Mid-term evaluation of project: “Skills for Energy in Southern Africa (SESA)”

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This "internal evaluation" as per ILO/EVAL types of evaluation of the ILO followed a formalized evaluation process managed by an officer of the Regional Programming Unit of the Regional Office for Africa of the ILO. The purpose of internal evaluations largely serves organizational learning.

Contents

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Acronyms

CO	Country Office
CTA	Chief Technical Advisor
DCPR	Development Cooperation Progress Report
EO	Employers Organisation
EE	Energy Efficiency
GIZ	German Agency for International Cooperation
IPP	Independent Power Producer
ILO	International Labour Organisation
ILS	International Labour Standards
ITC-ILO	International Training Centre of the ILO
KGRTC	Kafue Gorge Regional Training Centre
M&E	Monitoring and evaluation
MTR	Mid-Term Review
NPC	National Project Coordinator
NPO	National Project Officer
PSC	Project Steering Committee
RE	Renewable Energy
REA	Rural Electrification Authority
REI	Regional Energy Integration
RERA	Regional Electricity Regulators Association
RO	Regional Office
(SADC) SACREEE	SADC Centre for Renewable Energy and Energy Efficiency
SADC	Southern Africa Development Community
SAPP	Southern African Power Pool
SATUCC	Southern Africa Coordinating Council
SDG	Sustainable Development Goal
SESA	Skills for Energy in Southern Africa
Sida	Swedish International Development Cooperation Agency
SkiDRES	Skills Development for the Renewable Energy Sector
TEVETA	Technical Education Vocational and Entrepreneurship Authority
TWG	Technical Working Group
ToC	Theory of Change
UN	United Nations
ZARENA	Zambia Renewable Energy National Agency
ZCTU	Zambia Congress of Trade Unions
ZESCO	Zambia Electricity Supply Cooperation
ZFE	Zambia Federation of Employers

Executive Summary

Project background

Today, over 800 million people worldwide still have no access to electricity, out of which 600 million live in Sub-Saharan Africa. This lack of access to a reliable energy supply hampers social development and economic activity. Access to clean, affordable, reliable energy is one of the main drivers for socio-economic development, which in turn contributes to better living conditions and improved access to training and employment opportunities and enterprise development.

The Southern African Development Community (SADC) aims to follow a low-carbon developmental path; energy use will need to increase but without increasing greenhouse gas emissions (SADC Climate Change strategy and action plan, 2015). This requires a higher proportion of renewable energy (RE) in the energy mix, and increased energy efficiency. SADC has set a goal that, by 2022, the power generation mix in the SADC-region will be as follows: coal 36%, hydropower 26%, gas 19%, wind 10%, and solar 7%, with biomass and diesel energy occupying only 1% each[1].

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 the minimum efficiency standards for appliances, equipment and buildings could result in energy savings, which may offer a unique opportunity to reconcile economic competitiveness with sustainable development. They might also provide the added benefits of reducing the cost of energy and increasing energy productivity.

In addition to the highly skilled specialists needed to develop RE and EE, there is and will be demand for a large number of technicians and engineers to carry out installations and maintenance work. Any increase in the uptake of RE, EE and regional energy integration (REI) can not materialise without this group of employees. Consequently, well-qualified technicians are in high demand.

The International Labour Organisation (ILO), with funding provided by the Government of Sweden (through the Swedish International Development Cooperation Agency (Sida)), supports the Kafue Gorge Regional Centre's (KGRTC) implementation of the Skills for Energy in Southern Africa (SESA) Project, which was planned as a three-and-a-half-year intervention. The KGRTC has a long record of cooperation with Sida. The center has received Sida funding since 1997, for a variety of skills' development projects. For that reason, it was a natural choice for the donor to select the KGRTC as implementing partner in the SESA project.

The project's overarching developmental 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". This will be achieved through skills development

[1] SESA Project Document,2020

and the establishment of Public-Private Development Partnerships (PPDPs) in Zambia and the 16 SADC countries.[2]

Project aim

The project is expected to facilitate partnerships with the private sector and to strengthen KGRTC's capacity to become a Centre of Excellence for energy training in the region. It intends that it 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 project addresses only one of the many factors that contribute to the insufficient supply of sustainable energy in the region (i.e. the current shortage of skilled work force). The SESA project complements a range of engagements from other developmental agencies and investors, by contributing – through the KGRTC – to updating the skills of more technicians, engineers and managers' skills in the rapidly evolving field of RE/EE/REI technologies, within Southern Africa's power industry. The project enables the KGRTC to grasp the opportunities provided by demand, investments and the enabling policy environment for sustainable power generation and distribution. It does this by strengthening the KGRTC's institutional capacity for the quality training of new target groups, as well as its marketing and communications and its collaborative partnerships with the private sector. However, KGRTC itself should as the project does not have control on KGRTC's choices take the lead to make use of the opportunities provided by the project.

The project has formulated the following Objective and Outcomes:

Development Objective (Goal)

The SESA project aims to: Increase the uptake of Renewable Energy, Energy Efficiency and Regional Energy Integration interventions in Southern Africa, leading to a more sustainable and low-carbon energy mix.

Outcomes

The intervention strategy contains two interlinked elements, which contribute, jointly, to the achievement of the project's development objective.

1. More power technicians, engineers and managers in the SADC region have enhanced technical capacity to apply, manage and promote the latest RE, EE and REI technologies.

2. The KGRTC has built up its brand and standing as the region's Centre of Excellence for competitive skills training in RE, EE and RE technologies.

At the higher level the SESA project's Theory of Change (ToC) indicates that:

if More power engineers, technologists, technicians and managers in the SADC region have an enhanced technical capacity to apply, manage and promote the latest RE, EE and REI technologies; and

[2] The Southern African Development Community (SADC) is a Regional Economic Community comprising 16 Member States; Angola, Botswana, Comoros, Democratic Republic of Congo, Eswatini, Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, Seychelles, South Africa, United Republic Tanzania, Zambia and Zimbabwe.

if the KGRTC has built up its brand and standing as the region's Centre of Excellence for competitive skills' training in RE, EE and RE technologies

then **(this will contribute to) Increased uptake of RE, EE and REI interventions in Southern Africa leading to more sustainable and low carbon energy mix.**

Mid-term evaluation

The main purposes of this mid-term evaluation are; to be accountable to the donor and constituents, to serve internal organisational learning and to offer improvements for the further implementation of the project. This evaluation assessed the extent to which the project had achieved or was likely to achieve its expected objectives, as per the project's logical framework, the effectiveness and efficiency of the project's implementation, and the sustainability of the project's potential impact.

This mid-term evaluation identifies the major challenges that were faced during the first years of implementation and the action(s) taken to address them, as well as any lessons-learned and/or emerging good practices for both accountability and learning.

This evaluation assesses whether the project's interventions are aligned to relevant SDGs and with the ILO's strategic objectives and policy outcomes, as well as with the existing Decent Work Country Programmes (DWCPs) and other national development frameworks. In particular, the evaluation analyses the project's contribution to the decent work agenda.

The geographical scope of the current evaluation includes the project's implementation in Zambia, Zimbabwe and Botswana, as well as in the SADC region. The three countries were selected as most project activities till now have been targeted on these countries in particular Zambia. The evaluation covers the time period from the operational launch of the project and its first 18 months, specifically from January 2021 to the end of September 2022, and assesses all of the results and key outputs that were produced within this period.

The evaluator conducted a participatory, theory-based evaluation, to answer the questions raised in the Terms of Reference (Annex V). A theory-based evaluation implies that the evaluator works with the ILO's project team, during the project's inception phase, to confirm the intervention's Theory of Change (ToC). They will also confirm whether any implicit and explicit assumptions exist, that might influence the likelihood of the intervention's achieving its short- and longer-term outcomes and will expediate key stakeholder's use of the knowledge and understanding they have gained.

Findings

The project conducted a baseline study and a skills Supply and Demand study, during its first year, to define which needs the project interventions should cover. Because of delays in delivering the baseline study a number of training and curricula were developed on the basis of the preliminary findings of the studies. Some of the evaluation respondents were of the view that some courses are not exactly tailor-made to meet the concrete needs of all countries. However, a course on financial modelling that targeted IPPs is reported to have been very much on target and of high quality.

Relevance and strategic fit

The ILO constituents were involved with the development of the project to some extent. The project's design was only partly participative and few of the stakeholders recalled having been actively involved in the project's development. This might partly be due to staff turnover. However, those who were involved felt they were able to influence the formulation of the project, so that it meets their needs to a large extent. Stakeholders however recalled having been actively involved with the SkiDres project which was a pilot/preparatory to the current project.

A number of associations in the countries represent the interests of companies that are active in solar technologies in particular, but also in RE in general. These associations are not EOs perse, rather they represent their members' professional interests in (for example) governmental advisory bodies, and as such are the natural partners of the KGRTC. The organisations informed about limited contact and interaction between the KGRTC and the organisations.

The trade unions are reported to have been actively involved in other ILO skills-related projects; for example, on STEM skills' development. Therefore, it seems natural for them to be an active partner in the current project also, however this has only materialised to a limited extent. Many unions (and EOs) still do not have a well-formulated policy on RE, EE and REI; even though some of them were involved with Just Transition activities on the regional and international level. In many cases, skills development policies are also lacking the updates required to meet the challenges of the 4. Industrial Revolution and digitalisation of industries.

Validity of design

The current project is a PPDP, which remains an emerging approach within the ILO, so the organisation currently has limited experience in the implementation of such projects. This seems to present practical challenges in defining the social partners' involvement, especially the role of trade unions. However, efforts are being made and valuable experiences harvested. It will be very important to evaluate the PPDP process and the lessons learned, specifically during the final evaluation of the current project.

The KGRTC is a well-established institution with a strong reputation for high-quality, specialised training of specialists from the hydro power industry. Consequently, SADC selected it to be the regional centre of excellence. The project is well-aligned to SADC's priorities. The KGRTC's priorities are also in line with SADC's priorities and policies in this field, and all of the SADC countries should have the possibility to participate in the training activities, either physically or virtually. SADC's contact with the centre passes through the Zambian Ministry of Energy.

The evaluation was informed that there is a desire to have a training centre, similar to the KGRTC, in Zimbabwe. This is because most of what is taught in the KGRTC is also available in Zimbabwe. Zimbabwe expressed the feeling that they were only invited to discussions of the project's implementation after the project had already been developed. Therefore, they felt they had limited possibilities for influencing the design.

Effectiveness

The largest number of trainees are from Zambia. The SADC has raised some concerns about the limited number of participants from other countries.

There is a concern that the design of the project did not describe a systematic approach that would allow to follow how the participants use their newly acquired skills. The ITC-ILO conducted

an analysis of the KGRTC's course portfolio, but there was limited statistical materials available on courses and participants to make conclusive recommendations.

A number of institutions currently offer training in RE, especially solar. However, informants found most courses, including those offered by the KGRTC, to be too generalised, as they often cover all aspects of renewable energy. A need was felt for tailor-made courses with a greater focus on practical skills. KGRTC does however find that the courses offered already are specialised and modular in line with the approved curriculum at skills award level.

It is also suggested that REI be separated from the two other parts (EE and RE), as the target group for the former differs and few are seen to need this particular training.

In recent years, the solar energy industry is reported to be changing and big international companies, among others Chinese companies, are entering the market. They come with a small number of engineers and hire manual workers locally. Therefore, it is reported that demand exists, to boost the currently low numbers of skilled and semi-skilled craftsmen. The SMEs, which have traditionally dominated the market, are expected to be marginalised to a certain extent over time and will be left with those niches in the market that are no longer interesting for the big companies (for example, those in poor rural areas with a low population density). Informants recommended inviting the Rural Electrification Authority (REA) to join the PSC (currently they are members of the TWG only), as they could be crucial in the project's further development.

Two target groups for the intervention are women and youth. However, thus far mainly people with an engineering or technical background have been trained, and only one participant from rural areas is reported to have joined the training. There are few women with engineering and technical background.

Much effort has been made to engage with private business and get them to partner with the project/ILO. To a certain extent, this has been successful, and MoUs/Letters of Commitment have been signed within the framework of the PPDP, even after sometimes lengthy processes. The evaluation will discuss the partnership strategy elsewhere.

Efficiency of resource use

The targets set out in the project documents were optimistic and built on an assumption that it would be an easy and natural process to add RE, EE and REI courses to the existing course portfolio at the KGRTC. This has proven to be a bigger challenge than first expected, as it was necessary to create a preparedness for change at the KGRTC first. It requires a great deal of change, to move from training specialised hydro technicians from large utility companies, to owners and technicians from often new and about-to-be established SMEs and often with people who have limited prior technical insight into the RE and EE industry.

The high tuition fees charged at KGRTC raise the question of how realistic it is, if the project is to meet the targets it set out. The KGRTC had difficulty gathering enough participants (14) for a course, even though most of the female participants were sponsored. Online training might be a way forward for some trainings, but it requires a systematic approach. The evaluation found that the calculations used by KGRTC for determining the fee to be charged per participant/course needs to be further developed. It was informed that there is a break even, with 14 participants paying a tuition fee of 700 USD. The evaluations finds that the costs should vary, depending on type of course, its length, whether there are external/internal trainers, the level of expertise, consumables, and accommodation etc. Almost all of the informants raised the tuition fees issue

as a challenge. Therefore, it is crucial to the training activities' sustainability that a solution be found.

The current set-up in this PPDP project is oriented more towards business. The trade unions expressed a wish to be more visible in such PPDP projects. The workers' role in the current project is not clearly defined beyond their participation in PSC and TWG, it is recommended to look into the possibilities of a stronger involvement of trade unions and workers as they are the end beneficiaries.

This is a PPDP project, however, the involved companies have not been as enthusiastic as initially expected, and stakeholders felt that it took a long time to establish the project's identity. The evaluation finds that it is unrealistic that the project will meet its target on external fundraising from partnerships. The number of companies that have engaged with the project is not that high, but acceptable for a new concept as PPDP. Even though the MoUs to be signed between the partners are relatively simple agreements it has proven to take a complicated juridical process to develop them and to get them cleared. Consequently, the project moved to signing Letters of Commitment, where the clearance process is faster and smoother.

Impact orientation

In many countries, the dilemma of solar energy is between need and demand. It is important in rural areas as only source of electricity, whereas it is mainly used as a back-up only during grid fallouts in urban areas. However, the number of companies, selling solar system products including panels, is increasing and many of them would like to undergo training before investing. This has triggered polytechnical institutions also to offer courses in solar technology and thereby be in competition with KGRTC.

The project has a specific target on women and youth, but as most potential participants in the training are male, with an engineering or technical background, it has proven hard to attract women and youth to the offered training. However, it *has* been possible to attract a good number of women by offering female participants scholarships, but this is not a sustainable solution.

The project does not have any specific targets on the involvement of people living with disabilities. Youth is a target group, but the KGRTC has not taken any specific action to attract young participants so far.

The KGRTC has had the privileges to be a Centre of Excellence in energy training for more than 10 years, especially it is a major player in the hydro energy training sector. However, after they enter into the RE, EE and REI sector, they will be confronted with a large number of private and public institutions, which offer various types of training that are similar to the KGRTC's offers.

It is too early to measure impact of the project, but the project team finds that they are on the right track, as all stakeholders are onboard. In general stakeholders find that especially on Outcome 1 the project is on right track.

The project has helped to established contact between the KGRTC and the companies working in the RE, EE and REI industrial sectors. These are industries, which were relatively new to the KGRTC, when the project started.

It was also shown that the KGRTC could benefit from partnering with private companies and developmental organisations, thereby increasing resources which could be channelled towards RE/EE/REI promotion.

Sustainability of project outcomes and impacts beyond the lifetime of the project

Courses developed will stay beyond the project. The new KGRTC brand will also be there in the future if the re-branding is successful. The KGRTC's being seen as a centre of excellence in the SADC region and beyond could play a key role in the advancement of RE, EE and REI. Results from the baseline showed that the KGRTC's training may be the reason for an increased uptake of RE/EE/REI in SADC.

The KGRTC is new to having to join a competitive market. There are many institutions – from private companies to TVET centres and universities – which offer similar training and education. If the KGRTC want to either compete or cooperate for attracting participants from the whole of the SADC region, it must offer something unique, as recommended in this report.

The KGRTC does not have a formulated gender policy. The gender training has not had any visible impact and the gender audit was not conducted. However, it will now be initiated under the leadership of the project team and the DWT Gender Focal Point. The lack of progress in this field is problematic. Women's participation in training has mainly relied on sponsorships, and when the SESA project comes to an end, a part of these sponsorships will disappear, there seems to be no concern in the KGRTC management about ensuring a higher participation of women in the long term.

Conclusion

The SESA project is progressing well towards its planned outcomes. It is too early to expect any impact on the overall objective, even though increased attention is being paid to EE, RE and REI in the SADC region and beyond. However, it is not possible to document any direct impact on this very complex development, which is affected by dozens of factors.

The project's implementation was delayed from the beginning firstly because of issues complementing the staff and a delayed baseline study. The team is however catching up, but are behind schedule on meeting some of the goals which as also reported in this report were too optimistic from the design of the project. Secondly the KGRTC needed time to tune in to the new activities and to find ways of reaching out to new clients and partners.

This is a PPDP project. It has been a challenge to create partnerships, both because of the lengthy juridical procedures within the ILO and because of the limited buy-in from potential partners, namely national and foreign private companies. Now, the ILO CO Lusaka and the project team has found solutions to most of the challenges it faced. The final evaluation should in particular pay attention to these experiences and possible Emerging Good Practices.

The delays have made it unrealistic to meet all the targets that were set out in the project documents. These targets were already optimistic at the beginning, and – at this stage – the evaluation recommends reviewing them and establishing some more realistic targets. This current report indicates the fields of intervention wherein the project would benefit from new targets; the number of participants and courses, and the investments to be provided by companies and institutions entering into partnerships.

The branding of KGRTC as a centre of excellence in the SADC, in the field of skills for energy, also needs some rethought, when compared to the original idea. The KGRTC is used to serving a very much protected market and is currently entering a much more competitive one. In this new market, the KGRTC must develop its brand and attract new clients, however this is a very difficult task, due the centre's location which implies high travel and accommodation costs.

This report suggests rethinking the set-up and using the strengths of the KGRTC; its high-level quality training with an outreach to training providers in the region. If the right action is taken, it will be possible for the project to create a sustainable basis for the KGRTC's future successful work and thereby contribute to the overall objective of the project.

