities and leadership changes, which affected long-term collaboration.
Success / Positive Issues - Causal factors	Partnerships facilitated cost-sharing mechanisms and provided access to specialized knowledge and tools, enhancing the quality and reach of training programs
ILO Administrative Issues (staff, resources, design, implementation)	Strengthening MoU monitoring frameworks and introducing periodic reviews of partnership agreements can improve sustainability

LESSON LEARNED ELEMENT	TEXT
Brief description of lessons learned (link to specific action or task)	Sustained Commitment from Partners: Long-term success depends on sustained partner commitment, requiring periodic reviews and reaffirmations of Memoranda of Understanding (MoUs) and Letters of Commitment (LoCs).
Context and any related preconditions	Some partnerships under the SESA had disruptions due to changing leadership and shifting organizational priorities
Targeted users /Beneficiaries	KGRTC Management, ILO Administrative Teams, and Partner Organizations.
Challenges /negative lessons - Causal factors	Partner disengagement and lack of follow-up mechanisms undermined some long-term collaboration objectives
Success / Positive Issues - Causal factors	Periodic reviews of MoUs and LoCs, along with clear communication, improved accountability and alignment between partners
ILO Administrative Issues (staff, resources, design, implementation)	Establishing a structured partnership management framework will help monitor and reinforce long-term partnerships

LESSON LEARNED ELEMENT	TEXT
Brief description of lessons learned (link to specific action or task)	Public Awareness and Outreach: Campaigns and stakeholder engagement efforts significantly enhanced public awareness of Renewable Energy (RE) and Energy Efficiency (EE) initiatives
Context and any related preconditions	There was limited public knowledge and awareness about RE solutions, which constrained the adoption of sustainable energy practices before the project
Targeted users /Beneficiaries	General Public, KGRTC, Government Ministries, and Regional Energy Institutions.
Challenges /negative lessons - Causal factors	Limited initial outreach strategies hindered the broad dissemination of project outcomes and training opportunities
Success / Positive Issues - Causal factors	Tailored communication strategies, including social media campaigns, webinars, and community engagement sessions, increased project visibility and participation.
ILO Administrative Issues (staff, resources, design, implementation)	Ensuring a dedicated communication team and adequate budget allocation for outreach campaigns can further enhance impact

Annex 3. Good Practice



Project title: Skills for Energy in Southern Africa

Project DC/SYMBOL:RAF/20/04/SWE

Name of Evaluator: Dr. Edwin Ochieng Okul

Date: December, 2024.

The following emerging good practices have been identified during the evaluation.
Further text can be found in the full evaluation report.

GOOD PRACTICE ELEMENT	TEXT
Brief summary of the good practice (link to project goal or specific deliverable, background, purpose, etc.)	Integration of Blended Learning through the eCampus Platform: The SESA Project successfully launched an eCampus platform alongside the KGRTC website, allowing blended learning programs that combined theoretical knowledge online with practical, hands-on training sessions onsite. This approach addressed logistical and financial constraints while significantly improving accessibility and flexibility for participants across the SADC region
Relevant conditions and Context: limitations or advice in terms of applicability and replicability	The success of this model relied on an integration blended learning curriculum, a working eCampus platform, stable internet connectivity, digital literacy among participants, and adequate funding for online platforms.
Establish a clear cause-effect relationship	The blended learning approach allowed participants to complete theoretical training online, reducing time and cost burdens for both trainees and the institution. The onsite sessions then focused on practical hands-on training, maximizing resource utilization and improving learning outcomes.
Indicate measurable impact and targeted beneficiaries	<ul style="list-style-type: none">• Over 1,151 trainees successfully completed courses under this blended approach.• Female participation reached 27%, indicating moderate improvement in inclusivity - regional accessibility for trainees across Zambia, Zimbabwe, Namibia, and Botswana.
Potential for replication and by whom	The blended learning model can be replicated by other regional training centers and academic institutions offering specialized skills training.
Upward links to higher ILO Goals (DWCPs, Country Programme Outcomes or ILO's Strategic Programme Framework)	<ul style="list-style-type: none">• ILO Programme and Budget (P&B) Outcome 5 on promoting decent work opportunities.• Contribution to SDG 4 (Quality Education) and SDG 7 (Affordable and Clean Energy).
Other documents or relevant comments	The approach aligns with ILO's strategic priorities on enhancing access to skills development and decent work opportunities in emerging sectors

