GUIDELINES FOR THE ESTABLISHMENT OF AND PARTICIPATION IN RENEWABLE ENERGY CREDIT FACILITIES

Prepared for:

Enhancement of a Sustainable Regional Energy Market – Eastern Africa, Southern Africa, and Indian Ocean (ESREM: EA-SA-IO)

Funded by the European Union

Prepared by:

In association with:

Multiconsult ECONOLER

CPCS Ref: 19479
May 23, 2022

www.cpcs.ca

Consultancy services to implement harmonised regulatory/ technical frameworks and synthesised renewable and energy efficiency strategies in the EA-SA-IO region

This assignment is supporting the Common Market for Eastern and Southern Africa (COMESA), East African Community (EAC), Intergovernmental Authority on Development (IGAD), Indian Ocean Commission (IOC), and Southern African Development Community (SADC), in their collective efforts to promote the development of a sustainable regional energy market in the Eastern Africa, Southern Africa, and Indian Ocean (EA-SA-IO) Region.

Guidelines

This document provides policy makers with guidelines for the establishment of and participation in renewable energy credit facilities.

Acknowledgements

The CPCS Team acknowledges and is thankful for the invaluable input provided by the ESREM Project Team, as well as the beneficiary Regional Economic Communities and their respective member states.

Opinions and Limitations

Unless otherwise indicated, the opinions herein are those of the authors and do not necessarily reflect the views of COMESA, EAC, IGAD, IOC, or SADC.

CPCS makes deliberate efforts to validate data obtained from third parties, but CPCS cannot warrant the accuracy of all data.

Confidentiality Statement

These guidelines may contain material which is deemed commercially sensitive and/or confidential. **This document may not be shared with third parties without the prior written approval of ESREM**.

Contact

Questions and comments on these guidelines can be directed to:

Anirudh (Rudy) Gautama
Project Manager
E: agautama@cpcs.ca

Table of contents

Acronyms / Abbreviations

AFD	Agence Française de Développement (the French Development Agency)
EA	Eastern Africa
IO	Indian Ocean
KfW	Kreditanstalt für Wiederaufbau (the German Development Bank)
kWh	Kilowatt-hour
ESMAP	Energy Sector Management Assistance Program
ESREM	Project on Enhancement of a Sustainable Regional Energy Market in the Eastern Africa, Southern Africa and Indian Ocean (EA-SA-IO) Region
SA	Southern Africa
TDB	Eastern and Southern African Trade and Development Bank
AFD	Agence Française de Développement (the French Development Agency)

1 WHY CREDIT FACILITIES ARE IMPORTANT FOR THE EXPANSION OF RENEWABLE ENERGY

1.1 Objectives of the guidelines

These credit facility guidelines are prepared as part of the European Union-funded Project on the Enhancement of a Sustainable Regional Energy Market in the Eastern Africa, Southern Africa and Indian Ocean (EA-SA-IO) Region (ESREM). They build on a working paper submitted in January 2021 (ESREM, 2021).

The objectives of the guidelines are to:

- Provide policy makers with a broad understanding of how credit facilities can help address existing barriers to renewable energy expansion in the EA-SA-IO region (Part I);
- Provide guidance on the design of credit facilities (Part II); and
- Address key concerns for countries in the EA-SA-IO region wishing to establish a renewable energy credit facility or to join an existing one (Part III).

1.2 Barriers to renewable energy expansion

The EA-SA-IO region has excellent renewable energy resources and following drastic reductions in the levelised costs of solar and wind energy as well as energy storage over the past decade, these technologies are emerging as least-cost options. Even so, the deployment of renewable energy remains slower than in other parts of the world (IRENA, 2020).

