



REPUBLIC OF MOZAMBIQUE
MINISTRY OF MINERAL
RESOURCES AND ENERGY



**COLLECTION OF REGULATIONS AND
INSTRUMENTS IN THE SCOPE OF ACCESS
TO ENERGY IN OFF-GRID AREAS**

Datasheet

TITLE

Collection of regulations and instruments in the scope of access to energy in off-grid areas

AUTHOR

ARENE in collaboration with the BRILHO programme

FUNDING

Governments of the United Kingdom (FCDO) and Sweden through the BRILHO programme, implemented by SNV

TRANSLATION

Eduardo da Costa José Viegas

PHOTOGRAPHS

SNV

PRINT RUN

200

Preface

To attain the 2030 Sustainable Development Goals (SDG) and the international agreements on climate change, the Government of Mozambique (GoM) established ambitious targets in its Five-Year Plan (2019-2024) reflected in the “Energy for All” program, the Renewable Energy Policy and in the recently approved Energy Transition Strategy.

All of these instruments aim to guarantee access to energy as a potential mean to improve the lives of families and communities and to boost small and medium-sized companies towards the country's socio-economic development. To achieve this, it is crucial to provide potential consumers with access to modern energy technologies, which include improved cooking solutions, autonomous solar systems, mini-grids, among other technologies.

Hence, acknowledging the private sector's potential for investment, innovation and operational capacity, the GoM developed in the last two years, the complete regulatory package for the off-grid energy sector and more recently, the plan of electrification for off-grid areas. With these instruments, both the Government and the private sector are in a position to move forward with the implementation of robust and quality off-grid energy projects.

This compendium aims to be a support tool for the diversity of market stakeholders but also serves as an invitation to international market actors.

Mozambique is preparing to write a new phase in the history of access to energy in off-grid areas, as a result of the committed work of the Government of Mozambique through the Ministry of Mineral Resources and Energy (MIREME), the Energy Regulatory Authority (ARENE), the Energy Fund (FUNAE) and with the support from the BRILHO Program (funded by the Governments of the United Kingdom and Sweden, and implemented by SNV).

The Government of Mozambique is making every effort to ensure that the conditions are the most favourable, however it also recognizes that the objectives are ambitious, hence I also want to leave a message appealing that everyone's support, energy and action will be decisive to attain the greater objective of “Energy for All”.



His Excellency Antonio Osvaldo Saíde
Deputy Minister of Mineral Resources and Energy

Table of contents

Regulation on Access to Energy in Off-Grid Areas	6
Regulation for the Award of Mini-grids Concessions	28
Certificate of Registration of Energy Service Provider	72
Tariff Regulation For Mini-Grids In Off-Grid Areas	78
Mini-Grid Interconnection Regulation	96
Technical And Safety Standards Regulation	122
Quality of service and commercial relations regulation	132



DECREE N° 93/2021, 10 DECEMBER

Regulation on Access to Energy in Off-Grid Areas



REPUBLIC OF MOZAMBIQUE
COUNCIL OF MINISTERS

DECREE Nº 93/2021, 10 DECEMBER

Considering the need to strengthen the current legal framework in the energy sector, by regulating areas off-grid energy supply activities, with a view to increasing the productive use of energy for universal access to this resource and the consequent socio-development of the country, in accordance with the provisions of article 42, of Law n.º 21/97, of 1st October, the Council of Ministers decrees:

ARTICLE 1

The Regulation on Access to Energy in Off- Grid Areas, annexed to this Decree and an integral part hereof, is approved.

ARTICLE 2

Projects that involve off-grid energy supply activities in areas outside the National Electricity Grid (REN) are of public interest and of a social nature, as provided under the terms of the applicable legislation.

ARTICLE 3

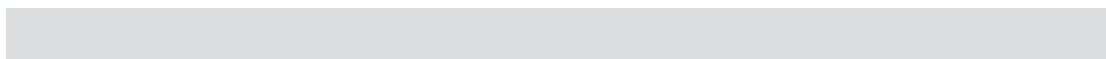
1. The Council of Ministers shall approve the electrification plan for off-grid areas which shall define the areas for mini- grid concessions.
2. The plan referred to in the previous section is prepared based on the Integrated Master Plan for Electricity Infrastructure and shall be revised every two years, or, exceptionally, in accordance with the information contained in the energy planning and registry.

ARTICLE 4

This Decree enters into force 45 days after its publication.

Approved by the Council of Ministers on 14 September 2021.
This decree is to be published in the official Gazette.

The Prime Minister, Carlos Agostinho do Rosário.



Regulation on Access to Energy in Off-Grid Areas

Chapter I – General Provisions

ARTICLE 1 Definitions

The meanings of the terms and expressions used in this regulation are set out in the attached glossary, which is an integral part of this regulation.

ARTICLE 2 Subject matter

This regulation establishes the principles and rules applicable to supply activities for access to energy in off-grid areas, with regards to mini-grids up to 10 MW and energy services.

ARTICLE 3 Scope

1. This regulation applies to legal entities, whether public and private, engaged in the activities provided for in this regulation.
2. For the purposes of this regulation, off-grid energy supply activities comprise initiatives and projects considered to be of a social and sustainable nature, aimed at carrying out activities, jointly or separately, of production, distribution, marketing and storage of electricity through mini-grids and the provision of energy services.

ARTICLE 4 Competences

1. The Minister overseeing the energy sector is in charge of making decisions regarding:
 - a) the organization of a public tender for the attribution of concessions for mini-grid projects, regardless of the installed capacity;
 - b) the attribution of a concession for a mini-grid project resulting from a public tender or an application from an interested party; and
 - c) the modification, suspension and revocation of concessions for mini-grid projects.
2. The Minister who oversees the energy sector may delegate, in whole or in part, the competencies provided for in number 1 of this article.
3. The entity responsible for implementing electrification activities in off-grid areas has the competency to:
 - a) promote and implement the development of energy use and benefit projects and solutions that contribute to increasing access to energy in off-grid areas;
 - b) build infrastructure for the supply of electricity in off-grid areas, focusing on activities for social purposes; and
 - c) collect and systematize data, for the energy registry, related to off-grid and rural areas, including energy services.

ARTICLE 5 Investment Regime

1. Projects whose subject matter is the carrying out of supply activities for access to energy in off-grid areas, which create and use physical or virtual infrastructure or systems, installations, equipment, software and other accessory components, essential for access to energy and

catalysts for the development and exploitation of industry, commerce, fisheries, agriculture, and other sectors of activity, fall under the respective investment regimes and fiscal benefits provided for in the applicable legislation.

2. Access to the respective tax benefits by concessionaires or registered holders is granted upon presentation of the concession contract or registration certificate.

Chapter II - Mini-grids

SECTION I Concession

ARTICLE 6 Awarding of Concession

- 1.** The concession for mini-grids is awarded through a public tender, under the terms of the legislation governing public procurement.
- 2.** A concession may exceptionally be granted, upon request of the interested party, when:
 - a)** a tender has been abandoned;
 - b)** the concessionaire, initially authorized, proves unable to carry out the activity, resulting in damages that substantially compromise the fulfilment of the electrification plan in off-grid areas;
 - c)** in the case of private financing requirements;
 - d)** the following prerequisites are cumulatively confirmed:
 - i** public interest;
 - ii** majority stake a legal person governed by public law.

ARTICLE 7 Categories of mini-grids

- 1.** Mini-grids are classified according to the following categories:
 - a)** category 1: mini-grid with installed capacity between 1,001 MW – 10 MW;
 - b)** category 2: mini-grid with installed capacity between 151kW – 1 MW;
 - c)** category 3: mini-grid with installed capacity up to 150 kW.
- 2.** In the case of a concession comprising multiple areas, the mini-grid category is determined based on the mini-grid with the greatest installed capacity.
- 3.** Category 3 mini-grid installations are exempt from the obligation to obtain an establishment license and an operating license, without prejudice to the concessionaire's obligations for the operation and maintenance of the installation and for respecting the principles and standards of quality, safety and reliability, as well as the respective inspection by the Energy Regulatory Authority.

ARTICLE 8 Term

The concession contract for mini-grids is valid for up to 30 years subject to the terms of the applicable legislation.

ARTICLE 9 Concession area

- 1.** The concession for mini-grids may be attributed for a single area or a set of multiple areas, the parameters of which are subject to regulation.
- 2.** The concession for mini-grids energy supply activities is granted based on exclusivity, subject to the realisation of other supply activities for access to energy in off-grid areas through energy services.

ARTICLE 10 Requirements for the attribution of a concession

1. The granting of the concession depends on the verification of the legal, technical and financial eligibility criteria, by the Energy Regulatory Authority, established by diploma of the Minister who oversees the energy sector.
2. The request for the concession allocation is submitted by the interested party to the Energy Regulatory Authority, through an application addressed to the competent authority, and must contain, at a least, the following information:
 - a) complete identification of the applicant, including:
 - i NUIT and Certificate of Registration of Legal Entities, with an updated copy of the articles of association as published in the Official Gazette of Mozambique or equivalent documentation;
 - ii address, telephone and email contact details of the applicant and its legal representative and, in the case of a public limited company, shareholders holding at least 5% of the share capital;
 - iii subscribed share capital and any changes.
 - b) proof of technical and financial capacity and experience in similar projects;
 - c) technical description, including overall project design, of the system and electrical installation, energy source(s), the capacity and energy to be supplied annually, apparatus and equipment to be used;
 - d) technical-financial studies, including financial plan and business model, which reflect the social and sustainable objectives of the project including public lighting, market study with demographic description of consumers, initial capital investment plan and throughout the life of the project, as well as the identification of funding sources and local content plan;
 - e) identification of the concession area with a topographical plan at an appropriate scale, indicating the location of installations and equipment, including the distribution grid and corresponding land use and benefit rights and administrative easements;
 - f) proof of initiation of the environmental licensing process;
 - g) schedule of activities, including the start and completion of construction, commissioning and commencement of commercial operations;
 - h) a reasoned proposal for the consumption tariff;
 - i) copy of any existing agreement with local communities, cooperatives and other forms of association and partnership for the development of the project;
 - j) list of applicable licenses and authorizations.

ARTICLE 11 Process

Within the scope of the process for the instruction and processing of the attribution, modification, suspension and termination of a concession, the Energy Regulatory Authority has the following obligations:

- a) approve the necessary forms and instructions;
- b) verify the certifications of the equipment proposed for the development of the respective activity;
- c) issue opinions and request opinions and other information from other areas of activity involved in the processing of cases;
- d) coordinate the activities to be carried out by all other entities involved in the process of attribution, modification, suspension and termination the concession;
- e) structure, establish, manage and supervise a process of instruction and deal with concession processes for mini- grids at local level;
- f) prepare the tender documents for mini-grids, adapting the characteristics of these activities to the regime governing public procurement, and submitting them to the approval of the Minister who oversees the energy sector.

ARTICLE 12 Elements of the concession contract

1. The concession contract must contain at least the following elements:
 - a) identification, address, telephone and electronic contacts, including email and electronic portal, of the applicant and its legal representative;
 - b) NUIT, NUEL or equivalent data from the identification document of the holder or its legal representative;
 - c) object of the concession, including the specification of activities, energy source, capacity and technology;
 - d) issuing date and duration;
 - e) the rules for the suspension, modification and termination of the concession;
 - f) location of the project, including the titles of land use and benefit rights and administrative easements;
 - g) schedule for the execution of the project;
 - h) rights and obligations of the parties, including, but not limited to:
 - i) constitution of a performance guarantee;
 - ii) interconnection to the national electricity grid;
 - iii) health, safety and environment;
 - iv) technical quality standards;
 - v) implementation, commissioning and commencement of commercial operations;
 - vi) local content;
 - vii) civil liability and insurance;
 - i) electrical installation plan, including the generation power plant, the planned installed capacity and the distribution grid;
 - j) the right to intervene in the project by the financiers, under the terms of the approved financing agreements;
 - k) investment regime;
 - l) applicable tariffs, prices and fees and review mechanisms; and
 - m) environmental licensing.
2. The concession contract is subject to prior review by the Administrative court, under the terms of the applicable legislation, which template is approved via diploma issued by the Minister who oversees the energy sector.
3. The rights of financiers, as mentioned in paragraph j) of number 1 of this article, includes the right to resort to any means of redress under the terms of such funding, including the right to enforce any guarantee or assume control of the administration of the project, upon prior written notification, provided that the financing contract has been previously approved by the competent entity.
4. The performance guarantee is issued for the construction phase in favour of the Energy Regulatory Authority, and is unconditional and irrevocable, with a maximum value of up to 5% of the amount of the investment, taking into account the category, size and complexity of the project. The guarantee can be issued in the form of an underwriting, insurance, surety, bank guarantee, parent company guarantee, or cash deposit in a bank account opened exclusively for this purpose.

ARTICLE 13 Competing Applications

1. When, during the period of instruction and processing of an application for a concession for a mini-grid in a certain area, another application for a concession in the same area is submitted, these are considered to be competing applications.
2. If there are two or more competing applications under the terms of the previous number, the Energy Regulatory Authority shall carry out a competitive and transparent process for the selection of the best technical-financial proposal, in terms to be regulated.

ARTICLE 14 Modification

The provisions and conditions provided in the concession contract for mini-grids may be modified, by mutual written agreement between the concessionaire and the competent entity, provided that the modification:

- a)** does not involve a violation or derogation from the provisions set forth in this regulation and other applicable legislation;
- b)** does not impair the supply of reliable, safe, regular and quality energy;
- c)** respects the economic and financial balance of the concession, observing the principles of diligent, prudent and correct financial management;
- d)** respects the principles of public order and public interest.

ARTICLE 15 Termination

- 1.** The concession contract is terminated as a result of:
 - a)** expiration of the term;
 - b)** revocation;
 - c)** occurrence of an event of force majeure, which lasts uninterruptedly for a period exceeding 90 days and which is not susceptible to repair or mitigation;
 - d)** resolution by initiative of the concessionaire, pursuant to number 7 of this article;
 - e)** interconnection of the mini-grid to the national electricity grid, pursuant to article 22; and
 - f)** agreement between the parties.
- 2.** The revocation is subject to a minimum of 90 days' prior notice by the competent entity to the concessionaire when, among others, one of the following facts occurs:
 - a)** deviation from the subject matter of the concession;
 - b)** construction does not start within a maximum period of 18 months from the effective date of the concession;
 - c)** not having reached the date for the commencement of commercial operation of the mini-grid within a maximum period of 36 months from the effective date of the concession, except in the case of mini-hydro plants, where the maximum period is 48 months, extendable for duly reasonable causes;
 - d)** suspension or abandonment of the activity object of the concession, including the paralysation of the activities of the project, when:
 - i)** the occurrence, imminent termination, total or partial interruption of the service;
 - ii)** there are serious deficiencies in the respective organization and functioning or in the general condition of the facilities and equipment that could compromise the reliability and continuity of the energy supply service, for a period of 90 consecutive days, which is not caused by an event of force majeure, which is not susceptible to repair or mitigation, technical failure or any other substantiated reason.
 - e)** refusal or repeated failure to allow the exercise of inspection and control, including the submission of annual reports and information within the scope of the inspection and control duties of the Energy Regulatory Authority;
 - f)** declaration of bankruptcy or insolvency and consequent liquidation of the concessionaire;
 - g)** refusal or failure to carry out the adequate maintenance, conservation, repair and replacement of electrical installations and assets related to them;
 - h)** refusal to carry out the necessary expansion of the grid and/or connections of consumers within the concession area, in accordance with the financial plan and business model, on the basis of which the concession was authorized, without proper justification;
 - i)** refusal or failure to comply with the local content plan, approved under the terms provided for in the concession contract;
 - j)** wrongful collection of tariffs in excess of those established in the concession or in the applicable tariff regime, as the case may be;

- k)** serious violation of the concession contract clauses or the provisions of this regulation;
 - l)** disobedience or systematic non-observance of applicable legislation.
- 3.** The competent entity may assume control of the project that is the object of concession in the cases provided for in subparagraph d) of paragraph 2 of this article, in which case the concessionaire shall be responsible for all charges and expenses necessary for the restoration of normality of the project, as well as the liability to third parties, and may also revoke the concession in cases where the concessionaire does not resume the operation of the concession until the date set forth in the respective notification.
 - 4.** In case the concession is revoked due to the concessionaire's non-compliance with its obligations, the electrical installations, movable and immovable assets, and tangible and intangible assets, free of any liens or charges, shall revert to the State subject to indemnification based on the audited accounting value of the assets, without prejudice to indemnification owed to the State for damages caused, as well as other liabilities owed by the concessionaire.
 - 5.** The concessionaire may terminate the concession based on the serious breach of the State's obligations which result in disruptions or damages that jeopardize the proper exercise of the concession activities, and the concessionaire shall have the right to fair compensation, calculated based on the audited book value of the assets of the project, at the date of payment, less the value of any insurance, to be determined by the Energy Regulatory Authority.
 - 6.** The termination of the concession by the concessionaire is subject to:
 - a)** prior notification to the competent entity, with at least 12 months prior notice, detailing the facts on which it is based;
 - b)** the fulfilment of obligations arising from the concession;
 - c)** compliance with the duty to supply electrical energy to consumers.
 - 7.** In the event that a force majeure event determines the termination of the concession, the electrical installation shall revert in favour of the State, in the event that the installation insurance does not cover its value, the concessionaire has the right to compensation corresponding to the audited accounting value of the electrical installation to be determined by the Energy Regulatory Authority.
 - 8.** The termination of the concession during its term gives the right to payment of a compensation corresponding to the audited accounting value of the installation determined by the Energy Regulatory Authority.
 - 9.** Without prejudice to the preceding paragraphs, in the 12 months prior to the expiration date of the concession, the concessionaire, in conjunction with the competent entity, shall implement all necessary, prudent and useful measures to ensure the continuity of reliable, safe and stable electrical energy supply service and its transition to a new operating regime.
 - 10.** The concession termination process is administered by the Energy Regulatory Authority and decided by the competent entity, subject to the [concessionaire's] right to contest the [decision].

SECTION II Operation and Management of mini-grids

ARTICLE 16 Concessionaire rights

The following are, among others, the rights of the mini-grid concessionaire:

- a)** carry out the activities of supplying electrical energy to consumers located within the geographical area defined in the concession, including the right to charge for the service provided;
- b)** plan, design, finance, build, possess, insure, operate, maintain, manage and subcontract the operation of the respective electrical installations, as well as other related infrastructure, equipment and materials in order to carry out the activities covered by the respective concession;
- c)** contract, at its own risk, studies, works, contracts, provision of services, supply of equipment, construction, technical assistance, management and operation of the electrical installations, at all stages necessary for the implementation and operation of the project;

- d)** obtain the collaboration with the respective competent entities in issuing, maintaining and renewing all other approvals, authorizations or licenses not covered by this regulation, necessary for the timely implementation of the project;
- e)** be indemnified as provided for in number 7 of article 15 of these regulations, in the event of expropriation for public interest, necessity or utility, under the terms of the applicable legislation;
- f)** access and transit without discrimination to electrical energy transport and distribution systems and installations, upon payment of the costs, charges and tariffs due, and enter into the respective contract in the case of interconnection of the mini-grid with the national electricity grid;
- g)** access the locations that receive or have received electrical energy supplied by the concessionaire to:
 - i)** carry out or inspect works, lines, measuring equipment and other technical equipment belonging to the concessionaire;
 - ii)** verify energy consumption;
 - iii)** remove the equipment that belongs to the concessionaire and that is not being used due to non-payment or disuse.
- h)** provide guarantees on the rights arising from the respective concession, as well as on the goods and assets linked to it, in the context of financing for the implementation of the project object of the concession, provided that the eventual execution of the guarantee does not compromise the continuity of activities at stake.

ARTICLE 17 Concessionaire duties

- 1.** The following are the duties of the mini-grid concessionaire, among others:
 - a)** comply with the principles and standards of quality, safety and reliability in relation to electrical energy supply activities, namely:
 - i)** supply electrical energy to all consumers within the concession area in accordance with the plan and schedule of concession activities;
 - ii)** enter into a contract with consumers, in accordance with the model approved by the Energy Regulatory Authority;
 - iii)** inform the consumer duly in advance of any interruptions to the supply of electrical energy;
 - iv)** restore the connection of any consumer within a period of 24 hours, and in the event that this is not possible, notify the consumer and the Energy Regulatory Authority, with the reasons thereof;
 - v)** ensure that the frequency and duration of planned and unplanned interruptions do not exceed the limits prescribed in the respective quality of service and commercial relations standards and norms, approved by the Energy Regulatory Authority.
 - b)** start the construction of the electrical installation within a maximum period of 18 months from the concession effective date;
 - c)** realise the commencement of commercial operation of the mini-grid within a maximum period of 36 months from the effective date of the concession, except in the case of mini- hydro plants, in which case the maximum period is 48 months, with the possibility of extension for duly justified motives;
 - d)** provide a performance guarantee for the construction phase until the commencement of commercial operation, under the terms of this regulation;
 - e)** demarcate and register easements and pay compensation to users and titleholders of land use and benefit rights;
 - f)** carry out the demobilization of infrastructure, at its expense and in accordance with the mitigation plan and environmental legislation, including the restoration of pre-existing environmental conditions prior to the implementation of the project, in the event of termination of the concession and if the competent entity is not interested in continuing to operate the electrical installation;
 - g)** carry out the replacement, recycling, recovery or demobilization of goods and equipment, as applicable, during the term of the concession;

- h)** submit to the Energy Regulatory Authority, by 31 May of each year, a report for the year ended, containing technical and financial information on the operation of the respective mini-grid, for inclusion in the energy registry;
 - i)** monthly send to the entity responsible for implementing electrification activities in off-grid areas, information on new connections, including other information of public interest;
 - j)** carry out authorized electrical energy supply activities with due technical competence, ethics, diligence, prudence and predictability, with sufficient financial means and in accordance with applicable legislation;
 - k)** plan, design, finance, build, own, insure, operate, maintain and manage the authorized activities and projects with due diligence and transparency;
 - l)** observe the specific technical and legal rules applicable to a reasonable and prudent operator, including the timetable for the implementation of the project;
 - m)** assume the responsibility and consequences for damages arising from any delays in the implementation of the project;
 - n)** carry out the conservation, maintenance and necessary replacement of the goods and assets allocated to the activity;
 - o)** keep organized accounts, records and complete and detailed inventories of goods and assets linked to the authorized activity;
 - p)** allow and facilitate access for inspection purposes by the competent entities, to the works, equipment and installations linked to the electrical energy supply activity, as well as to the accounting records;
 - q)** provide the requested regulatory information and comply with the decisions and instructions of the competent entities;
 - r)** communicate to the competent entities any changes, facts or events that may alter, interfere or compromise the exercise of the activity;
 - s)** observe health, safety and environmental norms and standards, in accordance with applicable legislation and with the standard of a reasonable and prudent operator;
 - t)** keep up to date civil liability insurance covering facilities, equipment, workers and third parties;
 - u)** diligently re-establish and restore transport and communication routes and interrupted, reduced or diverted circuits to carry out construction, maintenance, improvement and repair work on electrical installations;
 - v)** carry out the authorized activity in a manner to best serve the interests and needs of consumers;
 - w)** maintain a transparent, diligent and good faith interaction with consumers, as well as establish a consumer complaints mechanism, including a timeline branch to address the procedure for complaints and appeals, in accordance with the respective standards and norms of service quality and commercial relations;
 - x)** comply with the legislation in the electrical energy sector and other applicable legislation, including environmental, fiscal, accounting, foreign exchange, labour and social security legislation, as well as the conditions established in the respective concession.
- 2.** Concessionaires must ensure the expansion of the mini-grid, within the concession area, in keeping with the growth of demand.
 - 3.** Concessionaires shall ensure and carry out measures to implement local content, with a special focus on the residents and communities of the project location, with attention to gender balance, namely with regard to:
 - a)** employability, including recruiting and offering jobs in technical and management positions of the project;
 - b)** professional technical training programmes, including internships;
 - c)** contribution to the development of productive activities based on access to energy and local businesses, including partnerships with Mozambican companies;
 - d)** knowledge and technology transfer;
 - e)** capacity building and creation of opportunities for local companies to supply goods and services and carry out value chain activities;
 - f)** other aspects that may arise related to the characteristics of the project.

- 4.** The development of actions and mechanisms for local content underlies the philosophy of implementation of supply activities for access to energy in off-grid areas and is included in a local content plan, in terms to be regulated.

ARTICLE 18 Consumer rights

Within the scope of this regulation, the following constitute general consumer rights:

- a)** supply of electrical energy, with quality, safety and reliability, upon payment of the amount due, including the right to be connected in the concession area within the time period projected for the implementation of the project;
- b)** quality assurance of the goods and services provided, as established in the applicable legislation;
- c)** protection of health and physical safety;
- d)** information on prices and tariffs and calculation methods, equipment safety, invoicing, forms of payment, quality of goods and services and all existing rules and regulations on complaints and suspension of service supply;
- e)** fair tariffs established in accordance with the principles provided for in this regulation and the terms and procedures to be regulated;
- f)** protection from unfair terms or conditions relating to the goods and services provided;
- g)** indemnification for damage resulting from the provision of defective goods or services;
- h)** access to dispute resolution mechanisms.

ARTICLE 19 Duties of the consumer

Within the scope of this regulation, the general duties of the consumer are as follows:

- a)** pay the fees due for the goods and services provided within the stipulated time periods;
- b)** facilitate supervision and inspection by the competent entity and the concessionaire or registration titleholder;
- c)** comply with technical and safety requirements with respect to the electrical grid, equipment and installations;
- d)** provide information for billing purposes;
- e)** take care of the goods provided and refrain from practicing fraudulent energy consumption activities or acts;
- f)** comply with the obligations provided for in the energy supply contract;
- g)** proceed with the efficient use of energy; and
- h)** provide information for energy planning purposes.

ARTICLE 20 Technical and Safety Standards

The operation and management of mini-grid projects must comply with the following applicable technical and safety standards, among others, and in terms to be regulated:

- a)** construction and implementation of infrastructure and mini-grid generation facilities;
- b)** construction and implementation of mini-grid distribution grids;
- c)** operation and maintenance of mini-grids;
- d)** frequency, voltage and harmonic variations;
- e)** the number and duration of power supply interruptions;
- f)** current or future interconnection to the national electricity grid.

ARTICLE 21 Service Quality and Commercial Relations Standards

The operation and management of mini-grids must comply with the following norms and standards of service quality and commercial relations with end consumers, among others, and in terms to be regulated:

- a)** obligation to connect final consumers to the mini-grid within the concession area and in accordance with the exploration plan;
- b)** model contract to be executed;
- c)** connection processes and deadlines;
- d)** energy measurement and billing;
- e)** invoice model, invoicing time periods, invoice delivery and non-payment cases;
- f)** suspension of supply; and
- g)** complaint process and duty of information.