GOOD PRACTICE ELEMENT	TEXT
Brief summary of the good practice (link to project goal or specific deliverable, background, purpose, etc.)	Strong Public-Private Development Partnerships (PPDPs): The SESA Project established 40 partnerships with private sector actors, academic institutions, and government agencies to promote resource-sharing, curriculum development, and knowledge transfer. These partnerships facilitated cost-sharing mechanisms, reduced training fees, and improved industry alignment of training programs.
Relevant conditions and Context: limitations or advice in terms of applicability and replicability	Successful partnerships depended on clear Memoranda of Understanding (MoUs), long-term commitment from partners, and alignment of objectives across stakeholders
Establish a clear cause-effect relationship	Collaboration with industry experts and institutions ensured up-to-date curricula, practical training modules, and improved learning outcomes
Indicate measurable impact and targeted beneficiaries	<ul style="list-style-type: none"> • USD 725,437 was mobilized from private sector partners (50% of the target). • 17 formal MoUs and agreements were signed
Potential for replication and by whom	Other vocational training centers, government ministries, and private sector entities can replicate this partnership model to address skills gaps in emerging sectors
Upward links to higher ILO Goals (DWCPs, Country Programme Outcomes or ILO's Strategic Programme Framework)	<ul style="list-style-type: none"> • Alignment with the ILO Decent Work Agenda. • Contribution to SDG 8 (Decent Work and Economic Growth)
Other documents or relevant comments	Effective governance structures and regular reviews of MoUs and LoCs are critical for sustaining partnerships

GOOD PRACTICE ELEMENT	TEXT
Brief summary of the good practice (link to project goal or specific deliverable, background, purpose, etc.)	Digitization of Trainee Follow-up Systems: The project introduced a digitized trainee follow-up system to track graduate performance, monitor skills application, and evaluate training effectiveness. This system included post-training tracer studies and onsite follow-ups, providing valuable data for course improvement
Relevant conditions and Context: limitations or advice in terms of applicability and replicability	Success relied on adequate digital infrastructure, data management capacity, and regular system updates
Establish a clear cause-effect relationship	The digital monitoring system enabled better tracking of graduate employment outcomes, improved feedback mechanisms, and ensured accountability in training delivery
Indicate measurable impact and targeted beneficiaries	<ul style="list-style-type: none"> • 158 trainees were tracked through tracer studies and onsite visits. • 71% reported initiating or supporting RE/EE initiatives post-training
Potential for replication and by whom	Training institutions and regional energy centers can adopt similar digital monitoring tools to improve graduate tracking and feedback
Upward links to higher ILO Goals (DWCPs, Country Programme Outcomes or ILO's Strategic Programme Framework)	<ul style="list-style-type: none"> • Contributes to ILO Strategic Objective on education and skills development. • Supports SDG 8 (Decent Work and Economic Growth)
Other documents or relevant comments	Future iterations should integrate automated reporting features and integrated dashboards for improved usability

GOOD PRACTICE ELEMENT	TEXT
Brief summary of the good practice (link to project goal or specific deliverable, background, purpose, etc.)	Gender Equality and Inclusion Policy: The project developed and implemented a Gender Equality and Diversity Inclusion Policy, informed by a participatory Gender Audit. This policy aimed to mainstream gender considerations into training programs and institutional frameworks.
Relevant conditions and Context: limitations or advice in terms of applicability and replicability	The success of gender mainstreaming depends on commitment from leadership, targeted scholarships for women, and gender sensitization workshops
Establish a clear cause-effect relationship	Focused gender initiatives contributed to increasing female participation in training programs and addressing systemic barriers to inclusion
Indicate measurable impact and targeted beneficiaries	<ul style="list-style-type: none"> • Female participation in training reached 27%. • Institutional gender policies were adopted for long-term integration
Potential for replication and by whom	Other training centers and organizations can develop gender policies and mentorship programs for promoting inclusivity
Upward links to higher ILO Goals (DWCPs, Country Programme Outcomes or ILO's Strategic Programme Framework)	<ul style="list-style-type: none"> • Supports ILO Gender Equality Strategy. • Contributes to SDG 5 (Gender Equality)
Other documents or relevant comments	Regular audits and measurable gender indicators are now sustaining progress

GOOD PRACTICE ELEMENT	TEXT
Brief summary of the good practice (link to project goal or specific deliverable, background, purpose, etc.)	Industry-Responsive Training Programs: Training programs were developed based on industry needs, market research, and stakeholder consultations.
Relevant conditions and Context: limitations or advice in terms of applicability and replicability	Success relied on market intelligence, regular demand surveys and stakeholder feedback
Establish a clear cause-effect relationship	Industry-responsive curricula improved employability and practical application of skills among trainees
Indicate measurable impact and targeted beneficiaries	<ul style="list-style-type: none"> • 28 training courses developed (112% of the target). • 1,151 participants trained
Potential for replication and by whom	Other training institutions and regional centers can adopt a demand-driven approach to curriculum design
Upward links to higher ILO Goals (DWCPs, Country Programme Outcomes or ILO's Strategic Programme Framework)	<ul style="list-style-type: none"> • Supports ILO Strategic Priority on skills for employability. • Contributes to SDG 7 (Affordable and Clean Energy)
Other documents or relevant comments	Regular skills demand surveys and feedback mechanisms are essential for main curriculum relevance

