

UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION
Project of the Economic Community of Central African States Region
Final Project Document

Project number:	UNIDO Project ID 200138	
Project title:	First operational phase of the Centre for Renewable Energy and Energy Efficiency for Central Africa	
Thematic area code:	IC32 (Clean Energy Access)	
Starting date:	September 2022	
Duration:	5 years (60 months)	
Project site:	Regional project covering the Economic Community of Central African States (ECCAS) member's states. ¹ The Secretariat of the centre will be located in Luanda, Angola.	
Counterpart(s):	The main counterparts are the Secretariat of the Economic Community of Central African States (ECCAS) and the Ministries of Energy and Environment in the eleven Member States. Moreover, all project activities will be closely coordinated with other regional entities, such as the Central African Power Pool, as well as other African centres of the Global Network of Regional Sustainable Energy Centres (GN-SEC). CEREEAC together with ECREEE (ECOWAS) in Cape Verde, SACREEE (SADC) in Namibia, EACREEE (EAC) in Uganda and RCREEE (Arab League) in Egypt covers the entire African continent.	
Executing agency:	The United Nations Industrial Development Organization (UNIDO) in partnership with the Economic Community of Central African States (ECCAS) and its eleven Member States.	
Project Inputs: Austrian Ministry of European and International Affairs (BMeiA)	Contribution to the project:	€ 438,097
	UNIDO support costs (13%):	€ 56,953
	Total:	<u>€ 495,050²</u>
BMeiA contribution to the UN Levy (1%)	1% UN Levy on project contribution:	€ 4,950
UNIDO inputs	In-cash: ³	€ 70,000
Counterpart(s) Inputs:	The ECCAS Secretariat (in-cash):	€ 470,000
	ECCAS Member States (in-kind through NFIs)	€ 921,667
	The Government of Angola ⁴ (in-cash and in-kind):	€ 1,906,454

¹ ECCAS's regional member states include: Angola, Burundi, Cameroon, Central African Republic, Chad, Democratic Republic of Congo, Equatorial Guinea, Gabon, Republic of the Congo, São Tomé and Príncipe.

² The provided BMeiA grant is flexible and will allow shifts between budget lines within the outcome areas without approval by the donor (please note that outcomes are defined as outputs in the UNIDO SAP budget system). UNIDO reports only on the provided grant by BMeiA and not any other co-funding partner.

³ Subject to the approval of the UNIDO Executive Board

⁴ From the Ministry of External Relations and the Ministry of Energy and Water (of which approx. 1,394,959 have already been allocated directly to the refurbishment of the CEREEAC HQ. The remaining amount will be paid in annual instalments to cover the salaries of the national support staff, the running costs of the building, maintenance, etc.).

	The African Development Bank (AfDB) (in-cash through ECCAS): ⁵	€ 767,225
	OIF- IFDD ⁶ (in-cash through ECCAS):	€ 140,000
Funding to be mobilised	Under the optimistic budget scenario, another € 5,018,604 expected co-funding will be mobilized from other donors during the five (5) year period of project implementation (i.e. EU, IRENA, and the Oyo Centre). Italy has already indicated funding for the main phase of the UNIDO project establishing the Oyo Centre ⁷ in the Republic of Congo. The Oyo Centre will act as a thematic hub of CEREEAC.	
Total Budget:	€ 9,789,000 (incl. co-financing and excl. UN Levy)	

Project Summary

Under the Global Network of Regional Sustainable Energy Centres (GN-SEC) program, UNIDO supports the Economic Community of Central African States (ECCAS) and its eleven Members States in the establishment, operationalisation and implementation of the Centre for Renewable Energy and Energy Efficiency for Central Africa (CEREEAC), which aims to accelerate the energy and climate transition by providing support „from the region for the region“. The following project document provides a guiding framework for the full operationalisation of the centre, its governance structure, internal rules and procedures, as well as its technical cooperation portfolio within a period of five years.

From the very beginning, the centre will operate according to local rules and within ECCAS ownership and decision-making processes. UNIDO provides mentoring and technical services related to institution-building, technical program development, partnership building and fund mobilisation throughout the first operational phase. It is envisaged that the centre operates fully independent and sustainable by the end of the project period.

The technical and institutional design of the CEREEAC is the result of a comprehensive consultative preparatory process, which was undertaken between 2020 and 2021 to determine the added value, feasibility as well as the technical and institutional design of the centre. The process included the development of a baseline and needs assessment and was closely coordinated with the efforts of the International Renewable Energy Agency (IRENA) to design a Renewable Energy Roadmap for Central Africa.

In June 2021, UNIDO and IRENA organised a regional workshop, which validated the technical and institutional design of the centre and roadmap. The establishment of CEREEAC was adopted by the Energy Ministers on 8 June 2021 and it was formal established by Decision No. 04/CEEAC/CEEG/XIX/21 of the 19th Conference of Heads of State and Government held in Brazzaville on 30 July 2021. Following a selection process, Angola was designated as the host country of CEREEAC's Secretariat. The centre will be established in the country capital, Luanda. The Secretariat will operate through a network of National Focal Institutions (NFIs) and Thematic Hubs (THs) among all ECCAS countries. An ECCAS management and a Steering Group (SG) will guide the work of the centre.

The CEREEAC aims to address demand and supply-side barriers for integrated and inclusive ECCAS sustainable energy product and service markets by promoting economies of scales, equal progress, joint learning and spill-over effects between countries. Through cross-border approaches and methodologies, the centres will complement and accelerate national efforts in the areas of policy, regulation, quality infrastructure,

⁵ The AfDB support to CEREEAC will be focusing on the development of a framework for the implementation of the regional RE&EE policies, and their related adoption from the member states. The AfDB contribution is expressed in \$USD equivalent, with the current UN exchange rates (€EUR vs \$USD).

⁶ The fund was provided by the *Organisation internationale de la Francophonie (OIF)* through its *Institut de la Francophonie pour le développement durable (IFDD)* starting from June 2022. The fund has been channelled through the ECCAS via a grant agreement protocol signed by the ECCAS and OIF on 13 of May 2022

⁷ See project ID 190379 <https://open.unido.org/projects/CG/projects/190379>, € 80.000 was already made available by Italy for the preparatory phase.

qualification, knowledge and facilitation of investment and entrepreneurship. It will serve as a central hub for knowledge, counselling, as well as international and local partnerships.

With the creation of the CEREAC, the GN-SEC will cover the entire African continent. The Centre will become an important triangular capacity hub to accelerate the implementation of the industrialisation, energy and climate goals in the African Union Agenda 2063 “The Africa We want”. It contributes to the AU efforts to establish a harmonised continental electricity market and free trade area, as well as the implementation of the Third Industrial Development Decade for Africa (2016–2025). UNIDO will facilitate south-south and triangular cooperation between CEREAC and the other African centres, including RCREEE (Egypt), ECREEE (Cape Verde), SACREEE (Namibia) and EACREEE (Kampala) on common energy issues and solutions.

The creation of the CEREAC is an important contribution to the envisaged structural transformation in Central Africa. Global emergencies, such as climate change and the COVID-19 health and economic crisis, are demonstrating the vulnerability of Central African countries, which are highly dependent on the export of raw materials, including oil and gas. The shift towards renewables energy and resource efficiency, as well as circular economy practices is an important prerequisite for the success of economic diversification, industrialisation and climate actions. The expansion of higher added value manufacturing and servicing in Central Africa requires rapid investments in climate-resilient low-carbon energy infrastructure.

Further information is available at www.gn-sec.net and www.cereac.org.

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1. CONTEXT

1.1 Introduction

Under the Global Network of Regional Sustainable Energy Centres (GN-SEC) program, UNIDO supports the Economic Community of Central African States (ECCAS) and its eleven Member States in the establishment, the operationalisation and implementation of the Centre for Renewable Energy and Energy Efficiency for Central Africa (CEREEAC), which aims to accelerate the energy and climate transition by providing support „from the region for the region“. The project is based on an official request submitted by the ECCAS Secretariat to the UNIDO Director-General in February 2020.

The technical and institutional design of the CEREEAC is the result of a comprehensive consultative preparatory process, which was undertaken between 2020 and 2021 to determine the added value, feasibility as well as the technical and institutional design of the centre. The process included the development of a baseline and needs assessment and was closely coordinated with the efforts of the International Renewable Energy Agency (IRENA) to design a Renewable Energy Roadmap for the Central African region. The CEREEAC will create the required implementing capacity for this Roadmap. A summary of the baseline and needs assessment and the consultation process is included below.

Laudable progress was achieved in June 2021, UNIDO and IRENA organised a regional workshop, which validated the technical and institutional design of the centre. The establishment of CEREEAC was adopted by the Energy Ministers on 8 June 2021. It was formally established by Decision No. 04/CEEAC/CCEG/XIX/21 of the 19th Conference of Heads of State and Government held in Brazzaville on 30 July 2021.

Following a selection process, the capital of Angola, Luanda, was designated to host the Secretariat of the centre. The Secretariat will operate through a network of National Focal Institutions (NFIs) and Thematic Hubs (THs) among all ECCAS countries. Currently, UNIDO, the ECCAS Secretariat and the Government of Angola are finalising the hosting arrangement for the centre.

Once the centre is fully operational, its business plan and the annual work plans will be developed under the leadership of the Executive Director and the guidance of the Ministerial Steering Committee (MSC), the CEREEAC Technical Committee (TC) and Executive Board (EB). In the annual work plans, the partners will agree on the priority activities to be implemented by the centre.

The following project document provides a guiding framework for the full operationalisation of the centre, its governance structure, internal rules and procedures, as well as its technical cooperation portfolio within a period of five years. The document gives an outlook on the envisaged activities to be implemented by the centre, as well as their budgetary requirements.

From the very beginning, the centre will operate according to local rules and within ECCAS ownership and decision-making processes. UNIDO will provide mentoring and technical services related to institution-building, technical program development, partnership building and fund mobilisation throughout the first operational phase.

1.2 Baseline and needs assessment

Between 2021 and 2022, UNIDO in partnership with ECCAS and International Renewable Energy Agency (IRENA) undertook a comprehensive consultative preparatory process, to determine the added value, feasibility, as well as the technical and institutional design of the centre. The process included the development of a baseline and needs assessment and was aligned with the analytical work of IRENA on the Renewable Energy Roadmap for Central Africa.

The analysis conducted revealed that the existing regional institutional support framework is not prepared to support ECCAS member states (MS) effectively to reach the established RE&EE targets. All stakeholders confirmed the relevance and need for such a centre, as well as outlining various challenges and opportunities. In general, the assessment revealed that the ECCAS MS do recognise the energy issues at stake for development. They have started to take steps allowing them to realise the benefits of a sustainable RE&EE

industry, industry which could contribute to various environmental, economic and social development objectives. However, in some of the areas and countries, these developments are still at an initial stage and have not transformed into concrete investments and the creation of a vibrant market and business sector.

The areas of small and medium-sized grid-connected RE plants, decentralised renewable energy solutions for rural areas and households (e.g., cooking, mini-grids, stand-alone systems, warm water heating) as well as energy efficiency improvements in different sectors (e.g., buildings, transport, grid losses, appliances, industry, etc.) need to be further developed. Across the spectrum, the increasing opportunities offered by digitisation and innovation also need to be incorporated. Overall, there still exists a broad range of political, economic and social barriers which need to be addressed, in order to take full advantage of RE&EE and reap the benefits of developing these industries.

The needs assessment and consultative survey have demonstrated a strong need, added value and effectiveness of creating the CEREEAC to help achieve ambitions in RE&EE. Through its activities in the areas of policy, capacity development, knowledge management, awareness raising, as well as business and investment promotion, the centre can play a key role in creating economies of scale, as well as a competitive sustainable energy market and business sector in the ECCAS region. A regional approach is cost-effective and a common marketplace, with certain standards and guarantees, would help to attract potential public and private investors. The experience gained already by other GN-SEC centres puts the CEREEAC at a significant advantage with regard to immediately benefiting from lessons that many centres have already gone through – allowing the design of the CEREEAC to be focussed on meeting the needs of the region with the most effective interventions.

The assessment has shown that the private sector and investors clearly see the potential of the RE&EE sectors for the region. However, they require support in terms of clear policies as well as practical interventions to improve infrastructure and skills in the region to make it a more attractive market to invest in and to reduce risks.

Regional cooperation can be an effective tool to ensure that the expansion of RE&EE markets transform into local added value, businesses and jobs in the ECCAS region. In response to the identified needs in the RE&EE needs assessment and the request of ECCAS Partner States, the centre will focus on activities which demonstrate high relevance for leveraging investments in RE&EE infrastructure, services, local businesses and industry.

2. Project Justification

The following sections provide an overview on the results of the baseline and consultative needs assessment undertaken in each of the eleven ECCAS MS, identifying the current energy challenges and their impacts on society, economy and environment. The fragile energy situation hampers economic and social development aspirations of ECCAS countries and is interrelated with negative environmental externalities, including on and from climate change. In the annexes the detailed Baseline and Needs Assessment Report is available, which also include individual country profiles for each ECCAS MS.

2.1 ECCAS Energy Context

2.1.1 RE&EE Overview and Opportunities

The following table presents an overview of selected ECCAS socio-economic criteria and the energy landscape:

Table 1: ECCAS Energy Landscape⁸

Country	Population (million people)	GDP billion/yr (current international \$)	GDP per capita (current international \$)	Access to electricity (% population)	Electricity consumption (kWh per capita)	Access to clean fuels and technologies for cooking (% population)	HDI (value; ranking)
Angola	30.81	101.35	3 289.65	43.26	312.23	48.05	HDI: 0.574 Rank: 149
Burundi	11.18	3.04	271.75	11.02	NA	85	HDI: 0.423 Rank: 185
Cameroon	25.22	38.69	1 534.49	62.66	275.20	23.04	HDI: 0.563 Rank: 150
Central African Republic	4.67	2.22	475.95	32.42	NA	0.97	HDI: 0.381 Rank: 188
Chad	15.48	11.24	727.56	11.76	NA	3.13	HDI: 0.401 Rank: 187
Republic of Congo	5.24	11.66	2 223.85	68.52	202.87	24.13	HDI: 0.609 Rank: 138
Democratic Republic of Congo	84.07	46.83	557.06	18.98	108.52	4.02	HDI: 0.459 Rank: 179
Equatorial Guinea	1.31	13.28	10 144.20	67.03	NA	34.39	HDI: 0.588 Rank: 144
Gabon	2.12	16.86	7 956.63	93.04	1167.85	79.12	HDI: 0.702 Rank: 115
Rwanda	12.30	9.63	782.62	34.72	NA	0.57	HDI: 0.536 Rank: 157

⁸ Statistics for population, GDP, access to energy and electricity consumption per capita are from the WB (<https://data.worldbank.org/>) and for HDI from <http://hdr.undp.org/en/data>

Sao Tomé & Príncipe	0.21	0.42	2 001.14	71.00	NA	16.81	HDI: 0.609 Rank: 137
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Note: Statistics for population, GDP, GDP per capita, access to electricity and HDI are from 2018, while the electricity consumption per capita are from 2014 and the access to clean fuels and technologies for cooking is from 2016. NA: Not Available

As it can be noted from the table, ECCAS countries vary across key development indicators, however, they clearly have common development challenges. **Central Africa's energy sector must address the interrelated challenges of energy access, energy security and climate change mitigation and adaptation**, which are intertwined with the region's economic and social challenges.

Notwithstanding that most of its population lacks modern energy services (average electricity access rate of 46.76% and average access to clean cooking fuels of 29.02%)⁹, **Central Africa has the most abundant energy resources on the African continent and massive potential for RE development**. IRENA estimates that between 2015 and 2030, the renewable share of capacity could increase from 56% to 77%, with 11 860 MW of hydropower, 7 908 MW of solar PV, 4 083 MW of biomass, and 1 420 MW of wind constructed.

Available secondary data indicates that **EE markets are yet to be developed in the region**, presenting a clear potential for ECCAS to introduce new policies and projects in the field. This offers an opportunity to focus on EE improvements that are innovative and cutting-edge in terms of technology, but also on other measures, such as behavioural change and increased awareness¹⁰.

Critical EE challenges include losses in energy transmission and distribution (T&D). The rationale for improving EE in other areas, such as buildings, appliances, lighting, etc., is clear and well understood. Recommendations are in place to make progress across a number of these factors, particularly around programmes to phase out incandescent lighting for LEDS and for mandating EE in new buildings.

2.1.1.1 Energy Access

Access to reliable and affordable modern energy remains a central challenge to the socio-economic development efforts in the ECCAS region as a whole. Access rates across the ECCAS are well below what would be required to reach the SDGs, and below the average of Sub-Saharan Africa (which is 47%) as a whole.

Table 2: Statistics for Electricity Generation and Access in the ECCAS region

Country	2018 RE Generation Capacity (MW) ¹¹	2018 Thermal Generation Capacity (MW)	Access to Electricity (percentage) – 2018			Access to clean fuels and technologies for cooking (% of population) – 2016
			Urban	Rural	Total	
Angola	2 763.24	1 761.00	73.70	NA	43.26	48.05
Burundi	57.38	51.00	61.67	3.44	11.02	85.00
Cameroon	746.49	705.00	93.30	23.00	62.66	23.04
Central African Republic	19.15	22.00	55.25	16.32	32.42	0.97
Chad	1.27	86.00	41.84	2.75	11.76	3.13
Republic of Congo	214.47	170.00	92.41	20.19	68.52	24.13

⁹ Own estimate based on the information depicted in Table 1.

¹⁰ Available at Page 26 of Livre Blanc CEEAC-CEMAC pour un accès universel aux services énergétiques modernes (the CEEAC-CEMAC White Paper on Energy)

¹¹ 2018 IRENA statistics: <https://www.irena.org/Statistics/View-Data-by-Topic/Capacity-and-Generation/Technologies>

Country	2018 RE Generation Capacity (MW) ¹¹	2018 Thermal Generation Capacity (MW)	Access to Electricity (percentage) – 2018			Access to clean fuels and technologies for cooking (% of population) – 2016
			Urban	Rural	Total	
Democratic Republic of Congo	2 761.66	135.00	50.70	NA	18.98	4.02
Equatorial Guinea	127.14	274.00	90.36	6.60	67.03	34.39
Gabon	332.89	296.00	96.67	62.51	93.04	79.12
Rwanda	137.10	118.00	89.06	23.42	34.72	0.57
São Tomé & Príncipe	2.64	45.00	76.70	55.74	71.00	16.81
Total	7 163.43	3 663.00	-	-	-	-
Average	-	-	74.70	19.45	46.76	29.02

These electrification rates show that the level of energy consumption in the region has a potential to grow significantly in most countries, even without considering the knock-on impact of increased economic growth, as access improves.

Looking into the evolution of electricity access rates in the region, it can be seen that all ECCAS MSs register a growing trend, especially after 2012, where all of them have different paces. What is also important to note, is that 6 out of the 11 ECCAS MSs in 2018, had electricity access rates below the Sub-Saharan Africa (SSA) average access rate (47%).

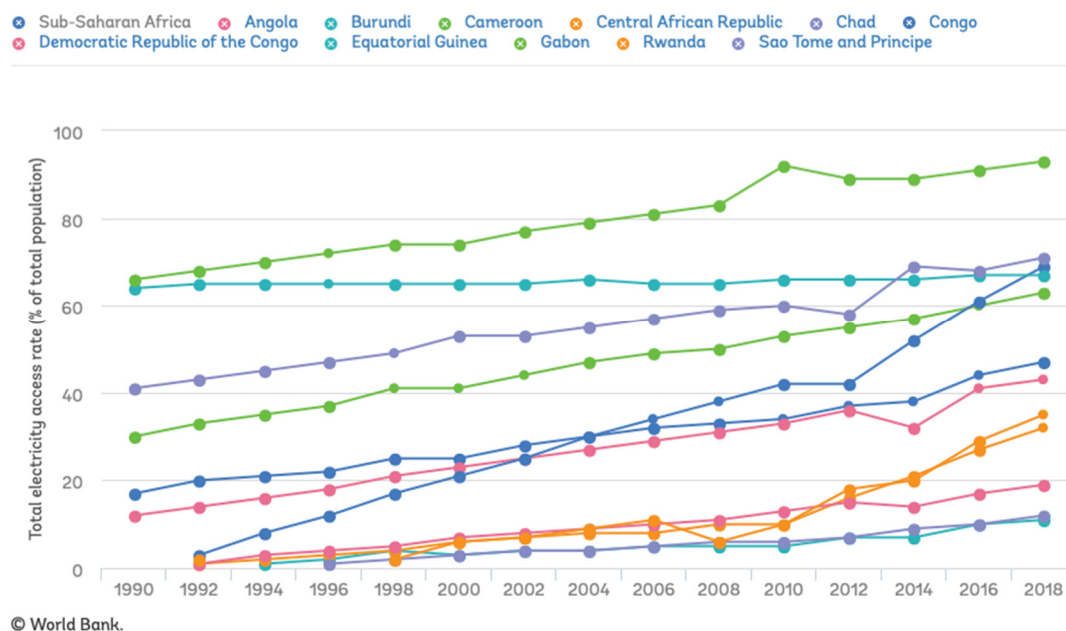


Figure 1: Electricity access rate (% total population) variation between 1990 and 2018¹²

In terms of access potential, off-grid solar products continue to increase across SSA. The Global Off Grid Lighting Association (GOGLA) reports that as of December 2019, 3.2 million people in Central Africa have

¹² Figure built in the ESMAP website, tracking SDG7, <https://trackingsdg7.esmap.org/time> (August 2020)

benefited from improved energy access, as a result of access to off-grid solar. Mini-grids also offer increasing potential across the African continent, although these developments are still challenging commercially. Mini-grid business models often rely on concessional and donor financing at this stage, preventing them from becoming widespread.

2.1.1.2 Industrial Development

The *Agenda 2030* and the African Union's *Agenda 2063: The Africa We Want* and COVID-19 recovery plans, call upon Central African countries to diversify their economies, industrialise and move towards more technology-intensive higher added value manufacturing and servicing. There is need to modernise traditional sectors and leapfrog to new emerging ones of the „green and blue economy“. Inclusive and sustainable industrial development (ISID) directed towards Sustainable Development Goal 9 (SDG9) is associated with job creation, sustainable livelihoods, innovation, technology and skills development, food security and equitable growth — key requirements for eliminating poverty by 2030.

The rapid expansion of access to modern, reliable, affordable and clean energy services is a prerequisite for a successful industrialisation in Africa, as well as the transition towards higher added value manufacturing (MVA). Unreliable, outdated and costly energy infrastructure is hampering the economic transformation aspirations of Central African people and businesses. At the same time, such an industrialisation needs to be an inclusive and sustainable one, based on sustainable energy and circular economy solutions.

At the industrial level, ECCAS energy use is critical to ensure some key industries (i.e., agriculture, manufacturing, blue economy) remain productive. Clearly, there is also a need for these industries to shift towards a low carbon and net zero future. Therefore, the integration of RE&EE into these sectors, which drive economic growth in many parts of the region, is essential.

As the cost of RE comes down in general, commercial and industrial customers will also consider generating power on site, besides connecting to the grid. This would bring the added potential benefit of supplying local populations with excess power, particularly in off-grid communities.

The Africa Energy Outlook¹³ identifies industry to be less energy efficient in Africa, compared to other global regions. The ECCAS/CEMAC White Paper states that most industrial business owners prefer their own diesel-powered generation. Most of the ECCAS countries are yet to develop programmes with specific EE activities for industries.

In this context, the African Union (AU) in partnership with UNIDO is spearheading the implementation of the Third Industrial Development Decade for Africa (2016–2025) as adopted by the UN General Assembly on 25 July 2016.¹⁴ UNIDO has been tasked with leading the implementation of the Decade, in collaboration with a range of partners. The vision for the implementation of IDDA III is to firmly anchor Africa on a path towards inclusive and sustainable industrial development. Without RE&EE to support a more diverse, modern and complex economy, achieving the aims of IDDA III will not be possible.

In keeping with the IDDA III vision, the Blue Economy holds enormous potential – particularly for island states and the countries situated on the west coast of Africa – in areas such as aquaculture, desalination, maritime transport, coastal protection and tourism and shipbuilding.

2.1.1.3 Entrepreneurship, Innovation and Frontier Technologies

Securing sustainable, modern energy services across the RE&EE allows innovation and entrepreneurship to develop. This will be the case directly in the energy industry, where new jobs can be created to develop and build clean energy supplies, and also in other industries and businesses that have the opportunity to create growth and innovation thanks to a more secure and efficient power system.

Frontier technologies, particularly digitalization but also green hydrogen, ocean energy and electric mobility, can become key drivers to accelerate the energy transformation by managing large amounts of data,

¹³ African Energy Outlook, <https://www.iea.org/reports/africa-energy-outlook-2019>

¹⁴ UN Third Industrial Development Decade - <https://www.unido.org/who-we-are/idda3-third-industrial-development-decade-africa-2016-2025#:~:text=On%2025%20July%202016%2C%20the,with%20a%20range%20of%20partners.>

allowing banking access to rural isolated populations, optimizing systems with many small generation units also enhancing revenue collection and monitoring PAYGO systems. Some innovations are already entering the ECCAS market. However, a lack of standards, in particular on safety and security, might cause problems for the end consumers in the future. Other technologies (e.g. green hydrogen, ocean energy) are expected to be ready for industrial scale-up during the next ten years. Another area of opportunity is the area electric mobility and integrated power and storage systems.

2.1.1.4 Clean Cooking

In terms of access to clean cooking fuels and technologies, the region averages 29.02%, which is more than double the average of 14% in the SSA. Nonetheless, there is still a lot of work to be done in terms of adopting clean fuels and technologies for cooking, if the 2030 universal energy access targets are to be reached. This will include making biomass cooking practices and products more sustainable (e.g., efficient stoves and proper education and training to use those stoves) as well as the longer-term challenge to try to introduce more sustainable solutions in the form of off-grid electricity supplies to develop clean electrical cooking, as well as other options, such as sustainable biogas.

2.1.1.5 Transport

Lack of progress in RE&EE in the transport sector across the ECCAS region is underpinned by a conspicuous absence of modern infrastructure and connectivity within and between countries. Furthermore, relative to more developed and wealthier economies, vehicles are older and not well-maintained. The push for electric vehicles is limited, with some pilot schemes taking place in Rwanda (Kigali) and an overall growth in Africa of electric bikes to replace the use of mopeds, motorbikes and bicycles. This growth is, of course, limited by the general lack of reliable electricity in the region. The interrelated value chains offer opportunities for local manufacturing and servicing.

2.1.1.6 Energy Costs and Tariffs

The ECCAS region has variable electricity tariffs: there are countries with very high electricity prices such as São Tomé & Príncipe and Burundi (which have residential tariffs more than 2 times higher than the world average¹⁵) and countries with very low ones such as Angola (which are 7 times lower than the world average). The average electricity tariff in the region is around US\$0.16/kWh and US\$0.11/kWh¹⁶ for households and businesses, which is close to the world's average electricity prices⁷, and above the SSA average (which is US\$0.13/kWh¹⁷).

Furthermore, it is important to note that the levelled costs of some RE technologies are falling below electricity tariffs in the region, as well as within the range of fossil fuels, making them more price competitive compared to a decade ago.

¹⁵ Average electricity price in the world in 2019 was of 0.14 \$/kWh and 0.13\$/kWh for household and business, extracted from <https://www.globalpetrolprices.com>

¹⁶ Own estimates based on the date used in the compilation of Figure 2.

¹⁷ Value extracted from https://www.irena.org/documentdownloads/publications/prospects_for_the_african_powersector.pdf

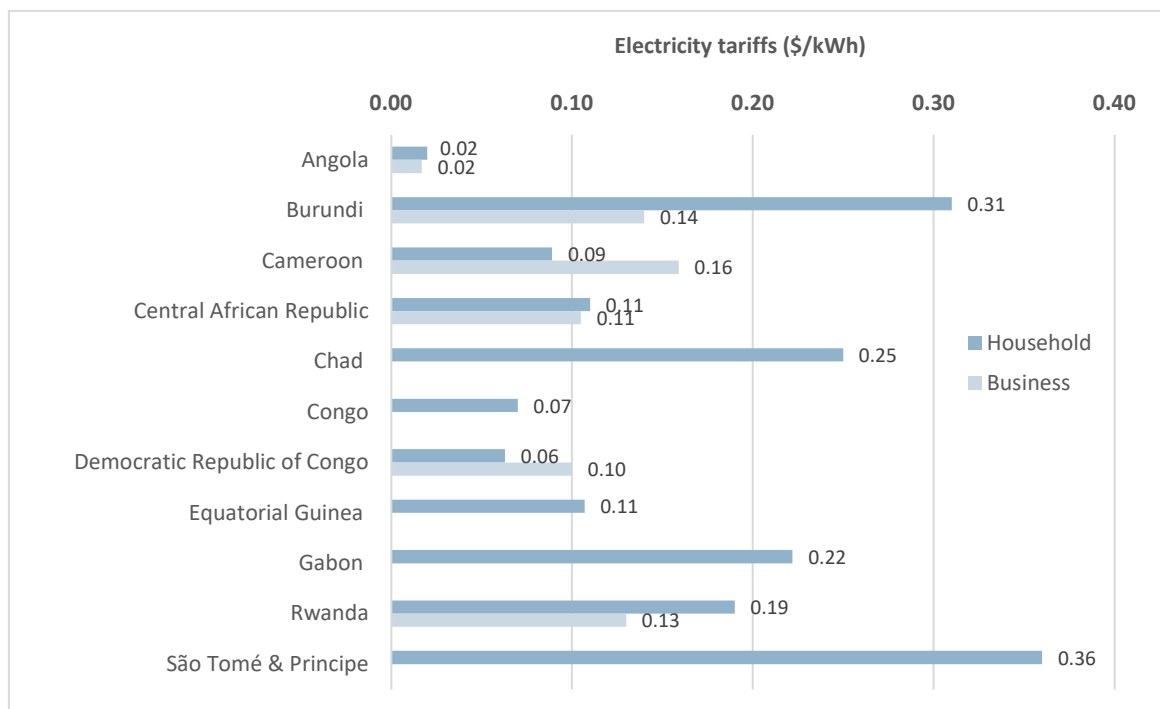


Figure 2: ECCAS Electricity tariffs¹⁸

2.1.1.7 Environmental externalities (incl. climate change)

Unsustainable fossil fuel consumption and (material) resource use particularly in urban areas is interrelated with various negative local and global environmental externalities, which combined with climate change, increasingly impact the health, social and economic sectors. The increasing pace and impact of climate change is something that the ECCAS region needs to be aware of, and plan for, in its future strategy with regards to RE&EE.

Therefore, there is need for integrated mitigation, adaptation and circular economy approaches, which can generate multiple benefits for various sectors simultaneously (e.g. health, energy, water and food). Inclusive and sustainable industrial development requires resource efficiency and decoupling from fossil fuel use in favour of more sustainable technologies.

In terms of the contribution to global emissions, Central Africa is only responsible for a tiny fraction of what the world produces. In fact, in 2012¹⁹ the ECCAS GHG emissions amounted to 1.66 million kt CO₂ equivalent, which represent around 36.07%²⁰ of the SSA emissions for that year and 3.10%²¹ of the world's CO₂ emissions. In terms of the GHG emissions per capita per year, the average ECCAS emission per capita (0.95 tCO₂ per capita/year²²) is above the SSA one (0.83 tCO₂ per capita/year²³).

Table 3: GHG emission reductions in ECCAS²⁴

¹⁸ Electricity tariffs were obtained from several different sources: <https://www.globalpetrolprices.com/>; <https://www.lexology.com/library/detail.aspx?g=8a686f01-c89c-4db6-b973-164b5abda114>; <https://www.doingbusiness.org/>; <https://united4efficiency.org/>; <http://documents1.worldbank.org/curated/en/734331492434048924/pdf/DRC-PAD-04172017.pdf>; <https://www.reg.rw/customer-service/tariffs/>;

¹⁹ 2012 is the most recent year with GHG emission information per country for the ECCAS region at the time of writing of this assessment

²⁰ Own calculations from the values in the WB data bank, <https://data.worldbank.org/indicator/EN.ATM.GHGT.KT.CE>

²¹ *ibid*

²² Own estimation of average ECCAS GHG emission per capita for 2016

²³ Value for SSA for 2016 extracted from the EB data bank, <https://data.worldbank.org/indicator/EN.ATM.CO2E.PC>

²⁴ Information extracted from the WB data Bank information on GHG emission and GHG emissions per capita, <https://data.worldbank.org/indicator/EN.ATM.GHGT.KT.CE> & <https://data.worldbank.org/indicator/EN.ATM.CO2E.PC>

Country	GHG Emissions (kt CO2 equivalent)	GHG Emissions per capita (t CO2 per capita)	
	Year: 2012	Year: 2012	Year: 2016
Angola	41 657.00	1.36	1.20
Burundi	6 254.00	0.04	0.05
Cameroon	100 922.00	0.28	0.35
Central African Republic	515 134.00	0.07	0.07
Chad	109 796.00	0.07	0.07
Republic of Congo	35 744.00	0.66	0.66
Democratic Republic of Congo	802 271.00	0.03	0.03
Equatorial Guinea	6 374.00	6.77	4.65
Gabon	34 571.00	2.89	2.65
Rwanda	6 690.00	0.07	0.10
São Tomé & Príncipe	195.00	0.60	0.60
Totals	1 659 608.00	-	-
Average	-	1.17	0.95

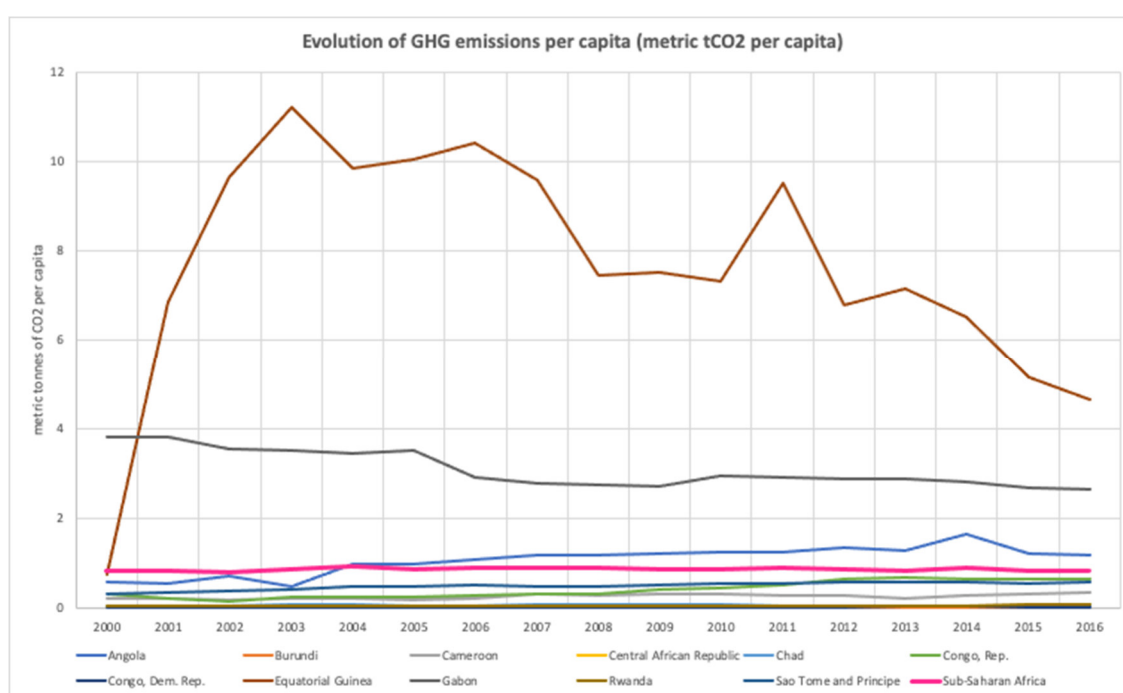


Figure 3: Evolution of the GHG emission per capita in the ECCAS countries and in SSA between 2000 and 2016

At a national level, the impacts of climate change in terms of draughts and floods are already creating negative effects. Therefore, the consideration around diversifying clean energy sources, so as not to rely only on hydropower, needs be taken into account among the ECCAS nations. At a more local level, environmental issues surrounding energy are also a matter of concern across the ECCAS. In cities, localised air pollution from generators, industry and transportation creates health issues and premature deaths. In peri-urban and rural areas, where households use biomass or charcoal to cook, light and heat homes, air pollution is also a major concern.

2.1.1.8 Urban, utility scale and energy security

Utility scale projects across ECCAS face a range of energy security and system challenges including aging and unreliable infrastructure and power developments; poor regulation and pricing and a lack of plans to develop networks. The region urgently needs to address these limitations to unlock investment in the utility scale sector and to realise the economic and social benefits of a well-functioning energy system. In order to achieve environmental benefits, such an energy system must have a focus on maximising RE&EE when addressing these issues, while ensuring that energy security and reliability make markets attractive for business, industry and investment in general.

Despite its large potential, the ECCAS area is coming from a position of low regional investment, and therefore a low level of private sector involvement in the energy sector. To increase support for private finance and development support, capacity building is required across the sector including technical project preparation, management, financing and ongoing operations. Kick-starting the industry from the current position is challenging, as it will require incentives for first movers to commit to developing unproven markets, which have higher risks than others. For the region to benefit from investment, economic growth and job creation in a sustained and significant way, overcoming these challenges is essential.

2.1.1.9 Socio-economic impacts

If economic activities in the sector increase, and RE&EE developments grow in number, there is clear evidence that this will lead to job creation in the region. IRENA's analysis suggests that the total potential of RE employment in 2030 ranges from 126 000 to 165 000 direct jobs²⁵, provided a number of challenging barriers are overcome and targets are met.

It is estimated that a net-zero carbon emission scenario for Africa requires USD 2 trillion of clean energy investment by 2050 (McKinsey 2021). USD 600 billion is needed to decarbonize existing manufacturing industries and power networks (retrofit brownfield manufacturing facilities and into new greenfield facilities). USD 1.4 trillion would be invested in new low-emitting businesses and networks replacing high-emitting legacy sectors. Opportunities for local clean energy and resource efficient manufacturing and servicing could generate additional USD 200 million to USD 2 billion revenues annually. This could lead to net additional 3,8 million jobs by 2050 in areas such as electric mobility, bioenergy, off-grid solar and mini-grids, wind power, etc.

Aside from job creation from the development of the renewables sector, a secure, modern and affordable energy supply can transform the fortunes of entrepreneurs and increase entrepreneurial activities in general. Businesses that currently have to count on an unreliable national grid or on polluting expensive diesel generators, can focus on longer term and more risk-free business models giving investors more confidence in the sector and encouraging growth.

Besides industry and commerce, there are social benefits of a secure energy supply for aspects of health, education and security - ranging from securing appropriate lighting to allow students to study, to health centres and hospitals being powered to ensuring life-saving operations can take place safely and medicines can be appropriately stored, to efficient food production for the whole population.

2.1.1.10 Gender and disadvantaged groups

Due to traditional responsibilities for collecting fuel and water in many developing countries, women and girls would benefit the most from improved access to energy services. The time and physical effort expended by women and girls in gathering fuel and carrying water seriously hampers their ability to engage in educational and income-generating activities. Many women and girls also suffer from health problems related to the time and physical burdens involved in gathering fuel, the hazards of cooking indoors with polluting fuel, and the increased danger of physical violence or accidents.

²⁵ Draft ECCAS Renewable Energy Roadmap for Central Africa, IRENA (2020).

In less well served urban areas, off-grid energy solutions are just as relevant as in rural areas and serve the same purpose, ‘leapfrogging’ the traditional power and energy solutions and establishing mini grids or household scale solutions in different neighbourhoods.

The ECCAS region also houses refugees from across the region and other parts of Africa, whose camps have significant energy challenges, are often make-shift and have no long-term infrastructure in place. Off-grid energy has been demonstrated as a viable solution to some energy problems in such camps allowing a rapid response to production of safe, clean power to assist with basic social needs such as lighting and refrigeration.

2.1.2 Barriers for RE&EE market uptake

By looking at the moderate growth rates of RE&EE markets in many developing regions, including ECCAS, it becomes obvious that SDG-7, SDG-9 and SDG-13 cannot be attained by 2030 in business-as-usual scenarios. The increased supply and use of RE&EE products and services remains hindered by a broad range of demand-side and supply-side barriers and shortcomings related to policy and regulation, fiscal and non-fiscal incentives, technical limitations, economics, finance, capacity, quality infrastructure, R&D and innovation frameworks, knowledge and awareness.