ARTICLE 22 Interconnection of mini-grids

- 1.** In the event that the national electricity grid is planned to be expanded to reach the concession area of a mini-grid, the manager of the national electricity grid and the proponent of the project for the expansion of the national electricity grid must notify the Energy Regulatory Authority and the concessionaire(s) affected, including the proposal for interconnection, or not, of the respective mini-grid production or distribution facilities, under the conditions mentioned in number 3 of this article.
- 2.** The proposal for interconnecting the mini-grid, referred to in the preceding paragraph, is subject to prior technical and economic studies, which demonstrate, under the terms of this article:
 - a)** the technical, economic and financial feasibility of the interconnection, including with regard to customers and the mini-grid concessionaire;
 - b)** the impact of interconnection on the distribution grid, including measures, works and reinforcement of installations necessary to preserve energy quality, reliability, safety and efficiency;
 - c)** reliability and continuity of supply to mini-grid customers.
- 3.** The conditions for interconnecting the mini-grid to the national electricity grid must contemplate the following alternatives:
 - a)** preservation of the mini-grid concession without interconnection;
 - b)** interconnection to the national electricity grid with preservation of the mini-grid concession, allowing the mini-grid concessionaire to purchase energy from the concessionaire of the electrical energy distribution grid;
 - c)** interconnection to the national electricity grid with the conversion of the mini-grid concession into a generation concession, allowing the mini-grid concessionaire to sell energy to the distribution grid concessionaire and transferring the distribution infrastructure and electrical installations, as well as the sales activity of the mini-grid to the concessionaire of the electrical energy distribution grid;
 - d)** interconnection to the national electricity grid with extinction of the mini-grid concession and subcontracting the management and operation of electrical energy distribution and sales activities to the [former] concessionaire;
 - e)** interconnection to the national electricity grid with the extinction of the concession and total transfer of the activities and the infrastructure and electrical installations included in the mini-grid to the concessionaire of the electrical energy distribution grid or other public entity to be indicated.
- 4.** Without prejudice to the provisions of the preceding paragraphs, the manager of the national electricity grid shall ensure, in cases of interconnection of the mini-grid to the national electricity grid, compliance with the Grid Code and other technical standards applicable to the national electricity grid.
- 5.** In the event of the choice of options c) or d) as provided for in paragraph 3 of this article, there will be a fair indemnification, calculated based on the accounting book value of the assets of the project, as of the payment date, including the lost profits.
- 6.** In case the circumstances of paragraph e) of number 3 of this article are verified, the financial indemnification to be received by the mini-grid concessionaire corresponds to the amount provided for in number 7 of article 15 of this regulation.
- 7.** In case the mini-grid concessionaire maintains the production activity, the purchase and sale of energy is managed by a contract, with the energy sale price being approved, in terms to be regulated, by the Energy Regulatory Authority.

8. Without prejudice to the provisions of the previous numbers, the Energy Regulatory Authority shall regulate and monitor:

- a)** the conditions for interconnecting the mini- grid to the national electricity grid;
- b)** contracts for interconnection and for the purchase and sale of electrical energy, and respective tariffs and prices; and
- c)** the conditions applicable to the determination of the amount of indemnification to be paid to the concessionaire for the assets of the mini- grid to be transferred and the respective regime.

ARTICLE 23 Tariff Principles

1. The principles of tariff regulation applicable to the provision of access to energy in off-grid areas are as follows:

- a)** the recovery of costs, provided that they are prudent, necessary, efficient and reasonably incurred on the basis of the principle of tariff additivity;
- b)** the reasonable return on invested capital taking into account an adequate capital structure that reflects the project's risks;
- c)** the stability of tariffs considering the expectations and capacity of the consumer and, at the same time, the economic and financial balance of the regulated activities under conditions of prudent and efficient management;
- d)** the fair sharing between the concessionaire and its final consumers of the results of the impact of fiscal and regulatory incentives and benefits, as well as economies of scale and productivity gains; and
- e)** transparency, simplicity and efficiency in the procedures for formulating, setting and publicizing tariffs, as well as in their inspection.

2. The tariff is calculated based on the accepted costs and the permitted income, including an adequate remuneration of the invested capital, with the possibility of establishing a maximum tariff limit to be charged in line with the consumers' payment capacity and incentives to economic efficiency.

3. The tariff structure, based on conventional kilowatt/hour tariffs, fixed tariffs, monthly fixed rates, capacity tariffs or a combination thereof, is fixed for each consumer category, by tariff cycles, subject to review and adjustments, and public consultation and adequate publicity for its recipients are mandatory.

ARTICLE 24 Environmental Assessment and Classification

1. Supply activities for accessing energy in off-grid areas from a mini-grid shall be carried out in accordance with the applicable legislation on the protection and preservation of the environment, including social, economic and cultural aspects, as well as with the respective technical and environmental safety standards.

2. Supply activities for accessing energy from mini- grids that use solar energy sources are activities whose environmental and social impacts are negligible, insignificant or minimal, not causing irreversible impacts, and having positive impacts related to development of these activities which are superior to or more significant than the negative impacts, under the terms of the applicable legislation.

3. For the purposes of the previous number, the applicant shall attach to the respective environmental licensing process, the document of Good Environmental Management Practices, in terms to be regulated.

4. The supply projects for access to electrical energy from mini-grids that use hydro, wind, or biomass sources with an installed capacity of up to 10 MW, are analysed case by case, during the instruction of the pre-evaluation process by the competent entity and based on the applicable legislation.

5. The demobilization of installations and equipment, the environmental recovery of the occupied land and the recycling of equipment and components of the mini-grid system, as well as the treatment of waste throughout the concession period until its end, are the responsibility of the mini-grid concessionaire, under the terms of the applicable legislation and the approved decommissioning, replacement, recycling or recovery plan.

ARTICLE 25 Right to Use Benefit from the Land

1. The use and benefit of land for the implementation of mini-grids is governed by the Land Law and other applicable legislation.
2. For the purposes of implementing mini-grids, the duration of the land use and benefit right, any easement, special license or other right of a real property nature, coincides with the term of the respective concession.
3. The construction or installation of mini-grid electrical installations, including overhead, surface, underground and submarine electrical energy conductors, for the distribution of electrical energy, as well as for the connection of electrical production installations to the transmission or distribution grids, implies the constitution of an administrative easement, according to the voltage levels and other standards to be registered in the respective concession, and the concessionaire shall be responsible for the compensation in an amount that represents the effective damage caused by the non-use by the party affected by the easement.
4. Without prejudice to the provisions of the previous number, when the nature and characteristics of the mini-grid project so require, a partial protection zone may be created at the location of the mini-grid installation, by means of a prior public act of declaration of public need, utility or interest, with the consequent expropriation of the land use and benefit rights and other private property goods and assets and the settlement of fair indemnification, for the expropriated goods, as at the date of payment, as well as resulting damages and loss of profits of its holder, arising from the divestment of its assets, under the terms of the applicable legislation.
5. A security zone for the electrical installation corresponding to the strip adjacent to the respective installation is established within the easement area.
6. The concessionaire of the mini-grid electrical energy supply concession is obliged to register the respective easement in the land registry and in the competent land registry office.
7. The acquisition of the right to use and benefit from land, as well as the creation of easements for the purpose of implementing mini-grids, is subject, when applicable, to the resettlement rules and payment of compensation, in accordance with the applicable legislation.

Chapter III Energy services

SECTION I Registration

ARTICLE 26 Registration

1. The provision of energy services is subject to registration with the Energy Regulatory Authority, at the request of the interested party.
2. The registration is valid for 5 years, after which, if there is no interest in extension, it expires.
3. Registration is non-transferable.

ARTICLE 27 Registration requirements

The registration for the provision of energy services is issued after the verification of the following elements and documents, according to the type of energy service provided:

- a) complete identification of the applicant, including:
 - i NUIT, Certificate of Registration of Legal Entities with an updated copy of the articles of association published in the Boletim da República de Moçambique [official Government Gazette of the Republic of Mozambique]; and
 - ii address, telephone and electronic contacts of the applicant and its legal representative.
- b) license of technician responsible for private service electrical installations issued by the competent entity;
- c) technical description, standards and quality certifications of devices and equipment, as applicable;

- d)** identification of the area of activity;
- e)** price list; and
- f)** Solid Waste Management Plan, which contains elements relating to the demobilization and recycling of autonomous systems, installations, equipment, and components of energy services, as well as the treatment and disposal of waste.

ARTICLE 28 Suspension, modification, extension and cancellation of registration

- 1.** The suspension, modification, extension and cancellation of registration are subject to 60 days prior notification to the Energy Regulatory Authority.
- 2.** The issuance, modification, extension and cancellation of registration is subject to:
 - a)** publication in the electronic portals [websites] of the Ministry that oversees the energy sector and of the Energy Regulatory Authority; and
 - b)** recording in the energy registry.

ARTICLE 29 Elements of the registration certificate

The registration follows the template approved in a diploma by the Minister who oversees the energy sector and which contains the following elements:

- a)** identification of the titleholder;
- b)** issuing date and duration;
- c)** license number of the technician responsible for private service electrical installations;
- d)** the category of equipment or energy services subject to registration;
- e)** location of activity.

ARTICLE 30 Prices

The prices of equipment which are used in energy services are approved by the Energy Regulatory Authority.

ARTICLE 31 Rights and duties of the registration holder

- 1.** The registration holder has the following rights:
 - a)** carry out the activities of providing energy services to consumers, including the right to charge for the service provided;
 - b)** obtain the collaboration with the respective competent entities in the issuing, maintaining and renewing of all other approvals and authorizations necessary for carrying out the activities for energy service provision;
 - c)** have access to the respective fiscal benefits applicable under the terms of article 5 of this regulation and other applicable legislation through the presentation of the respective registration certificate.
- 2.** The registration holder has the following duties:
 - a)** submit to the Energy Regulatory Authority, by 31 May of each year, an activity report containing the number, type and location of sales and other pertinent information;
 - b)** monthly send to the entity responsible for implementing electrification activities in off- grid areas, information on new residential systems, including other information of public interest;
 - c)** comply with quality standards, in relation to both equipment and service provision;
 - d)** comply with the Solid Waste Management Plan approved in the act of issuing the registration.

ARTICLE 32 Cancellation and expiry of registration

- 1.** The registration for the provision of energy services is cancelled, upon 10 days prior notice to the registration holder by the Energy Regulatory Authority, when:
 - a)** failure to pay the regulatory fee;
 - b)** non-compliance with the information or document contained in the register, such as with regard to the quality and certification of equipment and systems;
 - c)** no longer providing energy services;
 - d)** the use of equipment that does not comply with the applicable norms and standards;
 - e)** non-compliance with quality standards and solid waste management plan;
 - f)** the insolvency or bankruptcy of the holder and consequent liquidation;
 - g)** cancellation by the registration holder.
- 2.** The registration holder has a period of 10 days to present a justification with a view to regularizing the situation that caused the cancellation of the registration, and the Energy Regulatory Authority is responsible for carrying out a case-by-case assessment and deciding on the justification presented.
- 3.** Where the provision of energy service activities without proper registration is verified, the Energy Regulatory Authority shall notify the interested party in writing, giving a period of time within which it should regularize the situation, after which sanctions shall be applicable for the carrying out of the activity without an authorisation, under the terms of the applicable legislation.

Chapter IV Fees

ARTICLE 33 Fees

The carrying out of supply activities for access to energy in off-grid is subject to the payment of a regulatory fee, the terms and conditions of which are defined by the Energy Regulatory Authority.

Chapter V Inspection and Sanctions Regime

ARTICLE 34 Inspection

- 1.** The Energy Regulatory Authority shall monitor, supervise and control compliance with the terms of the concession and registration, in relation to administrative, accounting, commercial, technical, economic and financial matters and shall establish procedural rules compatible with the requirements of providing an appropriate service for the subject matter of a concession or registration.
- 2.** The competent entities within the scope of their attributions for the planning, development and implementation of mini-grid projects and the provision of energy services, shall collaborate with the Energy Regulatory Authority who is responsible for monitoring the projects being implemented, in carrying out actions referred to in the previous number.
- 3.** For the purposes of paragraphs 1 and 2 of this article, the Energy Regulatory Authority shall:
 - a)** carry out surveys, inspections and tests of energy supply installations and equipment for access to energy in off-grid areas;
 - b)** question the legal representatives and any employees of the concessionaire or registration holder, as well as request documents and other information elements deemed necessary or convenient;

- c) freely access the installations of the concessionaire or registration holder and proceed with the search, examination, processing and collection of copies or extracts of documents and other information in the possession of the concessionaire or registration holder that it deems necessary or convenient, including through the respective information systems;
 - d) require the concessionaire or registration holder to carry out the studies, tests or simulations, including using the respective information systems, which fall within the performance of the concessionaire's duties, as well as monitoring and participating in their preparation and implementation, namely in the context of the definition of the principles underlying energy policy;
 - e) analyse the business practices of the concessionaire or registration holder with respect to the authorized activity or any associated business;
 - f) issue orders, decisions, directives or instructions, within the scope of its supervision, monitoring and inspection powers.
4. In order to carry out the inspection function referred to in this article, the concessionaire or registration holder must allow access to the installations and other premises by the technical personnel of the authorized representatives of the competent entity including the measuring devices and instruments, and provide all the necessary information and assistance or support.
 5. The concessionaire or registration holder shall provide all the necessary assistance to the competent entity to conduct the work, including information and clarifications that allow the assessment of the correct execution of activities, as well as the data considered necessary for the statistical control and planning of the national electrical system.
 6. The non-compliance, by the concessionaire or registration holder, with the inspection requests, recommendations and determinations may result in the application of sanctions under the terms of the applicable legislation.

ARTICLE 35 Offences and sanctions

Without prejudice to the sanction regime to be approved by the Energy Regulatory Authority, the regime of infractions provided for in the Electricity Law applies, with the necessary adaptations, to mini- grid concessionaires, holders of energy services registration and their consumers.

ARTICLE 36 Complaints and Dispute Resolution

1. Interested parties may file complaints with the concessionaire and the energy services provider whenever they consider that their rights have not been properly safeguarded in violation of the provisions of this regulation, respective contracts and other applicable legislation.
2. Disputes between the concessionaire and consumers, involving regulatory matters, are subject to mediation, conciliation, arbitration and decision by the Energy Regulatory Authority.
3. Recourse to the Energy Regulatory Authority for the resolution of disputes does not exclude the right to resort to judicial and arbitration instances under the terms of the following numbers.
4. Without prejudice to matters subject to resolution by an independent expert under the terms of number 7 of this article and appeal by the parties to mediation under the terms of the previous numbers, disputes between the State and the concessionaire involving foreign direct investment of the activity object of the concession, including the investment and its regime, may be resolved by arbitration, by notification in writing, in accordance with:
 - a) the rules of the Washington Convention, of 15 March 1965, on the Settlement of Disputes Relating to Investments between States and Nationals of Other States, as well as of the respective International Centre for the Settlement of Disputes Relating to Investments between States and Nationals of other states;
 - b) the rules established in the Additional Facility Regulation, approved on 27

September 1978, by the Board of Directors of the International Centre for the Settlement of Disputes Relating to Investments, if the foreign entity does not meet the nationality conditions provided for in article 25 of the Convention; or

- c) the arbitration rules of the International Chamber of Commerce (ICC), headquartered in Paris; or
- d) in the case of ad hoc arbitration, in accordance with the terms of the UNCITRAL Arbitration Rules in force.

5. The forum for arbitration under the rules of ICC or UNCITRAL is Mozambique, the language of arbitration is Portuguese, and the decision is binding, final and enforceable in any competent court of law.

6. The production of documents and other matters relating to the presentation of evidence are determined in accordance with the Rules of the International Bar Association on the Production of Evidence in International Arbitration in the version in force on the date of commencement of the arbitration.

7. Any dispute of a technical or financial nature, including the calculation of the tariff, price, indemnification values, compensation, application of quality standards, the operation and maintenance of the electrical installation, is submitted to an independent expert when one of the parties notifies the other to that effect. In the absence of an agreement by the parties, the expert is appointed by the Energy Regulatory Authority, with the decision of the expert being final and binding on the parties and competent entities.

Chapter VI Final and Transitional Provisions

ARTICLE 37 Acquired Rights and Settlement

1. Operators of electrical installations that are part of a mini-grid, as well as energy service providers, in operation at the date of entry into force of this regulation, shall maintain the rights and obligations contained in the respective authorizations or contracts for the periods defined therein, without prejudice to the compliance with these Regulations and other applicable legislation.

2. Persons and entities that currently carry out energy supply activities covered by this regulation, without the respective authorization or under an authorization without a defined term, must regularize the status of the authorization of the activity.

3. The energy service providers that, on the date of approval of this Regulation, have not obtained the Licence for a Technician Responsible for Private Service Electrical Installations, must regularize their situation by applying for the Licence from the competent entity.

4. The recognition of the rights and obligations referred to in paragraphs 1 and 2 of this article shall be subject to the titleholder's submission of the respective documentation proving the exercise of the activities of supplying access to energy in off-grid areas, within a period of 180 days from the entry into force of these Regulations.

5. Projects of activities for supplying access to energy in off-grid areas covered by this regulation, authorized under Law n.º 21/97, of 1 October, which have not yet started their implementation, or whose works are delayed, in relation to the timelines established in the respective authorization, must present an implementation schedule for the project, including the respective budget, within 180 days from the date of entry into force of this regulation.

- 6.** In the event that the project technical and financial plan and schedule for the implementation and completion of the project, referred to in the previous number, are not presented or do not offer effective conditions for the commencement of the commercial operation, the corresponding authorization is declared extinct.
- 7.** Entities authorized for the development of a mini-grid project pursuant to Law n.º 21/97, of 1 October, pursuant to which a partial protection zone was created for the electrical installations that comprise the project, may change the applicable regime with a view to adapting the provisions applicable to administrative easements under the terms of article 25 of these regulations.
- 8.** The competent entity, through a process administered by the Energy Regulatory Authority, shall have the authority to recognize the acquired rights referred to in the previous numbers.

ANNEX – Glossary

Access to energy in off-grid areas: provision of installations, infrastructure, systems, equipment and services, including their interconnection with or without cable, access to physical and virtual infrastructure, mobile and fixed, which are intended for the supply for access to energy in off-grid areas;

Administrative easement: any and all limitations on the use, occupation and transformation of the land, which prevent the holder from benefiting from its full right, imposed by virtue of the public utility of the electrical installation object of the easement;

Audited book value: means the residual value of a project's assets according to the balance in the balance sheet based on the original cost of the asset, plus additional expenses charged to the asset, less any depreciation and/or amortization and impairment charges;

Authorisation: administrative act carried out by the competent entity that is intended for the recognition, modification, extension and cancellation of the rights and obligations of its titleholder;

Autonomous Systems: equipment and installations used in the production and consumption of electrical energy for domestic or productive use, including home solar systems;

Commencement of Commercial Operation: the date of start-up and conclusion of commissioning and testing of the electrical installation equipment, or the start date of the provision of energy services, as notified to the competent entity;

Competent Entity: the public law body or legal entity, endowed with operational powers attributed by law to exercise its competences and powers;

Concession Area: geographical area defined in the concession of mini-grids for carrying out supply activities for access to energy in off-grid areas, which may be a single area or a set of multiple areas;

Concession: administrative act by which the competent entity authorizes a legal person governed by public or private law, for a specified period, the right to explore, separately or jointly, the supply activities for access to energy in off-grid areas, pursuant to this Regulation;

Concessionaire: titleholder of a concession granted under the terms of this regulation;

Connection Point: physical infrastructure and/or equipment that make the connection between a unit of generation, storage, distribution and transport systems and consumers;

Consumer: an individual or legal person, final consumers, other distributors, who purchase electrical energy, subject to the supply of electrical energy or energy services for domestic, industrial or commercial use;

Consumption: use of electrical energy by an individual or legal person in residential, commercial, industrial, agricultural units, other distributors, export consumers and sellers;

Distributor: holder of a concession for the activity of electrical energy distribution, including a distribution grid operator, responsible for the transmission of energy with a view to its supply to consumers or to distribution stations that sell energy to consumers, as well as distributors of energy services;

Electric Energy Distribution: transmission of electrical energy by a distributor through medium and low voltage grids to be delivered to the consumer;

Electrical energy sale: sale of electrical energy to a consumer for its own use or for the purpose of sale to third parties;

Electrical Installation: equipment, electrical circuits and infrastructure and respective accessories for the supply of electrical energy, up to, in the case of being part of a distribution grid, the point of connection to the consumer;

Electricity Distribution Grid Concessionaire: means the concessionaire that transmits electrical energy, through medium and low voltage grids for delivery to the consumer;

Energy Efficiency: consists of a set of actions and measures aimed at a more rational and intelligent use of energy and equipment, in order to reduce energy consumption, costs and minimize environmental impacts, maintaining or improving service quality;

Energy Regulatory Authority: entity responsible for ensuring the regulation of energy supply activities, whose competences are defined in Law n.º 11/2017, of 8 September;

Energy services: include services for energy consumers, preferentially renewable, such as supply, financing, installation, operation, maintenance of equipment and electrical installations, including autonomous systems and other technologies of energy;

Energy Sources: fossil energy sources and renewable energy sources, as well as any other energy source that may be considered for purposes of energy generation, excluding atomic energy sources;

Entity responsible for implementing electrification activities in off-grid areas: the Fundo de Energia, FP pursuant to Decree n.º 101/2020, of 12 November and the National Electrification Strategy, approved by the Resolution n.º 49/2018, of 31 December;

Establishment license: document issued by the competent entity certifying that the electrical installation can be established within a certain period;

Final consumer: an individual or a legal person, including residential, commercial, industrial, agricultural units, other distributors, consumers who buy energy for export or consumers of supply services for access to energy for their own consumption;

Force Majeure: event or circumstance or a combination of events and circumstances, which are unforeseeable and unavoidable, whose effects, even where indirect, are produced independently of the will or action of the party invoking force majeure, and which prevent the fulfilment of the party's obligations. Force majeure includes acts of war or subversion, hostilities or invasion, rebellion, terrorism or epidemics, acts of governmental expropriation, liens, redemption and requisitions or nationalizations that do not comply with the terms and procedures established in this regulation and other legislation applicable; lightning, severe explosions, floods, cyclones, earthquakes and other natural cataclysms that directly affect the authorized activities;

Infrastructure: a set of systems, installations, equipment, software and other physical and virtual components that allow access to energy in off-grid areas;

Mini-grid: integrated system of electrical installations for the production, distribution, storage and sale of electrical energy, using mainly renewable energy sources, on a small scale less than or equal to 10 MW, not connected to the National Electricity Grid;

National Electricity Grid (REN): comprises the Electrical Energy Distribution Grid and the National Electrical Energy Transmission Grid;

Off-grid areas: locations not served by REN, with current and potential consumers, located in rural areas and remote communities;

Operating License: document issued by the competent entity certifying that the electrical installations have been inspected, found to be in compliance and authorizing their operation;

Other technologies: equipment used in the production and consumption of thermal or electrical energy with improved efficiency, such as improved stoves based on biomass and stoves based on alternative fuels;

Project: the entire process or cycle of carrying out a supply activity for access to energy in off-grid areas, isolated or integrated, from the design, construction, operation, financing and management of infrastructure, systems, installations, equipment, other components and related services, which guarantee advances in socio-economic and environmental terms under an authorization under the terms provided for in this regulation;

Registration Titleholder: anyone who holds a registration for the provision of energy services under this regulation;

Registration: administrative act aimed at recognizing, modifying, extending and cancelling the rights and obligations of its titleholder for the provision of energy services;

Responsible Technician: individual or legal person licensed by the competent entities under Decree n.º 51/2013, of 13 September;

Rural areas: areas characterized by low population density that are not part of an urbanization area, or that do not have a distribution grid accessible to consumers;

Storage: means the activity of converting electrical energy into energy that can be stored, as well as the storage and eventual reversion into electrical energy, by means of a controllable mechanism, which can be exercised autonomously or integrated into a system of production, transport or distribution;

Supply Activities for Access to energy in off-grid areas: comprise initiatives and projects considered to be of a social and sustainable development nature, aimed at carrying out the activities, jointly or separately, of production, distribution, commercialisation and storage of electrical energy, through mini-grids, and the provision of energy services;

Technical Safety and Quality of Service Standards: set of national and international technical standards and standards for safety and quality of equipment and services applicable to supply activities for access to energy in off-grid areas;

Virtual Infrastructure(s): a set of systems, installations, equipment, software and other components interconnected by digital means in the operation, management, sale and monitoring of off-grid energy technologies;



MINISTERIAL DECREE N° 8/2023 OF 31 MAY

Regulation for the Award of Mini-grids Concessions



REPUBLIC OF MOZAMBIQUE
**MINISTRY OF MINERAL
RESOURCES AND ENERGY**

MINISTERIAL DECREE Nº 68/2023 FROM 31 MAY

It has become necessary to establish the procedures to perform the supply activities for access to energy through mini-grids, in accordance with Article 10, Section 1 of the Regulation on Access to Energy in Off-grid Areas, approved by Decree n.º 93/2021, 10 December, I hereby determine:

ARTICLE 1

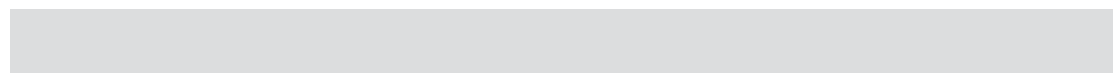
The Regulation for the Assignment of Concessions for Mini-grids, attached to this Ministerial Diploma and forming an integral part thereof, is hereby approved.

ARTICLE 2

This Ministerial Diploma shall take effect on the date of its publication.

Ministry of Mineral Resources and Energy in Maputo, on 3 April 2023. – The Minister,
Carlos Joaquim Zacarias.

The Minister



Carlos Joaquim Zacarias

Regulation for the Award of Mini-grids Concessions

Chapter I - General Provisions

ARTICLE 1 Definitions

For the purposes of this Regulation, the meaning of the terms and expressions used are provided in the attached glossary, which forms an integral part of this Regulation.

ARTICLE 2 Object

This Regulation establishes the simplified procedures for the award of mini-grids concessions.

ARTICLE 3 Scope

1. This regulation establishes the rules applicable to the exercise of supply activities for access to energy through mini-grids.
2. This Regulation applies to public and private legal persons engaged in supply activities for access to energy in off-grid areas.

ARTICLE 4 Competences of the Energy Regulatory Authority

Without prejudice to other essential competences under the implementation of supply activities for access to energy in off-grid areas, the Energy Regulatory Authority is in charge of the following:

- a) conduct public tender for awarding of concessions for mini-grids projects;
- b) regulate, process, instruct and approve the terms and conditions of the interconnection process, as well as the modification and termination of the respective concession agreements.
- c) approve forms, instructions, reports, plans, contract templates, guidelines, directives, and other necessary documents for the exercise of its functions.
- d) review and approve the investment and expansion plans submitted by the mini-grid concessionaires;
- e) conduct a survey of all off-grid energy access projects in operation or under implementation;
- f) approve a list of certified equipment, as well as information on technical and safety standards, for equipment certification;
- g) receive the annual reports submitted by concession holders and publish summaries of the information and data collected, including numbers of installations, numbers of connections to consumers, levels of energy generated and distributed, and local content actions;
- h) supervise, oversee, and monitor the activities regulated under this Regulation;
- i) ensure coordination between the entities responsible for electrification implementation activities in grid-connected and off-grid areas; and
- j) approve the regulations for the activities falling within its competences in accordance with this Regulation.