Annex 4. Evaluation Schedule

Activity	Description	Deliverable	Proposed Dates		
			No. of days	Start	End
Contract Start and End Dates	<ul style="list-style-type: none"> The contract period for the evaluation. 	-		20 Nov 2024	31 Dec 2024
Desk Review and Inception Report	<ul style="list-style-type: none"> Conduct a desk review of relevant project documentation. Engage with the ILO project team, core staff, DWT Pretoria and the donor for briefings. Refine the work plan, methodology, and draft questionnaire. Submit an inception report for approval. 	Inception Report	6	20 Nov 2024	27 Nov 2024
Data Collection	<ul style="list-style-type: none"> Schedule interviews and focus group discussions with key stakeholders. Utilize systematic tools to capture qualitative data. Debriefing / Stakeholders' Validation workshop to present preliminary findings and gather feedback. 	Data Collection Completion, clean data sets	15	2 Dec 2024	13 Dec 2024 17 Dec 2024
Draft Evaluation Report	<ul style="list-style-type: none"> Analyze collected data using quantitative and qualitative methods. Draft an evaluation report detailing findings, conclusions, and recommendations. 	Draft Evaluation Report	7	16 Dec 2024	24 Dec 2024
Final Evaluation Report	<ul style="list-style-type: none"> Incorporate feedback from stakeholders on the draft report. Revise and finalize the evaluation report for submission. 	Final Evaluation Report	2		31 Dec 2024
Evaluation Summary	<ul style="list-style-type: none"> Prepare a concise evaluation summary based on the report's executive summary, highlighting key findings and recommendations. 	Evaluation Summary			30 Dec 2024

Annex 5. Documents reviewed

1. Development Cooperation Project Document: Skills for Energy In Southern Africa (SESA)- a Public-Private Development Partnership for Skills in Renewable Energy, Energy Efficiency and Regional Energy Integration
2. Inception Report: Skills for Energy in Southern Africa (SESA). July 2021
3. Progress Report: 1st January – 31st December, 2021
4. Progress Report: 1st January – 31st December, 2022
5. Progress Report: 1st January – 31st December, 2023
6. Mid-term Evaluation Report of the project: “Skills for Energy in Southern Africa (SESA)”
7. ILO Evaluation Guidance and Templates
8. Tracer Study Report

Annex 6. List of Persons Interviewed

1. Eileen Van Der Est Private Sector Botswana
2. FGD Beneficiaries Namibia
3. Project Staff- Finance and Admin. Lusaka
4. Gift Chindebvu Malawi Trainee Beneficiary
5. KGRTC Staff
6. Namibia Beneficiary FGD
7. Namibia ERB François
8. Project Staff Musoli Kashinga
9. Rex Kalabgu Zambia EIZ
10. SACREE team
11. SADC Botswana team
12. Donor representative
13. SUSTENERGY Training Provider team Zimbabwe
14. Trainee Beneficiary Botswana – Pelontle
15. ZESA Institute staff Zimbabwe
16. Zimbabwe Trainee Beneficiaries FGD

Annex 7. Results Framework

OUTCOMES	OUTPUTS	Target	Status (Dec, 2024)	Comments
Outcome 1: More power technicians, engineers and managers in the SADC region have enhanced technical capacity to apply, manage and promote the latest Renewable Energy, Energy Efficiency and Regional Energy Integration technologies	1.1. RE/EE/REI skills demand survey among energy companies in the region completed	Rapid Skills Demand & Supply Surveys	100%	Results contributed to the baselining of project KPIs and the Insights informed KGRTC's training portfolio development.
	1.2. Desired training portfolio determined by KGRTC based on the identified market demand	Market survey	100%	Courses address gaps and align with industry requirements
	1.3. Partners identified and MoUs established as part of the Public-Private Development Partnership	40 Private and public sector institutions	34(85%)	
		20 Agreements and MoUs	17 (85%)	
		USD 1,465,259 in Mobilized investment	USD 725,437 (50%)	
	1.4. New RE/EE/REI training courses developed, marketed, and delivered.	25 Training courses in RE/EE/REI	28(112%)	
		1014 Women and men trained	1151 (113%)	Female participation at 27%
Outcome 2: KGRTC has built its brand and standing as the region's Centre of Excellence for competitive skills training in Renewable Energy, Energy Efficiency and Regional Energy Integration technologies	2.1. Increased customer base among main target group of training services in public utility companies and private sector in the areas of EE, RE and REI.	Strategy/Website	Operational	Over 27,000 Visit, against the base average of 800 visits
		KGRTC annual intake (Baseline: 715; Target: 50 % increase)	Av. 369 (103%)	Significant participation from public utilities and private sector entities
	2.2. Enhanced differentiation of KGRTCs service portfolio, e.g. by including distance learning	Differentiate the service offering by KGRTC, including distance/online learning (5 Blended+8 online/yr)	eCampus launched Integrated virtual classrooms	
	2.3. Upgraded quality control and management systems.	62 regular quality assurance checks 29 KGRTC training staff that are trained 450 trainees reached through the KGRTC Trainee follow-up monitoring system	Facilitated digitisation of trainee Reached 158 through tracer study and onsite follow-ups	
	2.4. Policies, initiatives, and programmes supporting cross-cutting strategy drivers developed and implemented at KGRTC.	1 KGRTC's Gender equality and Diversity Mainstreaming Policy developed	Gender policy developed Conducted a Gender Audit Developed a	