A recent report by KfW, GIZ, and IRENA (2021) identifies seven barriers on the path to low-carbon energy sectors on the African continent. These include a lack of cost-reflective tariffs and inadequate regulatory frameworks. The barriers may result in high real or perceived investment risks, which, in turn, leads to credit market failures manifested through excessively high capital costs - or even an inability to raise finance. These risks are more pronounced for renewable energy than many other investments because the projects tend to be different in nature than the projects that local financial institutions typically lend to. Specifically, they tend to have higher upfront costs and longer payback periods. The regulatory environment of the power sector is also more complex than for many other industries and may not be well understood by local financial institutions. For larger renewable energy projects, project finance is more common, and lenders accustomed to balance-sheet financing may shy away.

Well designed and implemented renewable energy credit facilities can help address these barriers and increase lending to renewable energy projects, as explored in the subsequent section.

1.3 The role of credit facilities in enhancing deployment of renewable energy

The overall purpose of any credit facility is to make financing for renewable energy projects more readily available by addressing one or more credit market failures, such as i) a lack of industry knowledge amongst financial market participants, ii) high real and/or perceived risks, and iii) a lack of liquidity (World Bank, 2016).

A credit line is a loan that is disbursed by a funder to one or more intermediary financial institutions for them to on-lend to end-borrowers[1], targeting projects that would otherwise not have been implemented (generally referred to as additionality).

A credit facility consists of one or more credit lines but can also include supportive design elements.

Fundamentally, there are three types of participants in a renewable energy credit facility:

- *Credit facility funder.* Typically, development finance organisations looking to unlock the potential for renewable energy in developing countries by leveraging private capital.
- *Intermediary financial institution.* Typically, local financial institutions looking for increased access to capital, or to establish or expand a renewable energy lending portfolio.
- *End-borrower.* Typically, investors, industrial and commercial consumers, or households looking for increased access to credit to fund renewable energy investments.

Depending on the prevailing level of knowledge and understanding of renewable energy investments in the market, many credit facilities augment their credit lines with specific measures to address identified barriers and/or risks. Measures typically range from the provision of technical assistance to build capacity among stakeholders or to improve the legal and regulatory environment, to guarantee schemes.

Finally, many credit facilities also require compliance with environmental and social safeguards. In addition to ensuring that the participating projects comply with international standards, this also helps build an expectation of and culture for compliance in the market.

[1] Some credit facilities will also have wholesalers that provide funding to several intermediary banks.

2 DESIGN ELEMENTS FOR RENEWABLE ENERGY CREDIT FACILITIES

Based on a review of existing credit facilities, ESREM (2021) introduces a framework consisting of several design elements that need to be addressed in the establishment of a credit facility. These are outlined in the following section, accompanied by actionable recommendations to policy makers and authorities across the EA-SA-IO region, who are either considering the establishment of a credit facility or joining an existing facility:

1. Identify need and set objectives
2. Establish eligibility criteria that ensure additionality
3. Ensure adequate response to capital market failure
4. Create a sound structure for risk-sharing
5. Identify suitable intermediary financial institutions
6. Ensure continuous monitoring

The financing of credit facilities, including possible sources of funding, are discussed in section 3.1, along with an overview of existing credit facilities that are active in the region.

2.1 First design element – Identify needs and set objectives

Before deciding to create a credit facility or join an existing platform, policy makers need to identify a need - that is, whether existing credit market failures are holding back the deployment of renewable energy in the country. Further, it is important to understand how these market failures impact the types of renewable energy generation that policy makers wish to promote in order to address national priorities and policies (e.g. on-grid versus off-grid and dispatchable versus variable).

These assessments will inform the establishment of credit facility objectives. Clear and well-defined objectives are the foundation of successful credit facility design - guiding, for example, the development of eligibility criteria. The following are examples of credit facility objectives:

- Increasing investments in renewable energy in given geographical regions.
- Increasing rural electricity access rates by means of renewable energy mini- and off-grid solutions.
- Demonstrating the feasibility of one or more specific renewable energy technologies in the market.
- Reducing greenhouse gas emissions.

It is important to note that these objectives in some cases may be conflicting. They should therefore be ranked upfront, based on national needs and priorities.

Authorities should:

- Determine whether there is a need for a credit facility by identifying specific credit market failures that are holding back renewable energy deployment.