ARTICLE 5 Local content

1. The implementation of supply activities for access to energy in off-grid areas shall provide direct and indirect socio-economic benefits for the Mozambican economy, with a special focus on the residents and communities of the project, integrating gender equity and equality.
2. The development and implementation of local content actions and mechanisms is a key component of the economic and financial model of the mini-grid project, during the construction, installation, operation, maintenance, management, and monitoring phases, as applicable.
3. The local content plan is evaluated by taking into consideration the mini-grid category, dimension, location, and other characteristics, following the elements approved by the Energy Regulatory Authority.
4. The implementation of the local content plan, according to this article, is reported by the concessionaire in the annual activity report to the Energy Regulatory Authority.

Chapter II - Mini-grid concessions

SECTION I Procedures for the award of mini-grid concessions

ARTICLE 6 Categories of mini-grid

1. Mini-grids are classified into three categories:
 - a) category 1 — Mini-grids with an installed capacity between 1,001 MW - and 10 MW;
 - b) category 2 — Mini-grids with an installed capacity between 151kW - 1 MW; and
 - c) category 3 — Mini-grids with an installed capacity of up to 150 kW.
2. In the case a concession integrates multiple areas, the mini-grid category is determined based on the mini-grid with the largest installed capacity.
3. The commencement of commercial operation of category 1 and 2 mini-grids will require an establishment license and an operating license, according to the applicable legislation.
4. Category 3 mini-grid installations are exempt from the obligation to obtain the establishment license and the operating license, without prejudice to the respective inspection by the Energy Regulatory Authority.

ARTICLE 7 Criteria for awarding concessions

1. The award of concessions for mini-grids depends on the verification of the following eligibility criteria:
 - a) the applicant's legal, technical, economic and financial capacity;
 - b) land use rights and the location of the mini-grid project;
 - c) power generation and distribution technologies;
 - d) cost of the mini-grid venture and the financing arrangements;
 - e) socio-economic impact of the mini-grid project, including the model and the economic and financial benefits for the concession area, which may include:
 - i results of the public hearing of people and communities affected by the mini-grid project;
 - ii the terms of the existing agreement with local communities, cooperatives, and other forms of association and partnership for the development of the mini-grid project; and
 - iii the terms of resettlement and compensation for residents affected by the activities subject to the concession, where applicable;
 - f) tariff proposal;
 - g) environmental impact and its mitigation;
 - h) local content plan;

- i) number of connections as of the date of the start of operation and in the expansion plans; and
 - j) any other aspects impacting the implementation of the mini-grid venture.
2. The Energy Regulatory Authority shall verify and weigh the applicability of the eligibility criteria described in the previous number, considering the category of the mini-grid, size, location, and other characteristics of the project.

ARTICLE 8 Documents and information accompanying the application for the award of concessions

1. The application for the award of concessions for mini-grids, by the interested party, is obtained and submitted to the Energy Regulatory Authority, by filling in a template form, in physical or electronic format, accompanied by the following information and documents:
- a) NUIT, NUEL, and certificate from the Legal Entity Registry Office with an updated copy of the by-laws published in the Mozambique Government Gazette or equivalent documentation;
 - b) address, telephone, and electronic contact details of the applicant and its legal representative;
 - c) description of the electrical system and installation, certified by a duly qualified technician in accordance with the applicable legislation, which includes the energy source(s), power and volume of energy to be supplied annually, appliances and equipment to be used;
 - d) technical and financial studies, including the financial plan, the business model, the identification of financing sources, and the local content plan;
 - e) tariff proposal;
 - f) identification of the concession area, including a topographic plan at an appropriate scale and indication of the location of the facilities and equipment, the distribution network, and the corresponding land use rights and administrative servitude;
 - g) certified copy of the right of use of the land or instrument resulting from the law or contract, conferring legitimacy to proceed with the construction of the mini-grid project in the concession area;
 - h) authorization for the use and exploitation of water resources, in the case of a hydroelectric project;
 - i) copy of the agreement with local communities, cooperatives, and other forms of association and partnership for the development of the mini-grid project, where applicable;
 - j) description of any interactions with government institutions regarding the mini-grid project, including a copy of supporting documents obtained at the time of the application;
 - k) schedule of activities, including start and completion of construction, commissioning, and commencement of commercial operation;
 - l) a statement or other document attesting to the applicant's financial capacity, including, as appropriate, the term of the funding commitment and any rights and obligations arising therefrom;
 - m) term of commitment or other third-party liability insurance instrument on human, environmental, and property damage;
 - n) term of commitment to guarantee performance for the construction phase considering the size and complexity of the project; and
 - o) list of other applicable registrations and authorizations.
2. For Category 1 and Category 2 mini-grids, in addition to the requirements set out in the previous number, the following documents and information shall be submitted:
- a) organigram and, in the case of a public limited company, the shareholders holding a minimum of 5% of the share capital;
 - b) the market research, including the survey report with members of the community, association, or other grouping of residents of the concession area, disaggregated by gender and age group; and
 - c) the statement demonstrating technical and financial capacity and experience in similar projects.

- 3.** The technical and financial study to be submitted for Category 1 and Category 2 mini-grids shall, in addition to the provisions of paragraph 1(d), include:
- a)** the demographic description of consumers;
 - b)** the consumer connection plan in the concession area; and
 - c)** the investment plan for the initial capital and throughout the life of the venture.

ARTICLE 9 Procedures for granting concessions

- 1.** The call for tenders for the award of concessions for mini-grids shall be published on the electronic portals of the Ministry that oversees the energy area, the Energy Regulatory Authority, and the entity responsible for off-grid electrification implementation activities, as well as in the newspapers with the largest circulation, at least 30 (thirty) days before the deadline for the submission of the bid.
- 2.** The bidding documents shall provide all the information that enables a potential competitor to prepare its proposal, including the criteria for the evaluation and selection of the proposals and all the necessary models and forms, and follow the phases and deadlines established in the following numbers, with the necessary adaptations.
- 3.** In the case of an application for a concession for a mini-grid, upon submission and receipt, the Energy Regulatory Authority shall record and issue a confirmation of receipt of the application and within 5 (five) days:
 - a)** verify its conformity; and
 - b)** in the case of missing or complementary elements, request for the applicant to provide them within a period of 10 (ten) days, extendable when applicable.
- 4.** The procedure for receiving and confirming the conformity of the application, in accordance with the preceding paragraph, shall be secret and confidential until the publication of the notice in accordance with this article.
- 5.** The Energy Regulatory Authority shall reject the application for a concession under paragraph 3 of this Article, where the applicant fails to submit:
 - a)** the elements of the application demonstrating the legal, technical, or financial eligibility requirements; and
 - b)** the additional elements requested within the time limit provided for their submission, in accordance with the previous paragraphs.
- 6.** Once the concession application has been duly verified and confirmed, the Energy Regulatory Authority shall proceed with the instruction of the process within 30 (thirty) days, namely:
 - a)** promoting and leading inter-institutional consultation and liaison with the entities that are competent to give an opinion or provide information;
 - b)** publishes a notice in the local administration, in the newspaper with the greatest local circulation, and the local radio station in the area where the project is located and on the electronic portals of the Ministry that oversees the energy area, the Energy Regulatory Authority and the entity responsible for implementing supply activities for access to energy in off-grid areas;
 - c)** promoting on-site public consultation in the area where the development is located, which should result in a written agreement with the approval of its residents and households; and
 - d)** issue an opinion to the competent entity within a maximum period of 10 (ten) days, concluding the investigation process.
- 7.** The competent authority has a maximum period of 15 (fifteen) days from the date of receipt of the opinion of the Energy Regulatory Authority to decide on the award of the concession.
- 8.** In case the application for the award of a concession is rejected, the Energy Regulatory Authority shall inform the applicant in writing of the reasons for the rejection and the applicant may challenge such decision in accordance with the applicable legislation.
- 9.** The process of instruction and decision for granting the concession takes place within a maximum period of 90 (ninety) days, counting from the working day following the final date of receipt of the application by the Energy Regulatory Authority.

10. The Energy Regulatory Authority establishes the conditions for simplifying and dematerializing the process of the concession award process for mini-grids.
11. The procedures for awarding concessions for mini-grids may be carried out through an electronic platform under terms to be regulated by the Energy Regulatory Authority.

ARTICLE 10 Conduct the procedure through an electronic platform

1. The procedures for awarding the concession are carried out electronically through an electronic platform and may be delivered by hand to the Energy Regulatory Authority when the applicant does not have access to it, under the terms to be regulated by the Energy Regulatory Authority.
2. The processing of the procedures referred to in the previous paragraph allows, namely
 - a) the delivery of applications and their annexes, documents, and communications;
 - b) consultation of the status of procedures by stakeholders;
 - c) obtaining automatic proof of submission of requests and communications, as well as the dematerialized issue of the instruments necessary for the exercise of the activity;
 - d) notification of decisions on applications; and
 - e) the waiver of the delivery of documentation that is in possession of any service and organism of the competent entities that intervene in the foreseen procedures, subject to the consent of the interested party to obtain it.
3. The submission of applications should ensure that access to the electronic platform by its users is made by authentication mechanisms proportional to the operations concerned.
4. When, due to temporary unavailability, it is not possible to carry them out through electronic platform, the procedures laid down in this Regulation shall be carried out by electronic communication to the electronic address of the Energy Regulatory Authority, published on the respective electronic portal and the platform's access page and the Energy Regulatory Authority shall ensure compliance with the procedures until the platform is operational again.
5. Whenever any elements of the procedure are delivered by electronic communication in accordance with the previous number, they shall be inserted in the electronic platform by the Energy Regulatory Authority within 5 (five) days following the cessation of the temporary unavailability situation.

ARTICLE 11 Concession award Formalities

After the award of the concession for mini-grids and signing the respective contract, the Energy Regulatory Authority proceeds to:

- a) publish in the *Government Gazette of Mozambique*;
- b) publish it along with the concession agreement, on the electronic portals of the competent entity, the Energy Regulatory Authority, and the entity responsible for implementing supply activities for access to energy in off-grid areas; and
- c) registration in the Energy Cadastre.

ARTICLE 12 Competing applications

The process for selecting the best technical and financial proposal among competing applications takes place in a public session conducted by the Energy Regulatory Authority following the procedures established by it.

ARTICLE 13 Performance guarantee for the construction phase

1. The amount and modality of provision of the performance guarantee, the model for which is set out in Annex II-C, is subject to assessment by the Energy Regulatory Authority, depending on the category, size, location, complexity, and socio-economic characteristics of the mini-grid project, with a maximum value of up to 5 (five) per cent of the investment value.

2. The concessionaire shall, within a maximum period of 30 (thirty) days from the date of communication of the award of the concession, submit documentary evidence of the issue of the performance guarantee.
3. Within 90 (ninety) days from the commencement date of commercial operation, in accordance with number 4 of article 16 of these regulations, the Energy Regulatory Authority shall return the guarantee provided by the concessionaire.
4. All expenses incurred in providing the guarantee referred to in this Article shall be borne by the mini-grid concessionaire.

ARTICLE 14 Concession agreement

1. The authorization for the award of the mini-grid concession shall be accompanied by a model concession agreement, in accordance with formats A or B attached.
2. The execution of the concession agreement may be authorized for Category 1 mini-grid projects using Format A whenever the location, complexity and public interest, justifies it.
3. The execution of the concession agreement, as well as its suspension, modification, and termination shall be subject to the following formalities:
 - a) publication on the electronic platforms of the competent authority, the Energy Regulatory Authority, and the entity responsible for implementing supply activities for access to energy in off-grid areas; and
 - b) registration in the Energy Cadastre.
4. The concession agreement is subject to the provisions of the applicable legislation.

ARTICLE 15 Concession area

1. The mini-grid concession can be awarded for a single area or a set of multiple areas, subject to the electrification plan for off-grid areas.
2. The concession area is set in the concession, based on the following factors:
 - a) plan and schedule for new consumer connections;
 - b) type of electrical installation;
 - c) demographics and geography of the concession area;
 - d) location, proximity, and other characteristics of a community, locality, or association that is the subject of the supply activities for Access to energy; and
 - e) economic and financial model of the mini-grid project.

ARTICLE 16 Deadlines

1. The concession for mini-grid developments is valid for a maximum of 30 years.
2. After the concession is awarded, the concessionary shall comply with an initial development period of 18 (eighteen) months, extendable, within which it shall begin the construction of the mini-grid, complying with the following obligations:
 - a) obtain and submit the environmental registration and related best practice, mitigation, and restoration plans resulting from the environmental impact assessment, as applicable;
 - b) obtain and register the provisional or definitive land use and benefit rights, and the respective administrative easements for electrical installations;
 - c) obtain and submit the permit to use and exploit water resources, as applicable;
 - d) conduct the digital demarcation of the concession area;
 - e) obtain and submit other permits applicable to the project, as stipulated in the concession and applicable legislation; and
 - f) obtain and submit the issuance of the performance guarantee for the construction phase as provided in the concession.
3. The initial development period may be extended by the Energy Regulatory Authority in cases where the non-compliance with the obligations mentioned in the previous number is not attributable to the concessionaire.

4. The concessionaire shall carry out the start of commercial operation of the mini-grid project within a maximum period of 36 (thirty-six) months from the effective date of the concession, except in the case of mini-hydro projects, where the maximum period is 48 (forty-eight) months, which can be extended for duly justified reasons.
5. Non-compliance with the obligations at the end of the initial development period, or failure to start the commercial operation, without duly justified reasons, shall constitute grounds for revocation of the concession.

ARTICLE 17 Requirements for modification of the concession request

1. The modification of the concession agreement shall be made in writing and signed by both parties.
2. The modification request shall be submitted and processed, in accordance with the terms of Article 18 of this Regulation, by the Energy Regulatory Authority and shall contain the following information:
 - a) proposal and justification for the intended modification;
 - b) the socio-economic, financial, and environmental impact of the intended modification, including the impact on compliance with the connections and expansion plan initially indicated by the concessionaire; and
 - c) proof of payment of the regulatory fee, in accordance with the applicable legislation.

ARTICLE 18 Processing of modifications for the concession

1. Once the modification request for the concession has been submitted, in accordance with the previous articles, the Energy Regulatory Authority shall process the request under the terms provided in articles 9 and 10 of this regulation, with the necessary adaptations.
2. Without prejudice to the provisions of the preceding number, the processing for the concession modification request shall be concluded within a maximum period of 60 (sixty) days from the date of its submission.
3. Once the instruction of the request is concluded, the Energy Regulatory Authority forwards the opinion to the competent authority for decision, informing the concessionaire in writing of the decision.
4. The applications referred to in this Article shall apply the criteria applicable to the award of the concession provided for in Article 7 of this Regulation, with all due adjustments.

ARTICLE 19 Processing and effects of revocation

1. The process of terminating the concession is prepared and processed by the Energy Regulatory Authority and decided by the competent entity that granted the concession, ensuring the right to due process.
2. Upon termination of the concession and without prejudice to the provisions of paragraph 3 of this Article, the competent authority may determine, in accordance with the criteria and procedures applicable to the award of the respective concession:
 - a) the reversion in favour of the State or an entity that it may designate with technical and financial capacity, for the audited book value of the electricity facilities, movable and immovable assets, tangible and intangible assets allocated, free of any encumbrance or charge, without prejudice to the compensation due to the State for losses and damages caused, as well as other obligations to which it is bound; and
 - b) the removal or destruction of electrical facilities, movable and immovable property, tangible and intangible assets, related to the activity that is the object of the concession, and the recovery of the site from the concession area at the concessionaire's expense, in accordance with the applicable legislation.
3. The electrical facilities subject to concession, as well as the assets allocated to them, built with public funds, revert free of charge to the State or to an entity with technical and financial capacity that it may indicate.

- 4.** The revocation of the concession for non-compliance with the obligation to commence construction, provided for in article 16, number 2, resulting from non-compliance with the obligations provided for therein without justifiable reasons, shall be notified in writing to the concessionaire, without the right to compensation for non-removable investments, giving the Energy Regulatory Authority the right to enforce the performance guarantee, and the concessionaire shall be liable for all other damages and losses arising therefrom.
- 5.** The revocation of the concession for non-compliance with the commencement of commercial operation, as provided for in Article 16, number 5, without justified reasons, shall be notified in writing to the concessionaire, giving the Energy Regulatory Authority the right to foreclose the performance guarantee and the reversion of the electrical facilities, movable and immovable property, and tangible and intangible assets allocated, to the State, in accordance with number 2 (a).
- 6.** Without prejudice to the preceding paragraphs, the revocation of the concession for breach of obligations by the concessionaire shall occur in accordance with number 2 (a).
- 7.** Without prejudice to the following paragraph, termination of the concession on the grounds of expropriation or serious breach of the State's obligations shall confer on the concessionaire the right to fair compensation, calculated based on the audited book value of the assets allocated to the project on the date of payment, minus the value of any insurance, to be determined by the Energy Regulatory Authority.
- 8.** The partial or total extinction of the mini-grid concession resulting from the interconnection to the National Electricity Grid shall give rise to the right to compensation under terms to be determined by the Energy Regulatory Authority.
- 9.** With the termination of the concession, the concession agreement expires, without prejudice to the rights and obligations that remain in force by the provisions of the contract and applicable legislation.

ARTICLE 20 Force majeure

- 1.** The delay or partial or total non-performance of the obligations by the concessionaire resulting from the occurrence of a force majeure event shall not be considered a breach of the obligations of the parties, and the term of the respective concession shall be extended for the duration of such event, provided that the concessionaire:
 - a)** has notified the occurrence of the force majeure event the Energy Regulatory Authority, as provided in paragraph 3 of this article;
 - b)** has taken all reasonable and prudent precautions and alternative arrangements to avoid or mitigate the effect of any delay caused, by such an event, including the use of alternative services, equipment, and materials;
 - c)** has complied with the terms and conditions resulting from the concession not affected by the force majeure event;
 - d)** has ensured the resumption of the normal activities of the project; and
 - e)** has complied with the terms and conditions resulting from the concession affected by the force majeure event as soon as the event ceases.
- 2.** In cases in which the concessionaire intends to invoke force majeure to justify the delay or partial or total non-fulfilment of obligations, it must notify the Energy Regulatory Authority in writing and within 48 (forty-eight) hours, providing details about the nature, circumstances, and date of occurrence of the event, its expected duration, affected rights and obligations, consequences and other aspects that are deemed necessary.
- 3.** Upon cessation of the force majeure event, the concessionaire is obliged to resume the suspended activities within a maximum period of 30 (thirty) days.
- 4.** If the event of force majeure results in the termination of the concession and the right to compensation, the amount of compensation shall correspond to the audited book value of the project to be determined by the Energy Regulatory Authority.

Annex I - Glossary

Access to energy in off-grid areas: provision of facilities, infrastructure, systems, equipment, and services, including their interconnection, wired or wireless, access to infrastructure, both physical and virtual, mobile, and fixed, for the supply of energy access.

Administrative Servitude: any limitations on the use, occupation, and transformation of the soil that prevents the holder from benefiting from his full right, imposed by the public utility of the electrical installation that is the object of the servitude.

Areas Outside the National Electricity Grid or Off-Grid: areas not served by REN, with current and potential consumers, located in rural areas and remote communities.

Authorization: administrative act by the competent entity consisting in the granting of a concession or registration to carry out the respective supply activities for access to energy in off-grid areas.

Audited bookvalue: means the residual value of the assets of a project according to the balance sheet balance based on the original cost of the asset, plus additional expenses charged to the asset, minus any depreciation and/or amortization and impairment charges.

Competent Entity: the body or collective person of public law, endowed with functional powers attributed by law to exercise its competences and attributions.

Concession: administrative act by which the competent authority authorizes a legal person, governed by public or private law, for a specified period, the right to explore, separately or jointly, the off-grid supply activities in off-grid areas, pursuant to this regulation.

Concession Area: geographical area defined in the mini-grid concession for the performance of supply activities for Access to energy, which may be a single area or a set of multiple areas.

Concessionaire: titleholder of a concession awarded in accordance with this Regulation

Connection Point: physical infrastructure and/or equipment that connects a generation unit, storage, distribution, transmission systems, and consumers.

Consumption: use of electrical energy by an individual or legal person, in residential, commercial, manufacturing, and or industrial production units, agricultural, other distributors, export consumers, and sellers.

Consumer: an individual or legal person, including final consumers, other distributors, and sellers who purchase electricity, subject to the supply of electricity or energy services, for domestic, industrial, or commercial use.

Development: the entire process or cycle of carrying out a supply activity for Access to energy, either isolated or integrated, from the design, construction, operation, financing, and management of infrastructures, systems, facilities, equipment, other components, and related services, which guarantees advances in socio-economic and environmental terms under the authorization of the terms of this Regulation.

Distributor: the holder of a concession that includes the activity of electricity distribution, including a distribution grid operator, responsible for the conveyance of energy with a view to its supply to consumers or to distribution stations that sell energy to consumers, as well as distributors of energy services.

Effective Date of the Concession: the date of issue of the Administrative Court's approval to the concession agreement by the competent entity.

Electricity Distribution: transmission of electricity by a distributor through medium and low voltage grid to be delivered to the consumer.

Electricity Distribution Grid Concessionaire: means the concessionaire that transmits electricity through medium and low voltage grid, for delivery to the consumer.

Electrical Installation: the equipment, electric circuits, and the infrastructures and respective accessories intended for the supply of electrical energy, up to, if part of a distribution grid, the point of connection to the consumer.

Electricity Supply: sale of electricity to a consumer for his use or sale to third parties.

Energy Regulatory Authority: also known as ARENE, established under Law n.º 11/2017, of 8 September, its regulations and organic statute, are responsible for ensuring the regulation of energy supply activities.

Energy Sources: fossil energy sources and renewable energy sources, as well as any other energy source that may be considered for energy generation purposes, excluding atomic energy sources.

Establishment license: a document issued by the competent authority certifying that the electrical installation may be established within a certain period.

Final consumer: an individual or legal person, including residential, commercial, manufacturing, and or industrial production units, agricultural, other distributors, and export consumers purchasing energy or energy access supply services for their consumption.

Force Majeure: event or circumstance or the combination of events and circumstances, which are unforeseeable and irresistible, whose effects are produced regardless of the will or the action of the invoking party, even if indirect, that prevent the fulfilment of its obligations. In particular, acts of war or subversion, hostilities or invasion, rebellion, terrorism or epidemics, acts of expropriation, foreclosure, ransom, and government requisitions or nationalizations not complying with the terms and procedures set out in these regulations and other applicable legislation, lightning, explosions, severe floods, cyclones, earthquakes, and other natural disasters directly affecting the authorized activities shall constitute force majeure.

Infrastructure: a set of systems, installations, equipment, software, and other components, both physical and virtual, which allow access to energy outside the grid.

Mini-grid: an integrated system of electricity generation, distribution, and trading facilities, which may include storage, using mainly renewable energy sources, of small scale less than or equal to 10 MW, not connected to the National Electricity Grid. In this regulation, it may also be simply referred to as "Grid".

National Electricity Grid (REN): includes the electricity distribution grid and the national electricity transmission grid.

Operating License: the document issued by the competent authority certifying that the electrical installations have been inspected, found to conform, and authorizing their operation.

Rural areas: areas characterized by low population density that are not part of an urbanization zone, or that do not have a distribution grid accessible by consumers.

Start of Commercial Operation: the date of start-up and completion of commissioning and completion of tests of the equipment of the electrical installation of the mini-grid, or the date of commencement of the provision of energy services as notified to the competent entity.

Storage: means the activity of conversion of electrical energy into a form of energy that may be stored, as well as the storage and eventual reversion into electrical energy, using a controllable mechanism, which may be exercised autonomously or integrated into a generation, transmission, or distribution system.

Supply activities for Access to energy in off-grid areas: they comprise initiatives and projects considered, of a social and sustainable development nature, aimed at carrying out the activities, jointly or separately, of generation, distribution, storage, and commercialization of electrical energy supply, through mini-grids, and the provision of energy services.

Technical Safety and Quality Standards: a set of national and international technical standards and norms for the safety and quality of equipment and services applicable supply activities for access to energy in off-grid areas.

The competent entity for electrification implementation activities in off-grid areas: is the Energy Fund, FP in accordance with Decree n.º 101/2020, of 12 November, and the National Electrification Strategy, approved by Resolution n.º 49/2018, of 31 December.

Virtual Infrastructure: a set of systems, facilities, equipment, software, and other components interconnected by digital means used in the operation, management, marketing, and monitoring of off-grid energy technologies.



REPUBLIC OF MOZAMBIQUE

MINISTRY OF MINERAL
RESOURCES AND ENERGY

DECREE Nº 93/2021 OF 10 DECEMBER
LAW 12/22 OF 11 JULY

Concession agreement for supply activities for access to
energy in off-grid areas through mini-grid 1 - format A

Between

The Republic of Mozambique represented by the Minister of Mineral Resources and Energy and
the Concessionaire

Concession No. ###

Energetic Registration No. ###

Installed capacity:

- Category 2:** installed capacity between 151kW - 1 MW
 Category 3: installed capacity up to 150 kW

Location of the Concession Area (single/multiple): 2

Activities covered:

- Generation
 Storage
 Distribution and Marketing

Power Source:

Installed capacity:

Effective Date:

Expiry Date:

Commercial Operation Start Date:

Concessionaire Representative:

Contacts:

Address:

Concessionaire

Minister of Mineral Resources and Energy

Terms and Conditions of the Concession Agreement

Without prejudice to the provisions set out in the Regulations for Access to energy in Off-grid Areas, approved by Decree n.° 93/2021, of 10 December and other applicable law, this contract shall be governed by the following terms and conditions:

CLAUSE 1 Definitions

For this concession agreement, the terms and expressions used shall have the meaning that has been attributed to them in the Regulation of Access to Energy in Off-grid Areas, approved by Decree n.° 93/2021, of 10 December, Law n.° 12/22, of 11 July or other applicable legislation, unless otherwise explicitly defined in this contract.

CLAUSE 2 Object of the concession

The object of this concession agreement is to perform the activities, jointly or separately, of generation, distribution, storage, and commercialization of electric energy of a Mini-grid of Category [], including the design, construction and installation, operation and maintenance, management and financing of the Mini-grid, as well as ancillary or similar activities related to it during the term of the concession.

CLAUSE 3 Rights and duties of the concessionaire

3.1. In performing the activities object of the concession, in compliance with the Regulations for Access to Energy in Off-grid Areas, approved by Decree n.° 93/2021, of 10 December, the concession holder has rights and duties under environmental, tax, accounting, foreign exchange, labour, and social security legislation.