			Gender Equality and Diversity Inclusion policy	
	2.5. Collaboration and communication for RE/EE awareness, coordination within the skills sector and complementarities with other RE/EE initiatives.	2 Collaboration and communication strategies on RE, EE and REI developed 3 Good practices and lessons in RE EE and REI documented and shared		

Annex 8: The Evaluation Questions Matrix (EQM)

Questions/sub-questions	Measure(s) or Indicator (s)	Data Sources	Data Collection Method	Stakeholders/informants	Analysis and assessment
Relevance and Strategic Fit					
<ul style="list-style-type: none"> • Has the project taken into account the needs and priorities of tripartite stakeholders and beneficiaries identified in the project document and during the project implementation? • In hindsight, was the project design realistic and purposeful towards achieving its objectives? • How well does the project support national and regional commitment to relevant SDG targets and indicators? 	<ul style="list-style-type: none"> • Alignment of project objectives with current stakeholder needs in the financial sector. • Stakeholder satisfaction with project relevance. • Evidence of continued demand for project services and activities. • The extent to which the project aligns with the regional energy & skills development initiatives • Evidence of coordination with other programs to avoid duplication. • Stakeholder perceptions of the project's added value 	Project documents Interview responses from sector experts Industry reports	Desk review KIIs	<ul style="list-style-type: none"> • ILO project team • National government agencies, such as the Ministry of Energy or Finance. • Representatives from the private sector in renewable energy and energy efficiency. • Development partners or donors involved in project funding. 	Thematic analysis of qualitative data Comparative analysis of project objectives with current stakeholder needs. Trend analysis of demand for project activities.
Validity of design					
<ul style="list-style-type: none"> • Did the project address the major issues relating to skills development in the RE and EE sub-sectors in the country/ies targeted? • Was the project Theory of Change comprehensive, integrating external factors and is based on systemic analysis? • Was the project design and implementation realistic (in terms of expected outputs, outcome, and impact) given the time and resources available, including performance and its M&E system, knowledge sharing and communication strategy? • To what extent did the project integrate crosscutting themes in the design and implementation (tripartism and social dialogue, gender and non-discrimination, 	<ul style="list-style-type: none"> • Presence of cross-cutting themes in project objectives • Evidence of adjustments based on lessons from prior evidence • Achieved outputs and outcomes vs. planned targets within the project timeline. • Allocated resources effectively utilized for planned activities. • Existence and functionality of a monitoring and evaluation (M&E) system, including regular reporting and adjustments based on findings. • Availability and usage statistics of knowledge-sharing platforms (e.g., portals, publications). • Stakeholder satisfaction with the communication strategy 	Project design documents Project progress reports Stakeholder feedback	Desk review KIIs	<ul style="list-style-type: none"> • ILO project team • Experts in renewable energy, energy efficiency, and systemic change analysis. • Project Monitoring and Evaluation officer/staff. 	Thematic coding to assess integration of cross-cutting themes and prior lessons. Triangulation with primary sources