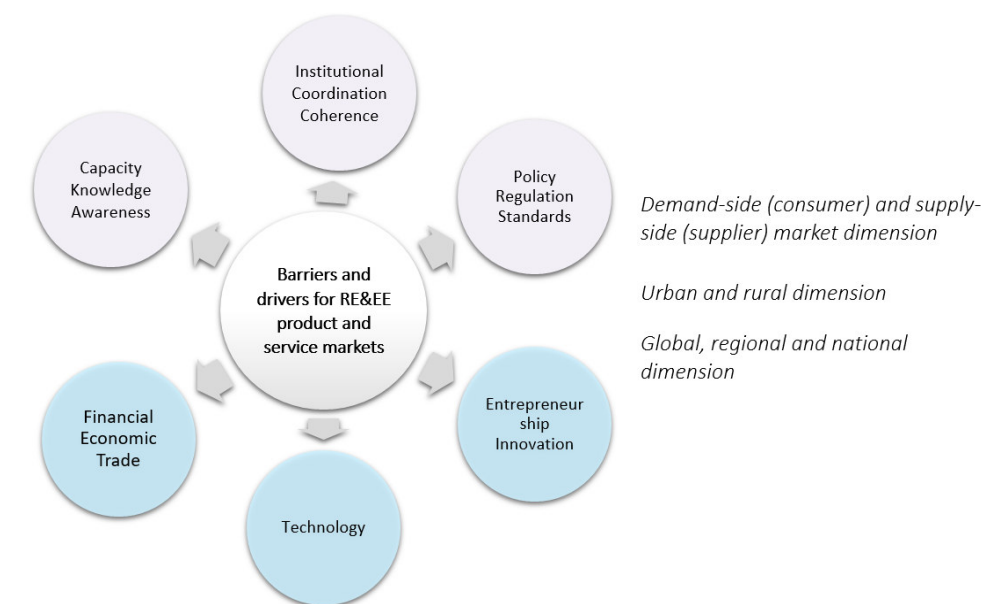


Figure 4: Barriers for the uptake of integrated and inclusive sustainable energy technology markets

Regionally, the energy transformation tends to remain uncoordinated between countries and common barriers, duplication, fragmentation and lack of agenda-setting on regional level often lead to inefficient use of international funding and opportunity costs. The ECCAS institutional capacities in the RE&EE sector need an urgent strengthening. There is need for a regional technical capacity to coordinate the efforts to implement regional policy commitments. The current situation tends to support donor driven approaches and agenda setting. There is a need for a stronger use of local implementing systems (e.g., procurement) and experts (e.g., consultants, companies). A regional entity is needed to ensure projects coordination on a technical level and to avoid duplication of efforts and loss of resources. The ownership and local setting of the agenda and priorities need to be strengthened.

Taking into account the desktop assessment and the consultative needs assessment results, Table 4 shows the specific challenges and opportunities for adoption and development of sustainable energy in the ECCAS region, and thus the areas where the Centre may assist the MS. Much of the information on the table, particularly around policies and regulations, is based on the World Bank’s Regulatory Indicators for Sustainable Energy.

Table 4: Summary of specific identified barriers²⁶

	Policy and Regulation					Capacity Building			Coordination & Information					Investment				
	No long-term national targets for RE	No long-term national targets for EE	Inadequate electrification plan	Inadequate RE regulations	Inadequate EE standards (labelling, energy codes etc)	Lack of capacity in regulators and utilities to regulate or liberalise markets	Lack of educational options for RE and EE	Skills gaps (entrepreneurship, management and/or technicians)	Absence of RE/EE agency	Absence of RE or EE trade association	No national database of existing and planned developments	No national constraints maps (e.g. grid constraints, environmental considerations etc)	No national database of available support from Govt or donors	Lack of consumer affordability for energy	Inadequate Government incentives or subsidies to encourage investment	Utility has poor creditworthiness	Lack of financing mechanisms for RE	Lack of financing mechanism for EE
Angola	•	•	•	•	✓	✓	✓	✓	✓	✓	✓	✓	•	✓	✓	✓	✓	
Burundi	✓	✓	✓	✓	✓	•	✓	✓	✓	✓	✓	✓	✓	•	✓	✓	✓	
Cameroon	•	•	•	•	✓	•	✓	✓	•	•	✓	✓	•	✓	•	✓	•	
Central African Republic	✓	•	✓	✓	✓	•	✓	✓	•	•	✓	✓	✓	✓	•	✓	✓	
Chad	✓	✓	✓	✓	✓	•	✓	✓	•	•	✓	✓	✓	✓	✓	✓	✓	
Republic of Congo	•	✓	✓	✓	✓	•	✓	✓	✓	•	✓	✓	✓	✓	✓	✓	✓	
Democratic Republic of Congo	✓	✓	✓	✓	✓	•	✓	✓	✓	•	✓	✓	•	✓	•	✓	✓	
Equatorial Guinea	•	✓	•	✓	✓	•	✓	✓	•	•	✓	✓	✓	✓	✓	•	•	
Gabon	•	•	•	✓	✓	•	✓	✓	✓	•	✓	✓	✓	✓	✓	✓	✓	
Rwanda	•	•	•	•	✓	•	✓	✓	•	✓	✓	✓	•	•	•	•	✓	
São Tomé and Príncipe	•	✓	✓	✓	✓	✓	✓	✓	•	•	✓	✓	✓	✓	✓	✓	✓	

²⁶ Developed with RISE (<https://rise.esmap.org/>), needs assessment questionnaires and desk-based research to/from country profiles.

2.1.2.1 Energy policy and regulation barriers

The desktop research and needs assessment revealed **that energy access is often mentioned in general energy policies, and most MS have energy access targets established**, although they are mainly related to electricity access and thus do not include access to modern clean fuels and technologies for cooking. Furthermore, not all of them have the universal access targets stipulated, yet. **Consequently, there is room for improvement to mainstream energy access priorities into energy planning and policy conversations at a national level, as well as to define universal energy access targets that include both electricity and modern clean fuels and technologies for cooking.**

ECCAS MS have set up overall targets for RE but the existent policy framework is still incipient. EE policies are far less defined by ECCAS national governments than the RE ones, with only a couple of strategic plans in place with clear ambitions and targets, and very limited incentives.

- Specific policy gaps/barriers identified across different research methods include:
- Weak enabling framework
- Lack of evidence-based energy planning and scenario development
- Lack of clear sustainable national energy action plans/road maps and supporting policies/legislation.
- Lack of oversight of the RE&EE policies to make sure they are adequate, coherent and aligned with policies for other sectors like, education, health, agriculture, trade and industry.
- Lack of or inadequate specific policies relating to key aspects of RE&EE development, for example renewable heating and cooling, with the focus tending to be on electricity.
- Applicable feed-in tariffs and technical standards for power generation do not address all RE technologies and often are not clear regarding the connection costs.
- Governments often lack the capacity to design clear and effective tenders/auctions.
- There are weak or no minimum energy performance standards for new buildings, building renovations, appliances, lights, air conditioning and refrigeration among other items
- In most countries, the import of RE equipment remains highly taxed and labelling standards for appliances or building codes are not in place.
- Lack of specific policy targeting at maximising the benefits of E and EE for gender issues.

2.1.2.2 Capacity Building Barriers

Capacity building barriers include: (a) knowledge and awareness barriers; (b) barriers to qualification and certification; (c) technical barriers and limitations; and (d) entrepreneurship and innovation barriers.

Knowledge and Awareness Barriers

- **Stakeholders/General public sometimes do not possess sufficient RE&EE knowledge and awareness to make informed decisions.** As such, there is a definite need for advocacy, awareness raising, information dissemination and stakeholder engagement efforts.
- **Incomplete and decentralized regional data collection, compilation and analysis is apparent in most countries in Central Africa.** Where data is collected it is decentralised and not coordinated regionally. In most cases in ECCAS, pertinent data is yet to be collected on a consistent basis.
- **Lack of feasibility studies for RE&EE assessments and projects (technical Assistance (TA) and Project Preparation Facilities).**
- **Lack of knowledge of frontier technologies and innovation e.g. digitalisation in policies.**

- **There is also a lack of knowledge regarding gender and energy approaches, as well as integrated climate change mitigation, adaptation, sustainable energy and circular economy approaches.**

Barriers related to qualification and certification

- Regional capacity, particularly as it relates to development of RE&EE projects is limited and **there is a need for mass training and capacity building across technologies**, for example there is a lack of:
 - Qualification and certification frameworks for products, services and personal.
 - Technical capacity to formulate and implement policies.
 - Project development and implementation expertise.
 - Local capacity in both public and private sectors to develop and sustain local RE&EE technologies.
 - Local trained human resources may migrate (outside the region) to seek better opportunities.
- The distinct differences in the geographical, environmental, cultural and social aspects in the region make it difficult to create a one-size-fits-all approach.
- Technical knowledge is required to establish a critical mass of policy makers, project financiers and engineers who will be able to manage all aspects of sustainable energy development. The following table summarises some of the identified capacity requirements of the different stakeholder groups.

Technical barriers and limitations

- There are **significant technology gaps**, particularly as it relates to the use of advanced energy technologies:
- **Technical knowledge and capacity transfer within and between countries is necessary** so that individuals embarking on new RE&EE initiatives can learn from those who have already successfully implemented such projects.
- **Demonstration projects are required to highlight the benefits of RE&RE technologies** that are yet to be used on a large scale in the region. This is to be supported through donor financing and capacity development.
- **Maintenance of equipment is an issue** where some countries do not have a good history of repair and maintaining equipment.
- The **lack of quality standards and low-quality equipment** can lead to a negative uptake of RE technologies.
- Climate resilience of infrastructure and impacts limit use of certain technologies (e.g. hydropower).
- Electricity **grids are generally characterised by high electricity losses, load shedding and blackouts**. The overall efficiency of the power systems needs to be tackled, so that the ECCAS countries can fully make use of the explored potential. The infrastructure for integrating RE into the existing grids is seen as an area of need. A grid that can feed back information to the grid operator and at the same time be adaptable is the ambition to reach but that is not currently feasible in most of the region.
- Land in small islands is limited as its use is often sensitive. As most RE technologies require significant land usage, investors can be weary of projects that entail land acquisitions/leases.

Entrepreneurship and innovation barriers

Like in most GN-SEC regions, in ECCAS MS exists **an inability of the domestic private sector to supply RE&EE quality products and services** under competitive prices and the domestic manufacturing and servicing sector remains weakly developed. There is also a lack of capacity and investment in IPPs in the region. The lack of domestic R&D and entrepreneurship hinders the establishment of RE&EE related businesses and the commercialisation of RE&EE solutions.

The number of **local RE&EE manufacturing and servicing companies is very limited** in some countries and associations remain weak or are not existing. There are hardly RE&E incubation programs for start-ups in place. Moreover, RE&EE associations are weakly organised and there are no cleantech clusters and/or acceleration programs. Therefore, public interventions and finance is required to work towards a balanced demand and supply-side approach when it comes to the promotion of RE&EE markets.

The ECCAS centre has an important role to strengthen the domestic private sector and maximise local added value of renewable energy and energy efficiency investments within the region. It becomes an advocate and “local voice” for a “new deal” and an “inclusive energy and climate transition”, creating benefits for women, men and youth.

2.1.2.3 Coordination and Information Barriers

The analysis of the responses given to the questionnaire revealed that there is a diversity not only in the way that policies and regulations were created but also in the development of energy infrastructures. The initiatives are taken individually by different states since there are no directives created by a common regional policy.

Furthermore, the ECCAS region does not have a centralised system for energy information (SIE), which would be necessary to rational planning and investments in the energy sector. Nevertheless, the Central Africa Energy Pool with EU support is in the process of creating an SIE, but it is only for electricity. A system which would be applicable to all energy sectors would be relevant.

2.1.2.4 Investment Barriers

The RE&EE market in most of the ECCAS countries is nascent or emerging, and in some cases in the very early stages. The specific needs of individual countries in the form of finance and investment are as follows:

- **RE&EE market structure not (fully) defined** with little or no data to suggest how the individual markets and the collective regional market can grow.
- **Inadequate support mechanisms for increasing the market share of RE&EE.**
- **Inadequate low-interest and innovative financing** programs or financial policies and regulations to provide financial incentives for RE&EE initiatives.
- Local companies and industry are currently not taking sufficiently advantage of the growing sustainable energy market, interest from investors and job opportunities due to lack of capacity.
- Markets are still not liberalised with utilities ECCAS are still vertically integrated and state owned, combining generation, transmission and distribution.
- **Inadequate framework to promote foreign direct investment and private participation in the RE/EE sector.**
- Apprehension in making new investments, particularly following the economic slowdown due to COVID-19. However, the ‘green recovery’ may point to opportunities here too.

2.1.3 ECCAS Sustainable Energy Policy Readiness

2.1.3.1 Global/Regional policies

There are a number of significant global and regional policies which will help to set the agenda for the CEREEAC, including:

The UN Sustainable Development Goals underpin the actions by which all members of the United Nations have agreed to set policy. Most relevant for the CEREEAC are SDG 7 which aims to “*ensure access to affordable, reliable, sustainable and modern energy for all*”; and SDG9 which aims to, ‘build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation’.

The UN's Third Industrial Development Decade for Africa (IDDA III) to firmly anchor Africa on a path towards inclusive and sustainable industrial development. RE&EE use to support a more diverse, modern and complex economy, achieving the aims of IDDA III will not be possible.

The aspirations that underpin the African Union's Agenda 2063 in particular the aspiration 1 "*A Prosperous Africa based on Inclusive Growth and Sustainable Development*". Africa aspires that by 2063, to be a continent of shared prosperity, which has the means and resources to drive its own development and where, among other things: (i) cities and other establishments are centers of cultural and economic activities, equipped with modern infrastructure, and where populations have access to all essential basic services, including housing, water, sanitation, energy, public transport and ICTs; (ii) structurally transformed economies to create shared growth and decent jobs and economic opportunities for all; and (iii) modern agriculture for greater production, productivity and added value, contributing to national and farmers' prosperity, and the collective food security of Africa; the environment and ecosystems are healthy and preserved, and economies and communities are climate resilient.

ECCAS/CEMAC regional policies including the ECCAS Green Economy and Renewable Energy Vision, the ECCAS Vision 2025, as well as the CEMAC White Paper and Energy Policy 2035. The white paper in particular sets out the regional policy for universal access to modern energy services and economic and social development. These policies also link in with wider aims around industrial development in the region.

The revised ECCAS Treaty, in particular the commitments of member states to (i) develop the energy resources of the Community and (ii) promote renewable energies within the framework of the policy of diversification of energy sources.

The roadmap for the promotion of renewable energies in Central Africa.

The World Bank's Regulatory Indicators for Sustainable Energy scorecard (RISE), a key element of the SEforALL Knowledge hub, helps to assess government support for sustainable energy investment, thus assessing the policies and regulations in place that contribute to advance global sustainable energy goals.

2.1.3.2 National policy readiness

This section outlines the current state of play in terms of produced and published policies in relation to RE&EE across the region, the key findings of this review are as following:

- Energy access policies, including developing rural energy and access, are often mentioned in general energy policies, although this is not ubiquitous and there is still room for improvement.
- There have been some clear efforts to implement policies and targets for RE across the ECCAS MSs, but this is not universal and needs to be addressed.
- Unfortunately, EE policies are far less well-defined by national governments at this point, with few strategic plans in place that incorporate clear ambitions and targets.
- RE&EE policy fails to target key aspects such as: heating/cooling; developing infrastructure to support the RE&EE sectors; specific info on the rural economy and the blue economy; digitisation and innovation; and how energy links to and supports other critical targets and initiatives.
- There are clearly more policy mechanisms and incentives towards RE than towards EE and access to clean energy fuels and technologies.
- Despite progress, there is a lot to be done in the region in terms of harmonisation of policies and creation of incentives for RE, EE and access to electricity and to modern clean fuels and technologies for cooking.

2.2 Justification for and added value of the centre

The analysis conducted revealed **that the existing regional institutional support framework is not prepared to support MS effectively to reach the established RE&EE targets.**

The assessment **identified major regional thematic opportunity gaps** in the areas of capacity development, knowledge and data management, awareness raising as well as investment and business promotion in the

sustainable energy sector. There is a need to create a sustainable energy market from which **the local private sector and industry can take advantage of. Also, this will bring to the MS additional social and economic benefits such as health improvement, increased job opportunities, etc.**

The creation of a specialised regional RE&EE promotion agency under the umbrella of the existing institutional and decision-making framework of ECCAS is recommended. The centre will address RE&EE holistically and in an equal way. The centre will act as a **think-tank and hub for sustainable energy** and will play a key role in creating economies of scale and a competitive sustainable and gender sensitive energy market and business sector.

The centre demonstrates local ownership and will **work according to the local rules under the umbrella of ECCAS decision making process and policy framework.** To ensure ownership, UNIDO and ECCAS undertook a competitive selection process of the host country, which resulted in the adoption of Luanda, Angola as the host of the CEREEAC Secretariat.

The institutional set-up of CEREEAC reflects the principles of **maximising the impact, avoiding duplication of efforts, strengthening and up-scaling of already existing local capacities.** The centre will work through a network of National Focal Institutions (NFIs) and thematic hubs (THs) with regional outreach and specialisation. Currently, UNIDO is also establishing the Oyo Centre of Excellence for Renewable Energy and Energy Efficiency in the Republic of the Congo, which will become one of the THs of the CEREEAC.²⁷

The CEREEAC management will be guided by a Ministerial Steering Committee (MSC), an Executive Board (EB) and a Technical Committee (TC) which will be established during the start-up phase. Moreover, other subcommittees will be established as required (e.g. finance, procurement, recruitment, etc.).

CEREEAC **complements and strengthens ongoing national/regional activities** in the areas of policy and capacity development, knowledge management and awareness raising, as well as investment and business promotion. CEREEAC will position itself as a regional RE&EE promotion agency rather than an implementer on micro-and grass-root levels. To **maximize the local added value** the execution of specific assignments or services will be, in many cases, delegated to national institutions and/or the private sector.

The centre will demonstrate a strong local identity, employ local staff and operate in all relevant official languages of CEEAC, French, English, Spanish and Portuguese. It will be strengthened through the secondment of temporary international experts (e.g., UNIDO).

The following added value of CEREEAC shall be highlighted:

- Regional Agenda Setting, Coordination and Coherence
- Support for Emerging Technologies
- Improved access to sustainable energy services
- Energy Planning Support
- Finance and Legislation Support
- Project Planning and Management
- Policy Advocacy and Awareness
- The Centre will work with its partners in order to identify sources of finance for RE&EE projects that directly benefit local companies.
- The Centre will train local experts and companies in the installation and maintenance of RE&EE systems and equipment through regional train-the-trainers and certification programs.
- The centre will promote south-south knowledge and technology transfer with other centres through the GN-SEC facilitated by UNIDO and with SIDS DOCK when it comes to islands.

²⁷ See project ID 190379 <https://open.unido.org/projects/CG/projects/190379>

- The Centre will pay a special focus to the development of EE
- The Centre will have a very important role on knowledge gathering and dissemination.
- The centre will contribute to the strengthening of the human capital of ECCAS MSs and its institutions in the area of sustainable energy.
- The centre can contribute to sustainable energy data quality, harmonisation and reliability in the region and improving the accessibility for local key market enablers to RE&EE information.

The establishment of a specialised institution for RE&EE helps to coordinate ongoing activities in the region on access to energy and capacity building activities. The creation of the centre is fully in line with the Paris Declaration on Aid Effectiveness and the principles of donor harmonisation and alignment with local country systems. The centre will apply local regulations and proceedings (e.g. procurement, financial rules) and employ exclusively local staff from the ECCAS MSs.

2.3 Origin of Project and Justification for UNIDO Assistance

2.3.1 The centre as part of the GN-SEC

To make regional sustainable energy and climate cooperation/integration a priority, UNIDO launched the Global Network of Regional Sustainable Energy Centres (GN-SEC) Programme. Under a common framework, UNIDO assists regional organisations in the creation and operation of sustainable energy centres. The GN-SEC is an innovative south-south and triangular multi-stakeholder partnership to accelerate the energy and climate transformation in developing countries. The gradually expanding partnership comprises a sub-network of centres for the African and the Arab region (in cooperation with the EAC, SADC, ECOWAS, and the Arab League) and a sub-network for Small Island Developing States (in cooperation with SIDS DOCK, CARICOM, and SPC). In the recent years, the network expanded to Central America, Central Asia and the Himalaya-Hindukush region. Further information is available at: www.gn-sec.net.

Regional public climate infrastructure from the region for the region

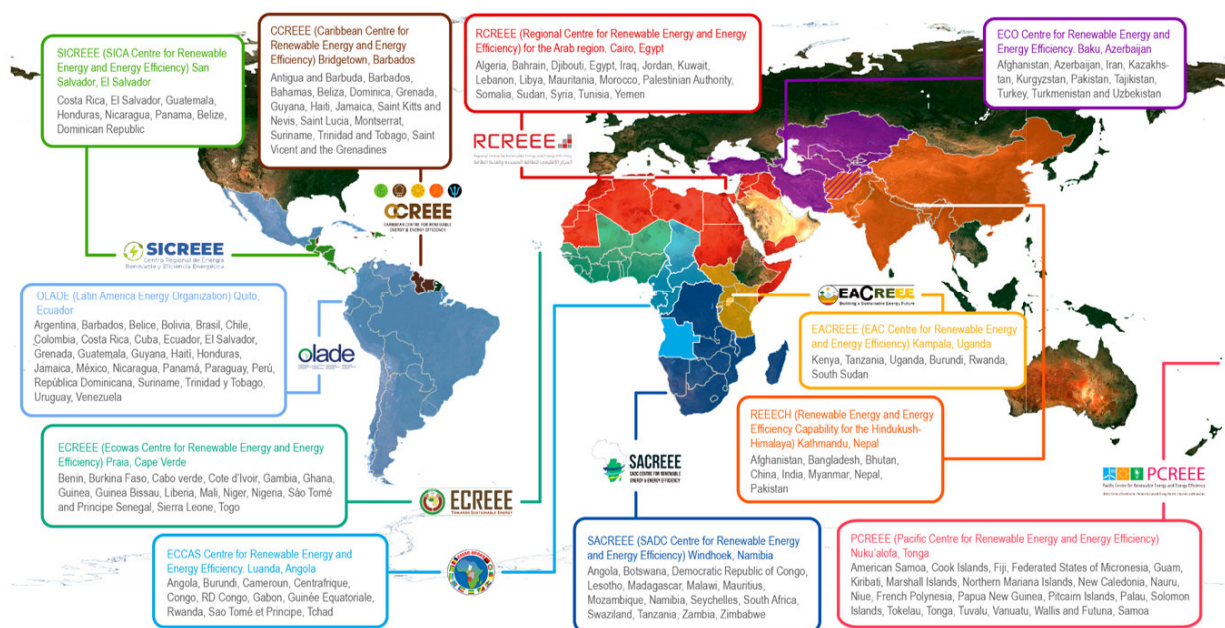


Figure 5: CEREEAC on the GN-SEC Map

The regional sustainable energy centres aim to accelerate the energy and climate transformation by creating economies of scales, equal progress and spill-over effects between countries. In partnership with MS and other sub-regional players (e.g. power pools, utility organisations, regulatory authorities, regional banks), the centres work towards the creation of integrated and inclusive regional markets for RE&EE products and services. This is being done by setting common targets, policies, standards and incentives, as well as the de-risking of investments through the provision of reliable data, analytics, bundling of projects and convening power. Each of the centres has its own priorities depending on the demands of MS. This mandate is in line with the efforts of the African Union (AU) to create a continental electricity market and an African Continental Free Trade Area (AfCFTA).

Thus, the regional centres play an instrumental role to empower local energy industries to take advantage of the growing RE&EE market opportunities and enjoy high-level support by the Energy Ministers and respond to the individual needs of the respective national Governments.

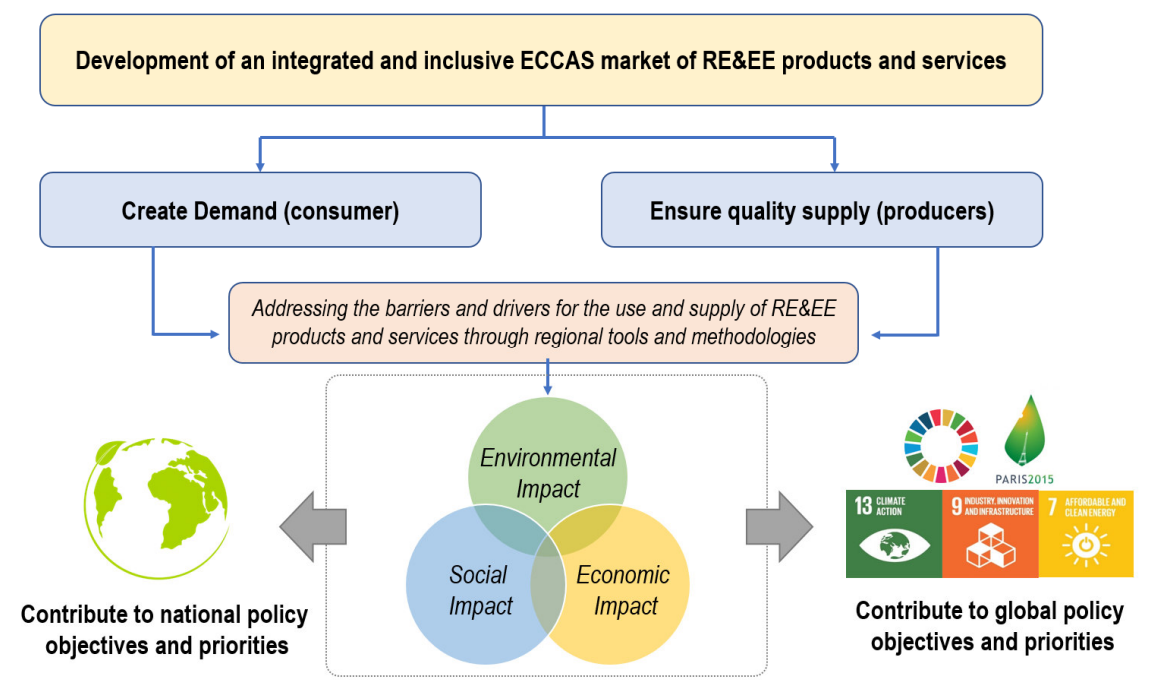


Figure 6: CEREEAC mission²⁸

Some of the barriers for the development of RE&EE markets can be addressed more effectively and at lower cost at the regional level. Like all GN-SEC centres, the CEREEAC will play an important role in setting domestic priorities, contribute to donor harmonisation and coordination, as well as ensuring the sustainability and availability of results and deliverables after project closure. The centre provides regional organisations with the urgently needed technical capacities to coordinate and monitor the implementation of regional energy and climate policies/regulations on national level.

Moreover, the CEREEAC will serve as knowledge resource facility and provide advice to Member States on how best to manage the transition towards sustainable energy. Through regional activities, the CEREEAC introduces new RE&EE innovations into the respective regional market. Once demonstrated and tested, CEREEAC will facilitate their commercialisation, replication and industrial scale-up.

²⁸ Extracted from GN-SEC website: https://www.gn-sec.net/sites/default/files/documents/files/290319_gn-sec_presentation.pdf

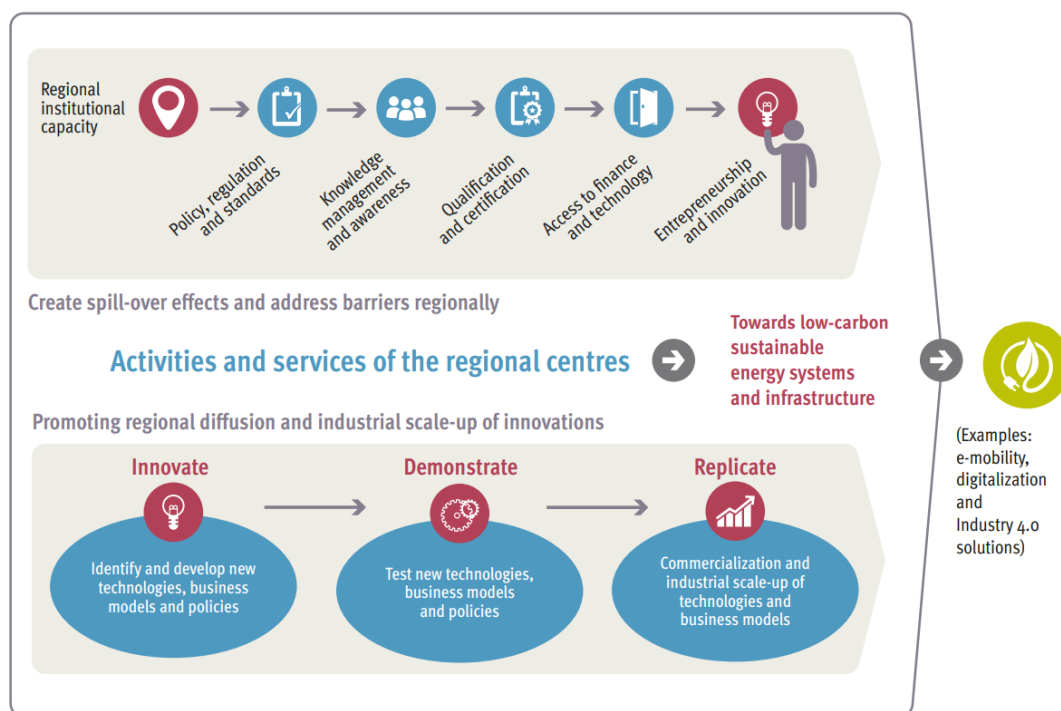


Figure 7: GN-SEC Theory of Change

Through cross-border approaches and methodologies, the GN-SEC centres, including the CEREEAC, complement and accelerate national efforts in the areas of policy and regulation, capacity development, knowledge and data management, awareness raising, as well as the promotion of investment, innovation and entrepreneurship. The CEREEAC serves as a hub for all kind of domestic and international partnerships.

Together with the other GN-SECs in Africa, the CEREEAC advocates for SDG-7, SDG-9 and SDG-13 in national, regional and international policy and decision-making processes. The CEREEAC can complement regional banks when it comes to the addressing of “soft” issues hindering the de-risking and long-term sustainability of investments (e.g. policy, standards, laws, qualification, and certification). These issues have usually too high transaction costs for banks and/or lead to unfavourable financing terms (e.g. interest rates).

The CEREEAC aims at an equilibrium between market demand for and supply of RE&EE products and services. They put particular emphasis on actions directed to increase the domestic value creation of investments in RE&EE. In this context, the centres focus on regional actions to strengthen the productive (manufacturing, assembling, servicing) and innovation capacities of domestic businesses and entrepreneurs (e.g. fiscal and non-fiscal incentives, incubation, acceleration, R&D, quality infrastructure and standards, qualification, IPs, cluster building).

Since 2010, UNIDO has been supporting regional communities/ organisations and its MS, through its Centres, and has, amongst other, contributed to: innovation of the regional set-up for RE&EE in eight (8) regions (covering mainly low-income countries and SIDS with population of more than 1.1 billion); enjoy approval by more than 108 Ministers of Energy and Heads of State; employs around 90 regional staff (excluding consultants and temporary assistance); has leveraged more than US\$300 million in direct funding for GN-SEC programmes (excluding investment leveraged through the activities of the programmes); developed regional RE&EE policies (including on gender) and 15 national action and investment plans; developed regional EE standards covering more than 50 countries; operates three (3) regional RE&EE information systems; has trained more than 5 thousand experts and trainers on various RE&EE issues; contributed to the

development of national RE&EE Investment Plans with a volume of several billions of dollars.²⁹ Further information on the GN-SEC model is included in the annexes.

2.3.2 UNIDO approach and key principles

In addition to the GN-SEC centres established by UNIDO, the organisation has also established technology or sector specific centres in the past that include the Centre for South-South Industrial Cooperation in India, the International Centre for Small Hydro Power in India; the International Centre for Solar Energy in China; the International Centre for Advanced Manufacturing Technology in India, as well as recently the International Hydrogen Energy Centre (IHEC) in China.

In addition, UNIDO has also established a global network of Cleaner Production Centres, which has over 40 national offices. These centres have played an instrumental role in promoting specific technologies, services and concepts that support sustainable development. UNIDO in cooperation with UNEP is also managing the Climate Technology Centre and Network (CTCN). In the process, UNIDO has acquired a wealth of experiences that would be useful in the preparation and running of the CEREEAC.

Given the energy challenges across Africa, and the experience gained from establishing and running similar centres on the continent, UNIDO is very well suited to make use of its regional and global experiences to support the Centre to ensure its effectiveness and sustainability. In addition, UNIDO's involvement will bring international recognition to the Centre, which will be instrumental in mobilising support from development partners. UNIDO currently chairs the UN-Energy and facilitator of two sub-clusters i.e., UN-Energy Cluster and Energy Efficiency cluster and will use these platforms to mobilise support for the CEREEAC.

Energy is central for promoting Inclusive and Sustainable Industrial Development. As such, UNIDO places high importance to the issue as demonstrated by its Strategic Long-term Vision Statement that states that in the long run, the focus of UNIDO activities in the thematic programme "Environment and Energy" should be to bring about fundamental changes in both product design and technology, which provide for resource sustainability. To support this vision, one of the steps foreseen is the shift from fossil-fuel based energy systems to the increased use of RE&EE technologies and services. In fact, UNIDO has in place various strategies outlining its role in promoting RE&EE technologies and services that include the Energy and Climate Strategy, Bioenergy Strategy; Renewable Energy Programme. In sum, the services to be provided by the CEREEAC squarely fit into UNIDO's mandate.

The figure below shows the UNIDO support model for the Centre's establishment and operation in the first couples of years. This model has been adopted for the development of the other GN-SEC centres, and this is the model to be adopted in the implementation of the CEREEAC. UNIDO applies an institutional "twinning" peer-to-peer learning model, which delegates, depending on progress and maturity of the management, gradually more and more responsibilities to the CEREEAC. In the ideal case, the centre operates fully independent after the first operational phase, and has mobilised the required human and financial resources, as well as international partnerships to run sustainably. This stage of development has been achieved in most GN-SEC centres with varying models and success.

²⁹ GN-SEC programme: https://www.gn-sec.net/sites/default/files/documents/files/290319_gn-sec_presentation.pdf

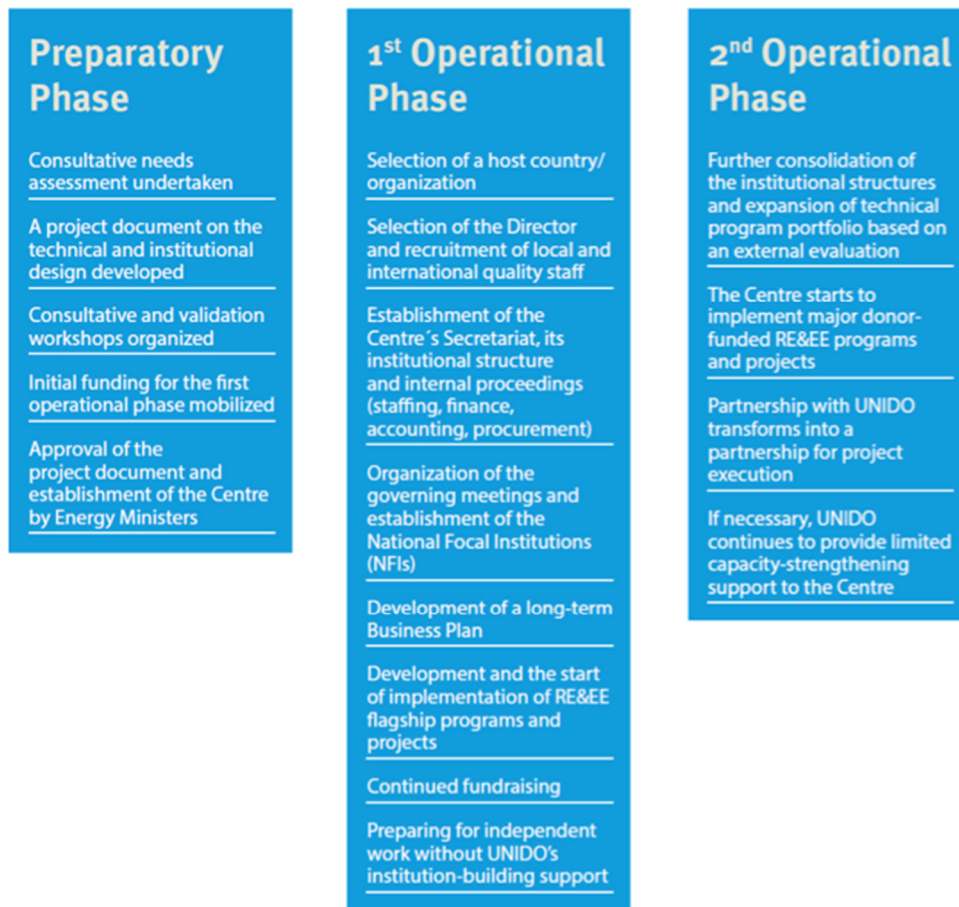


Figure 8: UNIDO's Centre support model³⁰

2.3.3 ECCAS-UNIDO Partnership

The support of UNIDO is directed to establish an effective regional sustainable energy centre with a strong ECCAS identity. The ownership and also the co-funding contribution of the ECCAS is a key success factor. UNIDO's holistic approach to the RE&EE sector is demand driven and is applicable to different settings and conditions and focuses on: creating sustainable markets through developing policy and regulatory framework and supporting market facilitators and players; increasing access to modern energy services for poverty reduction; generation of energy for productive uses to support value addition in decentralized communities, SMEs etc. The net effect is to create conditions for market-based dissemination of RE&EE technologies and services thereby ultimately increase access to modern energy services and enhance energy security. The use of RE&EE will increase productivity thereby increasing market access.

The UNIDO and ECCAS partnership will follow the following main principles:

The incorporation of the CEREEAC in the ECCAS structure will result in the ownership of the centre by the ECCAS and its MS, and better acceptance/adoption of its activities by the different stakeholders. UNIDO will apply an institutional peer-to-peer capacity building model, which delegates, depending on progress and maturity of the local management, more and more responsibilities to the centre. This comes also with a gradual reduction of influence of UNIDO on the decisions and operations of the centre and also project results. Gradually, the check and balances of the governance structure kicks-in, where also UNIDO and the main donors are represented at least during the first operational phase.

³⁰ Extracted from GN-SEC website: https://www.gn-sec.net/sites/default/files/documents/files/290319_gn-sec_presentation.pdf

The comprehensive UNIDO institution building support for the CEREEAC's core funding will be time limited to the first operational phase. Then it will transform to a partnership for specific projects and programs within the region, acting as a hub of activity to deliver programmes with donors and partners, which meet the aims and objectives of ECCAS. The UNIDO services include support for institution building, technical program development, as well as international partnership building and fund raising.

As part of its strategic partnership, UNIDO will collaborate and coordinate closely with different international organizations (e.g. SEforALL office in Vienna, IRENA, REN21) with a specific program aimed at addressing the challenges facing Central Africa. With regard to renewable energy technologies. The objectives of ECCAS and Central Africa, for example in the revised ECCAS Treaty, the Regional Energy Policy (under preparation), the CEMAC / ECCAS white paper on energy or in the draft IRENA roadmap, will be taken into consideration in the development of this agenda in order to ensure that the work of CEREEAC reflects the needs of ECCAS.

UNIDO will take into consideration the ongoing UNIDO activities in the ECCAS countries as well as other interventions by other donors/ organisations to ensure close coordination and synergy and avoid duplication and conflict.

UNIDO will transfer its knowledge and experience gained from similar interventions and adopt the good practices and the success stories involved, namely, the ECREEE model in West Africa, the EACREEE model in East Africa and the SACREEE model in Southern Africa.

UNIDO will facilitate the establishment of a south-south cooperation network between GN-SEC Centres in Africa and around the world as well as other Centre of excellence in which the agency participates;

UNIDO will utilise the existing locally available capacities through using the services of existing R&D institutions, consulting firms, technical centres, and universities.

The strong base of the collaboration with the RE associations of each country will bring the much-needed private sector involvement to assure the industry focus, ownership, and sustainability. ECCAS will play a crucial role in providing UNIDO and the CEREEAC with the key contacts in these areas to help build a strong network for the Centre.

2.4 Purpose of and Need for Provided UNIDO Support

The establishment of an integrated and inclusive ECCAS market for RE&EE products and services by 2030 is facing manifold barriers, which need to be addressed holistically in all countries. These include demand- and supply-side barriers in the areas of policy and regulation, capacity building, coordination and information and investment. The IRENA road map document identifies priority actions to address the existing barriers for RE markets on regional level. One key recommendation includes the establishment of a dedicated regional entity to promote RE&EE.

With the creation of the Central African centre, the GN-SEC will cover all parts of Africa, including most least developed countries (LDCs) and small island developing states (SIDS). The centre will closely cooperate in Africa with RCREEE, ECREEE, SACREEE and EACREEE, the regional economic communities and the power pools on intercontinental issues under the African Union (AU) framework. GN-SEC examples have proven, that the strengthening of regional capacities through a dedicated institution can help to accelerate national efforts and contribute to better coordination, coherence and equal progress, as well as economies of scale. The centre will be a specialised institution within ECCAS. UNIDO will provide mentoring and technical services for the establishment of the centre and its technical program throughout the first operational phase.

The creation of CEREEAC is fully in line with regional policies of ECCAS. It is part of the ECCAS efforts to establish an integrated and inclusive single market for products and services in traditional and emerging sectors, including sustainable energy and cleantech. The establishment of the centre will complement and significantly contribute to the existing efforts of ECCAS to promote energy and transport connectivity in the region. It is also part of strategies, which aim to diversify the economies and reduce the dependency on the export of raw materials and primary products (incl. fossil fuels). The temporary oil price drop caused by the COVID-19 crisis has demonstrated the risk of being primarily dependent on the export of oil products.