3.2. Under the Regulations for Access to Energy in Off-grid Areas, approved by Decree n.° 93/2021, of 10 December, the concession holder has the following rights and duties:

3.2.1. Concessionaire's rights:

- a)** carry out the activities of supplying electricity to consumers located within the concession area, charging for the service provided;
- b)** plan, design, finance, construct, own, insure, operate, maintain, manage, and subcontract the operation of the respective electricity facilities, as well as other infrastructures, equipment, and materials related thereto to perform the activities covered by the respective concession;
- c)** contracting, at its own expense and risk, studies, works, contracts, service provision, supply of equipment, construction, technical assistance, management and operation of electrical facilities, in all stages necessary for the implementation and operation of the project;
- d)** obtain the collaboration of the respective competent entities in the issue, maintenance, and renewal of all other approvals, authorizations, or licenses not covered by the Regulations on Access to Energy in Off-grid areas, approved by Decree n.° 93/2021, of 10 December, and which are necessary for the timely implementation of the project;
- e)** be compensated in the event of termination of the concession by applicable legislation;
- f)** access and transit without discrimination to the electricity transmission and distribution systems and facilities, against payment of the costs, charges, and tariffs due, and enter into the respective contract in the case of the interconnection of the mini-grid with the National Electricity Grid;

- g)** access locations that receive or have received electrical power supplied by the concessionaire to:
 - i** carry out or inspect works, lines, metering and counting equipment, and other technical equipment belonging to the concessionaire;
 - ii** check consumption; and
 - iii** remove equipment that belongs to the concessionaire and that is not being used due to lack of payment or disuse.
- h)** provide guarantees on the rights arising from the respective concession, as well as on the goods and assets linked to it, within the scope of the financing for the implementation of the project subject to the concession, provided that the possible execution of the guarantee does not compromise the continuity of the activities in question.

3.2.2. Concessionaire duties:

- a)** carry out the authorized electricity supply activities as a reasonable and prudent operator, to best serve the interests and needs of consumers, with due technical competence, ethics, inclusiveness, equity, gender equality, diligence, prudence, and predictability, with sufficient financial means, by the schedule for the implementation of the project subject to concession;
- b)** begin construction of the electrical installation within a maximum period of 18 (eighteen) months from the effective date of the concession, providing a performance guarantee, valid during the construction period until the start of commercial operation;
- c)** the commercial operation of the mini-grid to commence within a maximum period of 36/48 months from the effective date of the concession, subject to renewal for duly justified reasons;
- d)** supply electricity to all consumers within the concession area, through a contract, by:
 - i** the implementation plan and schedule for the project that is the object of the concession;
 - ii** the rights and duties of consumers;
 - iii** principles and standards of quality, safety, and reliability regarding the supply of electricity;
- e)** demarcate and register the easements and rights of land use and benefit, paying compensation to the users and holders;
- f)** ensure and carry out local content implementation measures, including community development, complying with the provisions of the approved local content plan, and integrating gender equity and equality;
- g)** carry out the necessary conservation, maintenance, replacement, recycling, recovery, or demobilization of the goods and equipment allocated to the activity;
- h)** inform the Energy Regulatory Authority, of any changes, facts, or events that may alter, interfere or compromise the exercise of the activity;
- i)** submit by 31 May of each year, the report for the preceding year, containing commercial, technical, and financial information on the operation of the mini-grid project;
- j)** to keep organized accounts, complete and detailed records, and inventories of goods and assets linked to the authorized activity;
- k)** allow and facilitate access to the competent entities, construction, equipment, and facilities linked to the activity of electricity supply, as well as to accounting and commercial records, for supervision purposes;
- l)** maintain an all-risk civil liability insurance covering the premises, equipment, workers, and third parties;
- m)** pay the regulatory fee, other fees, and other applicable charges.

CLAUSE 4 Rights and obligations of the granting authority

4.1. The granting authority shall exercise its general powers and perform the functions and duties assigned under the applicable legislation.

4.2. Without prejudice to the applicable law, the granting authority is obliged to:

4.2.1. support, assist, and make every effort, within the scope of its powers, so that the concessionaire may enjoy its rights and comply with the respective obligations assumed under this concession agreement;

4.2.2. support and make every effort to assist the concessionaire in identifying, applying for, and obtaining the authorization or issuance, maintenance, and renewal of all approvals, such as environmental permits, taxes, work permits, land, water, or any other permits issued by the relevant administrative entities; and

4.2.3. submit the concession agreement to the Administrative Court for review.

CLAUSE 5 Rights and Obligations of the Energy Regulatory Authority

The Energy Regulatory Authority shall exercise its regulatory powers and authority as well as its supervisory, oversight, and sanctioning powers, as defined in Law n.º 11/2017, of 8 September, the Law establishing the Energy Regulatory Authority, as well as provided for in the Regulation on Access to Energy in Off-grid areas, approved by Decree n.º 93/2021, of 10 December, in article 4 of the Regulation for the granting of concessions, approved by Ministerial Diploma.../.../..., in Law n.º 12/2022, of 11 July, which approves the Electricity Law and in this concession agreement and other applicable legislation as well as set out in this concession agreement.

CLAUSE 6 Terms of approval of the investment project

For this concession agreement, the concessionaire shall enjoy the rights and tax benefits granted under the Investment Project Authorization Terms and applicable legislation.

CLAUSE 7 Tariff

Concession The terms and conditions set out for the established tariff scheme approved by the competent entity, whose tariff is attached hereto and is an integral part thereof, are applied to this concession agreement.

CLAUSE 8 Other terms and conditions

8.1. The modification, suspension, and extinction of the concession implies the modification, suspension, and extinction of the concession agreement.

8.2. Modification of the concession is subject to prior approval and execution of an addendum to the concession agreement by the parties.

8.3. If the expansion of the national electricity grid reaches the geographical area where the mini-grid is located, the mini-grid may be integrated into it, subject to prior technical and economic studies that demonstrate the technical, economic, and financial feasibility of the interconnection, as well as the reliability and continuity of supply to mini-grid consumers, under the terms and conditions provided for in Article 22 of the Regulation on Access to Energy in Off-grid areas approved by Decree n.º 93/2021, of 10 December and in the Interconnection Regulation approved by the competent entity.

8.4. The concession is extinguished for the reasons set out in Articles 15 and 22 of the Regulations for Access to Energy in Off-grid Areas, approved by Decree n.º 93/2021, of 10 December, and the continuity of energy supply to consumers shall be ensured.

8.5. Upon termination, the concession assets may revert to the State by the provisions of article 15 of the Regulation of Access to Energy in Off-grid Areas approved by Decree n.º 93/2021, of 10 December, in which case the concession holder shall be compensated.

8.6. This contract is executed in the Portuguese language and may be translated into English. In the event of any conflict between the English language version and the Portuguese language version, the Portuguese language version shall prevail.

8.7. In the interpretation of the regime applicable to this concession, the public interest and good faith concerning the respective rights and obligations of the concessionaire and the conceding authority, among other aspects regulated in this contract, shall prevail.

CLAUSE 9 Mediation and dispute settlement mechanisms

9.1. The concessionaire may resort to mediation, conciliation, and decision by the Energy Regulating Authority, without prejudice to the right to resort to judicial and arbitration proceedings under the following terms and the applicable legislation.

9.2. When disputes between the State and the concessionaire involve foreign direct investment, arising from the activity object of the concession, including the investment and its regime, the dispute may be resolved by arbitration by the rules established in Article 36 of the Regulation on Access to Energy in Off-grid Areas, approved by Decree n.º 93/2021, of 10 December.

CLAUSE 10 Force Majeure

10.1. Whenever an event of force majeure or its effects persist for a period of more than 15 (fifteen) consecutive days, the concessionaire and the awarding authority shall meet as soon as possible to review the situation and agree on the measures to be taken to eliminate the cause of the occurrence of the force majeure and restart the execution of this concession.

10.2. The party wishing to request the suspension of its obligations under the concession due to the occurrence of a force majeure event shall:

- a)** immediately notify the other party of the occurrence within forty-eight (48) hours, or as soon as practicable in the most expeditious manner, and subsequently provide written confirmation;
- b)** take all reasonable and practicable steps to eliminate the cause of the force majeure event;
- c)** upon the elimination or cessation of the relevant cause of the force majeure event, immediately notify the other party and take all reasonable steps to resume the performance of its obligations under this Concession as soon as possible after the elimination or cessation of the force majeure event.

10.3. If the extent of the effects or the cause of any force majeure persists, or its effects persist for a period longer than 90 (ninety) consecutive days and are insusceptible to repair or mitigation, then the concessionaire or the conceding authority may terminate this contract.

10.4. If the event of force majeure determines the termination of the concession agreement and the right to payment of an indemnity, this amount shall correspond to the audited book value of the project to be determined by an independent expert in accordance with the applicable law.

CLAUSE 11 Anti-corruption

11.1. The parties are subject to the application of the rules on anti-corruption legislation approved by Law 6/2004, of 17th June, and other applicable legislation.

11.2. Each of the parties, their directors, officers, agents, and representatives shall, in the performance of their obligations hereunder, fully comply with Applicable Law and all applicable laws relating to anti-corruption, bribery, money laundering, terrorism, and boycotts.

11.3. Each of the parties, including any of its affiliates, subcontractors, consultants, representatives, or agents, represents and warrants that it has not made, and will not make, directly

or indirectly, any prohibited payment and is not engaged in any prohibited transaction in connection with the subject venture.

11.4. Each party shall promptly inform the other party of any prohibited payment or prohibited transaction of which it becomes aware or has reasonable grounds to suspect has occurred or will occur in connection with the project that is the subject of the concession.

11.5. Each party reserves the right to terminate this contract upon a proven breach of this clause.

CLAUSE 12 Confidentiality

Each party shall keep confidential and ensure that the contractors or subcontractors engaged by them, as well as consultants and agents and each of their respective successors and authorized assignees keep confidential all documents and other information of a confidential nature, whether technical or commercial, which have been provided by or on behalf of the other party and which relate to this concession agreement and will not publish or disclose them in any way except as required by applicable law, or when such information is or becomes public, except by breach of this clause or when such information is disclosed to any of their affiliates, financiers, advisors, insurers, reinsurers, shareholders or any investors within the scope of the project subject to the concession, provided that they agree to keep confidential the information disclosed to them. The provisions of this confidentiality clause will survive the termination of this concession agreement but will expire at the beginning of the fifth anniversary of the date of termination of this concession agreement.

CLAUSE 13 Communications

13.1. The communications to be made under this Concession shall always be delivered in writing, using a proven protocol, by registered letter with acknowledgement of receipt and/or by electronic mail with acknowledgement of receipt and, in the case of electronic mail, notification of reading, followed by the original within 3 (three) days, and shall be considered in the case of hand delivery on the date of signature of the protocol, in the case of the registered letter with acknowledgement of receipt on the date of its receipt, and the case of e-mail at the time of receipt in the recipient's mail, if it occurs until 5 p.m., or on the first following business day.

13.2. For this concession, the following addresses shall be deemed to be the domiciles of the Parties and the Energy Regulatory Authority shall be copied in all communications and submissions:

a) Granting Authority

Name:

Address:

Telephone:

E-mail:

b) Concessionaire

Name:

Representative/Mandatar:

Address:

Telephone:

E-mail:

13.3 The parties may change their designated addresses using a prior communication addressed to the other party.

Annexes

Map and geographical coordinates of the concession area
 Terms of Authorization
 Tariff
 Description and Specifications for the Construction and Operation of the Mini-grid
 Schedule for the Development implementation
 Construction Progress Report

Annex II.C - Model of Performance Guarantee

Beneficiary: Energy Regulatory Authority

Date:

Guarantee:

We have been informed that _____ (hereinafter referred to as "the Concessionaire") has a Concession for the development of a Category [1, 2, 3] mini-grid development with the installed capacity of _____ located at _____, in the Republic of Mozambique (the "Mini-grid Development"). The concession for the development of the projects shall be accompanied by a performance guarantee for the construction phase, with a maximum value of up to 5 (five) per cent of the investment value, considering the category, size, and complexity of the project.

Upon request by the Concessionaire, we, as the Guarantor, irrevocably undertake to pay to the Recipient any sum or sums not exceeding in the aggregate an amount of _____ (_____) upon receipt by us of the first application from the Recipient, supported by the Recipient's declaration, either in the application itself or in a separately signed document accompanying or identifying the application, stating that or the Concessionaire:

- a)** has completed construction of the Mini-grid project; or
- b)** having been notified of the breach of its obligations during the construction phase of the Mini-grid project,
 - i** has not completed the construction within the period provided for in the applicable legislation, or
 - ii** has not obtained the permits and other approvals provided for in the applicable legislation.

Consequently, any claim for payment under this guarantee shall be received by us at the office indicated above on or before that date.

This guarantee is subject to the Uniform Rules for First Demand Guarantees (URDG) 2010 Revision, ICC Publication n.º 758.



REPUBLIC OF MOZAMBIQUE
MINISTRY OF MINERAL
RESOURCES AND ENERGY

DECREE Nº 93/2021 OF 10 DECEMBER
LAW 12/2022 OF 11 JULY

Concession agreement for off-grid mini-grid supply activities - Format B

Between

The Republic of Mozambique represented by the Minister of Mineral Resources and Energy and
Concessionaire

Concession No. ###

Energetic Registration No. ###

Installed capacity: MW

Category 1: installed capacity > 1 MW

Location of the Concession Area (single/multiple):

Activities covered:

- Production
- Storage
- Distribution and Marketing

Power Source:

Effective Date¹:

Expiry:

Commercial Operation Start-Up Date:

Concessionaire Representative:

Contacts:

Address:

Concessionaire

[Grey bar for Concessionaire signature]

Minister of Mineral Resources and Energy

[Grey bar for Minister signature]

¹ Date of issue of the visa by the Administrative Court

This page shall be framed and fixed in a place visible to the public, at the concessionaire's headquarters and at the location of the project in the concession area. This contract includes as an annex map and coordinates.

Concession Agreement for the Supply of Electricity Through a Mini-grid

Including

Design, Construction, Operation, Maintenance, Financing, Insurance, and Management of a Category 1 mini-grid development (hereinafter referred to as the "Concession Agreement")

Entered into between:

The Republic of Mozambique, duly represented in this act by the Minister of Mineral Resources and Energy ("Granting Authority")

and

[..... name of Concessionaire] a company incorporated under the laws of Mozambique, registered in the Legal Entity Registry Office of under NUEL, with NUIT, with its registered office at ("Concessionaire")

Maputo, 20....

Whereas:

- a) access to energy is a constitutionally recognized fundamental right, and the existence and availability of electricity are essential factors for Mozambique's economic and social development;
- b) by the Applicable Legislation, the concession was allocated for the supply activities for Access to energy through mini-grids, namely generation, distribution, storage, and commercialization;

Under these terms, this concession agreement is entered into under the following clauses:

CLAUSE 1 Definitions, Interpretation and Construction

1.1. Unless the context indicates otherwise, the definitions in force and the Regulations on Access to Energy in Off-grid Areas approved by Decree n.º 93/2021, of 10 December, shall apply to this concession agreement, together with the terms and expressions used in this contract, including its annexes, which shall have the following meanings:

Administrative Court: means the highest body in the hierarchy of administrative, fiscal and customs courts in Mozambique under the Applicable Law;

Applicable Exchange Rate: means, in respect of any amount paid or to be paid by the grantor to the Concessionaire under this Concession Agreement, the prevailing application rate for the conversion of the Metical into foreign currency quoted by the Central Bank of Mozambique;

Applicable Legislation: means, Law n.º 11/2017 of 8 September, the Law establishing the Energy Regulatory Authority, Decree n.º 93/2021 of 10 December (Regulation on Access to Energy in Off-grid areas), Electricity Law n.º 12/2022 of 11 July or any law that may come to replace it and any other laws, decrees, diplomas, rules, regulations, orders, resolutions, normative directives, ordinances, notifications, or other similar guidelines and standards with which compliance is mandatory in Mozambique, including any diploma that may come to replace them, provided that they have been published in the Government Gazette, made available for distribution to the general public and have binding force, being in force at the time when the same is invoked, without prejudice to the provisions of this contract regarding the change in the law and the stability of the respective rights and obligations under this contract;

Approval: means any grant, permission, consent, license, permit, authorization, registration, exemption, submission, award, grant, expedition, recognition, or approval to be obtained from or to be granted by any Administrative Authority under any Applicable Legislation about the Development;

Business day: means any day (except Saturday, Sunday, or a national holiday) on which banks are open for daily business in Mozambique;

Concession: means all concessions granted to the Concessionaire by the Granting Authority according to this Concession Agreement, including those described in Clause 3 (Object of Concession);

Concession Area: is a geographical area defined in the Mini-grid concession for carrying out supply activities for access to energy in off-grid areas, and it can be a single area or a set of multiple areas;

Concession Assets: means the Mini-grid project and the facilities and systems necessary for its operation, including assets financed by the Concessionaire, which may be developed, constructed, and installed by the Concessionaire, or any assets delivered to the Concessionaire by the Granting Authority during the term of this agreement, as per the inventory attached and updated from time to time, including all relevant documents (such as manual, licenses and certifications) and immovable property (land, buildings, etc.), including notably the Mini-grid, movable assets (equipment, etc.), and intangible assets, financed, constructed or acquired and operated by the Concessionaire and which are essential for the performance of the public service of energy generation, including, but not limited to:

- a) goods in the public domain,
- b) vehicles and specialized machinery (tractors, etc.),
- c) maintenance tools (module cleaning, field maintenance equipment, etc.),
- d) measurement equipment (I-V tester, thermal camera, surveillance drone, grid analyser, etc.),
- e) stocks of spare parts,
- f) computer hardware and specialized software dedicated to the operation of the Mini-grid, as well as files and databases, office equipment, and furniture.

Commencement of Commercial Operation Date or Commencement of Commercial Operation: means the date of start-up and completion of commissioning and carrying out tests of the equipment of the electrical installation, as notified to the competent authority;

Concessionaire: means a [limited liability company / joint stock company / cooperative / association etc.] incorporated under Mozambican law with the corporate purpose of implementing the Development and executing the Development Contracts;

Construction Contract: means the contract to be entered into between the Concessionaire and the Construction Contractor for the engineering, design, assembly, construction, installation, programming, testing, and commissioning (among other matters) of the Mini-grid;

Control: means the right to elect a majority of the members of the management body of a legal entity, and/or the direct or indirect ownership of a majority of the voting rights of the share capital of such entity, and the verb "control" shall be construed accordingly;

Development Agreements: means the concession agreement, the Terms of Authorization, the Construction agreement, the O&M agreement, and any other agreements to which the Parties may agree, and which shall constitute Development Agreements;

Development Implementation Schedule: means the schedule for the implementation of the Development set out in the Annex (Development Implementation Schedule);

DUAT: means the right of use and enjoyment of land concerning the Concession Area, or any portion thereof, granted to the Concessionaire by the competent Administrative Authority;

Effective Date: means the date on which this concession agreement shall come into full force and effect, following the issue of the Administrative Court's approval to the concession agreement;

Electricity Supply Activities through Mini-grids: the joint or separate performance of the activities of generation, distribution, storage, and commercialization of electricity through Mini-grids;

Energy Regulatory Authority: entity responsible for ensuring the regulation of energy supply activities, whose competences are defined in Law n.º 11/2017, of 8 September, its Organic Statute and Internal Regulations;

Electricity Law: means Law n.º 12/2022 of 11 July or any law replacing it;

Environmental Management Plan: means the environmental management program developed concerning the Development, per Applicable Legislation;

Expropriation Event: means any of the following acts, events circumstances, or combination thereof:

- a)** the expropriation, compulsory acquisition, or nationalization by any Administrative Authority of all or part of the Mini-grid and/or any of its direct or indirect shareholders in connection with the Development, or any of its rights under the Development Agreements;
- b)** the revocation of all or part of the land rights granted to the concessionaire over the Concession Area or on a subsidiary basis, and which are essential for the performance of the activities;
- c)** any action by any Legislative or Administrative Authority that is aimed at or directly affects the Project or the concessionaire except to the extent that such act corresponds to the exercise by the relevant Legislative or Administrative Authority of its rights under Applicable Legislation;
- d)** any omission by an Administrative Authority or Legislative Authority where it is legally or contractually obliged to act, which materially and adversely affects the Concessionaire's rights and enjoyment of its benefits or the performance of its obligations under the Development Contracts; or
- e)** the introduction, adoption, approval, or enactment of any Applicable Legislation by any Administrative Authority or a Legislative Authority, or any change in the interpretation of any Applicable Legislation, making it unlawful for the Concessionaire to perform any material obligation or to enjoy or enforce any material right under the Development Agreements;

Force Majeure Event: means an event or circumstance or combination of events and circumstances, which are unforeseeable and irresistible, whose effects occur regardless of the will or action of the invoking party, even if indirectly, which prevent the performance of its obligations. Acts of war or subversion, hostilities or invasion, rebellion, terrorism or epidemics, acts of expropriation, foreclosure, ransom, and government requisitions or nationalizations that do not comply with the terms outlined in the Applicable Law; lightning, explosions, strikes, floods, cyclones, earthquakes, and other natural cataclysms that directly affect the authorized activities shall, in particular, constitute force majeure;

Good Use Practices: means that, at a particular time, such practices, methods, equipment, specifications, and safety and performance standards act as are used by experienced international contractors or operators in the electricity generation industry engaged in the same type of business under the same or similar circumstances and conditions, which in the exercise of reasonable judgment in the light of the facts known at the time the judgment was made, are considered good, safe and prudent practice, commensurate with the standards of safety, performance, reliability, efficiency, and economy;

Government: means the Government of the Republic of Mozambique;

Granting Authority: means the Republic of Mozambique represented by the Minister of Mineral Resources and Energy;

Grid Code: means the National Electricity grid Code approved by Ministerial Order n.º 184/2014, of 12 November (National Electricity Grid Code) or any legislation replacing it;

Hazardous Substance: means those substances or objects that you dispose of, intend to dispose of, or are required by law to dispose of, also referred to as waste, which contains hazardous characteristics because they are flammable, explosive, corrosive, toxic, infectious or radioactive or other characteristics which constitute a danger to life or health of humans and other living beings and to the quality of the environment.

Increase in Costs: means, any increase in costs or expenses unforeseen and related to the occurrence of an Expropriation Event or to an amendment, revocation of the terms and conditions, or to an interpretation of any Applicable Legislation, which harms the income and economic and financial balance of the Mini-grid Project, to be approved by the Energy Regulator;

Independent Expert: means a qualified professional who has great command over a subject or discipline or a specialist whose knowledge enables him to assess a situation with rigour and objectivity, and over which he has no direct or indirect interest that could influence his assessment (expertise).

Insolvency: means, concerning a person, that is or has become unable to pay its debts when due, has ceased to pay its debts, has become insolvent, or has applied for or commenced recovery proceedings under any applicable insolvency law;

Investment Project Terms of Authorization or Terms of Authorization: means the terms and conditions, including tax and other benefits, rights, and obligations relating to the Development, applicable to the Development and the Concessionaire during a period specified therein as outlined in the Annex (Terms of Authorization).

Legislative Authority: means the Assembly of the Republic of Mozambique and any other national or local government authority or body, including a municipality, with statutory authority to issue rules and by-laws;

Local Content Plan: means the approved local content plan in respect of the Development to be executed per Applicable Law and detailed in the Concession, including the Community Development Plan, as updated from time to time;

Metical or MZN: means the official currency of Mozambique;

Mini-grid Project or Project: means the entire process or cycle of carrying out a supply activity for Access to energy, either isolated or integrated, through a Mini-grid from the design, construction, operation, financing, and management of infrastructures, systems, facilities, equipment, other components, and related services, which guarantees advances in socio-economic and environmental terms in accordance with the Applicable Legislation;

Mini-grid: means the integrated system of electricity generation, distribution, and trading facilities, which may include storage, preferably using renewable energy sources, with the installed capacity from 1 to 10 MW;

Prohibited Transactions: means and includes:

- a)** the receipt, transfer, transportation, retention, use, structuring, dispatch, or concealment of the proceeds of any criminal activity, including drug trafficking, fraud, and bribery of a Government Official or any member of his or her family;
- b)** participating in, financing, financially supporting, or otherwise sponsoring, supporting, assisting, or protecting any terrorist person or organization (including the persons and organizations mentioned in any list drawn up by the United Nations under Chapter VII of the Charter of the United Nations, by the European Union under Council Regulations 2580/2001 or 881/2001, by the United Kingdom under the Counter-Terrorism Act 2000 or by the United States under the Anti terrorism and Effective Death Penalty Act 1996 or the USA PATRIOT Act 2001) or any terrorist activity; and
- c)** engaging in any transaction or the existence of any other business relationship with the persons identified in (a) and (b) above about money laundering, terrorism and its financing, drug trafficking, or violation of economic or arms traffic;

Prohibited Payment: includes any offer, gift, payment, promise to pay, or authorization of payment of any sum of money or thing of value made directly or indirectly to a Government Employee, including any relative of a Government Employee, to:

- a)** influence any act or decision of a Government Official in the exercise of his or her functions;
- b)** encourage a Government Official to perform or refrain from performing an act in breach of his or her lawful duties;
- c)** obtain an undue advantage; or
- d)** encourage a civil servant to use his or her influence with a public agency or public body to affect or influence any act or decision of that public agency or public body to facilitate the obtaining or retaining of a commercial business or the referral of a commercial business to any party;

O&M Agreement or contract: means the contract for the operation, maintenance, and repair of the Mini-grid between the Concessionaire and the O&M Contractor;

Regulation on Access to Energy in Off-grid Areas: is the regulation approved by Decree n.º 93/2021, of 10 December.

Signature Date: means the date on which both Parties sign this concession agreement;

Storage: means the activity of conversion of electrical energy into a form of energy that can be stored, as well as the storage and possible reconversion into electrical energy, using a controllable mechanism, which may be exercised autonomously or integrated into a generation, transmission or distribution system;

Subsidiary: means, concerning a person, any other person who (directly or indirectly) controls, is controlled by, or is under common control with, that person;

Supply activities for access to energy in off-grid areas: comprise initiatives and projects considered, of a social and sustainable development nature, aimed at carrying out the activities, jointly or separately, of generation, distribution, commercialization, and storage of electricity, through mini-grids, and the provision of energy services;

Supply activities for access to energy in off-grid areas: joint or separate performance of electricity generation, distribution, storage, trading activities, as well as supply activities for Access to energy;

1.2. Interpretation

- a)** this concession agreement is entered into in accordance with Article 12 of the Regulation of Access to Energy in Off-grid Areas approved by Decree n.° 93/2021, of 10 December and Article 14 of the Regulation for the granting of the concession, approved by Ministerial Order
- b)** references to any agreement or document shall include a reference to that agreement or document together with any modifications, amendments, supplements, restatements, substitutions, assignments, and transfers from time to time.
- c)** a "person" includes any individual, firm, company, corporation, government, state, or agency of a state or any association, trust, or joint venture (with or without separate legal personality) between two or more such entities.
- d)** any reference to a person shall include a reference to any of his or her successors and, where that person is a Legislative Authority and/or an Administrative Authority, shall also include any organization or entity that has assumed all or part of the functions, responsibilities, assets, and property of that Legislative Authority and/or Administrative Authority.
- e)** the words "include" and "including" shall be construed in all cases as if the words "without limitation" were followed thereafter.
- f)** unless the context requires a different interpretation, references to a specific "Clause" or "Annex" shall be construed as references to that specific Clause or Annex of this Concession Agreement.
- g)** references to days, weeks, months, years, and daily, weekly, monthly, or yearly situations shall be references to days, weeks, months, and years of the civil calendar.
- h)** the Terms of Authorization, any exchange control regime, and the concession agreement shall be interpreted consistently.
- i)** where it is confirmed that a provision of this Concession Agreement requires the submission or issue of any license, permit, mandate, notification, endorsement, consent, approval, certificate, or determination by any person unless otherwise stated, such license, permit, mandate, notification, endorsement, consent, approval, certificate or determination shall be in writing and shall not be refused on unreasonable grounds and the words "permit", "authorize", "mandate", "notify", "endorse", "consent", "approved", "certificate" or "determined" shall be construed accordingly.
- j)** in the event of any inconsistency between the body of the concession agreement and an appendix, the body of the concession agreement shall prevail.
- k)** all prior or contemporaneous negotiations, understandings, representations, warranties, memoranda, or projects relating to or in any way affecting the subject matter of this Concession Agreement are superseded by this Concession Agreement and shall be of no force or effect and neither Party shall be liable to the other Party in respect of such matters.
- l)** the Development Agreements shall be considered mutually explanatory of each other. If either Party discovers any conflict or inconsistency within or between any of the Development Agreements, then the Party discovering such conflict or inconsistency shall notify the other Party as soon as possible.