- Define clear credit facility objectives and rank them in accordance with national policies and priorities.
- Review existing credit facilities to identify ones that could meet the stated objectives and explore options for joining one of them rather than establishing a dedicated facility. Available options are further explored in section 3.1.

The remainder of these guidelines are concerned with the design of new credit facilities. It is, however, also highly relevant for authorities that wish to assess whether existing facilities meet the needs of their national context.

2.2 Second design element – Establish eligibility criteria that ensure additionality

The eligibility criteria for projects under a credit facility may be the primary factor determining whether the loans turn out to be additional or not. It is therefore important that they are well aligned with the agreed objective(s). This helps ensure that scarce resources are prioritised for the right types of projects.

In addition to the agreed objectives, the eligibility criteria should also take into account current market conditions, ensuring that relevant market failures are addressed. A non-exhaustive list of potential eligibility criteria is presented below:

- *Geography.* Depending on the objectives set by policy makers and available resources, a credit facility may target one or more countries or even certain regions of a country.
- *Renewable energy technologies.* A credit facility may be technology-neutral, or target given renewable energy technologies, for example, to prove their viability in the country or region.
- *Maximum loan size or maximum share of investment.* A credit facility that targets large projects will potentially be cheaper to monitor, but the limited number of loans being processed may also limit the impact in terms of creating a sustainable credit market for renewable energy projects. This can be addressed by capping the maximum loan size.
- *Size of project.* Limiting the size of projects that are eligible will distribute the risk and limit the credit facility´s exposure to failure of individual projects. By lending to several small projects instead of a few larger ones, the intermediary financial institution will also benefit from learning curves by repeating lending procedures.
- *On-grid or off-grid projects.* This decision rests directly on the credit facility objectives (e.g. access expansion in rural areas, or increased share of renewable energy in the national grid).
- *Turnover or number of employees.* Some credit facilities have requirements for the turnover or (minimum/maximum) number of employees an eligible end-borrower must have, targeting for example, small and medium sized enterprises.

Authorities should:

- Draft eligibility criteria that are aligned with the credit facility objectives, address the identified credit market failures, while ensuring operational integrity and efficiency.
- Consult relevant stakeholders, including potential intermediary financial institutions, potential end-borrowers, and electricity utilities on the proposed eligibility criteria, to ensure that they address genuine credit market failures holding back renewable energy deployment.

2.3 Third design element – Ensure adequate response to capital market failure

The concrete response to capital market failure for eligible renewable energy projects should be tailored to the prevailing conditions in each country. It is important to note that for a credit facility to fulfil its objective(s) by changing market behaviours, the benefits need to flow through to end-users. This must be taken into account in credit line design, to ensure that the intermediary banks do not retain the full benefit.

The table below presents the most common instruments.

Incentive	Benefit
Concessional financing terms	Concessional financing is at the core of any credit line. It can come in many forms, including, but not limited to: • Lower interest rates • Longer tenors • Grace periods • Lending up to 100 percent of the investment For a credit facility to meet its objective, it must incentivise the end-borrower. It is therefore important to ensure that the favourable terms provided to the intermediary financial institution fully or at least partly are passed through to the end-borrowers, even though it might be tempting for an intermediary financial institution to keep much of the profits/benefits.
Incentive payments	Incentive payments can be given out to intermediary financial institutions upon completion of agreed milestones and present a motivation to continually comply with credit line requirements after loan disbursement.
Technical assistance and capacity building	Technical assistance to and capacity building of intermediary financial institutions and end-borrowers are in many cases found to be key in establishing viable credit facilities, with a long-term positive impact on the investment environment. Examples of such support includes development of environmental and social risk management frameworks in the intermediary financial institutions, or funding of best-practice feasibility studies for potential end-borrowers. Depending on the identified needs in the market, technical assistance can take various forms, including market studies, support in project preparation, energy audits, administration, monitoring, investment proposal preparation, loan application assistance, and pipeline development. The support is often grant based - sometimes disbursed from a different institution than the main credit line funder.
Guarantees	There are some particularly prevalent risks associated with renewable energy investments in Africa. Guarantees can help to reduce the risk for investors and lenders in individual projects. This can make it possible to achieve financial close even in the face of high perceived risks, and in many cases even reduce financing costs. This issue is further explored under design element four, which deals with risk sharing.