The establishment of CEREEAC is complementary to the efforts to expand the regional power market through the Central African Power Pool (CAPP) and the Southern African Power Pool (SAPP). Some of the countries are also part of SACREEE and EACREEE.

3. Project Objectives, Outputs and Activities

3.1 Technical Design of the Centre

3.1.1 Scope of Mandate of the Centre

The geographic scope of intervention of the Centre is defined as follows: It supports and executes RE&EE activities and projects which cover one or more ECCAS countries (Angola, Burundi, Cameroon, Central African Republic, Chad, Republic of Congo, Democratic Republic of the Congo, Equatorial Guinea, Gabon, Rwanda and São Tomé and Príncipe).

It focuses primarily on activities and projects with regional impact or national projects which demonstrate high potential for scaling-up or regional replication.

It ensures activities are focussed on rural areas as well as assists in the development of large scale RE&EE developments, which benefit the region as a whole, covering urban, peri-urban and rural areas.

The Centre promotes the following energy technologies/solutions:

- All appropriate and sustainable RE&EE technologies, including also partly RE-based hybrid systems and mini-grids.
- Small-scale and medium-scale hydro power projects³¹.
- Biofuel projects, which prove to be sustainable. In this context, CEREEAC considers 2nd generation biofuels not competing with food crops for available land, complying with the following minimum criteria: lifecycle GHG reductions, including direct and indirect emissions, land use change, local added value, ecological and social standards.



Figure 9: Map of ECCAS Countries

³¹ Usually with a maximum capacity of 30 MW

Table 5: Scope of intervention and stakeholders

Geographic Focus	ECCAS Stakeholders	Technical Focus
<p>ECCAS Countries:</p> <p>Angola Burundi Cameroon Central African Republic Chad Republic of Congo Democratic Republic of the Congo Equatorial Guinea Gabon Rwanda São Tomé and Príncipe Regional (covers more than one country listed above)</p>	<p>A range of stakeholders involved in RE&EE at all levels, working to ultimately benefit the people of the region.</p> <p>Government institutions (ministries, electrification agencies, municipalities)</p> <p>Private, public or public-private companies (e.g. SMEs, ESCOs, utilities)</p> <p>Individual consultants and project developers</p> <p>Universities, schools, research centres</p> <p>NGOs, CSOs and cooperatives</p> <p>International organisations</p>	<p><u>Renewable energy-based solutions for various end-use sectors, including:</u></p> <ul style="list-style-type: none"> • Solid biomass (e.g., wood from sustainable managed forestry, improved stoves for cooking, improved charcoal production, power generation) • Biofuels (e.g. biodiesel, bioethanol) • Biogas • Waste-to-energy • Geothermal energy • Hydroelectric power (medium, small, micro, pico) • Solar photovoltaic (PV) (e.g. grid/off-grid, standalone systems, lighting, pumping, desalination) • Concentrated solar power (CSP) • Solar thermal heating and cooling (SHC): water heating, cooling of big buildings, process heat e.g. in food production and industry • Solar thermal drying of wood, fruits, herbs etc. • Wind energy (e.g. off/on-grid, on- and off-shore, small and large, water pumping, desalination, etc.) • Ocean energy, incl. wave, tidal and ocean thermal conversion and others (e.g. SWAC) • Utility-scale, mini-grids and decentralised solutions • Renewable electric mobility • Storage, smart grids and flexibility solutions, including battery based • Green hydrogen <p><u>Energy efficiency solutions for various end-use sectors, including:</u></p> <ul style="list-style-type: none"> • Efficient and clean stoves for cooking for households and industries • Efficient appliances (e.g. MEPS for refrigeration, pumping, lighting, cooling) • Energy efficiency in buildings, low energy construction and renovation methods, modern light building materials based on local renewable raw materials for construction and insulation

		<ul style="list-style-type: none"> • Efficient generation, transmission and distribution (e.g. reduction of technical losses in the power and heat grids, smart grids, stop flaring) • Energy conservation and reduction of commercial losses • Efficient land and sea transport solutions (e.g. MEPs electric mobility, intelligent systems) • Industrial energy efficiency <p><u>Important Cross-cutting areas</u></p> <ul style="list-style-type: none"> • Gender and youth • Integrated cross-sectoral climate mitigation and adaptation solutions • Digitalisation and industry 4.0 driven solutions • Holistic approaches addressing energy, resource efficient production and circular economy • RE&EE for productive uses • RE&EE Innovation and entrepreneurship
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3.1.2 Vision and Mission

The main mission of CEREEAC is to ensure the coordination of the implementation of the ECCAS Policy on RE&EE and to promote the creation of an integrated and inclusive ECCAS market for related products and services.

This mission aims to achieve the **vision of ECCAS and CEMAC** expressed in the white paper which is to ensure by 2030, universal access to modern energy services for the populations, with a view to the emergence of our region. CEREEAC contributes to the achievement of SDG7 through regional level activities accelerating national implementation in Central Africa.

3.1.3 Theory of change (flowchart)

The establishment of the regional centre is part of the general economic integration efforts of ECCAS. The final goal is to establish and integrated and inclusive regional market for renewable energy and energy efficiency products and services (which has a demand and supply side).

The CEREEAC will be build based on GN-SEC regional intervention logic and thus it will contribute to the creation of integrated and inclusive regional ECCAS markets for sustainable energy products and services by mitigating existing barriers through regional tools and methodologies. The CEREEAC will work towards an equilibrium between domestic market demand for and supply of sustainable energy products and services. Therefore, the consideration of local value creating aspects (jobs, local manufacturing and servicing) in demand-side activities (e.g. policies, standards, financing and incentives), as well as the promotion of domestic energy entrepreneurship and innovation become an important emphasis.

Currently, the ECCAS market development for traditional and “new emerging” RE&EE products and services is hindered by various barriers on the demand (consumer) and supply (producer, supplier) side. The regional centre will help to address these barriers much quicker by creating economies of scale, equal progress, joint learning, policies, standards and incentives – better and more efficient coordination and harmonisation. Moreover, the centre has the role to create an inclusive market – with the understanding – to increase the local value creation of the RE/EE market expansion by ensuring that local entrepreneurs and businesses can

participate in the value chains of sustainable energy business models, financing, manufacturing and servicing, thus not remaining just an area of imports.

Through its activities, the CEREEAC complements and accelerates national efforts in the areas of policy and regulation, capacity development, knowledge and data management, awareness raising, as well as the promotion of investment, innovation and entrepreneurship. The CEREEAC aims to serve as a hub for all kinds of domestic and international partnerships. Together with ECCAS, the CEREEAC will play an important role in setting domestic priorities, contributing to donor harmonisation and coordination, as well as ensuring the sustainability and availability of results and deliverables after project closure.

The following figure shows the Theory of Change (ToC) flowchart for the CEREEAC.

THEORY OF CHANGE

Mission of CEREAC

Promote the establishment of an integrated and inclusive ECCAS market for renewable energy (RE) and energy efficiency (EE) products and services.

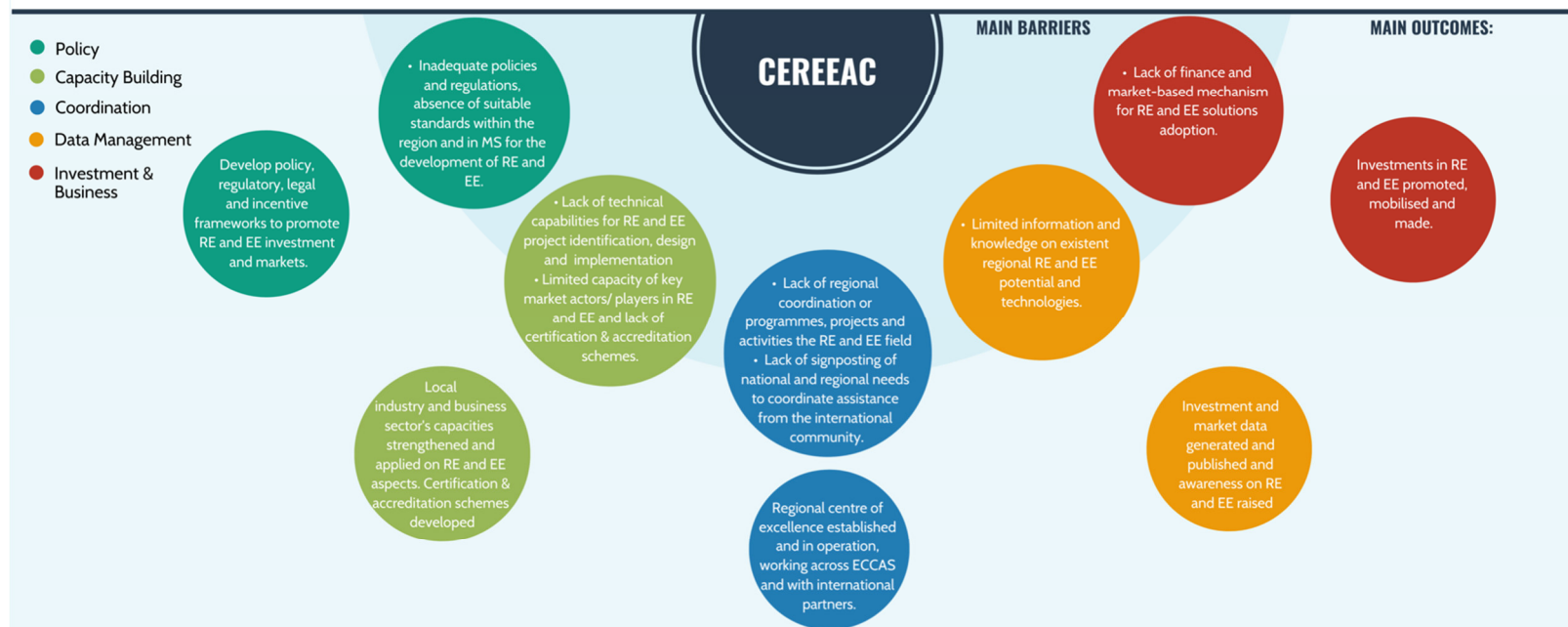
Vision of CEREAC

For all in the ECCAS region to be given the opportunity to realise the economic, social and environmental benefits of a sustainable, efficient, modern, affordable and reliable energy system.

Drivers & Assumptions

Drivers: Regional cooperation and integration is an effective and cost-efficient way of addressing ECCAS energy challenges ; Strengthening of capacities and knowledge on RE and EE will foster the adoption of RE and EE solutions; Credible data, improved awareness and demonstrated benefits will support an accelerate the adoption of centralised and decentralised energy solutions.

Assumptions: CEREAC is the key partner for the promotion of RE and EE in ECCAS enabling MS, donor organisations, development partners, (development) finance institutions, bilateral and multilateral partners to make more focused contributions towards SE development in the region; ECCAS MS and key stakeholders are committed to promote, pursue, finance and implement sustainable energy solutions.



IMPACT

Support provided in execution and implementation of national and regional energy policies.



Figure 9: CEREAC Theory of Change

3.1.4 Results framework summary (details in the annex)

3.1.4.1 Start-up phase

Taking the GN-SEC experience, the start-up phase of the centre can last up to two years. It involves usually the following key tasks:

- Designate the Centre’s host country in the Conference of the ECCAS Heads of State and Governments. The Republic of Angola was designated as the host country per ECCAS decision N°04/CEEAC/CCEG/XIX/21 on 30 July 2021. In December 2021, the ECCAS Commission signed an agreement regarding the hosting of CEREEAC with the government of Angola.
- Establishing the centre physically with initial staff members and Director.
- Establishing a governance structure of the Centre including ensuring there are NFI contacts in every ECCAS country and ensuring there is a Technical Committee (TC), Executive Board (EB) and Ministerial Steering Committee (MSC) established. This will include also the identification of potential Thematic Hubs (THs). One of the THs will be the Oyo Centre of Excellence for Renewable Energy and Energy Efficiency, currently established by UNIDO in partnership with the Republic of the Congo. It will focus particularly on the water, energy and food nexus, rural electrification and cleantech promotion.
- Signing of financial agreements between UNIDO and key donor partners (e.g., ADA, AECID, Norway)

Experience has shown that this phase might take up to two years. As long as the centre has no legal identity it cannot sign contracts or recruit staff according to its own rules and procedures. In line with the GN-SEC twinning modality, UNIDO will bridge this start-up phase through its own rules and procedures so that the centre can begin working even before obtaining its full legal identity. Based on the achievements and milestones, UNIDO will gradually delegate more and more powers to the centre under the supervision of the Executive Board. Therefore, the start-up phase and the full operational phase are overlapping. Experiences have demonstrated that during the first three years there is need to put particular emphasis on institution building and the establishment of robust procedures and internal controls of the centre. The full list of outcomes, outputs and activities for the start-up phase are as follows:

Table 6: Start-up Phase

Outcome 1: Effective CEREEAC provides quality services to ECCAS Member States and the international community	
Output 1.1: Funding arrangements finalised, Host Country Agreement prepared and the CEREEAC Secretariat is physically established	
Activities	Responsibility
1.1.1 Host Country Agreement is prepared	ECCAS, UNIDO
1.1.2 The ToRs for the CEREEAC staff are prepared	ECCAS, UNIDO
1.1.3 Funding arrangements with donors, ECCAS and host country finalised	Angola, ECCAS, UNIDO
1.1.4 Establishment of a functional office with IT infrastructure	Angola, ECCAS, and UNIDO
Output 1.2: Quality technical and administrative staff recruited and internal rules and procedures of the centre established and implemented	
Activities	Responsibility
1.2.1 Recruit the CEREEAC Executive Director and the UNIDO technical assistant according to the CEREEAC personnel TORs	ECCAS, UNIDO

1.2.2 Recruit the administrative and technical staff in accordance with the organizational chart and established TORs (using gender responsive procurement – see Output 7)	CEREEAC, ECCAS, UNIDO
1.2.3 Develop gender-sensitive internal rules and procedures, as well as fiduciary standards of CEREEAC in line with international donor requirements; kick-off the recruitment and procurement cycle, incl. the establishment of relevant committees (e.g. procurement) in line with the UNIDO GN-SEC Manual for Administration and Finance;	UNIDO, CEREEAC, ECCAS
1.2.4 Relevant trainings on finance and administration, management, project cycle management and technical issues for CEREEAC staff undertaken and external certification support implemented	UNIDO / external contractors
1.2.5 Establish an internal quality and appraisal framework for supported RE&EE activities, as well as environmental and social safeguard policies in line with international standards (e.g., ESIA, ESMP).	CEREEAC, UNIDO
Output 1.3: CEREEAC fully legalised and institutional and governance structure established	
Activities	Responsibility
1.3.1 CEREEAC Host Country Agreement signed	ECCAS, CEREEAC (UNIDO provide mentoring support) and Host Country
1.3.2 Establish the networks of National Focal Institutions (NFIs) and Thematic Hubs (THs) and strengthen its capacities (e.g., through interns, collaboration, consultants)	CEREEAC, ECCAS
1.3.3 Establish the TC, CMP and EB (incl. rules and procedures) and organise at least one annual TC and CMP meeting; (TC and CMP should aim at a 50% women participation – see Output 7)	CEREEAC and UNIDO (at the beginning)
1.3.4 Sign first funding/execution agreement signed between UNIDO and CEREEAC based on the successful certification of internal proceedings	UNIDO, CEREEAC
Output 1.4: Long and short-term planning, implementation and M&E framework of the Centre is established and implemented	
Activities	Responsibility
1.4.1 Develop the CEREEAC Business Plan	CEREEAC, UNIDO
1.4.2 Develop and adopt annual work plans, status reports and audited financial statements of the Centre	CEREEAC with support of UNIDO in the beginning
1.4.3 Develop and implement of a Monitoring and Evaluation (M&E) system including indicators measuring the CEREEAC progress and impact (including Gender and Youth specific indicators)	CEREEAC with support of UNIDO in the beginning
1.4.4 External auditors and evaluators selected by public procurement are appointed by the CEREEAC procedures (annual external audits of CEREEAC accounts)	UNIDO, ECCAS (to be contracted by UNIDO in the beginning)

The first operational phase of the project will involve the formal launch of the CEREEAC and a number of activities to develop a full programme of work in key areas of policy development, capacity building,

investment, project development and awareness raising. The centre will also have established a M&E system as well as having developed institutional policies and procedures to run the organisation. This period is expected to last the full length of the first business plan, as well as the time taken to develop that plan, at approximately 4 years. This period might be extended for another two years.

The full list of outcomes, outputs and activities for the First Operational Phase are described below. By the end of the project duration, it is expected that all outputs under outcome 1 are achieved. The outcomes 2 to 6 describes an optimistic scenario and a point of orientation of the CEREEAC management. Since the resources for many of the activities under these outcomes have to be mobilised during project implementation, it will most probably not be possible to implement all of them. The implementation of more than 50% of the activities under the outcomes 2 to 6 is considered as the conservative scenario and a success.

Table 7: First Operational Phase

Outcome 1: Effective CEREEAC provides quality services to ECCAS Member States and the international community	
Output 1.5: The core activities and functions of the Centre are launched	
Activities	Responsibility
1.5.1 Organize the official inauguration of the Centre (back-to-back to the EB and TC meeting)	Angola, CEREEAC, ECCAS, UNIDO
1.5.2 Sign funding and technical cooperation agreements with regional and international partners to ensure financial sustainability of the Centre for the 1 st and 2 nd Operational Phases of the Centre (e.g., EAPP, IRENA, GIZ, REN-21, REEEP)	CEREEAC
1.5.3 Develop at least 4 flag-ship programs and/or projects in partnership with UNIDO and other partners to be submitted jointly donors and environmental funds (e.g. GEF, GCF); at least 2 programs/projects to be implemented with UNIDO	CEREEAC with support of UNIDO and other partners (e.g. OIF)
1.5.4 Act as focal point for international organisations such as GN-SEC, IRENA, REN-21 and SEforALL in the region	CEREEAC
1.5.5 Participate in joint south-south and triangular GN-SEC activities, particularly in the African Union framework, as agreed (participate in at least two programs/projects)	CEREEAC with support of UNIDO

Outcome 2: Improved national RE&EE policy and regulatory frameworks in ECCAS Member States	
Output 2.1: Regional RE&EE policies, regulations and standards developed and national implementation facilitated	
Activities	Responsibility
2.1.1 Review of existing national targets, policies, regulations, standards and institutional capacities to promote RE&EE markets and identification of regional support needs in the urban and rural context	CEREEAC, ECCAS with support of UNIDO and other partners
2.1.2 A regional RE&EE target, policy and implementation framework (incl. M&E) is established and the development/update of national RE&EE action plans is facilitated (covering demand-side and supply-side aspects)	CEREEAC, ECCAS with support of UNIDO and other partners
2.1.3. Develop at least one relevant regional regulation (incl. practical model templates) to promote private participation in RE and facilitate its implementation on national level (e.g., PPAs for IPPs, net-metering, rural mini-grids)	CEREEAC, ECCAS with support of UNIDO and other partners

2.1.4 Development of regional minimum performance standards (MEPS) for lighting and appliances and facilitate the adoption and enforcement on national level	CEREEAC, ECCAS with support of UNIDO and other partners
2.1.5 Identify the need for and develop a quality standard at least one RE equipment relevant for urban and rural areas and facilitate its enforcement on national level (e.g. solar PV, cooking, mini-grids)	CEREEAC with support of UNIDO and other partners
2.1.6 Cooperate with other African GN-SECs, regional power pools and regulatory authorities on the harmonisation of RE&EE standards under the AU framework in at least 2 initiatives/programs particularly (particularly the electricity and heat markets)	CEREEAC, ECCAS, CAPP, with support of UNIDO and other partners
Output 2.2: CEREEAC works as a think-tank and clearinghouse for policy and regulatory advice	
Activities	Responsibility
2.2.1 Respond to specific requests for assistance from Governments and private sector for advice on policy, regulation and legislation for promotion of RE&EE (at least 5)	CEREEAC
2.2.2 Develop and present ECCAS positions on sustainable energy in energy and climate conferences, policy processes and negotiations	CEREEAC
2.2.3 Prepare technical policy briefs on issues such as energy for productive uses and industrial decarbonisation, efficient transport (incl. vehicle and fuel standards, e-mobility), gender, industrial energy efficiency, cleantech innovation, innovative financing and business models, digital/industry 4.0 energy solutions, climate adaptation/resilience of energy infrastructure, water, energy, food and climate nexus	CEREEAC, ECCAS with support of UNIDO and other partners

Outcome 3: National capacities for the use and supply of RE&EE quality products and services are strengthened	
Output 3.1: Regional framework for the qualification, certification and testing of RE&EE products, services and personal strengthened (with focus on the needs of local private sector and industry)	
Activities	Responsibility
3.1.1 A regional needs assessment on quality infrastructure related to RE&EE products, services and personal implemented (particularly reflecting the needs of the local RE&EE technology industry and business)	CEREEAC with support of UNIDO and other partners
3.1.2 A modular regional framework for the qualification, certification and testing of RE&EE products, services and personal established and its implementation through a regional network of national centres/partners facilitated	CEREEAC, ECCAS, national quality and training institutes with support of UNIDO and other partners
3.1.3 Tailored ECCAS training and certification modules covering various RE&EE issues and tools are developed in coordination with the local business and industry groups, as well as national training and quality institutes (e.g. UNIDO developed standards on SHP development or industrial EE)	CEREEAC with support of UNIDO and other partners
Output 3.2: ECCAS network of certified trainers is created and operational	
Activities	Responsibility

3.2.1 Strengthening cross-border cooperation between universities and vocational training institutions and networks to promote train-the-trainer modalities	CEREEAC with support of UNIDO and other partners
3.2.2 Act as coordinative hub for the accreditation and certification of national training centres and trainers	CEREEAC with support of UNIDO and other partners
3.2.3 Establish a web-based interactive portal on training as part of the CEREEAC website with an <i>'ask the trainer/expert'</i> function to provide advice for businesses and candidates	CEREEAC with support of UNIDO and other partners
Output 3.3: Key market enablers are trained on RE&EE aspects of high relevance for the local business and industry sector	
Activities	Responsibility
3.3.1 Train key policy and decision-makers in RE&EE energy planning, policy, legislation, incentive mechanisms, tendering/auctions, standards (in conjunction with the development of the national RE&EE action plans)	CEREEAC with support of UNIDO and other partners
3.3.2 Train rural electrification agencies and other rural stakeholders on various RE&EE issues and support mechanisms (e.g., concessions, digital innovations payment systems)	CEREEAC with support of UNIDO and other partners
3.3.3 Train utilities and regulators regarding steps to take to promote IPPs, RE integration, grid stability, EE and loss management, climate resilience and disaster reduction, e-mobility and storage, digitalisation and innovative business models	CEREEAC with support of UNIDO and other partners
3.3.4 Provide targeted RE&EE training for energy entrepreneurs and businesses in rural and urban key industries (e.g., petroleum, agriculture, blue economy), as well as the financial sector (e.g. banks)	CEREEAC with support of UNIDO and other partners
3.3.5 Increase the capacity of experts to mainstream gender into RE&EE policies and projects	CEREEAC with support of UNIDO and other partners
3.3.6 Train key stakeholders on the enforcement of standards related to quality infrastructure for RE&EE products, services and personal in cooperation with national training and quality institutes (e.g. SHP, appliances and lighting, industrial EE, vehicle and fuel standards)	CEREEAC with support of UNIDO and other partners
3.3.7 Train experts/businesses on the financial structuring and planning of RE&EE projects (e.g. climate finance, RETScreen Expert, HOMER Pro)	CEREEAC with support of UNIDO and other partners
Output 3.4: Local innovation and R&D frameworks and networks with private-sector orientation are strengthened	
Activities	Responsibility
3.4.1 Conduct a baseline study on the R&D and innovation priority needs of the local RE&EE industry and business sector	CEREEAC
3.4.2 Contribute to the establishment of R&D and innovation networks comprising national institutes and private sector and facilitate the development of joint projects	CEREEAC
3.4.3 Promote south-south and north-south technology development partnerships	CEREEAC

Outcome 4: Availability of investment and market data, awareness and advocacy on RE&EE are strengthened	
Output 4.1: Establish an online RE&EE information management system addressing the needs of investors, local industry and business	
Activities	Responsibility
4.1.1 Maintain an effective interactive website including extensive document sharing facility (http://www.cereec.org) interlinked with the GN-SEC portal	CEREEAC with support of UNIDO and other partners
4.1.2 Establish a gender-sensitive web-based information system on RE&EE market and investment data interlinked with the GN-SEC portal	CEREEAC with support of UNIDO and other partners
4.1.3 Compile an inventory of relevant experiences/projects and papers/study reports/research reports and documents on best practices, skills, know-how, knowledge, technology suppliers in each MS (disseminated through the information system)	CEREEAC with support of UNIDO and other partners
4.1.4 Create a gender-sensitive database of RE&EE businesses contacts (disseminated through the information system)	CEREEAC with support of UNIDO and other partners
4.1.5 Organize training workshops on energy data verification, quality and harmonisation in cooperation with NFIs and national data and quality institutes	CEREEAC with support of UNIDO and other partners
4.1.6 Create a database of RE&EE investment opportunities and sites (linked to Output 6)	CEREEAC with support of UNIDO and other partners
4.1.7 Collect, aggregate and disseminate GIS based RE&EE resource data of MS through the information system	CEREEAC with support of UNIDO and other partners
Output 4.2: Promote awareness on RE&EE solutions and opportunities	
Activities	Responsibility
4.2.1 Organize at least one major conference on different RE&EE aspects per year (possibly a virtual event depending on travel situation due to COVID-19)	CEREEAC with support of UNIDO and other partners
4.2.2 Produce an ECCAS Industry report on RE&EE (or cleantech) and regularly update it (this should be different from the policy report and link to industry opportunities, socio-economic (including gender and youth mainstreaming) and supply chain benefits etc.)	CEREEAC with support of UNIDO and other partners
4.2.3 Design and implement at least one gender-sensitive regional RE&EE awareness campaign (e.g. electricity theft, efficient lighting, clean cooking)	CEREEAC with support of UNIDO and other partners

Outcome 5: Investment in RE&EE infrastructure, services and businesses are mobilised and implemented	
Output 5.1: Facilitate finance, private participation and foreign direct investment in RE&EE projects	
Activities	Responsibility
5.1.1 Cooperate with financial institutions (e.g. DFIs, local banks) on the bundling of projects – Investment Portfolio – presenting relevant project data (to be published through the information system)	CEREEAC with support of UNIDO and other partners
5.1.2 Provide pre-investment and sustainability support to RE projects with high regional replication and impact potential (e.g. feasibility studies, ESIA's and elaboration of project proposals) in partnership with DFIs and the financial sector (e.g. bioenergy, SHP, mini-grids)	CEREEAC with support of UNIDO and other partners
5.1.3 Work with the financial sector on the design and testing of innovative RE&EE financing schemes and models for urban and rural energy (e.g. concessional, commercial finance, micro-credits, guarantees, insurance products, revolving funds, energy contracting)	CEREEAC with support of UNIDO and other partners
5.1.4 Analyse and implemented RE&EE projects with high replication potential and disseminate the lessons learned throughout the ECCAS region	CEREEAC with support of UNIDO and other partners
Output 5.2: Promote local RE&EE entrepreneurship and innovation	
Activities	Responsibility
5.2.1 Regional platform to support RE&EE start-ups, entrepreneurs and SMEs is fully operational and provides technical support in partnership with national centers/institutions	CEREEAC with support of UNIDO and other partners
5.2.2 Support MS in the establishment of RE&EE (cleantech) acceleration programs and associations/clusters by working with UNIDO GCIP and BLOOM Program	CEREEAC with support of UNIDO and other partners
5.2.3 Organize at least two RE&EE investment and business forums (e.g. trade fares) to present the project pipeline to interested financiers and investors (in partnership with PFAN and other partners)	CEREEAC with support of UNIDO and other partners
5.2.4 Organize at least one investment and business forum on rural sustainable energy opportunities (e.g. mini-grids, stand-alone systems, hybrids, efficient cooking)	CEREEAC with support of UNIDO and other partners

3.1.5 Gender and youth mainstreaming

Gender equality and the empowerment of women and youth have a significant positive impact on sustained economic growth and inclusive development, which are key drivers of poverty alleviation and social progress. The impacts of energy are not gender-neutral and, due to diverging needs and rights on energy consumption and production, women and men are expected to be affected differently by sustainable energy projects.

ECCAS has a unit in charge of Gender, a Gender Policy and an Action Plan was adopted by the Heads of State on July 30, 2020. This policy aims to improve the institutional and operational integration of gender in programs, sectors of the Community as well as support to MS, in accordance with continental and international commitments in the field of women's empowerment, pacification, maintenance of peace in the region, environment, health, and in social and cultural development of infrastructure.

Overall, the project sets out to demonstrate good practices for a just energy transition, considering not only gender equality and women's empowerment, but also youth engagement and the involvement of minority

groups wherever possible, and to avoid negative impacts on people in general, including due to their gender, age, ethnicity and/or religion

A gender analysis will be conducted in line with the guidelines set out in the UNIDO Guide to Gender Analysis and Gender Mainstreaming the Project Cycle and ECCAS Gender Policy and Action Plan. It will be done with the support of the Global Women's Network for the Energy Transition (GWNEN) to ensure that the centre's activities and projects/programmes will be elaborated in a gender-responsive manner in order to establish gender responsive indicators, targets and baseline. Hence, a systematic gender and inter-generational analysis will be undertaken for projects and programmes to be designed and formulated and implemented.

Overall, the project sets out to demonstrate good practices for a just energy transition, considering not only gender equality and women's empowerment, but also youth engagement and the involvement of minority groups wherever possible, and to avoid negative impacts on people in general, and in particular due to their gender, age, ethnicity and/or religion.

3.1.5.1 Development goal

The CEREEAC will adopt the ECCAS Gender Policy in its activities and programmes; and develop specific activities to foster the implementation of the ECCAS Gender Policy and an Action Plan in the region. The following figure illustrate how the ECCAS Gender Policy and Action Plan will be taken into account.



Institutional governance structure and staff policy

- The CEREEAC team will include a Gender and Youth Specialist that will ensure that all Centre's activities are gender and youth sensitive as per the ECCAS Gender Policy
- Gender responsive recruitment will be promoted by the Centre at all levels where possible. The Centre will try to maintain women representation in the technical and administrative staff of at least 50%.
- The CEREEAC will pursue a 50% women participation in both the CEREEAC MSC and TC



Programme/project/activity implementation level

- All activities, programmes and projects developed by the CEREEAC will target at least 40% beneficiaries or service providers being women and youth.
- Gender responsive TORs will be used to mainstream gender in the activities of consultants and experts engaged by the Centre. In cases where the programme/project does not have direct influence, gender-sensitive recruitment is encouraged.
- Gender and youth dimensions will be considered in the CEREEAC M&E system accordingly to the ECCAS Gender Policy (the system will include key gender dimensions of the respective outcomes and outputs, indicators and targets).
- Whenever possible, existing staff will be trained and their awareness raised regarding gender and youth issues.
- All decision-making processes of the CEREEAC will consider gender and youth dimensions. At a programme/project management level, the CEREEAC TC will invite observers to ensure that gender is fairly taken into account. Also, at a project and activity design level, implementation and evaluation (project cycle) efforts will be made to consult with stakeholders focusing on gender equality and women's empowerment issues. Moreover, the CEREEAC will develop its guidelines to mainstream gender into its programmes and projects according to the ECCAS Gender policy.

Figure 10: The CEREEAC Strategy for gender mainstreaming

3.1.5.2 Outcomes and outputs

The following are the genders and youth expected outcomes and outputs from the CEREEAC operation.

Table 8: Gender and Youth Dimensions

Outcome 6: Gender and youth are mainstreamed into the CEREEAC activities, the project cycle and regional gender programmes/projects	
Output 6.1: Gender and youth dimensions are integrated into CEREEAC governance structure, programme/project management level	
Activities	Responsibility
6.1.1 Appoint a Gender and Youth Specialist and partners with the other GN-SEC gender focal points	CEREEAC with support of UNIDO and other partners
6.1.2 Promote gender and youth responsive recruitment (targeting, if possible, a representation of at least 50% of women working in the Centre and 40% youth)	CEREEAC with support of UNIDO and other partners
6.1.3 Pursue a 50% women participation in the TC and EB meetings	CEREEAC with support of UNIDO and other partners
6.1.4. Develop a Gender and Youth Mainstreaming strategy for the CEREEAC	CEREEAC with support of UNIDO and other partners
6.1.5 All projects/programmes developed and/or implemented by the CEREEAC should include gender-specific targets or performance indicators that track gender results and impact (pursue a target of at least 50% beneficiaries or service providers being women and 40% youth)	CEREEAC with support of UNIDO and other partners
6.1.6 Collect gender and youth related indicators on CEREEAC projects and programmes and integrate a gender mainstreaming chapter on the RE&EE ECCAS Industry report (see Output 4.2)	CEREEAC with support of UNIDO and other partners
Output 6.2: Develop and facilitate the execution of regional gender programmes and projects	
Activities	Responsibility
6.2.1 Ensure inclusion of gender and youth mainstreaming indicators on the energy policies and strategies developed through Output 2.1	CEREEAC with support of UNIDO and other partners
6.3.2 Create targeted actions for women within the developed flagship projects (e.g., women led energy access small business competition)	CEREEAC with support of UNIDO and other partners

3.1.6 Key programs and cross-cutting areas

The following are some key programmes that the Centre could pursue during the 1st Operational phase:

- Develop a comprehensive holistic integrative process to support ECCAS MS to develop its national RE & EE policies/plans so that they contribute towards the implementation of the regional vision and goals (similar process for policy development as the one carried out by ECREEE)
- Expansion of the Energy Efficiency Lighting and Appliances (EELA) project to ECCAS, as some of the ECCAS countries are already benefiting from it through the EACREEE and SACREEE centres. At the moment the project supports the development of vibrant markets for EE lighting and appliances across East and Southern Africa³².
- Program to promote Industrial Energy Efficiency and Management with close ties to the UNIDO Industrial Energy Efficiency Accelerator.
- Investment and business development: Discuss with Get.Invest and PFAN the establishment and operation of a Project Preparation Facility (PPF) to support the development and implementation of local sustainable energy across the region. Establishment of a regional platform to promote

³² More information on the EELA project can be found at: <https://www.eacreee.org/project/energy-efficient-lighting-and-appliances-eela-project-southern-and-eastern-africa>

incubation and acceleration of RE&EE start-ups and businesses through the GCIP and Regional BLOOM Cluster program.

- Frontier technology programs, such as green hydrogen and ocean energy could be developed. Close links with ongoing UNIDO and GN-SEC programs can be created (e.g. green hydrogen program, GLOEA).

Capacity building:

- For decision makers – making policy match potential;
- For entrepreneurs – creating the leaders required for investment;
- For technicians – developing the workforce to enable sustainable growth.
- Cross cutting issues will be integrated into all the programmes and projects of the Centre.

The highlighted key programmes will be analysed at the start of the First Operational Phase of the Centre, so that project proposals are developed and financing raised.

3.1.7 Service lines of the Centre

The CEREEAC aims to fulfil its objective and mandate by working together with stakeholders acting in the region and focusing on coordinating and creating synergies with different national/regional activities. The CEREEAC will serve as a catalyst for the implementation of RE&EE projects that will have a direct impact on transforming the ECCAS energy landscape. This will be carried out through stakeholder engagement as well as through the provision of several services to different clients and target groups:

- strengthen the ECCAS in technical coordination and implementation of RE&EE issues and projects
- act as the ECCAS regional hub for the coordination of the Sustainable Energy for All Initiative (SEforALL) in cooperation with AfDB, SIDS DOCK and other donor activities
- act as facilitator to implement established regional sustainable energy targets of ECCAS at national levels
- act as service provider to assist the ECCAS MS to implement their RE&EE policy commitments in practice (e.g., laws, standards, incentive schemes)
- work closely with and strengthen already existing national energy institutions
- be a strong link between international climate finance and implementation on the ground
- act as “think-tank” for sustainable energy issues in Central Africa
- act as editor of policy statements for ECCAS
- act as provider of reliable sustainable energy investment and market data
- promote the Central Africa region as attractive place to invest in RE&EE
- act as implementer of regional awareness raising campaigns
- act as manager of call for proposals for sustainable energy projects and businesses
- support local businesses to take advantage of sustainable energy investment opportunities
- act as coordinator of regional train-the-trainer networks and applied research networks and projects
- act as executor of regional RE&EE programs, projects and activities in cooperation with international partners (e.g., UN, EU, AfDB, donors, IRENA, GEF)
- participate in the GN-SEC and coordinate closely with the other regional centres (e.g., ECREEE, SACREEE, EACREEE, CCREEE, PCREEE, RCREEE)
- act as promoter of south-south and north-south knowledge and technology transfer.

3.1.8 Time-Activity Diagram

A time-activity diagram is presented below.

Outcome/Outputs / Activities	Year 1												Year 2												Year 3												Year 4												Year 5														
	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12			
Outcome 1: Effective CEREAC provides quality services to ECCAS Member States and the international community																																																															
Output 1.1: Funding arrangements finalised, Host Country Agreement prepared and the CEREAC Secretariat is physically established																																																															
1.1.1 Host Country Agreement is prepared																																																															
1.1.2 The ToRs for the CEREAC staff are prepared																																																															
1.1.3 Funding arrangements with donors, ECCAS and host country finalised																																																															
1.1.4 Establishment of a functional office with IT infrastructure																																																															
Output 1.2: Quality technical and administrative staff recruited and internal rules and procedures of the centre established and implemented																																																															
1.2.1 Recruit the CEREAC Executive Director and the UNIDO technical assistant according to the CEREAC personnel TORs																																																															
1.2.2 Recruit the administrative and technical staff in accordance with the organizational chart and established TORs (using gender responsive procurement – see Output 7)																																																															
1.2.3 Develop gender-sensitive internal rules and procedures, as well as fiduciary standards of CEREAC in line with international donor requirements; kick-off the recruitment and procurement cycle, incl. the establishment of relevant committees (e.g. procurement) in line with the UNIDO GN-SEC Manual for Administration and Finance;																																																															
1.2.4 Relevant trainings on finance and administration, management, project cycle management and technical issues for CEREAC staff undertaken and external certification support implemented																																																															
1.2.5 Establish an internal quality and appraisal framework for supported RE and EE activities, as well as environmental and social safeguard policies in line with international standards (e.g. ESIA, ESMP).																																																															
Output 1.3: CEREAC fully legalised and institutional and governance structure established																																																															
1.3.1 CEREAC Host Country Agreement signed																																																															
1.3.2 Establish the networks of National Focal Institutions (NFIs) and Thematic Hubs (THs) and strengthen its capacities (e.g. through interns, collaboration, consultants)																																																															
1.3.3 Establish the TC, CMP and EB (incl. rules and procedures) and organise at least one annual TC and CMP meeting; (TC and CMP should aim at a 50% women participation – see Output 7)																																																															
1.3.4 Sign first funding/execution agreement signed between UNIDO and CEREAC based on the successful certification of internal proceedings																																																															

3.2 Target Beneficiaries

The main target beneficiaries of the activities of the Centre shall consist primarily of RE&EE market players and enablers in the ECCAS region. More specifically, the following stakeholders will benefit from the Centre's activities:

Policy makers in energy and related sectors: as a result of the project, the beneficiaries will have better capacity to develop, implement and operationalize policies, strategies that are conducive to the dissemination of RE&EE technologies in the region.

Private sector like micro, small and medium enterprises (MSMEs), entrepreneurs, equipment manufacturers, project developers financing institutions: as a result of the project, they will be trained on various aspects including RE project identification, development, implementation, funding mobilisation, equipment manufacturing etc.

National institutions charged with promoting RE&EE: they will benefit from the project through targeted training programmes that include regional equipment standards and performance labelling schemes, policy implementation and rural energy planning.

Regulators, Independent Power Producers (IPPs), Generating Companies, utilities and grid operators: as result of the project, they will have clear policy and regulatory framework on how to collaborate with other stakeholders in the development of RE will be established and these beneficiaries will be sensitized on the benefits of adopting EE strategies.

Policy makers, private sector, national institutions: they will benefit from the project through awareness raising programmes on RE&EE.

Women and children: Lack of access to modern energy services tends to affect women and children disproportionately. Therefore, the activities of the Centre will alleviate the plight of women and children through reduced time and labour in collection firewood and exposure to indoor air pollution, creation of opportunities of engaging in productive activities, among others.

ECCAS' population: Ultimately, the greater population in the ECCAS region will benefit from increased access to modern energy services through increased market penetration of RE technologies and systems and EE technologies and services.

4. Institutional Arrangement and Governance Structure of the Centre

4.1 Legal Status of the CEREEAC

The Centre will be established as a specialised institution of the ECCAS. The Centre will act as an independent body but within the legal, administrative and financial framework of ECCAS rules and regulations. It will have its own legal identity. ECCAS will delegate the day-to-day management and decision-making authorities to the bodies and the Centre's Executive Director (e.g., procurement, authority to sign contracts and recruitment). This approach has been applied by UNIDO in other centres including the EACREEE and ECREEE and is considered to be essential to the effective and successful operation of the Centre. Although the CEREEAC will have autonomy in its operations, it will have reporting procedures that are in line with other ECCAS institutions (e.g., CAPP). The formal relationship between the CEREEAC, ECCAS and the host country would be outlined by a formal legal agreement to be finalised during the start-up Phase. CEREEAC staff and operations will benefit from ECCAS immunities and privileges (e.g. immunities, exemption from taxation and duties).