Questions/sub-questions	Measure(s) or Indicator (s)	Data Sources	Data Collection Method	Stakeholders/informants	Analysis and assessment
International Labour Standards and fair/just transition on the environment?	<ul style="list-style-type: none"> • Project activities explicitly addressing crosscutting themes (e.g., workshops on gender equality, and compliance with International Labour Standards). • Stakeholders from workers' organizations, employers, and government participating in project design and implementation (tripartism and social dialogue). • Female or underrepresented participants in skills development programs and governance mechanisms. • Incorporation of fair/just transition principles in RE and EE initiatives (e.g., green jobs created or sustained). 				
Coherence					
<ul style="list-style-type: none"> • How well does the project complement and fit with other ongoing ILO programmes in the country? • To what extent was the project aligned to national, regional and international frameworks related to its main thematic area? • To what extent did the project complement and synergize with other interventions by national or international development actors? 	<ul style="list-style-type: none"> • Alignment of project design with identified priorities and needs. • Alignment with ILO programmes in the country (DWCP) • Alignment with interventions by national or international development actors • Alignment to national, regional and international frameworks related to its main thematic area • Stakeholder perceptions of coherence and relevance. 	Theory of Change and strategy documents Risk analysis reports Project planning documents	Desk review KIIs FGDs	<ul style="list-style-type: none"> • ILO project team • ILO country office and regional team representatives. • Direct beneficiaries/trainees • National and international development actors implementing similar interventions. • Policy advisors in related national frameworks or strategies. 	Thematic assessment of the Theory of Change and risk analysis, highlighting gaps or inconsistencies. Cross-verification with stakeholder feedback using triangulation.
Effectiveness					
<ul style="list-style-type: none"> • To what extent did the project achieve its objectives, or is likely to by the end of its implementation? • Have the quantity and quality of the outputs produced been satisfactory? 	<ul style="list-style-type: none"> • Achievement of project objectives. • Evidence of intended and unintended changes. • Evidence of good practices and innovations. 	Project design documents Theory of change and risk analysis reports Stakeholder feedback	Desk review KIIs FGDs	<ul style="list-style-type: none"> • Beneficiaries, including trainees in skills development programs. 	Comparative analysis between KPIs and achieved outcomes.

Questions/sub-questions	Measure(s) or Indicator (s)	Data Sources	Data Collection Method	Stakeholders/informants	Analysis and assessment
<ul style="list-style-type: none"> • What outputs have not been produced and why? • Have unexpected results (outputs and outcomes) taken place? • To what extent does the project have specific targets for intended beneficiaries (women, youths) in an equal way? • How effective were the backstopping support provided by the Country Office, the DWT Pretoria and HQs? 	<ul style="list-style-type: none"> • Planned outputs not delivered within the project timeline. • Unmet expectations or undelivered outputs. • Unplanned outputs or outcomes generated by the project • Project activities with explicit targets for women and youth participation • Representation of women and youth among total beneficiaries (disaggregated by gender and age group). • Frequency of backstopping support (e.g., technical advice, monitoring visits) provided by each entity. • Rating of backstopping support by project implementers and stakeholders. • Project challenges addressed or mitigated through backstopping support. • Coordination and alignment between the Country Office, DWT Pretoria, and HQs in providing support. 			<ul style="list-style-type: none"> • ILO project management and implementation team members. • ILO support units (e.g., DWT Pretoria, HQs). 	<p>Triangulation with stakeholder feedback to validate unintended impacts.</p> <p>Tracers Study</p>
Efficiency of Resource Use					
<ul style="list-style-type: none"> • How efficiently have resources (human resources, time, expertise, funds etc.) been allocated and used to achieve the project objectives? In general, did the results achieved justify the costs? Could the same results be attained with fewer resources? • Were funds and activities delivered in a timely manner? If not, what were the bottlenecks encountered? 	<ul style="list-style-type: none"> • Extent to which the resources have been efficiently used during the project's implementation process • Budget adherence • Project activities and funds disbursed within the planned timelines. • Proportion of the total project budget allocated to gender and inclusion-specific objectives/ activities. 	<p>Financial reports</p> <p>Project timelines</p> <p>Stakeholder interviews</p>	<p>Desk review</p> <p>KIIs</p>	<ul style="list-style-type: none"> • ILO project team (Finance & Procurement staff) • External auditors or evaluators reviewing financial and activity efficiency. 	<p>Financial data analysis against project timelines and feedback on perceived efficiency.</p>