CLAUSE 2 Representations and Warranties

2.1. Without prejudice to other representations and warranties made by the Awarding Authority in this concession agreement, the Awarding Authority represents and warrants as of the Signature Date that:

- a)** the Ministry overseeing the energy sector has approved this Concession Agreement, under Applicable Legislation, and the Concessionaire's rights under Clause 3 (Subject Matter) have been validly granted by the Granting Authority; and
- b)** this concession agreement has been duly executed and delivered by the Granting Authority and constitutes valid, binding, and enforceable obligations of the Granting Authority, enforceable by its terms and the Applicable Law.

2.2. The Concessionaire represents and warrants that it:

- a)** is duly organized and incorporated under Mozambican law and that it is duly qualified, licensed, or registered, for the sole purpose of carrying out the activities contemplated in this concession agreement;
- b)** has all the necessary power of the company and the authority to grant and execute this concession agreement;
- c)** the execution, delivery, and performance by the Concessionaire of this Concession Agreement has been duly authorized by all necessary corporate steps on the part of the Concessionaire;
- d)** this Concession Agreement has been duly executed and delivered by the Concessionaire and constitutes a legally enforceable, valid, and binding obligation of the Concessionaire by its terms;
- e)** each of the Financing Documents is, or when entered into will be, valid, binding, and enforceable legal obligations of the parties, subject to customary legal reservations as to bankruptcy, moratorium, or rescheduling of debts and other similar insolvency proceedings;
- f)** does not engage in any activities other than those provided for in this concession agreement;
- g)** there are no fines, penalties, or other sanctions imposed on the Concessionaire that could have a material adverse effect on its financial condition or ability to perform its obligations under the Concession agreement; and
- h)** compliance by the Concessionaire with the terms of this Concession Agreement shall not breach or constitute a breach hereof:
 - i)** any provision of the Concessionaire's articles of association or by-laws or equivalent corporate documents;
 - ii)** any agreement or instrument to which it is a party or by which it is bound; or
 - iii)** any order, judgment, decree, or other restriction applicable to it.

CLAUSE 3 Object of the Concession

The object of this concession agreement is to perform, jointly or separately, the activities of generation, distribution, storage, and commercialization of power of a Mini-grid of Category [], including the design, construction and installation, operation and maintenance, management and financing of the Mini-grid, as well as ancillary or similar activities related to it during the term of the concession.

CLAUSE 4 Nature of the Concession Agreement

4.1. The concession agreement is an administrative contract and is governed by the Applicable Law.

4.2. Employees, agents, representatives, and/or subcontractors hired by the Concessionaire in the context of this concession agreement shall always remain under the control of the Concessionaire and shall not be considered employees of the Granting Authority and there shall be no contractual or legal relationship between the Granting Authority and the subcontractors, agents, and representatives of the Concessionaire.

CLAUSE 5 Term and Validity

This concession agreement shall take effect on the Effective Date and shall remain in force for a period of [] years after the Effective Date unless terminated earlier by the terms of this concession agreement and the Applicable Legislation.

CLAUSE 6 Tax Benefits and Other Investment Incentives

For this concession agreement, the concessionaire shall enjoy the rights and tax benefits granted under the attached Investment Project Authorization Terms and other Applicable Legislation.

CLAUSE 7 Exchange Control Regime

The foreign exchange regime applicable to the Concessionaire is subject to the provisions of Law 28/2022 of 29 December and Notice 20/GBM /2017 of 27 December, as amended by Notice 6/GBM/2020, of 10 June, and their regulations, other Applicable Legislation or any law that may replace it.

CLAUSE 8 Land Rights, Easements and Partially Protected Areas

8.1. The Development subject to this concession agreement is considered to be of public interest, convenience, and the necessity for the acquisition and operation of rights in the form of an easement area, by the provisions set out in Article 25 of the Regulations for Access to Energy in Off-grid Areas, approved by Decree n.º 93/2021, of 10 December.

8.2. The Granting Authority confirms that the Concessionaire has been granted a Land Use and Development Right ("DUAT") in respect of the Concession Area, by its boundaries (copy of DUAT attached) with a validity equivalent to the term of the Development and that it has been registered with the National Land Registry.

CLAUSE 9 Environmental License

The Concessionaire undertakes to submit the Environmental Management Plan and to obtain the relevant Environmental License under Law n.º 20/97 of 1 October, which includes Decree n.º 54/2015 of 31 December (Regulation on the Environmental Impact Assessment Process) together with any other regulatory instruments issued under Law n.º 20/97 of 1 October and Decree n.º 54/2015 of 31 December, and any Applicable Legislation or Approvals relating to the environment or any Hazardous Substance or Hazardous Activity relating to Hazardous Substances.

CLAUSE 10 Modification

10.1. Property Regime of the Concession Assets:

- a)** all materials, equipment, systems, and facilities used in the Mini-grid project, existing or to be constructed, as well as the relevant associated documents, are considered to constitute the assets of the Mini-grid concession.
- b)** the Concessionaire shall, on the Execution Date, deliver to the Concessionaire the Concession Assets, including land and facilities, as detailed in the Annex, with the use of such assets being limited to the scope of the Mini-grid Development Concession, when applicable.
- c)** any improvements, additions, alterations, and substitutions to materials, equipment, systems, and facilities used in the Mini-grid Development undertaken during the term of this Concession Agreement shall constitute an integral part of the Concession Assets.
- d)** before the signing date, an inventory of the Concession Assets, including the Mini-grid project, any other facilities, systems, and immovable or movable assets necessary for its operation, specifying their location, mode of operation, generation or distribution capacity, date of commencement of commercial operation, general condition, residual useful life, and estimated value, shall be prepared.
- e)** the inventory referred to in the previous number shall be approved and signed by both parties and copies of it shall be kept by the Granting Authority and the Concessionaire during the term of this concession agreement or for the period agreed between the parties.
- f)** the Concessionaire shall ensure that the inventory is annually updated, throughout the concession period and keep the Granting Authority and the Energy Regulator periodically informed of the respective updates.

10.2. Modification

Modification of this concession agreement is subject to prior approval and execution of an addendum to the concession agreement by the parties.

CLAUSE 11 Tariffs

The concession agreement is subject to the terms and conditions established for the tariff scheme established in the Regulation approved by the competent entity, whose tariff is attached hereto and is an integral part thereof.

CLAUSE 12 Local Content, Distribution of Socio-Economic Benefits, Community Development and Inclusion

12.1. The development and implementation of local content actions and mechanisms is a key component of the economic and financial model of the Mini-grid project, during the construction, installation, operation, maintenance, management, and monitoring phases, as applicable.

12.2. The Mini-grid Development during the term of this concession agreement shall provide direct and indirect socio-economic benefits to the Mozambican economy, with a special focus on the residents and communities of the development site, integrating gender equity and equality, following the approved Local Content Plan, namely:

- a)** increasing Mozambique's installed energy generation capacity and security of supply and, at the same time, diversifying the source used for energy generation;
- b)** generating sustainable employment and providing training for local communities and other Mozambicans;
- c)** diversification and development of Mozambique's productive base;
- d)** contribution to Mozambique's economic development through electricity supply;
- e)** contribution to the development of Mozambique's economic activities and value chain;
- f)** development of awareness, education, and community engagement campaigns, aimed at disseminating sustainable energy use and promoting ethical and inclusive behaviour.

12.3. The Local Content Plan shall include community development actions, which carry out processes with the active participation of the community and seek to create satisfactory economic, social, and environmental conditions for all its members, based on the mobilization of their capacities and resources.

12.4. The Concessionaire shall incorporate in the Annual Report to be submitted by 31 May of each year, information regarding the compliance with the Local Content Plan, including:

- a)** details of all programs and initiatives carried out by it or with its cooperation during the previous calendar year, under the Local Content Plan;
- b)** number of Mozambican workers employed in the Mini-grid Development, under Clause 15.9;
- c)** any suggestions to improve the programs and initiatives within the scope of the Local Content Plan; and
- d)** details of the programs and initiatives to be implemented by the concessionaire, or with its cooperation, during the current calendar year.

CLAUSE 13 Provision of Performance Guarantees for the Construction Phase

13.1. Through the terms of paragraph 4 of Article 12 of the Regulations for Access to Energy in Off-grid Areas, approved by Decree n.º 93/2021, of 10 December the concession holder provides a performance guarantee for the construction phase, with a maximum value of up to 5 (five) per cent of the investment value, and may be performed by way of guarantee, insurance, surety or bank guarantee or parent company or cash deposit in a bank account opened exclusively for this purpose, unconditional and irrevocable in favour of the Energy Regulatory Authority.

13.2. The Awarding Authority shall be entitled to call upon the performance guarantee in cases where:

- a)** the concession holder fails to comply with any of its obligations relating to the construction and/or
- b)** does not meet the scheduled Commencement of Commercial Operation Date.

13.3. The concessionaire shall, within a maximum period of 30 (thirty) days from the date of communication of the award of the concession, submit documentary evidence of the issue of the performance guarantee.

13.4. A corporate guarantee only constitutes an acceptable financial guarantee if and so long as the Granting Authority is satisfied, and the corporate guarantor can meet its obligations in terms of the guarantee provided having regard:

- a) the value of the guarantee;
- b) the audited annual financial statements of that corporate guarantor; and
- c) other matters that may from time to time be reasonably relevant to the long-term solvency of such corporate financial guarantee, failing which the concessionaire shall obtain a replacement financial guarantee in the form of a bank guarantee, insurance policy, or corporate guarantee of another corporate guarantee acceptable to the Energy Regulatory Authority within ninety (90) days from the date of commencement of commercial operation, the Energy Regulatory Authority shall return the performance guarantee for construction phase provided by the concessionaire.

CLAUSE 14 Rights and Obligations of the Granting Authority and the Energy Regulatory Authority

14.1. Granting Authority's Rights

The Granting Authority shall exercise its general powers and perform the functions and duties assigned as defined in the Regulations for Access to Energy in Off-grid Areas, approved by Decree n.° 93/2021 of 10 December, the Regulations for allocating the concession for mini-grids, approved by Ministerial Order n.°....of...of...and the Electricity Act, n.° 12/2022 of 11 July and this concession agreement.

14.2. Obligations of the Granting Authority

Without prejudice to the obligations of the Granting Authority established in the Applicable Legislation and other clauses of this concession agreement, the Granting Authority shall:

- a) support, assist, and make every effort, within its power, so that the concessionaire can comply with its obligations under this concession agreement;
- b) support and make every effort to assist the concessionaire in identifying, applying for or issuing, maintaining, and renewing all approvals, such as environmental permits, taxes, work permits, water use, and benefit rights, or any other permits issued by the competent administrative authorities;
- c) support, cooperate, and assist the concessionaire in its relations with the competent Administrative Authorities about obtaining and renewing Approvals on time;

14.3. Rights and obligations of the Energy Regulatory Authority

- a) the Energy Regulatory Authority shall exercise its regulatory powers and authority as well as oversight, supervision, and sanctioning powers, as defined in Law n.° 11/2017, of 8 September, as well as provided in the Regulation for Access to Energy in Off-grid Areas, approved by Decree n.° 93/2021, of 10 December, in Article 4 of the Regulation for allocating mini-grid concessions, approved by Ministerial Order n.°....of...of...of...of..., in Law 12/2022 of 11 July, approving the Electricity Law and in the present concession agreement.
- b) in particular, the Energy Regulatory Authority will be associated with the Mini-grid commissioning procedure carried out by the applicable norms and standards and, if all tests have been successfully passed, will sign the Mini-grid Acceptance Certificate.
- c) it is incumbent on the Energy Regulatory Authority to promptly submit this concession agreement to the Administrative Court for review.

CLAUSE 15 Specific Obligations of the Concessionaire

Without prejudice to the duties of the concession holder under the Regulation on Access to Energy in Off-grid Areas, approved by Decree n.° 93/2021, of 10 December the concession holder also has the following duties:

15.1. Design, Construction and Operation

- 15.1.1.** In accordance with this Concession Agreement and the Applicable Law, the Concessionaire has the right to undertake any construction works deemed necessary for the

proper functioning of the Mini-grid Development, including the Concession Assets, within the Concession Area.

15.1.2. The Concessionaire shall operate the Mini-grid Project, including:

- a)** operate, manage, and maintain the overall Concession Assets, throughout the term of the Concession, at its own expense, by the terms of this Agreement and the detailed Specifications annexed hereto, on an ongoing basis;
- b)** rehabilitate the existing Concession Assets to ensure adequate services provided after obtaining the consent of the Granting Authority;
- c)** provide electricity services by the Applicable Legislation and report to the Granting Authority on the management of those services;
- d)** provide management services to customers as set out in the contract and its annexes;
- e)** maintain an up-to-date inventory and records of the Concession Assets under the Concession;
- f)** inform the Granting Authority if any Concession Assets are to be decommissioned or replaced, together with proof of disposal of such Assets by applicable environmental guidelines;
- g)** comply with the specifications set out in the Annex;
- h)** comply with the performance and maintenance indicators established in this concession agreement and its annexes;
- i)** publish reports and provide relevant information to the Energy Regulatory Authority in accordance with this contract or at such other intervals as may be specified by the Energy Regulatory Authority;
- j)** enter into financing agreements for the Mini-grid Project enshrining the right of the financiers to intervene in the project, to have recourse to any means of redress under such financing, including the right to foreclose any security or to take control of the administration of the project, upon prior written notice, provided that the financing agreement has been approved in advance by the relevant authority.

15.2. Quality of service

The Concessionaire undertakes to provide customers with sustainable access to electricity, by the applicable rules and regulations on tariffs, technical and service quality standards, and commercial relations, in accordance with this contract and the Applicable Law.

15.3. Environmental Protection

The concessionaire shall carry out its activities in compliance with Applicable Legislation on the protection and preservation of the environment, including social, economic, and cultural aspects, as well as the respective technical and environmental safety standards.

15.4. Hiring of Third Parties

15.4.1. The Granting Authority acknowledges and agrees that the concessionaire may enter into contracts with third parties for the performance of its obligations under this concession agreement, including the design, construction, operation, maintenance, and management of the Mini-grid; however, the concessionaire shall remain solely responsible to the Granting Authority for the execution of any contracted and/or subcontracted activities.

15.4.2. In the acquisition of goods and services necessary for the execution of the Mini-grid Development, both during the construction and operation phases, the concessionaire shall give preference to goods manufactured in Mozambique and to services from local suppliers, provided that the conditions of their offer are comparable in terms of price and quality to goods and services produced and offered on the international market and provided that they are available in time and the necessary quantities.

15.4.3. The concessionaire shall provide the Energy Regulatory Authority with a list of contractors and subcontractors and copies of the construction contracts and the operation and maintenance contract within twenty (20) working days after the respective signing by the concessionaire, by the provisions of Clause 15.5 (Reports and Records);

15.4.5. All contracts entered into by the concessionaire with its Affiliates are concluded on terms that are no less favourable to the concessionaire than those that could reasonably have been obtained by or from any third party in good faith after arm's length negotiations.

15.4.6. The concessionaire will ensure that contracts entered into with third parties, or renewed, during the term of this concession agreement, are attributable to the Granting Authority (or any substitute of the concessionaire) at the expiration or early termination of the concession agreement;

15.4.7. Upon termination of the concession agreement for any reason other than a Force Majeure Event, the Awarding Authority may select the third-party contracts to be awarded to it or the concessionaire's successor.

15.4.8. In the termination of the concession agreement due to a Force Majeure Event, all contracts with third parties will be assigned to the Granting Authority.

15.4.9. In each case, the concessionaire shall remain responsible for the obligations and liabilities: i) incurred under contracts assigned before the date of assignment or ii) incurred under non-assignable contracts, whether before or after the date of termination or expiry and shall indemnify the Awarding Authority against any costs, losses or liabilities arising in each case.

15.5. Reports and Records

15.5.1. The Concessionaire shall keep complete and detailed records of all activities relating to the Mini-grid Project. These records shall be available to the Awarding Authority the Energy Regulator and their duly authorized representatives at all reasonable times with the following information:

- a)** financial records, including audited annual financial statements in accordance with Applicable Law presented in Metical;
- b)** records relating to the acquisition, maintenance, and refurbishment of the Concession Assets and changes to the Concession Area;
- c)** mini-grid safety and security records, including details of all incidents occurring at the Development which have resulted in (i) bodily injury to employees, contractors, users, or members of the general public, or (ii) loss or damage to third-party property.

15.5.2. All necessary records listed in paragraph 1 of this Clause shall be kept for a period of five (5) years from the date of creation of the relevant records or until twelve (12) months after the expiry or termination of the concession agreement, whichever occurs first, provided that the Concessionaire notifies the Awarding Authority before any disposal and provides the Awarding Authority with a reasonable opportunity to receive such records.

15.5.3. From the Effective Date and until the date of Commencement of Commercial Operation, within ten (10) Business Days after the last day of each calendar month, the Concessionaire shall provide the Awarding Authority with a progress report, on the implementation of the Development by the Implementation Schedule thereof.

15.5.4. The concessionaire shall present to the Granting Authority an annual report in accordance with the Applicable Legislation by the 31st of May of each year as of the Effective Date.

15.5.5. Within the Local Content Plan the concessionaire shall provide the Competent Authority with the list of Third-Party Contractors and Subcontractors, indicating at least the name of the Third-Party Contractor or Subcontractors, their place of registration and reference, an outline of their scope of work and the amount of the contract.

15.5.6. As part of its obligations relating to the Operating License, the Concessionaire shall submit to the Concessionaire and the Energy Regulatory Authority, in written or electronic form, a report describing the occurrence of any act or condition that materially affects the Concessionaire's ability to perform its obligations under this Concession Agreement within sixty (60) days of the occurrence or emergence of such act or condition.

15.6 Inspections

15.6.1. The concessionaire will provide representatives of the Awarding Authority and/or the Energy Regulatory Authority, whenever requested and with a minimum of two (2) working days' notice, with access to the Concession Site to review the progress of the construction and to verify compliance with any requirements of the Development Contracts and the Applicable Legislation.

15.6.2. The Granting Authority and the Energy Regulatory Authority carry out supervision and inspection activities of the concessionaire by the Applicable Legislation and this concession agreement.

15.6.3. The Concessionaire shall provide access to the Awarding Authority, or any person authorized by the Awarding Authority and the Energy Regulator for inspection, to the extent required by Applicable Legislation, of the premises, equipment, accounting books and records, and other relevant documents relating to the conduct of the Concessionaire's activities in connection with the Project, subject to the Awarding Authority and the Energy Regulator providing a reasonable written notice (except in any circumstance where Applicable Legislation expressly provides that such notice is not required).

15.6.4. Without prejudice to any more stringent requirements under Applicable Legislation, if so requested, the Concessionaire shall provide the Awarding Authority and/or the Energy Regulatory Authority, within a reasonable period not exceeding thirty (30) days, with such data and information relating to the Development as the Awarding Authority and/or the Energy Regulatory Authority may reasonably request to the extent necessary to determine the Concessionaire's compliance with its obligations under this Concession Agreement.

15.7. Payment of expenses

Except as otherwise provided in this Concession Agreement, the Concessionaire shall not be obliged to pay more than the usual, non-discriminatory, and reasonable costs, fees, or charges under Applicable Law payable by comparable commercial projects in respect of all Approvals, or the use by the Concessionaire of any public infrastructure and other facilities in Mozambique, which are necessary for the Development.

15.8. Liability and Insurance

15.8.1. From the Execution Date, the Concessionaire shall be entirely responsible for all operations within the Concession Area, and the Concession will be managed and operated by the Concessionaire at its own risk.

15.8.2. The concessionaire shall take out and keep in force the insurance and reinsurance policies provided for in the Applicable Legislation and by the Good Practices if they are available on the market in reasonably acceptable conditions.

15.8.3. The Concessionaire shall always maintain insurance of the Concession Assets, including the Mini-grid Development and related facilities and systems, for comprehensive general liability, property damage, and "all risks" throughout the Concession Period by a recognized insurance provider.

15.8.4. At the request of the concessionaire, either directly or on behalf of a financier and/or investor, the Awarding Authority will use reasonable endeavours to expeditiously execute and obtain all consents, warranties, and projects that are required to enable the concessionaire, financiers and/or investors to take out and maintain insurance cover against non-commercial risks, breach of contract and other types of cover, provided that the concessionaire, financiers and/or investors bear all expenses incurred by them in connection with such insurance.

15.9. Workers

15.9.1. The recruitment of workers by the concessionaire is subject to the labour legislation in force in Mozambique.

15.9.2. The concessionaire may freely hire the workers necessary to operate and maintain the Mini-grid, including determining the conditions of its human resources management policy, concerning the applicable legislation.

CLAUSE 16 Establishment and Operating License

16.1. For Article 67 and subsequent relevant provisions of the Electrical Installation Licensing Regulations, approved by Decree n.º 60/2021, 18 August, to calculate the inspection fee, the Establishment License fee, and the Operating License fee, the is an electrical installation of the category.

16.2. Before starting the construction of, the Concessionaire shall apply for the issuance of the Establishment License. To obtain the Establishment License, the Concessionaire shall pay the Establishment License fee calculated by the Licensing Regulations for Electrical Installations, approved by Decree n.º 60/2021, of 18 August.

16.3. When the construction of is completed, the Concessionaire shall apply to the Granting Authority to have the Mini-grid project inspected and pay the inspection fee, for the performance of such inspection, in accordance with the Licensing Regulations for Electrical Installations, approved by Decree n.º 60/2021, of 18 August.

16.4. After the inspection, the Concessionaire will request the issue of the Operating License, after proof of payment of the Operating License fee calculated in accordance with the terms of the Licensing Regulations for Electrical Installations, approved by Decree n.º 60/2021, of 18 August.

CLAUSE 17 Contractual Penalties

17.1. Without prejudice to the other rights of the Granting Authority under the concession agreement, in particular, the right to terminate the agreement under Clause 21, number 1, paragraph b) (Termination of the concession agreement), the Granting Authority may impose penalties on the Concessionaire if, after a grace period of thirty (30) days from the date on which the Granting Authority sends a written notice to the Concessionaire, any of the following events persist:

- a) failure by the concessionaire to deliver any document required by the Awarding Authority or the Energy Regulatory Authority in respect of the Development and/or the concession agreement under Clause 15.5 (Reports and Records);
- b) problem involving the safety or hygiene of the Concessionaire's staff;
- c) dissatisfaction with the requirement regarding the employment of Mozambican nationals in the context of the proposed Local Content Plan.

17.2. Any amounts payable as contractual penalties in accordance with the preceding paragraph shall be paid by the Concessionaire to the Granting Authority within 45 (forty-five) days of the Concessionaire's receipt of a notification submitted by the Regulating Authority containing the grounds and applicable penalty.

CLAUSE 18 Expansion of the National Electricity Grid

If the expansion of the national electricity grid reaches the geographical area where the Mini-grid is located, the Mini-grid may be integrated into it using prior technical and economic studies that demonstrate the technical, economic, and financial feasibility of the interconnection, as well as the reliability and continuity of supply to Mini-grid consumers, under the terms and conditions provided for in Article 22 of the Regulation on Access to Energy in Off-grid Areas approved by Decree n.º 93/2021, of 10 December and in the Interconnection Regulation, approved by the competent authority.

CLAUSE 19 Effects of Force Majeure Events

19.1. Whenever an event of force majeure or its effects persist for over 15 (fifteen) consecutive days, the concessionaire and the awarding authority shall meet as soon as possible to review the situation and agree on the measures to be taken to eliminate the cause of the occurrence of the force majeure and restart the execution of this concession.

19.2. The party wishing to request the suspension of its obligations under the concession due to the occurrence of a force majeure event shall:

- a) immediately notify the other party of the occurrence within forty-eight (48) hours or as soon as possible in the most expeditious manner and subsequently provide written confirmation;
- b) take all reasonable and practicable steps to eliminate the cause of the force majeure event;
- c) upon the elimination or cessation of the relevant cause of the force majeure event, immediately notify the other party and take all reasonable steps to resume the performance of its obligations under this Concession as soon as possible after the elimination or cessation of the force majeure event.

19.3. If the extent of the effects or the cause of any force majeure persists, or its effects persist for a period exceeding ninety (90) consecutive days and are insusceptible to repair or mitigation, then the concessionaire or the conceding authority may terminate this contract.

19.4. In the case where the event of force majeure determines the termination of the concession agreement and the right to payment of an indemnity, this amount shall correspond to the audited book value of the project to be determined by an independent expert in accordance with the Applicable Law.

CLAUSE 20 Increase in Costs

20.1 In the event of an Expropriation Event or Change in Applicable Legislation or a Force Majeure Event resulting in a Cost Increase, which harms the income and economic-financial balance of the Mini-grid Project, the concessionaire shall report in writing to the Energy Regulator identifying the respective event and the net amount of the Cost Increase resulting from the event, and request approval of said Cost Increase.

20.2. Within fifteen (15) days of the submission of a notice by the Concessionaire under this Clause, the Energy Regulatory Authority shall consider the amount proposed by the Concessionaire as a Cost Increase and shall convene a meeting to enable the Parties to agree on the amounts and forms of compensation.

20.3. In the event of a dispute between the Parties regarding the calculation of compensation for lost revenues and/or increased costs, the Parties shall attempt to resolve such dispute in good faith through negotiation between representatives of each Party. If no agreement is reached within thirty (30) days, the Parties shall submit the Dispute for determination by an Independent Expert.

20.4. The operator shall not be entitled to make any claim under this Clause and the Awarding Authority shall not be obliged to compensate the operator in respect of any Cost Increases if, and to the extent that, the operator has already been fully compensated.

CLAUSE 21 Termination of the Concession Agreement

21.1. This concession agreement expires:

- a)** by agreement between the Parties;
- b)** by revocation by the Awarding Authority by the provisions of Clause 22 (Events of non-performance by the concessionaire);
- c)** by termination by the concessionaire in accordance with the provisions of Clause 23 (Events of default by the Awarding Authority);
- d)** interconnection of the Mini-grid to the national electricity grid, in accordance with the Interconnection Regulation, approved by the competent authority, or whatever replaces it;
- e)** occurrence of a force majeure event, which lasts uninterruptedly for a period exceeding ninety (90) days and which is unsusceptible of repair or mitigation in accordance with the provisions of Clause 19 (Force Majeure Event).