The agreement will be guided by ECCAS rules (not country rules). This agreement would detail among other things, the relationship among all parties, contributions of all parties as well as privileges of the staff of the Centre. In addition, by establishing the CEREEAC as an institution under ECCAS, it implies that the Centre will

be entitled to an annual budget allocation from the ECCAS. The details of this support will be worked out during the start-up phase.

4.2 Selection process for the host country

In line with the GN-SEC modality, the hosting of the Secretariat of the Centre was determined by a competitive selection process in line with established selection criteria. Countries were invited to bid and nominate an institution that will host the Secretariat of CEREEAC. The selection criteria and submission forms are included in the annexes. Candidatures of Angola, Cameroon and Sao Tome and Principe were received. Finally, Angola, Luanda, was determined as the host of the CEREEAC Secretariat by the ECCAS Energy Ministers on 8 June 2021 and the ECCAS Heads of State on 30 July 2021.

4.3 CEREEAC Integration into the ECCAS Regional Institutional Structure

Together with the other regional centres, the GN-SEC network covers the entire African continent and is an important capacity to accelerate the implementation of the industrialisation, energy and climate goals in the African Union Agenda 2063 “The Africa We want”. The activities of the Centre should be fully integrated in the ECCAS structure, rules and proceedings. The Executive Director of the Centre will be represented at ECCAS energy meetings. The decisions and approved reports of the EB of the Centre will be presented by the Executive Director in Conference of Heads of State and Government of ECCAS in charge of energy for review.

The Centre and its NFIs will be responsible for taking forward the aims and aspirations of the ECCAS work on energy, including the ambitions in the Renewable Energy Road Map for Central Africa, developed by IRENA and ECCAS, and CEMAC/ECCAS White Paper and Regional Energy Policy (currently in preparation). The Centre, with technical assistance of UNIDO and other partners, will take the lead in providing ECCAS with advice and direction in establishing new energy policies for RE&EE going forward. The following figures shows the ECCAS Organisation Chart and then the inclusion of the CEREEAC within it.

La Commission de la CEEAC

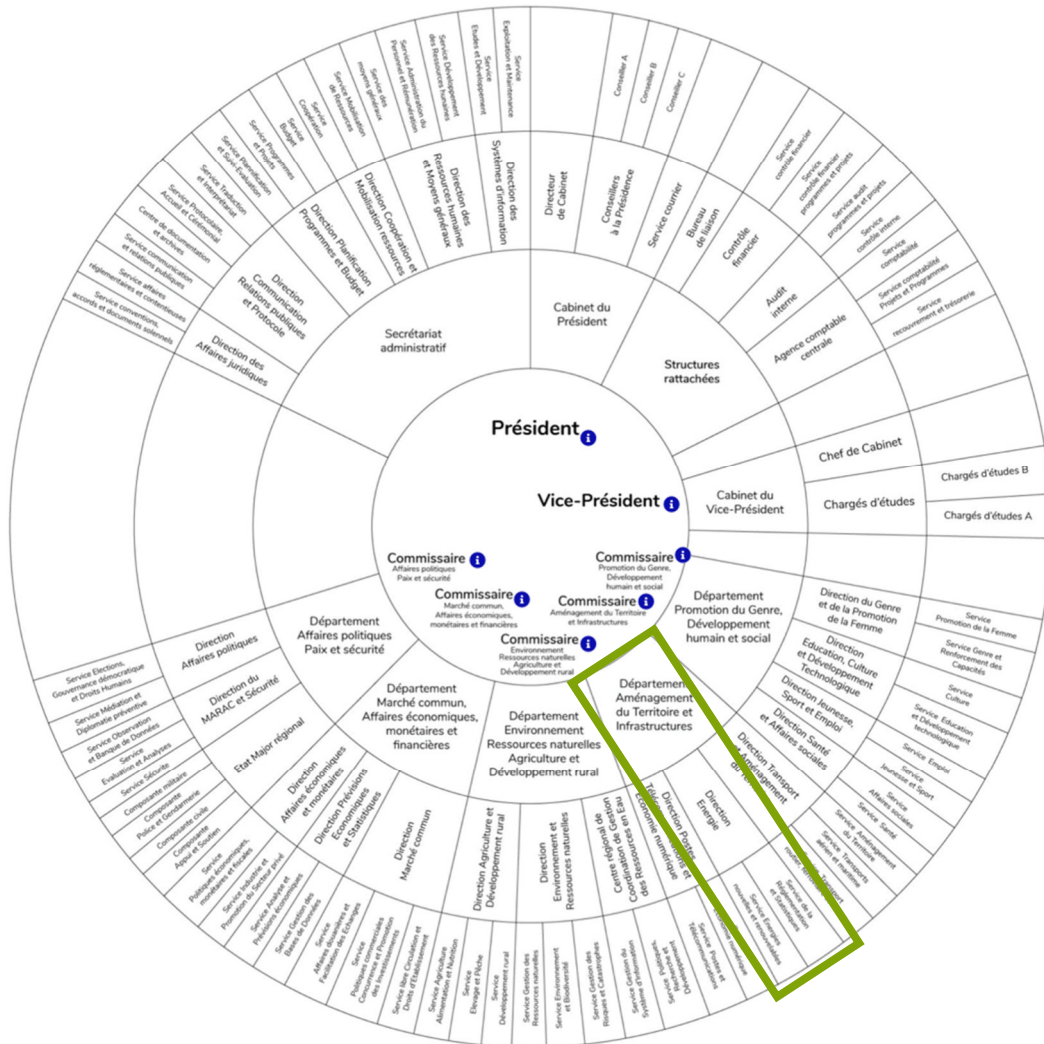


Figure 11: ECCAS Organizational Chart³³

³³ <https://ceeac-eccas.org/#structure>

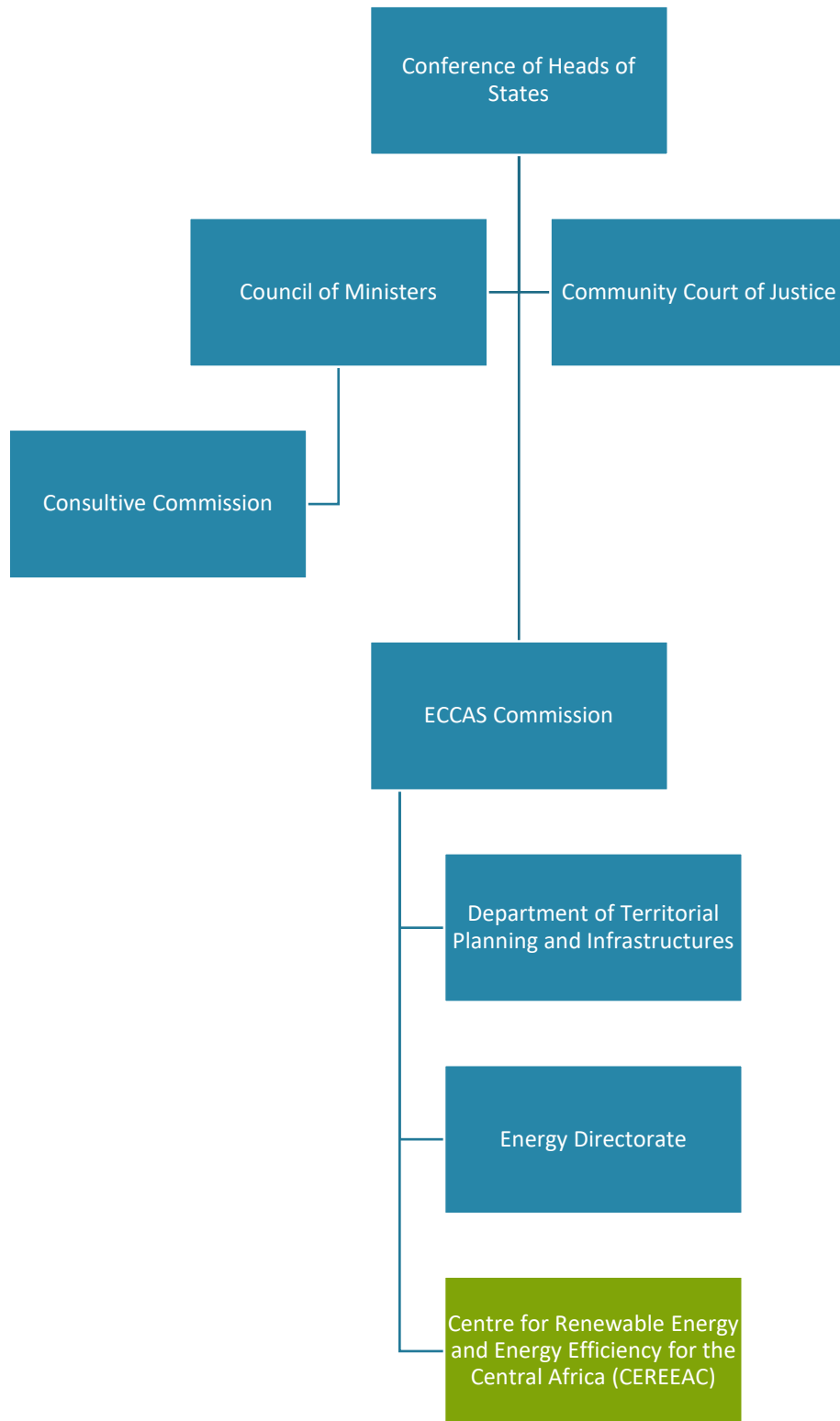


Figure 12 : Inclusion of CEREEAC within the ECCAS Structure

4.4 Institutional Structure and Governance of the CEREEAC

The institutional structure of the Centre and the roles of the different groups within the structure are outlined in Figure 13.

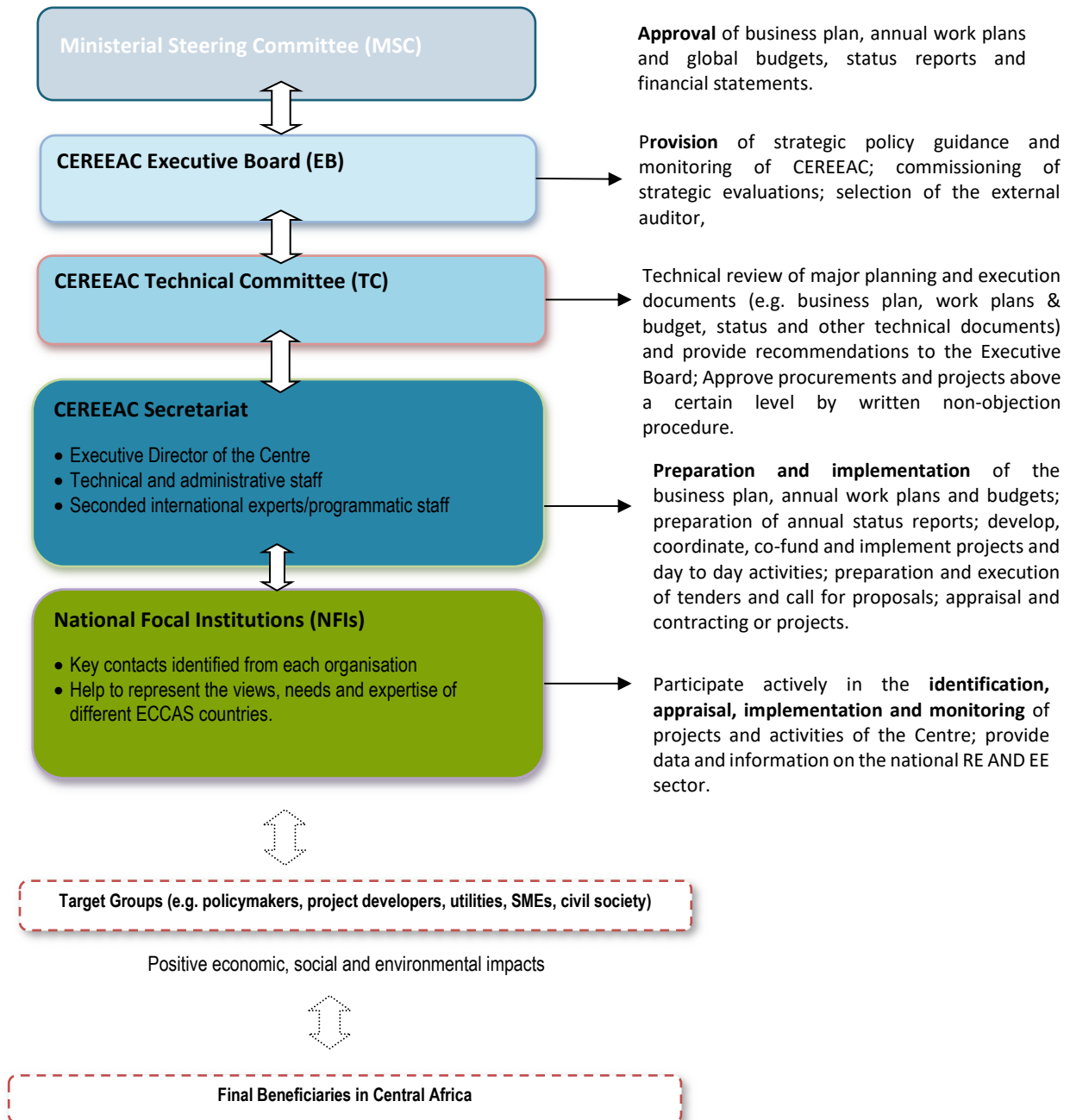


Figure 13: Organisational Structure of the CEREEAC

4.4.1 The Ministerial Steering Committee (MSC)

The Ministerial Steering Committee is the decision-making body. It is composed of the Ministers in charge of energy from the ECCAS member states. The MSC requires the participation of the policymakers (e.g., Ministers) of the eleven (11) ECCAS governments to maximize consensus, steer the development and adoption of the

regional RE/EE policies. Its secretariat is provided by the ECCAS Commission. The MSC is a hierarchical supervision and its functions are as follows:

- Validate policies and strategies in terms of RE&EE;
- Submit for adoption by the Conference of Heads of State and Government of ECCAS policies and strategies in terms of RE&EE;
- Approve annual status reports, audited financial statements and evaluations reviewed by the Board of Directors and prepared by the CEREEAC Secretariat;
- Transmit to the Conference the selection report of the Executive Director;
- Validate the internal regulations of CEREEAC and send them to the Conference of Heads of State and Government for adoption;
- Validate the organization chart of CEREEAC and submit it for adoption by the Conference of Heads of State and Government of ECCAS.

4.4.2 The Executive Board (EB)

The EB is the decision-making body which provides strategic guidance on the annual work plans and budgets, progress reports and financial statements of the Centre. The EB decides in consensus. The functions of the EB are as follows:

- decides in consensus and by written procedure if necessary;
- offers strategic guidance to CEREEAC secretariat to meet its objectives;
- proposes strategic flag-ship programs;
- approves CEREEAC's annual work plan and budgets after review by the Technical Committee (TC);
- approves CEREEAC's Business Plan upon recommendation of the TC;
- monitors the progress and performance of the Secretariat and the Executive Director;
- adopt the annual status reports, audited financial statements and evaluations;
- approves and updates the procurement, staff, contracting and financial rules of CEREEAC in line with CARICOM regulations and rules;
- approves CEREEAC's organizational chart, staff recruitments and related job descriptions;
- organize the selection process of the Executive Director by an independent cabinet
- appoints external auditors and approve external audit reports;
- appoints external evaluators and approve evaluations and management responses;
- approves procurements and co-funding for projects exceeding a certain amount;
- reviews the composition and membership of the Board and the TC;
- approves international secondments to the centre;
- assigns sub-committees to work on changes in the existing rules and procedures of the centre;
- approves senior management staff appointments;
- approves proposed changes in the CERREAC rules and procedures (e.g. staff, procurement)
- reviews any proposals to establish subcommittees; and
- contributes to CEREEAC's visibility in the Caribbean region and internationally.

Representatives appointed to the CEREEAC EB will serve for a fixed period of term of two (2) years which can be renewed for a maximum of one more additional term. The benefit of the proposed membership of the EB is that it provides avenues for harnessing the strengths of regional and international actors with broad experience in the energy sector. The EB will meet at least once a year, just before the MSC annual meeting. Meetings will be held physically or virtually. In case of physical meetings, there will be also the possibility for members to participate online (this might be particularly required due to COVID-19 or other emergencies).

The ED does not have any voting right in the EB. Matters related to the performance of the ED will be discussed without the attendance of CERREAC staff. The EB can suggest to the ECCAS to remove the ED on an annual basis if his performance is not adequate.

4.4.3 The Technical Committee (TC) and other sub-committees

Due to the work load, limited time of EB members and the specificity of some of the matters, the EB will establish sub-committees such as the Technical Committee for technical matters, the Committee for Finance and Administration, the Committee for Procurement and Recruitment and the Committee for Fund mobilisation and partnerships. The committees will meet the before EB meetings physically or virtually. To ensure check and balances, the committees will comprise ECCAS and international members.

The TC provides technical guidance to the EB. The TC has the role to review all documents which are subject for approval by the EB. If necessary, the TC reviews projects to be funded by CEREEAC resources and recommends their approval by the EB. The core donor partners have one vote and have to harmonise their positions before or during the meetings to decide by consensus. The TC functions are as follows:

- meets back-to-back with the EB;
- technical advice to the CEREEAC EB and Secretariat;
- reviews the annual work plans, status reports and other technical documents submitted to the EB by the Secretariat;
- reviews the CEREEAC Business Plan and suggests priority activities;
- reviews the CEREEAC progress on the basis of the indicators in the Business Plan and annual work plans;
- suggests improvements in the organisational, administrative, quality and technical appraisal framework of the Centre;
- reviews appraisal results of procurements and co-funded projects exceeding a certain level;
- reviews major CEREEAC program documents, policy documents and reports and give comments;
- assists CEREEAC in fund raising activities for its technical program and raise visibility on the Centre on regional and international levels; and
- consideration of specific sub-committees will be made at TC meetings to respond to operational needs of the CEREEAC. Any subcommittees the TC determines are required to be established, and a proposed membership list, will be submitted for approval by the EB.

The Committee for Finance and Administration and the Committee for Procurement and Recruitment will deal with organisational, financial and administrative matters. The members shall have at least minimum expertise in these areas. The sub-committees also review financial statements and audits of the centre. They will also do quality checks on the implemented rules and procedures of the CEREEAC (e.g. procurement, staffing). Moreover, if necessary, the committees will propose changes in the existing rules and procedures to be presented for approval to the EB. The committee for fund mobilisation and partnerships will work on strategies to strengthen the financial base of the centre.

4.4.4 Composition of the Executive Board and Technical Committee

The CEREEAC will be governed by an EB and a TC which will meet at least once a year. If possible, the EB and TC meetings will be held back-to-back and coordinated with the relevant ECCAS meetings. Both will appoint a chairman and a deputy. The chairman and deputy will represent the Board and take leadership in the coordination of matters in partnership with the CEREEAC management. Together with the ED, the chairman will report to the relevant ECCAS meetings.

The composition of the EB and TC are indicated in Figure 14.³⁴

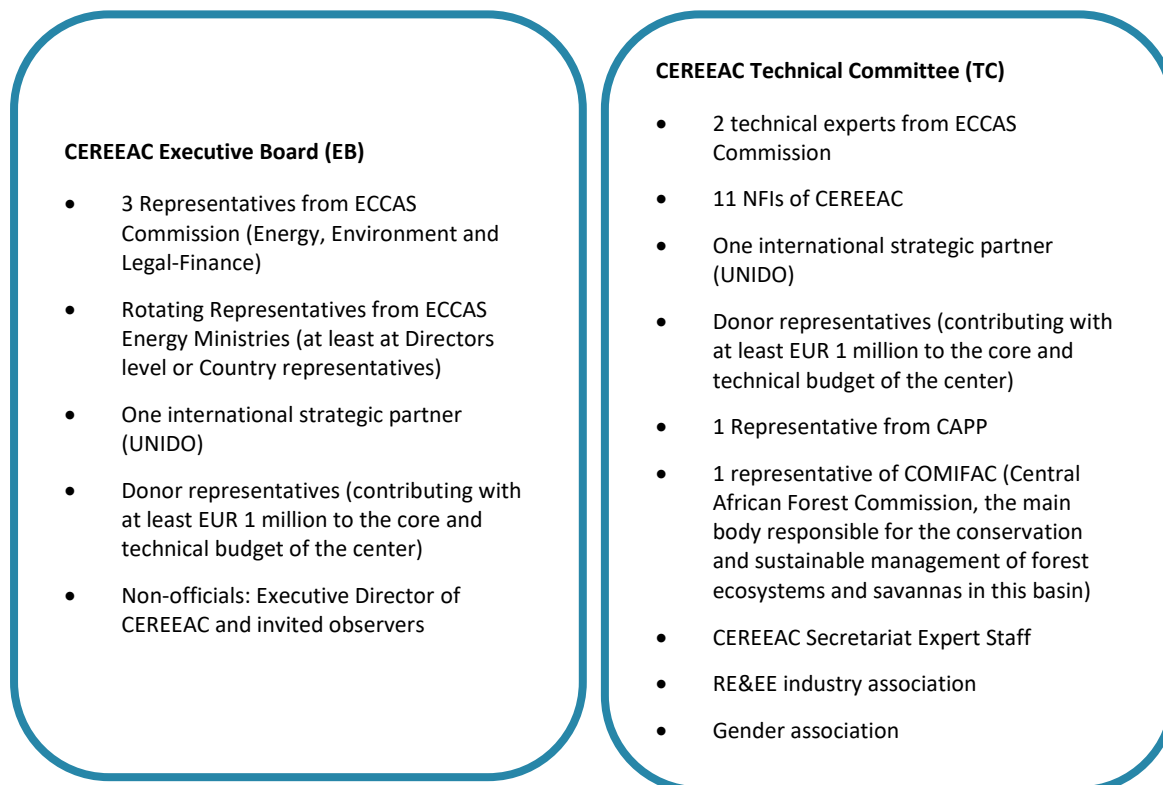


Figure 14: Composition of the EB and TC

The EB meetings have a closed format and no other non-contributing partners will be invited. TC meetings shall be open to other non-core donor partners, particularly if they are interested to co-fund activities of the annual work plans or they would like to align their activities with the centre (e.g., EU, IRENA, GIZ, UNEP, UNDP). This will facilitate the expansion of project partnerships.³⁵

UNIDO will join the bodies as strategic partner. Once the Centre is established, other donor partners will be invited to join depending on their financial contributions to the Centre. Core partners are defined as partners who support the technical and institutional (administrative budget) operations of the centre through considerable long-term contributions. Core donors need to contribute at least with EUR 1 million to the technical and administrative budget of the centre. It is envisaged that at least 50% of the members of the EB and TC will be female, where possible.

4.4.5 The CEREEAC Secretariat

The Secretariat will be based in Luanda, Angola. It will operate in all three main languages of the region: French, English and Portuguese. Public outputs will be shared in all three languages. It will employ a multinational team of Central African and international full-time staff. The CEREEAC Secretariat implements the activities and elaborates the annual work plans and status reports and presents the documents for review and approval to

³⁴ In the current budget scenario, UNIDO is not in a position to cover the travel costs of EB/TC members

³⁵ Meetings might be held by online means in the case of funding constraints

the TC, EB and MSC. The day-to-day activities of the Centre will be under the direction of the Executive Director of the CEREEAC who will be primarily responsible for the implementation of the mandate of the Centre and the work plan as approved by the EB. The Executive Director will also lead the funds mobilisation efforts of the Centre. He will be accountable to the EB and MSC. The general responsibilities of the CEREEAC Secretariat will be to:

- develop and update the CEREEAC Business Plan;
- develop the annual work plans, status reports and financial reports for the next year;
- prepare an annual activity report to the ECCAS Commission;
- represent CEREEAC in all acts of civil life;
- ensure the Secretariat of the Board of Directors;
- cooperate with external auditors and evaluators assigned by the EB;
- implement activities approved in the annual work plan in cooperation with ECCAS and the NFIs;
- implement the decisions of the EB;
- monitor the progress of the implementation of the annual work plans;
- organize the meetings of the TC and EB;
- implement efficient and transparent management of the resources made available to CEREEAC;
- conclude any agreement or contract relating to the missions of CEREEAC;
- elaborate periodical reports on the progress and achievements of the Centre in relation to the indicators in the CEREEAC Business Plan;
- keep an overview on relevance, effectiveness, efficiency and sustainability of the CEREEAC programme; and
- compile and, where relevant, publish information and data provided by the NFIs.

Regarding technical support, the CEREEAC Secretariat's role will be to:

- strengthen the regional network of NFIs;
- recruit qualified administrative and technical staff; strengthen the capacities of staff and select international seconded experts;
- coordinate regularly with the core partners of the Centre;
- develop, appraise, implement and monitor CEREEAC projects;
- undertake fund-raising activities and contribute to proposal preparation;
- develop the quality, appraisal and project cycle management framework for activities to be co-funded and implemented (including gender and youth mainstreaming consideration);
- ensure that projects are in line with national and regional policies and legislation;
- participate actively in the evaluation of tender bids and proposals;
- prepare and execute procurements and calls for proposals; and
- sign contracts (where power is delegated by the EB) and monitor projects and assignments.

The Secretariat will also be responsible for CEREEAC's external communications and engagements as follows:

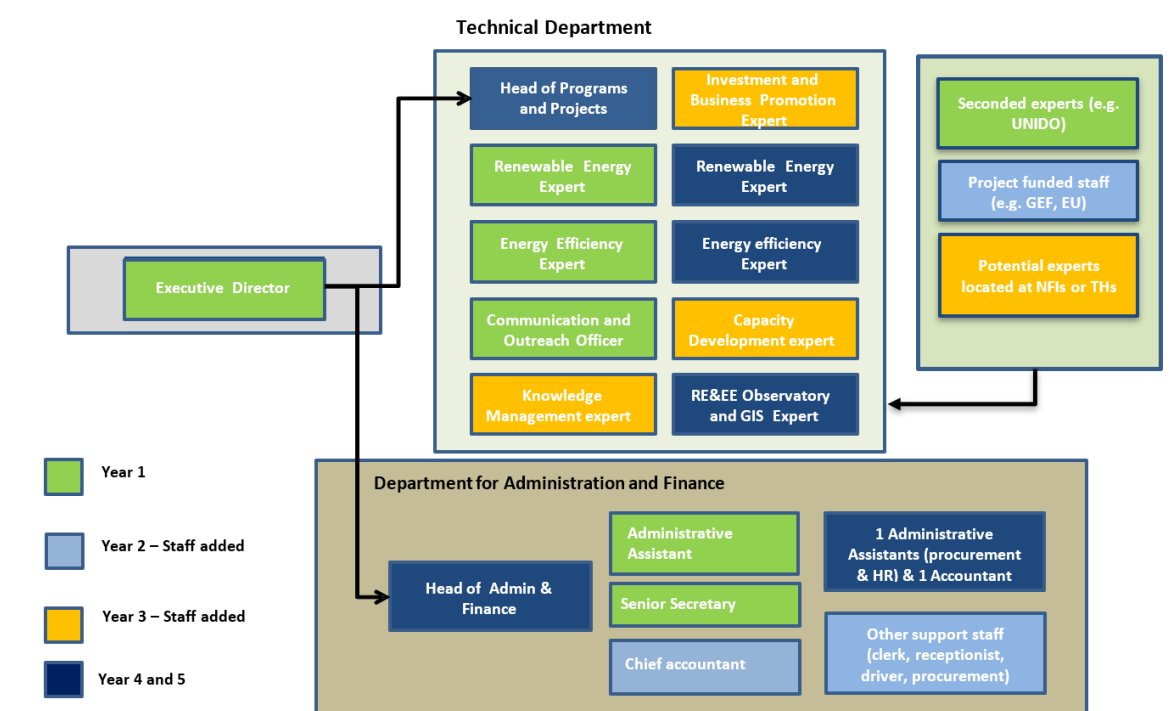
- develop partnerships with other local and international technical institutions;
- contribute to international networks and publications (e.g. UNIDO, SEforALL, IRENA and REN21);
- ensure harmonisation of CEREEAC activities with other donor initiatives and alignment with local initiatives and support systems;
- establish strategic links to loan and equity finance institutions;
- establish policy dialogue with ECCAS, CAPP and national institutions on regional RE&EE policy aspects;
- network with national and regional chambers of commerce;
- engage relevant stakeholders in RE&EE policy dialogue including public institutions, civil society and private sector;
- ensure effective public relations and publication of information; and
- carry out awareness raising on RE&EE in the ECCAS region.

4.4.6 CERREAC Organisational Chart and Staff Strategy

In the beginning, the Centre will start with a very small staff base and will expand, depending on the mobilised funding and developed programs and projects (form follows function). In the future, it is expected that the Centre will employ permanent core staff and temporary project financed staff. All core staff shall have the nationality of one of the ECCAS countries. During the first year, it is envisaged to recruit the Executive Director, one Renewable Energy Expert, one Energy Efficiency Expert, one Administrative Assistant, one Senior Secretary.

UNIDO will second a Sustainable Energy Expert to the centre and will provide backstopping through the GN-SEC coordinator and his team in UNIDO headquarters. Depending on the availability of funding, further staff will be hired during the first operational phase in line with the organisational chart below. One of the core staff will also act as a gender focal point during the inception phase.

Figure 15: Proposed Organisational Chart and Structure of the CEREEAC



Temporary financed project staff from the ECCAS MS will be integrated, as per project needs, into CEREEAC. The recruitment of the Executive Director is the first priority and will be advertised following the decision being made for the initial first tasks of the start-up phase (full job description for the Executive Directors is included in the annexes). This is reflected in the work plan outlined in this document. UNIDO will assist ECCAS/CEREEAC in the development of the internal staff, administrative and financial rules and procedures in line with the existing GN-SEC manual. Local and international experts seconded to the centre, require approval by the EB and must report to the Executive Director (and not to the respective Government or donor). Secondments require a public competitive recruitment process with the involvement of the CEREEAC management.

The internal structure, staff recruitment plan and organisational chart of the CEREEAC Secretariat will be finalised during the development of the first Business Plan to fit with the themes and outputs of the initial programmes. The start-up Phase of the CEREEAC Secretariat will aim to have the following staff in place:

- An Executive Director
- A RE&EE expert
- A seconded RE&EE Expert

- An administrative assistant

As highlighted above, during the Start-up Phase and First Operational Phase, UNIDO will support the Centre through the provision of a seconded RE&EE and institutional expert which will be based at the Secretariat. The expert will assist the Executive Director of the Centre in establishing the internal procedures as well as the technical program of the Centre. Moreover, the expert will assist in building up donor relations. The TORs of the expert will be prepared by ECCAS and UNIDO in coordination with any relevant donors. In addition, UNIDO will provide further part-time technical backstopping by its existing GN-SEC Coordinator³⁶ and his team³⁷, located at the UNIDO headquarters, in the Energy Systems and Infrastructure Division (ESI) of the Department of Energy.

4.4.7 The National Focal Institutions (NFIs)

CEREEAC will establish a strong network of NFIs, which have links to Governments as well as to the central ECCAS structure. The activities of CEREEAC are executed in cooperation with the NFIs and/or other entities of the public and private sector. The NFIs are to be nominated by the Ministries of Energy of the ECCAS Member States. The proposed TORs of the NFIs can be found in the annexes. The NFIs duties will include:

- participate actively in the identification, appraisal, implementation and monitoring of projects and activities of CEREEAC;
- timely consultations with private sector and civil society experts to review the annual CEREEAC work plans and suggest priority activities;
- provide data and information on the national RE&EE sector; and
- coordinate CEREEAC activities in their countries.

4.4.8 Thematic Hubs (THs) and collaboration with other energy stakeholders

Some of the execution of the CEREEAC's programmes and projects would be done through regional and national institutions which have already a wealth of experience in specific energy sub-sectors including prominent academic and research institutions in Central Africa, or private sector businesses. During the start-up phase CEREEAC will nominate regional thematic hubs for aspects such as policy, knowledge management, investment and capacity development. The centre will sign MOUs with the institutions leading the hubs. These are subject to the approval by the EB, which can also decide to extend the number of hubs (e.g., Geothermal) or to wind down any hubs after projects are complete if required.

One of the THs will be the Oyo Centre of Excellence for Renewable Energy and Energy Efficiency, currently established by UNIDO in partnership with the Republic of the Congo. It will focus particularly on the water, energy and food nexus, rural electrification and cleantech promotion.

Execution through national institutions, private sector and NGOs will promote greater ownership of projects and programmes of the Centre, increase chances of sustainability, ensure that regional standards are conformed with and also leverage on capacity already available in the region. It will also ensure that the programmes and projects of the Centre are implemented in a cost-effective manner.

The envisaged structure of relationship between the Centre and the national focal institutions and other stakeholders in partner states will, to a large extent, depend on the specific activities. As an example, in the case of developing a regional policy framework, national institutions will be responsible to review national policies while the CEREEAC would be responsible for synthesising the national reports to come up with a regional draft policy. Likewise, in the case of training programmes, the Centre would subcontract a specific national institution or centre of excellence to develop and conduct the training programme.

³⁶ L4 staff

³⁷ ISA Administrator, Associate and Assistant

The CEREEAC, when initially staffed, will also carry out an inventory of all national institutions and agencies including universities, research centres, advocacy groups and national professional associations working in its areas of mandate. The choice of which institution or national body will act as a collaborator in the implementation of specific projects will be determined on a case-by-case basis. Given the significant differences across ECCAS countries in terms of level of capacity development, needs and resource endowments, the Centre will be mindful of this and will adopt a differentiated approach to each country in the development and implementation of its programmes.

At a global level, the CEREEAC will closely cooperate with other centres of excellence from both developed and developing country regions. Other African and global energy networks that the CEREEAC can link with include the SE4ALL Initiative, the International Renewable Energy Agency (IRENA), Renewable Energy and Energy Efficiency Partnership (REEEP), REN21 and others. The CEREEAC will collaborate with similar international organisations in areas of mutual interest like capacity building, technology transfer and knowledge management. It is also expected that the Centre will create a South-South cooperation between ECCAS members and other African countries in order to share experiences and develop stronger partnerships.

4.4.9 Other Energy Sector Stakeholders

The Centre's primary activities entail leading and coordinating efforts to develop markets for RE&EE technologies and services in the region. Most of the actual implementation of the CEREEAC's programmes and projects would be done through identified national institutions, private sector and NGOs in the MS that will serve as operating/implementing agencies. Training programmes organised by the Centre can take place in its headquarters. However, part of its operational training that requires physical visitation to project sites should be carried out in the country where such projects are located.

In addition to serving as a coordinating centre, the CEREEAC will also be responsible for developing regional programmes and mobilising funds. In this activity, the Executive Director will be closely supported by all partners, such as ECCAS and UNIDO.

Implementation through national institutions, private sector partners and NGOs will promote greater ownership of projects and programmes of the Centre, increase chances of sustainability, ensure that regional standards are conformed with and also leverage capacity already available in the region. It will also ensure that the programmes and projects of the Centre are implemented in a cost-effective manner.

The envisaged structure of relationship between the Centre and the NFIs and other stakeholders in the ECCAS MS will, to a large extent, depend on the specific activity and demands

The choice of which institution or national body to collaborate in the implementation of specific projects will be determined on case-by-case basis as well as being guided by knowledge from NFIs the TC and the EB. Given the significant differences across the ECCAS MS in terms of level of capacity development, needs and resource endowments, the Centre will be mindful of this and will adopt a differentiated approach to each country in the development and implementation of its programmes.

It is also expected that the CEREEAC creates a South-South and North-South cooperation with the four other African centres (ECREEE, EACREEE, SACREEE and RCREEE) in order to share experiences and develop partnerships. Moreover, stakeholders will also include relevant gender focal points and experts, as well as local and international associations and/ or agencies promoting gender equality and women's empowerment, in particular those focusing on the nexus between gender and energy needs.

4.5 Gender Mainstreaming

The CEREEAC will particularly focus on mainstreaming gender and young women issues in the energy sector. In order to lift the income levels of poor families and communities, energy policies and projects must be targeted to reach those who are most in need. In many contexts, it is women who suffer the most from conditions of extreme poverty. Because of their traditional responsibilities for collecting fuel and water, in many developing countries women and girls would benefit most from access to improved energy services.

Reduced drudgery for women and increased access to non-polluting power for lighting, cooking and other household and productive purposes can have dramatically improved effects on women's levels of empowerment, education, literacy, nutrition, health, economic opportunities and involvement in community activities. These improvements in women's lives can, in turn, have significantly beneficial consequences for their families and communities.

The situation of other vulnerable groups such as elderly people, children, people with disabilities and ethnic minorities are also expected to be improved through the provision of affordable RE&EE services. The CEREEAC will develop and implement projects and activities with particular focus on sustainable energy, gender and vulnerable groups as well as mainstream these issues throughout its institutional governance structure and staff policy (as explained in Section 3.3.5). The Centre expects to establish a close dialogue with Energies-Africa the regional representation of ENERGIA - the International Network on Gender and Sustainable Energy. This network has gained valuable lessons learned in mainstreaming gender issues in capacity building, policy, networking and project development. ENERGIA will be an important partner for collaborating with for the Centre to achieve its gender mainstreaming objectives and to effectively mainstream gender issues into project and institutional design. Moreover, the CEREEAC will join the established GN-SEC gender network established in partnership with GWNET. The GWNET will provide support to the CEREEAC to conduct gender analysis of gender in the energy sector in ECCAS. It will support ECCAS to put in place action plan and strategy to address the gender imbalances in the energy sector and to promote gender-sensitive action around the energy transition.

It is UNIDO's vision that women and men equally lead, participate in, and benefit from ISID (UNIDO Gender Policy 2019). UNIDO's mandate to promote inclusive and sustainable industrial development (ISID) relies on the advancement of gender equality and the empowerment of women. UNIDO addresses gender inequalities in industry and harnesses women's full potential as economic agents of change and leaders thereby transforming economies and generating inclusive growth.

One of the guiding principles of the project will be to ensure that both women and men are provided equal opportunities to lead, participate in, and benefit from the project. In practical terms this includes for this project the following aspects:

Develop a **Gender Analysis Report and respective Gender Mainstreaming Strategy and Action Plan** during the start-up phase to validate and expand on the planned gender mainstreaming approach of this project. This also includes validation of the key gender dimensions in the project outputs, activities, indicators and targets.

Gender-sensitive recruitment will be practiced at all levels where possible, especially in selection of project staff to ensure diversity in team composition. Furthermore, whenever possible existing staff will be trained and their awareness raised regarding gender issues;

The mainstreaming of gender in the project will be pursued by striving for equal representation of women and men on the side of project counterparts, stakeholders and beneficiaries. To the extent possible, efforts will be made to promote **equal participation of women and men** in working groups, workshops and events, both at managerial and technical levels;

While planning activities and reviewing/formulating policies relevant to industrial decarbonisation, gender dimensions will be considered and gender-responsive policies proposed. This shall include the **identification of the differentiated needs and roles of women and men** with respect to the capacity building interventions of the project. For these purposes, women's groups and associations, gender experts and/or other stakeholder concerned with gender and energy will be consulted. In that connection, the tools and guides developed will be gender responsive. Involve and whenever possible collaborate with women networks and enterprises/associations' gender focal points to enhance project visibility and mainstreaming gender within project communication and other project execution activities;

Raise awareness on gender and disseminate information about gender dimensions and gender mainstreaming in the sector.

All **decision-making processes will consider gender dimensions**. Also at the level of project activity implementation, efforts will be made to consult with stakeholders focusing on gender equality and women's

empowerment issues. This is especially relevant in policy review and formulation as well as for capacity building activities;

When data collection or assessments are conducted, gender dimensions will be considered. This can include **sex-disaggregated data** collection, performing gender analysis as part of ESIs, etc.

5. Indicative Budget & Financial Sustainability Plan

5.1 Proposed Funding Model

The CEREEAC is envisaged to be primarily funded through grants from the ECCAS, MS fees and official development aid from donors (e.g. EU, Austria, Spain, Norway, UNIDO, etc.). It is envisaged that with the Centre establishment and the development of its programs and projects that the share of donor grants can be reduced from practically 100% to 75% of its annual budget at the end of the 1st Operational Phase. The share of ECCAS and MS contributions should increase from 0% in Year 1 to 15% of the annual budget in Year 5. Moreover, the Centre aims at mobilizing around 20% of its annual budget through commercial services and investment shares (fee-for-service).

It is understood that the indicated total budget of EUR 9,8 million is an optimistic scenario and benchmark for the management. Around 50% of the indicated budget is the conservative scenario. As explained under 3.3.4, the implementation of more than 65% of the activities indicated in the CEREEAC results framework (outcomes 2 to 6) is considered as a success. Not all of this budget needs to be mobilised in the beginning. The centre can start operations with a much lower funding level. The rest of the budget would be mobilised by the centre through its developed programs, projects and partnerships. It shall be noted that not all of the EUR 9,8 million might flow through the centre. Some of the international partners could earmark contributions to the activities of the centre through provided services.