Recommendations

Recommendation 1

Addressed to	Priority	Time frame	Resources
ILO	Medium	Short	Low

The ILO is recommended to investigate with EOs and trade unions the need for developing policies on to meet the challenges and benefit from the opportunities the RE, EE and REI agenda provides for the social partners. These policies could also be developed in relation to the Just Transition agenda.

Recommendation 2

Addressed to	Priority	Time frame	Resources
SESA	High	Short	None

The project team is strongly recommended to give high priority to develop an exit strategy for the project as soon as possible. An exit strategy should land the project in a way that ensures that the initiatives taken within the project is carried forward by KGRTC and its possible partners.

Recommendation 3

Addressed to	Priority	Time frame	Resources
KGRTC	High	Long-term	Requites more insight to estimate

The KGRTC is recommended to review its pricing of courses as it according to current and potential clients is fare too expensive to join the trainings at the centre if not backed by a sponsor. The sustainability of the initiatives taken under the SESA project depends on a solution to this problem. The evaluation recommends to the KGRTC to focus on REI and highly specialized technicians for RE and EE meaning to continue the profile the centre has in hydro into the three new areas of intervention. For the basic trainings and training of semi-skilled technicians' capacity is available locally in the SADC countries. KGRTC can take the lead and establish cooperation with TVET centres and other training providers in the countries which under the umbrella of KGRTC and with use of KGRTC training materials and technics can offer this training in their respective countries to an affordable price and in the good quality guaranteed by the KGRTC brand.

Recommendation: 4

Addressed to	Priority	Time frame	Resources
KGRTC (ILO)	High	Short-term	Medium

The KGRTC is recommend (eventually together with the ILO) to engage an external consultant/expert with insight in and hands-on experience with running successful training centers to optimize the implementation and if needed suggest amendments to the 5-year KGRTC Business Plan. The expert should likewise analyse possible scenarios including a possible withdraw of ZESCO funding partly or in full and the suggested structural changes as per other Recommendations in this report.

Recommendation: 5

Addressed to	Priority	Time frame	Resources
KGRTC	High	Short-term	None

As for 1.3.3 KPI 1.3.4 also indicates a large amount (10% of PPDP budget) to be mobilized by KGRTC from development partners. No initiatives were reported in this field and KGRTC is not on track to meet this with a 0% achievement rate. The evaluation finds that the project should consider to remove this indicator and then concentrate on meeting 1.3.3.

Recommendation: 6

Addressed to	Priority	Time frame	Resources
KGRTC/ILO	High	Short-term	None

The KGRTC and the ILO is recommended to review the target for number of participants based on an analysis of what is realistic to achieve with the given capacity without lowering the quality of the training. The current figures are not seen to be realistic.

Recommendation 7

Addressed to	**Priority**	**Time frame**	**Resources**
ILO	Medium	Short-term	None

It is recommended to review the KPI 2.1.1 as the 50% increase is too high and milestones should show the movement towards a (realistic) target.

Recommendation 8

Addressed to	**Priority**	**Time frame**	**Resources**
ILO	Medium	Short-term	None

The two KPIs under 1.4.3 and 2.2 to be reviewed together and new realistic targets established taking the real capacity of the KGRTC into account – and also the demand in the market for these courses.

Recommendation 9

Addressed to	**Priority**	**Time frame**	**Resources**
KGRTC	Medium	Long-term	Low

Review the format of the online training to make it fit to the needs and possibilities of the potential participants there is already many different experiences in this field and new approaches can be developed as long as the high quality is kept unharmed.

Recommendation 10

Addressed to	**Priority**	**Time frame**	**Resources**
ILO	High	Short-term	Low

The evaluation recommends the ILO to consider having more presence in the KGRTC not so much during training activities but more as coaching during the everyday work to support the change process and help secure it moves forward and that joint initiatives have a follow-up.

Recommendation 11

Addressed to	**Priority**	**Time frame**	**Resources**
ILO	Medium	Medium-term	None

It is recommended to include in partnership agreement or in separate document to whom the equipment provided by partners belongs or should be transferred to by the end of the project.

Lessons Learned and Emerging Good Practises

An important lesson learned from the current project is that change takes time and change processes need external support and coaching to get away from wishful thinking and "business as usual".

The KGRTC has worked in a very protected environment with clients being mainly large public owned utilities. This has given the center a solid financial basis which allowed for conducting highly specialised and relatively expensive trainings. With the current project KGRTC tries to enter a new and very much competitive market, this requires a lot of changes in the institution's priorities and way of operating. Traditionally KGRTC has had a non-profit philosophy. The evaluation finds that this is a very sympathetic approach but **when acting in a competitive market the center has at the least to cover its own expenses and accumulate some reserves for future investments.** The evaluation finds that the **KGRTC needs external professional business support and coaching to be able to introduce a new business model**, that opens for a new base of potential clients.

Another Lesson learned is that it **for ILO staff still is a challenge to work on the PPDP approach**. There is still not strong expertise and experience in working with these agreements in the ILO and a lot of resources are used to mobilize relative limited resources from the private sector. The partners join mainly to increase their visibility in the region in the beginning they were hesitant as they entered into a field where they to a certain extend committed investment without exactly knowing where the engagement would take them. It will be easier to mobilize resources when a ready-to-go training packet is available to buy in to. **The ILO should support local staff and project staff in balancing efforts and outcomes from negotiations with potential private sector investors/contributors**. It has also proven a challenge to activate the agreements and coordinate the concrete support to be provided by partners.

No Emerging Good Practises were found by the mid-term evaluation.

1. Context and Background of the Project

1.1 Context

Today, over 800 million people worldwide still have no access to electricity, out of which 600 million live in Sub-Saharan Africa. This lack of access to a reliable energy supply hampers social development and economic activity. Access to clean, affordable, reliable energy is one of the main drivers for socio-economic development, which in turn contributes to better living conditions and improved access to training and employment opportunities and enterprise development.

The Southern African Development Community (SADC) aims to follow a low-carbon developmental path; energy use will need to increase but without increasing greenhouse gas emissions (SADC Climate Change strategy and action plan, 2015). This requires a higher proportion of renewable energy (RE) in the energy mix, and increased energy efficiency. SADC has set a goal that, by 2022, the power generation mix in the SADC-region will be as follows: coal 36%, hydropower 26%, gas 19%, wind 10%, and solar 7%, with biomass and diesel energy occupying only 1% each[3].

New technologies and skills are required to ensure the efficient integration of renewable energy into the grid. A large share of the new and intermittent power sources is also expected to be operated by Independent Power Producers (IPPs). In addition to the technical aspects (e.g. installation and maintenance, software development and application, energy planning and technical development skills, and grid integration skills etc.) These IPPs will also require skilled personnel; for example, in financial modelling, business planning and the development of 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 the minimum efficiency standards for appliances, equipment and buildings could result in energy savings, which may offer a unique opportunity to reconcile economic competitiveness with sustainable development. They might also provide the added benefits of reducing the cost of energy and increasing energy productivity.

Energy efficiency reduces energy expenditure and increases energy's affordability in poorer households by bringing down the per-unit cost of electricity: It also reduces pollution by lowering the need for generated and associated emissions. Energy efficiency is set to become increasingly important, particularly for industry (e.g. the extractive industries and agro-processing), utilities and the construction sector. This means that a range of skills will be required to perform energy audits and to implement effective energy efficiency strategies and practices, which will be specific to the sectoral and technology processes. A global energy crisis has further underlined the need for investment in RE, and for developing EE and integrated regional energy resources.

In addition to the highly skilled specialists needed for the above-listed fields of work, there is and will be demand for a large number of technicians and engineers to carry out installation and maintenance work. Any increase in the uptake of RE, EE and regional energy integration (REI) can not materialise without this group of employees. Consequently, well-qualified technicians are in high demand.

[3] SESA Project Document,2020

In recent years the RE market has changed and is changing dramatically. For many years the wind and solar energy market was dominated by smaller energy providers. However now, big transnational and national companies are entering the market, and their huge investments are leaving less space in the market for the smaller players.

1.2. Background

The International Labour Organisation (ILO), with funding provided by the Government of Sweden (through the Swedish International Development Cooperation Agency (Sida)), supports the Kafue Gorge Regional Centre's (KGRTC) implementation of the Skills for Energy in Southern Africa (SESA) Project, which was planned as a three-and-a-half-year intervention. The KGRTC has a long record of cooperation with Sida. The centre has been funded since 1997 and comprises a variety of skills' development projects. For that reason, it was a natural choice for the donor to select the KGRTC as implementing partner in the SESA project.

The project's overarching developmental 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". This will be achieved through skills' development and the establishment of Public-Private Development Partnerships (PPDPs) in Zambia and the SADC region.

The background and context of this development's intervention is that reliable access to energy is vital for economic development, business, and employment. The lack of skills in renewable energy, energy efficiency and regional power pooling technologies is a major factor that impedes universal access to secure, clean and sustainable energy in the SADC region, and which contributes to widespread chronic poverty and a lack of decent work in rural areas. It also reduces power producers' ability to generate, transmit and distribute sufficient sustainable energy.

1.3 Project aim

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

The project's focus is on contributing to: SDG 7 ("Ensure access to affordable, reliable, sustainable and modern energy for all") by responding to the power industry's needs for skills' development in the areas of renewable energy, energy efficiency and regional energy integration (REI); as well as 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, which will lead to a mix of more sustainable and low carbon energy.

The project is expected to facilitate partnerships with the private sector and to strengthen KGRTC's capacity to become a Centre of Excellence for energy training in the region. It intends that it 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 project addresses only one of the many factors that contribute to the insufficient supply of sustainable energy in the region (i.e. the current shortage of skilled work force). The SESA project complements a range of engagements from other developmental agencies and investors, by contributing – through the KGRTC – to updating the skills of more technicians, engineers and managers' skills in the rapidly evolving field of RE/EE/REI technologies, within Southern Africa's power industry. The project enables the KGRTC to grasp the opportunities provided by demand, investments and the enabling policy environment for sustainable power generation and distribution. It does this by strengthening the KGRTC's institutional capacity for the quality training of new target groups, as well as its marketing and communications and its collaborative partnerships with the private sector. However, whether the KGRTC will choose to make use of the opportunities provided by the project is out of project's direct control.

1.4 Project objectives and outcomes

The project has formulated the following Objective and Outcomes:

Development Objective (Goal)

The SESA project aims to: Increase the uptake of Renewable Energy, Energy Efficiency and Regional Energy Integration interventions in Southern Africa, leading to a more sustainable and low-carbon energy mix.

Outcomes

The intervention strategy contains two interlinked elements, which contribute, jointly, to the achievement of the project's development objective.

3. More power technicians, engineers and managers in the SADC region have enhanced technical capacity to apply, manage and promote the latest RE, EE and REI technologies.

4. The KGRTC has built up its brand and standing as the region's Centre of Excellence for competitive skills training in RE, EE and RE technologies.

Under each Outcome a number of planned Outputs have been formulated:

Outputs

Outputs for Outcome 1

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

1.2 Desired training portfolio determined by KGRTC based on demand

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

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

Outputs for Outcome 2

2.1 Customer base for EE, RE and REI increased

2.2 Service portfolio differentiation enhanced, e.g., by including distance-learning

2.3 Quality control and management systems upgraded

2.4 Cross-cutting strategy drivers developed and implemented

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

1.5 Project Theory of Change

The project documents refer to a Theory of Change (ToC), which is a copy of the project logframes' Objective, Outcomes and Outputs. The evaluation discussed the ToR with the project team and it was found that the project builds on a Theory of Change that can be formulated thus:

if RE/EE/REI skills demand and supply analysis, with a focus on energy companies and training providers in the region, is completed; and

if Desired training portfolio is determined by the KGRTC based on demand; and

if Partners are identified and MoUs established as part of the Public-Private Development Partnership; and

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

then **More power engineers, technologists, technicians and managers in the SADC region have enhanced technical capacity to apply, manage and promote the latest RE, EE and REI technologies.**

if The customer base for EE, RE and REI is increased; and

if A marketing strategy is in place and implemented; and

if Service portfolio differentiation is enhanced, e.g., by including distance-learning; and

if Quality Control Systems (QCS) and Quality Management Systems (QMS) are upgraded

if Cross-cutting strategy drivers are developed and implemented; and

if Collaboration and communication for RE/EE/REI awareness, coordination within skills sector and complementarities with other RE/EE/REI initiatives are enhanced.

then **the KGRTC has built up its brand and standing as the region's Centre of Excellence for competitive skills' training in RE, EE and RE technologies**

At the higher level the SESA project's logic indicates that:

if More power engineers, technologists, technicians and managers in the SADC region have an enhanced technical capacity to apply, manage and promote the latest RE, EE and REI technologies; and

if the KGRTC has built up its brand and standing as the region's Centre of Excellence for competitive skills' training in RE, EE and RE technologies

then **(this will contribute to) Increased uptake of RE, EE and REI interventions in Southern Africa leading to more sustainable and low carbon energy mix.**

The evaluation discussed the ToC with the project team, and it was found that marketing is a missing element in the realisation of the change. Marketing is a key issue for reaching out to potential clients in the RE, EE and REI industries. The KGRTC has a strong brand as a centre for training of highly skilled specialists for the hydro power industry and has had close to a monopoly in this field within the region. However, currently this brand could be both a benefit and a burden when entering the RE, EE and REI markets. On the one hand, they could introduce new courses – based on the above strong brand – to traditional clients. On the other hand, the same strong brand can be a burden when reaching out to new clients, who might see the KGRTC as a hydro-power-only institution. Therefore, it is recommended that KGRTC develop a strong marketing strategy that covers different platforms and sources. This is further needed because the KGRTC is moving from a very protected to a very competitive market.

2. Background and Purpose of the Evaluation

2.1 Evaluation background

The ILO considers evaluation to be an integral part in the implementation of technical cooperation activities. It uses an evaluation for accountability, learning, planning, and building knowledge. This current evaluation was conducted within the context of the criteria and approaches to 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 follows the ILO's 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 between one and five million USD, should submit to an internally managed, mid-term evaluation in Year 2, and an independent, final evaluation in Year 3, which should be conducted by an independent evaluation consultant.

The mid-term evaluation followed the ILO's policy guidelines for results-based evaluations (November 2020), and the ILO's EVAL Policy Guidelines Checklist 4 "Validating methodologies" and Checklist 5 "Preparing the evaluation report".

For all practical purposes, the Terms of Reference (ToR) and the ILO's Evaluation Policies and Guidelines defined the overall scope of this evaluation. The Recommendations of this evaluation are strongly linked to its findings, and they aim to provide the stakeholders with clear guidance on how they can address them.

The mid-term evaluation was managed by an ILO evaluation manager, who also is the project's Chief Technical Advisor (CTA). The ILO Regional Evaluation Officer provided oversight and quality assurance and the ILO Evaluation Office approved the final report. The evaluation applied a participatory and consultative process with all key stakeholders throughout the evaluation process. The evaluation also adhered to UN Evaluation Group's (UNEG) Norms and Standards and ethical safeguards.

2.2 Purpose of the evaluation

The main purposes of this mid-term evaluation are; to be accountable to the donor and constituents, to serve internal organisational learning and to offer improvements for the further implementation of the project. This evaluation assessed the extent to which the project had achieved or was likely to achieve its expected objectives, as per the project's logical framework, the effectiveness and efficiency of the project's implementation, and the sustainability of the project's potential impact.

This mid-term evaluation identifies the major challenges that were faced during the first years of implementation and the action(s) taken to address them, as well as any lessons-learned and/or emerging good practices for both accountability and learning.

This evaluation assesses whether the project's interventions are aligned with the ILO's strategic objectives and policy outcomes, as well as with the existing Decent Work Country Programmes (DWCPs) and other national development frameworks. In particular, the evaluation analyses the project's contribution to the decent work agenda.

The evaluation also determines and assesses the coordination mechanisms with other ILO interventions.

The evaluation will be used in the following ways:

- Findings, recommendations, and lessons-learned will be used to improve the strategy and implementation of the project in its second half and beyond.
- It accounts for the project's achievement to ILO management and the donor, in terms of the impact of the donor's spent funds and any measurable results to-date against the baseline.
- It will determine the extent to which the project has increased the constituents and the implementing partner's capacity, as well as the extent to which the constituents and the implementing partner have leveraged their increased capacity and will determine which contribute to sustainability.
- It will assess the project's synergy with other projects, particularly the extent to which this project has made links to other interventions, for better and more effective results and sustainability.

This evaluation report will be disseminated within the ILO for organisational learning through EVAL's database.

2.3 Scope of the Evaluation

The geographical scope of the current evaluation includes the project's implementation in Zambia, Zimbabwe and Botswana, as well as in the SADC region. The evaluation covers the time period from the operational launch of the project and its first 18 months, specifically from January 2021 to the end of September 2022, and assesses all of the results and key outputs that were produced within this period.

The evaluation integrates gender equality as a cross-cutting concern throughout its deliverables and processes. This was addressed in line with EVAL guidance note n° 4 and Guidance Note n° 7

to ensure stakeholder participation. This should aid an understanding of how and why the project has, or has not, achieved specific results from outputs to potential impacts.

2.4 Evaluation criteria

In reference to the ILO's evaluation policy and guidelines, this evaluation will assess contributions, based on the criteria of relevance, effectiveness, efficiency, impact and sustainability. Focus will also be placed on some cross-cutting themes; namely, gender, non-discrimination, climate change, just transition, International Labour Standards (ILS), social dialogue and tripartism.

The evaluation will cover the following evaluation criteria:

- Relevance strategic fit
- Validity of design
- Effectiveness
- Efficiency of resource use
- Impact orientation
- Sustainability of project's outcomes and impacts beyond the project's lifespan

In line with the results-based approach applied by the ILO, the evaluation focuses on identifying and analysing results by addressing the key questions related to the evaluation criteria and the achievement of the outcomes/ objectives of the project, using mainly – but not only – the indicators in the project's logical framework.

Key Evaluation Questions

The evaluation examined the following key issues:

<u>Relevance and strategic fit</u>

1) Has the project taken into account the needs and priorities of the tripartite stakeholders and beneficiaries, who were identified in the project document and during the project's implementation?

2) In hindsight, was the project design realistic and purposeful concerning achieving its objectives?

3) How well does the project complement and fit in with other ongoing ILO programmes in the country?

4) How well does the project support national and regional commitments to relevant SDG targets and indicators?

<u>Validity of design</u>

5) Did the project address the major issues related to skills' development in the RE and EE sub-sectors within the country?