21.2. The termination of this concession agreement for the reasons set out in paragraph e) of the previous number will take place when one of the following interconnection models occurs:

- a)** interconnection to the national electricity grid with the termination of the Mini-grid concession and subcontracting of its concessionaire for the management and operation of electricity distribution and supply activities;
- b)** interconnection to the national electricity grid with the extinction of the concession and total transfer of the Mini-grid's activities and electrical infrastructures and facilities to the concessionaire of the electricity distribution grid or other public entity to be indicated.

21.3. Either Party may terminate this Concession Agreement upon thirty (30) days prior written notice to the other Party if a Force Majeure Event results in the substantial loss of all Concession Assets.

21.4. Right of Redemption

The Granting Authority may exercise the right to cancel the concession agreement based on reasons of public interest, by giving the concessionaire a minimum of 30 (thirty) and a maximum of 180 (one hundred and eighty) days' notice, counting from the date of receipt of the notice by the concessionaire, in accordance with the Applicable Law.

21.5. Continuation of Pre-existing Liabilities

Termination or revocation of this concession agreement shall not relieve either Party of the relevant liability for any breach committed by such Party under this concession agreement before such termination or revocation.

21.6. The procedures for handing over the concession assets are determined by the Energy Regulatory Authority.

CLAUSE 22 Events of Non-Fulfilment by the Concessionaire

22.1. The Granting Authority may revoke this concession agreement based on one or more causes of non-compliance by the concessionaire:

- a)** deviation from the object of the concession;
- b)** it does not begin the construction of the electrical installation within the initial development period of 18 (eighteen) months from the effective date of the concession, namely not:
 - i)** obtain and submit the environmental register and respective good practice and/or mitigation and restoration plans resulting from the environmental impact assessment;
 - ii)** obtain and register the temporary or definitive land use and benefit right title and the respective administrative easements for electrical installations;
 - iii)** obtain and submit the authorization for the use and exploitation of water resources;
 - iv)** carry out the digital demarcation of the concession area;
 - v)** obtain and submit the other permits applicable to the project, as stipulated in the concession and Applicable Legislation;
 - vi)** obtain and submit the issue of the construction guarantee, as provided for in the concession;
- c)** not having reached the date for the start of commercial operation of the Mini-grid within a maximum period of 36 (thirty-six) months from the effective date of the concession, except in the case of mini-hydro plants, where the maximum period is 48 (forty-eight) months, extendable for duly justified reasons;
- d)** suspension or abandonment of the activity object of the concession, including the stoppage of the activities of the project, when total or partial cessation or interruption of the service occurs or is imminent, or when there are serious deficiencies in the respective organization and operation or the general state of the facilities and equipment that may compromise the reliability and continuity of the supply service, for a period of 90 (ninety) consecutive days, which is not caused by a force majeure event, which is unsusceptible to repair or mitigation, technical failure or any other justified reason;
- e)** refusal or repeated failure to allow the exercise of inspection and supervision, including the submission of annual reports and information within the scope of the exercise of inspection and supervision by the Energy Regulatory Authority;
- f)** declaration of bankruptcy or insolvency and consequent liquidation of the concessionaire;
- g)** refusal or failure to carry out proper maintenance, conservation, repair, and replacement of electrical installations and goods assigned to them;
- h)** refusal to proceed with the necessary expansion of the grid and/or consumer connections within the concession area, in accordance with the financial plan and business model based on which the concession was authorized, without due justification;
- i)** refusal or lack of compliance with the local content plan, approved according to the terms provided in the concession agreement;
- j)** malicious charging of tariffs at a higher value than those set in the concession or in the applicable tariff scheme, as the case may be;
- k)** disobedience or systematic non-compliance with the Applicable Law; and
- l)** a serious breach of the clauses of the concession agreement or the provisions of this regulation.

22.2. The revocation of the concession is subject to prior notice of at least 90 (ninety) days, from the Granting Authority to the concessionaire, specifying the breach, and the period for it to correct or remedy the facts that gave rise to the revocation notice, provided, however, that any termination of this concession agreement by the Granting Authority under this Clause (Events of default by the concessionaire) shall be subject to the provisions of any direct agreement entered into between the Financing Parties and the concessionaire and approved by the Granting Authority in respect of this concession agreement.

CLAUSE 23 Events of Default by the Granting Authority

23.1. The Concessionaire may terminate this Concession Agreement on one or more of the following grounds, each of which is an "Event of Default of the Awarding Authority":

- a)** breach of the material obligations of the Awarding Authority or any Administrative Authority that is not remedied within ninety (90) days of notification by the concessionaire to the Awarding Authority of the occurrence of such breach;
- b)** the occurrence of an Expropriation Event or the amendment, revocation of the terms and conditions or interpretation of any Applicable Law, making it unlawful to continue the performance of this concession agreement or preventing a Party from performing its obligations for one hundred and eighty (180) days;
- c)** the dissolution, liquidation, privatization, merger, reorganization, or restructuring of any public-law person with an equity interest in the concessionaire is or has become unable to pay its debts when due, has ceased to pay its debts, has become insolvent, or has applied for, or commenced, reorganization proceedings under any applicable insolvency law, unless:
 - i** any successor entity (or entities) assumes the rights and obligations of the public law person with an equity interest in the concessionaire; and
 - ii** such successor entity (or entities) has, in the reasonable opinion of the operator, sufficient technical competence and financial capacity to be able to meet its respective obligations; and
 - iii** the assignment or transfer by the Granting Authority of its rights or obligations under this concession agreement.

23.2. Termination of the concession agreement under this clause is subject to prior written notice containing the grounds for termination to the Awarding Authority, including the period of the cure specifying the breach under which such notice is being issued.

CLAUSE 24 Consequences of Termination or Expiration of the Term

24.1. Once the concession is extinguished and without prejudice to the provisions of number 2 of the present clause, the Granting Authority may determine, in accordance with the criteria and procedures applicable to the award of the respective concession:

- a)** the reversion in favour of the State or an entity that it may designate with technical and financial capacity, at the audited book value of the electricity facilities, movable and immovable property, and tangible and intangible assets allocated, free of any encumbrance or charge, without prejudice to the compensation due to the State for losses and damages caused, as well as other obligations to which it is bound; or
- b)** the removal or destruction of electrical facilities, movable and immovable property, tangible and intangible assets, related to the activity object of the concession, and the recovery of the site from the concession area at the concessionaire's expense, in accordance with the applicable legislation.

24.2. The electricity facilities subject to concession, as well as the assets allocated to them, built with public funds, revert free of charge and without any charges to the State or to the entity it may indicate with technical and financial capacity.

24.3. In the event of termination of this Concession Agreement by the Concessionaire in accordance with Clause 23 (Events of Default by the Granting Authority), the Granting Authority shall be obliged to pay to the Concessionaire a just compensation, calculated based on the audited book value of the assets of the project as at the date of payment, minus the value of any insurance, to be determined by the Energy Regulator and transfer of the Concession Assets.

24.4. In the event this concession agreement is terminated by the Granting Authority as a result of an event of default by the concessionaire in accordance with Clause 22 (Events of default by the concessionaire), the electric facilities, movable and immovable property and tangible and intangible assets affected shall revert to the State at their audited book value, free of any encumbrances or charges, without prejudice to the compensation owed to the State for losses and damages caused, as well as other obligations to which it is bound.

24.5. The revocation of the concession for non-compliance with the obligation to commence construction, provided for in paragraph b) of Clause 22.1 of this concession agreement, arising from non-compliance with the obligations provided for therein without justified reasons, shall be notified in writing to the concessionaire, without entitlement to compensation for non-removable investments, giving the Energy Regulatory Authority the right to enforce the performance guarantee, and the concessionaire shall be liable for all other damages and losses arising therefrom.

24.6. The revocation of the concession for non-compliance with the commencement of commercial operation, provided for in paragraph c) of Clause 22.1 of this concession agreement, without justified reasons, shall be notified in writing to the concessionaire, giving the Energy Regulatory Authority the right to enforce the performance guarantee, and the reversion to the State of the electric facilities, movable and immovable property and tangible and intangible assets allocated, in accordance with paragraph a) of Clause 2.

24.7. If the force majeure event determines the termination of the concession and the right to the payment of compensation, this amount will correspond to the audited book value of the project to be determined by the Energy Regulatory Authority.

24.8. The partial or total extinction of the Mini-grid concession resulting from the interconnection of the Mini-grid to the National Electricity Grid shall give rise to the right to compensation under terms to be determined by the Energy Regulatory Authority in accordance with the Applicable Legislation.

24.9. Termination at the end of the concession

Notwithstanding any other provisions of this Concession Agreement, upon the termination of this Concession Agreement, at the end of the term, the Concession shall terminate and the Concession Assets shall be transferred to the Granting Authority or a third party designated by it, without compensation.

CLAUSE 25 Complaints and Conflict Resolution Between the Parties

25.1. Interested parties may present complaints to the concessionaire whenever they consider that their rights have not been duly safeguarded, in breach of the provisions of the Applicable Legislation.

25.2. Disputes between the concessionaire and consumers involving regulatory matters are subject to mediation, conciliation, arbitration, and decision by the Energy Regulatory Authority.

25.3. Recourse to the Energy Regulatory Authority for dispute resolution does not exclude the right to resort to judicial and arbitral proceedings in accordance with the following paragraphs.

25.4. Without prejudice to matters subject to resolution by an independent expert under paragraph 7 of this clause, and recourse by the parties to mediation in accordance with the preceding paragraphs, disputes between the State and the Concessionaire involving matters relating to foreign direct investment, arising from the activity subject to the concession, including the investment and its regime, shall be resolved by arbitration, subject to written notice in accordance with:

- a)** the rules of the Washington Convention of 15 March 1965 on the Settlement of Investment Disputes between States and Nationals of Other States and its International Centre for Settlement of Investment Disputes between States and Nationals of Other States; and
- b)** the rules laid down in the Rules of the Supplementary Mechanism, adopted on 27 September 1978 by the Board of Governors of the International Centre for Settlement of Investment Disputes, if the foreign entity does not satisfy the nationality requirements of Article 25 of the Convention; or
- c)** the arbitration rules of the International Chamber of Commerce (ICC), based in Paris; or
- d)** in the case of ad hoc arbitration, in accordance with the terms of the UNCITRAL Arbitration Rules in force.

25.5. The forum for arbitration under ICC or UNCITRAL rules is Mozambique, the language of the arbitration is Portuguese, and the award shall be binding, final, and enforceable in any court of competent jurisdiction.

25.6. The production of documents and other matters relating to the submission of evidence shall be determined in accordance with the International Bar Association's Rules on the

Production of Evidence in International Arbitration as they exist on the date of the commencement of the arbitration.

25.7. Any matter or dispute of a technical or financial nature including the calculation of the tariff, interconnection, pricing, compensation values, application of quality standards, the operation and maintenance of the electrical installation, will be submitted to an Independent Expert by determination of one of the parties who notifies the other to that effect. In the absence of agreement by the parties, the expert will be designated by the Energy Regulatory Authority, the decision of the Independent Expert being final, binding, and enforceable for the parties and the competent entities.

25.8. Each Party shall also bear the fees, costs, and expenses of the Independent Expert, as well as the expenses incurred by that Party in preparing the material to be provided or presented to the Independent Expert, and in making presentations to the Independent Expert.

CLAUSE 26 Applicable Law

This concession agreement is subject to and shall be interpreted in accordance with the law in force in Mozambique.

CLAUSE 27 Language

27.1. This concession agreement is executed in Portuguese, being any translation optional and non-binding.

27.2. In the event of any conflict between the other language version and the Portuguese version of this concession agreement, the Portuguese version shall prevail.

27.3. Unless otherwise agreed by the Parties, every notification, instrument, certificate, or other communication to be made under or in connection with this Concession Agreement shall be in the Portuguese language.

CLAUSE 28 Amendment

28.1. This Concession Agreement, together with the Annexes, constitutes the entire agreement between the Parties relating to this Concession Agreement, superseding any statements, agreements, or arrangements previously made orally or in writing between the Parties in respect of the Concession.

28.2. All additions, amendments, and modifications to this concession agreement shall only be binding if made in writing, signed by an authorized representative of each Party, and shall only come into full force and effect on the date on which the visa is issued by the Administrative Court in respect of any such addition, amendment, and modification.

CLAUSE 29 Notification

29.1. Any notices or other communications sent or delivered by one Party to the other Party shall be deemed to have been properly sent or delivered unless otherwise provided in this Concession Agreement, if:

- i** sent or delivered in writing;
- ii** delivered in person (by hand or by courier service) to the other Party at the address set forth below or such other address as the other Party may require by notice, or sent by electronic mail at the electronic mail address to the other Party set forth below or such other electronic mail address as the other Party may require by notice; and
- iii** referred to the attention of the person(s) designated below. Any notice or communication made by one Party to the other Party in accordance with the foregoing provisions of this Clause shall be deemed to have been received by the other Party, if delivered by hand or sent by courier, on the day it is left at that Party's address, or if sent by facsimile transmission or electronic mail, on the next succeeding Business Day following the day on which it is sent to that Party's electronic mail address number.

If addressed to the Granting Authority:

[•]

[•]

Email: [•]

If addressed to the Concessionaire:

[•]

[•]

Email: [•]

29.2. Either Party may change its address, fax number, e-mail address, or other information from time to time; to be notified, such Party shall by notification specify this change to the other Party.

CLAUSE 30 Waiver

A waiver by either Party of any breach by the other Party in the performance of its obligations under this Concession Agreement: (a) shall only apply in respect of the specific case for the purposes based on which it is granted and shall not operate or be construed as a waiver of any other or subsequent breach, whether of similar or different characteristics; and (b) shall not be effective unless properly made in writing by an authorized representative of the Party concerned.

CLAUSE 31 Confidentiality

Each Party shall keep confidential and ensure that its contractors or subcontractors employed by it, as well as consultants and agents and each of their respective successors and permitted assigns, shall keep confidential all documents and other information of a confidential nature, whether technical or commercial, which have been provided by or on behalf of the other Party and which relate to this Concession Agreement and shall not publish or disclose them in any manner except as required by Applicable Law, or when such information is or becomes public (other than by breach of this Clause) or when such information is disclosed to any of its affiliates, lenders, advisors, insurers, reinsurers, or any investors in connection with the Development provided that such affiliates, lenders, advisors, insurers, reinsurers, or any investors agree to keep confidential the information disclosed to them. The provisions of this Clause shall survive the termination of this Concession Agreement but shall expire at the beginning of the twentieth anniversary of the termination or the fifth anniversary of the expiry date of this Concession Agreement.

CLAUSE 32 Anti-Corruption

32.1. In the performance of their obligations, each Party, its officers, directors, agents, and representatives shall fully comply with Applicable Law and all applicable laws related to anti-corruption, bribery, money laundering, terrorism, and boycotts.

32.2. Each of the Parties (including, in particular, any of their affiliates, subcontractors, consultants, representatives, or agents) hereby represents and warrants that it has not made, and will not make, directly or indirectly, any Prohibited Payment and that it is not engaged in any Prohibited Transaction in connection with the Development.

32.3. Each Party will promptly inform the other Party of any Prohibited Payment or Prohibited Transaction of which it becomes aware or of which it has reasonable grounds to suspect has occurred or will occur under the Venture.

CLAUSE 33 Compensation

33.1.The Granting Authority will indemnify the concessionaire against, and hold the concessionaire harmless from, at any time after the date hereof, all and any costs, losses, damages, expenses, actions, and/or proceedings of whatsoever nature, including all documented fees or legal costs, any action, claim, and demands relating to such, incurred, suffered, borne or required to be paid, directly or indirectly, by the concessionaire or which has been attempted to be imposed on the Concessionaire, due to bodily injury or death of persons or damage to property resulting from the negligent or intentional acts or omissions of the Granting Authority within the scope of this concession agreement.

33.2.The concessionaire will indemnify the Awarding Authority against, and hold the Awarding Authority harmless from and against, any costs, losses, damages, expenses, actions, and/or proceedings of whatsoever nature, including all documented fees or legal costs, and any action, claim, and demand relating to such, incurred, suffered, supported or that need to be paid, directly or indirectly, by the Granting Authority or that has been tried to be imposed on the Granting Authority, due to bodily injury or death of persons or damage to property resulting from the negligent or intentional acts or omissions of the concessionaire within the scope of this concession agreement.

33.3.If any of any costs, losses, damages, expenses, actions, and/or proceedings of whatever nature, including all types of documented fees or legal costs, resulting from the joint or concurrent negligent or intentional acts or omissions of the Parties, each Party shall be liable under this indemnity in proportion to its relative degree of fault.

33.4.Notice of Proceedings: Each Party will promptly notify the other of any Claim, action, demand, or proceeding for which it has or may be entitled to indemnification. Such notice will be given as soon as reasonably practicable after the relevant Party becomes aware of the Claim, action, demand, or proceeding. Failure to give timely notice shall not affect the rights of the Party to be indemnified to receive indemnification except to the extent that the indemnifying Party is materially prejudiced by such failure.

33.5.Rights Surviving: The indemnity obligations outlined in this Clause shall survive the termination of this concession agreement until the date of expiration applicable to the right to bring an action respectively to Claims, actions, suits, or proceedings.

CLAUSE 34 Miscellaneous

34.1.Individual Responsibility

If any provisions of this concession agreement are held to be invalid, illegal, or unenforceable in any jurisdiction, any such provisions shall be deemed to have effect to the extent permitted by law, and the invalidity, illegality, or unenforceability of such provisions shall not invalidate the remaining provisions herein nor affect the validity or unenforceability of such provisions in any other jurisdiction.

34.2.Exclusion of Third Parties

The terms and conditions of this concession agreement are solely for the benefit of each Party and their respective successors and assigns and it is not the intention of the Parties hereto to grant beneficiary rights to any other person.

34.3.Other Guarantees

Each of the Parties undertakes to execute and deliver all additional instruments to perform all acts and take all additional measures necessary for the execution of the provisions of this concession agreement.

34.4.Copies

This concession agreement may be executed in one or more copies each of which shall be deemed to be an original copy, but which together shall constitute the same instrument.

34.5.Binding effect

This concession agreement shall be binding upon and inure to the benefit of the Parties and their respective successors, legal representatives, and authorized assignees.

34.6.Survivor's rights

The covenants and agreements of the Parties contained in Clauses 1 (Definitions, Interpretation, and Construction), 24 (Consequences of Termination), 25 (Claims and Dispute Resolution), 27 (Language), 29 (Notices) 31 (Confidentiality), and 34 (Miscellaneous), shall survive termination or expiry of this concession agreement.

34.7.Expenditure

Each Party shall pay its costs and expenses (including the fees and expenses of its agents, representatives, advisors, attorneys, and accountants) necessary for the negotiation, preparation, signing, conclusion, performance, and enforcement of this concession agreement.

For and on behalf of Republic Of Mozambique

For and on behalf of (Concessionaire)

Annexes

Map and geographical coordinates of the concession area

Terms of Authorization

Tariff

Description and Specifications for the Construction and Operation of the Mini-grid

Schedule for the implementation of the Development

Construction Progress Report



MINISTERIAL DECREE
N° 84/2023 OF 07 JUNE

Certificate of Registration of Energy Service Provider



REPUBLIC OF MOZAMBIQUE
**MINISTRY OF MINERAL
RESOURCES AND ENERGY**

MINISTERIAL DECREE Nº 84/2023 OF 07 JUNE

As it has become necessary to approve the model for energy service provider registration, under the provisions of article 29 of the Regulation on Access to Energy in Off-Grid Areas, approved by Decree n.º 93/2021, of 10 December, I hereby determine:

ARTICLE 1

The Model Certificate of Registration of the Energy Service Provider, which is annexed to this Ministerial Order and forms an integral part thereof, is hereby approved.

ARTICLE 2

This Decree-law shall enter into force on the date of its publication.

Ministry of Mineral Resources and Energy in Maputo, on 13 April 2023

The Minister

[Redacted signature area]

Carlos Joaquim Zacarias



Certificate of Registration of Energy Service Provider

Registration n.º. ____ / ARENE / 20...

Pursuant to Article 26, of the Regulation on Access to Energy in Off-Grid Areas, approved by Decree n.º 93/2021 of 10 December, the Energy Service Provider Registration is granted:

Holder identification: _____

Date of Issue: _____

Validity of Registration: _____

Licence number of the technician responsible for electrical installations and private services:

Category of energy equipment or services (subject of the registration): _____

Field of action: _____

Note: - Registration is Non-transferable and the Registration Certificate must be in a place clearly visible to the public and must be presented during the inspection activities of the Energy Regulatory Authority.

The Energy Regulatory Authority

(Chairman of the Board of Directors)

Terms And Conditions For Registration Of Energy Service Providers n.º .../ARENE/20...

CLAUSE 1 Identification of the Parties

Energy Regulatory Authority - ARENE, NUIT..... located at Desportistas Street n.º 480, Maputo Business Tower, 4º floor, in the city of Maputo,
and
(Company Name), NUIT, NUEL, (address), hereafter referred to as Registered Entity (Regulated)

CLAUSE 2 Interpretation

2.1. Definitions

For the purposes of this registration, the following definitions shall apply:

- 2.1.1.** Operating Area - Geographical area defined for the provision of energy service activities;
- 2.1.2.** Energy Regulatory Authority - Entity responsible for ensuring the regulation of energy supply activities, whose competences are defined in Law n.º 11/2017 of 8 September, including the registration of energy services under Decree n.º 93/2021 of 10 December;
- 2.1.3.** Registration - An administrative act aimed at recognising, modifying, extending and cancelling the rights and obligations of its holder for the provision of energy services, under Decree n.º 93/2021, of 10 December;
- 2.1.4.** Energy Services - These include services to energy consumers, preferably renewable, such as the supply, financing, installation, operation, maintenance of electrical equipment and installations, including autonomous systems and other energy technologies;
- 2.1.5.** Responsible Technician - A natural or legal entity licensed by the competent authorities in accordance with Decree n.º 51/2013 of 13 September;
- 2.1.6.** Holder - The person who holds a registration for the provision of energy services in accordance with Decree n.º 93/2021 of 10 December.

CLAUSE 3 Object, Scope and Duration of Registration

3.1. Subject matter

In accordance with article 26 of the Regulation for Access to Energy in Off-Grid Areas, approved by Decree n.º 93/2021, of 10 December, Energy Service Provider Registration n.º ...ARENE/20...

3.2. Scope

The licensed entity's operation area is located at..., in the ... District, in the Province of...

3.3. Duration

This registration is valid for 5 years from the date of its signature, renewable at the interest of the registered entity.

CLAUSE 4 Regulatory Authority

4.1. The Regulator shall have the duty to supervise and control compliance with the conditions for registration, in relation to administrative, accounting, commercial, technical, economic and financial matters in accordance with Article 34 of the Regulation on Access to Energy in Off-Grid Areas, approved, by Decree n.º 93/2021, of 10 December.

4.2. In the exercise of its supervisory powers, the Regulatory Body shall require the Registered Entity to comply with the duties incumbent upon it, under clause 5.2 of this certificate and other applicable legislation.

CLAUSE 5 Rights and Duties of the Registered Entity

5.1. Rights

5.1.1. Carry out the activities of energy service activities, including the right to charge for the service provided;

5.1.2. Obtain the collaboration of the respective competent entities in the issuance, maintenance renewal all other permits and authorisations necessary to carry out the energy service provision activities;

5.1.3. Have access to the respective benefits applicable under the terms of Article 5 of the Regulations for Access to Energy in Off-Grid Areas, approved by Decree n.° 93/2021, of 10 December, and other applicable legislation upon presentation of the respective registration certificate.

5.2. Duties

5.2.1. Submit an annual activity report to the Regulatory Authority before 31 May including, among others, the following relevant information:

- a)** number of beneficiaries;
- b)** area of action;
- c)** type and place of sales;
- d)** quantity of energy produced, used and installed power, when applicable;
- e)** local content actions, including details on gender empowerment and environmental conservation;
- f)** breakdowns, decommissioned installations and equipment, recycled equipment and components;
- g)** complaints from service users/consumers and their respective form of resolution;

5.2.2. Send, on a monthly basis, to the entity responsible for implementing electrification activities in off-grid areas, information on new residential systems, including other information of public interest;

5.2.3. Comply with quality standards, both in terms of equipment and service provision;

5.2.4. Comply with the Solid Waste Management Plan approved when the registration is issued.

CLAUSE 6 Suspension, Modification, Extension and Cancellation of Registration

6.1. The suspension, modification, extension and cancellation of the registration shall be subject to 60 days' prior notice to the Energy Regulatory Authority.

6.2. The issuance, modification, extension and cancellation of the registration shall be subject to:

- a)** publication in the electronic portals of the Ministry that oversees the energy sector and of the Energy Regulatory Authority; and
- b)** registration in the energy register.

CLAUSE 7 Cancellation and Expiry of Registration

The registration to provide energy services shall be cancelled, upon prior notification by the Energy Regulatory Authority to the Registered Entity within 10 days, pursuant to Article 32 of the Regulation on Access to Energy in Off-Grid Areas, approved by Decree n.° 93/2021, of 10 December.

CLAUSE 8 Sanctions

Failure to comply with these terms and conditions of the Energy Service Provider Registration, may result in sanctions defined by law, Sanctioning Regulations and other applicable legislation.

Drawn up in two original copies, in the Portuguese language, one in the possession of the Regulatory Authority and the other kept by the Registered Entity, both equally valid.

Maputo, 20...



NORMATIVE RESOLUTION
Nº 1/ARENE-CA/2022 OF 19 DECEMBER

Tariff Regulation For Mini-Grids in Off-Grid Areas



NORMATIVE RESOLUTION Nº 1/ARENE-CA/2022 OF 19 DECEMBER

Considering the need to define the rules and procedures related to the establishment, regulation, setting and supervision of tariffs applicable to off-grid energy supply activities through mini-grids in off-grid areas, within the scope of the powers provided for in Article 7(1)(d) of Law n.º 11/2017 of 8 September, in conjunction with Article 29(1)(c) of Ministerial Diploma n.º 17/2020 of 14 April, the Board of Directors determines:

ARTICLE 1

The Tariff Regulation for Mini-grids in Off Grid Areas, attached to this Resolution, which is an integral part thereof, is hereby approved.

ARTICLE 2

Any doubt arising from the interpretation and implementation of the approved Regulation shall be clarified by the Administrative Council of the Energy Regulatory Authority.

ARTICLE 3

This Resolution shall enter into force immediately. Approved by the Board of Directors in Maputo, on 19 December 2022.

The Chairman of the Board of Directors

A solid grey rectangular box used to redact the signature of the Chairman of the Board of Directors.

Paulo da Graça

Tariff Regulation For Mini-Grids in Off-Grid Areas

Chapter I - General provisions

ARTICLE 1 Definitions

1. For the purposes of this Regulation, the meaning of the terms and expressions used herein is set out in the attached glossary, which is an integral part of this Regulation.
2. Any term used in this regulation to which a different meaning has been assigned in the Regulation on Access to Energy in Off-Grid Areas approved by Decree n.° 93/2021 of 10 December or Law n.° 12/2022 of 11 July, shall have the meaning assigned to it, unless explicitly stated otherwise in this regulation.