UNIDO will only report on the received contribution from BMeiA or any other contribution directly managed by UNIDO.³⁸ UNIDO does not report on contributions given directly to the centre during project implementation. This will be reported by the CEREEAC management to the Executive Board of the centre. UNIDO will provide financial reports to BMeiA in line with the table under section 5.2 and budget Annex 2 (per outcome area).

³⁸ The provided BMeiA grant is flexible and will allow shifts between budget lines within the five outcome areas without approval by the donor (please note that outcomes are defined as outputs in the UNIDO SAP budget system).

5.2 Total financial contribution managed by UNIDO per donor and budget lines

Total financial contribution managed by UNIDO in EUR				
BL	Budget Lines	BMeiA (through UNIDO)	UNIDO (financial contribution) ³⁹	Total
1100	International Consultant/staff	285,000	8,392	293,392
1700	National Consultants/staff	26,000	7,358	33,358
2100	Contractual Services	42,000	11,100	53,100
1600	International Travel	24,000	9,650	33,650
1500	Local Travel	21,000	3,130	24,130
3500	Regional Meetings/Workshops	25,097	18,000	43,097
5100	Miscellaneous expenses	500	3,170	3,670
4300	Premises & recurring office expenses (lights, equipment, water, security, etc.)	0	0	0
4500	CEREEAC office space and equipment, incl. project car	13,500	0	13,500
3000	Training/Fellowships	1,000	9,200	10,200
	Subtotal	438,097	70,000	508,097
	Programme support costs of UNIDO (13%)	56,953		
	Total	495,050	70,000	565,050
	UN Levy 1%	4,950		
	Total	500,000	70,000	570,000

³⁹ Still subject to the approval of the Executive Board

5.2.1 Total financial contribution managed by UNIDO per donor, years and budget lines

Indicative Budget and Funding through UNIDO for the First Operational phase in EUR														
		Year 1		Year 2		Year 3		Year 4		Year 5		TOTAL BMEIA and UNIDO Financial		Years 1-5 Total Funds through UNIDO
BL	Budget Lines	BMeiA (through UNIDO)	UNIDO (Financial)	BMeiA (through UNIDO)	UNIDO (Financial)	BMeiA (through UNIDO)	UNIDO (Financial)	BMeiA (through UNIDO)	UNIDO (Financial)	BMeiA (through UNIDO)	UNIDO (Financial)	BMeiA (through UNIDO)	UNIDO (Financial)	
1100	International Consultant/staff	70,000	2,000	70,000	6,392	70,000	0	70,000	0	5,000	0	285,000	8,392	293,392
1700	National Consultants/staff	8,000	4,142	8,000	0	5,000	1,542	5,000	683	0	992	26,000	7,358	33,358
2100	Contractual Services	12,000	950	12,000	4,150	12,000	4,250	6,000	1,300	0	450	42,000	11,100	53,100
1600	International Travel	8,000	1,492	8,000	4,067	8,000	2,950	0	750	0	392	24,000	9,650	33,650
1500	Local Travel	7,000	740	7,000	1,030	7,000	1,000	0	240	0	120	21,000	3,130	24,130
3500	Regional Meetings/Workshops	13,000	3,820	9,097	3,200	3,000	6,000	0	2,920	0	2,060	25,097	18,000	43,097
5100	Miscellaneous expenses	500	740	0	420	0	1,650	0	240	0	120	500	3,170	3,670
4300	Premises & recurring office expenses (lights, equipment, water, security, etc)	0	0	0	0	0	0	0	0	0	0	0	0	0
4500	CEREEAC office space and equipment, incl. project car	8,500	0	5,000	0	0	0	0	0	0	0	13,500	0	13,500
3000	Training/Fellowships	0	2,413	1,000	3,733	0	1,733	0	547	0	773	1,000	9,200	10,200
	Subtotal	127,000	16,297	120,097	22,992	105,000	19,125	81,000	6,680	5,000	4,907	438,097	70,000	508,097
	0	16,510		15,613		13,650		10,530		650		56,953	0	
	Total	143,510	16,297	135,710	22,992	118,650	19,125	91,530	6,680	5,650	4,907	495,050	70,000	565,050

5.3 Indicative overall budget of the CEREEAC (all funding contributions)⁴⁰

Indicative Budget and Funding Commitment for the Start up & the First Operational phase in EUR										
BL	Budget Lines	Angola	BMeiA (through UNIDO)	UNIDO (Financial)	IFDD (financial contribution through ECCAS)	AfDB (financial contribution through ECCAS)	ECCAS Secretariat (Financial & In-Kind)	ECCAS Member States (Financial & In-Kind)	Expected Co-funding from Other Donors (i.e. EU, IRENA, Oyo Centre, etc)	Total
1100	International Consultant/staff	0	285,000	8,392	0	0	320,000	251,667	1,298,368	2,163,426
1700	National Consultants/staff	210,000	26,000	7,358	0	0	0	165,000	1,105,967	1,514,325
2100	Contractual Services	0	42,000	11,100	140,000	767,225	0	0	1,537,667	2,497,992
1600	International Travel	0	24,000	9,650	0	0	0	68,000	118,500	220,150
1500	Local Travel	0	21,000	3,130	0	0	90,000	5,000	231,904	351,034
3500	Regional Meetings/Workshops	4,500	25,097	18,000	0	0	60,000	342,000	470,199	919,796
5100	Miscellaneous expenses	1,500	500	3,170	0	0	0	0	161,000	166,170
4300	Premises & recurring office expenses (lights, equipment, water, security, etc)	1,612,454	0	0	0	0	0	0	0	1,612,454
4500	CEREEAC office space and equipment, incl. project car	78,000	13,500	0	0	0	0	0	15,000	106,500
3000	Training/Fellow ships	0	1,000	9,200	0	0	0	90,000	80,000	180,200
	Subtotal	1,906,454	438,097	70,000	140,000	767,225	470,000	921,667	5,018,604	9,732,047
	13% UNIDO support costs		56,953							
	Total	1,906,454	495,050	70,000	140,000	767,225	470,000	921,667	5,018,604	9,789,000

⁴⁰ Please refer to Annex 2 for a detailed budget overview per year, per outcome and per budget line

5.4 Envisaged Funding Sources

During the start-up phase all involved partners will be approached concerning their financial contributions to the core budget and/or technical programme of the Centre. The commitments received will allow the Centre to start its administrative and technical core activities in accordance with the established results-based management framework. To start implementation, UNIDO/ECCAS needs to mobilise at least EUR 1 million (correspondent to around 10% of the budget). This minimum budget is required to start the core operations of the centre and to implement first technical activities. UNIDO and ECCAS will agree on the detailed funding arrangements beforehand.

This includes also discussions on contributions of the ECCAS, the host country and membership fees. In the ideal case, ECCAS Member States contribute to the centre at latest in the second year. The GN-SEC experience has demonstrated that the local funding modality is very important for the sustainability of the centre. Core costs of the centre should be gradually overtaken completely by the local counterparts and other income (e.g. project overheads, fee for service).

ECCAS is committed to mobilize around 2,3 million EUR (around 23% of the total budget) throughout the 1st operational phase. This includes also potential Membership fees. The Host Country is supposed to cover the financial contributions for the office and some running costs of the Centre. The indicative amounts in the table below are envisaged and are still subject to discussion and approval by the respective internal institutional bodies and dependent of availability of resources. The funding on the column “other donor partners” still needs to be mobilised.

Table 9: Funding commitments to CEREEAC (EUR)

Envisaged Funding Commitments	Total (EUR)	% of total budget
BMeiA (through UNIDO)	500,000	5.06%
UNIDO (EUR 70,000 in-cash)	70,000	0.72%
Host Country	1,906,454	19.48%
ECCAS Secretariat, AfDB, IFDD, and the ECCAS MSs Membership fees and in-kind NFI services	2,293,942	24.48%
Other Donors (i.e. EU, IRENA, Oyo Centre).	5,018,604	50.26%
Total	9,789,000	100%

5.5 Counterparts Inputs

5.5.1 ECCAS

ECCAS will provide the Centre with the requisite support to ensure its successful start-up phase and operation. This will include empowering the CEREEAC through its recognition as a central institution in the RE&EE market and through active participation in the Executive Board of the Centre. As the custodian of the CEREEAC, ECCAS will facilitate the deliberations of relevant matters about the Centre in its meetings and conferences. In addition, ECCAS will provide financial support for the centre activities as presented in the budget.

5.5.2 Member States (MS)

ECCAS MS are the key beneficiaries of the activities of the Centre hence they will be central to the continued relevance of its activities. In this connection, countries will support the CEREEAC through, nominating NFIs and supporting activities of these centres and through the provision of financial contributions to the Centre, when required. It is also foreseen that partner states will be expected to provide co-funding for projects being implemented in their countries, decided on a project-by-project basis. Progress of the CEREEAC will be periodically discussed during regular meetings of the ECCAS. MS will contribute with in-kind support and ideally with membership fees. The modality shall be discussed and approved before the establishment of the centre.

5.5.3 Government of the Host Country: The Republic of Angola

The Government of the host country, through the nominated institution, the republic of Angola, provided office space and possibly furniture, telephone, fax and Internet connection for the CEREEAC. It will take over parts of the running costs of the Centre without time limit.

5.5.4 UNIDO and the GN-SEC

Besides assisting in the conceptualisation and design the CEREEAC, UNIDO will continue to provide technical assistance to the Centre to ensure quality delivery. UNIDO will work towards sustainability of the Centre and the ability for the Centre to receive direct funding from other donors. In the optimum case, the UNIDO support is time limited to the First Operational Phase; after which the relationship would transform to a project-based partner cooperation (e.g., implementation of GEF projects). Furthermore, UNIDO will mobilise funding for the First Operational Phase as indicated in the budget. Therefore, it is very important that the centre starts to cover gradually its core costs through local funding and other income.

UNIDO will apply its ownership-oriented GN-SEC “twinning” peer to peer learning approach,⁴¹ which will transfer gradually more and more administrative, financial and technical responsibilities to the CEREEAC. Since CEREEAC will not have full legal identity and internal rules and procedures in the beginning, UNIDO will manage the funding and provide administrative and procurement support. UNIDO is applying the GN-SEC “twinning” approach, which is characterized by the principles of genuine partnership, shared responsibilities and execution, flexibility, institution-to-institution peer learning and mentoring. Gradually, depending on the progress and quality of the technical and financial reporting, UNIDO will delegate more responsibilities, including the management of funds, to CEREEAC. This will be done in line with the established project document and annual work plans subject to the approval of the Board of Directors. Additionally, UNIDO will promote joint learning with the other GN-SECs and will assist CEREEAC in technical portfolio development and the creation of partnerships with donors and institutional funds, such as the GEF and GCF.

To implement its support, UNIDO will second a Sustainable Energy Expert to the centre and will provide backstopping through the GN-SEC coordinator and his team in headquarters. As soon as the procedures and processes of the Centre are sustained UNIDO intends to subcontract specific implementation tasks and funding to the Centre. In addition, UNIDO will use its international networks to assist the Centre to establish partnerships with other international players so that the CEREEAC could leverage expertise and technologies.

UNIDO will facilitate joint learning, projects and partnerships under the umbrella of the GN-SEC. Some of the GN-SEC are operating already a number of years and there is a lot to learn by CEREEAC to harness opportunities and avoid pitfalls. CEREEAC will join the GN-SEC platform and will benefit from documents generated by and for other centres. For example, UNIDO has developed an administrative, financial and procurement manual for GN-SEC centres. Moreover, it provides standardised trainings for institution building support and technical cooperation. CEREEAC will be able to benefit from already established regional programs and projects already established in partnership with other centres.

Potential donors are the usual GN-SEC core partners, including the European Union, Austria, Spain, Germany and Norway. There is need to distinguish between donors which will provide programmable funding to the centre to cover core and technical costs, as well as donors, which will provide project related support and/or technical services to the centre.

5.6 Projections Beyond the First Operational Phase

The Second Operational Phase of the CEREEAC is expected to cover the period from year six (6) to year nine (9). A new Business Plan will be developed for this period. In this phase, the Director of the CEREEAC will work together with UNIDO, the Host Country and other partners on ensuring the sustainability of the projects and programmes coordinated by the Centre. Based on the demand of its services and availability of resources, the

⁴¹ Defined as institution peer-to-peer learning

CCREEE will consider expanding its staff complement and activities. In the optimum case UNIDO will reduce its engagement concerning institution building.

5.7 Financial Sustainability Plan

It is expected that at the end of the First Operational Phase the Centre is reaching financial sustainability through core funding from developed partners, local partners, the host country, and mobilised project funding and provision of services. During the first two years of the 1st Operational Phase MS are not expected to make financial contributions to the CEREEAC. In the last year of the 1st Operational Phase, the MS contributions will start to be requested by the CEREEAC, first as a very small staff-based contribution and then evolving depending on the mobilised funding and developed programmes and projects (forms follow function). Thus, a mix of donor funding, ECCAS and MS contributions, mobilised funding and programme/project financing (and respective administrative fees), will be part of the financial sustainability of the Centre.

6. Risk mitigation and lessons learned

6.1 Table with expected risks and risk mitigation

The following potential risks to the success of the CEREEAC have been identified and risk mitigation strategies have been proposed:

Risk	Likelihood	Mitigation Strategy.
<p>Political and policy coherence risk: Conflicting political agendas block institutional development of ECCAS. Due to economic downturn, there might be diminishing interest in promoting RE&EE.</p>	Low	An opportunity-oriented approach towards implementation and strong partner integration in steering with a clear focus will mitigate the political risk. Moreover, CEREEAC as an ECCAS backed centre, its neutral stand, good reputation and its diplomatic know-how and networks, will allow the centre to handle difficult negotiation processes between MSs. The MSs will be closely involved in the activities of the CEREEAC and its major decisions through projects implemented in each country. Care will be taken so that the CEREEAC maintains its regional focus and not appear to be operated by the host country through consultative decision-making processes. CEREEAC will promote the RE&EE agenda also through awareness raising targeting high-level decision makers. The ECCAS Commission will take care of building policy coherence with other important sectors (e.g., transport, climate change, industrialisation, and environment).
<p>Sustainability risk: CEREEAC can only become sustainable if it broadens its finance base, which includes also membership fees of MS. Some MS might oppose this development and/or required national ratification processes get stuck.</p>	High	Further support from UNIDO is linked to the provision of co-funding by MS and the acknowledgement of CEREEAC as full ECCAS institution. There will be continuous engagement with the ECCAS Commission and MS to strengthen their ownership in CEREEAC programmes. In case CEREEAC cannot become a full ECCAS institution, alternative models will be considered. Lessons from the SACREEE centre on this point should be learned.
<p>Institutional risk: UNIDO has only limited control over the management of CEREEAC and its performance. CEREEAC will have its own legal identity. The CEREEAC management reports to ECCAS (not to UNIDO)</p>	Medium	To mitigate the risk, UNIDO will apply its ownership-oriented GN-SEC “twinning” approach, which will transfer gradually more and more administrative, financial and technical responsibilities to the CEREEAC. Gradually, depending on the progress and quality of the technical and financial reporting, UNIDO will delegate more responsibilities, including the management of funds, to CEREEAC. This will be done in line with the project document and annual work plans subject to the approval of the Board of Directors. Payments to CEREEAC will depend on implementation progress, the approved annual work plans, progress reports and audited financial statements. Further control power is exercised through the participation in the BoD.

<p>in line with the principle of local ownership and alignment. Therefore, UNIDO has only limited control over project results and oversight regarding the operations of the centre.</p>		
<p>Ownership risk: Lacking commitment and responsiveness by national focal institutions and partner.</p>	<p>Medium</p>	<p>The commitment shown by ECCAS for CEREEAC is, so far, high and strongly supported, although formal approval for the Centre is still being sought. The proposed goals align well with national agendas and perceived priorities. Key energy institutions from central or sub-national governments will be invited to participate in programme steering to increase commitment and ensuring partner alignment. Engagement of focal institutions and partners in steering programmatic activities through a consultative decision-making process in annual work plan and building their capacities to effectively achieve their targets will support their meaningful engagement. CEREEAC will also carry out regular capacity building programmes for the staff of national focal institutions to ensure their continued and meaningful engagement. In addition, each national focal institution will be required to regularly brief the representative of the member state to CEREEAC Board. Adequate financial operational resources from CEREEAC to national institutions will also help to maintain interest and cooperation.</p>
<p>Quality risk: Limited technical capacities and low resource base might lead to sub-optimal results and lack of support by ECCAS MS.</p>	<p>Medium</p>	<p>Technical know-how on energy will be enhanced through dedicated budget for strategic recruitments of champion and senior experts and bringing in specialised consultancy experience for the first year of the operation of thematic areas. UNIDO will provide technical support from HQ to CEREEAC staff through trainings and the participation in GN-SEC joint learning activities. CEREEAC will rely on already mobilised contributions from UNIDO and can based its activities on the achievements under the 1st operational phase. UNIDO will strengthen its efforts to support CEREEAC in consolidating a project pipeline. Moreover, UNIDO supports CEREEAC to develop its technical quality and appraisal framework, as well as its social and environmental safeguards.</p>
<p>Gender risk: Reproducing existing unequal gender relations</p>	<p>Low</p>	<p>A gender perspective will be applied in all types of activities and research it undertakes and actively promote the participation of women in its various committees and structures for more balanced decision-making. Moreover, gender mainstreaming will be addressed by ensuring that gender perspectives and gender equality considerations are central to all policy development, research, dialogue, planning, implementation and monitoring activities it conducts or helps facilitate.</p>
<p>COVID-19 risk: Lockdowns and an economic downturn might have severe impacts on regional activities and regional cooperation in ECCAS in general. CEREEAC might continue to face challenges with meetings and workshops.</p>	<p>Medium</p>	<p>UNIDO and ECCAS should be prepared to progress the initial stages of the CEREEAC remotely and through online meetings and workshops until such a time mitigation measures are in place for COVID-19. In partnership with other GN-SEC centres, CEREEAC will work on specific assessments and programs addressing the thematic area of “promoting green post-COVID recovery in the ECCAS”.</p>
<p>Environmental risk Severe environmental impacts and potential risk of conflicting agendas between energy and environmental aspects</p>	<p>Medium</p>	<p>These risks will be mitigated by identifying the potential risk planning actions to mitigate them and anchoring sustainable development nexus perspectives into the design of CEREEAC initiatives while at the same time defining environmental mechanism and framework for the centre during its first operational phase</p>

can slow down the implementation of activities		
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6.2 Lessons learned from other GN-SECs

The previous and ongoing experience of the GN-SEC network will prove to be invaluable to the establishment and running of the CEREEAC. The longevity of the existing centres means many of the identified risks have already been faced and addressed in some form, depending on circumstances. The GN-SEC centres network will therefore be an invaluable resource for the CEREEAC in both mitigating against and handling risks on an ongoing basis. Furthermore, UNIDO staff involved in helping to develop the CEREEAC will also have excellent knowledge of some of the barriers and challenges the centre may face and advice can be sought from support staff throughout the process.

The lessons learned and success factors concerning the establishment and first operational phase of the ECREEE, the first Centre to be established, were considered in the design process of the CEREEAC. These were mostly based on the external evaluation of the first phase of ECREEE in West Africa which was conducted by an external consultant. The former UNIDO seconded expert, who was based at the ECREEE Secretariat in Cape Verde, was also highly involved in the technical preparations and ensured the integration of the practical experiences, lessons learned and risk mitigation measures. Table 10 provides an overview on the lessons learned and how they were applied in the design of CEREEAC.

Table 10: GN-SEC Lessons learnt and success factors and its incorporation in the CEREEAC design process

Institutional aspects
<i>Involving key regional and national stakeholders and ensure local ownership of the centre from the very beginning.</i> Involvement of energy stakeholders is necessary from the initial stages to gather inputs for the design, the technical program and demanded services; create awareness and attract interest.
<i>Local ownership and use of local procedures should be mainstreamed and encouraged for the sustainability of the centre.</i> The centre should be owned by the local counterpart. The initial UNIDO institution building support should be directed to build a centre with strong ECCAS identity, ownership and ability to mobilise and implement its own financial resources. The UNIDO support should have a clear exit-strategy.
<i>Fund mobilization should be a core activity of the centre and should not be limited to funding commitments at the beginning.</i> The expansion of the project portfolio should be a requirement for the expansion of staff and administrative costs: form should follow function.
<i>Early establishment and capacity strengthening of the NFIs is crucial of the functioning of the centre.</i> The network allows high level access to national policy makers and national support services (e.g. workshops, project monitoring, awareness creation and data collection)
<i>It is essential to employ high-quality staff from the very beginning.</i> In the best case such an expert should combine technical-economic energy skills with sound management skill and good relations and contacts with MS, partners and international donors for fund raising.
<i>Efficient and effective institutional structure with high level of legitimacy in the region should be established.</i> The duties and roles of the Executive Board, Technical Committee, Secretariat, and strategic representation of member states and core donors in the governance structure should be clearly defined.
<i>It is key to mention the definition of the legal status and scope of delegation of competencies from the regional organization to the centre from the very beginning.</i> For efficiency purposes it is important that the centre has its own legal identity but should work in accordance with the rules of the regional organization.
<i>A long-term (4 to 5 years) and short-term (annually) planning, execution and monitoring framework including a set of performance indicators should be developed.</i> This allows an efficient monitoring of the progress by the donor partners and the Board of Directors. The design of the project document should leave space for changes in accordance with the priorities of the Director and demands from the national focal institutions.
<i>The annual work plans should be developed in close coordination with the NFIs.</i> NFIs and other relevant market enablers should carry out wider stakeholder consultations on the work plans.

Technical aspects

The centre should act as a facilitator and supporter rather than implementer of grass-root activities. By doing so, it should avoid competition and overlapping of services provided by the private sector and other institutions.

It is essential to demonstrate added value on local and international levels with early start-up activities with high visibility factor. Country visits, call for applicants and/or projects, tenders, regional key conferences and workshops, data provider, partner in project submissions are some high visibility factors, which should be focused upon by the centre.

Permanent pro-active fund raising for the technical program of the centre should be a key performance indicator. The centre should participate in call for proposals and donor dialogues from the very beginning and should prepare high-quality project documents. It is essential to develop well designed long-term oriented flag-ship priority programs with the potential for up-scaling to be implemented during the first operational phase.

It is necessary to create an informative website dedicated to the centre. Availability of e-newsletter and use of electronic social media should be essential features of the website.

The centre should build a strong network of partnerships with local and international institutions in clean energy sector. It is important to build such partnerships to develop common projects and win-win situations.

The centre should establish an internal quality, appraisal and management framework for technical procurements and projects. Standard project document templates for project appraisal, procurement and project cycle management should be developed to aid the framework.

The centre must build up numerous partnerships with different donors and partners. Donor interests should be managed and balanced carefully by defining the priorities for their assistance through the annual work plans and business plan to strengthen the capacities of the centre and raise co-funding.

7. Monitoring, Evaluation and Reporting

7.1 Overall Monitoring

The Centre will apply an interrelated short-term and long-term planning and monitoring framework:

- The CEREEAC Business Plan, to be prepared by the Executive Director, will be based on the results-based management framework of this project document and will provide a long-term planning framework at least for the period 2021 to 2024. The logical framework defines measurable and attainable indicators for the objectives and project components of the logical framework matrix.
- The annual work plans, which are subject to approval by the EB, provide a short-term planning framework which incorporates projects and activities to be executed by the CEREEAC Secretariat in a given year. The work plans include also the annual budget and an activity matrix which specifies from which source the respective activity is funded (e.g., ECCAS, UNIDO, other donor partners).
- The annual status reports and audited annual financial statements monitor the implementation of the work plans and report on the achievements in the different project components in the Business Plan and the logical framework of this project document.

Three types of monitoring will be carried out on a regular basis:

- Output monitoring of the achievement in terms of quantitative targets achieved directly due to CEREEAC activities (e.g., number of people, men and women trained per programme). An assessment of the outputs of the Centre will be conducted on an annual basis. This will be done on the basis of the annual status reports. The achievements are measured according to the indicators of this project document (and the CEREEAC Business Plan to be prepared). Moreover, a data tracking framework will be established to complete some of the missing gender-aggregated data in the results framework.

- Impact monitoring at the level of the target groups (intermediary as well as direct target groups) that will also yield both quantitative and qualitative information about progress in RE&EE market activities will be coordinated by the CECREEAC where possible but collected by MS (through the respective NFIs). Such information will include increase in the installed capacity of RE, quantity of energy saved, reduction in the electricity production costs and investments in RE&EE projects.
- Process monitoring aimed at keeping on top of changes in the internal and external environment, so as to learn from them and refine strategies of the different components of the CECREEAC's multi-annual programme continually.

The results of these different types of monitoring will be captured in the reporting system and annual reports and will determine the annual operational planning exercise. The annual reports and annual work plans will be presented to ECCAS and to donors and will serve as an exercise in reviewing progress, problems and solutions. Since the CECREEAC is likely to seek funding and other support from different types of organisations and agencies, it should negotiate from the very beginning a general annual reporting format that would satisfy the needs of all the different organisations, so as to keep the burden of reporting to a necessary minimum.

A mid-term review will be undertaken after 30 months of implementation (or as decided by the BoD according to the needs). One external evaluation will take place near to the finalisation of the First Operational Phase. The evaluations will take the two CECREEAC development scenarios into account. In the optimistic scenario CECREEAC will raise the required funding to implement all activities/outputs. In the conservative scenario, CECREEAC will mobilise the resources to implement at least 65% of the activities/outputs. An external evaluation will take the conservative scenario as basis. The achievement of more than 65% of the results is considered as an excellent achievement. Since funding needs to be mobilised during the implementation and also highly depends on the CECREEAC management, the UNIDO project does not have full control over the results.

Emphasis of the evaluations should be an assessment of the organisational design as well as the suitability of its programmes. Another focus should be the financing aspect of the operational budget of the CECREEAC in so far as it is possible to raise core funds for its functioning and which of the different functions have a potential for generating an income in the long term. Following the completion of the Monitoring, Evaluation and Reporting plan, tools and methods of data collection, processing, analysing, and interpreting will undergo detailed development. Tools such as questionnaires and structured surveys will be used in collecting data. Baseline data will be established for the performance indicators, which have been defined in the project logical framework and benchmarking will be carried out to see the changes caused by the project at different results levels.

All monitoring and evaluation tools and documents, such as the monitoring plan, progress reports, final evaluation report, and thematic evaluations (e.g. training needs assessment), will include gender and youth dimensions, and report with respect to an established baseline for gender related targets.

7.2 Benchmark for Monitoring and Evaluation Processes

In line with the proposed institutional setup of the CECREEAC, the Executive Director of the Centre will be responsible for compiling detailed progress reports on an annual basis and present to all parties involved in the management and funding of the CECREEAC. The annual reports will be discussed and approved by the EB. The Director of the Centre will also be responsible for producing abridged progress report in between EB meetings (i.e., six months after each main progress report). This report will also be made available to all parties. With the establishment of the Centre the MER system will be developed having as a basis monitoring framework and the project results framework, developed in this project document. In its first progress report the Executive Director will provide the baseline for the respective Key Performance Indicators against which the progress is to be measured.

7.3 Legal Context

It is expected that each set of activities that will be implemented in the target countries, will be governed by the provisions of the Standard Basic Cooperation Agreement concluded between the Government of the

recipient country concerned and UNIDO or – in the absence of such an agreement – by one of the following: (i) the Standard Basic Assistance Agreement concluded between the recipient country and UNDP, (ii) the Technical Assistance Agreements concluded between the recipient country and the United Nations and specialized agencies, or (iii) the Basic Terms and Conditions Governing UNIDO Projects.”

The counterpart of the UNIDO project is the ECCAS and CERREAC once it receives full legal identity. The centre acts as an independent body but within the legal, administrative and financial framework of ECCAS rules and regulations, which delegates while respecting its texts, the day-to-day management and certain decision-making authorities to the bodies (Executive Board) and the Centre’s Executive Director (e.g., procurement, authority to sign contracts and recruitment). UNIDO is represented in the decision-making bodies of CERREAC without time limitation.

8. Annexes

Annex 1: Results framework matrix

The following draft project result framework will be further discussed and finalised in consultation with ECCAS Member States.⁴²

Development Impact (ultimate outcome)	Indicators ⁴³	Baseline and targets	Means of verification	Risks and assumption
<p><i>Contribute to increase access to modern, affordable and reliable energy services, energy security and mitigation of negative externalities of energy systems (e.g. local pollution and GHG emissions) by promoting the establishment of an integrated and inclusive ECCAS market for renewable energy and energy efficiency products and services</i></p>	<ul style="list-style-type: none"> - 1% reduction of energy related GHG emissions by RE&EE in the ECCAS region (baseline data 2018) (IRPF Indicator ENV.1) - # of additional million people in rural areas of the ECCAS region gain access to RE based electricity services ((IRPF Indicator SOC.3) - # of RE&EE products and services are introduced into the ECCAS market (IRPF Indicator ENV.5) - # of RE&EE businesses are created in the ECCAS region (IRPF Indicator SOC.2) - # of additional (directly or indirectly) domestic jobs are created in the RE&EE sector (IRPF Indicator SOC.1) - % increase of national electric RE generation in all Member States - % increase of households with clean cooking technologies - % EE improvement in the residential, commercial and industrial sector in the EAC - % growth of investment in RE&EE infrastructure and businesses in the ECCAS 	<p><u>Baseline:</u></p> <p>In terms of energy access:</p> <ul style="list-style-type: none"> - Almost 47% of the ECCAS population had access to electricity in 2018. Only 19% of the rural ECCAS population had access to electricity in the same year. - 29% of the total ECCAS population has access to clean fuels and technologies for cooking in 2016. <p>In 2018, the region had a RE electric generation capacity of 7GW.</p> <p>ECCAS GHG emissions amounted to 1.66 million kt CO2 equivalent in 2012</p> <p><u>Target(s):</u>⁴⁴</p> <p>CEREEAC will contribute to the following targets by end of the project duration:</p> <ul style="list-style-type: none"> - 10% reduction of energy related GHG emissions by RE&EE in the ECCAS region (baseline data 2018) (IRPF Indicator ENV.1) - At least additional 5 million people in rural areas of the ECCAS region gain access to RE based electricity services (sex-disaggregated data (at least 50% women envisaged) – baseline 2018) (IRPF Indicator SOC.3) - At least 10 RE&EE products and services are introduced into the ECCAS market (sex-disaggregated data – baseline 2018) (IRPF Indicator ENV.5) 	<p>Regional statistics in energy balances</p> <p>Regional statistics on GHG emissions</p> <p>National and regional policies and strategy papers</p> <p>CEREEAC financial reports</p>	<p>Investments in RE&EE projects continue to be and perceived as feasible and viable options</p> <p>Regional development of policies and legal framework for energy continues and create favourable environment for sustainable energy</p> <p>Stable political situations in the ECCAS countries</p>

⁴² In the optimistic scenario CEREEAC will raise the required funding to implement all activities/outputs. In the conservative scenario, CEREEAC will mobilise the resources to implement at least 50% of the activities/outputs. An external evaluation will take the conservative scenario as basis. The achievement of more than 65% of the results is considered as an excellent achievement. Since funding needs to be mobilised during the implementation and also highly depends on the CEREEAC management, the UNIDO project does not have full control over the results. It shall be noted that core donors will be involved in the monitoring of CEREEAC progress and the performance of the management through the governance structure, particularly the Technical Committee and the Executive Board.

⁴³ Currently the baseline data is very fragmented and hardly available. CEREEAC needs to develop a data tracking framework at the beginning of the project to ensure monitoring of progress.

⁴⁴ CEREEAC has no full control over these targets. They are influenced by many factors, as well as national and regional stakeholders. The final external evaluation will assess just the CEREEAC contributions to these targets.

		<ul style="list-style-type: none"> - At least 50 RE&EE businesses are created in the ECCAS region 50% female CEOs envisaged) (sex-disaggregated data – baseline 2018) (IRPF Indicator SOC.2) - At least 500 additional (directly or indirectly) domestic jobs are created in the RE&EE sector (50% jobs for women envisaged) (IRPF Indicator SOC.1) - 10% increase of national electric RE generation in all Member States (sex-disaggregated data – baseline 2018) - 10% increase of households with clean cooking technologies (sex-disaggregated data - baseline 2018) - 10% EE improvement in the residential, commercial and industrial sector in the EAC (baseline 2018) - 10% growth of investment in RE&EE infrastructure and businesses in the ECCAS (on- and off-grid) (baseline 2018) 		
Short term outcomes	Indicators	Baseline and targets	Means of verification	Assumption
Outcome 1: Effective CEREEAC provides quality services to ECCAS Member States and the international community	<ul style="list-style-type: none"> - (Yes/No) CEREEAC inaugurated and kick-started operations (IRPF indicator GOV.1) - # of National Focal Institutions (NFIs) and # of thematic hubs (THs) are appointed (IRPF indicator GOV.2) - 1 signed and ratified legal and host country agreement (if required) - # of CEREEAC permanent staff working on the region sustainable energy issues - Funding for % of the activities in the CEREEAC Project Document is mobilised and under implementation - EUR of funding mobilised for the implementation of CEREEAC activities during the First Operational Phase (IRPF indicator INV.3) - # of major CEREEAC flag-ship projects and programs are developed and under implementation (at least one on gender and energy) (IRPF indicator INV.1) 	<p><u>Baseline:</u></p> <p>No regional RE & EE centre exists in the ECCAS region</p> <p><u>Target(s):</u></p> <ul style="list-style-type: none"> - (Yes/No) CEREEAC inaugurated and kick-started operations (IRPF indicator GOV.1) - 11 National Focal Institutions (NFIs) and at least 5 thematic hubs (THs) are appointed (IRPF indicator GOV.2) - 1 signed and ratified legal and host country agreement (if required) - At least 5 CEREEAC permanent staff working on the region sustainable energy issues (at least 50% women) - Funding for at least 65% of the activities in the CEREEAC Project Document is mobilised and under implementation - At least EUR 5 million mobilised for the implementation of CEREEAC activities during the First Operational Phase (IRPF indicator INV.3) - At least 4 major CEREEAC flag-ship projects and programs are developed and under implementation (at least one on gender and energy) (IRPF indicator INV.1) - Sufficient funding to sustain the core operations of the centre during the Second Operational phase is mobilised 	<p>CEREEAC Progress reports and monitoring and evolution records</p> <p>Inauguration of the Centre reports, newflashes, etc.</p> <p>Financial reports of the Centre</p> <p>Centre agreements</p>	<p>The centre has enough resources to develop the programmes and projects and to organise meetings/events</p> <p>Regional staff of suitable quality and experience is available</p>

	<ul style="list-style-type: none"> - Sufficient funding to sustain the core operations of the centre during the Second Operational phase is mobilised - Minimum rating level of the external evaluation regarding the relevance, effectiveness, efficiency and impact of the Centre - Acknowledgement of CEREEAC in # of major UN or African Union documents or strategies - Cooperation with other African GN-SEC centres in # of triangular initiatives/programs implementation of CEREEAC activities in the Transition and First Operational Phase (IRPF indicator INV.3) 	<ul style="list-style-type: none"> - At least achieve a Moderately Satisfactory evaluation classification in the relevance, effectiveness, efficiency and impact of the Centre - Acknowledgement of CEREEAC in at least 3 major UN or African Union documents or strategies - Cooperation with other African GN-SEC centres in at least 2 triangular initiatives/programs 		
<p>Outcome 2: Improved national RE&EE policy and regulatory frameworks in ECCAS Member States</p>	<ul style="list-style-type: none"> - # of regional gender-sensitive RE&EE policy implementation framework established (IRPF indicator POL.1) - % of CEREEAC MS adopted national RE&EE action plans (IRPF indicator POL.1) - # of regional gender-sensitive standards on RE&EE are developed and their implementation # of 4 countries facilitated (IRPF Indicator POL.2) - # of requests for assistance from Government and private sector - evidenced cooperation with other African GN-SECs on the harmonisation of RE&EE standards under the AU framework in joint initiatives/programs 	<p><u>Baseline:</u></p> <p>Incipient national RE policy frameworks. Non-existent EE policies.</p> <p>Lack of regional policy and regulations for RE&EE. No harmonised RE&EE targets across the region.</p> <p><u>Target(s):</u></p> <ul style="list-style-type: none"> - 1 gender-sensitive regional RE&EE policy implementation framework established and its implementation facilitated (IRPF indicator POL.1) - 50% of national RE&EE policies in MS are harmonised with the regional framework (IRPF indicator POL.1) - at least 2 regional gender-sensitive standards on RE&EE are developed and their implementation in at least 4 countries facilitated (IRPF Indicator POL.2) - at least 5 of requests for assistance from Governments and private sector - evidenced cooperation with other African GN-SECs on the harmonisation of RE&EE standards under the AU framework in at least 2 initiatives/programs 	<p>Regional RE&EE policy implementation framework</p> <p>Regional and national documents and standards</p> <p>Requests for assistance from Government and private sector</p>	<p>Support is provided by ECCAS countries for process at regional and national level</p> <p>Interest of Governments and private sector in receiving assistance from CEREEAC</p>

<p>Outcome 3: National capacities for the use and supply of RE&EE quality products and services are strengthened</p>	<ul style="list-style-type: none"> - # of regional frameworks for the qualification, certification and testing of RE&EE products, services and personal (IRPF Indicator POL.2) - % of the regional framework activities implemented at the end of the 1st Operational Phase - # of trainers of institutes are certified on RE&EE issues across all ECCAS countries (IRPF indicator KASA.2) - # of key stakeholders are trained by trainers and/or institutions (with at least a % female) (IRPF Indicator KASA.1) - % of trained stakeholders apply their received skills in the energy sector of ECCAS - # of experts from ECCAS region participating in ECCAS RE&EE conferences by end of the 1st Operation Phase (IRPF Indicator KASA.2) 	<p><u>Baseline:</u></p> <p>Lack/weak capacities of key institutions and stakeholders in the energy sector; very weak to no mainstreaming of gender aspects.</p> <p>No regional framework for the qualification, certification and testing of RE&EE products, services and personal in place; No gender mainstreaming standards in place</p> <p><u>Target(s):</u></p> <ul style="list-style-type: none"> - 1 regional frameworks for the qualification, certification and testing of RE&EE products, services and personal developed and validated by key stakeholders' groups with gender mainstreaming mechanisms incorporated (IRPF Indicator POL.2) - at least 50% of the regional framework activities implemented at the end of the 1st Operational Phase - At least 40 trainers of institutes are certified on RE&EE issues across all ECCAS countries at least 50% female trainers envisaged (IRPF indicator KASA.2) - at least 500 key stakeholders are trained by trainers and/or institutions (with at least a 50% female) (IRPF Indicator KASA.1) - 50% of trained stakeholders apply their received skills in the energy sector of ECCAS (with at least a 50% female) - 500 experts from ECCAS region participating in ECCAS RE&EE conferences by end of the 1st Operation Phase (with at least 50% female) (IRPF Indicator KASA.2) 	<p>Regional frameworks for the qualification, certification and testing of RE&EE products, services and personal</p> <p>Attendance sheets and questionnaires</p> <p>Lists of participants</p> <p>Workshops documents</p> <p>Monitoring and evaluations results</p> <p>CEREEAC progress reports & monitoring and evaluation data</p>	<p>Regional frameworks for the qualification, certification and testing of RE&EE products, services and personal is well accepted</p> <p>Energy stakeholders and institutions are interested in attending to the training courses and applying the received knowledge</p>
<p>Outcome 4: Availability of investment and market data, awareness and advocacy on RE&EE are strengthened</p>	<ul style="list-style-type: none"> - # of CEREEAC websites - # of registered users in the established web-based ECCASS energy information system (IRPF indicator REA.2) - # of institutions from ECCAS countries providing updated RE&EE for the web-based regional information system annually (including sex-disaggregated data) (IRPF Indicator GOV.2) - # of ECCAS Industry Reports on RE&EE 	<p><u>Baseline:</u></p> <p>No adequate and reliable regional information system on RE&EE in the ECCAS region.</p> <p>Limited awareness of stakeholders on RE & EE technologies, potentials, benefits etc. Limited awareness on gender issues</p> <p><u>Target(s):</u></p> <ul style="list-style-type: none"> - 1 CEREEAC website connected to the GN-SEC platform 	<p>Workshop reports and statistics</p> <p>List of events and participants lists</p>	<p>Public and private sector continue to show interest on RE&EE issues</p>