Questions/sub-questions	Measure(s) or Indicator (s)	Data Sources	Data Collection Method	Stakeholders/informants	Analysis and assessment
<ul style="list-style-type: none"> • Did the project budget make adequate provisions for addressing gender and inclusion-related specific objectives/activities? • Has an effective risk analysis and monitoring and evaluation system been established and implemented? 	<ul style="list-style-type: none"> • Presence and functionality of a risk management plan and M&E system with regular updates and adjustments based on findings 				
Impact Orientation					
<ul style="list-style-type: none"> • Has the project worked towards achieving the proposed impacts? Have the project strategy and project management steering towards impact? • Is the project working at policy and practice levels (change in practices, perceptions, technical capacity, governance or enabling environment) significant contributions to gender and inclusion-related concerns within the realm of promoting decent work? • How did the project positively and negatively affect local capacities, institutions, or systems? 	<ul style="list-style-type: none"> • Evidence of progress along the ToC • Positive changes in partner institution practices • Project outcomes achieved compared to initial impact targets. • Policies, practices, or governance frameworks influenced by the project to address gender and inclusion in promoting decent work. • Local institutions or systems strengthened or adversely affected, disaggregated by positive and negative impacts 	ToC outcomes Feedback from institution partners Annual reports	Desk review KIIs FGDs Tracer Study	<ul style="list-style-type: none"> • ILO project team • Partner institutions benefiting from the project's outcomes. • Beneficiaries • ILO support units • Policymakers involved in governance and enabling environment changes. 	Comparison of ToC expectations with actual changes observed in partner institutions and project beneficiaries Triangulation of feedback from different stakeholders
Sustainability of project outcomes and impacts beyond the project's lifespan					
<ul style="list-style-type: none"> • Will the project outcomes be expected to be achieved in a sustainable manner that enables continuing beyond the project's lifespan? • To what extent will the implementing partner be likely to continue the project results without external funding or support? • Has an effective and realistic exit strategy been developed and implemented? • What needs to be done to enhance the sustainability of the project and strengthen the uptake of the project outcomes by stakeholders? 	<ul style="list-style-type: none"> • Evidence of institutional commitment to project outcomes • Evidence of project outcomes integrated into local systems, policies, or practices to ensure continuity • Proportion of project activities or results supported by the implementing partner's independent resources or mechanisms. • Availability of key lessons learned on how improvements can be made on the sustainability of ILO's 	Interviews with partner institutions Project progress and previous final evaluation reports	KIIs	<ul style="list-style-type: none"> • ILO project team • Beneficiaries • ILO support units • Implementing partners assessing the feasibility of continuing project activities post-funding. • Local government or community organizations supporting project initiatives. 	Thematic analysis of ownership strategies. Triangulation with partner institution feedback on commitment to sustainability.

Questions/sub-questions	Measure(s) or Indicator (s)	Data Sources	Data Collection Method	Stakeholders/informants	Analysis and assessment
	engagement/work with impact investors <ul style="list-style-type: none"> Stakeholder-led initiatives or commitments adopted to sustain and scale up project outcomes. 				
Tripartism, Gender Equality, and Non-Discrimination and Environmental Sustainability					
To what extent has the project addressed gender and social inclusion in its impact and training/skills development activities? How has the project promoted sustainable practices in renewable energy and energy efficiency? To what extent were environmental sustainability considerations integrated into project planning and implementation?	<ul style="list-style-type: none"> Inclusion of gender equality and non-discrimination components in capacity-building materials and activities. Evidence of improved understanding and practices related to gender equality and non-discrimination among partners. Evidence of beneficiaries adopting renewable energy and energy efficiency technologies as a result of the project interventions. And the incorporation of sustainability guidelines in their design and execution. 	Training registers Stakeholder feedback Project reports	Desk review KIIs FGDs Stakeholder validation session	<ul style="list-style-type: none"> ILO project team Workers' and employers' organizations involved in the project. Gender specialists or advocates promoting social inclusion. Training participants and beneficiaries 	Thematic analysis of training content. Comparative analysis of pre- and post-training enrollments by gender and inclusion. Review of partner practices on gender equality and non-discrimination.

Annex 9: Data Collection Tools

10.1 KII Guide- ILO Teams

1. Relevance and Strategic Fit

1. How well does the project address the needs and priorities of;
 - a) tripartite stakeholders and
 - b) beneficiaries?
2. Was the project realistic in setting out its objectives and activities?
 - a) Are the project's objectives and activities still relevant in the current socio-economic context?
3. To what extent do the project objectives align with national and regional strategies for skills development in renewable energy (RE) and energy efficiency (EE)?
4. How has the project contributed to the achievement of SDG targets and indicators?

2. Validity of Design

1. To what extent did the project address the major challenges in skills development within the RE and EE sectors?
2. Was the Theory of Change comprehensive, integrating external factors and systemic analysis?
3. How realistic were the project's expected outputs, outcomes, and impacts given the time and resources available?
4. Were cross-cutting themes such as gender equality, social dialogue, and fair transition adequately integrated into the project design?
5. How well did the M&E system support the project in tracking progress and adjusting strategies?

3. Coherence

1. How well does this project complement other ILO programs or initiatives in the country?
2. To what extent was the project aligned with national and international frameworks in its thematic area?
3. How effectively did the project coordinate with other development actors to avoid duplication?
4. Are there synergies between this project and ongoing initiatives by other international organizations?
5. How consistent were the project strategies with the broader ILO objectives in promoting decent work?