6) Is the project's Theory of Change comprehensive, does it integrate external factors and is it based on systemic analysis?

7) 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?

8) To what extent did the project integrate crosscutting themes in its design and implementation (tripartism and social dialogue, gender and non-discrimination, International Labour Standards and fair/just transition on environment)?

Effectiveness

9) To what extent did the project achieve its objectives, or it is likely to do so by June 2024?

10) Has the project followed the Theories of Change? Were the development hypotheses, underpinning the logical framework, supported or unsupported, based on project performance data?

11) Is the quantity and quality of the outputs produced satisfactory?

12) Which outputs were not produced and why?

13) Have any unexpected results (outputs and outcomes) occurred?

14) To what extent does the project have specific targets for intended beneficiaries (women, persons with disability) in an equal manner?

15) Are the project's results similar between project geographic and sector areas?

16) How effective was the backstopping support provided by ILO Pretoria and HQs?

Efficiency of resource use

17) How efficiently were resources (human, time, expertise, funds etc.) allocated and used to achieve the project's objectives?

18) In general, did the results achieved justify the costs?

19) Could the same results have been attained with fewer resources?

20) Were funds and activities delivered in a timely manner? If not, what bottlenecks were encountered?

21) Did the project's budget make adequate provision for addressing gender and inclusion-related specific objectives/activities?

22) Has an effective risk analysis and monitoring and evaluation system been established and implemented?

Impact orientation

23) Is the project working towards achieving the proposed impacts?

24) Is the project strategy and project management steering it towards impact?

25) Is the project working at policy and practice levels (changes in practices, perceptions, technical capacity, governance or enabling environment) to effect significant contributions to gender and inclusion-related concerns within the realm of promoting decent work?

Sustainability of project's outcomes and impacts beyond the project's lifespan

26) Assess whether the project's outcomes have been or are expected to be achieved in a sustainable manner, which assures its continuance beyond the project's lifespan?

27) To what extent will the implementing partner be likely to continue the project's results without external funding or support?

28) Has an effective and realistic exit strategy been developed and implemented?

29) What needs to be done to enhance the sustainability of the project, and strengthen the uptake of its outcomes by stakeholders?

2.5 Clients of the evaluation

The primary users of the evaluation are the project team in ILO Lusaka and the implementing partner (KGRTC), as well as the ILO tripartite constituents in the SADC countries involved with the project; the ILO project technical unit, the ILO CO-Lusaka, the ILO DWT Office in Pretoria, the ILO Regional Office for Africa (ROAF), and the relevant technical units in ILO Headquarter, ITC-ILO and the donor, the Government of Sweden.

3. Methodology

The evaluator conducted a participatory, theory-based evaluation, to answer the questions raised in the Terms of Reference (Annex V). A theory-based evaluation implies that the evaluator works with the ILO's project team, during the project's inception phase, to confirm the intervention's Theory of Change (ToC). They will also confirm whether any implicit and explicit assumptions exists, that might influence the likelihood of the intervention's achieving its short- and longer-term outcomes and will expediate key stakeholder's use the knowledge and understanding they have gained.

Identified assumptions – e.g. about the relevance of the data collected, the stakeholders' data needs and how data informs policy and decision making – informed the evaluation's data collection amongst the project's stakeholders.

A theory-based evaluation approach asks – and answers – questions, including, but not limited to:

- What changes, expected and unexpected, did the intervention contribute to, and how?
- To what extent is the identified change process a reflection of the original intervention logic/did change happen the way we thought it would?
- To what extent are assumptions viable?
- If (some) assumptions are not valid, what must change for the intervention to achieve its desired outcomes and objectives and contribute to stronger accountability and decent working conditions in the energy sector in Southern Africa?

Comparing how change was envisaged in the planning stage with 'how change really takes place' facilitates learning and contributes to valuable insights for the project's further implementation.

At the same time, the approach is well-placed to answer the questions (raised in the Terms of Reference) concerning the intervention's design, implementation, outcomes and long-term value.

The evaluator used a mixed method, convergent evaluation design to assess the anticipated links between data collection. Convergent design contributes to the validation of findings, using different sources of information.

Qualitative data collection

To understand the strengths and limitations of the chosen approach, and to explore how this setup might have influenced perceptions and attitudes in the energy sector about skills, employment and economic growth, the evaluator conducted semi-structured interviews with members of the Project Steering Committee (PSC) and the Technical Working Group (TWG).

The evaluation collected data and information from the implementing partner and from the project's beneficiaries.

The evaluation focuses on the following areas:

- An assessment of the project's deliverables, results and achievements against the appropriateness and validity of the project's strategy and design. This includes the project's contribution to the ILO's programme and policy frameworks at the national (e.g., DWCPs) and regional levels, as well as national sustainable development strategy and/or including any relevant sectoral policies and programmes.
- An establishment of the relevance of the project's design and implementation strategies, in relation to the SADC region's national and regional policies on energy, final beneficiaries needs; the ILO and UN's development frameworks; and skills development concerning energy-related strategies.
- An identification of the factors affecting the project's implementation and the achievement of its outcomes and possible impacts (both positively and negatively).
- An assessment of the effectiveness and efficiency of the project's implementation, as well as the coordination mechanism/partnership with the implementing partner.
- An assessment of the sustainability of the achieved results and the likelihood of a continuation of the initiated activities beyond the project's lifetime.
- An identification of any good practices and lessons-learned, as well as the provisioning of action-oriented recommendations, which could be reflected on and considered in the project's further implementation.
- An identification of any supporting factors and the constraints that led to them, including any chosen implementation modalities (how and why).
- An identification of any unexpected (positive and negative) project results.
- An assessment of the extent to which the project's outcomes will be sustainable and will potentially have either positive or negative impacts on the project-targeted institutions and final beneficiaries.
- The provisioning of recommendations to the project's key stakeholders. to assist the achievement of project outcomes.

The evaluation integrates gender equality and non-discrimination as crosscutting concerns throughout its deliverables and processes. This was addressed in line with EVAL Guidance Note 4, Integrating gender equality in M&E of projects and Guidance Note 7. Stakeholders' participation in the ILO evaluation to ensure stakeholder participation.

The evaluation also considers the issues related to social dialogue and tripartism, international labour standards and a fair transition.

The evaluator reviewed data and information that was disaggregated by sex and gender. The relevance and effectiveness of gender-related strategies and outcomes to improve the lives of women and men was assessed.

Quantitative and qualitative data were analysed to identify pertinent results from each data set. These were then compared and triangulated to identify any areas of convergence and possible contradiction(S) before the final conclusions were drawn. The draft evaluation report was discussed with program staff and the relevant stakeholders and was then circulated for review and comments, prior to finalisation.

The evaluation fieldwork was qualitative and participatory in nature. The qualitative information was obtained through field visits to Zambia, Zimbabwe and Botswana, and to the KGRTC, and one-on-one interviews (face-to-face, Microsoft Teams and Zoom) were conducted as appropriate. The stakeholders' opinions improved and clarified the quantitative data that was obtained from the project documents.

The quantitative data were drawn from project documents, including the Development Cooperation Progress Reports and the Monitoring and Evaluation Plan (MEP). A combination of sound quantitative and qualitative research methods (e.g. interviews and group discussions with appropriate quantitative data analysis methods for each type of data collected) was developed for each evaluation question, as deemed appropriate. However, various evaluation questions were combined into one tool/method for specifically targeted groups. as appropriate. Attempts were made to collect data from different sources through various methods, for each evaluation question, and the findings were triangulated, in order to draw valid and reliable conclusions. Where possible and appropriate, data was disaggregated by sex.

The gender dimension was considered as a cross-cutting concern throughout the methodology, deliverables, and final report of the evaluation. In terms of this evaluation, this implies involving both men and women in the data collection and analyses. The needs of other vulnerable groups were also taken into account, when considering initiatives for an inclusive labour market. Likewise social dialogue, international labour standards and a just environmental transition were also considered.

The evaluation includes the voices of workers, employers, governments, and key stakeholders, discussing their participation throughout the project. In addition, the evaluation addressed country specific and regional concerns.

The data collection comprised following elements:

(i) semi-structured interviews with the key informants and stakeholders;

(ii) direct observation, during field visits to Zambia, Zimbabwe, Botswana and the KGRTC;

(iii) a validation workshop with the project team on the preliminary findings, conclusions and recommendations.

The evaluation engaged key stakeholders of the project at all levels, during interviews and field work, and the validation and reporting stages.
The data from the following sources were triangulated to increase the validity and rigor of the evaluation's findings.

- Interviews with two ILO International Training Centres (ITCILO) Specialists and one Regional Office (RO) Skills & Lifelong Learning Specialist. The purpose of this was to explore how and under which circumstances, the intervention contributed to the desired changes.
- An interview with the ILO CO Director in Lusaka. The purpose of this was to understand the extent to which the COs was able to integrate the project's activities into its policy development.
- Interviews with nine government representatives in Botswana, Zambia and Zimbabwe, who are either directly or indirectly involved with the project. The purpose of this was to understand the level of engagement and perspectives for policy development as well as the challenges the governments were/are confronted with. It also aimed to understand the interventions' coherence with the skills' development situation within the countries
- Interviews with two representatives of employers' organisations that are directly involved with the implementation of the project and who benefitted from it.
- Interview with two trade union leaders – one national and one regional – to understand the social partners' level of involvement in the project.
- Interview with three officers from the KGRTC (the implementing partner); this to understand centre's capacity and its commitment to and ownership of the project.
- Interviews with five private REI, RE and EE energy-sector-related companies and their associations. The purpose of this was to learn about the challenges the industry is confronted with and to discover any alliances that are being built between the associations.
- An interview was conducted with a donor representative, to understand the donor's motives for supporting this project and to gauge their appreciation of the achievements.
- Interviews were conducted with three direct beneficiaries, to understand project's impact and to understand the extent to which the expected outcomes have materialised into more decent jobs in the energy sector. The beneficiaries were selected with the assistance of project staff.

In total 11 female and 18 male informants were interviewed, hereunder three other staff and the project team (4 males and one female).

The above sample is not statistically representative, because the methodology of this evaluation mainly uses a qualitative approach for data collection. Time and resource constraints did not allow for a full sample and for visiting more countries in the region.

Limitations

One limitation of the chosen evaluation methods is the limited outreach to the establishments, training participants, and end beneficiaries. Additionally, only three of the 16 SADC countries were visited.

It turned out to be a challenge for both project staff and the evaluator to get a positive response from the potential interviewees on setting up interviews. In some cases the informants had allocated very little time, even though they had agreed to the interviews in advance.

The evaluation would have benefitted from deeper insight into the KGRTC's work, in order to understand better how the new sectors of the intervention fit into to the centre's DNA.

4. Findings

The mid-term evaluation addressed the following ILO evaluation concerns, as per the ToR:

- **Relevance and strategic fit**

The ILO engaged a consultant to develop the ProDoc during the lifetime of the pilot project. The ProDoc includes lessons learned during the project as well as documentation developed during the project such as the Market System Analysis and the Capacity Assessment of the Centre. A meeting in Turin provided a platform for consultations among the four parities (ILO, Sida, ITCILO and KGRTC) and was a 'internal validation' of how and what would be contained in the ProDoc. Stakeholder consultations and endorsement of the PSC was then sought and obtained.

The donor was rather restrictive about what could be included in the project and the selection of implementing partner was based on the donor's recommendation. Due to staff turnover and delays in the development of the basic project documents (for example, a baseline study and others) the project's delivery is behind schedule in meeting some of the targets (see "Effectiveness" section).

The project conducted a baseline study and a skills gaps report, during its first year, to define which needs the project interventions should cover. However, a number of trainings and curricula were developed before these two documents were in place. Some of the courses are seen to be relatively broad in their approach and are not exactly tailormade to meet the concrete needs of the participants. Some informants expressed the opinion, to the evaluation, that the courses that the project offered not always are in line with all countries' needs. However, a course on financial modelling that targeted IPPs is reported to have been very much on target and of high quality.

Some of the countries in the region are still in the process of developing policies on RE, EE and REI. Specific needs can only be further specified depending on the final forms of these policies. For example, the evaluation was informed that, in Zimbabwe, the focus is on (among others) EE and the shift to electrical vehicles. Also in Zimbabwe, RE training and education is not a new item on the agenda and the Zimbabwe Polytechnical University has offered a Masters in RE for several years. In addition, it has an "innovation hub" on RE. However, this University takes an academical approach, whereas utilities need specialists with a more practical approach. The evaluation finds that the KGRTC could benefit from a closer cooperation with universities and other educational institutions, which already have experiences in offering training and education concerning the new and emerging energy-related issues.

The ILO constituents, hereunder the EOs, were involved with the development of the project to some extent, but the sectoral structures have really had the lead. The project's design was only

partly participative and few of the stakeholders recalled having been actively involved in the project's development this partly might be due staff turnover. However, those who were involved felt they were able to influence the formulation of the project, so that it meets their needs to a large extent. This viewpoint was highlighted by SAPP, among others.

A number of associations in the countries represent the interests of companies that are active in solar technologies in particular, but also in RE in general. These associations are not EOs perse, rather they represent their members' professional interests in (for example) governmental advisory bodies, and as such are the natural partners of the KGRTC. However, there seems to have been limited contact and interaction between the KGRTC and the organisations.

TEVETA suggested designing courses, which were fitted to the local market, to SESA. They also suggested that the courses developed within the project should be available for use by all training providers in the country and beyond.

The trade unions are reported to have been actively involved in other ILO skills-related projects; for example, on STEM skills development. Therefore, it seems natural for them to be an active partner in the current project also, however this has only materialised to a limited extent. Many unions (and EOs) still do not have a well-formulated policy on RE, EE and REI; even though some of them were involved with Just Transition activities on the regional and international level. In many cases, skills' development policies are also lacking the updates required to meet the challenges of the 4. Industrial Revolution and digitalisation of industries. In order to increase the social partners' engagement in the project, the evaluation recommends considering supporting the trade unions and EOs in skills for energy policy development, eventually at the regional level.

Recommendation 1

Addressed to	**Priority**	**Time frame**	**Resources**
ILO	Medium	Short	Low

The ILO is recommended to investigate, together with EOs and trade unions, the need to develop policies on meeting the challenges and benefitting from the opportunities, provided for the social partners, by the RE, EE and REI agenda. These policies could also be developed in relation to the Just Transition agenda.

The current project is a PPDP, which remains an emerging approach within the ILO, so the organisation and especially the COs currently have limited experience in the implementation of such projects. This seems to present practical challenges in defining the social partners' involvement, especially the role of trade unions. However, efforts are being made and valuable experiences harvested. It will be very important to evaluate the PPDP process and the lessons learned, specifically during the final evaluation of the current project.

The project aims to support the involvement of more women and youth in the offered training. Scholarships are offered to women participants these cover the participants tuition fees as well as travel and accommodation. Most female participants in the physical training were sponsored.

To date, the implementation has shown that some of the planned Outputs were too optimistic (see "Effectiveness" section). The design did not take into account that skills certificates are not fully recognised in all SADC countries. This makes it less likely that a larger number of participants from countries other than Zambia will join the training in the KGRTC. This is unfortunate, as it was foreseen by all of the stakeholders, including the donor, that the project would have a strong

regional profile. Therefore, and in order to ensure that the project's targets are met and that a higher level of sustainability is reached, the evaluation recommends that the project – together with the KGRTC – investigate the possibility of ensuring the training programs are recognised in the other SADC countries. Eventually, this should also be accomplished in cooperation with the national training providers. The evaluation recognises that achieving this goal will require efforts beyond the scope and lifetime of the current project. The evaluation suggests that the project/ILO table the idea in relevant fora and indicate a way forward for this to be achieved.

Some informants found that the training focused too much on technical and financial issues and – to a lesser extent – highlighted environmental issues linked to climate change. Governments see the current project as a way to engage youth in developing a greener economy. Millions of young women and men are un- or underemployed and the hope is that the green economy will open new decent jobs in the energy sector. Many of these young people are living in off-grid areas. They have a strong incentive to join the training to increase their skills, which they expect will be in demand within their communities.

The ILO currently has no other skills projects in Zambia, but the ILO has previously been very supportive of strengthening the country's 14 TVET centres. A new EU-funded skills project is reported to be in the pipeline. Skills development plays a very prominent role in the DWCP both in Zambia and the other countries in the region, where a special emphasis is put on STEM, with women in STEM having a high priority. ILO has skills projects in other SADC countries incl. Malawi.

Government officials were reported to have been very much involved in the SkiDRES project, and they contributed with a large amount of training materials and inputs.

The KGRTC is a well-established institution with a strong reputation for the high-quality, specialised training of specialists from the hydro power industry. Consequently, SADC selected it to be the regional centre of excellence. The project launch was high-level and had a high political attendance. The project is well-aligned SADC's priorities. The KGRTC's priorities are also in line with SADC's priorities and policies in this field, and all of the SADC countries should have the possibility to participate in the training activities, either physically or virtually it is found. SADC's contact with the centre passes through the Zambian Ministry of Energy. SADC's Centre for Renewable Energy and Energy Efficiency (SACREEE), which is sponsored by the Austrian Government, has not yet been approved as a legal entity. It is unclear whether this will impact the possibility of SADC's being a partner with the project and the KGRTC, in the short- and mid-term. Meeting SDG targets is a high priority for SADC and the project is seen as a valuable contributor to meeting the relevant SDG targets.

Overall, it can be stated that the project is foreseen to contribute to:

- The 2030 Agenda for Sustainable Development - 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 ILO's Programme and Budget Outcomes for 2020-2021 - Outcome 5: Skills and lifelong learning to facilitate access to and transitions in the labour market; Output 5.1. Increased capacity of the ILO constituents to identify current skills mismatches and anticipate future skill needs
- The ILO's Africa Regional Objectives (African Regional Meeting in Abidjan on 9 December 2019) - "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."

- The Zambia Decent Work Country Programme (DWCP) (2020-2023) - Priority 2: Enhanced Economic Diversification to Create More and Better Job Opportunities for all, especially Young People. Outcome 2.1: Improved framework for development of skills that increase productivity and employability among youths, especially in the informal economy. CPO ZMB126: Economic, social, and environmental transition for full, productive, and freely chosen employment and decent work.

- SADC's Renewable Energy and Energy Efficiency Strategy and Action Plan (REEESAP) - 2017 - Alignment through Complementarity each other by SACREEE providing specialist expertise in RE/EE and KGRTC providing professional training facilities.