	- % of population in the ECCAS countries reached by regional awareness campaigns in RE&EE supported by CEREEAC	- At least 200 registered users in the established web-based ECCASS energy information system (IRPF indicator REA.2) - at least 7 institutions from ECCAS countries providing updated RE&EE for the web-based regional information system annually (including sex-disaggregated data) (IRPF Indicator GOV.2) - At least 1 ECCAS Industry Report on RE&EE (1 report) - 30% of population (among which 50% women and 40% youth) in the ECCAS countries reached by regional awareness campaigns in RE&EE supported by CEREEAC		
Outcome 5: Investment in RE&EE infrastructure, services and businesses are mobilised and implemented	EUR mobilised towards facilitation of RE & EE projects in the region (investment & demonstration projects) (IRPF Indicator INV.3) # of start-ups, entrepreneurs and SMEs that received support through CEREEAC (IRPF indicator BUS.3) % of increase in Foreign Direct Investment (FDI) on the RE&EE sectors in the region	<u>Baseline:</u> Insufficient levels of investment in RE&EE across the ECCAS region. Lack of technical assistance and funding to create a RE&EE project portfolio. Lack of RE&EE funding instruments for RE&EE projects Insufficient financial support to start-ups and entrepreneurs and SMEs <u>Targets:</u> Contributed to the mobilisation of at least EUR 200 millions of project finance towards RE & EE projects in the region (investment & demonstration projects) in partnership with DFIs and private sector (IRPF Indicator INV.3) At least 40 start-ups, entrepreneurs and SMEs received support through CEREEAC (IRPF indicator BUS.3) At least 15% of increase in Foreign Direct Investment (FDI) on the RE&EE sectors in the region	Documents on facilitated support for RE&EE projects (pre-feasibility studies, feasibility studies, ESIA, elaboration of project proposals etc.) Project documents CEREEAC Progress Reports Statistical data on FDI in RE&EE sector Signed contracts	CERREAC can identify and support a significant number of RE&EE projects The private sector shows interest in RE&EE market opportunities The private sector (start-ups, entrepreneurs and SMEs) shows interest in RE&EE market opportunities
Outcome 6: Gender and youth are mainstreamed into the CEREEAC activities, the project cycle and regional gender programmes/projects	- % of programmes/projects implemented by CEREEAC that include gender-specific targets or performance indicators that track gender results and impact (pursue a target of at least 50% women and 40% youth) (IRPF Indicator INV.1) - % of programmes/projects implemented by CEREEAC that include gender-specific targets	<u>Baseline:</u> There are no RE&EE programmes/projects with specific actions targeting women and youth <u>Target(s):</u>	CEREEAC project/programme documents and implementation progress reports CERREAC progress reports and monitoring and evaluation tracking tool CEREEAC Gender and Youth Mainstreaming strategy	There is a continued interest and commitment from ECCAS countries to promote gender equity There is interest from ECCAS countries to track gender and youth indicators in programmes/projects

	or performance indicators that track gender results and impact	<ul style="list-style-type: none"> - At least one dedicated project/program on gender and energy is developed, has resources and is under implementation (IRPF Indicator INV.1) - 50% of programmes/projects implemented by CEREEAC that include gender and youth specific targets or performance indicators that track results and impact on gender and youth 	ECCAS Gender and Youth Policy and Regional Strategic Framework	
OUTCOME 1: EFFECTIVE CEREEAC PROVIDES QUALITY SERVICES TO ECCAS MEMBER STATES AND THE INTERNATIONAL COMMUNITY				
Immediate Outcomes (short-term) - Outputs	Indicators	Baseline and Targets	Means of verification	Assumptions
Output 1.1. Funding arrangements finalised and host location of the CEREEAC Secretariat in one ECCAS country is defined and the CEREEAC Secretariat is physically established	<ul style="list-style-type: none"> - # appointed independent committee to identify the centre location - # office(s) with appropriate space and equipment to accommodate staff of the Secretariat 	<u>Baseline:</u> No regional RE&EE centre exists in the ECCAS region <u>Target(s):</u> <ul style="list-style-type: none"> - 1 appointed independent committee to identify the centre location - 1 office with appropriate space and equipment to accommodate staff of the CEREEAC Secretariat 	<ul style="list-style-type: none"> - Assessment report on possible locations for the Centre - Office agreement 	<ul style="list-style-type: none"> Selection of the Centre location is carried out in a timely manner Host country provides an appropriate office in time
Activities				
1.1.1 Host Country Agreement is prepared				
1.1.2 The ToRs for the CEREEAC staff are prepared				
1.1.3 Funding arrangements with donors, ECCAS and host country finalised				
1.1.4 Establishment of a functional office with IT infrastructure				
Immediate Outcomes (short-term) - Outputs	Indicators	Baseline and Targets	Means of verification	Assumptions
Output 1.2: Quality technical and administrative staff recruited and internal rules and procedures of the centre established and implemented	<ul style="list-style-type: none"> - # of Executive Directors recruited - # of expert(s) recruited for the Centre - # established internal rules and fiduciary standards in line with international donor requirements (e.g. procurement, staff, 	<u>Baseline:</u> No regional RE & EE centre exists in the ECCAS region <u>Target(s):</u> <ul style="list-style-type: none"> - 1 Executive Director recruited and an “alternative Director” position to ensure gender balance 	<ul style="list-style-type: none"> - Staff contracts - Internal rules & procedures - CEREEAC training registers 	<ul style="list-style-type: none"> Regional staff of suitable quality and experience is available Salary scales and contract conditions do not deter regional staff or result in high turnover

	<p>financial and accounting rules) (IRPF indicator TCO.3)</p> <ul style="list-style-type: none"> - # of procurement and recruitment committee established - # of Quality & Appraisal Frameworks for CEREAC technical cooperation established (IRPF indicator TCO.3) - # of trainings for CEREAC staff on finance and administration, management, project cycle management (IRPF indicator TCO.1) - # of trainings for CEREAC staff on RE&EE and latest innovations, incl. green hydrogen, ocean energy, electric mobility, electric storage and digital business models (IRPF indicator TCO.1) 	<ul style="list-style-type: none"> - at least 4 expert(s) (with at least 50% women) recruited for the Centre (one seconded expert by UNIDO) - 1 set of internal rules and fiduciary standards in line with international donor standards (e.g. procurement, staff, financial and accounting rules) established (IRPF indicator TCO.3) - Establishment of the procurement and recruitment committee; - 1 internal quality and appraisal framework for technical cooperation activities of the centre established and considering also climate change adaptation and gender aspects (IRPF indicator TCO.3) - At least 2 trainings (at least 50% women participation) for CEREAC staff on finance and administration, management, project cycle management (IRPF indicator TCO.1) - At least 6 trainings for CEREAC staff (at least 50% women participation) on RE&EE and latest innovations, incl. green hydrogen, ocean energy, electric mobility, electric storage and digital business models, climate change adaptation (IRPF indicator TCO.1) 		
Activities				
1.2.1 Recruit the CEREAC Executive Director and the UNIDO technical assistant according to the CEREAC personnel TORs				
1.2.2 Recruit the administrative and technical staff in accordance with the organizational chart and established TORs (using gender responsive procurement – see Output 7)				
1.2.3 Develop gender-sensitive internal rules and procedures, as well as fiduciary standards of CEREAC in line with international donor requirements; kick-off the recruitment and procurement cycle, incl. the establishment of relevant committees (e.g. procurement) in line with the UNIDO GN-SEC Manual for Administration and Finance;				
1.2.4 Relevant trainings on finance and administration, management, project cycle management and technical issues for CEREAC staff undertaken and external certification support implemented				
1.2.5 Establish an internal quality and appraisal framework for supported RE&EE activities, as well as environmental and social safeguard policies in line with international standards (e.g. ESIA, ESMP).				
Immediate Outcomes (short-term) - Outputs	Indicators	Baseline and Targets	Means of verification	Assumptions
Output 1.3: CEREAC fully legalised and institutional and	- # of signed and ratified legal and host country agreement	<u>Baseline:</u> No regional RE & EE centre exists in the ECCAS region	Legal and host country agreement EB & TC Meeting Minutes	There is interest from national institutions in CEREAC to become an NFI and a TH

governance structure established	<ul style="list-style-type: none"> - # of ECCAS meetings on energy and climate that CEREAC participated (IRPF indicator CPO.1) - # of networks of National Focal Institutions (NFIs) and Thematic Hubs (THs) established - # of TC and EB meetings organised (IRPF indicator CPO.1) 	<u>Target(s):</u> <ul style="list-style-type: none"> - 1 CEREAC legal agreements signed and ratified & 1 host country agreement signed and ratified (if required) - CEREAC participated in at least 4 ECCAS meetings on energy and climate (IRPF indicator CPO.1) - 11 NFIs and at least 5 THs - 4 TC and 4 EB meetings organised (IRPF indicator CPO.1) 	NFIs agreement	
Activities				
1.3.1 CEREAC Host Country Agreement signed;				
1.3.2 Establish the networks of National Focal Institutions (NFIs) and Thematic Hubs (THs) and strengthen its capacities (e.g. through interns, collaboration, consultants)				
1.3.3 Establish the TC , CMP and EB (incl. rules and procedures) and organise at least one annual TC and CMP meeting; (TC and CMP should aim at a 50% women participation – see Output 7)				
1.3.4 Sign first funding/execution agreement signed between UNIDO and CEREAC based on the successful certification of internal proceedings				
Immediate Outcomes (short-term) - Outputs	Indicators	Baseline and Targets	Means of verification	Assumptions
Output 1.4: Long and short-term planning, implementation and M&E framework of the Centre is established and implemented	<ul style="list-style-type: none"> - # of approved Business Plan (BP) (IRPF Indicator TCO.4) - # of workplan and progress reports per year - # of Monitoring and Evaluation Frameworks established and used by CEREAC to track progress 	<u>Baseline:</u> No regional RE & EE centre exists in the ECCAS region <u>Target(s):</u> <ul style="list-style-type: none"> - 1 approved Business Plan (BP) (IRPF Indicator TCO.4) - 1 workplan and progress reports per year - 1 Monitoring and Evaluation Framework established and used by CEREAC to track progress 	Business Plan Works plans Progress reports Monitoring and Evaluation Framework	The EB reaches a consensus regarding the BP and the annual work plans CEREAC has enough resources
Activities				
1.4.1 Develop the CEREAC Business Plan in line with the GN-SEC templates				
1.4.2 Develop and adopt annual work plans, status reports and audited financial statements of the Centre				
1.4.3 Develop and implement of a Monitoring and Evaluation (M&E) system including indicators measuring the CEREAC progress and impact (including Gender and Youth specific indicators)				
1.4.4 External auditors and evaluators selected by public procurement are appointed by the CEREAC procedures (annual external audits of CEREAC accounts)				

Immediate Outcomes (short-term) - Outputs	Indicators	Baseline and Targets	Means of verification	Assumptions
Output 1.5: The core activities and functions of the Centre are launched	<ul style="list-style-type: none"> - # Inauguration event of the CEREEAC (IRPF indicator CPO.1) - % of CEREEAC Project Document activities / BP implemented in the Transition and First Operational Phase - # of RE & EE programmes and /or projects implemented by CEREEAC (IRPF indicator PAO.1) - Act as UNIDO executing agency for projects to be jointly developed and submitted to GEF or GCF (IRPF indicator PAO.1) - Cooperation with other African GN-SEC centres on # of triangular initiatives/programs 	<p><u>Baseline:</u></p> <p>No regional RE & EE centre exists in the ECCAS region</p> <p><u>Target(s):</u></p> <ul style="list-style-type: none"> - 1 Inauguration event of the CEREEAC (IRPF indicator CPO.1) - At least 65% of the CEREEAC Project Document activities implemented - At least 4 major CEREEAC flag-ship projects and programs are developed and under implementation (at least one on gender and energy, one on rural energy and one related to climate change adaptation) (IRPF indicator PAO.1); all programmes and/or projects are gender responsive - Act as executing agency for at least 2 UNIDO projects to be jointly developed and submitted to GEF or GCF (IRPF indicator PAO.1) - Cooperation with other African GN-SEC centres it at least 2 triangular initiatives/programs 	<p>Inauguration of the Centre reports, newflashes etc.</p> <p>Meeting Minutes</p> <p>Programmes & Project Documents</p> <p>Annual workplans and progress reports</p> <p>Financial reports of the Centre</p> <p>Centre agreements</p>	The centre has enough resources to develop the programmes and projects and to organise meetings/events
Activities				
1.5.1 Organize the official inauguration of the Centre (back-to-back to the EB and TC meeting)				
1.5.2 Sign funding and technical cooperation agreements with regional and international partners to ensure financial sustainability of the Centre for the 1 st and 2 nd Operational Phases of the Centre (e.g. EAPP, IRENA, GIZ, REN-21, REEEP)				
1.5.3 Develop at least 4 flag-ship programs and/or projects in partnership with UNIDO and other partners to be submitted jointly donors and environmental funds (e.g. GEF, GCF); at least 2 programs/projects to be implemented with UNIDO				
1.5.4 Act as focal point for international organisations such as GN-SEC, IRENA, REN-21 and SEforALL in the region				
1.5.5 Participate in joint south-south and triangular GN-SEC activities, particularly in the African Union framework, as agreed (participate in at least two programs/projects)				
OUTCOME 2: IMPROVED NATIONAL RE&EE POLICY AND REGULATORY FRAMEWORKS IN ECCAS MEMBER STATES				
Immediate Outcomes (short-term) - Outputs	Indicators	Baseline and Targets	Means of verification	Assumptions

<p>Output 2.1: Regional RE&EE policies, regulations and standards developed and national implementation facilitated</p>	<ul style="list-style-type: none"> - # of regional RE&EE policy implementation framework established - # of regional RE&EE targets - % of CEREAC MS adopted national RE&EE action plans - # of regional regulations in the RE field and standards 	<p><u>Baseline:</u></p> <p>Incipient national RE policy frameworks. Non-existent EE policies.</p> <p>Lack of regional policy and regulations for RE&EE. No harmonised RE&EE targets across the region.</p> <p><u>Target(s):</u></p> <ul style="list-style-type: none"> - 1 gender-sensitive regional policy with RE&EE targets developed (IRPF indicator PAO.1) - 1 regional gender-sensitive RE&EE policy implementation framework established, and its implementation facilitated (IRPF indicator PAO.1) - 50% of national RE&EE policies in MS are harmonised with the regional framework (IRPF indicator PAO.1) - at least 2 regional standards on RE&EE are developed and their implementation in at least 4 countries facilitated (IRPF Indicator NOO.1) - evidenced cooperation with other African GN-SECs on the harmonisation of RE&EE standards under the AU framework in at least 2 initiatives/programs 	<p>Regional RE&EE policy implementation framework</p> <p>Regional and national documents and standards</p>	<p>Support is provided by ECCAS countries for process at regional and national level</p>
<p>Activities</p>				
<p>2.1.1 Review of existing national targets, policies, regulations, standards and institutional capacities to promote RE&EE markets and identification of regional support needs in the urban and rural context</p>				
<p>2.1.2 A regional RE&EE target, policy and implementation framework (incl. M&E) is established, and the development/update of national RE&EE action plans is facilitated (covering demand-side and supply-side aspects)</p>				
<p>2.1.3. Develop at least one relevant regional regulation (incl. practical model templates) to promote private participation in RE and facilitate its implementation on national level (e.g. PPAs for IPPs, net-metering, rural mini-grids)</p>				
<p>2.1.4 Development of regional minimum performance standards (MEPS) for lighting and appliances and facilitate the adoption and enforcement on national level</p>				
<p>2.1.5 Identify the need for and develop a quality standard at least one RE equipment relevant for urban and rural areas and facilitate its enforcement on national level (e.g. solar PV, cooking, mini-grids)</p>				
<p>2.1.6 Cooperate with other African GN-SECs, regional power pools and regulatory authorities on the harmonisation of RE&EE standards under the AU framework in at least 2 initiatives/programs particularly (particularly the electricity and heat markets)</p>				
<p>Immediate Outcomes (short-term) - Outputs</p>	<p>Indicators</p>	<p>Baseline and Targets</p>	<p>Means of verification</p>	<p>Assumptions</p>

<p>Output 2.2: CEREEAC works as a think-tank and clearinghouse for policy and regulatory advice</p>	<ul style="list-style-type: none"> - # of requests for assistance from Government and private sector - # of gender-sensitive position papers developed and presented - # of gender-sensitive technical policy briefs developed and presented - # of gender-sensitive roadmaps/strategies for the introduction of new innovative solutions are developed (e.g. circular economy, green hydrogen, ocean energy, digitalisation and industry 4.0). 	<p><u>Baseline:</u></p> <p>No regional RE & EE centre exists in the ECCAS region</p> <p>Incipient national RE policy frameworks. Non-existent EE policies.</p> <p>Lack of regional policy and regulations for RE&EE. No harmonised RE&EE targets across the region.</p> <p><u>Target(s):</u></p> <ul style="list-style-type: none"> - at least 5 of requests for assistance from Governments and private sector - at least 2 gender-sensitive position papers are developed and presented to regional or international energy/climate discussions/processes (IRPF Indicator PAO.2) - at least 2 gender-sensitive technical policy briefs are developed and submitted for consideration in regional/international energy and climate discussions/negotiations (IRPF Indicator PAO.2) - at least 3 gender-sensitive roadmaps/strategy for the introduction of new innovative solutions are developed (e.g. circular economy, green hydrogen, ocean energy, digitalisation and industry 4.0, e-mobility, electric storage). (IRPF Indicator PAO.2) 	<p>Requests for assistance from Government and private sector</p> <p>Position papers</p> <p>Policy briefs</p>	<p>Interest of Governments and private sector in receiving assistance from CEREEAC</p> <p>CEREEAC has enough resources to be able to develop and present position papers and policy briefs</p>
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Activities

2.2.1 Respond to specific requests for assistance from Governments and private sector for advice on policy, regulation and legislation for promotion of RE&EE

2.2.2 Develop and present ECCAS positions on sustainable energy in energy and climate conferences, policy processes and negotiations

2.2.3 Prepare technical policy briefs on issues such as energy for productive uses and industrial decarbonisation, efficient transport (incl. vehicle and fuel standards, e-mobility), gender, industrial energy efficiency, cleantech innovation, innovative financing and business models, digital/industry 4.0 energy solutions, climate adaptation/resilience of energy infrastructure, water, energy, food and climate nexus

OUTCOME 3: NATIONAL CAPACITIES FOR THE USE AND SUPPLY OF RE&EE QUALITY PRODUCTS AND SERVICES ARE STRENGTHENED

Immediate Outcomes (short-term) - Outputs	Indicators	Baseline and Targets	Means of verification	Assumptions
<p>Output 3.1: Regional framework for the qualification, certification and testing of RE&EE products,</p>	<p>- # of regional gender-sensitive needs assessment</p>	<p><u>Baseline:</u></p> <p>Lack of capacity on RE & EE in the ECCAS region</p>	<p>Regional frameworks for the qualification, certification and testing of RE&EE products, services and personal</p> <p>Needs assessment</p>	<p>Regional frameworks for the qualification, certification and testing of RE&EE products, services and personal is well accepted</p>

services and personal strengthened (with focus on the needs of local private sector and industry)	<ul style="list-style-type: none"> - # of gender-sensitive regional frameworks for the qualification, certification and testing of RE&EE products, services and personal - % of the regional framework activities implemented at the end of the 1st Operational Phase - # of gender sensitive training competency standards adopted by the Centre 	<p>No regional framework for the qualification, certification and testing of RE&EE products, services and personal in place; No gender mainstreaming standards in place</p> <p><u>Target(s):</u></p> <ul style="list-style-type: none"> - 1 regional gender-sensitive needs assessment (IRPF indicator PAO.2) - 1 gender-sensitive regional frameworks for the qualification, certification and testing of RE&EE products, services and personal developed and validated by key stakeholder groups with gender mainstreaming mechanisms incorporated (IRPF indicator PAO.1) - at least 50% of the regional framework activities implemented at the end of the 1st Operational Phase - at least 2 gender-sensitive training standards adopted by the Centre (with at least one dedicated to gender mainstreaming) (IRPF Indicator NOO.1) 	<p>CEREEAC progress reports and monitoring and evaluation data</p> <p>Training standards adopted</p>	
Activities				
3.1.1 A regional needs assessment on quality infrastructure related to RE&EE products, services and personal implemented (particularly reflecting the needs of the local RE&EE technology industry and business)				
3.1.2 A modular regional framework for the qualification, certification and testing of RE&EE products, services and personal established and its implementation through a regional network of national centres/partners facilitated				
3.1.3 Tailored ECCAS training and certification modules covering various RE&EE issues and tools are developed in coordination with the local business and industry groups, as well as national training and quality institutes (e.g. UNIDO developed standards on SHP development or industrial EE)				
Immediate Outcomes (short-term) - Outputs	Indicators	Baseline and Targets	Means of verification	Assumptions
Output 3.2: ECCAS network of certified trainers is created and operational	<ul style="list-style-type: none"> - # of network of universities/vocational training institutions promoting train-the-trainer modalities - # of accredited and certified national training institutions and trainers - # of web-based interactive portals on training as part of the CEREEAC website 	<p><u>Baseline:</u></p> <ul style="list-style-type: none"> No certification and accreditation schemes and standards for trainers and training institutions No network of vocational trainers/institutions No web-based interactive portal on RE&EE training <p><u>Target(s):</u></p> <ul style="list-style-type: none"> - 1 network of universities/vocational training institutions promoting train-the-trainer modalities 	<p>Records and certificates of certified trainers</p> <p>Records of institutions that adopted capacity standards</p>	Involved trainees and organisations show interest to cooperate with the Centre

		<ul style="list-style-type: none"> - At least 40 trainers of institutes are certified on RE&EE issues across all ECCAS countries (at least 50% female trainers envisaged) (IRPF indicator KASA.2) - 1 web-based interactive portal on training as part of the CEREAC website (IRPF indicator TCO.3) 		
Activities				
3.2.1 Strengthening cross-border cooperation between universities and vocational training institutions and networks to promote train-the-trainer modalities				
3.2.2 Act as coordinative hub for the accreditation and certification of national training centres and trainers				
3.2.3 Establish a web-based interactive portal on training as part of the CEREAC website with an ' <i>ask the trainer/expert</i> ' function to provide advice for businesses and candidates				
Immediate Outcomes (short-term) - Outputs	Indicators	Baseline and Targets	Means of verification	Assumptions
Output 3.3: Key market enablers are trained on RE&EE aspects of high relevance for the local business and industry sector	<ul style="list-style-type: none"> - # of key stakeholders are trained by certified trainers and/or institutions (with at least a % female) - % of trained stakeholders apply their received skills in the energy sector of ECCAS (with at least a % female) - % of national research institutions (that belong to the network of universities/vocational training institutions) that are involved in the execution of regional applied research programmes on RE&EE - joint online trainings/webinars with the African GN-SECs 	<p><u>Baseline:</u></p> <p>Lack/weak capacities of key institutions and stakeholders in the energy sector; very weak to no mainstreaming of gender aspects.</p> <p><u>Target(s):</u></p> <ul style="list-style-type: none"> - at least 500 key stakeholders are trained by trainers and/or institutions (with at least a 50% female) in the course of 10 workshops/webinars (IRPF indicator TCO.3) - 50% of trained stakeholders apply their received skills in the energy sector of ECCAS (with at least a 50% female) - at least 5 joint online trainings/webinars with the African GN-SECs (IRPF indicator TCO.3) 	<ul style="list-style-type: none"> Attendance sheets and questionnaires Lists of participants Workshops documents Monitoring and evaluations results 	Energy stakeholders and institutions are interested in attending to the training courses and applying the received knowledge
Activities				
3.3.1 Train key policy and decision-makers in RE&EE energy planning, policy, legislation, incentive mechanisms, tendering/auctions, standards (in conjunction with the development of the national RE&EE action plans)				
3.3.2 Train rural electrification agencies and other rural stakeholders on various RE&EE issues and support mechanisms (e.g. concessions, digital innovations e.g. payment systems)				
3.3.3 Train utilities and regulators regarding steps to take to promote IPPs, RE integration, grid stability, EE and loss management, climate resilience and disaster reduction, e-mobility and storage, digitalisation and innovative business models				

3.3.4 Provide targeted RE&EE training for energy entrepreneurs and businesses in rural and urban key industries (e.g. petroleum, agriculture, blue economy), as well as the financial sector (e.g. banks)				
3.3.5 Increase the capacity of experts to mainstream gender into RE&EE policies and projects				
3.3.6 Train key stakeholders on the enforcement of standards related to quality infrastructure for RE&EE products, services and personal in cooperation with national training and quality institutes (e.g. SHP, appliances and lighting, industrial EE, vehicle and fuel standards)				
3.3.7 Train experts/businesses on the financial structuring and planning of RE&EE projects (e.g. climate finance, RETScreen, HOMER)				
Immediate Outcomes (short-term) - Outputs	Indicators	Baseline and Targets	Means of verification	Assumptions
Output 3.4: Local innovation and R&D frameworks and networks with private-sector orientation are strengthened	<ul style="list-style-type: none"> - # of baseline assessments on R&D and innovation priority needs of the local RE&EE industry and business sector developed and published - # of institutions from ECCAS countries providing baseline data to the regional system on an annual basis (including sex-disaggregated data) - # of experts from ECCAS region participating in ECCAS RE&EE conferences by end of the 1st Operation Phase (with at least a % female) 	<p><u>Baseline:</u></p> <ul style="list-style-type: none"> No major regional applied research programmes and technology transfer projects on RE&EE being implemented in ECCAS No knowledge or information on R&D and innovation priority needs of the local RE&EE industry and business sector <p><u>Target(s):</u></p> <ul style="list-style-type: none"> - 1 gender-sensitive baseline assessments on R&D and innovation priority needs of the local RE&EE industry and business sector developed and published (considering also frontier technologies such as green hydrogen, ocean energy and electric mobility) - at least 3 institutions from the ECCAS countries providing baseline data to the regional system on an annual basis (including sex-disaggregated data) - 500 experts from ECCAS region participating in ECCAS RE&EE conferences by end of the 1st Operation Phase (with at least 50% female) 	<ul style="list-style-type: none"> Baseline assessment Research reports Programme document CEREEAC progress reports & monitoring and evaluation data 	<ul style="list-style-type: none"> New technologies are well accepted by users
Activities				
3.4.1 Conduct a baseline study on the R&D and innovation priority needs of the local RE&EE industry and business sector				
3.4.2 Contribute to the establishment of R&D and innovation networks comprising national institutes and private sector and facilitate the development of joint projects				
3.4.3 Promote south-south and north-south technology development partnerships				
OUTCOME 4: AVAILABILITY OF INVESTMENT AND MARKET DATA, AWARENESS AND ADVOCACY ON RE&EE ARE STRENGTHENED				

Immediate Outcomes (short-term) - Outputs	Indicators	Baseline and Targets	Means of verification	Assumptions
<p>Output 4.1: Establish an online RE&EE information management system addressing the needs of investors, local industry and business</p>	<ul style="list-style-type: none"> - # of CEREAC websites - average # of visitors per month accessing the CEREAC website - % of visitors to the CEREAC website from the ECCAS countries - (Yes/no) Adequate and reliable web-based centralised gender-sensitive regional information system on RE&EE available - # of institutions from ECCAS countries providing updated RE&EE for the web-based regional information system annually (including sex-disaggregated data) - # of documents, files and data sets available on the regional web-based information system - (Yes/No) gender-sensitive database of RE&EE business contacts available on the web-based information system - (Yes/No) gender-sensitive database of RE&EE investment opportunities identified in the web-based information system - (Yes/No) gender-sensitive web-based information system providing GIS resource data - % of NFIs that received training on energy data collection, verification and validation 	<p><u>Baseline:</u></p> <ul style="list-style-type: none"> No adequate and reliable regional information system on RE&EE in the ECCAS region. No systematic collection of baseline data disaggregated by gender. <p><u>Target(s):</u></p> <ul style="list-style-type: none"> - 1 CEREAC website connected to the GN-SEC platform (IRPF Indicator TCO.3) - average of 200 visitors per month accessing the CEREAC website - at least 50% of visitors to the CEREAC website are from the ECCAS countries - (Yes) Adequate and reliable web-based centralised gender-sensitive regional information system on RE&EE available (IRPF Indicator TCO.3) - at least 7 institutions from ECCAS countries providing updated RE&EE for the web-based regional information system annually (including sex-disaggregated data) - 100 documents, files and data sets available on the regional web-based information system - (Yes) database of RE&EE business contacts available on the web-based information system - (Yes) gender-sensitive database of RE&EE investment opportunities identified in the web-based information system - (Yes) web-based information system providing GIS resource data - 100% of NFIs received training on energy data collection, verification and validation 	<ul style="list-style-type: none"> CEREAC website Website statistics Files and documents uploaded/shares in through the website 	<p>Website content is useful for key stakeholders in the ECCAS energy market</p>
Activities				
4.1.1 Maintain an effective interactive website including extensive document sharing facility (http://www.cereec.org) interlinked with the GN-SEC portal				
4.1.2 Establish a gender-sensitive web-based information system on RE&EE market and investment data interlinked with the GN-SEC portal				

4.1.3 Compile an inventory of relevant experiences/projects and papers/study reports/research reports and documents on best practices, skills, know-how, knowledge, technology suppliers in each MS (disseminated through the information system)				
4.1.4 Create a gender-sensitive database of RE&EE businesses contacts (disseminated through the information system)				
4.1.5 Organize training workshops on energy data verification, quality and harmonisation in cooperation with NFIs and national data and quality institutes				
4.1.6 Create a database of RE&EE investment opportunities and sites (linked to Output 6)				
4.1.7 Collect, aggregate and disseminate GIS based RE&EE resource data of MS through the information system				
Immediate Outcomes (short-term) - Outputs	Indicators	Baseline and Targets	Means of verification	Assumptions
Output 4.2: Promote awareness on RE&EE solutions and opportunities	<ul style="list-style-type: none"> - # major conferences, workshops, exhibitions carried out on different RE&EE aspects (possibly virtual depending on travel situation die to COVID-19) - # of ECCAS Industry Reports on RE&EE - % of population in the ECCAS countries reached by regional awareness campaign on RE&EE 	<p><u>Baseline:</u></p> <p>Limited awareness of stakeholders on RE & EE technologies, potentials, benefits etc. Limited awareness on gender issues</p> <p><u>Target(s):</u></p> <ul style="list-style-type: none"> - 4 major conferences, workshops, exhibitions carried out on different RE&EE aspects (possibly virtual depending on travel situation die to COVID-19) (IRPF Indicator CPO.1) - At least 1 ECCAS Industry Reports on RE&EE (1 report) - 30% of energy key stakeholders in the ECCAS region reached by a awareness campaign on RE&EE 	<p>Workshop reports and statistics</p> <p>List of events and participants lists</p>	Public and private sector continue to show interest on RE&EE issues
Activities				
4.2.1 Organize at least one major conference on different RE&EE aspects per year (possibly a virtual event depending on travel situation due to COVID-19)				
4.2.2 Produce an ECCAS Industry report on RE&EE (or cleantech) and regularly update it (this should be different from the policy report and link to industry opportunities, socio-economic (including gender and youth mainstreaming) and supply chain benefits etc.)				
4.2.3 Design and implement at least one gender-sensitive regional RE&EE awareness campaign (e.g. electricity theft, efficient lighting, clean cooking)				
OUTCOME 5: INVESTMENT IN RE&EE INFRASTRUCTURE, SERVICES AND BUSINESSES ARE MOBILISED AND IMPLEMENTED				
Immediate Outcomes (short-term) - Outputs	Indicators	Baseline and Targets	Means of verification	Assumptions

<p>Output 5.1: Facilitate finance, private participation and foreign direct investment in RE&EE projects</p>	<p>EUR mobilised towards facilitation of RE & EE projects in the region (investment & demonstration projects)</p> <p>% of increase in Foreign Direct Investment (FDI) on the RE&EE sectors in the region</p> <p># National ECCAS financial institutions (e.g. banks) providing co-finance for RE&EE projects within the developed innovative RE&EE financing schemes and models</p> <p>EUR RE&EE Investment Portfolio identified and presented to international and domestic investors</p> <p>Contribute to the introduction of frontier technologies and innovative business models (e.g. green hydrogen, electric mobility, marine energy, digitalisation)</p> <p># of RE&EE projects receiving pre-investment and sustainability support</p>	<p><u>Baseline:</u></p> <p>Insufficient levels of investment in RE&EE across the ECCAS region.</p> <p>Lack of technical assistance and funding to create a RE&EE project portfolio.</p> <p>Lack of RE&EE funding instruments for RE&EE projects.</p> <p><u>Target(s):</u></p> <p>Collect data and establish a RE&EE project investment pipeline of at least EUR 400 million in ECCAS MS and present it to international and domestic investors</p> <p>Contribute to the mobilisation of at least EUR 200 millions of project finance towards RE & EE projects in the region (investment & demonstration projects) in partnership with DFIs and private sector</p> <p>Contribute to the introduction of frontier technologies and innovative business models (e.g. green hydrogen, electric mobility, marine energy, digitalisation)</p> <p>At least 3 ECCAS financial institutions (e.g. banks) are providing co-finance for RE&EE projects within the developed innovative RE&EE financing schemes and models</p> <p>At least 5 RE&EE projects receiving pre-investment and sustainability support</p>	<p>Documents on developed support schemes</p> <p>Documents on facilitated support for RE&EE projects (pre-feasibility studies, feasibility studies, ESIA, elaboration of project proposals etc)</p> <p>Project documents</p> <p>CEREEAC Progress Reports</p> <p>Statistical data on FDI in RE&EE sector</p> <p>Signed contracts</p>	<p>CERREAC can identify and support a significant number of RE&EE projects</p> <p>The private sector shows interest in RE&EE market opportunities</p>
<p>Activities</p>				
<p>5.1.1 Cooperate with financial institutions (e.g. DFIs, local banks) on the bundling of projects – Investment Portfolio – presenting relevant project data (to be published through the information system)</p>				
<p>5.1.2 Provide pre-investment and sustainability support to RE projects with high regional replication and impact potential (e.g. feasibility studies, ESIA's and elaboration of project proposals) in partnership with DFIs and the financial sector (e.g. bioenergy, SHP, mini-grids)</p>				
<p>5.1.3 Work with the financial sector on the design and testing of innovative RE&EE financing schemes and models for urban and rural energy (e.g. concessional, commercial finance, micro-credits, guarantees, insurance products, revolving funds, energy contracting)</p>				
<p>5.1.4 Analyse and implemented RE&EE projects with high replication potential and disseminate the lessons learned throughout the ECCAS region</p>				
<p>Immediate Outcomes (short-term) - Outputs</p>	<p>Indicators</p>	<p>Baseline and Targets</p>	<p>Means of verification</p>	<p>Assumptions</p>

<p>Output 5.2: Promote local RE&EE entrepreneurship and innovation</p>	<p>(Yes/No) regional platform to support RE&EE start-ups and entrepreneurs and SMEs</p> <p># of start-ups, entrepreneurs and SMEs that received support through CEREEAC</p> <p># of RE&EE (cleantech) acceleration programs and associations/clusters created in ECCAS</p> <p># of investment and business forums</p>	<p><u>Baseline:</u></p> <p>Insufficient financial support to start-ups and entrepreneurs and SMEs</p> <p>Lack of RE&EE (cleantech) acceleration programs and associations/clusters in ECCAS.</p> <p><u>Target(s):</u></p> <p>At least 40 start-ups, entrepreneurs and SMEs received support through CEREEAC (IRPF indicator BUS.3)</p> <p>At least 3 RE&EE (cleantech) acceleration programs and associations/clusters created in ECCAS (at least one BLOOM Clean Tech Cluster established) (IPRF indicator TCO.4)</p> <p>At least 2 investment and/or business forums carried out (IRPF Indicator CPO.1)</p>	<p>Workshop reports and list of attendees</p> <p>Calls for proposals issues</p> <p>Contracts with SME, start-ups and entrepreneurs</p> <p>Records of RE&EE acceleration programmes and associations / clusters created across the region / list of contacts of these</p> <p>Industry reports developed by the CEREEAC</p> <p>CEREEAC progress reports</p>	<p>The private sector (start-ups, entrepreneurs and SMEs) shows interest in RE&EE market opportunities</p>
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Activities

5.2.1 Regional platform to support RE&EE start-ups, entrepreneurs and SMEs is fully operational and provides technical support in partnership with national centers/institutions

5.2.2 Support MS in the establishment of RE&EE (cleantech) acceleration programs and associations/clusters by working with UNIDO GCIP and BLOOM Program

5.2.3 Organize at least two RE&EE investment and business forums (e.g. trade fairs) to present the project pipeline to interested financiers and investors (in partnership with PFAN and other partners)

5.2.4 Organize at least one investment and business forum on rural sustainable energy opportunities (e.g. mini-grids, stand-alone systems, hybrids, efficient cooking)

OUTCOME 6: GENDER AND YOUTH ARE MAINSTREAMED INTO THE CEREEAC ACTIVITIES, THE PROJECT CYCLE AND REGIONAL GENDER PROGRAMMES/PROJECTS

Immediate Outcomes (short-term) - Outputs	Indicators	Baseline and Targets	Means of verification	Assumptions
<p>Output 6.1: Gender and youth dimensions are integrated into CEREEAC governance structure, programme/project management level</p>	<p># of Gender and Youth specialist within the CEREEAC Staff and focal point within the GN-SEC gender network</p> <p>% of women working at CEREEAC</p> <p>% of women participation in TC & EB meetings</p> <p>(Yes/No) CEREEAC Gender and Youth Mainstreaming strategy developed and adopted</p> <p>% of programmes/projects implemented by CEREEAC that include gender-specific targets</p>	<p><u>Baseline:</u></p> <p>No regional RE & EE centre exists in the ECCAS region</p> <p><u>Target(s):</u></p> <p>At least 1 Gender and Youth specialist works in CEREEAC and acts as focal point within the GN-SEC gender network</p> <p>At least 50% of women in the CEREEAC staff</p> <p>At least 50% of women participation in TC & EB meetings</p>	<p>Baseline data and statistics</p> <p>CEREEAC project and programme documents</p> <p>CEREEAC Gender and Youth Mainstreaming strategy</p> <p>CEREEAC progress reports and monitoring and evaluation tracking tool</p> <p>EB and TC Meeting Minutes</p> <p>CEREEAC adopted strategies</p>	<p>There is a common interest in providing and assessing gender and youth disaggregated data</p>

	<p>or performance indicators that track gender results and impact (pursue a target of at least 50% women and youth)</p> <p>% of data collected from the region is gender and youth disaggregated</p>	<p>(Yes) CEREEAC Gender and Youth Mainstreaming strategy developed and adopted</p> <p>50% of programmes/projects implemented by CEREEAC that include gender and youth specific targets or performance indicators that track results and impact on gender and youth (pursue a target of at least 50% women and 40% youth)</p> <p>50% of data collected from the region is gender and youth disaggregated</p>	CEREEAC staff contracts	
Activities				
6.1.1 Appoint a Gender and Youth Specialist and partners with the other GN-SEC gender focal points				
6.1.2 Promote gender responsive recruitment (targeting, if possible, a representation of at least 50% of women working on the Centre)				
6.1.3 Pursue a 50% women participation in the TC and EB meetings				
6.1.4. Develop a Gender and Youth Mainstreaming strategy for the CEREEAC				
6.1.5 All projects/programmes developed and/or implemented by the CEREEAC should include gender-specific targets or performance indicators that track gender results and impact (pursue a target of at least 50% beneficiaries or service providers being women and youth)				
6.1.6 Collect gender and youth related indicators on CEREEAC projects and programmes and integrate a gender mainstreaming chapter on the RE&EE ECCAS Industry report (see Output 4.2)				
Immediate Outcomes (short-term) - Outputs	Indicators	Baseline and Targets	Means of verification	Assumptions
Output 6.2: Develop and facilitate the execution of regional gender programmes and projects	<p>- % of programmes/projects implemented by CEREEAC that include gender-specific performance indicators that track gender results and impact (pursue a target of at least 50% women and youth)</p> <p>- % of flagship projects/programmes that include targeted actions for women</p>	<p><u>Baseline:</u></p> <p>There are no RE&EE programmes/projects with specific actions targeting women and youth</p> <p><u>Target(s):</u></p> <p>- 50 % of programmes/projects implemented by CEREEAC that include gender and youth specific performance indicators that track gender results and impact (pursue a target of at least 50% women and 40% youth)</p> <p>- 50 % of flagship projects/programmes that include targeted actions for women and youth</p>	<p>CEREEAC project/programme documents and implementation progress reports</p> <p>CEREEAC progress reports</p> <p>ECCAS Gender and Youth Policy and Regional Strategic Framework</p>	There is interest from ECCAS countries to track gender and youth indicators in programmes/projects
Activities				

6.2.1 Ensure inclusion of gender and youth mainstreaming indicators on the energy policies and strategies developed through Output 2.1

6.3.2 Create targeted actions for women within the developed flagship projects (e.g. Women led energy access small business competition)

Annex 2 Total budget allocations per outcome area and budget lines (over five years)

The detailed budget is also available as an Excel sheet.