ARTICLE 2 Subject Matter

This regulation aims to standardise the tariff regulation of the energy supply activities through mini-grids in off-grid areas

ARTICLE 3 Scope

This Regulation applies to legal entities governed by public or private law, engaged in off-grid energy supply activities through mini-grids in off-grid areas, as well as to final energy consumers.

ARTICLE 4 Principles of tariff regulation

1. The principles of tariff regulation under this Regulation are as follows:
 - a) cost recovery, provided that it is prudent, necessary, efficient and reasonable based on the principle of tariff additivity;
 - b) a reasonable return on invested capital taking into account an appropriate capital structure that reflects the risks of the project, safeguarding the benefits and exemptions attributed by the social nature of the project;
 - c) the stability of tariffs considering the consumer expectations and ability to pay, while simultaneously ensuring the economic and financial balance of regulated activities under conditions of prudent and efficient management;
 - d) the fair sharing between the concession holder and final consumers of the results of the impact of fiscal and regulatory incentives and benefits, as well as economies of scale and productivity gains; and
 - e) transparency, simplicity and efficiency in the tariff formulation, setting and publication procedures, as well as in their supervision.
2. The tariff shall be calculated based on accepted costs and allowable revenues, including an adequate remuneration of the invested capital, with the possibility of setting a ceiling on the tariff to be charged in line with the consumers' ability to pay and incentives for economic efficiency.

3. The tariff structure, based on conventional kilowatt-hour (kWh) tariffs, fixed tariffs, monthly flat-rate tariffs, power tariffs or a combination of these, shall be established for each category of consumer, by tariff cycles, subject to review and adjustments, with mandatory public consultation and adequate publicity to its recipients.

ARTICLE 5 Competences

Under this Regulation, the Energy Regulatory Authority:

- a)** establishes, approves and regulates the tariffs applicable to the projects engaged in supply access to energy in off-grid areas through mini-grids;
- b)** sets tariffs in accordance with this regulation and other applicable legislation;
- c)** proceeds to the revision and adjustment of tariffs;
- d)** reviews the structure and framework to calculate and set the applicable tariffs;
- e)** monitors compliance with tariff regulations;
- f)** requests information from the concessionaires regarding costs, revenues, investments and others matters related to the project;
- g)** analyses and approves the investment and expansion plans submitted by the concessionaires;
- h)** ensures the publication of electricity consumption tariffs and respective updates;
- i)** resolves complaints from concessionaires and customers related to the tariff;
- j)** monitors tariffs by auditing the accounts of mini-grid companies as and when necessary;
- k)** initiates and conducts infringement procedures resulting from the violation of provisions, and imposes fines and other penalties on offenders in accordance with applicable legislation;
- l)** establishes and adopts the specific rules and necessary guidelines for the application of this Regulation; and
- m)** performs other duties in accordance with the applicable legislation.

Chapter II - Objectives and methods of tariff regulation

ARTICLE 6 Objectives of tariff regulation

The objectives of tariff regulation are as follows:

- a)** the stability and predictability of remuneration throughout the life of the project, in order to:
 - i)** promote economic and productive development, as well as improve living standards through access to electricity;
 - ii)** maintain a balance between the economic viability of the project and the ability of final consumers to pay;
 - iii)** attract and facilitate financing and investment in electricity supply activities as well as in productive socio-economic activities;
 - iv)** allow concessionaires flexibility to adapt the tariffs to the socio-economic and environmental context of the development;
 - v)** ensure continued operation, maintenance and reinvestment in the mini-grid's electricity installations;
- b)** provide a balance between economic and energy efficiency and quality, environmental and safety standards in the electricity supply service.

ARTICLE 7 Tariff methodology

1. The tariff shall be determined based on accepted costs and allowed revenues, including an adequate remuneration of the invested capital, as defined in this regulation.
2. The Energy Regulatory Authority, without prejudice to paragraph 1, may set a ceiling for the tariff to be charged, aligned with the consumers' ability to pay, based on the study of the characteristics of the consumers targeted by the project or on comparative studies and analysis, including avoided cost or other method to be defined.
3. Final consumers shall not be charged, directly or indirectly, of any other tariffs, prices, costs, fees or charges for the consumption of electricity, nor shall any procedures and rules be imposed, which are not provided for in this regulation or which differ from those established by the Energy Regulatory Authority.
4. Tariff changes shall be subject to the provisions outlined in this regulation.

ARTICLE 8 Procedures for setting the tariff

1. In order to calculate the tariff for the first tariff cycle, 90 (ninety) days before the start of the commercial operation, the concessionaire submits a technical, economic and financial study, containing disaggregated and detailed data for each of the energy supply activities throughout the concession period, namely:
 - a) the accepted capital and operation and maintenance costs of the generation activity;
 - b) the accepted capital and operating costs of distribution and commercialization activities;
 - c) the tax benefits and exemptions scheme applicable to the project;
 - d) the economic and financial indicators expected for the investment.
2. For the definition of the tariff for the first tariff cycle, the following ceiling shall be considered:
 - a) the value of the offer contained in the tender documents, in the case of an open tender;
 - b) the value of the applicant's proposal for the concession of the mini-grid project, as set out in the application form, in accordance with Ministerial Order of...;
 - c) the value of the tariff previously set by the Energy Regulatory Authority.
3. For subsequent tariff cycles, in addition to the accounting information required in accordance with this regulation, the concessionaire shall submit an investment and expansion plan covering the entire duration of the tariff cycle, which includes:
 - a) the net present value of the investment made;
 - b) planned new investments related to new connections and, where applicable, the replacement of end-of-life equipment;
 - c) the applicable tax benefits and exemptions;
 - d) the estimated energy consumption for each year of the tariff cycle, detailing the number of existing and new customers, the category and the estimated consumption for each;
 - e) the plan for improving the efficiency of operation and maintenance, including the internal training plan for mini-grid staff.
4. For tariff setting or revision, the concessionaire shall hold a public consultation in the concession area of the project, with the participation of representatives of the different categories of customers, and the minutes of the consultation and the comments received shall be submitted for the consideration of the Energy Regulatory Authority.
5. The Energy Regulatory Authority may, at the initiative of consumers or itself, if it deemed necessary, promote public consultation on the tariff, with the cost of it being borne by the applicant and/or the concessionaire, as applicable.
6. The setting, review or adjustment of the tariff shall be disclosed to its recipients through public meetings at community-level, community television and radio broadcasting, leaflets and digital platforms, including those of the Energy Regulatory Authority, as well as written notices, as appropriate.

SECTION I Cost Structure and Remuneration

ARTICLE 9 Cost structure

1. The following are considered part of the accepted cost structure to be reflected in the tariff calculation:
 - a) costs of the generation activity;
 - b) costs of distribution and trading activity.
2. Accepted costs should reflect the technical, geographical, size, socio-economic and other specific costs of the respective mini-grid project.
3. The accepted costs in the tariff calculation may reflect the difference in providing services at different periods of the year and at different times of the day.
4. The cost for providing appliances and equipment for domestic or productive use promoted by the concessionaire shall be charged separately and is not reflected in the calculation of the electricity consumption tariff.

ARTICLE 10 Eligible costs

1. Only costs that are deemed reasonable, prudent, efficient and necessary for the supply of electricity shall be eligible and reflected in the tariff calculation.
2. Without prejudice to the provisions of paragraph 1, the following shall be considered as eligible costs in relation to the production activity:
 - a) costs related to the operation and maintenance of the infrastructure and generation facilities, including those related to personnel and the supply of goods and services;
 - b) costs related to activities carried out in connection with the project, resulting from instructions issued by the Energy Regulatory Authority;
 - c) annual depreciation of assets allocated to generation activity;
 - d) fuel acquisition costs, where applicable; and
 - e) costs related to the acquisition of land use and exploitation rights and the establishment of administrative easements and infrastructure protection zones allocated to the project, including compensation paid to the owners and users.
3. Without prejudice to the provisions of paragraph 1, the following shall be considered to be eligible costs relative to distribution and trading activities:
 - a) costs related to the exemption or financing of connection fees for final consumers, when applicable;
 - b) cost of internal installation of consumer units, where applicable;
 - c) costs related to public lighting;
 - d) costs related to the operation and maintenance of the distribution network infrastructure, including those related to staff, and the supply of goods and services;
 - e) marketing related costs, including those related to personnel, and the supply of goods and services;
 - f) annual amortisation of the assets allocated to distribution and supply activities;
 - g) costs related to the acquisition of land use and benefit rights and the establishment of administrative easements and protection zones allocated to the distribution network, including compensation paid to the owners and users.
4. The following shall also be considered eligible costs:
 - a) regulatory, contractual and administrative fees and charges;
 - b) costs of studies and development of technical projects and financial analysis for the project;
 - c) costs related to the establishment of a reserve for the replacement, repair and maintenance of infrastructure, components, materials and equipment;

- d)** costs related to the establishment of a provision for decommissioning of the infrastructure and environmental compliance under the applicable legislation;
 - e)** costs related to staff training, provided that they are included in an annual activity plan;
 - f)** fees and taxes other than those levied on income.
- 5.** Costs resulting from the following shall not be considered eligible costs:
- a)** fines and penalties imposed for infringement under the applicable legislation;
 - b)** the exercise of other type of activity;
 - c)** the exercise of activities under another concession for electricity supply;
 - d)** the depreciation of goods supplied and financed with grants, donations or subsidies;
 - e)** the amortisation of goods supplied and financed by customers.

ARTICLE 11 Allowed revenues

- 1.** The components of the allowable revenues shall comprise the eligible costs and an adequate remuneration of the invested capital defined in accordance with paragraph 3 of this Article.
- 2.** The amount of allowable revenues from consumption tariffs is determined for the first year of each tariff cycle, according to the following formula:

$$PP = (CMPC \times BRR) + Amort + O\&M + T\&I + (MD \times W_v)$$

Where

- PP** - Allowable Revenues
- WACC** - Weighted Average Cost of Capital (or WACC), calculated in accordance with Article 14
- BRR** - Regulatory Asset Base for the tariff cycle, calculated in accordance with article 12
- O&M** - Operation and Maintenance Costs
- Amort** - Amortization of assets
- T&I** - Charges and Taxes
- MD** - Performance Margin
- W_v** - Amount related to electricity sold

- 3.** The appropriate remuneration of the invested capital shall correspond to the allowable remuneration to be determined by the Energy Regulatory Authority in the following terms:
 - a)** in the case of exclusively private financed project by applying a rate of return on capital in accordance with this Regulation;
 - b)** in the case of exclusively public financed project under private management through a management contract, by a performance-related Performance Margin (MD) rate, proportional to the amount of revenue from electricity sold (WV);
 - c)** in the case of public and private financed project under private management, by a proportional combination of the rate of return on capital and the performance-related Margin (MD) rate, measured by the amount of revenue from electricity sold (WV).
 - d)** the amount of the Performance Margin (MD) and the terms of the management contract shall be negotiated between the parties and approved by the Energy Regulatory Authority.

ARTICLE 12 Regulatory remuneration base

- 1.** The initial Regulatory Asset Base (BRRO) for the mini-grid electricity supply activity:
 - a)** reflects the economic value of the goods required;
 - b)** includes the volume of material and financial resources;
 - c)** is calculated separately for each of the production and distribution and trading activities.

2. The Regulatory Asset Base at the end of each year of a tariff cycle is given by the following formula:

$$BRR_n^i = BRR_{n-1}^i - A_n^i + CAPEX_n^i + VarFM_n^i$$

where

BRR_n^i Net Regulatory Asset Base associated with activity *i*, in year *n*

BRR_{n-1}^i Net Regulatory Asset Base associated with activity *i*, in year *n-1*

A_n^i Amortization associated to activity *i*, in year *n*

$CAPEX_n^i$ - Investments associated to activity *i*, in year *n*

$VarFM_n^i$ Change in working capital requirement associated with activity *i*, in year *n*.

3. The Regulatory Asset Base at the end of each review period or tariff cycle is given by the following formula:

$$BRR_N^i = BRR_0^i - \sum_{n=1}^N A_n^i + \sum_{n=1}^N CAPEX_n^i + \sum_{n=1}^N VarFM_n^i$$

where:

BRR_0^i Initial Regulatory Asset Base associated to activity *i*

BRR_N^i Net Regulatory Asset Base associated to activity *i*, at the end of the tariff cycle

N - Duration of the tariff cycle in years

A_n^i Amortization associated to activity *i*, in year *n*

$CAPEX_n^i$ Investment disbursed to activity *i*, in year *n*

$VarFM_n^i$ Change in working capital requirement associated with activity *i*, in year *n*.

4. The value of the investments associated with each tariff cycle shall be set out in the investment and expansion plan referred to in Article 8 of this Regulation.

5. The volume of resources referred to in number 4 of this article shall constitute the variation of the working capital requirement, which shall be dimensioned in accordance with the characteristics of the operation and commercialisation systems of the off-grid energy supply activities, operating in an efficient regime.

ARTICLE 13 Amortisation

1. The depreciation rates and the classification of the asset elements are in accordance with the amortisation rules of the applicable legislation.

2. Any change in the amortisation regime is noted in the regulated and audited accounts.

ARTICLE 14 Rate of remuneration or return

1. The rate of return on capital is set by the Energy Regulatory Authority and calculated based on the Weighted Average Cost of Capital (WACC) using the following formula:

$$CMPC = F_D \times r_d + F_E \times r_e \times \frac{1}{(1 - t)}$$

where:

WACC: weighted average cost of capital

r_d - cost of debt

t - income tax rate

r_e - cost of equity

F_D - corporate debt ratio

F_E - company equity ratio.

2. The cost of equity capital referred to in the previous number is estimated using a risk-return model (CAPM), by the following formula:

$$r_e = r_f + \beta_e (r_m - r_f)$$

where:

r_e cost of equity capital opportunity

r_f return on a risk-free asset

β_e risk associated with the investment

r_m market risk premium

3. For the purposes of this regulation, there shall be no difference in risk between generation activities and distribution and supply activities.

4. The Energy Regulatory Authority may set a maximum acceptable value for the rate of return on capital (WACC), and this value shall be the same for all mini-grid developments with the same characteristics.

ARTICLE 15 Economic efficiency

1. For each tariff cycle the Energy Regulatory Authority shall set efficiency targets taking into account, namely, the following parameters:

a) acceptable levels of technical and commercial losses;

b) the number of new connections each year;

c) the level of productivity gains in the operation and maintenance of the systems;

d) levels of productivity gains in the payment of bills.

2. The targets set shall take into account the characteristics of the respective mini-grid project and the benchmarks established by national or international experience and benchmarks studies.

3. In assessing and setting the tariff levels, the Energy Regulatory Authority shall take into consideration the concessionaire's compliance with the targets established in number 1 of this article.

SECTION II Tariff structure

ARTICLE 16 Criteria for setting the tariff structure

1. The tariff structure shall:
 - a) reflect the accepted costs and allowable revenues as described in this regulation, for each customer category, according to the consumption characteristics;
 - b) be based on conventional kilowatt-hour (kWh) tariffs, flat rate tariffs, monthly flat rate tariffs, capacity tariffs or a combination of these;
 - c) may reflect social concerns and encourage energy efficiency in consumption.
2. The tariff:
 - a) should be uniform per customer category;
 - b) may be set to reflect the difference in cost of service provision at different times of the year and at different times of day.

ARTICLE 17 Tariff components

1. The tariff structure is made up of the following tranches:
 - a) fixed or capacity; and
 - b) variable or based on actual consumption.
2. The fixed part is associated with a fixed cost per consumer, proportional to the installed load in kW.
3. The variable part is calculated according to the amount of electricity supplied to the consumer in kWh and may reflect the variation over time of the production cost.

ARTICLE 18 Billing Methods

1. Fees may be charged using one of the following methods:
 - a) fixed monthly fee;
 - b) pre-payment; and
 - c) post-payment.
2. The utility may also limit the maximum load and the maximum energy consumed in a given period per consumer, depending on their category.

ARTICLE 19 Categories of clients

1. Tariffs shall be uniform per customer category and may be discriminated as follows:
 - a) social, covering small-scale uses such as agriculture, cooperatives and associations;
 - b) residential;
 - c) public administration, health centres and schools;
 - d) street lighting;
 - e) commercial and services;
 - f) industrial.
2. For residential customers, the Energy Regulatory Authority may define one or more consumption levels where differentiated tariff conditions shall apply.
3. Customers may also be categorised by voltage level:
 - a) low voltage;
 - b) medium voltage.

SECTION III Tariff cycle and review

ARTICLE 20 Tariff cycle

- 1** The first tariff cycle lasts two years, from the date of commencement of commercial operation, and the second and subsequent tariff cycles lasts 4 (four) years.
- 2** For each tariff cycle a tariff shall be fixed, remains constant during the cycle, subject to review and adjustments, under the terms of this regulation.

ARTICLE 21 Periodic review process and deadlines

- 1.** The periodic tariff revision shall take place at the end of each tariff cycle and shall be based on the values of the allowable revenues and eligible costs of the project subject to concession, in accordance with the provisions of this regulation, taking into account the accounting information of the concessionaire's duly audited and the annual reports.
- 2.** The concessionaire shall submit the tariff proposal 90 (ninety) days before the end of the respective tariff cycle, which must include all economic and financial information and documents justifying it, the criteria and method for setting the tariff, the tariff model, the investment and expansion plan provided for in article 8 of these regulations and any other relevant information.
- 3.** Upon receiving the tariff proposal from the concessionaire, within 10 (ten) days, the Energy Regulatory Authority verifies the submitted elements and information requesting additional information as necessary, to which the concessionaire shall respond within a maximum period of 10 (ten) days from the date of notification.
- 4.** Upon receipt of the information submitted by the concessionaire referred to in the previous number, the Energy Regulatory Authority shall have 60 (sixty) days for analysis, clarification and determination on the request for revision of the tariff and shall notify the concessionaire in written.
- 5.** In the event of disagreement, the concessionaire shall have 10 (ten) days to appeal the decision on the revision of the tariffs to the Energy Regulatory Authority, which shall respond in accordance with the applicable legislation.
- 6.** While awaiting the response to the appeal lodged in the previous number, the concessionaire must apply the tariff established by the last decision of the Energy Regulatory Authority.
- 7.** The revised tariff in accordance with this article shall be implemented by the concessionaire from the beginning of the new tariff cycle.

ARTICLE 22 Procedure and deadlines for extraordinary revision

- 1.** The procedure for extraordinary revision of the tariff may be initiated at any time, on the initiative of the Energy Regulatory Authority, or at the request of the concessionaire or of the representatives of the customers in the concession area, based on the significant changes of the values of eligible costs and allowable revenues, underlying the calculation of the tariff, which results from:
 - a)** an event that has a significant impact on the economic and financial equilibrium of the project subject to the concession, such as unforeseen costs in the expansion of the distribution network or extension of the infrastructure and generations installation or significant unforeseen profits;
 - b)** force majeure event;
 - c)** changes related to the implementation of the project with a significant impact on the parameters established.
- 2.** The request for extraordinary review shall be submitted to the Energy Regulatory Authority, based on one of the reasons specified in the sub-paragraphs of the previous number, within a maximum of 30 (thirty) days following the occurrence of the event, and shall specify:
 - a)** the elements of the economic and financial balance that have been affected or are expected to be affected, including a preliminary assessment of their impact;
 - b)** the tariff proposal.
- 3.** The same procedure and deadlines shall apply to the extraordinary review as the periodic review, established in Article 21, with the necessary adjustments.

ARTICLE 23 Annual and extraordinary adjustments

1. A tariff adjustment may be made, promoted either by the concessionaire or by the representatives of the customers in the concession area, or by the Energy Regulatory Authority, based on the fluctuation or changes of the following indices:
 - a) inflation rate;
 - b) currency fluctuation;
 - c) other relevant.
2. As the adjustment is made according to the tariff model, the Energy Regulatory Authority should prepare a guide to clarify the formulas and calculation methods.
3. The tariff adjustment shall have an annual basis and may take place up to 365 days (operating year) after the date of the last adjustment or revision, or exceptionally, whenever the conditions so justify.
4. The same procedure for the periodic review, established in article 21 of these regulations, apply to the periodic adjustment, with the necessary adaptations, and the following deadlines shall apply:
 - a) proposal submitted 60 (sixty) days before the end of the operating year;
 - b) verification of the elements and information submitted, requesting any additional information that is deemed necessary, within 10 (ten) days;
 - c) analysis, clarification and determination on the application within 30 (thirty) days;
 - d) appeal against the decision by the concessionaire, within 10 (ten) days from the date of the decision.
5. The deadlines for the extraordinary adjustment are the same as for the periodic adjustment, and the adjusted tariff must be implemented by the bidder within 10 (ten) days from the notification of the decision.

Chapter III - Accounting and reporting

ARTICLE 24 Publicity

The concessionaire must publish, in a manner appropriate to the circumstances of the consumers, in printed form at customer service locations, newspapers of wider circulation, on community radio stations, and in electronic and other formats, appropriate to the circumstances of the concession area, details of the applicable tariffs and respective conditions, as well as other charges applicable to services related to the supply of electricity.

ARTICLE 25 Accounting

1. The concessionaire must keep the accounting and the respective supporting documents for each project subject to the concession, broken down by area of activity, in accordance with the applicable legislation, including the following cost centres and statements:
 - a) regulated asset base, amortisation including reserves / contingency funds, where applicable;
 - b) the investment and expansion plan including subsidies, supplies and grants updated to the date of submission;
 - c) revenues disaggregated by customer category and according to provenance as allowable revenues according to Article 11, remuneration of tariffs broken down by variable and fixed rate;
 - d) amortisation scheme;
 - e) operation, and maintenance costs including administrative costs, identifying the costs incurred both outside and inside the country;
 - f) costs and revenues from ancillary activities for energy supply service;
 - g) complementary activities provided outside the scope of the activities for electricity supply service;
 - h) level of losses, broken down into technical and commercial losses;
 - i) any other relevant information.

- 2.** Where more than one concession is held, the concessionaire shall keep separate accounts for each concession, unless expressly authorised by the Energy Regulatory Authority.
- 3.** The accounting of the mini-grid concessionaires shall be audited annually by independent auditors, duly registered and licensed in Mozambique.
- 4.** The concessionaire must report annually on the audited accounts of the regulated activities, providing a copy of the auditor's report, including information on the elements referred to in number 1 of this article, broken down by activity, without prejudice to the provisions of the previous number.
- 5.** Whenever it deems necessary, the Energy Regulatory Authority may request additional or complementary information, within a period to be set by it.
- 6.** The expenses incurred by a person carrying out energy access supply activities in off-grid areas which cannot be directly attributed to a particular concession because they are general expenses of that concession and must be attributed to the mini-grid project of the same person in a proportional manner.
- 7.** The Energy Regulatory Authority may, at any time and at the expense of the concessionaire, require an independent audit to be carried out on any specific matter relating to or arising from the project which is the subject of the mini-grid concession.
- 8.** When, as a result of an audit, there are values that are not substantiated in accepted costs and allowable revenues, including investments, the Energy Regulatory Authority shall determine:
 - a)** the retroactive correction of the total costs and/or allowable revenues defined, with the amounts to be corrected being included in the total allowable revenues in the year following their calculation;
 - b)** the correction of the applicable consumption tariff to be applied within 10 (ten) days of the notification of the determination.

ARTICLE 26 Infringements

Without prejudice to criminal and civil liability, and other applicable sanctions, the practice of the following acts by private or public legal entities carrying out energy access supply activities constitutes an administrative offence:

- a)** practice tariffs without the respective concession and or not approved by the Energy Regulatory Authority under the terms of this regulation;
- b)** applying discriminatory tariffs between customers of the same category;
- c)** failure to provide, or late provision of, information required under this Regulation;
- d)** the provision of false information, including on the costs of the project;
- e)** hinder or impede access of the tariff inspection teams from the Energy Regulatory Authority to accounting and other technical, accounting and economic information.

Chapter IV - Final provisions

ARTICLE 27 Provision of Information to the Energy Regulatory Authority

The concessionaires are obliged to provide all the information and documents requested by the Energy Regulatory Authority at any time and within the time limits, and must do so in writing, in physical and electronic format, unless the Energy Regulatory Authority indicates otherwise.

ARTICLE 28 Supervision of the application of the Regulation

1. The supervision of the application of these regulations is the responsibility of the Energy Regulatory Authority, in accordance with the Law establishing it, its Organic Statute, its internal regulations and other applicable legislation.
2. Supervisory actions shall be carried out in accordance with plans previously approved by the Energy Regulatory Authority and whenever deemed necessary to ensure the regulation of the energy sector.
3. The Energy Regulatory Authority shall carry out or promote the carrying out of verification actions, namely audits and inspections, which may cover all or part of the provisions of this Regulation, as determined by the Energy Regulatory Authority.

ARTICLE 29 Penalty regime

1. Failure to comply with the provisions of this regulation constitutes a punishable offence in accordance with the applicable sanctioning regime approved by the Energy Regulatory Authority.
2. All information and documents obtained in the implementation of this Regulation, including those resulting from audits, enforcement actions, inspections, petitions, complaints, denunciations and claims, may be used in accordance with the applicable sanctioning regime.

Annex - Glossary

Ability to Pay or Capacity to Pay: a measure of the value or quantity of a particular good or service that a consumer can afford to purchase in a given period of time. This value depends on the price of the good or service and the consumer's income, as well as on the subjective value attached to the good or service in comparison with other goods and services that the consumer needs or wants to acquire.

Allowable revenues: income and profits that, under regulatory terms, are attributed to the project of a regulated activity, subject of a concession, to be recovered through the collection of the consumption tariff, in return for the development of the activity in question.

Areas Outside the National Electricity Grid or Off Grid: areas not served by REN, with current and potential consumers, located in rural areas and remote communities.

Avoided cost: corresponds to the value that the consumer would pay for the same energy service if the project (in this case the mini-grid) did not exist. It allows comparing the monthly amount paid for energy supply by the mini-grid and the amount the user would pay for the energy service (lighting, battery charging, entertainment, etc.) using conventional sources.

CAPM (Capital Asset Pricing Model) - method of analysing the relationship between risk and the expected return on an investment and is used to estimate a company's cost of equity.

Commencement of Commercial Operation: the date of commencement and completion of commissioning and testing of the equipment of the electrical installation, as notified by the concessionaire to the competent entity.

Commercial losses: the difference between the amount of energy delivered for consumption and the energy paid by consumers.

Concession Area: the geographical area defined in the mini-grid concession for the performance of activities for energy access supply, which may be a single area or a set of multiple areas.

Concessionaire: the holder of a concession granted under the Off Grid Energy Access Regulation approved by Decree 93/2021 of 10 December.

Consumer: a natural or legal person, including final consumers, other distributors, sellers who are subject to the supply of electricity or energy services, for domestic, industrial or commercial use. For the purposes of this regulation, the concepts of customer and consumer shall have the same meaning.