Authorities should:

- Analyse potential intermediary financial institutions and end-borrowers to identify the incentives that are best suited to address the capital market failure and unlock lending.
- Consult stakeholders, in particular potential intermediary financial institutions and end-borrowers in order to refine potential incentives for the credit facility.

- Include provisions in the credit facility design to ensure that favourable lending terms trickle down to the end-borrower.

2.4 Fourth design element – Create a sound structure for risk-sharing

Setting up an appropriate sharing of risk between the funder, intermediary financial institutions and the end-borrower is important in order to align the incentives of stakeholders with the objectives of the credit facility.

In a guidance note from 2016, the World Bank presents the most common ways they structure credit facilities (World Bank, 2016). Critically, the intermediary financial institutions carry the risk of getting paid back from their respective end-borrowers. Further, the World Bank aims to secure governmental guarantees for the funds they put in, and the intermediary financial institutions have to pay guarantee fees to the respective governments for this service. In order to further reduce their own risk, the World Bank will also consider obtaining preferred creditor status from the intermediary financial institution[2].

The European Investment Bank underlines in their product description that the risks linked to on-lending to end-borrowers is carried by the intermediary financial institution, while they accept the risk linked directly to the intermediary financial institution (EIB, 2017).

A number of supporting design elements can be put in place to allocate risk, including local currency lending and guarantees. ESREM (2021) identifies several existing guarantee facilities whose services may be embedded in a credit facility.

Irrespective of how risk is shared between credit facility participants, it is, as outlined under the fifth design element, critical that the intermediary financial institutions are equipped through capacity building and technical assistance to understand and handle typical risks in renewable energy projects.

Finally, compliance with national legislation and international best practice for environmental and social issues is a critical part of risk mitigation for medium- and large-scale renewable energy projects. It is therefore important that these aspects are embedded in the eligibility criteria and monitored closely during construction and operations.

Authorities should:

- Ensure that risk sharing arrangements align the incentives of different stakeholders with the objectives of the credit facility.
- Identify and embed design elements that can improve risk sharing arrangements, such as local currency lending or guarantees.
- Require that compliance with relevant environmental and social safeguards is embedded in the design.

2.5 Fifth design element – Identify suitable intermediary financial institutions

Typical intermediary financial institutions include national development banks and local commercial banks. Selecting strong and financially stable intermediary financial institutions reduces the risk of loan management problems and increases the chance of lasting market

[2] Preferred creditor status means that a certain institution is first in line when debt is to be repaid. This reduces the risk of nonpayment.

changes resulting from the credit facility. The following criteria are proposed for selection of intermediary financial institutions:

- *Creditworthy.* Managing its existing loans in a financially sustainable manner.
- *Good risk monitoring.* Able to monitor and assess risks related to their investments in an acceptable manner.
- *Interested in embracing new market segments.* The credit line will only be additional if the intermediary financial institution uses the opportunity to enter new market segments. If the intermediary financial institution is not motivated to do so, any technical assistance directed at increasing its capacity to lend in these markets may not be taken full advantage of, and there is increased risk that the institution will discontinue lending to renewable energy projects once the credit line dries up.
- *Internal structure which allows for learning and change.* A culture where employees are willing to learn and where learning processes are in focus.

It is important to formulate clear selection criteria and conduct due diligence of the potential intermediary financial institution to ensure that these criteria are met. For institutions that currently do not meet the requirements, institutional development plans may be prepared to support their evolution (World Bank, 2016).

Authorities should:

- Establish clear eligibility or selection criteria for intermediary financial institutions.
- Assess a longlist of potential intermediary financial institutions that can act as the on-lender based on the eligibility criteria.
- Conduct a gap assessment if a sufficient number of qualified financial institutions does not exist, and as appropriate, prepare an institutional development plan and implement it.