Detailed Budget for Outcome 1 throughout the Start up & the First Operational phase (in EUR): Effective regional RE&EE promotion agency created and efficiently managed																												
BL	Budget Lines	Year 1									Year 2								Year 3									
		Angola	BMeiA (through UNIDO)	UNIDO (Financial)	IFDD (financial contribution through ECCAS)	AfDB (financial contribution through ECCAS)	ECCAS Secretariat (Financial & In-Kind)	ECCAS Member States (Financial & In-Kind)	Expected Co-funding from Other Donors (i.e. EU, WB, IRENA, USAID, Oyo Centre, etc)	Total Year 1	Angola	BMeiA (through UNIDO)	UNIDO (Financial)	IFDD (financial contribution through ECCAS)	AfDB (financial contribution through ECCAS)	ECCAS Secretariat (Financial & In-Kind)	ECCAS Member States (Financial & In-Kind)	Expected Co-funding from Other Donors (i.e. EU, WB, IRENA, USAID, Oyo Centre, etc)	Total Year 2	Angola	BMeiA (through UNIDO)	UNIDO (Financial)	IFDD (financial contribution through ECCAS)	AfDB (financial contribution through ECCAS)	ECCAS Secretariat (Financial & In-Kind)	ECCAS Member States (Financial & In-Kind)	Expected Co-funding from Other Donors (i.e. EU, WB, IRENA, USAID, Oyo Centre, etc)	Total Year 3
1100	International Consultant/	0	65,000	2,000	0	0	30,000	50,000	0	147,000	0	65,000	6,392	0	0	50,000	16,667	0	138,059	0	65,000	0	0	0	50,000	10,000	0	125,000
1700	National Consultants/sta	21,000	5,000	1,142	0	0	0	167	1,000	28,308	21,000	5,000	0	0	0	333	2,000	28,333	21,000	5,000	1,542	0	0	0	1,000	3,500	32,042	
2100	Contractual Services	0	7,000	0	120,000	0	0	0	10,000	137,000	0	7,000	0	20,000	0	0	0	20,000	47,000	0	7,000	500	0	0	0	20,000	27,500	
1600	International Travel	0	4,000	0	0	0	0	0	667	4,667	0	4,000	600	0	0	0	0	1,333	5,933	0	4,000	500	0	0	0	2,333	6,833	
1500	Local Travel	0	4,000	420	0	0	15,000	0	667	20,087	0	4,000	610	0	0	15,000	0	1,333	20,943	0	4,000	0	0	0	15,000	0	21,333	
3500	Regional Meetings/Work	900	10,000	1,000	0	0	10,000	2,500	667	25,067	900	6,097	1,000	0	0	10,000	5,000	1,333	24,330	900	0	0	0	0	10,000	15,000	28,233	
5100	Miscellaneous expenses	300	500	420	0	0	0	0	0	1,220	300	0	0	0	0	0	0	0	300	300	0	600	0	0	0	0	900	
4300	Premises & recurring office expenses (lights, equipment, water, security, etc)	1,420,454	0	0	0	0	0	0	0	1,420,454	48,000	0	0	0	0	0	0	0	48,000	48,000	0	0	0	0	0	0	48,000	
4500	CEREEAC office space	78,000	8,000	0	0	0	0	0	1,000	87,000	0	4,500	0	0	0	0	0	2,000	6,500	0	0	0	0	0	0	3,500	3,500	
3000	Training/Fellow ships	0	0	0	0	0	0	0	0	0	0	500	0	0	0	0	0	0	500	0	0	0	0	0	0	0	0	
	Subtotal	1,520,654	103,500	4,982	120,000	0	55,000	52,667	14,000	1,870,802	70,200	96,097	8,602	20,000	0	75,000	22,000	28,000	319,899	70,200	85,000	3,142	0	0	75,000	26,000	34,000	293,342
	13% UNIDO support costs		13,455									12,493								11,050								
	Total	1,520,654	116,955	4,982	120,000	0	55,000	52,667	14,000	1,884,257	70,200	108,590	8,602			22,000	28,000	237,392	70,200	96,050	3,142	0	0	75,000	26,000	34,000	304,392	

BL	Budget Lines	Year 4									Year 5									Project Duration (5 years)								
		Angola	BMeiA (through UNIDO)	UNIDO (Financial)	IFDD (financial contribution through ECCAS)	AfDB (financial contribution through ECCAS)	ECCAS Secretariat (Financial & In-Kind)	ECCAS Member States (Financial & In-Kind)	Expected Co-funding from Other Donors (i.e. EU, WB, IRENA, USAID, Oyo Centre, etc)	Total Year 4	Angola	BMeiA (through UNIDO)	UNIDO (Financial)	IFDD (financial contribution through ECCAS)	AfDB (financial contribution through ECCAS)	ECCAS Secretariat (Financial & In-Kind)	ECCAS Member States (Financial & In-Kind)	Expected Co-funding from Other Donors (i.e. EU, WB, IRENA, USAID, Oyo Centre)	Total Year 5	Angola	BMeiA (through UNIDO)	UNIDO (Financial)	IFDD (financial contribution through ECCAS)	AfDB (financial contribution through ECCAS)	ECCAS Secretariat (Financial & In-Kind)	ECCAS Member States (Financial & In-Kind)	Expected Co-funding from Other Donors (i.e. EU, WB, IRENA, USAID, Oyo Centre)	Total
1100	International Consultant/staff	0	65,000	0	0	0	50,000	83,333	0	198,333	0	0	0	0	0	50,000	91,667	0	141,667	0	260,000	8,392	0	0	230,000	251,667	0	750,059
1700	National Consultants/staff	21,000	5,000	683	0	0	0	1,667	4,000	32,350	21,000	0	992	0	0	0	1,833	4,500	28,325	105,000	20,000	4,358	0	0	0	5,000	15,000	149,358
2100	Contractual Services	0	6,000	0	0	0	0	0	20,000	26,000	0	0	0	0	0	0	0	20,000	20,000	0	27,000	500	140,000	0	0	0	90,000	257,500
1600	International Travel	0	0	300	0	0	0	0	2,667	2,967	0	0	0	0	0	0	0	3,000	3,000	0	12,000	1,400	0	0	0	0	10,000	23,400
1500	Local Travel	0	0	120	0	0	15,000	0	2,667	17,787	0	0	60	0	0	15,000	0	3,000	18,060	0	12,000	1,210	0	0	75,000	0	10,000	98,210
3500	Regional Meetings/Workshops	900	0	0	0	0	10,000	25,000	2,667	38,567	900	0	600	0	0	10,000	27,500	3,000	42,000	4,500	16,097	2,600	0	0	50,000	75,000	10,000	158,197
5100	Miscellaneous expenses	300	0	120	0	0	0	0	0	420	300	0	60	0	0	0	0	0	360	1,500	500	1,200	0	0	0	0	0	3,200
4300	Premises & recurring office expenses (lights, equipment, water, security, etc)	48,000	0	0	0	0	0	0	0	48,000	48,000	0	0	0	0	0	0	0	48,000	1,612,454	0	0	0	0	0	0	0	1,612,454
4500	CEREAC office space and equipment	0	0	0	0	0	0	0	4,000	4,000	0	0	0	0	0	0	0	4,500	4,500	78,000	12,500	0	0	0	0	0	15,000	105,500
3000	Training/Fellow ships	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	500	0	0	0	0	0	0	500
	Subtotal	70,200	76,000	1,223	0	0	75,000	110,000	36,000	368,423	70,200	0	1,712	0	0	75,000	121,000	38,000	305,912	1,801,454	360,597	19,660	140,000	0	355,000	331,667	150,000	3,158,378
			9,880									0								46,878								
	Total	70,200	85,880	1,223	0	0	75,000	110,000	36,000	378,303	70,200	0	1,712	0	0	75,000	121,000	38,000	305,912	1,801,454	407,475	19,660	140,000	0	355,000	331,667	150,000	3,110,256

Detailed Budget for Outcome 2 throughout the Start up & the First Operational phase (in EUR): Improved national RE&EE policy and regulatory frameworks in ECCAS Member States

BL	Budget Lines	Year 1									Year 2									Year 3									
		Angola	BMeiA (through UNIDO)	UNIDO (Financial)	IFDD (financial contribution through ECCAS)	AfDB (financial contribution through ECCAS)	ECCAS Secretariat (Financial & In-Kind)	ECCAS Member States (Financial & In-Kind)	Expected Co-funding from Other Donors (i.e. EU, WB, IRENA, USAID, Oyo Centre, etc)	Total Year 1	Angola	BMeiA (through UNIDO)	UNIDO (Financial)	IFDD (financial contribution through ECCAS)	AfDB (financial contribution through ECCAS)	ECCAS Secretariat (Financial & In-Kind)	ECCAS Member States (Financial & In-Kind)	Expected Co-funding from Other Donors (i.e. EU, WB, IRENA, USAID, Oyo Centre, etc)	Total Year 2	Angola	BMeiA (through UNIDO)	UNIDO (Financial)	IFDD (financial contribution through ECCAS)	AfDB (financial contribution through ECCAS)	ECCAS Secretariat (Financial & In-Kind)	ECCAS Member States (Financial & In-Kind)	Expected Co-funding from Other Donors (i.e. EU, WB, IRENA, USAID, Oyo Centre, etc)	Total Year 3	
1100	International Consultant/staff	0	5,000	0	0	0	90,000	0	0	95,000	0	5,000	0	0	0	0	0	30,000	35,000	0	5,000	0	0	0	0	0	0	35,000	40,000
1700	National Consultants/staff	21,000	3,000	0	0	0	0	40,000	0	64,000	21,000	3,000	0	0	0	0	0	17,600	41,600	21,000	0	0	0	0	0	40,000	4,387	65,387	
2100	Contractual Services	0	5,000	650	0	577,418	0	0	0	583,068	0	5,000	0	0	189,807	0	0	75,000	269,807	0	5,000	750	0	0	0	0	77,667	83,417	
1600	International Travel	0	4,000	350	0	0	0	0	2,000	6,350	0	4,000	500	0	0	0	0	4,000	8,500	0	4,000	500	0	0	0	0	7,000	11,500	
1500	Local Travel	0	3,000	140	0	0	15,000	0	4,000	22,140	0	3,000	200	0	0	0	0	7,000	10,200	0	3,000	200	0	0	0	0	2,695	5,895	
3500	Regional Meetings/Workshops	0	3,000	0	0	0	10,000	1,833	7,833	22,667	0	3,000	0	0	0	0	3,667	11,667	18,333	0	3,000	900	0	0	0	11,000	17,917	32,817	
5100	Miscellaneous expenses	0		140	0	0	0	0	2,567	2,707	0		200	0	0	0	0	5,133	5,333	0		250	0	0	0	0	8,983	9,233	
4300	Premises & recurring office expenses (lights, equipment, water, security, etc)	0		0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	
4500	CEREEAC office space and equipment	0	500	0	0	0	0	0	0	500	0	500	0	0	0	0	0	0	500	0		0	0	0	0	0	0	0	
3000	Training/Fellow ships	0	0	0	0	0	0	1,500	1,333	2,833	0	500	0	0	0	0	3,000	2,667	6,167	0		0	0	0	0	9,000	4,667	13,667	
	Subtotal	21,000	23,500	1,280	0	577,418	115,000	43,333	17,733	799,265	21,000	24,000	900	0	189,807	0	6,667	153,067	395,440	21,000	20,000	2,600	0	0	0	9,000	158,315	261,915	
	0		3055									3120									2600								
	Total	21000	26555	1280	0	577418	115000	43333	17733	802320	21000	6968	900	0	189807	0	6667	153067	378409	21000	22600	2600	0	0	0	60000	158315	264515	

BL	Budget Lines	Year 4									Year 5									Project Duration (5 years)								
		Angola	BMeiA (through UNIDO)	UNIDO (Financial)	IFDD (financial contribution through ECCAS)	AfDB (financial contribution through ECCAS)	ECCAS Secretariat (Financial & In-Kind)	ECCAS Member States (Financial & In-Kind)	Expected Co-funding from Other Donors (i.e. EU, WB, IRENA, USAID, Oyo Centre, etc)	Total Year 4	Angola	BMeiA (through UNIDO)	UNIDO (Financial)	IFDD (financial contribution through ECCAS)	AfDB (financial contribution through ECCAS)	ECCAS Secretariat (Financial & In-Kind)	ECCAS Member States (Financial & In-Kind)	Expected Co-funding from Other Donors (i.e. EU, WB, IRENA, USAID, Oyo Centre, etc)	Total Year 5	Angola	BMeiA (through UNIDO)	UNIDO (Financial)	IFDD (financial contribution through ECCAS)	AfDB (financial contribution through ECCAS)	ECCAS Secretariat (Financial & In-Kind)	ECCAS Member States (Financial & In-Kind)	Expected Co-funding from Other Donors (i.e. EU, WB, IRENA, USAID, Oyo Centre, etc)	Total
1100	International Consultant/staff	0	5,000	0	0	0	0	40,000	45,000	0	5,000	0	0	0	0	0	41,000	46,000	0	25,000	0	0	0	0	90,000	0	146,000	261,000
1700	National Consultants/staff	21,000	0	0	0	0	40,000	5,013	66,013	21,000	0	0	0	0	0	40,000	24,200	85,200	105,000	6,000	0	0	0	0	160,000	51,200	322,200	
2100	Contractual Services	0	0	300	0	0	0	95,000	95,300	0	0	150	0	0	0	0	95,000	95,150	0	15,000	1,850	0	767,225	0	0	342,667	1,126,742	
1600	International Travel	0	0	100	0	0	0	8,000	8,100	0	0	50	0	0	0	0	9,000	9,050	0	12,000	1,500	0	0	0	0	30,000	43,500	
1500	Local Travel	0	0	40	0	0	0	3,080	3,120	0	0	20	0	0	0	0	3,465	3,485	0	9,000	600	0	0	15,000	0	20,240	44,840	
3500	Regional Meetings/Workshops	0	0	400	0	0	18,333	13,333	32,067	0	0	200	0	0	0	10,167	28,750	39,117	0	9,000	1,500	0	0	10,000	45,000	79,500	145,000	
5100	Miscellaneous expenses	0	0	40	0	0	0	10,267	10,307	0	0	20	0	0	0	0	11,550	11,570	0	0	650	0	0	0	0	38,500	39,150	
4300	Premises & recurring office expenses (lights, equipment, water, security, etc)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4500	CEREEAC office space and equipment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,000	0	0	0	0	0	0	1,000	
3000	Training/Fellow ships	0	0	0	0	0	15,000	5,333	20,333	0	0	0	0	0	0	16,500	6,000	22,500	0	500	0	0	0	0	45,000	20,000	65,500	
	Subtotal	21,000	5,000	880	0	0	73,333	180,027	280,240	21,000	5,000	440	0	0	0	66,667	218,965	312,072	105,000	77,500	6,100	0	767,225	115,000	250,000	728,107	2,048,932	
	0		650								650									10075								
	Total	21,000	5,650	880	0	0	73,333	180,027	280,890	21,000	5,650	440	0	0	0	66,667	218,965	312,722	105,000	87,575	6,100	0	767,225	115,000	250,000	728,107	2,059,007	

Detailed Budget for Outcome 3 throughout the Start up & the First Operational phase (In EUR): National capacities for the use and supply of RE&EE quality products and services are strengthened

BL	Budget Lines	Year 1									Year 2									Year 3									
		Angola	BMeiA (through UNIDO)	UNIDO (Financial)	IFDD (financial contribution through ECCAS)	AfDB (financial contribution through ECCAS)	ECCAS Secretariat (Financial & In-Kind)	ECCAS Member States (Financial & In-Kind)	Expected Co-funding from Other Donors (i.e. EU, WB, IRENA, USAID, Oyo Centre, etc)	Total Year 1	Angola	BMeiA (through UNIDO)	UNIDO (Financial)	IFDD (financial contribution through ECCAS)	AfDB (financial contribution through ECCAS)	ECCAS Secretariat (Financial & In-Kind)	ECCAS Member States (Financial & In-Kind)	Expected Co-funding from Other Donors (i.e. EU, WB, IRENA, USAID, Oyo Centre, etc)	Total Year 2	Angola	BMeiA (through UNIDO)	UNIDO (Financial)	IFDD (financial contribution through ECCAS)	AfDB (financial contribution through ECCAS)	ECCAS Secretariat (Financial & In-Kind)	ECCAS Member States (Financial & In-Kind)	Expected Co-funding from Other Donors (i.e. EU, WB, IRENA, USAID, Oyo Centre, etc)	Total Year 3	
1100	International Consultant/staff	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	33,000	33,000	0	0	0	0	0	0	0	0	123,000	123,000
1700	National Consultants/staff	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	37,000	37,000	0	0	0	0	0	0	0	0	104,833	104,833
2100	Contractual Services	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,000	5,000	0	0	0	0	0	0	0	0	0	0
1600	International Travel	0	0	167	0	0	0	0	0	167	0	0	1,667	0	0	0	0	0	1,667	0	0	0	0	0	0	0	0	0	0
1500	Local Travel	0	0	0	0	0	0	167	0	167	0	0	0	0	0	0	333	3,500	3,833	0	0	0	0	0	0	1,000	32,033	33,033	
3500	Regional Meetings/Workshops	0	0	700	0	0	0	767	0	1,467	0	0	0	0	0	0	1,533	6,000	7,533	0	0	2,000	0	0	0	4,600	26,833	33,433	
5100	Miscellaneous expenses	0	0	0	0	0	0	0	12,000	12,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11,667	11,667	
4300	Premises & recurring office expenses (lights, equipment, water, security, etc)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4500	CEREEAC office space and equipment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3000	Training/Fellowships	0	0	1,213	0	0	0	667	3,000	4,880	0	0	1,733	0	0	0	1,333	0	3,067	0	0	1,733				4,000	12,000	17,733	
	Subtotal	0	0	2,080	0	0	0	1,600	15,000	18,680	0	0	3,400	0	0	0	3,200	84,500	91,100	0	0	3,733	0	0	0	9,600	310,367	323,700	
	0		0									0								0									
	Total	0	0	2,080	0	0	0	1,600	15,000	18,680	0	0	3,400	0	0	0	3,200	84,500	91,100	0	0	3,733	0	0	0	9,600	310,367	323,700	

BL	Budget Lines	Year 4									Year 5							Project Duration (5 years)											
		Angola	BMeiA (through UNIDO)	UNIDO (Financial)	IFDD (financial contribution through ECCAS)	AfDB (financial contribution through ECCAS)	ECCAS Secretariat (Financial & In-Kind)	ECCAS Member States (Financial & In-Kind)	Expected Co-funding from Other Donors (i.e. EU, WB, IRENA, USAID, Oyo Centre)	Total Year 4	Angola	BMeiA (through UNIDO)	UNIDO (Financial)	IFDD (financial contribution through ECCAS)	AfDB (financial contribution through ECCAS)	ECCAS Secretariat (Financial & In-Kind)	ECCAS Member States (Financial & In-Kind)	Expected Co-funding from Other Donors (i.e. EU)	Total Year 5	Angola	BMeiA (through UNIDO)	UNIDO (Financial)	IFDD (financial contribution through ECCAS)	AfDB (financial contribution through ECCAS)	ECCAS Secretariat (Financial & In-Kind)	ECCAS Member States (Financial & In-Kind)	Expected Co-funding from Other Donors (i.e. EU)	Total	
1100	International Consultant/staff	0	0	0	0	0	0	0	103,000	103,000	0	0	0	0	0	0	0	75,667	75,667	0	0	0	0	0	0	0	334,667	334,667	
1700	National Consultants/staff	0	0	0	0	0	0	0	104,833	104,833	0	0	0	0	0	0	0	74,200	74,200	0	0	0	0	0	0	0	320,867	320,867	
2100	Contractual Services	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,000	5,000	
1600	International Travel	0	0	0	0	0	0	0	0	0	0	0	167	0	0	0	0	0	167	0	0	2,000	0	0	0	0	0	2,000	2,000
1500	Local Travel	0	0	0	0	0	0	1,667	26,833	28,500	0	0	0	0	0	0	1,833	24,833	26,666	0	0	0	0	0	0	5,000	87,199	92,199	
3500	Regional Meetings/Workshops	0	0	400	0	0	0	7,667	22,458	30,525	0	0	200	0	0	0	8,433	21,708	30,341	0	0	3,300	0	0	0	23,000	76,999	103,299	
5100	Miscellaneous expenses	0	0	0	0	0	0	0	13,333	13,333	0	0	0	0	0	0	0	5,000	5,000	0	0	0	0	0	0	0	42,000	42,000	
4300	Premises & recurring office expenses (lights, equipment, w ater, security, etc)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4500	CEREEAC office space and equipment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
3000	Training/Fellow ships	0	0	347	0	0	0	6,667	0	7,013	0	0	173	0	0	0	7,333	0	7,507	0	0	5,200	0	0	0	20,000	15,000	40,200	
	Subtotal	0	0	747	0	0	0	16,000	270,458	287,204	0	0	540	0	0	0	17,600	201,408	219,548	0	0	10,500	0	0	0	48,000	881,732	940,232	
	13% UNIDO support costs		0									0									0								
	Total	0	0	747	0	0	0	16,000	270,458	287,204	0	0	540	0	0	0	17,600	201,408	219,548	0	0	10,500	0	0	0	48,000	881,732	940,232	

Detailed Budget for Outcome 4 throughout the Start up & the First Operational phase (in EUR): Availability of investment and market data, awareness and advocacy on RE and EE are strengthened

BL	Budget Lines	Year 1									Year 2							Year 3										
		Angola	BMeiA (through UNIDO)	UNIDO (Financial)	IFDD (financial contribution through ECCAS)	AfDB (financial contribution through ECCAS)	ECCAS Secretariat (Financial & In-Kind)	ECCAS Member States (Financial & In-Kind)	Expected Co-funding from Other Donors (i.e. EU, WB, IRENA, USAID, Oyo Centre)	Total Year 1	Angola	BMeiA (through UNIDO)	UNIDO (Financial)	IFDD (financial contribution through ECCAS)	AfDB (financial contribution through ECCAS)	ECCAS Secretariat (Financial & In-Kind)	ECCAS Member States (Financial & In-Kind)	Expected Co-funding from Other Donors (i.e. EU)	Total Year 2	Angola	BMeiA (through UNIDO)	UNIDO (Financial)	IFDD (financial contribution through ECCAS)	AfDB (financial contribution through ECCAS)	ECCAS Secretariat (Financial & In-Kind)	ECCAS Member States (Financial & In-Kind)	Expected Co-funding from Other Donors (i.e. EU)	Total Year 3
1100	International Consultant/staff	0	0	0	0	0	0	0	3,333	3,333	0	0	0	0	0	0	0	100,600	100,600	0	0	0	0	0	0	0	99,333	99,333
1700	National Consultants/staff	0	0	3,000	0	0	0	0	0	3,000	0	0	0	0	0	0	0	104,800	104,800	0	0	0	0	0	0	0	106,333	106,333
2100	Contractual Services	0	0	0	0	0	0	0	5,000	5,000	0	0	4,000	0	0	0	0	110,000	114,000	0	0	0	0	0	0	0	149,000	149,000
1600	International Travel	0	0	525	0	0	0	0	1,333	1,858	0	0	750	0	0	0	0	0	750	0	0	750	0	0	0	0	4,667	5,417
1500	Local Travel	0	0	0	0	0	0	0	133	133	0	0	0	0	0	0	0	9,000	9,000	0	0	0	0	0	0	15,667	15,667	
3500	Regional Meetings/Workshops	0	0	2,120	0	0	0	833	6,333	9,287	0	0	2,000	0	0	0	1,667	29,500	33,167	0	0	1,100	0	0	0	5,000	40,167	46,267
5100	Miscellaneous expenses	0	0	0	0	0	0	0	5,667	5,667	0	0	0	0	0	0	0	11,333	11,333	0	0	0	0	0	0	12,250	12,250	
4300	Premises & recurring office expenses (lights, equipment, w ater, security, etc)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4500	CEREEAC office space and equipment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3000	Training/Fellow ships	0	0	1,200	0	0	0	833	5,000	7,033	0	0	2,000	0	0	0	1,667	10,000	13,667	0	0	0	0	0	0	5,000	0	5,000
	Subtotal	0	0	6,845	0	0	0	1,667	26,800	35,312	0	0	8,750	0	0	0	3,333	375,233	387,317	0	0	1,850	0	0	0	10,000	427,416	439,266
	13% UNIDO support costs		0									0									0							
	Total	0	0	6,845	0	0	0	1,667	26,800	35,312	0	0	8,750	0	0	0	3,333	375,233	387,317	0	0	1,850	0	0	0	10,000	427,416	439,266

BL	Budget Lines	Year 4								Year 5								Project Duration (5 years)										
		Angola	BMeiA (through UNIDO)	UNIDO (Financial)	IFDD (financial contribution through ECCAS)	AfDB (financial contribution through ECCAS)	ECCAS Secretariat (Financial & In-Kind)	ECCAS Member States (Financial & In-Kind)	Expected Co-funding from Other Donors (i.e. EU, WB, IRENA, USAID, Oyo Centre, etc)	Total Year 4	Angola	BMeiA (through UNIDO)	UNIDO (Financial)	IFDD (financial contribution through ECCAS)	AfDB (financial contribution through ECCAS)	ECCAS Secretariat (Financial & In-Kind)	ECCAS Member States (Financial & In-Kind)	Expected Co-funding from Other Donors (i.e. EU, WB, IRENA, USAID, Oyo Centre, etc)	Total Year 5	Angola	BMeiA (through UNIDO)	UNIDO (Financial)	IFDD (financial contribution through ECCAS)	AfDB (financial contribution through ECCAS)	ECCAS Secretariat (Financial & In-Kind)	ECCAS Member States (Financial & In-Kind)	Expected Co-funding from Other Donors (i.e. EU, WB, IRENA, USAID, Oyo Centre, etc)	Total
1100	International Consultant/staff	0	0	0	0	0	0	99,333	99,333	0	0	0	0	0	0	0	100,600	100,600	0	0	0	0	0	0	0	0	403,200	403,200
1700	National Consultants/staff	0	0	0	0	0	0	88,733	88,733	0	0	0	0	0	0	0	104,800	104,800	0	0	3,000	0	0	0	0	0	404,666	407,666
2100	Contractual Services	0	0	1,000	0	0	0	140,000	141,000	0	0	0	0	0	0	0	110,000	110,000	0	0	5,000	0	0	0	0	0	514,000	519,000
1600	International Travel	0	0	150	0	0	0	5,333	5,483	0	0	75	0	0	0	0	0	75	0	0	2,250	0	0	0	0	11,333	13,583	
1500	Local Travel	0	0	0	0	0	0	15,330	15,330	0	0	0	0	0	0	0	19,000	19,000	0	0	0	0	0	0	0	59,130	59,130	
3500	Regional Meetings/Workshops	0	0	1,320	0	0	0	8,333	39,200	0	0	660	0	0	0	9,167	30,500	40,327	0	0	7,200	0	0	0	25,000	145,700	177,900	
5100	Miscellaneous expenses	0	0	0	0	0	0	17,667	17,667	0	0	0	0	0	0	0	11,333	11,333	0	0	0	0	0	0	0	58,250	58,250	
4300	Premises & recurring office expenses (lights, equipment, water, security, etc)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4500	CEREAC office space and equipment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
3000	Training/Fellow ships	0	0	200	0	0	0	8,333	20,000	0	0	600	0	0	0	9,167	10,000	19,767	0	0	4,000	0	0	0	0	25,000	45,000	74,000
	Subtotal	0	0	2,670	0	0	0	16,667	425,596	444,933	0	0	1,335	0	0	0	18,333	386,233	405,902	0	0	21,450	0	0	0	50,000	1,641,279	1,712,729
	13% UNIDO support costs		0								0									0								
	Total	0	0	2,670	0	0	0	16,667	425,596	444,933	0	0	1,335	0	0	0	18,333	386,233	405,902	0	0	21,450	0	0	0	50,000	1,641,279	1,712,729

Detailed Budget for Outcome 5 throughout the Start up & the First Operational phase (in EUR): Investments in RE and EE infrastructure, services and businesses are mobilised and implemented

BL	Budget Lines	Year 1								Year 2								Year 3											
		Angola	BMeiA (through UNIDO)	UNIDO (Financial)	IFDD (financial contribution through ECCAS)	AfDB (financial contribution through ECCAS)	ECCAS Secretariat (Financial & In-Kind)	ECCAS Member States (Financial & In-Kind)	Expected Co-funding from Other Donors (i.e. EU, WB, IRENA, USAID, Oyo Centre, etc)	Total Year 1	Angola	BMeiA (through UNIDO)	UNIDO (Financial)	IFDD (financial contribution through ECCAS)	AfDB (financial contribution through ECCAS)	ECCAS Secretariat (Financial & In-Kind)	ECCAS Member States (Financial & In-Kind)	Expected Co-funding from Other Donors (i.e. EU, WB, IRENA, USAID, Oyo Centre, etc)	Total Year 2	Angola	BMeiA (through UNIDO)	UNIDO (Financial)	IFDD (financial contribution through ECCAS)	AfDB (financial contribution through ECCAS)	ECCAS Secretariat (Financial & In-Kind)	ECCAS Member States (Financial & In-Kind)	Expected Co-funding from Other Donors (i.e. EU, WB, IRENA, USAID, Oyo Centre, etc)	Total Year 3	
1100	International Consultant/staff	0	0	0	0	0	0	1,333	1,333	0	0	0	0	0	0	0	0	22,000	22,000	0	0	0	0	0	0	0	0	36,667	36,667
1700	National Consultants/staff	0	0	0	0	0	0	667	667	0	0	0	0	0	0	0	0	26,400	26,400	0	0	0	0	0	0	0	0	32,267	32,267
2100	Contractual Services	0	0	0	0	0	0	30,000	30,000	0	0	0	0	0	0	0	0	105,200	105,200	0	0	1,500	0	0	0	0	0	125,000	126,500
1600	International Travel	0	0	350	0	0	0	667	2,667	3,683	0	0	500	0	0	1,333	5,333	7,167	0	0	500	0	0	0	0	4,000	1,167	5,667	
1500	Local Travel	0	0	140	0	0	0	333	473	473	0	0	200	0	0	0	6,000	6,200	0	0	200	0	0	0	0	0	6,667	6,667	
3500	Regional Meetings/Workshops	0	0	0	0	0	0	2,000	15,333	17,333	0	0	0	0	0	4,000	10,000	14,000	0	0	0	0	0	0	12,000	10,000	22,000		
5100	Miscellaneous expenses	0	0	140	0	0	0	500	640	640	0	0	200	0	0	0	1,000	1,200	0	0	200	0	0	0	0	1,750	1,950		
4300	Premises & recurring office expenses (lights, equipment, water, security, etc)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4500	CEREAC office space and equipment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
3000	Training/Fellow ships	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Subtotal	0	0	630	0	0	0	2,667	50,833	54,130	0	0	900	0	0	0	5,333	175,933	182,167	0	0	2,400	0	0	0	16,000	213,518	231,918	
	13% UNIDO support costs		0																	0									
	Total	0	0	630	0	0	0	2,667	50,833	54,130	0	0	900	0	0	0	5,333	175,933	182,167	0	0	2,400	0	0	0	16,000	213,518	231,918	

BL	Budget Lines	Year 4									Year 5									Project Duration (5 years)									
		Angola	BMeiA (through UNIDO)	UNIDO (Financial)	IFDD (financial contribution through ECCAS)	AfDB (financial contribution through ECCAS)	ECCAS Secretariat (Financial & In-Kind)	ECCAS Member States (Financial & In-Kind)	Expected Co-funding from Other Donors (i.e. EU, WB, IRENA, USAID, Oyo Centre)	Total Year 4	Angola	BMeiA (through UNIDO)	UNIDO (Financial)	IFDD (financial contribution through ECCAS)	AfDB (financial contribution through ECCAS)	ECCAS Secretariat (Financial & In-Kind)	ECCAS Member States (Financial & In-Kind)	Expected Co-funding from Other Donors (i.e. EU)	Total Year 5	Angola	BMeiA (through UNIDO)	UNIDO (Financial)	IFDD (financial contribution through ECCAS)	AfDB (financial contribution through ECCAS)	ECCAS Secretariat (Financial & In-Kind)	ECCAS Member States (Financial & In-Kind)	Expected Co-funding from Other Donors (i.e. EU)	Total	
1100	International Consultant/staff	0	0	0	0	0	0	0	146,667	146,667	0	0	0	0	0	0	0	149,667	149,667	0	0	0	0	0	0	0	0	356,334	356,334
1700	National Consultants/staff	0	0	0	0	0	0	0	98,267	98,267	0	0	0	0	0	0	0	124,500	124,500	0	0	0	0	0	0	0	0	282,101	282,101
2100	Contractual Services	0	0	0	0	0	0	0	150,800	150,800	0	0	150	0	0	0	0	175,000	175,150	0	0	1,650	0	0	0	0	0	586,000	587,650
1600	International Travel	0	0	100	0	0	0	6,667	10,667	17,433	0	0	50	0	0	0	7,333	12,000	19,383	0	0	1,500	0	0	0	20,000	31,833	53,333	
1500	Local Travel	0	0	40	0	0	0	0	16,667	16,707	0	0	20	0	0	0	0	15,000	15,020	0	0	600	0	0	0	0	0	44,667	45,267
3500	Regional Meetings/Workshops	0	0	400	0	0	0	20,000	11,333	31,733	0	0	200	0	0	0	22,000	31,000	53,200	0	0	600	0	0	0	60,000	77,667	138,267	
5100	Miscellaneous expenses	0	0	40	0	0	0	0	2,000	2,040	0	0	20	0	0	0	0	2,250	2,270	0	0	600	0	0	0	0	0	7,500	8,100
4300	Premises & recurring office expenses (lights, equipment, water, security, etc)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4500	CEREEAC office space and equipment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3000	Training/Fellow ships	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Subtotal	0	0	580	0	0	0	26,667	436,401	463,648	0	0	440	0	0	0	29,333	509,417	539,190	0	0	4,950	0	0	0	0	80,000	1,386,102	1,471,052
	13% UNIDO support costs		0									0								0									
	Total	0	0	580	0	0	0	26,667	436,401	463,648	0	0	440	0	0	0	29,333	509,417	539,190	0	0	4,950	0	0	0	80,000	1,386,102	1,471,052	

Detailed Budget for Outcome 6 throughout the Start up & the First Operational phase (in EUR): Gender & youth are mainstreamed into the CEREEAC activities, the project cycle and regional gender programmes/projects

BL	Budget Lines	Year 1									Year 2									Year 3								
		Angola	BMeiA (through UNIDO)	UNIDO (Financial)	IFDD (financial contribution through ECCAS)	AfDB (financial contribution through ECCAS)	ECCAS Secretariat (Financial & In-Kind)	ECCAS Member States (Financial & In-Kind)	Expected Co-funding from Other Donors (i.e. EU, WB, IRENA, USAID, Oyo Centre, etc)	Total Year 1	Angola	BMeiA (through UNIDO)	UNIDO (Financial)	IFDD (financial contribution through ECCAS)	AfDB (financial contribution through ECCAS)	ECCAS Secretariat (Financial & In-Kind)	ECCAS Member States (Financial & In-Kind)	Expected Co-funding from Other Donors (i.e. EU, WB, IRENA, USAID, Oyo)	Total Year 2	Angola	BMeiA (through UNIDO)	UNIDO (Financial)	IFDD (financial contribution through ECCAS)	AfDB (financial contribution through ECCAS)	ECCAS Secretariat (Financial & In-Kind)	ECCAS Member States (Financial & In-Kind)	Expected Co-funding from Other Donors (i.e. EU, WB, IRENA, USAID, Oyo)	Total Year 3
1100	International Consultant/staff	0	0	0	0	0	0	5,333	5,333	0	0	0	0	0	0	0	16,500	16,500	0	0	0	0	0	0	0	0	25,000	25,000
1700	National Consultants/staff	0	0	0	0	0	0	2,667	2,667	0	0	0	0	0	0	0	8,800	8,800	0	0	0	0	0	0	0	15,000	15,000	
2100	Contractual Services	0	0	300	0	0	0	0	300	0	0	150	0	0	0	0	150	150	0	0	1,500	0	0	0	0	0	1,500	
1600	International Travel	0	0	100	0	0	0	6,667	10,667	0	0	50	0	0	0	7,333	0	7,383	0	0	700	0	0	0	20,000	2,000	22,700	
1500	Local Travel	0	0	40	0	0	0	1,333	1,373	0	0	20	0	0	0	0	1,500	1,520	0	0	600	0	0	0	0	5,000	5,600	
3500	Regional Meetings/Workshops	0	0	0	0	0	0	20,000	11,333	0	0	200	0	0	0	22,000	0	22,200	0	0	2,000	0	0	0	30,000	0	32,000	
5100	Miscellaneous expenses	0	0	40	0	0	0	2,000	2,040	0	0	20	0	0	0	0	1,000	1,020	0	0	600	0	0	0	0	7,500	8,100	
4300	Premises & recurring office expenses (lights, equipment, water, security, etc)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4500	CEREEAC office space and equipment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
3000	Training/Fellow ships	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Subtotal	0	0	480	0	0	0	26,667	33,333	60,480	0	0	440	0	0	0	29,333	27,800	57,573	0	0	5,400	0	0	0	50,000	54,500	109,900
	Total	0	0	480	0	0	0	26,667	33,333	60,480	0	0	440	0	0	0	29,333	27,800	57,573	0	0	5,400	0	0	0	50,000	54,500	109,900

BL	Budget Lines	Year 4									Year 5							Project Duration (5 years)										
		Angola	BMeiA (through UNIDO)	UNIDO (Financial)	IFDD (financial contribution through ECCAS)	AfDB (financial contribution through ECCAS)	ECCAS Secretariat (Financial & In-Kind)	ECCAS Member States (Financial & In-Kind)	Expected Co-funding from Other Donors (i.e. EU, WB, IRENA, USAID, Oyo Centre, etc)	Total Year 4	Angola	BMeiA (through UNIDO)	UNIDO (Financial)	IFDD (financial contribution through ECCAS)	AfDB (financial contribution through ECCAS)	ECCAS Secretariat (Financial & In-Kind)	ECCAS Member States (Financial & In-Kind)	Expected Co-funding from Other Donors (i.e. EU, WB, IRENA, USAID, Oyo Centre, etc)	Total Year 5	Angola	BMeiA (through UNIDO)	UNIDO (Financial)	IFDD (financial contribution through ECCAS)	AfDB (financial contribution through ECCAS)	ECCAS Secretariat (Financial & In-Kind)	ECCAS Member States (Financial & In-Kind)	Expected Co-funding from Other Donors (i.e. EU, WB, IRENA, USAID, Oyo Centre, etc)	Total
1100	International Consultant/staff	0	0	0	0	0	0	5,333	5,333	0	0	0	0	0	0	0	6,000	6,000	0	0	0	0	0	0	0	0	58,167	58,167
1700	National Consultants/staff	0	0	0	0	0	0	2,667	2,667	0	0	0	0	0	0	0	3,000	3,000	0	0	0	0	0	0	0	32,133	32,133	
2100	Contractual Services	0	0	0	0	0	0	0	0	0	0	150	0	0	0	0	0	150	0	0	2,100	0	0	0	0	0	2,100	
1600	International Travel	0	0	100	0	0	0	6,667	10,667	0	0	50	0	0	0	7,333	12,000	19,383	0	0	1,000	0	0	0	48,000	35,333	84,333	
1500	Local Travel	0	0	40	0	0	0	0	1,333	0	0	20	0	0	0	0	1,500	1,520	0	0	720	0	0	0	0	10,667	11,387	
3500	Regional Meetings/Workshops	0	0	400	0	0	0	20,000	0	0	0	200	0	0	0	22,000	69,000	91,200	0	0	2,800	0	0	0	114,000	80,333	197,133	
5100	Miscellaneous expenses	0	0	40	0	0	0	2,000	2,040	0	0	20	0	0	0	0	2,250	2,270	0	0	720	0	0	0	0	14,750	15,470	
4300	Premises & recurring office expenses (lights, equipment, water, security, etc)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4500	CEREEAC office space and equipment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
3000	Training/Fellow ships	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Subtotal	0	0	580	0	0	0	26,667	22,000	49,247	0	0	440	0	0	0	29,333	93,750	123,523	0	0	7,340	0	0	0	162,000	231,383	400,723
	Total	0	0	580	0	0	0	26,667	22,000	49,247	0	0	440	0	0	0	29,333	93,750	123,523	0	0	7,340	0	0	0	162,000	231,383	400,723