4. Effectiveness

1. To what extent have the project's objectives been achieved so far?
2. Were the outputs delivered on time and of the expected quality?
 - a) What outputs were not produced, and what were the barriers to their delivery?
3. Did the project achieve any unexpected results (positive or negative)?

4. How effective was the backstopping support from the ILO Country Office, DWT Pretoria, and HQs?

5. Efficiency of Resource Use

1. Were the project's financial and human resources used efficiently to achieve its objectives?
2. Were funds and activities delivered in a timely manner?
 - a) If not, what were the key bottlenecks?
3. Did the project budget allocate adequate resources for gender and inclusion-related objectives?
4. How well was the financial management system implemented to ensure resource efficiency?
5. Did the results achieved justify the costs?
 - a) Could similar results have been achieved with fewer resources?

6. Impact Orientation

1. To what extent has the project achieved its intended impact?
2. How has the project influenced practices, perceptions, technical capacities, or governance in the RE and EE sectors?
3. What were the significant contributions to gender and inclusion in promoting decent work?
4. What are the most notable changes in local institutions or systems attributed to the project?
5. How has the project contributed to policy-level changes?

7. Sustainability of Project Outcomes

1. Are the project outcomes likely to be sustained beyond its lifespan?
2. How committed are the implementing partners to continuing project activities without external funding?
3. Was an effective and realistic exit strategy developed and implemented?
4. What measures were taken to integrate project outcomes into local systems, policies, or practices?
5. What additional steps could enhance the sustainability and scaling-up of project outcomes?

8. Tripartism, Gender Equality, and Non-Discrimination & Environmental Sustainability

1. How effectively did the project integrate tripartism and social dialogue in its activities?
2. To what extent did the project address gender equality and non-discrimination in capacity-building and outcomes?
3. How well were vulnerable groups (e.g., women, youth) represented in the project's activities and governance mechanisms?
4. How were cultural and local contexts considered in designing and implementing the project?
5. What evidence exists of improved understanding or practices related to gender equality and non-discrimination among stakeholders?

6. How has the project contributed to promoting sustainable practices in renewable energy and energy efficiency?
7. To what extent were environmental sustainability considerations integrated into project planning and implementation?

10.2 KII Guide- Donor

1. Relevance and Strategic Fit

1. How well does the project align with the priorities of the Government of Sweden's development cooperation goals?
2. To what extent did the project address critical issues in skills development for renewable energy (RE) and energy efficiency (EE)?

2. Validity of Design

1. Was the project's Theory of Change comprehensive?
 - a) To what extent did the ToC reflect the systemic challenges and opportunities in the RE and EE sectors?
2. How realistic were the project's objectives and outcomes in relation to the time and resources allocated?

3. Efficiency of Resource Use

1. Were the financial resources provided by Sweden utilized effectively and in alignment with the agreed project objectives?
2. Were there any concerns regarding delays, bottlenecks, or inefficiencies in resource utilization?

4. Impact Orientation

1. What are the most significant changes or impacts observed as a result of the project?

6. Sustainability

1. What measures were taken to ensure the sustainability of project outcomes after Sweden's support concludes?
2. To what extent is Sweden confident that the project's results will be sustained by local partners and stakeholders?

7. Cross-Cutting Themes (Gender and Inclusion)

1. How effectively did the project address gender equality, non-discrimination, and inclusion in its activities?
2. To what extent do you think the project has advanced fair and equitable access to opportunities in the RE and EE sectors?

10.3 KII Guide- National Government Agencies

Guiding Questions

1. Relevance and Strategic Fit

1. How well does the project align with the priorities of your ministry and national strategies?
2. Do you think the project addresses the key challenges in the renewable energy (RE) and energy efficiency (EE) sectors?

2. Validity of Design

3. Were the project's objectives and activities realistic given the available time and resources?

3. Coherence

5. How well does the project complement existing government initiatives in the RE and EE sectors?
6. Were there any overlaps or gaps in coordination between this project and other programs led by the government or development partners?

4. Effectiveness

7. What do you consider the most significant achievements of the project so far?
8. Were there any expected results or outputs that were not achieved? If so, what were the barriers?

5. Efficiency of Resource Use

9. From your perspective, were project funds and activities utilized efficiently?
10. Were there any bottlenecks or delays that impacted the timely delivery of project activities?

6. Impact Orientation

11. Has the project contributed to significant changes in practices, governance, or policies in the RE and EE sectors?
12. How has the project supported the government's broader goals in promoting sustainable energy development?