- The United Nations' Sustainable Development Partnership Framework (UNSDPF) 2016-2021 - UNSDPF Pillar 2: Environmentally Sustainable and Inclusive Economic Development (Transformative Indicator of Success: Percentage of youth (15-35 years) who state that they have viable choices for employment, as employers and as employees, and can make informed decisions about their future. ; Outcome 2.1: Productive sectors expand income-earning opportunities that are decent and sustainable, especially for youths and women in the poorest areas and; Outcome 2.2: Women, youth and other vulnerable groups are empowered to participate in economic opportunities that are decent and promote sustainable livelihoods.

- The 7th National Development Plan – 7NDP (2017-2021) - Outcome 4 - improved energy production and distribution for sustainable development; Strategy 3 - promotion of renewable and alternative energy.

- Sweden's Development Cooperation with Zambia and Sub-Saharan Africa - Strategy for Sweden's Development Cooperation with Zambia 2018 – 2022- increased access by the rural poor to renewable energy and improved energy efficiency in off-grid areas; Strategy for Sweden's Regional Development Cooperation in Sub-Saharan Africa 2016-2021 - To bridge the financial gap and double electricity access for millions of people in Sub-Saharan Africa. This gives the project a strong alignment with the main political trends in the energy sector in the region in general and in Zambia in particular.

However, to-date it has not been possible for the project to focus on the youth element, and the target group has – so far – consisted of engineers and technicians with some experience, although there are few youth and women among this group.

At the governmental level, the ILO traditionally works with the ministries of labour, but for this project the ministries of energy have become the most relevant partners. These ministries have previous experience of working with UN agencies – mainly UNDP and UNIDO – but all expressed their appreciation for the cooperation with the ILO.

- **Validity of design**

The evaluation was informed that there is a desire to have a training centre, similar to the KGRTC, in Zimbabwe. This is because most of what is taught in the KGRTC is also available in Zimbabwe. Zimbabwe expressed the feeling that they were only invited to discussions of the project's implementation after the project had already been developed. Therefore, they felt they had limited possibilities for influencing the design. It is indeed recognized by the project team that

regional consultations were limited during the design phase, however, needs in SADC are similar in nature as such this was the premise of design. Further, output 1.3 of SESA has made provision for exploratory missions to have better understanding of the contexts of members states.

The largest number of trainees are from Zambia. The SADC has raised some concerns about the limited number of participants from other countries.

There is a concern that the design of the project did not describe a systematic approach that would allow to follow how the participants use their newly acquired skills. The ITC-ILO conducted an analysis of the KGRTC's course portfolio, but there was limited statistical materials available on courses and participants to make conclusive recommendations.

As solar energy is a new and developing industry, there is a great deal of interest in learning about it. Furthermore, most of the companies in the sector are SMEs with limited own resources for training activities. According to informants, SMEs with 5-10 employees cannot pay 200 USD for three-day training session. The maximum they could afford would be 100 USD, and it would have to be budgeted in advance. Only a few SMEs, which are backed by bigger companies, could eventually pay the higher fee.

Those informants who saw the documents, produced by the project, find that the skills' gaps have been well identified in all three segments; RE, EE and REI. However, although some technicians are already trained in RE, there are very few with skills in EE.

A number of institutions currently offer training in RE, especially solar. However, informants found most courses, including those offered by the KGRTC, to be too generalised, as they cover all aspects. A need was felt for tailormade courses with a greater focus on practical skills.

It is also suggested that REI be separated from the two other parts (EE and RE), as the target group for the former differs. Very few are seen to need this particular training, which is more of an economic and political issue.

In recent years, the solar energy industry is reported to be changing and big international companies, among others Chinese companies, are entering the market. They come with a small number of engineers and hire manual workers locally. Therefore, it is reported that demand exists, to boost the currently low numbers of skilled and semi-skilled craftsmen. The SMEs, which have traditionally dominated the market, are expected to be marginalised to a certain extent over time and will be left with those niches in the market that are no longer interesting for the big companies (for example, those in poor rural areas with a low population density). Informants recommended inviting the Rural Electrification Authority (REA) to join the PSC, as they could be crucial in the project's further development.

A trend towards more universities' taking up courses in RE was reported. The project has documented a huge skills gap; in some countries this comes from a poorly functioning TVET system and a rapidly developing energy sector.

The entrepreneurship training that the current project offers was well-received, but the informants underlined the fact that entrepreneurship training cannot stand alone; rather it must be backed by technical skills.

The evaluation finds that the project should consider a closer cooperation with the German Agency for International Cooperation (GIZ). This organisation is a major player in the field of solar development projects and has a high level of competency in skills development.

The project has very much focussed on solar technology, however informants considered there was also a need to enter into wind energy and biomass. It remains a strategic choice; whether to concentrate on solar – where there is already good expertise and equipment available, but where there is already a rather competitive market – or to include wind energy and biomass, where the KGRTC has less expertise and equipment is not immediately available, but where there is less competition.

All informants support the project's objective on RE and underline the need for giving climate issues the highest priority. At the same time, it should also be realised for the most consumers is the price the driving force rather than environmental concerns. Informants recommended that TVET students in general are made aware of EE and are given skills to increase their efficiency in it as part of their regular curriculum.

The evaluation discussed the ToC with the project team and it was found that marketing is a missing element in the realisation of the change. Marketing is a key issue for reaching out to potential clients in the RE, EE and REI industries. The KGRTC has a strong brand as a centre for the training of highly skilled specialists for the hydro power industry and has had close to a monopoly in this field within the region. However, currently this brand could be both a benefit and a burden when entering the RE, EE and REI markets. On the one hand, they could introduce new courses – based on the above strong brand – to traditional clients. On the other hand, the same strong brand can be a burden when reaching out to new clients, who might see the KGRTC as a hydro-power-only institution. Therefore, it is recommended that they develop a strong marketing strategy that covers different platforms and sources. This is further needed because the KGRTC is moving from a protected to a very competitive market.

Two target groups for the intervention are women and youth. However, thus far mainly people with an engineering or technical background have been trained, and only one participant from rural areas has joined the training.

Much effort has been made to engage with private business and get them to partner with the project/ILO. To a certain extent, this has been successful, and MoUs/Letters of Commitment have been signed within the framework of the PPDP, even often after sometimes lengthy processes. The evaluation will discuss the partnership strategy elsewhere.

The targets set out in the project documents were optimistic and built on an assumption that it would be an easy and natural process to add RE, EE and REI courses to the existing course portfolio at the KGRTC. This has proven to be a bigger challenge than first expected, as it was necessary to create a preparedness for change at the KGRTC first. It requires a great deal of change, to move from training specialised hydro technicians from large utility companies, to owners and technicians from often new and about-to-be established SMEs and often with people who have limited prior technical insight into the RE and EE industry.

The project reports on a handful of success stories, where participants have used their new skills to train and increase awareness about RE. Unfortunately, to-date the project has not built up and implemented a tracer system to follow the participants' use of their skills in a systematic way. Only anecdotical evidence is available. Those participants who are known to have used their skills are mainly women who participated in more than one course, and who now offer basic training on solar technology to others. SMEs are still in their start-up phases. One general comment from the interviewed participants is that they feel self-confidence after the training and that the training has given them a kick start towards their own business/organisation.

Another general comment from participants is that the training was too short and covered too many subjects in few days. They felt a two-week course would be more realistic and would give a better result. The participants found some of the training rather heavy on theory (even for people with an academic background) and they would have preferred a better balance between theory and practise.

Some of the targets that are set for the project are not realistic. The evaluation suggests adjusting these, so that they are better aligned with what is achievable (see the section on "Effectiveness"). It is also recommended that the project look into the structure of the training as well we the manner in which KGRTC offers its training. A rethink of the model could provoke a short-term delay but will increase the chances for sustainability. According to all the stakeholders one key bottleneck which must be overcome is the far too high tuition fees that the KGRTC charges. Neither the SMEs, nor their employees themselves can pay the high fees, but informants reported that if an official certificate was issued it would be possible to pay a small amount for the training.

It is difficult for the owner of an SME to be away from the business for one week and most RE companies are SMEs. The participants recommended splitting the groups into those with no experience and those with some experience in the sector. It was felt that both groups would benefit from this.

The evaluation recommends that the KGRTC restructure the training; away from courses covering both RE, EE and REI, because the target groups differ. As a first move REI should be singled out. RE and EE training can partly be conducted jointly, but there is also a need for specialisation in this field. The center is already targeted on meeting these demands.

The project document was realistic if all the assumptions had been realised and there had been no negative impacts and delays from outside. It seems like the stakeholders have been involved with the project development and establishing targets to a certain extent some feel very much involved whereas others do not feel that their voice has been heard. The work of the PSC is appreciated by constituents even they express a desire to have more information about achievements. Also, it is found that there is a need for discussing an exit strategy for the project as a such is not defined in the project document.

Recommendation 2

Addressed to	**Priority**	**Time frame**	**Resources**
SESA	High	Short	None

The project team is strongly recommended to give high priority to developing an exit strategy for the project as soon as possible. An exit strategy should land the project in such a way that it ensures that the initiatives taken within the project are carried forward by the KGRTC and its potential partners.

The high tuition fees raise the question of how realistic it is, if the project is to meet the targets it set out. One EU project on RE was offered free of charge and they had more than 100 applicants, so the interest is proven. The KGRTC had difficulty gathering enough participants (14) for a course, even though most of the female participants were sponsored. Online training might be a way forward for some trainings, but it requires a systematic approach. The evaluation found that the calculations used by KGRTC for determining the fee to be charged per participant/course needs to be further developed. It was informed that there is a break even, with 14 participants paying a tuition fee of 700 USD. In the KGRTC pricing model the course is calculated with 20

participants and a fee of 830 USD with a "mark-up" of 40%. The fact that "mark-up" is removed when calculating the break-even is underlining the need for support in developing a sustainable business plan. The evaluations finds that the costs should vary, depending on type of course, its length, whether there are external/internal trainers, the level of expertise, consumables, and accommodation etc. Almost all of the informants raised the tuition fees issue as a challenge. Therefore, it is crucial to the training activities' sustainability that a solution be found. One idea would be to look into any possible ways of minimising costs and – if needed – of increasing the number of participants per course (where this can be done without harming the quality of the training). These calculations, together with suggested restructuring (see Recommendation 5), could form a basis for the development of a revised business plan.

Recommendation 3

Addressed to	**Priority**	**Time frame**	**Resources**
KGRTC	High	Long-term	Requires more insight to be able to estimate

The KGRTC is recommended to review the pricing of its courses, as current and potential clients report that it is too expensive to train at the centre, if not backed by a sponsor. The sustainability of the initiatives taken under the SESA project depend on a solution to this problem. The evaluation recommends that the KGRTC focus on REI and the highly specialised technicians for RE and EE, meaning they continue to build the profile the centre has established in hydro into the three new areas of intervention. Capacity is available locally in the SADC countries for basic training and training for semi-skilled technicians. The KGRTC could take the lead and establish a cooperation with TVET centres and other training providers in those countries, who fall under the KGRTC's umbrella. Using the *KGRTC's training materials and technics would mean this training could be offered in their respective countries at an affordable price and with the good quality that is guaranteed by the KGRTC brand.*

In Zambia all the courses provided by TEVETA have a national approach. TEVETA did not participate in development of the KGRTC's curriculum, even though they already conduct RE courses. Their role is to control that all providers meet certain quality norms, such as the availability of trainers and equipment. In all of the countries, one or more associations unite the companies – both big and small – according to their industrial profile. These associations currently circulate information about training activities to their members as well as any offers they receive from the KGRTC. The ILO made great efforts to engage with the private companies.

The associations circulate information they get from ILO and the KGRTC to their members, who then register for training. It is quite normal for bigger companies to pay for their employees' training; some have it in their Collective Bargaining Agreements (CBAs) and other can be reimbursed from government funds.

Members of the PSC found that implementation is progressing well from 2022 onwards, and that big steps forward have been made. In previous years the progress was very slow, and the studies took much longer than expected. Staff turnover also delayed implementation. The COVID 19 pandemic caused some delays, but also had a positive impact as it boosted the e-learning outreach. Key informants from both the donor and SADC found it important to remember that this should be a regional project for the whole of Africa and beyond.

There is no documentation of companies' up-take of participants, who joined the training, but it is reported to be very limited. It would be important to put a tracer system in place to verify the extent to which the graduates are in demand and, if not, why not.

The majority of trainees in the KGRTC are reported to be technicians, with one to three years of education. There is no market demand for graduates, coming directly from university. Nor is there any demand for those who followed short courses, according to the information of industry representatives. It might not be relevant for everyone to join entrepreneurship training – e.g. for engineers employed in companies – and this should be taken into account when designing the courses.

The SADC has a tri-partite structure in place. There is also a tri-partite representation in the PSC both at regional and national levels. The social partners in the energy sector are invited to the TWG. The PSC and the TWG only started functioning at the time of the project's implementation.

The current set-up in the PPDP project is oriented mainly towards business. The trade unions expressed a wish to be more visible in such PPDP projects. The workers' role in the current project is not clearly defined, and this should be changed so that workers' voices are heard.

This is a PPDP, however the involved companies have not been as enthusiastic as initially expected, and stakeholders felt that It took a long time to establish the project's identity. The evaluation finds that it is unrealistic that the project will meet its target on external fundraising from partnerships. The number of companies that have engaged with the project is not that high, but acceptable for a new concept as PPDP. There is not much content in the MoUs, however this might be because it takes a complicated juridical process to develop them and to get them cleared. Consequently, the project moved to signing Letters of Commitment, where the clearance process is faster and smoother.

The baseline study came up with four recommendations:

1) Improve the learner's database, by capturing all of the learners' necessary details and those of their host companies, such as e-mail addresses, phone numbers and a physical address for tracking purposes. This is vital if the KGRTC is to conduct tracer surveys in the future.

2) Perform extensive marketing of the RE/EE/REI courses on offer, using various platforms such as social media, internet blogs and seminars. This is expected to increase the number of learners who attend the KGRTC, thereby increasing the uptake of RE/EE/REI technologies in the SADC region.

3) There is a need to establish partnerships in different countries, with similar private institutions, as this may help to market the RE/EE/REI courses on offer, as well as the uptake of the same.

4) The KGRTC needs to explore ways to commercialise its offered courses, to ensure the sustainability of developing new courses, which in turn advances RE/EE/REI and green jobs.

These earlier recommendations are reflected in this current evaluation's recommendations. The project's implementation phase has demonstrated an even stronger need for follow-up of the baseline recommendations.

- **Effectiveness;**

The project has reported the following key achievements:

Development Objective (Goal)

The SESA project aims to: Increase the 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 uptake depends on many varied factors, wherein available skills is just one (but) important element. A basic condition, for investment in the sector, is the availability of a skilled workforce that can install and maintain the installations. It will be very difficult to measure the direct positive impact of this intervention alone.

Outcomes

The intervention strategy contains two interlinked elements, which contribute, jointly, to the achievement of the project's development objective.

Outcome 1. More power technicians, engineers and managers in the SADC region have enhanced technical capacity to apply, manage and promote the latest RE, EE and REI technologies

The outcome's KPIs are measured against case studies, however the evaluation finds that it would be more logical to use the follow-up system that is being developed to measure progress towards meeting the outcome.

The evaluation finds it very positive that the project aims to measure the extent to which the energy companies (sponsors of their staff participating in the training) are satisfied with the training. However, the project reports an achievement of 0%, due to the fact that no data are available as the tracer system is not yet in place. Therefore, a more correct picture would be to indicate "not available" rather than "0%".

In relation to this outcome, the project made the following assumptions:

(i) As a result of the COVID-19 pandemic, fiscal space is constrained and government budget has been spent on response measures to the pandemic. There is a possibility that the Government will withdraw the RE/EE promotion policies and this will have an associated effect on the private sector's willingness to invest in RE/EE in Zambia.

(ii) There is the possibility of social unrest, due to political and security deterioration, which will have an associated effect on the project's ability to operate,

(iii) The uptake of interventions and initiatives will be motivated by the project's activities wherever there is collaboration.

The evaluation does not see that any of these risks have had a negative impact on the implementation.

KPI 1.1. Number of skilled people trained through the project that initiate/promote or support RE EE and REI initiatives (Target 450)

The project reports a 2% achievement of the target, based on six trainees who indicated they were participating in RE projects: two in 2021 and four in 2022. An effective follow-up system is pending establishment in 2022. Once this is in place, the number of reports from participants using their new skills is expected to increase significantly. However, it is questionable whether the project's ambitious targets – of 200 in 2022 and 2023 – can be reached.

KPI 1.2. Energy companies satisfied that the courses are relevant to their demand (Target: At least 95% average satisfaction rate across all courses)

The project reports zero progress on this indicator. The evaluation finds that this indication is not fair to the project, as no data was collected, because the tracing system is not yet in place. It would be more correct to state: "Not available".

KPI 1.3. Number of new RE, EE and REI interventions and initiatives that have been taken up in Zambia and SADC (Target: 4)

Given the target of one intervention or initiative per year, it would be expected that such new activities would be of a certain significance. The evaluation met with the two training participants referred to in the reports. Both initiatives are rather small. One has not really started, and is still in the developmental stage, whereas the other has started training activities and has trained 72 people, in three-days courses, over two years. Both of these initiatives have good prospects as they are driven by competency and enthusiasm. The evaluation encourages the project team to follow up with participants, to find good examples of those who have developed game changing initiatives to an even greater extent.

Case story:

One female participant received a scholarship in 2021. Before that she had already established a training centre in 2020. The KGRTC's training gave her the self-confidence to move forward with her own solar energy training. It is generally felt that the training is now at a higher level than before. Since 2020, the training centre has trained 72 people, some of whom are electricians or engineers and who use the solar training as an add-on to the skills they already have. However, newcomers with no technical background also join the training. It is a three-day course with a maximum of 10 participants in a group.

The training centre (or Sustenergy Training Academy as it will be called in the future) has been recognised by the authorities (Ministry of Higher and Tertiary Education) as a VET institution, which can issue official certificates to trainees.

The training should be seen as skills upgrading, and the courses must be easy to access, notwithstanding that the trainees must be capable of installing a small solar system after the training. The centre would like to expand, but lack the funds to realise their ideas. The trainees pay USD 120 for the three-day course. The trainees would like to have a one-week course, but the price is too low, so it cannot cover for two weeks and participants cannot pay more.