Table 9: Indicative total budget per years and budget lines in EUR

BL	Budget Lines	Year 1									Year 2									Year 3									
		Angola	BMeiA (through UNIDO)	UNIDO (Financial)	IFDD (financial contribution through ECCAS)	AfDB (financial contribution through ECCAS)	ECCAS Secretariat (Financial & In-Kind)	ECCAS Member States (Financial & In-Kind)	Expected Co-funding from Other Donors (i.e. EU, WB, IRENA, USAID, Oyo Centre, etc)	Total Y1	Angola	BMeiA (through UNIDO)	UNIDO (Financial)	IFDD (financial contribution through ECCAS)	AfDB (financial contribution through ECCAS)	ECCAS Secretariat (Financial & In-Kind)	ECCAS Member States (Financial & In-Kind)	Expected Co-funding from Other Donors (i.e. EU, WB, IRENA, USAID, Oyo Centre, etc)	Total Y2	Angola	BMeiA (through UNIDO)	UNIDO (Financial)	IFDD (financial contribution through ECCAS)	AfDB (financial contribution through ECCAS)	ECCAS Secretariat (Financial & In-Kind)	ECCAS Member States (Financial & In-Kind)	Expected Co-funding from Other Donors (i.e. EU, WB, IRENA, USAID, Oyo Centre, etc)	Total Y3	
1100	International Consultant/staff	0	70,000	2,000	0	0	120,000	50,000	10,000	252,000	0	70,000	6,392	0	0	50,000	16,667	202,100	345,159	0	70,000	0	0	0	0	50,000	10,000	319,000	449,000
1700	National Consultants/staff	42,000	8,000	4,142	0	0	0	40,167	4,333	98,642	42,000	8,000	0	0	0	0	333	196,600	246,933	42,000	5,000	1,542	0	0	0	41,000	266,320	355,862	
2100	Contractual Services	0	12,000	950	120,000	577,418	0	0	45,000	755,368	0	12,000	4,150	20,000	189,807	0	0	315,200	541,157	0	12,000	4,250	0	0	0	0	371,667	387,917	
1600	International Travel	0	8,000	1,492	0	0	0	7,333	17,333	34,158	0	8,000	4,067	0	0	0	8,667	10,667	31,400	0	8,000	2,950	0	0	0	24,000	17,167	52,117	
1500	Local Travel	0	7,000	740	0	0	30,000	167	6,467	44,373	0	7,000	1,030	0	0	15,000	333	28,333	51,697	0	7,000	1,000	0	0	15,000	1,000	64,396	88,396	
3500	Regional Meetings/Workshops	900	13,000	3,820	0	0	20,000	27,933	41,500	107,153	900	9,097	3,200	0	0	10,000	37,867	58,500	119,564	900	3,000	6,000	0	0	10,000	77,600	97,250	194,750	
5100	Miscellaneous expenses	300	500	740	0	0	0	0	22,733	24,273	300	0	420	0	0	0	0	18,467	19,187	300	0	1,650	0	0	0	0	42,150	44,100	
4300	Premises & recurring office expenses (lights, equipment, water, security, etc)	1,420,454	0	0	0	0	0	0	0	1,458,287	48,000	0	0	0	0	0	0	0	123,000	48,000	0	0	0	0	0	0	0	178,000	
4500	CEREEAC office space and equipment	78,000	8,500	0	0	0	0	0	1,000	87,500	0	5,000	0	0	0	0	0	2,000	7,000	0	0	0	0	0	0	0	3,500	3,500	
3000	Training/Fellow ships	0	0	2,413	0	0	0	3,000	9,333	14,747	0	1,000	3,733	0	0	0	6,000	12,667	23,400	0	0	1,733	0	0	0	18,000	16,667	36,400	
	Subtotal	1,541,654	127,000	16,297	120,000	577,418	170,000	128,600	157,700	2,876,502	91,200	120,097	22,992	20,000	189,807	75,000	69,867	844,533	1,508,496	91,200	105,000	19,125	0	0	75,000	171,600	1,198,116	1,790,041	
	13% UNIDO support costs		16,510								15,613									13,650									
	Total	1,541,654	143,510	16,297	120,000	577,418	170,000	128,600	157,700	2,876,502	91,200	135,710	22,992	20,000	189,807	75,000	69,867	844,533	1,508,496	91,200	118,650	19,125	0	0	75,000	171,600	1,198,116	1,790,041	

BL	Budget Lines	Year 4									Year 5									Project Duration (5 years)								
		Angola	BMeiA (through UNIDO)	UNIDO (Financial)	IFDD (financial contribution through ECCAS)	AfDB (financial contribution through ECCAS)	ECCAS Secretariat (Financial & In-Kind)	ECCAS Member States (Financial & In-Kind)	Expected Co-funding from Other Donors (i.e. EU, WB, IRENA, USAID, Oyo Centre, etc)	Total Y4	Angola	BMeiA (through UNIDO)	UNIDO (Financial)	IFDD (financial contribution through ECCAS)	AfDB (financial contribution through ECCAS)	ECCAS Secretariat (Financial & In-Kind)	ECCAS Member States (Financial & In-Kind)	Expected Co-funding from Other Donors (i.e. EU, WB, IRENA, USAID, Oyo Centre, etc)	Total Y5	Angola	BMeiA (through UNIDO)	UNIDO (Financial)	IFDD (financial contribution through ECCAS)	AfDB (financial contribution through ECCAS)	ECCAS Secretariat (Financial & In-Kind)	ECCAS Member States (Financial & In-Kind)	Expected Co-funding from Other Donors (i.e. EU, WB, IRENA, USAID, Oyo Centre, etc)	Total
1100	International Consultant/staff	0	70,000	0	0	0	50,000	83,333	394,334	597,667	0	5,000	0	0	0	50,000	91,667	372,934	519,601	0	285,000	8,392	0	0	320,000	251,667	1,298,368	2,163,426
1700	National Consultants/staff	42,000	5,000	683	0	0	0	41,667	303,513	392,863	42,000	0	992	0	0	0	41,833	335,200	420,025	210,000	26,000	7,358	0	0	0	165,000	1,105,967	1,514,325
2100	Contractual Services	0	6,000	1,300	0	0	0	0	405,800	413,100	0	0	450	0	0	0	0	400,000	400,450	0	42,000	11,100	140,000	767,225	0	0	1,537,667	2,497,992
1600	International Travel	0	0	750	0	0	0	13,333	37,333	51,417	0	0	392	0	0	0	14,667	36,000	51,058	0	24,000	9,650	0	0	0	68,000	118,500	220,150
1500	Local Travel	0	0	240	0	0	15,000	1,667	65,910	82,817	0	0	120	0	0	15,000	1,833	66,798	83,751	0	21,000	3,130	0	0	90,000	5,000	231,904	351,034
3500	Regional Meetings/Workshops	900	0	2,920	0	0	10,000	99,333	88,991	202,145	900	0	2,060	0	0	10,000	99,267	183,958	296,185	4,500	25,097	18,000	0	0	60,000	342,000	470,199	919,796
5100	Miscellaneous expenses	300	0	240	0	0	0	0	45,267	45,807	300	0	120	0	0	0	0	32,383	32,803	1,500	500	3,170	0	0	0	0	161,000	166,170
4300	Premises & recurring office expenses (lights, equipment, water, security, etc)	48,000	0	0	0	0	0	0	0	48,000	48,000	0	0	0	0	0	0	0	48,000	1,612,454	0	0	0	0	0	0	0	1,612,454
4500	CEREEAC office space and equipment	0	0	0	0	0	0	0	4,000	4,000	0	0	0	0	0	0	0	4,500	4,500	78,000	13,500	0	0	0	0	0	15,000	106,500
3000	Training/Fellow ships	0	0	547	0	0	0	30,000	25,333	55,880	0	0	773	0	0	0	33,000	16,000	49,773	0	1,000	9,200	0	0	0	90,000	80,000	180,200
	Subtotal	91,200	81,000	6,680	0	0	75,000	269,333	1,370,482	1,893,695	91,200	5,000	4,907	0	0	75,000	282,267	1,447,773	1,906,147	1,906,454	438,097	70,000	140,000	767,225	470,000	921,667	5,018,604	9,732,047
	13% UNIDO support costs		10,530									650																
	Total	91,200	91,530	6,680	0	0	75,000	269,333	1,370,482	1,904,225	91,200	5,650	4,907	0	0	75,000	282,267	1,447,773	1,906,797	1,906,454	495,050	70,000	140,000	767,225	470,000	921,667	5,018,604	9,789,000

Annex 3: Job description for the Executive Director of the CEREEAC

Draft Job Description for the Executive Director of the Central African Centre for Renewable Energy and Energy Efficiency (CEREEAC) – draft to be finalised

(Female candidates from ECCAS countries are encouraged to apply)

Post title:	Executive Director of the Central African Centre for Renewable Energy and Energy Efficiency (CEREEAC)
Duty station:	location in an ECCAS country to be confirmed; with international travel as required
Duration:	2 years (with the possibility for extension for another 2 years to be approved by the Executive Board based on the performance)

A. Functions and responsibilities:

Management and Organisational Development:

- Establish the office of the CEREEAC Secretariat and its financial and administrative rules and procedures in line with ECCAS requirements and the need for timely and quality delivery of the Centre.
- Establish and implement the institutional cycle of the Centre which includes the network of National Focal Institutions (NFIs) among all participating ECCAS Countries, the Executive Board (EB) and Technical Committee (TC); organize regular meetings with the NFIs as well as the TC and EB; take minutes of the meetings and prepare all necessary documents.
- Implement the decisions and recommendations of the CEREEAC Executive Board (EB) and Technical Committee (TC).
- Ensure effective organisational development of the Centre and its strategic positioning in ECCAS and international renewable energy and energy efficiency markets.
- Establish the CEREEAC Five-Year Business Plan (BP) (incl. organisational chart, budget, logical framework and performance indicators) in coordination with UNIDO, ECCAS, and the NFIs; submit the BP to the TC and EB for approval.
- Develop the annual work plans, progress reports and financial statements in cooperation and coordination with ECCAS, the National Focal Institutions (NFIs) and other key stakeholders; submit the documents to the TC and EB for approval.
- Support actively the planning and preparation of the annual budgets of the CEREEAC work plans. Provide strategic inputs for the annual work plans and ensure budgetary long-term planning to avoid financial short-falls for projects funded by the CEREEAC.
- Cooperate with external auditors and evaluators assigned by the EB.
- Ensure efficient implementation of the CEREEAC activities and financial resources approved in the annual work plans in cooperation and coordination with ECCAS and the National Focal Institutions (NFIs).
- Establish a clear recruitment process to be agreed to by TC and EB with standard processes and templates and ensure timely implementation of procurements.
- Sign contracts with staff, consultants and/or project implementers in line with the rules and procedures of the Centre and ECCAS; monitor the implementation of the contracts.
- Ensure that the Centre meets and maintains all fiduciary standards (financial, administrative, procurement, internal controls, project cycle management) required to manage international donor funding (e.g., World Bank, European Commission, GEF, UN). Ensure that CEREEAC staff implement and maintain the quality standards.

- Ensure financial accountability and recommend internal control mechanisms to prevent misuse of funds. Implement the recommendations of the external auditors and evaluators.
- With assistance from Finance and Administrative staff, ensure quality of CEREEAC contracts, financial progress reports provided by project implementers and ensure timely financial disbursements and payments according to the established payment schedules. Prepare financial project reports for international donors.
- Recruit qualified regional and international administrative and technical staff in accordance with the needs of the organisation, as well as the staff and recruitment rules approved by the Executive Board; ensure effective human resource processes (e.g., performance appraisal); manage and supervise the staff accordingly and ensure a fair division of labour; ensure involvement of seconded international experts (e.g. UNIDO and seconded experts).
- Monitor the progress of the technical and financial implementation of the annual work plans; elaborate periodical reports on the progress and achievements of the Centre in relation to its objectives, results and indicators (incl. analytical recommendations for adaptations and revision of activities etc.) in the CEREEAC Business Plan.
- Keep an overview on relevance, effectiveness, efficiency and sustainability of the CEREEAC program (according to the CEREEAC Business Plan); plan and suggest to the Executive Board studies and surveys that are considered necessary in order to achieve the program objectives.
- Compile regularly information and data provided by the National Focal Institutions (NFIs) about the progress of the execution of CEREEAC activities and share it with the TC and EB members.

Technical Cooperation and Supervision

- Represent the Centre and raise awareness on renewable energy and energy efficiency opportunities in the Central African region as well internationally; travel regularly to Central African countries and key events in the region and internationally to participate in conferences and workshops.
- Coordinate, prepare and submit policy inputs/statements on renewable energy and energy efficiency to be considered in international energy and climate processes (e.g. COP, SDGs, SEforALL, REN21).
- Supervise the development, appraisal, implementation, and monitoring of CEREEAC projects and programs in the areas of capacity and policy development, knowledge management and investment and business promotion; supervise the execution of conferences, workshops and trainings.
- Give guidance on the development and implementation of CEREEAC flag-ship programs. Take leadership in the development and implementation of ECCAS targets in cooperation with ECCAS officials and NFIs.
- Ensure that the CEREEAC activities are in line with the Business Plan and annual work plans, national policies, strategies and legislation; avoid duplication of activities implemented by other actors or donors and cooperate closely with ECCAS and NFIs.
- Supervise the technical staff on project management issues and in renewable energy and energy efficiency aspects.
- Establish and further develop the quality, appraisal and project cycle management framework for activities to be co-funded and/or implemented under the CEREEAC program.
- Constantly mobilise funding for activities of the Centre and contribute to preparation of project proposals to be co-funded by local or international development partners; participate in calls for proposals.
- Contribute to quality assurance throughout the project cycle of a wide range of different CEREEAC activities (e.g. trainings, conferences, policy activities, co-funding of projects).

- Assure quality of approved projects according to donor requirements and ensure that pro-poor, environmental, and gender impacts have been assessed; participate actively in the evaluation of tender bids and project proposals.
- Supervise the preparation and execution of complex technical procurements and call for proposals; supervise staff to effectively monitor consultants or installations.
- Strengthen the regional network of National Focal Institutions (NFIs) of CEREEAC and contribute to the organisation of coordination meetings.
- coordinate and cooperate closely with the core partners of the Centre (e.g., UNIDO, other GN-SEC centres and other donors).

Communication

- Establish regular consultations with ECCAS, the National Focal Institutions (NFIs) and other key market enablers in the region.
- Build strong technical partnerships between the Centre and other institutions in the region or on international levels; make use of know-how and technology transfer; create south-south partnerships and strong links and exchange to other centres in Africa.
- Act as focal point for the implementation of UN Sustainable Energy For All Initiative (SEforALL) activities in Central Africa and other international organisations (e.g. IRENA, REN21 and GEF).
- Establish strategic links to donor partners and to loan and equity finance institutions to raise funding for RE&EE investment projects (such as development banks in donor countries, national or regional development banks).
- Establish a communication network with national and regional chambers of commerce, trade associations and other RE&EE lobbying agencies in the Central African region.
- Engage relevant stakeholders in renewable energy policy dialogue including public institutions, civil society and private sector.
- Ensure effective public relations and publication of information on the CEREEAC programs to different target groups.
- Ensure awareness raising activities take place on RE&EE in the Central African region.
- Establish and maintain a comprehensive RE&EE contact network in the Central African region (e.g. focal points, private sector) and internationally.

B. Qualifications, Skills and Experience:

- Citizen of an ECCAS country.
- Proven track record in resource mobilization among development partners, private sector, and philanthropic organizations.
- No less than 15 years of work experience in the energy sector within the ECCAS region (or Sub Sahara Africa) with a proven track-record of developed, managed and implemented programs and projects that have generated quantifiable benefits. A mix of public and private sector experience is an asset.
- Proven capabilities in high level management position(s) within the public and/or private sector, with a minimum of 7 year of senior management experience.
- Experience in managing similar-sized or larger organizations or companies in the energy/environmental sector.
- Excellent knowledge of the status of renewable energy and energy efficiency markets, policies, stakeholders and trends in the Central Africa region at a national and regional level.

- Experience in international development cooperation and the management of development partners are a prerequisite; knowledge and good relations to the main actors of the energy sector are an added value.
- Demonstrated understanding of gender equality and women's empowerment in the field of energy, as well as the interconnections between energy and sustainable development; and
- Excellent writing skills and familiarity with modern ICT systems, practices and processes.
- Solid analytical, negotiation, presentation and communication skills.
- Languages: proficiency in French and English essential; with Portuguese highly sought after;

Annex 4: Baseline and Needs Assessment Report

Note: the full report is included in a separate standalone document.

Results of the Consultative Needs Assessment Survey

In order to identify a clear need and added value of CEREEAC a survey has been undertaken as part of a need's assessment among the RE&EE stakeholders to ascertain the Centre's mandate, priority activities and issues that should be addressed. As agreed with ECCAS the needs assessment had a particular focus first on the NFIs and NFIs feedback. After collecting the NFIs responses, the team also deployed the questionnaire electronically to gather the participation of other stakeholders in the energy sector, such as, other public organisations, private sector, training and research institutions and the donor community.

Details on the needs assessment carried out are provided in Annex 0 Baseline and Needs Assessment Report.

Method

Questionnaires were disseminated via email to representatives of NFIs in each country, alongside groups of key RE&EE as well as regional and international donors and other prominent organisations in the RE&EE space. The questionnaire was focused on the following areas:

1. Design of the Centre
2. Recommendations for an effective Centre
3. Information regarding country/territory situation
4. Identification of synergies with existing efforts to promote sustainable energies

Results

After working with ECCAS to identify National Focal Institutions across the 11 countries, the questionnaire was then distributed to them, and assistance was given where required to complete the questionnaire from local consultants. As it can be seen in the table below of the 11 NFIs, we received answers from 6. The e-mail and online questionnaire were also distributed to other key stakeholders in country and further afield. Additional responses were received from 22 institutions (public and private) with majority being in full support of the CEREEAC's establishment, and none being wholly opposed.

The stakeholder's consultation process was continued at the Virtual Validation Workshop.

Table 11: Summary of stakeholder's consultation activities

Country	NFI Identified?	Response Received?	Additional questionnaires completed	Total questionnaires filled
Angola	Yes	Yes	0	1
Burundi	Yes	Yes	2	3
Cameroon	Yes	No	5	5
Central African Republic	Yes	Yes	0	1
Chad	Yes	No	0	0
Republic of Congo	Yes	Yes	0	1
Democratic Republic of Congo	No	No	0	0
Equatorial Guinea	Yes	No	0	0
Gabon	Yes	Yes	1	2
Rwanda	No	No	0	0

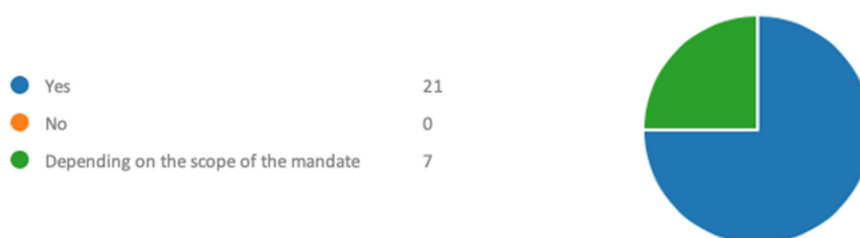
São Tomé and Príncipe	Yes	Yes	4	5
Wider/International Contacts	n/a	n/a	3	10
Total				28

Feedback Summary

The response rate to the questionnaire (55% for the NFIs) was lower than desired and despite the efforts of ECCAS, UNIDO, ITPE and our local partners, we were unable to identify all NFIs and ensure that they completed the questionnaire.

The following figures and table summarised the responses collected from the stakeholders.

Do you think a specialised regional ECCAS centre to promote the uptake of RE&EE markets is needed and would add value?



There was a clear trend for respondents to support the establishment of the Centre, with over three quarters in agreement that this would add value. Encouragingly, no respondents said the Centre would not add value.

What key functions should the regional Centre have?

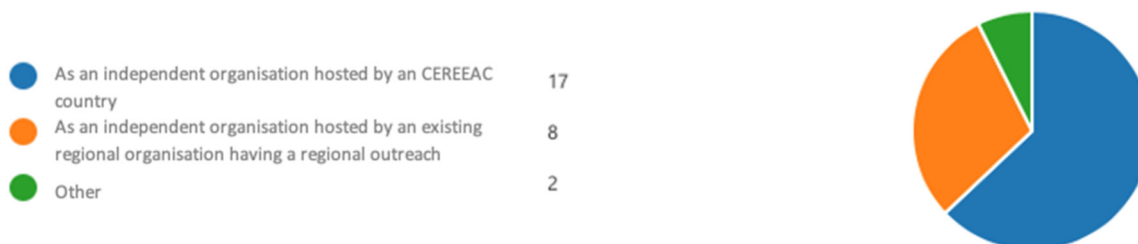
There was broad support across the board for the options presented to respondents in the questionnaire regarding the key functions of the Centre – potentially indicating a gap in delivery of most of these services in the region which presents an opportunity for the CEREEAC.

All respondents highlighted involvement in policy, regulations and standards as well as support for local energy entrepreneurs as being important. Also, almost all pointed out the joint learning and knowledge exchange as a very important function of the Centre.

Key function	% of responses in support
Set regional RE&EE targets and priorities to ensure equal progress among all ECCAS countries	71%
Strengthen technical capacities of the ECCAS Commission to assist and advice Governments on key questions of the energy transformation	82%
Address barriers for RE&EE more cost-effectively through joint coordination and cooperation on programs and projects	64%
Set regional RE&EE policies, regulations and standards and support/monitor their national implementation	89%
Promote economies of scale and business opportunities through the creation of harmonised markets for sustainable energy products and services	82%
Set regional content requirements to promote the participation of local energy entrepreneurs in value chains of sustainable energy manufacturing and servicing	89%
Coordinate international donor support in line with regional priorities and ensure coordination and synergy building	68%

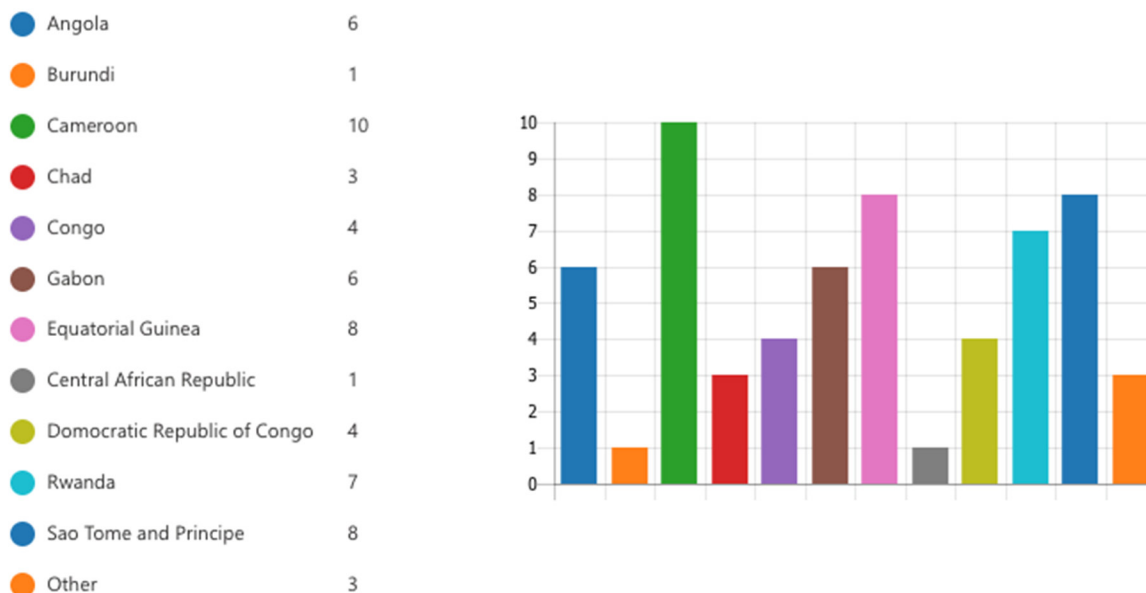
Act as regional focal point for international climate sustainable energy finance and assist countries in the development and implementation of programs and project proposals	79%
Act as knowledge and information hub for the region	79%
Create opportunities for domestic companies and training institutes through regional programs and the creation of tailored financial facilities	79%
Promote the region as attractive place to invest in RE&EE	79%
Promote joint learning and knowledge exchange	93%

In your opinion how should the Centre be set-up?



More than 60% of the respondents to this question wanted the CEREAC to be an independent organisation hosted by a CEREAC country. This is in line with many of the GN-SEC centres around the world. Around a third of respondents felt the organisation should be hosted by an existing regional organisation (e.g., ECCAS). Interestingly, all those who wanted an alternative configuration suggested that given the Republic of Congo was already establishing a centre of excellence for RE&EE, it could perhaps expand its scope and take on the regional responsibilities of CEREAC.

Please suggest countries and/or organisations to host such a regional centre?



There was a broad range of views around the question of which country could host the centre. There was, however, a clear preference for Cameroon, Equatorial Guinea and São Tomé e Príncipe.

How do you see the Centre assisting with the current and future RE&EE efforts in your country?

The general view given by respondents was that the centre would play an important role given the critical nature of RE&EE to the region. There were positive requests for aspects including assistance with master plans, standards and quality, training and human capital, strengthening capacity and awareness raising. One

respondent did note that EE should perhaps be a focus given it is still further behind RE and that the private sector is already playing a bigger role in RE.

Annex 5: CEREEAC Validation workshop

See attachment

Annex 6: RE IRENA Renewable Energy Roadmap for Central Africa

See attachment

Annex 7: EE Baseline Chapter on Central Africa

See attachment

Annex 8: GN-SEC model description

To make Regional sustainable energy and climate cooperation/integration a priority, UNIDO launched the Global Network of Regional Sustainable Energy Centres (GN-SEC) Programme. Under a common framework, UNIDO assists regional organisations in the creation and operation of sustainable energy centres. The GN-SEC is an innovative south-south and triangular multi-stakeholder partnership to accelerate the energy and climate transformation in developing countries. The gradually expanding partnership comprises a sub-network of centres for the African and the Arab region (in cooperation with the EAC, SADC, ECOWAS, and the Arab League) and a sub-network for Small Island Developing States (in cooperation with SIDS DOCK, CARICOM, and SPC). Currently, the network is expanding to Central America, Central Asia and the Himalaya-Hindukush region. Further information is available at: <https://www.gn-sec.net/>.

GN-SEC Platform

Since some of the centres have reached a certain level of maturity and share similar challenges and opportunities, it was agreed to create a formalised global GN-SEC platform to facilitate joint learning, programming and project implementation. Together the centres are a strong advocate for SDG-7, SDG-9 and SDG-13 and joint interests in international policy processes. The Platform provides a “maker-space” for south-south and triangular partnerships and projects, as well as knowledge/technology transfer within the GN-SEC and internationally. For example, SIDS share similar challenges and opportunities when it comes to electric mobility and storage solutions. LDCs in Sub Sahara Africa share a common interest in renewable energy (hybrid) mini-grid development for rural electrification and productive uses. The platform provides also an interesting forum to exchange experiences and lessons learned on methodologies related to Regional cooperation and institution building. The Secretariat of the GN-SEC is hosted by UNIDO in Vienna, Austria.

Functions of the GN-SEC Platform:

- Raising the profile and visibility of the network on global level;
- Advocating for SDG-7, SDG-9 and SDG-13;
- South-south cooperation on common issues and solutions (e.g. SIDS, LDCs)
- Advocating for more inclusive SECT technology transfer processes;
- Joint policy inputs for international energy and climate processes;
- Effective communication, public relations and cooperate identity;
- Lessons learned and joint learning on technical and institutional aspects;
- Joint quality assurance and monitoring of results;
- Provision of global services and promote joint products;
- Promote Joint programs and projects;
- Joint fund raising;
- Strategic partnerships with int. organizations, industry, civil society, investors and foundations;

The GN-SEC mission statement

The regional sustainable energy centres aim to accelerate the energy and climate transformation by creating economies of scales, equal progress and spill-over effects between countries. In partnership with Member States and other sub-regional players (e.g. power pools, utility organisations, regulatory authorities, regional banks), the centres work towards the creation of integrated and inclusive regional markets for SECT products and services. This is being done by setting common targets, policies, standards and incentives, as well as the de-risking of investments through the provision of reliable data, analytics, bundling of projects and convening power. Each of the centres has its own priorities depending on the demands of member states.

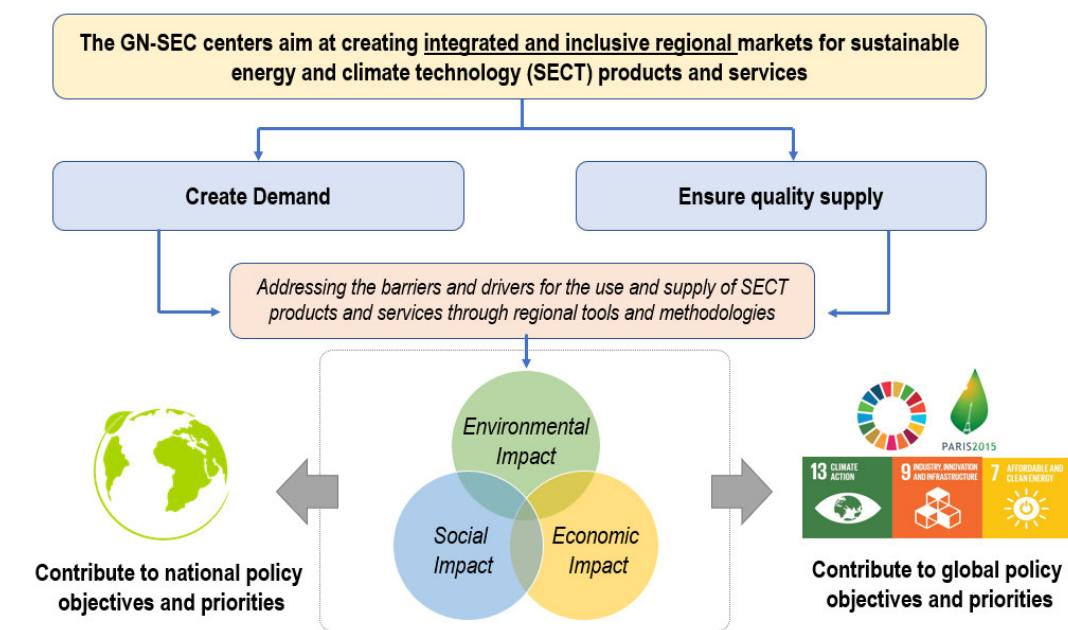


Figure 15: GN-SEC Mission

Some of the barriers for the development of SECT markets can be addressed more effectively and at lower cost at sub-regional level. The GN-SEC centres play an important role in setting domestic priorities, contribute to donor harmonisation and coordination, as well as ensuring the sustainability and availability of results and deliverables after project closure. The centres provide regional organisations with the urgently needed technical capacities to coordinate and monitor the implementation of sub-regional energy and climate policies/regulations on national level. Moreover, the GN-SEC centres serve as knowledge resource facility, and provide advice to Member States on how best to manage the transformation towards sustainable energy.

Through regional activities, the GN-SECs introduce new RE&EE innovations into the respective regional market. Once demonstrated and tested, the Centres facilitate their commercialisation, replication and industrial scale-up.

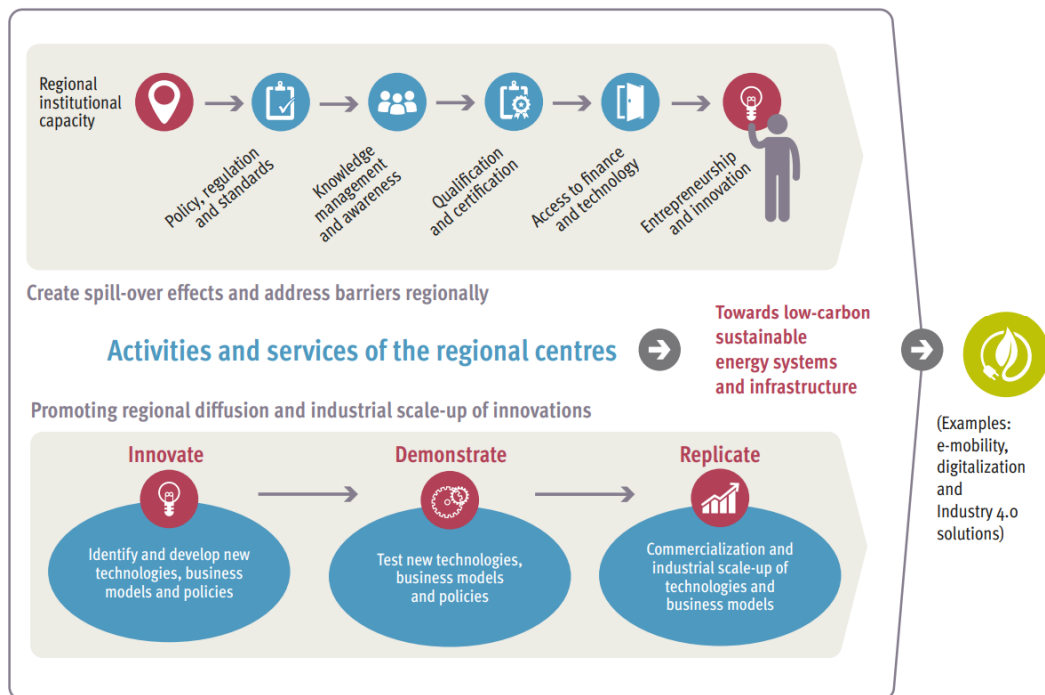


Figure 16: GN-SEC theory of change (2)

Through cross-border approaches and methodologies, the centres complement and accelerate national efforts in the areas of policy and regulation, capacity development, knowledge and data management, awareness raising, as well as the promotion of investment, innovation and entrepreneurship. The centres serve as a hub for all kind of domestic and international partnerships. They are important advocates for SDG-7, SDG-9 and SDG-13 in national, regional and international policy and decision-making processes. They can complement regional banks when it comes to the addressing of “soft” issues hindering the de-risking and long-term sustainability of investments (e.g. policy, standards, laws, qualification, and certification). These issues have usually too high transaction costs for banks and/or lead to unfavourable financing terms (e.g. interest rates).

Figure 17: Complement and accelerate national efforts to address demand and supply barriers for SECTs

Functions of the GN-SEC Centres (selection):

- Enhance technical implementation/coordination capacities of RECs
- Advocate for SDG-7, SDG-9 and SDG-13 on regional and national level
- Strengthen domestic ownership, agenda-setting, donor harmonization and sustainability of project-based approaches
- Create high-level awareness and complement RECs, regional financial institutions and regional utility organizations/power pools
- Address the „missing link“ between international energy and climate commitments and execution on national level
- Accelerate national efforts and equal progress in countries
- Address common barriers more (cost) effective through regional exchange, approaches and methodologies
- Economies of scale through the creation of sub-regional markets
- “Hubs” for knowledge and fusion of internal and external partnerships
- Leveraging funding for priority activities from a range of partners

The GN-SEC centres **aim at an equilibrium between market demand for and supply of SECT products and services**. They put particular emphasis on actions directed to increase the domestic value creation of investments in SECTs. In this context, the centres focus on sub-regional actions to strengthen the productive (manufacturing, assembling, servicing) and innovation capacities of domestic businesses and entrepreneurs (e.g. fiscal and non-fiscal incentives, incubation, acceleration, R&D, quality infrastructure and standards, qualification, IPs, cluster building).

The GN-SEC Principles

GN-SEC is *“living empowerment”*. The centres are advocates for a *“New Deal”* giving particularly LDCs and SIDS a stronger voice in shaping climate and technology transfer processes. The official mandate given by Ministers and Head of States, the intergovernmental character (based on int. agreements) and the close link to the RECs and national Ministries (through national focal points) give the centres high-level legitimacy. Currently, over ninety Ministers of Energy and/or Heads of State adopted the creation of such centres.

From the very beginning, the centres are in the ownership and under the leadership of the respective regional organization and its Member States. The centres are well embedded in the regional decision-making structure and report usually to the RECs and their Member States. The centres employ domestic staff and seconded international experts. The centres are designed as hubs for all kind of domestic and international partnerships. Building on country leadership within existing regional cooperation entities, the network puts the key principles of aid and development effectiveness (as defined in the Accra, Paris and Busan Declarations) into practice: It respects country ownership of development priorities coupled with results-oriented partnerships, transparency and shared responsibility.

GN-SEC principles:

- Programmatic approach (individual centres are part of a wider program);
- Demand-driven (based on requests by the regions);
- „No blueprints“ and tailored design to the individual needs and culture of the sub-region;
- Ownership and leadership by the regional organization and their Member States;
- Hosted by an existing domestic institution or a Member State;
- High level of legitimacy and intergovernmental character (approved by Ministers and/or Heads of States);
- Well embedded in sub-regional decision-making and policy processes;
- Well-connected to national Ministries and policies through a network of national focal institutions;
- Work complementary to the existing sub-regional institutions (e.g. RECs, utility and regulatory organizations);
- Use of domestic processes and systems (e.g. procurement, recruitment, financing and accounting);
- Financial sustainability through domestic contributions, international partnerships, fee-for-services and participation in call for proposals;
- „Small is beautiful“ and „form follows function“ - centres expand based on mobilized resources;
- Institutional "check and balances" through governance bodies (e.g. Executive Board, Technical Committee);
- Timely-limited UNIDO support for institution building, technical program development and mentoring of the political process;



Figure 18: GN-SEC Makerspace

Evolution of the Global Network of Regional Sustainable Energy Centres (GN-SEC)

By looking at the moderate growth rates of Sustainable Energy and Climate Technology (SECT) markets in many developing countries, it becomes obvious that SDG-7, SDG-9 and SDG-13 cannot be attained by 2030 in business-as-usual scenarios. There is need for economies of scale and speed. In this context, formal, informal, centralised and decentralized multi-stakeholder partnerships - leveraging flexible networks and resources between a broad range of like-minded partners in developing and developed countries – can become important accelerators.

Therefore, UNIDO in partnership with sub-regional economic communities/organisations (RECs) and their Members States (MS), is establishing the Global Network of Regional Sustainable Energy Centers (GN-SEC), an innovative south-south and triangular multi-stakeholder partnership to accelerate the energy and climate transformation in developing countries. Since 2010, UNIDO assists RECs in the establishment and operation of sub-regional sustainable energy promotion centres.

The gradually expanding partnership comprises a sub-network of centers for the African and the Arab region (in cooperation with the EAC, SADC, ECOWAS, and the Arab League) and a sub-network for Small Island Developing States (in cooperation with SIDS DOCK, CARICOM, and SPC). Currently, the network is expanding to Central America, Central Asia and the Himalaya-Hindukush region. The network has approval by more than ninety Ministers of Energy and/or Heads of State.

Regional public climate infrastructure from the region for the region

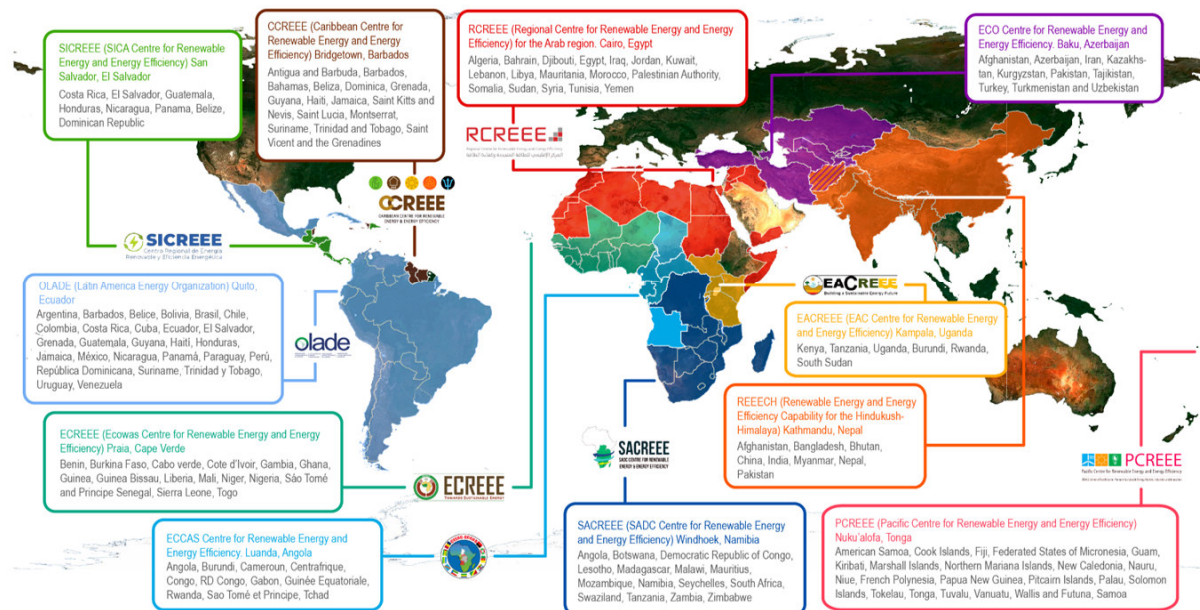


Figure 19: GN-SEC Map

Operating Centres:

- [ECOWAS Centre for Renewable Energy and Energy Efficiency \(ECEEE\)](#) in partnership with [ECOWAS](#)
- [Regional Centre for Renewable Energy and Energy Efficiency \(RCREEE\)](#) in partnership with the Arab League
- [SADC Centre for Renewable Energy and Energy Efficiency \(SACREEE\)](#) in partnership with [SADC](#)
- [East African Centre for Renewable Energy and Energy Efficiency \(EACREEE\)](#) in partnership with [EAC](#)
- [Pacific Centre for Renewable Energy and Energy Efficiency \(PCREEE\)](#) in partnership with [SPC](#) and [SIDS DOCK](#)
- [Caribbean Centre for Renewable Energy and Energy Efficiency \(CCREEE\)](#) in partnership with [CARICOM](#) and [SIDS DOCK](#)
- [Renewable Energy and Energy Efficiency Centre for the Hindu Kush Himalaya \(REEECH\)](#), in partnership with [ICIMOD](#)
- [SICA Centre for Renewable Energy and Energy Efficiency \(SICREEE\)](#), in partnership with [SICA](#)

Centres in the Preparatory Phase:

- ECO Clean Energy Centre (ECEC), in partnership with [ECO](#)
- Central African Centre for Renewable Energy and Energy Efficiency (CEREAC) in partnership with [ECCAS](#)

Annex 9: CEREAC Decision of the ECCAS Ministers of Energy

See attachment

Annex 10: CEREAC Decision of the ECCAS Heads of State

See attachment