7. Sustainability of Project Outcomes

13. Are the outcomes of this project likely to be sustained beyond its lifespan?
14. What measures have been taken to integrate the project outcomes into national systems or frameworks?

10.4 KII Guide- Training Service Providers

1. Relevance and Strategic Fit

1. How well did the project align with the needs of the RE and EE sectors in terms of skills development?
2. Were the training programs tailored to meet the specific demands of beneficiaries and industry stakeholders?

2. Effectiveness

1. What key outcomes have been achieved through the training programs implemented by your institution?
2. Were there any unexpected results (positive or negative) from the training activities?

3. Efficiency of Resource Use

1. Were the resources provided (financial, technical, and material) sufficient and timely to support the delivery of the training programs?
2. Could similar results have been achieved with fewer resources or alternative approaches?

4. Impact Orientation

1. How has the training influenced the technical capacities and practices of the beneficiaries?
2. What changes in the RE and EE sectors can be attributed to the training programs?

5. Sustainability

1. Are there plans or mechanisms in place to continue delivering similar training programs beyond the project's lifespan?
2. How can your institution enhance the sustainability of the training outcomes?

6. Cross-Cutting Themes (Gender and Inclusion)

1. To what extent were women and youth included in the training programs?
 - a) What strategies were used to ensure their participation?
2. How did the training address issues of gender equality and non-discrimination?

10.5 KII Guide- Private Sector Representatives

1. Relevance and Strategic Fit

1. How well did the project address the needs and priorities of the private sector in the RE and EE sectors?
2. Were the project objectives and activities aligned with your organization's strategic goals?

2. Effectiveness

1. What benefits has your organization experienced as a result of partnering with this project?
2. Were there any challenges or unexpected results (positive or negative) that impacted your collaboration?

3. Impact Orientation

1. What tangible impacts have the project activities had on your operations or the broader RE and EE sectors?
2. How has the partnership influenced innovation, capacity, or market expansion for your organization?

4. Sustainability

1. How likely is your organization to continue activities initiated through this project after its conclusion?
2. What additional measures could enhance the sustainability of the outcomes for your organization and the sector?

5. Cross-Cutting Themes (Gender and Inclusion)

1. What changes have you observed regarding the inclusion of women and youth in the RE and EE sectors through project initiatives?

10.6 KII Guide- Social Partners and Professional Bodies

1. Relevance and Strategic Fit

1. How well did the project align with the priorities of your organization?
 - a) How well did the project align with the priorities of your members or stakeholders?
2. To what extent did the project address critical skills development challenges in the RE and EE sectors relevant to your focus area?

2. Effectiveness

1. What role did your organization play in the project?
 - a) How successful were these efforts in achieving project objectives?
2. Were there any notable successes in your collaboration with the project?
 - a) Were there any notable challenges in your collaboration with the project?

3. Efficiency of Resource Use

1. How effective was the coordination between your organization and the project team?

4. Impact Orientation

1. How has the project influenced practices, governance, or technical capacities in the RE and EE sectors relevant to your organization's work?
2. What changes have you observed in the engagement of your members or stakeholders as a result of the project?

5. Sustainability

1. How likely is your organization to sustain the activities or results of the project beyond its lifespan?
2. What additional support or measures would enhance the sustainability of outcomes for your organization?

6. Cross-Cutting Themes (Tripartism, Gender, and Inclusion)

1. How effectively did the project integrate tripartism, social dialogue, and engagement with workers' and employers' organizations?
2. To what extent did the project address gender equality, non-discrimination, and inclusion within its scope?

10.7 Focus Group Discussion (FGD) Guide- Training Program Beneficiaries

1. Relevance and Strategic Fit

1. How well did the training align with your professional needs and career goals?
2. Were the training topics relevant to the current trends and demands in the renewable energy (RE) and energy efficiency (EE) sectors?

2. Effectiveness

1. How would you describe the quality and effectiveness of the training you received?
2. What skills or knowledge have you gained, and how have you applied them in your work?

3. Efficiency of Resource Use

1. Were the training resources (e.g., materials, trainers, and facilities) adequate and delivered in a timely manner?
2. Were there any logistical challenges that impacted your training experience?

4. Impact Orientation

1. What changes have you noticed in your technical skills, career opportunities, or job performance after the training?
2. Have the trainings contributed to any changes in your workplace practices or energy management processes?

5. Sustainability

1. Do you feel equipped to continue applying the skills and knowledge gained from the training in the long term?
2. What additional support or follow-up would enhance the sustainability of the benefits you've gained?

6. Cross-Cutting Themes (Gender and Inclusion)

1. Was the training inclusive and accommodating for all participants, regardless of gender or background?
2. How did the training address issues of gender equality or inclusivity in the RE and EE sectors?