From 2023 onwards, the academy will get a National Certificate, allowing them to run one-year long courses, where graduates will be certified. The price will be USD 120 per month. The academy is now working with the Ministry of Energy on the development of a number of curricula for various energy related issues.

The centre would like to work with kindergartens, to give them an understanding of environmental issued. There would also be more of a focus on recycling.

<u>Outcome 2.</u> *The KGRTC has built up its brand and standing as the region's Centre of Excellence for competitive skills training in RE, EE and RE technologies.*

In relation to this outcome, the project made the following assumptions:

(i) There is continued Government commitment and support for the growth of RE/EE through the implementation of the National Energy Policy.

(ii) There is a possibility the private sector will not be willing to contribute to the PPDP.

(iii) There is buy-in from public and private sector actors, engaged in the renewable energy, energy efficiency and regional energy pooling.

Although governments are showing increasing commitment to RE and EE, it has proven difficult for the project to engage with private business to the same extent. Less buy-in from private companies is reported.

For Outcome KPI 2.1 the same recommendation is valid as for KPI 1.4.2. It is not realistic that the target of 1,617 participants will be met.

The evaluation notes, with appreciation, that the project provides detailed gender disaggregated data under this KPI. For the purposes of future reporting, the project should consider providing the same collection of data for all KPIs, where relevant.

In the project's reporting, it is stated that the percentage of partnerships that continue after the lifetime of the project will be evaluated at the end of the project. However, the evaluation finds that it already makes sense to indicate and report on possible movement among the partnership holders now. This would enable the project management to react if any partners withdrew from the partnership.

The participants are reported to be greatly satisfied with the training provided by the KGRTC (more than 90%), so the project is well on track with these possibly ambitious targets. However, it is unfortunate that the data are not disaggregated by gender, as a possible difference here could lead the KGRTC's management to improve their integration of women even further.

One major challenge to the project is to change the mindset at the KGRTC, to be open to a commercial approach in the training activities. Under KPI 2.4, a profit for courses is indicated (7, 13 and 18% over the years respectively). Although the planned profit is relatively small, the evaluation finds it positive that the process of calculating real training costs has now become a management issue. The evaluation was informed that the commercial approach only will cover the SESA project related training activities this raises the concern that the financial basis for the sustainability of achievements towards Outcome 2 might be challenged as the continuation of RE, EE and REI training activities will depend on clients/participants payment as continued project/external funding cannot be expected.

As a follow-up to this, a solid and well-founded business plan needs to be developed for the KGRTC. A plan is required that lays out the different potential scenarios – including the changes that might be tabled by the Government of Zambia concerning the ZESCO and the consequences this might have on the centre.

Recommendation: 4

Addressed to	**Priority**	**Time frame**	**Resources**
KGRTC (ILO)	High	Short-term	Medium

The KGRTC is recommend (eventually together with the ILO) to engage an external consultant/expert with insight in and hands-on experience with running successful training centres to optimize the implementation and if needed suggest amendments to the 5-year

KGRTC Business Plan. The expert should likewise analyse possible scenarios including a possible withdraw of ZESCO funding partly or in full and the suggested structural changes as per other Recommendations in this report.

Outputs

Outputs for Outcome 1

With the assumptions:

(i) Potential international private sector partners may initially be unwilling to engage and contribute to the PPDP, because of a reluctance to enter the Southern African market stemming from the contracted global economy.

(ii) There is the possibility of a slow project start-up, due to administrative processes, which may affect the results' being achieved on time.

The delay in the beginning of the project's implementation was not due to administrative procedures, rather the clearance of MoUs took longer than assumed. Foreign companies are actively entering the SADC region, but the partners need to understand how they might benefit from a cooperation with the ILO/KGRTC on this concrete project. As the project has not yet much results to show, it could be difficult for the partners to see the potential in a partnership.

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

The 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". The evaluation finds that the KGRTC should consider and investigate the contradiction that exists, where the KGRTC's offered courses should be in high demand, but where it is very difficult for the centre to attract participants to the training.

One KPI set had a milestone that a skills' demand and supply survey be conducted, and – after some delay – this has now been tabled. As many courses were developed based on preliminary findings the KGRTC should consider reviewing the curricula, to ensure that they are in line with the demand indicated in the survey.

1.2 Desired training portfolio determined by KGRTC based on demand

The KGRTC is well on track with its development of new courses. With a current achievement rate of 76%, the evaluation is confident that the target will be met. The comment made under Point 1.1, concerning ensuring that the courses reflect the identified needs, is also valid here.

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

A total of ten (10) partnerships have been concluded, resulting in four MoUs being signed, including the KGRTC, Renewable Management Services (RMS) of South Africa, SMARTNET Energy Ltd of Zambia and Engie PowerCorner of Zambia. Other partnerships have been consolidated, using Letters of Commitment and include University of Zambia, the SADC Centre for Renewable Energy and Energy Efficiency (SACREEE), Unipower of Sweden, Solvina of Sweden and Siemens Energy AB of Sweden and Res4Africa

The project has set a target of getting contributions to the training at the KGRTC from 40 companies. To date 14 (35%) have agreed to contribute. As the course curricula are finalised, it might become easier to convince companies and institutions to support the KGRTC in this. The evaluation finds it questionable whether it will be possible to meet the target.

It was a complicated and lengthy process to develop MoUs and to get them approved internally in the ILO. Therefore, the project shifted to signing Letters of Commitment, which require less time for approval. The project has achieved 70% of the target to date, and the evaluation finds it fully realistic to expect that it will meet the target within the timeline of the project.

The project's KPI, 1.3.3, indicates a target of two million USD (40% of the total PPDP costs) to be raised by the project/KGRTC from the private sector. To date this investment is at less than 35,000 USD, not including some 50,000 USD that private companies have paid in tuition fees. The evaluation finds that the latter cannot be seen as an investment, as it is closely linked to the KGRTC's recovery of training costs. The ILO is recommended to review the target for fundraising from the private sector to a more realistic level.

Recommendation: 5

Addressed to	Priority	Time frame	Resources
KGRTC	High	Short-term	None

Similar to 1.3.3, KPI 1.3.4 also indicates a large amount (10% of PPDP budget) to be mobilised by the KGRTC, from development partners. No initiatives were reported in this field and the KGRTC is not on track to meet this, with a 0% achievement rate. The evaluation finds that the project should consider removing this indicator and concentrating on meeting KPI 1.3.3.

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

Eight courses were revised and/or designed. These included Off-Grid Solar System Design and Installation, New Market Structures Renewable Energy IPPs, Financial Modelling and Bank Financing for RE IPPs in Africa, Industrial Energy Management, Gas Turbines and Green Fuels, Entrepreneurship, Power Quality and Media Training, of which the first three were delivered.

A total of 277 people were trained in various courses, covering the three thematic areas of focus, including Renewable Energy, Energy Efficiency and Regional Energy Integration.

The project is well on track when it comes to the development of new, demand-driven courses. With 19 (76%) out of 25 planned courses, the evaluation is confident that the target can be met. However, there is a concern (as mentioned above) that some of the courses were developed on the basis of preliminary findings and therefore might not be fully in synch with the market.

The project has a target of training 1.617 women and men. The evaluation could not obtain any information about where this figure came from or on what basis it was calculated beyond what is provided in the PD. Here it is calculated on the basis of a given number of courses multiplied with the number of possible participants in each course. With only 17% of the target achieved to date, it is not realistic to expect to meet the set target. According to the project team the delay is due to be delayed identification and development of courses which in turn stemmed from the delayed conclusion of the Skills Supply and Demand & Market research assessments, and consequently delayed partnerships.

The female participation has been relatively high for the sector with 22% in 2021 and 63% in 2022. However, it should be noted that the far majority of female participants in the physical training were 100% sponsored.

Recommendation: 6

Addressed to	Priority	Time frame	Resources
KGRTC/ILO	High	Short-term	None

The KGRTC and the ILO are recommended to review their target for the number of participants, based on an analysis of what is realistically achievable with the given capacity and without lowering the quality of the training. The current figures are not seen to be realistic.

Outputs

Outputs for Outcome 2

With the assumptions:

(i) Energy companies may hold back enrolments at the KGRTC because of a reluctance to travel – distance learning capacity will be crucial.

(ii) Other RE/EE/REI training providers may pose harmful competition – strategic partnerships can alleviate that risk.

The effect of the distance to the training centre has not been investigated, but surely those costs are a major obstacle for people enrolling with the KGRTC. Almost all informants pointed out this fact during interviews.

Yes, the KGRTC will be met by competition, both in its traditional market (hydro power) and in the new emerging RE, EE and REI markets. However, to call it harmful might not be the correct wording. It could also be seen a positive, that is as encouragement to modernise and to develop and to find new ways of working.

Other training institutions, in Zimbabwe and South Africa, are offering the same type of training. The two best training centres in the SADC countries are the one in SA and the KGRTC. The KGRTC has a good reputation, and its equipment and labs on hydro are of a very high standard. However, they need to make more of an effort in marketing their training offers in the new markets, an informant stated.

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

To date, ITC-ILO has categorised and analysed all of the KGRTC's current website architecture, including determining the main gaps and benefits of the current website, and its architectural layout and conducted an analysis of the hyperlinks, connections, and flow within the website. ITC-ILO has also conducted usability tests to determine the efficiency of the specific tasks of the website, to evaluate what works and requires no change and what can be improved upon or completely changed. An improved website was launched and a final update, including a well-placed e-campus, is in the pipeline (the e-campus has been in place for some time, but has not been fully used).

The commissioned KGRTC e-Campus enhancement will support different types of activity and not exclusively e-learning. It will become a central knowledge-sharing hub, with on-line communities of practice, short promotional open educational resources and relevant KGRTC knowledge products.

ITCILO worked with the KGRTC in modernising their website, but they have been reluctant to change. Furthermore, did the COVID-19 have a negative impact on the engagement in driving the outreach forward.

The website has not really taken off until now. The ITCILO found that there should be someone responsible for it in each department, as many things could be solved organisationally.

There is a miscalculation in the current KPIs. This output has a KPI, stating that the KGRTC should increase its intake from SADC energy companies with 50% (KPI 2.1.1). The baseline indicates 450 trainees per year, so a 50% increase would mean a target of 625 trainees per year, by the end of the project. However, the yearly target is 450 for every year (even for 2024).

Recommendation 7

Addressed to	**Priority**	**Time frame**	**Resources**
ILO	Medium	Short-term	None

It is recommended to review the KPI 2.1.1, as the 50% increase is too high and milestones should show movement towards a (realistic) target.

This output has also two KPIs linked to the KGRTC's website, both of which need to be reviewed. One (KPI 2.1.2) has a baseline but no target. The achievement rate is therefore fixed to 0%, although much effort has been made in this field, not least by ITC-ILO. KPI 2.1.3 has a target but no indication of users. The baseline for this KPI should indicate the number of users who find the site user-friendly; however, this cannot be determined from the data available. The site has 17% returning users. It is recommended that the site be compared with similar sites in Zambia, to see how well-performing it is. Likewise, it would be helpful to clean the data, so that it expresses the numbers of the KGRTC's relevant users (excluding visitors from the US, and Europe etc.).

2.2. Service portfolio differentiation enhanced, e.g., by including distance-learning

The project is behind because of the delays, especially in the establishment and active use of the e-campus, which is far behind on delivery. Meeting this target would require that one training would be conducted every second week, until the end of the project. Viewed together with the challenges under 1.4.3., none of them are realistically achievable. Therefore, the evaluation recommends viewing these intervention under one KPI and setting realistic targets.

Recommendation 8

Addressed to	**Priority**	**Time frame**	**Resources**
ILO	Medium	Short-term	None

The two KPIs under 1.4.3 and 2.2 should be reviewed together and new realistic targets established, taking into account the true capacity of the KGRTC – and also the demand in the market for these courses.

2.3. Quality control and management systems upgraded

The KGRTC's trainee follow-up monitoring system was to be enhanced and digitalised. This has been developed but is not yet in active use.

KPI 2.3.1 suggests counting the number of quality assurance checks. The evaluation recommends calculating the percentage of training undergoing a quality assurance check that has a score above 75. This would give a clearer picture of performance. Delivery is behind schedule, but the evaluation finds that with some effort the target can be met.

The project is well on track when it comes to trainers trained under the trainer development interventions with an achievement rate of 92%.

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

As part of the development of the KGRTC's cross-cutting strategy, eight KGRTC staff members underwent a four-week e-Academy on Gender, inclusion, and the Future of Work.

The KGRTC has not developed the planned Gender Equality and Diversity Mainstreaming Policy. The evaluation finds it disappointing that no action has been taken in this field to date. It is understood that the project team in Lusaka has now taken the lead on a gender audit and other gender and diversity issues. The evaluation finds that there is a need to create political understanding of the need for a gender policy in the centre.

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

Twenty members of KGRTC's staff trained under the Mass Hackathon, aimed at identifying the drivers and building blocks for innovation in the KGRTC.

A communication strategy has been developed, but still it needs to be implemented in practice. The communication should be improved both internally and externally, to create a strong brand based on a strong team at the centre.

KPI 2.5.1 The indicator assesses the availability of a RE EE collaboration and communication strategy. Strategic documentation would enhance the participation of a more inclusive pool of participants, would attract corporate sponsorships and partnerships, and would contribute to awareness-raising and education about the EE, RE and REI, as well as supporting a job-rich economic transformation in Zambia and the region. The evaluation was informed that former participants meet informally in social media and that they have a Facebook group, where they exchange information and share experiences. This platform exist outside the KGRTC's framework, but it indicates an interest in continued up-skilling.

This output contains a KPI on lessons-learned and good practices. This directs the project to analyse and describe the challenges of establishing partnerships and how these have been overcome. Therefore, flagging the centre, as a regional centre of excellence, could be upheld under this output. If the KGRTC is a strong brand, it must tell the world. Some informants referred to ILO or SESA courses rather than KGRTC courses. This should be changed, so that all feel that they are in a KGRTC course. Only in this way the brand can be built up.

Often, those outside of the hydro power industry did not know about the KGRTC's training before the centre presented the SESA project to them. The KGRTC only went to Harare at the beginning of 2022 and, before that time, the Zimbabwean partners were not involved with the project. This underlines the difficult starting point where the KGRTC is entering a new market.

Many participants informed the evaluations that the current format of the training is a challenge. Therefore, it is recommended that the KGRTC look into alternative demand-driven structures. It can be difficult for SMEs to leave the business for several days, but one day of online training per week, over a longer period of time, could be feasible. The centre could also consider improving the online training by having the trainer online in the morning, followed by groupwork during the

midday hours where the trainees report back to the trainer at the end of the day. Many options are available to be considered in close consultation with the clients and potential clients.

Recommendation 9

Addressed to	Priority	Time frame	Resources
KGRTC	Medium	Long-term	Low

Review the format of the online training to make it fit the needs and possibilities of the potential participants. Many different possibilities already exist in this field and new approaches can be developed as long as the high quality remains undamaged.

The trade unions reported that tuition fees should not be a problem, and the right to education and up-skilling should be a part of the CBA. In some of the countries, the government partially reimburses companies part of the costs for the up- and re-skilling of employees.

The KGRTC has suffered from old-style management. Not all of its efforts were directed towards training and more attention was paid to the catering and accommodation business, which is where they earn their money. A new management is reported to be making more space for change.

In Zimbabwe all of the stakeholders – institutions, ministries and companies in the energy sector – are working together under one umbrella; the Renewable Energy Association of Zimbabwe (REAZ). Herein they agree on standards for equipment, training and other elements. They have a centre in Harare, but are also present in the regions. The evaluation finds that REAZ could be a strong partner for the KGRTC in developing activities in Zimbabwe. The Zimbabwean partners informed that the project that they have invited some participants several times (two-three people), but they mainly offer virtual training, so no close relation has yet been developed.

There is a natural flow in the staff turnover. The Southern African Power Pool (SAPP) and the utilities constantly need retraining, as people move around in the sector and follow promotions. Today, the utilities are buying and selling electricity in a free market, therefore they need training in this very specific type of marketing. Although the SAPP does not find it overly expensive, to send staff to the KGRTC when compared with the quality of the training, they would prefer that more practical training was offered.

Some companies see the partnership as an investment and a chance for their employees to get new information. In many, cases companies have structured in-house training. Partners informed the evaluation that SESA facilitates the training and the partners provide external lectures/trainers. The training is seen as a good forum for an exchange of experiences in the sector.

If partnerships are seen as outputs, then some achievements have been made even if it has taken a longer time and been more complicated than originally anticipated. The fact that these partnerships are a new phenomenon also plays a role for the ILO staff, where there is still not a great deal if experience in the COs about how to proceed and how to engage with private companies in PPDPs.

The KGRTC website needs some further improvement; it is not user-friendly as it stands and some work remains to be done before the partnerships are up and running. According to the baseline survey only three of the partnerships were active.

As mentioned elsewhere, the establishment of a quality assurance program and policy has taken longer than expected and is still not fully operational. The evaluation was surprised to learn that the tracer system will be out in place for the SESA project but not for the centre, as such. Today pre- and post-training questionnaires are used to check the participants' satisfaction. Here, scores are reported to be high. The trainers report that participants are quite enthusiastic on joining the training and that participants in the Business Planning for IPPs courses are coming forward with real projects. The course consists of three days of face-to-face training in the centre, which is followed by three hours of online training five times over 10 weeks. After the training is complete the trainers continue as mentors in teamwork. The evaluation finds that it is very positive that trainers bring in alternative training models to be tested. Those joining the training had different backgrounds but engineers and craftsmen with additionally solar training are very much in demand.

Although the graduates in RE/EE/REI and their host companies were satisfied with the KGRTC training and curriculum, the KGRTC needs to continue involving companies in the development of new courses to ensure that the content covers market expectations. This is an ongoing dynamic process which never ends.

The KGRTC is focused on delivering outputs. The achievements for Outcome 1 have a lower priority and when referring to Outcome 2, which is fully focused on the KGRTC the outputs are highlighted rather than the outcome. It would be important for the project team to create stronger ownership towards the outcome from the implementing partner's side.

The project has a specific target on women and youth, but as most potential participants in the training are male, with an engineering or technical background, it has proven hard to attract women and youth to the offered training. However, it *has* been possible to attract a good number of women by offering female participants scholarships, but this is not a sustainable solution.

The project does not have any specific targets on the involvement of people living with disabilities. Youth is a target group, but the KGRTC does not taken any specific action to attract young participants so far.