2.6 Sixth design element – Ensure continuous monitoring

Monitoring of credit lines during and after implementation should balance the need to collect important information with the risk of overburdening intermediary financial institutions or end-borrowers. Incentive payments should be considered to compensate for the added burden of compliance/reporting and incentivise the use of the credit line.

Further, it is important that monitoring requirements are clear and feasible for the intermediary financial institution and other stakeholders. If two or more funders are co-financing a credit facility, the requirements should be harmonised between them. Such harmonisation may also facilitate the comparison of results between credit lines.

The list of issues to be monitored may include:

- General financial parameters such as i) capital adequacy - the ratio of total assets over total capital, ii) profitability measured as return on assets and return on equity, iii) portfolio quality indicator which is the non-performance loans ratio and/or the portfolio at risk;
- Key performance indicators related to the impact of the credit line on its objectives, such as emission reduction, access expansion, and quality of loan application reviews; and
- Credit facility additionality.

Finally, it is important that a realistic monitoring plan is put in place from inception to allow the required data to be collected.

Authorities should:

- Develop a monitoring and evaluation framework early on, ideally at the design stage, covering financial performance, achievement of the credit facility objectives, and additionality.
- Confirm and refine the monitoring and evaluation framework with potential intermediary financial institutions and end-borrowers to ensure that they find it practical.
- Establish realistic monitoring routines that ensure continuous follow-up of the credit facility and its performance, and consider incentive payments for intermediary financial institutions that comply.

3 KEY CONCERNS FOR COUNTRIES IN THE EA-SA-IO REGION

Further to the credit facility design elements outlined above, there are a few key concerns that countries across the EA-SA-IO region need to consider when assessing how best to address credit market failures that hold back deployment of renewable energy.

3.1 Creating a new credit facility or joining an existing one

Several credit facilities are currently active in one or more countries across the EA-SA-IO region. Clearly, joining one of these may come with lower transaction costs and require fewer resources for the individual countries than designing a new credit facility. Further, joining an existing facility may reduce the lead-time to disbursement.

However, the context and needs will differ widely across the region. Therefore, a “one-size-fits-all” approach to credit facilities should be avoided. It is important that countries conduct a thorough review of the credit facilities they consider joining, to ensure that the design is apt for meeting the objectives set by policy makers. Countries could also engage the funders of their preferred credit facilities to find suitable adaptations to national needs and conditions.

Annex A to these guidelines provides a non-exhaustive overview of selected credit facility funders that are active in the region, including the World Bank Group, Agence Française de Développement (AFD), and the German Development Bank - KfW.

3.2 Ensure that intermediary financial institutions have the required resources and commitment

All too often credit facilities fail because the intermediary financial institutions lack the resources and/or commitment required to fulfill their role (ESREM, 2021). It is important to recognise that most national development banks and commercial banks across the region will require capacity building and technical assistance in order to develop internal systems for handling typical risks in renewable energy projects and conduct the required due diligence of potential borrowers. As such, a capacity assessment of the potential intermediary financial institution should already be made during the design stage (see section 2.5) – and may be part of the requirements of the funder. This will allow for an early identification of potential shortcomings and may result in the development and implementation of an Institutional Development Plan for the institution to act as an on-lender. Governments should ensure that the required resources are set aside for this assistance.

3.3 Creating a transparent and inclusive design process

Finally, it is important to ensure that the process of establishing or joining a credit facility is conducted in a transparent manner with the appropriate stakeholder consultation throughout to ensure that the concerns of stakeholders are addressed, and that the purpose and relevance of the credit line facility is clear all involved. This is the only way to i) guarantee that key stakeholders support and have the necessary buy-in for a successful implementation, and ii) ensure that the credit facility design actually reflects the needs in the market.

Appendix A REFERENCES

EIB. (2017). Support to the Financial Sector: Lines of Credit to Financial Intermediaries, European Investment Bank. https://www.eib.org/attachments/country/acp_fs_lines_of_credit_to_financial_intermediaries_en.pdf

ESREM. (2021). Working paper on Renewable Energy Incentive Mechanisms. Unpublished.