The skills and employment specialist in the ILO DWT in Pretoria follows and supports the project. She regularly visits Lusaka and the KGRTC. During the first half of the project the ITC-ILO provided a great deal of support and assessment in an institutional capacity, and in up-dating the website and establishing the e-campus.

- **Efficiency of resource use;**

Most of the PSC and TWG meetings so far have been online. Notwithstanding, the members feel that the platform is well-functioning, and that they are given the opportunity to come forward with proposals and ideas. However, it was felt that feedback and information from the team could be strengthened.

To date, there has been no systematic cadre development put in place for training related staff at the KGRTC. It was reported that it is always the same five-six people who come to all of activities. Similar to many other organisations, they want to have change, but no one want to change. The evaluation was informed that a new management is now in place in the centre, and this should open up space for some positive changes and for modernisation of the institution. The new strategy contains a HR development plan: from 2023, all staff in the education department will be trained every year, and a career perspective will be established.

It has proven difficult to communicate with the centre online and by phone, therefore there is a need for more physical meetings. The KGRTC needs to strengthen its communication capacity to be able to perform in the digitalised RE, EE and REI training market. It should be an urgent and high priority issue to solve this problem.

According to course participants and other stakeholders, the KGRTC needs more accommodation capacity and also more equipment and instruments for RE and EE training as well as better labs. It is essential to have state-of-the-art equipment, if the centre wants to compete in the RE and EE training market.

Five KGRTC staff were trained within the trainer development intervention. This number seems small when the huge number of different courses offered are taken into account, but the centre does rely on a strong network of highly qualified external trainers.

According to the KGRTC, ILO Lusaka helped with conducting the studies and coordination. The project identifies potential trainers and someone from the Lusaka project team is present in some 50% of the training. The evaluator has not seen evidence that such a frequent ILO presence is justified. Conversely, the evaluation finds that more presence and support in the everyday work could have a positive impact on the drive forward in implementation and for the introduction of new initiatives.

Recommendation 10

Addressed to	**Priority**	**Time frame**	**Resources**
ILO	High	Short-term	Low

The evaluation recommends the ILO to consider having more presence in the KGRTC not so much during training activities but more as coaching during the everyday work to support the change process and help secure it moves forward and that joint initiatives have a follow-up.

The RE companies report that they are sending many more people to the TVET centres training than to the KGRTC and point out that there really are many training providers at the market. TVET offers certificated training for 50 USD, whereas the KGRTC asks 800 USD for training with similar content.

The KGRTC is used to being the sole player in the hydro energy training sector. However, after they enter into the RE, EE and REI sector, they will be confronted with a large number of private and public institutions, which offer various types of training that are similar to what KGRTC's offers.

As mentioned earlier, many course participants feel that the volume of information is too high for only few days of training. It was suggested that some courses could be increased from three to five days, but given the competition in prices, it is more realistic to shave some of the content in order to optimise the courses.

The evaluation finds that the project should consider counting training days/sessions and not only the number of courses. Likewise, it would be informative to report on the number of graduates and not only the number of participants, e.g., is it normal that longer online training has a relatively high drop-out rate.

It is stated that courses are demand-driven, but at the same time it has been difficult to attract participants.

A lot of efforts are being made to establish MoUs with partners, but the baseline study reports that only three of out 14 MoUs were active. It should be analysed whether the efforts input to date has paid off. A great deal of time, resource, and effort have been invested in the partnerships, but the output has been limited when it comes to private companies' investment.

The KGRTC should do more to promote themselves and should be more visible. The SAPP circulate information about the training KGRTC offers to all the utilities. The KGRTC should conduct a survey among, to make the training more demand-driven and more relevant to the utilities. The SAPP offers to send all of the utilities a questionnaire to determine their needs.

Funds are transferred on-time and with very little bureaucracy. This is true for both Lusaka and the KGRTC. There is an implementation agreement between the ILO and the KGRTC. The principle is "No report - no money", but the KGRTC reports on time every month and the reports are of an acceptable quality. Total delivery is 57% - in 2021 it was 81% and in 2022 73%. This means the project is very much on track when it comes to spending. If nothing extraordinary happens, there will be no need for an extension of the project.

Most of the funds are used for course development and scholarships for young women. There is no limit on the cost to be reimbursed per female participant (price of travel, accommodation, and tuition fees) and some participants join several times with full payment. The KGRTC gets a lump sum per advanced course.

As it is very difficult to get participants from industry, going to universities to get female graduates to join the training is considered.

Only 41% of the participants paid for themselves or were sponsored by their employers. Projects or other institutions/associations sponsored 59%.

SESA staff is present in approximately half of the training. This to see how new partners perform and how the partnerships function in practice. The finance officer is annually conducting a financial review of the project related financial activities/documentation in the KGRTC.

The partners sometimes take equipment back with them after the training. The partners themselves estimate value of the human and technical support provided. The value is then counted as their contribution/investment as per the partnership agreement.

Recommendation 11

Addressed to	**Priority**	**Time frame**	**Resources**
ILO	Medium	Medium-term	None

It is recommended that the partnership agreement includes, or a separate document states, to whom the equipment provided by the partners belongs or to whom it should be transferred at the end of the project.

- **Impact orientation;**

No significant change can be reported to date. Two studies were conducted, to analyse the demand for skills' development. The first period of the project was mainly used to develop new courses and to study the demand for skills.

It is too early to measure impact of the project, but the project team finds that they are on the right track, as all stakeholders are onboard.

There is an increased awareness of RE, EE and REI in the SADC region and beyond, but the extent to which the project has contributed to this cannot be documented. When it comes to ILO constituents and direct and indirect beneficiaries of the project, their awareness may have been influenced by the project.

As concerns other concrete results, it is too early to assess.

The project has helped to established contact between the KGRTC and the companies working in the RE, EE and REI industrial sectors. These are industries, which are new to the KGRTC.

Normally it takes one year+ to develop a new curriculum for a course. However, for short courses of up to six-eight weeks, the KGRTC can develop them based on its accreditation with the authorities. According to interviewed stakeholders, there are enough electricians and technicians in the labour market, but there are not enough among them with knowledge of RE, especially on solar.

A program has started in both secondary schools and universities to attract more youth to STEM heavy industry professions, and there are even secondary STEM schools. ILO has a partnership agreement with STEM Africa Foundation and the KGRTC is participating in activities within this agreement.

RE-related issues are of interest to the unions, as RE will create more and newer types of jobs. According to the unions, the PSC has not discussed the disadvantages of RE; for example, those working in coal mines might lose their jobs. The unions have suggested that re-skilling should be included in the program. As the project is foreseen also to work at the policy level, it would make sense to support the unions in developing policies on RE, as a concrete supplement to the policy work, as they do on Just Transition. The EOs might also be interested in policy development.

- **Sustainability of project's outcomes and impacts beyond the project's lifespan.**

Courses developed will stay beyond the projects lifetime. The new KGRTC brand will also be there in the future if the re-branding is successful. The KGRTC's being seen as a centre of excellence in the SADC region and beyond could play a key role in the advancement of RE, EE and REI. Results from the baseline showed that the KGRTC's training may be the reason for an increased uptake of RE/EE/REI in SADC.

It was also shown that the KGRTC could benefit from partnering with private companies and developmental organisations, thereby increasing resources which could be channelled towards RE/EE/REI promotion.

The courses will be validated by the stakeholders (representatives from the different industries) as per requirement of TEVETA in general and KGRTC curriculum development process in particular.

The website will stay beyond the project. The site will need to be improved further; for example, remove "dead" pages on the site and all of those that are not up-to-date.

The e-learning platform will also be in place and there is an increasing demand for this. It should however be noted that only trainings with no practical exercises can go online in full. Therefore it can be expected that hybrid/mixed training processes will play a significant role in the future.

The KGRTC is new to having to join a competitive market. There are many institutions – from private companies to TVET centres and universities – which offer similar training and education. If the KGRTC want to either compete or cooperate for attracting participants from the whole of the SADC region, it must offer something unique, as recommended in this report.

Linked to commercialisation, it is necessary to review the fundraising strategy. It is not clear for how many years the ZESCO will continue to contribute as significantly as it does now. The outreach to both private and public TVETs in other countries is a good step forward, but it would be better to wait until the portfolio is ready before going full scale. A new regional centre is to be established in Harare, which will focus on solar energy. The KGRTC should seek an alliance with such a centre for mutual benefits.

Big Zambian energy companies, such as CBECO and ZESCO, are entering the solar energy market (CBECO will have 34 megawatts from solar by the end of the year). This could be a chance for the KGRTC to prove itself as a training provider in this sector in front of major players in the market.

In the mid- and long-term, the KGRTC should consider a module-based system of training, where students move from level to level in a systematic way. This could ensure that clients return year after year.

The question of reaching out to TVET institutions has already been raised in the PSC. It was not clear to the interviewed members what action had been taken by the project management on this issue.

The MoL is currently working with the Ministry of Tech and Science on developing a policy paper, which should help to develop training that fits the market. Today, it can take three years to get a curriculum certified. The ILO should follow this closely and follow up with the ministries and offer expert advice if needed, and should be ready to offer its assistance when the policy paper is ready and published.

The KGRTC claims to have a quality assurance system in place, but it is not clear who is involved or the format of its functioning. There are outstanding issues with the digitalisation of the training monitoring system.

If the KGRTC intends to enter a competitive market it should also develop its capacity on EE as it is also necessary to provide skills' training on EE; for example, it is important in construction and for the promotion of electric vehicles. EE is also important in urban areas. In Zambia there is a drive for certification and the government is looking into EE. The project is very much aligned to this.

There might be a push to enter into wind energy, as this is also a part of the government's strategy. However, the centre should calculate how much its resources might be stretched by several new initiatives being launched at the same time.

Regional Energy Integration is important, but the market is centralised. The KGRTC should use its brand to become the leading training institution in this field.

A lot of occupational health and safety (OHS) management is needed for solar installations. ILO has strong expertise in OHS and ILO Specialist can provide high quality support to the project. ILO experts reviewed and commented on drafts of the Financial Cost Modelling courses, and this specialised course seems to be in demand.

As part of developing its marketing strategy, the centre should study where the participants first learn about the centre and the training offered, and then it should develop its marketing/communication strategy accordingly. At a first glance it looks as if very few learn about the centre and its training from the centre's website, but rather they use it to get further information after already learning about the centre through other media.

This is important information to have when planning how to reach out to potential participants. It would also be worth developing business cases, showing how the participants use their skills once they are back in their companies.

The project has taught the KGRTC to involve more stakeholders in the delivery and development of courses and to use external experts better. There has also been a strong impact on marketing, which has been totally changed.

Almost all interviewees reported the KGRTC's courses are too expensive. The high tuition fees make potential participants hesitant to enrol, and it is especially difficult for youth and women to pay such high fees. Informants stated that it would be better if the training was conducted in the participants home countries.

Commercialisation seems possible, but firstly, it requires a readiness to skip unprofitable courses and to set tuition fees at a realistic level, which means minimising the cost per participant. However, the evaluation finds that little has been done on this in the centre's new approach and philosophy, which is why it has suggested some ways forward to increase the centre's sustainability. The KGRTC aims to become independent of grants and ZESCO.

The KGRTC became a SADC centre based on a ministerial decision; this was then supported by SIDA/ILO. There are now 10 hydro training centres in Africa – previously, the KGRTC was the only one – and some utilities are now also conducting in-house training. Because of this development, the KGRTC feels that they are being forced by the extended competition to take on new initiatives. There exists a real threat to the institution that ZESCO could stop funding the centre's training. The KGRTC has a strong brand and they can sell courses on this basis, informants found.

There are more than 300 training providers in the Zambia. According to TEVETA, all courses developed under SESA should be accessible for all. TEVETA is very happy that skills' development on solar technology is in place. Some colleges are already offering solar training.

Many institutions struggle with collecting tuition fees, public institutions included. Access to training is a major problem; for example, there is a high demand for the education level and experience required to gain access to courses.

The social partners have raised the issue of sustainability in the PSC as they are concerned about how activities will be continued after the project comes to an end. To date there is no indication whether the activities initiated within the SESA project will continue beyond the lifetime of the project. The donor has made it clear that the KGRTC should make the project sustainable. A business model and a clear business strategy must be in place before the project comes to an end. However, the project does not have an exit strategy, as for now. This mid-term evaluation presents recommendations that can help the KGRTC to reach a higher level of sustainability.

The SESA project is known, and the ILO somewhat as well, however the courses were not sold as KGRTC courses and, thereby, a possibility of branding was missed.

The centre is not yet a brand in the field of renewable energy, but they have become more visible and are often mentioned in public/official documents. They have started to flag themselves more. SESA is flagging itself less and is giving more space to the KGRTC.

ZESCO also runs another training centre (public) that works more closely with TEVETA. The KGRTC should consider aligning its work with this centre and develop a partnership, if possible.

The project will try to introduce the training of trainers in Malawi. They have also made initial contact with three TVET centres in Angola. This outreach must move faster and be complex and concrete, while flagging the KGRTC as a regional player.

Cross Cutting issues

The TU and EO are actively involved in the projects run under the Ministry of Labour, but other ministries forget to get them onboard. In some countries the social partners are in need of support to develop policies on skills and on RE and EE. These are important to them, as many jobs and business opportunities will be created within these industries in the years to come. The ILO is reported to have been very firm in requesting a tri-partite approach in the SESA project.

Gender was taken up as an issue, as there are many women working in the centre (45% of its staff), but this figure covers also those working in the hospitality department. It has not been a priority to attract more women to the education department where they comprise 20% of staff. Although the project is foreseen to have a strong gender and youth profile, the KGRTC did not meet the expectations on the development and implementation of a gender policy, and no specific initiatives were taken towards youth and people living with disabilities. The donor has not pushed for a gender agenda. The gender audit was deferred but will now be picked up by the project team. No initiatives for youth and the disabled were taken. In a few courses, the majority of participants were women. Most courses within the project are balanced, although 99% of the companies in the sector are led by men.

The ITCILO will not undertake any new initiatives but will try to get what has been initiated to function. The KGRTC is not using the tools they have been provided with. Those tools will remain beyond the project, but to date they are not being used efficiently.

Eight staff joined the Gender Academy, but the selection of participants was questionable, as they should represent different departments and different job categories within these departments. Those who participated in the Gender Academy will be trained as gender audit facilitators.

The KGRTC does not have a formulated gender policy. The gender training has not had any visible impact and the gender audit was not conducted. However, it will now be initiated under the leadership of the project team and the DWT Gender Focal Point. The lack of progress in this field is problematic.

Women's participation in training has mainly relied on sponsorships, and when the SESA project comes to an end, a part of these sponsorships will disappear, there seems to be no concern about the long-term progress nor about ensuring a higher participation of women in the KGRTC in the long term.

A stakeholders' committee is linked to the centre, which inform the KGRTC which courses/skills they need. The study will help to shape the new courses, so that they fit into the overall program.

Traditional training will still be included in the program, which supports diversification. In the next round there will be more information and needs will be better met.

Ownership of the data from the evaluation rests jointly with the ILO and the evaluator. The copyright of the evaluation report rests exclusively with the ILO. Use of the data for publication and other presentations can only be made with the agreement of the ILO. Key stakeholders can make proper use of the evaluation report, in line with the original purpose and with the appropriate acknowledgments.

Conclusion

The SESA project is progressing well towards its planned outcomes. It is too early to expect any impact on the overall objective, even though increased attention is being paid to EE, RE and REI in the SADC region and beyond. However, it is not possible to document any direct impact on this very complex development, which is affected by dozens of factors.

The project's implementation was delayed from the beginning firstly because of issues complementing the staff and a delayed baseline study. The team is however catching up but is behind schedule on meeting some of the goals which as also reported in this report were too optimistic from the design of the project. Secondly the KGRTC needed time to tune in to the new activities and to find ways of reaching out to new clients and partners.

This is a PPDP project. It has been a challenge to create partnerships, both because of the lengthy juridical procedures within the ILO and because of the lack of buy-in from potential partners, namely national and foreign private companies. Now, the ILO CO Lusaka and the project team has found solutions to most of the challenges it faced.

The delays have made it unrealistic to meet all the targets that were set out in the project documents. These targets were already optimistic at the beginning, and – at this stage – the evaluation recommends reviewing them and establishing some more realistic targets. This current report indicates the fields of intervention wherein the project would benefit from new targets; the number of participants and courses, and the investments to be provided by companies and institutions entering into partnerships.

The branding of KGRTC as a centre of excellence in the SADC, in the field of skills for energy, also needs some rethought, when compared to the original idea. The KGRTC is used to serving a very much protected market and is currently entering a much more competitive one. In this new market, the KGRTC must develop its brand and attract new clients, however this is a very difficult task, due the centre's location which implies high travel and accommodation costs.

This report suggests rethinking the set-up and using the strengths of the KGRTC; its high-level quality training with an outreach to training providers in the region. If the right action is taken, it will be possible for the project to create a sustainable basis for the KGRTC's future successful work and thereby contribute to the overall objective of the project.

Recommendations

Recommendation 1

Addressed to	Priority	Time frame	Resources

ILO	Medium	Short	Low

The ILO is recommended to investigate with EOs and trade unions the need for developing policies on to meet the challenges and benefit from the opportunities the RE, EE and REI agenda provides for the social partners. These policies could also be developed in relation to the Just Transition agenda.

Recommendation 2

Addressed to	**Priority**	**Time frame**	**Resources**
SESA	High	Short	None

The project team is strongly recommended to give high priority to develop an exit strategy for the project as soon as possible. An exit strategy should land the project in a way that ensures that the initiatives taken within the project is carried forward by KGRTC and its possible partners.

Recommendation 3

Addressed to	**Priority**	**Time frame**	**Resources**
KGRTC	High	Long-term	Requites more insight to estimate

The KGRTC is recommended to review its pricing of courses as it according to current and potential clients is fare too expensive to join the trainings at the centre if not backed by a sponsor. The sustainability of the initiatives taken under the SESA project depends on a solution to this problem. The evaluation recommends to the KGRTC to focus on REI and highly specialized technicians for RE and EE meaning to continue the profile the centre has in hydro into the three new areas of intervention. For the basic trainings and training of semi-skilled technicians' capacity is available locally in the SADC countries. KGRTC can take the lead and establish cooperation with TVET centres and other training providers in the countries which under the umbrella of KGRTC and with use of KGRTC training materials and technics can offer this training in their respective countries to an affordable price and in the good quality guaranteed by the KGRTC brand.

Recommendation: 4

Addressed to	**Priority**	**Time frame**	**Resources**
KGRTC (ILO)	High	Short-term	Medium

The KGRTC is recommend (eventually together with the ILO) to engage an external consultant/expert with insight in and hands-on experience with running successful training centers to optimize the implementation and if needed suggest amendments to the 5-year KGRTC Business Plan. The expert should likewise analyse possible scenarios including a possible withdraw of ZESCO funding partly or in full and the suggested structural changes as per other Recommendations in this report.

Recommendation: 5

Addressed to	**Priority**	**Time frame**	**Resources**
KGRTC	High	Short-term	None

As for 1.3.3 KPI 1.3.4 also indicates a large amount (10% of PPDP budget) to be mobilized by KGRTC from development partners. No initiatives were reported in this field and KGRTC is not on track to meet this with a 0% achievement rate. The evaluation finds that the project should consider to remove this indicator and then concentrate on meeting 1.3.3.

Recommendation: 6

Addressed to	**Priority**	**Time frame**	**Resources**
KGRTC/ILO	High	Short-term	None

The KGRTC and the ILO is recommended to review the target for number of participants based on an analysis of what is realistic to achieve with the given capacity without lowering the quality of the training. The current figures are not seen to be realistic.

Recommendation 7

Addressed to	Priority	Time frame	Resources
ILO	Medium	Short-term	None

It is recommended to review the KPI 2.1.1 as the 50% increase is too high and milestones should show the movement towards a (realistic) target.

Recommendation 8

Addressed to	Priority	Time frame	Resources
ILO	Medium	Short-term	None

The two KPIs under 1.4.3 and 2.2 to be reviewed together and new realistic targets established taking the real capacity of the KGRTC into account – and also the demand in the market for these courses.

Recommendation 9

Addressed to	Priority	Time frame	Resources
KGRTC	Medium	Long-term	Low

Review the format of the online training to make it fit to the needs and possibilities of the potential participants there is already many different experiences in this field and new approaches can be developed as long as the high quality is kept unharmed.

Recommendation 10

Addressed to	Priority	Time frame	Resources
ILO	High	Short-term	Low

The evaluation recommends the ILO to consider having more presence in the KGRTC not so much during training activities but more as coaching during the everyday work to support the change process and help secure it moves forward and that joint initiatives have a follow-up.

Recommendation 11

Addressed to	Priority	Time frame	Resources
ILO	Medium	Medium-term	None

It is recommended to include in partnership agreement or in separate document to whom the equipment provided by partners belongs or should be transferred to by the end of the project.

Lessons Learned and Emerging Good Practices

An important lesson learned from the current project is that change takes time and change processes need external support and coaching to get away from wishful thinking and "business as usual".

The KGRTC has worked in a very protected environment with clients being mainly large public owned utilities. This has given the centre a solid financial basis which allowed for conducting highly specialised and relatively expensive trainings. With the current project KGRTC tries to enter a new and very much competitive market, this requires a lot of changes in the institution's priorities and way of operating. Traditionally KGRTC has had a non-profit philosophy. The evaluation finds that this is a very sympathetic approach but **when acting in a competitive market the centre has at the least to cover its own expenses and accumulate some reserves for future investments.** The evaluation finds that the **KGRTC needs external professional business support and coaching to be able to introduce a new business model**, that opens for a new base of potential clients.

Another Lesson learned is that it **for ILO staff still is a challenge to work on the PPDP approach**. There is still not strong expertise and experience in working with these agreements in the ILO and a lot of resources are used to mobilize relative limited resources from the private sector. The partners join mainly to increase their visibility in the region in the beginning they were hesitant as they entered into a field where they to a certain extend committed investment without exactly knowing where the engagement would take them. It will be easier to mobilize resources when a ready-to-go training packet is available to buy in to. **The ILO should support local staff and project staff in balancing efforts and outcomes from negotiations with potential private sector investors/contributors**. It has also proven a challenge to activate the agreements and coordinate the concrete support to be provided by partners.

No Emerging Good Practises were found by the mid-term evaluation.

Annex I Lessons Learned

Mid-term Evaluation of "Skills for Energy in Southern Africa (SESA)" project

Project DC/SYMBOL: RAF/20/04/SVE
Name of Evaluator: Sten Toft Petersen, International Consultant,

Date: 08 December 2022

The following lesson learned has been identified during the course of the evaluation. Further text explaining the lesson may beincluded in the full evaluation report.

LESSON LEARNED ELEMENT	TEXT
Brief description of lessons learned (link to specific action or task)	An important lesson learned from the current project is that change takes time and change processes need external support and coaching to get away from wishful thinking and "business as usual". The evaluation finds that the KGRTC needs external professional business support and coaching to be able to introduce a new business model, that opens a new base of potential clients.
Context and any related preconditions	The KGRTC has worked in a very protected environment with clients being mainly large public owned utilities. This has given the center a solid financial basis which allowed for conducting highly specialised trainings and with that relatively expensive trainings. With the current project KGRTC tries to enter a new and very much competitive market, this requires a lot of changes in the institution's priorities and way of operating. Traditionally KGRTC has had a non-profit philosophy. The evaluation finds that this is a very sympathetic approach but when acting in a competitive market the center has at the least to cover its own expenses and accumulate some reserves for future investments.
Targeted users / Beneficiaries	The target user is the KGRTC, its staff, management and as end beneficiaries future trainees in the center.
Challenges /negative lessons - Causal factors	It has been difficult to get the process of change to take off in practise and still a lot of efforts are needed before a sustainable business plan less depending of ZESCO and donors is in place.
Success / Positive Issues - Causal factors	There is a very positive vibe surrounding RE and EE issues during the implementation the project contributes to this.
ILO Administrative Issues (staff, resources, design, implementation)	The ILO project staff should in the remaining lifetime of the project be more present in KGRTC and coach the colleagues even more than now.

Mid-term Evaluation of "Skills for Energy in Southern Africa (SESA)" project

Project DC/SYMBOL: RAF/20/04/SVE
Name of Evaluator: Sten Toft Petersen, International Consultant,

Date: 08 December 2022

The following lesson learned has been identified during the course of the evaluation. Further text explaining the lesson may beincluded in the full evaluation report.

LESSON LEARNED ELEMENT	TEXT
Brief description of lessons learned (link to specific action or task)	A lesson learned is that it for ILO staff is a challenge to work on the PPDP approach. There is still not strong expertise and experience in working with these agreements in the ILO and a lot of resources are used to mobilize relative limited resources from the private sector. It has also proven a challenge to activate the agreements and coordinate the concrete support to be provided by partners.
Context and any related preconditions	The current project did not have a ready product to present to the potential investors, they therefore to a certain extend invested in blind. It would be easier to mobilize resources if a ready-to-go training packet was available for private sector to buy in to.
Targeted users / Beneficiaries	ILO would in general benefit from more experience in working within and towards PPDP.
Challenges /negative lessons - Causal factors	The challenge is that many resources are used by project staff to convince the private sector to buy in and then there have been lengthy clearance processes in the ILO
Success / Positive Issues - Causal factors	A way has been found to avoid the lengthy clearance procedures in the ILO and some partners have agreed to provide the support as per agreement. Participants are in general positive about the trainers coming from partner organizations.
ILO Administrative Issues (staff, resources, design, implementation)	The ILO should support local staff and project staff in balancing efforts and outcomes from negotiations with potential private sector investors/contributors.

Annex II – Overview of Stakeholder, Topics and Data Collection Methodologies

Social actors interviewed	Issues to be explored	Data Collection Methodologies
ILO staff at RO and CO	Changes (outcomes) experienced related to the intervention e.g. with respect to employment policies, or constituents attitude, knowledge, skills and behaviour. Relevance and contribution of the intervention to changes identified: • In what way has the employment situation and access to skills in RE, EE and REI improvement changed • What would it take to make the current intervention even more relevant • Barriers and drivers related to the context, companies, workers, KGRTC or the intervention for using information and skills provided through the project • Experiences working in PPDP set-up	Desk review Semi-structured interviews
Government	Relevance and contribution of the intervention to changes identified: • Reasons for engaging with the ILO project • Added value by working with the ILO • Experiences cooperating with the project and its partners • Usefulness of (tri-partite) social dialogue in relation to skills development • Barriers and opportunities for engaging in skills development projects • Experiences working in PPDP set-up	Desk review Semi-structured interviews
Trade Unions leaders	Changes (outcomes) experienced related to the intervention e.g. with respect to employers' attitude, knowledge, or relations to make use of information provided by the project: Relevance end efficiency of the intervention to changes identified: • Reasons for cooperating with ILO and the social partners on skills challenges in the energy sector • Relevance of the project for workers and unions • What would it take to make the project even more relevant • Experiences working in PPDP set-up	Desk review and semi-structured interviews
Employers and their associations	Changes (outcomes) experienced related to the intervention e.g. with respect to employers' attitude, knowledge, or relations to make use of information provided by the project: • Relevance and efficiency of the intervention towards EOs	Desk review

	• Reasons to cooperate with ILO on skills and employment issues • Relevance of the project to employers (private and public) • What would it take to make the skills and knowledge provided even more relevant? • Barriers and drivers related to the context, employers themselves or the intervention for using information and skills provided through the project. • Experiences working in PPDP set-up	Semi-structured interviews
External consultants and experts	Relevance or contribution of the intervention to changes observed by experts and consultants. • The project's contribution to improving knowledge base • Interaction with other stakeholders • Improvements in government policies • Relevance of the project for employees (male and female) • What would it take to make the skills provided even more relevant? • Barriers and drivers related to the context or the intervention for using skills provided through the project	Semi-structured interviews
KGRTC	Relevance and contribution of the intervention to changes identified: • Reasons for engaging with the ILO project • Experiences cooperating with the project • Usefulness of ILO instruments and social dialogue in relation to skills development • Barriers and opportunities for using the knowledge provided in relation to institutional capacity and strategy	Desk review Semi-structured interviews

Annex III Key Questions for Mid-Term Evaluation

Evaluation Questions	Indicator	Sources of Data	Method
Relevance and strategic fit			
1) 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?	Stakeholders report that they have contributed to design and implementation	Stakeholders and social partners statements	Interviews with stakeholders and social partners
2) In hindsight, was the project design realistic and purposeful towards achieving its objectives?	Extent to which Outcomes and Objectives are met or are on their way to be met.	Project documents and informants hereunder PSC members	Desk review and semi-structured interviews with key informants
3) How well does the project complement and fit with other ongoing ILO programmes in the country?	Synergies established with other interventions	Project documents and officials engaged with other relevant interventions	Desk review and semi-structured interviews with ILO informants
4) How well does the project support national and regional commitment to relevant SDG targets and indicators?	Project reflect relevant SDGs	Project Document, National/Regional Strategic frameworks and DCPR	Desk review
Validity of design			
5) Did the project address the major issues relating to skills development in the RE and EE sub-sectors in the country?	National stakeholders incl. beneficiaries report that their needs are met	DCPR, stakeholders hereunder energy companies	Desk review and interviews with relevant energy companies

6) Is the project Theory of Change comprehensive, integrating external factors and is based on systemic analysis?	Level of use of ToC as guideline for project implementation	Project staff	Interview with project staff
7) 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?	Level of documented results and delivery of expected Outputs towards Outcomes or indications that these will be delivered within the lifetime of the project	DCPRs and project staff	Desk review and interview with project staff
8) 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?	Level of involvement of constituents, and focus on non-discrimination and just transition during implementation Crosscutting issues given priority and move towards impact noted	DCPR, constituents and ILO staff	Desk review and interviews with constituents and ILO staff
Project effectiveness			
9) To what extent did the project achieve its objectives, or it is likely to by June 2024?	Level of achievement of Objective	DCPR, project staff, CO Lusaka and donor	Desk review and interviews with project staff CO Lusaka and donor

10) Has the project followed their Theories of change? Were the development hypotheses underpinning the logical framework supported or unsupported based on project performance data?	Continued relevance of ToC	Project documents and project staff	Desk review and discussion of ToC with project staff
11) Have the quantity and quality of the outputs produced been satisfactory?	Level of use of Outputs by implementing partner, project staff and relevant stakeholders	Statistics, staff, trainees and stakeholders	Desk review, interviews with stakeholders incl. trainees
12) What outputs have not been produced and why?	N/A	Project staff and DCPR	Interviews with project staff and desk review
13) Have unexpected results (outputs and outcomes) took place?	N/A	DCPR and key informants	Desk review and interviews with key informants
14) To what extent does the project have specific targets for intended beneficiaries (women, persons with disability) in an equally way?	Non-discrimination is paid specific attention during implementation	Project documents, project staff and implementing partner	Desk review and interviews
15) Has been the project results similar by the project geographic and sector areas?	Project outreach	Project staff and implementing partner	Interviews
16) How effective were the backstopping support provided by ILO Pretoria and HQs?	Project requests for support met	Project staff and ILO specialists	Interviews
Efficiency of resource use			

17) How efficiently have resources (human resources, time, expertise, funds etc.) been allocated and used to achieve the project objectives?	Activities implemented in accordance with workplan and budget	Progress and financial reports	Desk review and interview with fin/adm staff
18) In general, did the results achieved justify the costs?	Level of achievement of Outcomes and Outputs	Financial reports and DCPR	Desk review
19) Could the same results be attained with fewer resources?	N/A	Implementing partner and project staff	Interviews with project management and implementing partner
20) Were funds and activities delivered in a timely manner? If not, what were the bottlenecks encountered?	Project implemented according to work plan	Project documents, DCPR and project staff	Desk review and interviews
21) Did the project budget make adequate provisions for addressing gender and inclusion related specific objectives/activities?	Sufficient financial and human resources allocated to cross-cutting issues and level of political priority given to these	Project Document incl. budget	Desk review Interviews with ILO specialists
22) Has an effective risk analysis and monitoring and evaluation system been established and implemented?	Validity of risks and assumptions are monitored and progress evaluated	M&E plan and project staff	Desk review and interviews with relevant M&E staff
Impact orientation			
23) Is the project working towards achieving the proposed impacts?	Level of meeting Outcomes and deliver Outputs targeted on impact	PSC members, project staff, CO Director and stakeholders	Interviews with PSC members, project staff, CO Director and stakeholders

24) Is the project strategy and project management steering towards impact?	Level of meeting Outcomes and deliver Outputs targeted on impact	PSC members, project staff, CO Director and stakeholders	Interviews with PSC members, project staff, CO Director and relevant stakeholders
25) 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?	Political priority given to cross cutting issues when promoting Decent Work. Change in practice to meet Outcomes and Objective	Project documents, ILO staff and constituents	Interviews and desk review
Sustainability of project's outcomes and impacts beyond the project's lifespan			
26) Assess whether project outcomes have been or are expected to be achieved in a sustainable manner that enable continuing beyond the project's lifespan?	Level of commitment from implementing partner and key stakeholders	Implementing partner and key stakeholders	Interviews
27) To what extent will the implementing partner be likely to continue the project results without external funding or support?	Level of commitment from implementing partner, SADC and ZESCO and key stakeholders	Implementing partner and key stakeholders	Interviews
28) Has an effective and realistic exit strategy been developed and implemented?	N/A	Project staff	Interviews
29) What need to be done to enhance the sustainability of the project, strengthen the uptake of the project outcomes by stakeholders?	Level of up-take of project Outcomes by implementing partner and key stakeholders	Implementing partner, key stakeholders and ILO specialists	Interviews with constituents, key stakeholders, implementing partner and ILO Specialists

Annex IV Documents reviewed

- INSTITUTIONAL CAPACITY ASSESSMENT OF THE KAFUE GORGE REGIONAL TRAINING CENTRE IN ZAMBIA (2019)
- Kafue Gorge Regional Training Centre STRATEGIC BUSINESS PLAN 2018-2022
- KGRTC COMPANY PROFILE
- Minutes of 1st PSC meeting, July 2021
- Minutes of 2nd PSC meeting, June 2022
- Project launch for the Skills for Energy in Southern Africa (SESA) Project, on 8th April 2021.
- INCEPTION REPORT SESA project - A Public-Private Development Partnership JULY 2021
- Report on "Consultancy services to develop partnerships for skills development in the Renewable Energy, Energy Efficiency and Regional Energy Integration sub-sector" Martin Clemensson, 1 July 2022
- Progress Report 1st January – 31st December2021, SKILLS FOR ENERGY IN SOUTHERN AFRICA
- 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
- SKILLS FOR ENERGY IN SOUTHERN AFRICA 2021-2024, Comprehensive Monitoring and Evaluation Strategy, May/2021
- ILO Newsletter April 2022 | Issue No. 09
- ILO Newsletter April 2021 No. 06
- Baseline Survey for the Skills for Energy in Southern Africa (SESA) Project
- MINUTES OF 2nd SESA PSC MEETING HELD ON THURSDAY 25th November, 2021

- Skills Development for the Renewable Energy Sector (SkiDRES), Public-Private Development Partnership – Final Evaluation

- KGRTC COMMUNICATIONS STRATEGY (KCS) for Kafue Gorge Regional Training Centre (KGRTC) March 2020

- An assessment of skills supply and demand for renewable energy, energy efficiency and regional energy integration Final report, 28th October 2022

- MARKET RESEARCH ON RENEWABLE ENERGY, ENERGY EFFICIENCY AND REGIONAL ENERGY INTEGRATION TRAINING IN THE SADC REGION UNDER THE SKILLS FOR ENERGY IN SOUTHERN AFRICA (SESA) PROJECT
  Final Report, Thomson Sinkala, Lungowe Lutangu, 24th August, 2022

- PPDP KNOWLEDGE SHARING FORUM FOR THE ILO'S PUBLIC-PRIVATE DEVELOPMENT PARTNERSHIP PROGRAMMES IN KENYA,SOMALIA, AND ZAMBIA
  NAIVASHA, KENYA, 25-28 APRIL 2022

- SIDA: ILO/KGRTC PPDP "Skills for Energy in Southern Africa" (SESA), Beredning av insats Appraisal of Intervention

- MINUTES OF 1ST SESA TWG MEETING HELD ON Tuesday12 October, 2021
- Partnership Strategy for "Skills for Energy in Southern Africa" with Action Plan for 2022

Annex V Terms of Reference

International Labour Organization

Terms of Reference

Internal Mid-term 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	International Labour Organisation Country Office-Lusaka
Technical Unit(s) responsible for backstopping the project	ILO DWT in Pretoria
Project Duration	42 Months (January 2021 – June 2024)
Project Geographical coverage	SADC Region
Funder	Government of Sweden
Budget	US$ 3,830,480
ILO P&B	Outcome 5.0: Skills and lifelong learning to facilitate access to and transitions in the labour market
Type of evaluation	Internal Mid-Term Evaluation
Evaluation timing	October - November 2022
Evaluation Manager	Lloyd Ngo

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 socio-economic 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 2022 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".*
- A total of ten (10) partnerships have been concluded resulting into a four MoUs signed including the Kafue Gorge Regional Training Centre (SESA key implementing partners), Renewable Management Services (RMS) of South Africa, SMARTNET Energy Ltd of Zambia and Engie PowerCorner of Zambia. Other partnerships have been consolidated using Letters of Commitment and include Africa GreenCo of Zambia, the SADC Centre for Renewable Energy and Energy Efficiency (SACREEE), Unipower of Sweden, Solvina of Sweden and Siemens Energy AB of Sweden and Res4Africa.
- 8 courses revised and designed. These included the Off-Grid Solar system Design and Installation, New Market structures Renewable Energy IPPs, and Financial Modelling and Bank Financing for RE IPPs in Africa, Industrial Energy Management, Gas Turbines and Green Fuels, Entrepreneurship, Power Quality and Media Training of which the first three were delivered.
- 120 Trained in various courses covering the three thematic areas of focus including Renewable energy, energy efficiency and Regional energy integration

Outcome 2

- ITCILO has so far, categorized and analysed all current KGRTC website architecture, including determining the main gaps and benefits of the current website, its architectural layout, and conducted an analysis of the hyperlinks, connections, and flow within the website. As well as conducting the usability tests to determine the efficiency of specific tasks of the current KGRTC website to evaluate what works and requires no change and what can be improved or changed completely.
- The KGRTC e-Campus enhancement commissioned and will support different type of activities and not exclusively e-learning. It will become the central knowledge-sharing hub with on-line communities of practices, short promotional open educational resources and relevant KGRTC knowledge products.
- KGRTC's trainee follow-up monitoring system enhanced and digitalized.