IRENA. (2020). Renewable energy statistics 2020. https://www.irena.org/publications/2020/Jul/Renewable-energy-statistics-2020

KfW, GIZ & IRENA. (2021). The Renewable Energy Transition in Africa. https://www.irena.org/publications/2021/March/The-Renewable-Energy-Transition-in-Africa

World Bank. (2016). Investment Project Financing -Financial Intermediary Financing.

Appendix B OVERVIEW OF SELECTED CREDIT FACILITIES ACTIVE IN THE REGION

The table below provides an overview of selected credit facilities that already are active in the region, and their funders. It is important to underline that the list is non-exhaustive.

Initiative	Main Funder	Short description of program	Further information
IDA Credit Lines	World Bank / International Development Association (IDA)	The World Bank / IDA are extending credit lines to certain countries in the region to support green investments. Examples include the TEDAP Credit Line in Tanzania and the Electricity Service Access Project Off-Grid Loan Facility in Zambia.	ESREM (2021)
Scaling solar	World Bank	Scaling solar provides funding for selected credit lines in the region. For example, the Development Bank of Ethiopia has created a foreign exchange credit line that can be accessed by the private sector to import qualifying products, including pico-photovoltaic lanterns and solar home systems. Microfinance institutions can also access this line of credit to provide loans to households seeking to make a purchase of a qualified product.	https://www.lightingafrica.org/what-we-do/access-to-finance/
KfW renewable energy credit facilities	KfW (the German Development Bank)	KfW´s main credit facility for renewable energy is the Renewable Energy Standard Program. It covers all renewable energy technologies, and up to 100 percent of the investment costs eligible for financing. In South Africa, the credit facility ensured a long-term credit line EUR 50 million to the Development Bank of South Africa for financing the Jeffreys Bay Wind Farm in the Eastern Cape province, with a capacity of 138 MW.	https://www.international-climate-initiative.com/en/details/project/credit-line-for-the-promotion-of-renewable-energies-and-energy-efficiency-in-southern-and-eastern-africa-08_I_034-154
Sunref Programme	Agence Française de Développement (AFD)	Sunref is a program established by AFD in 2007 to provide credit lines and technical support to local financial institutions and potential investors worldwide. The program has specifically been active in countries such as Kenya, Seychelles, Mauritius, Comoros, Madagascar, and South Africa. AFD has allocated 2,5	ESREM (2021)

		billion EUR to intermediary banks through the Sunref project, of which 1,2 billion EUR has been disbursed.	
Credit line to the Eastern and Southern African Trade and Development Bank (TDB)	AFD	Since 2020 ADF has funded a USD 150 credit line million to the the Eastern and Southern African Trade and Development Bank, aiming at financing renewable energy and other climate infrastructure projects in Eastern and Southern Africa. Projects that promote efforts to reduce or limit greenhouse gas emissions or enhance greenhouse gas sequestration, or support adaptation projects will be eligible.	https://www.afd.fr/en/actualites/communique-de-presse/tdb-and-afd-sign-credit-line-finance-green-infrastructure-africa?origin=/fr/actualites/communique-de-presse%3Fpage%3D7
Credit Lines by OeEB	Oesterreichische Entwicklungsbank AG, OeEB	In December 2015, OeEB signed a long-term credit line of USD 30 million to Africa Finance Corporation (AFC). The funds are dedicated to infrastructure projects in Sub-Saharan Africa.	https://www.ifc.org/wps/wcm/connect/58529596-f759-4055-a74d e5c0d6b282ff/Oesterreichische+Entwicklungsbank-+%28OeEB%29.pdf?MOD=AJPERES&CVID=lNvlOJA

CONTACT INFORMATION:

Suite 201
First Floor Warrens Court
48 Warrens Industrial Park
Warrens
St. Michael, Barbados

T: +1-246-622-1783

hello@cpcs.ca
www.cpcs.ca