- As part of the development of the KGRTC cross-cutting strategy, 8 staff members of KGRTC underwent a 4-week E-Academy on Gender, inclusion, and the future of work.
- 20 members of staff for KGRTC trained under the Mass Hackathon aimed towards identifying drivers and building blocks for innovation in KGRTC

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 Programme Officer based in Country Office -Lusaka.

The Project Implementation team at KGRTC is mainly drawn from their existing structures particularly a Project Coordinator and Digital Marketing Officer, with the exception of the Administrative Officer who is recruited separately by the project . The Head of Training and Consultancy 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 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 African Regional Meeting in Abidjan 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."

The Zambia Decent Work Country Programme (2020-2023) reflects the constituents' priorities and ensures consistency with national development priorities whilst considering elements of the ILO's Decent Work Agenda for Africa. SESA will contribute to specifically Priority 2: Enhanced Economic Diversification to Create More and Better Job Opportunities for All, especially Young People - Outcome 2.1: Improved framework for development of skills that increase productivity and employability among youths, especially in the informal economy. Country Programme Outcome (CPO) ZMB126: Economic, social, and environmental transition for full, productive, and freely chosen employment and decent work.

Contribute to UNSDCF 2022-2027 Pillar one: outcome 1 Outcome 1: By 2027, all people in Zambia, including the marginalized and vulnerable, benefit from an inclusive, resilient and sustainable economy that provides equitable, diverse and sustainable opportunities for decent jobs, livelihoods and businesses.

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, will undergo through 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.

VI. Evaluation purpose, scope and clients

Purpose and objectives of the evaluation:

The overall purpose of the mid-term evaluation is to promote accountability, assess progresses, bottlenecks and strengthen learning among the ILO 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, and ILO and UN development frameworks and on skills development around energy related strategies;
2. Assess the extent to which the project has achieved or is on track or not to achieve its stated objective and expected results;
3. Identify the supporting factors and constraints that have led to them, including implementation modalities chosen (how and why);
4. Identify unexpected positive and negative results of the project;
5. Assess the implementation efficiency of the project
6. Assess the extent to which the project outcomes will be sustainable and will have a potential either positive or negative impacts in 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 the key stakeholders for future similar interventions.

Scope:

The evaluation will focus on the first 18 months of the project, namely from January 2021 to the end of September 2022, assessing all the results and key outputs that have been produced in this period.

The evaluation will integrate gender equality as cross-cutting concerns 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.

This should help to understand how and why the Project has or not achieved specific results from output to potential impacts.

Clients:

The primary users of the evaluation are the, the project implementing partner (KGRTC) as well as the ILO tripartite constituents, the ILO project technical unit, the ILO CO- Lusaka, the ILO DWT Office in 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, UNEG code of conduct for evaluations in the UN system:

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

The evaluation should consider key evaluations dimensions including Human rights(HR), the SDGs (relevant SDGs and indicator's 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). 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 manger.

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 complement and fit with other ongoing ILO programmes in the country?
   - 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?
   - Is 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. **Effectiveness**
   - To what extent did the project achieve its objectives, or it is likely to by June 2024?
   - Has the project followed their Theories of change? Were the development hypotheses underpinning the logical framework supported or unsupported based on project performance data?
   - 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, persons with disability) in an equally way?

- Has been the project results similar by the project geographic and sector areas?
- How effective were the backstopping support provided by ILO Pretoria and HQs?

4. **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?

5. **Impact orientation**
   - Is the project working towards achieving the proposed impacts? Is 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?
6. **Sustainability of projects outcomes and impacts beyond the project's lifespan.**
   - Assess whether project outcomes have been or are 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 need to be done to enhance the sustainability of the project, strengthen the uptake of the project outcomes by stakeholders?

VIII. Methodology

The evaluation will be carried out through a desk review, interviews with ILO relevant officers in ILO in Zambia, ILO DWT/CO-Pretoria, ILO Country Offices in SADC and the donor; and field visit 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 made use of, amongst others, the following methods and tools:

- Desk review of literature;

- Semi-structured interviews with key informants and stakeholders, including some of the beneficiaries of the various training programmes under the project
- Triangulation of data and sources

COVID -19 guidelines for Evaluations will be adhered to

Desk review

A desk review will analyse project and other 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.

Interviews with ILO, SESA team and project stakeholders

The evaluator will undertake group and/or individual interviews with the ILO staff of technical units who are involved with the management and implementation of the project. A first meeting will be held with the ILO Director of Lusaka Office, CTA, and with the Project Team, which includes those from KGRTC, ILO DWT/CO-Pretoria and ITCILO, for their respective outputs. After that, the evaluator will meet relevant stakeholders including members of PSC and Technical Working Group, as well as selected project beneficiaries to undertake more in depth reviews of the delivery of outputs of the respective objectives of the project.

An indicative list of persons to be interviewed will be developed by the evaluator in consultation with the project management (CTA).

This will include but not limited to:

- ILO CO-Lusaka
- ILO technical backstopping staff at DWT/CO-Pretoria
- ILO Project staff
- PSC members, TWG members and Implementing Partners (KGRTC, ITCILO)
- PPDP stakeholders
- Experts that have played a significant role in the project design and implementation (e.g. PPDP strategy development expert)

A Stakeholders workshop will be organized at the end of the exercise to validate 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.

At the beginning of the mission and after the workshop, a debriefing to the ILO Director of CO and the project team will take place.

Draft Report

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.

Final report

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 RSMEO and EVAL for final review. The evaluation report will be distributed to the key stakeholders to ensure enhance 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. Deliverables

1. Inception report (with detailed work plan and data collection instruments) following ILO EVAL Checklist 3, the report should include:
    - Description of the evaluation methodology and instruments to be used in sampling, data collection and analysis and the data collection plan mentioned above;
    - Guide questions 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. A draft and a final versions of evaluation report 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:
  - TOR
  - 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. ILO template for the Executive summary completed.

All reports, including drafts, will be written in English and follow the guidelines provided in the ILO Style Manual. 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. Management arrangements, work plan & time frame

Management

The evaluator will report to the evaluation manager Dr. Lloyd Ngo, 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 SMEO.

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 week 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.

Evaluator qualification

The independent evaluator will be selected on the basis of proven evaluation experience and meeting the following independence criteria:

- A master's degree in social sciences, Development studies, Economics, electrical engineering, Renewable energy or related graduate qualifications
- A minimum of 5 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
- Experience in qualitative and quantitative data collection and analysis, including survey design,
- A good understanding of ILO mandate and tripartite structure
- Experience in facilitating workshops for evaluation findings
- Have no previous or current involvement – or offers of prospective employment – with the ILO project or programme being evaluated
- Have no personal links to the people involved in managing the project/programme (not a family member, friend or close former colleague)
- Knowledge and previous experience on the project thematic area and the country/region will be an asset
- Fluent in spoken and written English.

The evaluator will start to work tentatively on mid-October 2022.

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	1 day
	Virtual meetings with the project team and core staff and 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, aligned with this TOR	2 day

Data collection	• Consultations with Projectstaff/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)	10 days
Draft report	A short (no more than 30 pages) report (templates and annexes not counted in the page numbers) addressing the evaluation questions.	5 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	1days
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	1 days
Total		22Days

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 for 22 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 defined by the TOR.

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

XII. Proposal Submission

Submissions of the technical and financial proposals to be emailed to lusaka@ilo.org The deadline for submission of proposals is **26 August 2022** by 17.00 hrs. Interested consultants are encouraged to send their application with the subject: **Mid-term Evaluation of the Skills for Energy in Southern Africa Project.**

Annex I - All relevant 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

Template for evaluation summary:
http://www.ilo.org/legacy/english/edmas/eval/template-summary-en.doc

Annex VI List of informants

	Region/Country	Name	Position	Organisation, Institution, Project/Programme
m	Zimbabwe	J. Mukuzunga	Acting Director	Ministry of Energy and Power Development
f	Zimbabwe	Dr. Fortunate Farirai	CEO and Founder	Sustenergy
m	Zimbabwe	Alison Chikova	Chief Engineer	SAPP
f	Zimbabwe	Karen F. Giffard	Executive Committee Member Director	Solar Industries Association So Solar
m	Botswana	Moses H. Ntlamelle	Senior Program Officer - Energy	SADC
f	Botswana	Eileen Van Erst	Focal Point	SADC Private Sector Forum
f	Botswana	Mavis A. Koogotsitse	Executive Secretary	SATUCC
f	Botswana	Charity Kiki Kennedy	Founder	Solartree
m	Zambia	Arnold Simwaba	Chair of PSC/Director	Ministryof Energy
m	Zambia	Mulasikwanda	Assistant Director	Ministry of Energy
m	Zambia	Moffat Bili	Director Planning and Research	Ministry of Labour and Social Security
m	Zambia	Geofrey Mbewe	President	Zambia Congress of Trade Unions
m	Zambia	Harrington Chibanda	Executive Director	Zambia Federation of Employers
m	Zambia	Matanda Mwewa	President	Solar Industry Association of Zambia (SIAZ)
f	Zambia	Khdija Mvula Sakala	Assistant Director	Ministry of Technology and Science - Department of Vocational Education and Training
f	Zambia	Mukabanji Mutanuka	Head of Minigrid	IPP Engie PowerCorner
f	Zambia	Ms Phyllis Kasonkomona	Director for Planning	TEVETA
m	Zambia	Michael Tarney	Chairperson	Zambia Renewable Energy Association (ZARENA)
m	Italy	Karl Pfeffer	Senior Programme Officer	ITC-ILO

	Region/Country	Name	Position	Organisation, Institution, Project/Programme
f	Italy	Nicole Victoria Pallares Ferrer	Junior Programme Officer	ITC-ILO
m	Zambia	George Okutho	Director	ILO CO Lusaka
m	Zambia	Llyod Ngo Chabala	CTA	ILO SESA
f	Zambia	Musoli KASHINGA	National Project Coordinator	ILO SESA
m	Zambia	Simon Longa	NPO M&E	ILO SESA
m	Zambia	Malambo Simulyampondo	Financial Officer	ILO SESA
m	Zambia	Brian Makungo	HTC	KGRTC
m	Zambia	Mpezilwe Simukoko	SESA Project Coordinator	KGRTC
m	Zimbabwe	Adam Öjdahl	Project Focal Point	SIDA
f	Pretoria	Alice Vozza	Skills Specialist	ILO DWT Pretoria

Total informants: 29

Female: 11

Male: 18

Annex VII: Results against Indicators

Outcomes/Outputs	Performance Indicator	Target	Mid-term Evaluation Findings
Outcome 1. More power technicians, engineers and managers in the SADC region have enhanced technical capacity to apply, manage and promote the latest RE, EE and REI technologies. awareness, coordination within skills sector and complementarities with other RE/EE initiatives enhanced.	KPI 1.1. Number of skilled people trained through the project that initiate/promote or support RE EE and REI initiatives KPI 1.2. Energy companies satisfied that the courses are relevant to their demand KPI 1.3. Number of new RE, EE and REI interventions and initiatives that have been taken up in Zambia and SADC	450 people initiate and promote RE, EE and REI At least 95% average satisfaction rate across all courses 4 new interventions on RE, EE and REI	Because of lack of tracer system only a very small number has been identified till now. No data yet as per 1.1 The project is counting initiatives which rightly should be under 1.1. The evaluation finds that 1.3 should report on interventions with a potential significant impact – game changers.
Output 1.1 RE/EE/REI skills demand survey among energy companies in the region completed	KPI 1.1.1. The final RE/EE/REI skills demand and supply survey report	1 report	Report is available and appreciated by stakeholders.
Output 1.2 Desired training portfolio determined by KGRTC based on demand	KPI 1.2.1. KGRTC develop a RE/EE/REI Skills development curriculum	25 new curricula developed	The project is well on track and no new initiatives are needed.
Output 1.3 Partners identified and MoUs established as part of the Public-Private Development Partnership	KPI 1.3.1. Number of Private and public sector institutions that contribute to KGRTC's new training programmes in RE/EE/REI	40 signed partnership agreements are being implemented	Even the project is behind schedule it is realistic to meet the target especially as more courses can be offered and potential partners better understands in what they are investing.

Outcomes/Outputs	Performance Indicator	Target	Mid-term Evaluation Findings
	KPI 1.3.2. Agreements and MoUs signed with private energy companies	20 signed partnership agreements signed with private energy companies	The project is well on track with 70% of target met. Challenge will be to secure the implementation of the partnership agreements.
	KPI 1.3.3. Mobilised investment from the private sector as a percentage of total PPDP cost	40% of total PPDP cost mobilized from private sector	The target is too optimistic and needs to be revised.
	KPI 1.3.4. Mobilised additional funding / contributions from development partners	10% of total PPDP cost mobilized from development partners	No progress reported and not realistic to meet target. The evaluation recommends concentrating efforts on meeting KPI 1.3.3
Output 1.4 New RE/EE/REI training courses developed, marketed, and delivered	KPI 1.4.1. New demand driven RE/EE/REI courses developed by KGRTC	25 demand driven RE, EE and REI courses developed	The project is well on track. However not clear to what extend demand driven.
	KPI 1.4.2. Women and men trained per type of course and in total by KGRTC and in RE/EE/REI during the project period	1.617 women and men trained	The target too optimistic needs review
	KPI 1.4.3. Number of training sessions in RE EE REI courses	75 courses	To meet the target another 57 courses are to be conducted this is too optimistic. The target needs review.
Outcome 2 KGRTC has built its brand and standing as the region's Centre of Excellence for competitive skills training in RE, EE and RE technologies.	KPI 2.1. Number of participants reached through training activities (face to face, distance and blended), disaggregated by sector and sex	1,617 training participants: 25% Female & 75% Male	As per 1.4.2. – these two KPIs should match each other.
Outputs for Outcome 2	KPI 2.2. % of KGRTC's Partners established under the PPDP that	60 % of partners	The project plans to measure by end of project, but the evaluation suggest to

Outcomes/Outputs	Performance Indicator	Target	Mid-term Evaluation Findings
	continue the collaboration with KGRTC at the end of the three-year project		measure and follow the development already now and with 100% project is well on track.
	KPI 2.3. Participants satisfied with overall quality of the training offered by KGRTC	95 % of the participants	Project is well on track, but measurement could be improved to give better and more detailed information.
	KPI 2.4. KGRTC offers courses commercially and recover costs	Overhead per year: Year 1 = 7%, Year 2 = 13%, Year 3 = 18%	The project needs to work more with implementing partner on calculation of costs and overhead.
Output 2.1 Customer base for EE, RE and REI increased	KPI 2.1.1. KGRTC increases its intake of learners from energy companies in SADC	625 learners per year (50% increase from 450)	There is an error in the set target as it in documents sets a target of 450, but this would be a 0% increase.
	KPI 2.1.2. Number of visits to RE/EE/REI training courses pages on KGRTC website	TBD	Can be defined when new website is up running.
	KPI 2.1.3. Number of users of the KGRTC website that visit the RE/EE/REI training course pages who rank the website as user friendly and information on RE/EE/REI sufficient/relevant	TBD	As per 2.1.2
Output 2.2 Service portfolio differentiation enhanced, e.g., by including distance learning	KPI 2.2.1. Numbers of online/distance courses introduced	39 new online courses	The project is behind schedule and it is not realistic to meet the target as this would require a new course every two weeks – se also 1.4.3

Outcomes/Outputs	Performance Indicator	Target	Mid-term Evaluation Findings
Output 2.3 Quality control and management systems upgraded	KPI 2.3.1. Number of regular quality assurance checks conducted on the delivery of training for all new courses in RE EE and REI that are scored above 75%	X trainings with quality score above 75%	The project is recommended to change subject for measurement to number of trainings with a score over 75%.
	KPI 2.3.2. Number of KGRTC training staffs that are trained under the trainer development interventions	26 trainers trained	Well on track to meet target.
	KPI 2.3.3. Number of trainees that are reached through the KGRTC Trainee follow-up monitoring system	450 trainees monitored after the training concluded	Delayed because tracer system not in place.
Output 2.4 Cross-cutting strategy drivers developed and implemented	KPI 2.4.1. KGRTC's Gender, equality and Diversity Mainstreaming Policy developed	1 policy document developed	The policy document has not been developed; it will require project management intervention to meet the target.
Output 2.5 Collaboration and communication for RE/EE	KPI 2.5.1.The Project/KGRTC's Collaboration and communication strategies on RE and EE developed	1 strategy document developed	The document delivered it now needs to be translated into practise.
	KPI 2.5.2. Good practices and lessons in RE EE and REI documented and shared	EGP and LL reporting forms provided and shared	The project reports some learnings.