Consumption Tariff: means fair and reasonable tariff, which may vary according to consumer category, service, voltage or time of use, and which result from the costs of service and consumption, where energy consumption is measured in conventional kilowatt hours, by means of energy limiters, pre-paid meters or devices with a combination of these functions, as approved by the Energy Regulatory Authority.

Consumption: the use of electricity by a natural or legal person, including residential, commercial, factory and or industrial production or agricultural units, other distributors, export consumers and sellers.

Cost: the expenditure or loss incurred in the ordinary course of business or other (when applicable), defined in accordance with current accounting and regulatory standards.

Customer: the same as the consumer under an energy supply contract.

Diffuse rights or interests: supra-individual rights, indivisible in nature, belonging to indeterminate persons and linked by certain circumstances, related to the defence of human rights, public health, the environment, consumption, natural resources, and cultural heritage.

Economic and financial equilibrium: consists of a relationship of equality formed between eligible costs and allowable revenues in accordance with the calculation rules defined in this regulation.

Electrical Installation: the equipment, electrical circuits and infrastructures and related ancillary accessories intended for the supply of electrical energy, up to, if part of a distribution network, the point of connection to the consumer.

Eligible cost: expenses or losses, upon the achievement of an adequate return in accordance with the investment made by the project, as referred to in Article 9;

Energy Regulatory Authority: also known as ARENE, created by Law n.º 11/2017 of 8 September, responsible for ensuring the regulation of activities for energy supply, in accordance with the respective Law, its Organic Statute and Internal Regulations.

Fair and reasonable tariffs: electricity consumption tariffs are fair and reasonable when they are set in accordance with the following criteria, cumulatively:

- a)** reflect costs accepted on the basis of the principle of full cost recovery, provided that they are prudently incurred, reasonable and efficient;
- b)** which ensure the lowest possible cost to end users and which are compatible with the quality of the service provided;
- c)** that amortise the capital and operating costs over time; and
- d)** that provide a compatible return on the capital invested in the respective installation.

Final consumer: a natural or legal person, including residential, commercial, manufacturing and or industrial production units, agricultural, other distributors, export consumers purchasing energy or energy access supply services for their own consumption.

Force Majeure: event or circumstance or the combination of events and circumstances, which are unforeseeable and irresistible, whose effects are produced independently of the will or action of the invoking party, even if indirect, which prevent the fulfilment of its obligations. Force majeure events include, namely, acts of war or subversion, hostilities or invasion, rebellion, terrorism or epidemics, acts of expropriation, foreclosure, governmental requisitions and ransoms or nationalisations that do not comply with the terms and procedures established in the applicable legislation, lightning, explosions, serious floods, cyclones, earthquakes and other natural cataclysms that directly affect the authorised activities.

Infrastructure: set of systems, installations, equipment, software and other components, both physical and virtual, that enable access to energy outside the network.

kW (Kilowatt): unit of power.

kWh (Kilowatt-hour): unit of electrical energy.

Low Voltage (LV): any composite rated voltage of 1 kV or less, with the typical rated voltage being 400 V three-phase LV and 230 V single-phase LV.

Mini-grid Tariff Model: means the standardised spreadsheets approved by the Energy Regulatory Authority for the calculation of the mini-grid tariff.

Mini-grid: an integrated system of electricity generation, distribution and trading installation, which may include storage, using mainly renewable energy sources, of less than or equal to 10 MW, not connected to the National Electricity Grid. In this regulation it may also be simply referred to as "grid".

Operating costs: expenses incurred in the course of the activities related to the operational cycle of the concessionaire which constitute one of the components in determining the operating profit of the company before financial expenses of any nature and taxes.

Opportunity Cost: theoretical concept that measures the cost of what is given up when making a decision. For a given investment, the Opportunity Cost of Equity is measured in relation to feasible alternatives of investing own resources in a venture with the same risk.

Project: the entirety of the process or cycle of carrying out an activity for the supply of energy, whether isolated or integrated, from conception, construction, operation, financing, and management of infrastructure, systems, facilities, equipment, other components and related services, under a concession, in accordance with the Off-Grid Energy Access Regulation.

Prudence or Prudent: the performance of the concessionaire is considered prudent when carried out in accordance with the following principles:

- a)** responsibility and active management of the administration;
- b)** a strategic and transparent regulatory approach, including the continuous provision of transparent and unambiguous information about the project, including the costs, investment and operation schedules, accounting, potential and current risks and impacts and mitigation measures with a view to ensuring the solvency, stability and resilience of the project;
- c)** acting in accordance with the principles set out in Article 4 of this Regulation; and
- d)** preserve the solvency and liquidity of the project, ensuring its stability and resilience.

Regulated accounts: the accounts of the project kept by the concessionary for regulation purposes, subject to independent audit, certifying that the accounts comply with the accounting requirements of the applicable legislation and of this regulation to determine the consumption tariff and the other cost elements.

Regulatory Asset Base (RAB): is, according to the formula set out in Article 12 of these Regulations, the compilation and sum of the Net Asset Balance, which is calculated on the basis of the current cost of the assets (financed with funds from the concessionaire and excluding the assets contributed by the customer and any subsidies) plus the prudent cost of capital less liquidated assets (being the Asset Balance) minus the value of accumulated amortizations (being the Net Asset Balance).

Revenue: income and profit arising from ordinary or any other activities (as applicable), defined in accordance with accounting and regulatory standards in force.

Rural areas: areas characterised by low population density that are not part of an urbanisation zone, or that do not have an accessible distribution network per consumer.

Supply Activities for Energy Access in Off-grid Areas: they comprise initiatives and projects considered to be of a social nature and sustainable development, aimed at carrying out the activities, jointly or separately, of generation, distribution and commercialisation of electrical energy, and may include storage, through mini-grids and the provision of Energy Services.

Tariff: consists of the approved tariff structure including its components, subject to review and adjustment, in accordance with this regulation.

Tariff Additivity: basic principle applied to the calculation of consumption tariffs which ensures that there are no cross-subsidies between activities and between customers, by charging each customer for the costs incurred in the supply of electricity.

Tariff Adjustment: consists of a simple variation of the tariff, periodic or extraordinary, according to inflation, exchange rate, fuel and consumer price indexes, without changing the tariff structure.

Tariff Cycle: the period of time during which the energy tariff remains constant.

Tariff Revision: consists in the periodic or extraordinary process of validation or restructuring of the tariff assumptions according to the procedures of this regulation.

Tariff Structure: categorisation of consumption tariffs per customer category, which may include a fixed value and a variable value in accordance with the provisions of this regulation.

Tariffs and Prices Manual: detailed description of the procedure, criteria and methods for setting tariffs and energy sales prices, including the revision and adjustment rules.

Technical losses: the difference between the energy produced and the energy that is delivered to the final consumers.

The rate of return on assets: corresponds to a rate of return on an investment as described in this regulation.

Weighted Average Cost of Capital (WACC): a measure of the cost of resources used by a company or business, including equity debt capital. The cost of capital is derived from a risk-return relationship in which the higher the risk, the higher the required rate of return. From this point of view the WACC is the minimum acceptable value of return on an investment.

Working Capital: is the ability of a company to ensure at all times the normal functioning of its activities in the short term. It takes the form of a permanent capital surplus which is not used to finance net fixed assets, and which covers the financing needs of the operating cycle.



NORMATIVE RESOLUTION N° 2/ARENE-CA/2022 OF 19 DECEMBER

Mini-Grid Interconnection Regulation



NORMATIVE RESOLUTION Nº 2/ARENE-CA/2022 OF 19 DECEMBER

In order to establish rules and procedures regarding the interconnection of Mini-grids to the National Electricity Grid, within the scope of the competences provided for in article 22, n.º 8, of the Regulation on Access to Energy in Off-grid Areas, approved by Decree n.º 93/2021, of 10 December, the Board of Directors shall determine:

ARTICLE 1

The attached Mini-grids Interconnection Regulation, which is an integral part of it, is hereby approved.

ARTICLE 2

Any doubts arising from the interpretation and execution of the approved Regulation shall be clarified by the Board of Directors of the Energy Regulatory Authority.

ARTICLE 3

This Resolution shall enter into force immediately.

Approved by the Board of Directors in Maputo, on 19 December 2022.

The Chairman of the Board of Directors

A solid grey rectangular box used to redact the signature of the Chairman of the Board of Directors.

Paulo da Graça

Mini-Grid Interconnection Regulation

Chapter I - General Provisions

ARTICLE 1 Definitions

1. For the purposes of this Regulation, the meaning of the terms and expressions used is set out in the glossary in the Annex, which forms an integral part of this Regulation.
2. Any term used in these regulations to which another meaning has been assigned in the Regulation on Access to Energy in Off-Grid Areas, approved by Decree n.º 93/2021 of 10 December or Law n.º 12/2022 of 11 July, has the meaning assigned to it, unless explicitly otherwise stated in this regulation.

ARTICLE 2 Object

This Regulation establishes the terms, conditions, and procedures applicable to the interconnection of mini-grids to REN, in the event of extension into the mini-grid concession area.

ARTICLE 3 Scope

This Regulation shall apply to all legal persons, whether public or private, carrying out energy supply activities by participating in a process of interconnection of a mini-grid to the REN, including, but not limited to, the interconnection proponent, the acquiring entity and the mini-grid concessionaire.

ARTICLE 4 Competences

Within the scope of this Regulation, the Energy Regulatory Authority shall be responsible for the following, inter alia:

- a) regulate, monitor and supervise:
 - i the requirements for interconnection of the mini-grid to the REN;
 - ii interconnection contracts and power purchase agreements;
 - iii consumption tariffs and prices for buying or selling electricity; and
 - iv the conditions applicable for the determination of the compensation value to be paid to the concessionaire for unused or transferred Mini-grid asset and their respective regime.
- b) establish and approve:
 - i the terms and conditions for interconnecting mini-grids to REN;
 - ii the compensation value to be paid;
 - iii the tariff applicable to mini-grid customers after interconnection; and
 - iv the purchase and sale price of electricity, where applicable.
- c) approve the interconnection contract, the electricity purchase contract by the mini-grid concessionaire from a generation and/or distribution concessionaire, the contract for the sale of electricity by the mini-grid concessionaire to the distribution concessionaire, and the contract for the management and operation of the distribution network, as appropriate;

- d)** verify the technical compliance of mini-grids and expansion plans submitted by a bidder as well as the reports of the independent auditors;
- e)** instruct and manage the interconnection process which involves the modification, transfer, or cancellation of the mini-grid concession, for the approval of the competent authority; and
- f)** resolve any doubt and mediate disputes arising from the interconnection, including those concerning the amount of compensation and its payment.

ARTICLE 5 Interconnection models

1. The conditions for interconnecting the mini-grid to REN must include the following alternatives:

- a)** interconnection to REN while maintaining the mini-grid concession, allowing the mini-grid concessionaire to purchase electricity from the electricity distribution grid concessionaire;
- b)** interconnection to REN with conversion of the mini-grid concession into an electricity generation concessionaire: allowing the mini-grid concessionaire to sell electricity to the distribution concessionaire, and transfer the electricity distribution infrastructures and facilities, as well as the supply activity forming part of the mini-grid, to the electricity distribution grid concessionaire;
- c)** interconnection to REN with the termination of the mini-grid concession, and subcontracting the management and operation of electricity distribution and supply activities to the concessionaire of the mini-grid;
- d)** interconnection to REN with the termination of the concession and complete transfer of the activities and of the electrical infrastructures and installation forming part of the mini-grid to the electricity distribution concessionaire or to another public entity to be indicated.

2. The non-interconnection of a mini-grid although it is located within a perimeter of 30 (thirty) km distant from REN in accordance with number 3 of this article, must consider the following alternatives:

- a)** the termination of the mini-grid, which requires the migration of all mini-grid customers to the distribution concessionaire connected to REN, with the mini-grid concessionaire having the right to compensation under the terms of Article 8 of the Regulation;
- b)** maintaining the mini grid concession, with exclusivity for the supply of electricity to customers in the concession area, with no right to compensation for the mini grid concessionaire.

3. In the case of planned expansion of the REN into the Mini-grid concession area without interconnection:

- a)** the proposal for non-interconnection must be justified based on the expansion plan, considering:
 - i)** geographical or topographical location of the mini-grid, including more than 30 (thirty) km away from the REN;
 - ii)** technical infeasibilities for the interconnection of the mini-grid; and
 - iii)** financial and/or economic infeasibilities of the interconnection of the mini-grid.
- b)** the expansion plan without interconnection shall specify the measures to be taken to maintain the electricity supply activities that are the subject of the mini-grid concession, including the customers served by the mini-grid.

ARTICLE 6 Process

1. Based on REN's expansion plans, the proponent of the interconnection shall notify in writing and at least 180 (one hundred and eighty) calendar days in advance the Energy Regulatory Authority and the affected concessionaire(s), including the proposal for the interconnection or non-interconnection, of their respective generation and mini-grid production and distribution facilities, under the conditions established in Article 5.

2. The proposal for interconnection of the mini-grid, referred to in the previous paragraph, shall be subject to prior technical and economic studies demonstrating, in accordance with this article:
 - a) the technical, economic and financial feasibility of the interconnection, including with regard to customers and the mini-grid concessionaire;
 - b) the offer of compensation in accordance with Article 8;
 - c) the impact of the interconnection on REN and on the mini-grid concession operation that is subject of the interconnection, including the measures, works and reinforcement of the facilities necessary to maintain energy quality, reliability, safety and efficiency; and
 - d) the reliability and continuity of electricity supply to mini-grid customers.
3. Upon receipt of the notification and interconnection proposal, the Energy Regulatory Authority shall, within a total period of sixty (60) days from the date of receipt, without prejudice to paragraph 5 of this Article:
 - a) record the interconnection proposal upon receipt, verifying its contents and subsequently notifies the proponent within 3 (three) days from the date of receipt of any missing elements giving the proponent 10 (ten) days to provide them;
 - b) promote, within 15 (fifteen) days, the consultation of interested parties on the terms and conditions applicable to the interconnection;
 - c) verify within 20 (twenty) days, the technical conformity of the mini-grid for interconnection with REN, the availability of funds for the payment of the compensation, the feasibility of the tariff or the purchase and/or sale price, as appropriate;
 - d) upon completion of the review, notify the parties in writing, within 3 (three) days, of its decision on the interconnection proposal, regarding:
 - i the mini-grid interconnection model as described in Article 5;
 - ii the amount/value and terms of payment for compensation for unused or transferred mini-grid assets, as applicable;
 - iii the entity responsible for compensation payment;
 - iv the tariff value for the supply of electricity to customers; and
 - v the purchase and sale price of electricity, as applicable.
4. Failure to provide the missing elements referred to in paragraph a) of the previous number results in the outright rejection of the interconnection proposal.
5. In the event of disagreement between the parties on the terms and conditions of the interconnection, either party may request the intervention of an independent expert in accordance with the provisions of the Regulation on Access to Energy in Off-Grid Areas, approved by Decree 93/2021 of 10 December, with the expert's decision to be sent, within a maximum period of 20 (twenty) days of its appointment, simultaneously to the Energy Regulatory Authority, the bidder and the mini-grid concessionaire.
6. Once the procedure has been completed, the Energy Regulatory Authority submits it to the competent authority for a decision, which, when favourable, leads to the signing of the respective contracts by the interested parties, within a maximum period of 30 (thirty) days from the notification thereof.
7. The REN manager must ensure compliance with the technical standards applicable to interconnection, access, and transit on the REN, in accordance with the interconnection contract and applicable legislation.
8. Electricity consumption tariffs are determined in accordance with the applicable legislation.
9. For the purposes of paragraph 5 of this Article, the party willing to have recourse to the intervention of the independent expert shall do so within 3 (three) days and shall notify ARENE immediately.

ARTICLE 7 Form and content of the contracts

1. The interconnection contract contains, among other elements, the following:
 - a) the identity, address, telephone and electronic contact details, including mail and electronic portal, the representative of the legal person and the corresponding mandate;
 - b) the subject matter of the contract, including, the specification of the activities, energy source, capacity and technology;

- c)** the date and duration of the contract;
 - d)** the location of the project and the concession area, described with geographical coordinates, including the titles of right of use and benefit of the land and easements;
 - e)** the list of customers in the concession area, subject to interconnection;
 - f)** electrical installation layout for the mini-grid, including the energy source and installed capacity, transformer substations, the storage facilities and, where appropriate, the distribution network;
 - g)** the rights and obligations of the parties, including in relation to the purchase and sale of electricity, as appropriate, and interconnection to the REN;
 - h)** point of interconnection to the REN;
 - i)** duration, non-performance, dispute resolution and termination of the contract.
- 2.** The power purchase agreement between the mini-grid concessionaire and a generation and/or distribution concessionaire shall include, among others, the following elements:
- a)** identification of the parties, address, telephone and electronic contact details, including postal and electronic mail, the representative of the legal person and the mandate;
 - b)** the rights and obligations of the parties;
 - c)** the object of the contract, including the terms and conditions of supply and the rules for estimating the quantity of electricity to be purchased and/or sold, expressed in kilowatt hours;
 - d)** the price for the purchase and/or sale of electricity to the mini-grid;
 - e)** the terms of invoicing and payment;
 - f)** the list of persons qualified to carry out transactions and their contact details for communication between the parties;
 - g)** description of the mini-grid, including technical specifications of the relevant components;
 - h)** technical requirements applicable to the electricity installation in interconnection regime;
 - i)** designation of the connection point and connection requirements to REN;
 - j)** conditions of access to the protection and metering systems in the interconnection to REN;
 - k)** the rules applicable to metering and metering equipment;
 - l)** the forecast of the quantity and conditions of supply of electricity to the REN;
 - m)** the operation of the mini-grid, power factor, synchronisation and other applicable technical standards;
 - n)** rules applicable to scheduled and unscheduled interruptions and blackouts of electricity;
 - o)** the duration, non-performance, settlement of disputes and termination of the contract;
 - p)** obligations and responsibilities, individual and mutual, in the stability and reliability of the electricity supply to the mini-grid and in maintaining the quality of REN's operations, accordance with the applicable legislation.
- 3.** The contract for the sale of electricity by the mini-grid concessionaire to the distribution concessionaire must include, in accordance with the applicable legislation, among others, the following elements:
- a)** identification of the parties, address, telephone and electronic contact details, including mail and e-mail gateways, the legal entity representative and the mandate;
 - b)** the list of persons authorized to carry out transactions and their contact details for communication between the parties;
 - c)** the rights and obligations of the parties;
 - d)** the object of the contract, including the specification of the energy source, capacity and other technical characteristics;
 - e)** the selling price of electricity by the mini-grid, calculated in accordance with Article 9 of this Regulation;
 - f)** the terms of invoicing and payment;

- g)** the description of the mini-grid, including technical specifications of the relevant components;
 - h)** the technical requirements applicable to the electricity installation in interconnected system;
 - i)** the designation of the connection point and the condition for connection to REN;
 - j)** the conditions for access to the protection and metering systems in the interconnection to REN;
 - k)** the forecast of the quantity and conditions for supply of electricity to the REN;
 - l)** the operation of the mini-grid, power factor, synchronisation and other applicable technical standards;
 - m)** the duration, non-performance, dispute resolution and termination of the contract;
 - n)** the obligations and responsibilities of the parties, regarding the stability and reliability of the mini-grid or power plant's electricity supply and the maintenance of the quality of REN's operation.
- 4.** The mini-grid distribution management and operation contract shall include, inter alia, the following elements:
- a)** identification of the parties, address, telephone and electronic contact details, including email and website, and, in the case of a legal entity, the representative and the mandate;
 - b)** the rights and obligations of the parties;
 - c)** the object of the contract, including the terms and conditions of management, operation and maintenance, as well as the applicable health and safety and environmental conditions;
 - d)** the customer charges, operating and administrative costs and other economic terms between the parties;
 - e)** the description of the area of operation;
 - f)** the safety, operational and management standards;
 - g)** the customer service and complaints handling;
 - h)** the duration, non-performance, dispute resolution and termination of the contract.
- 5.** The standard contracts provided for in this article shall be approved by the Energy Regulatory Authority.

ARTICLE 8 Calculation of the compensation value

The calculation of the compensation value to be paid to the mini-grid concessionaire, in the event of REN's expansion into the concession area pursuant to Articles 5 and 6, shall be approved by the Energy Regulatory Authority and shall be made up of the sum of:

- a)** the audited book value of the assets lost or acquired by the acquiring entity as a result of the interconnection process;
- b)** the loss of profits, determined and based on the total amount of the audited net revenues of the mini-grid concessionaire in the 12 (twelve) months prior to the date of termination of the concession.

ARTICLE 9 Calculating of the electricity sell price

1. The price and conditions for the sale of energy from the mini-grid concessionaire to the REN distribution concessionaire shall be freely negotiated between the parties subject to the approval of the Energy Regulatory Authority, based on the principle of recovering the investments and preserving the acquired rights of generating income at the permitted level, as referred to in the Tariff Regulations.

2. Following the submission of the interconnection proposal and in the absence of an agreement between the parties, within the twenty (20) day period referred to in Article 6(3) (c) of this Regulation, the Energy Regulatory Authority shall apply the following calculation formula:

a) in the event that interconnection pursuant to the Article 5(1)(a), the selling price of electricity produced and sold by the mini-grid:

$$\text{Selling Price (MZN/kWh)} = (\text{Allowed revenues} + \text{Cost of electricity purchases and - Revenues from consumer tariffs}) / \text{electricity sold (kWh)}$$

Where:

- i** the Allowed Revenues have the same structure and calculation formula defined in the Tariff Regulation, except for the Performance Margin (MD) which is equal to zero.
- ii** the cost of electricity purchases corresponds to the value of electricity purchases made by the mini-grid concessionaire during one year.
- iii** revenue from consumer tariffs corresponds to the volume of revenue from the sale of electricity to consumers, taking into account the tariffs applicable after interconnection.
- iv** the electricity sold corresponds to the amount of kWh sold during one year.
- v** the quantity of electricity sold by the mini-grid concessionaire, as well as the quantity of electricity sold to customers, are defined as follows:

In the first tariff period after interconnection: the quantities of electricity are estimated in the detailed technical and financial plan submitted by the mini-grid concessionaire, this plan must include the information mentioned in the Tariff Regulations and accurately reflect the new interconnection status.

In subsequent tariff periods: the quantities of electricity are determined based on actual data from previous periods.

At the end of each period, the accounts are consolidated and the amounts collected in excess or in deficit are integrated into the accounts of the following period.

b) in the event that the interconnection is carried out in accordance with Article 5(1)(b), the selling price of electricity produced and sold by the mini-grid shall be calculated on the basis of the following formula:

$$\text{Selling Price (MZN/kWh)} = \text{Allowed Revenues} / \text{electricity sold (kWh)}$$

Where:

a) The Allowed Revenues have the same structure as defined in the Tariff Regulation. The different elements of the Allowed Revenues formula must be updated:

BRR = The Regulatory Asset Remuneration Base includes only those assets that have not been transferred to other entities in exchange for compensation at the time of interconnection.

Amort = Amortisation is adjusted according to the changes made to the RAB.

O&M = Operating Costs correspond only to electricity generation activities.

MD = The Performance Margin is zero.

b the electricity sold corresponds to the quantity of kWh sold during one year, and is defined according to point v), of paragraph a), of number 2 of this article.

Chapter II - Final provisions

ARTICLE 10 Models and forms

1. The Energy Regulatory Authority prepares, approves and publishes the model contracts, forms and associated guidelines to the processes applicable to the quality of service and commercial relations of this regulation, in Annexes II to III, namely:
 - a) interconnection contract;
 - b) contract for the purchase and sale of electricity by the mini-grid concessionaire.
2. The Energy Regulatory Authority may approve any other models, forms and guides needed for the implementation of this Regulation.

ARTICLE 11 Monitoring the implementation of the Regulation

1. Supervision of the application of this regulation falls under the jurisdiction of the Energy Regulatory Authority, in accordance with the terms of the Law establishing it, its Organic Statute, its Internal Regulations and other applicable legislation.
2. Supervisory actions shall be carried out in accordance with plans previously approved by the Energy Regulatory Authority and whenever deemed necessary to ensure the regulation of the energy sector.
3. The Energy Regulatory Authority shall carry out or promote the carrying out of verification actions, namely audits and inspections, which may cover all or part of the provisions of this Regulation, as determined by the Energy Regulatory Authority.

ARTICLE 12 Provision of information to the Energy Regulatory Authority

The concessionaires are obliged to provide all the information and documents at any time and within the time limits specified by the Energy Regulatory Authority and must do so in writing in paper and electronic format, unless otherwise specified by the Energy Regulatory Authority.

ARTICLE 13 Penalty regime

1. Failure to comply with this regulation constitutes a punishable offence under the terms of the applicable penalty regime approved by the Energy Regulatory Authority.
2. All information and documents obtained in the implementation of this Regulation, including those resulting from audits, enforcement actions, inspections, petitions, complaints, denunciations, and claims, may be used in accordance with the applicable penalty regime.

ARTICLE 14 Dispute Resolution

Disputes arising within the scope of this regulation shall be settled in accordance with the provisions of the Regulations for Access to Energy in Off Grid Areas approved in Decree 93/2021 of 10 December.

ANNEX I - Glossary

Acquiring Entity: any public or private entity holding a concession for the activities of electricity supply from REN, which acquires generation and/or distribution and/or storage assets from a mini-grid concessionaire in accordance with this Regulation, and which may also be the Bidder.

Allowed revenues: Revenue and profits which, by virtue of regulatory provisions, are attributed to the exercise of an electricity supply activity, subject to concession, and which are to be recovered through the collection of the consumption tariff, in return for the development of the activity in question.

Areas Outside the National Electricity Grid or Off-grid: areas not served by REN, with current and potential consumers, located in rural areas and remote communities.

Audited book value: means the residual value of the assets of the project according to the balance sheet based on the original cost of the asset, plus any additional expenses charged to the asset, less any depreciation and/or amortisation and impairment charges.

Competent Entity: public body or body corporate vested by law with functional powers attributed by law to exercise its competences and attributions.

Concession Area: geographical area defined in the concession of mini-grids for carrying out supply activities for access to energy in off-grid areas, which may be a single area or a set of multiple areas;

Electrical Installation: the equipment, electrical circuits and the infrastructures and related ancillary equipment intended for the supply of electricity, up to the point of connection to the consumer if they form part of a distribution network.

Electricity generation: conversion into electricity of any energy source.

Energy Regulatory Authority: also known as ARENE, created by Law n.º 11/2017 of 8 September, responsible for ensuring the regulation of energy supply activities, in accordance with the aforementioned Law, its Organic Statute and its Internal Regulations.

Interconnection Bidder or Tenderer: any legal entity under public or private law responsible for the operation and management of REN, RNT, the National Market or concessionaire of a distribution network that is part of REN or otherwise involved in a venture to expand REN to the geographical location of a mini-grid concession area, whereby the holder of a mini-grid concession may also be an interconnection bidder.

Interconnection Contract: the contract between the mini-grid concessionaire and the Bidder governing the terms and conditions of the interconnection.

Interconnection point: physical infrastructure and/or equipment that interconnects a mini-grid with generation, storage and/or distribution network and REN, through the distribution network of a distribution concessionaire.

Mini-grid Distribution Network Management and Operation Contract: contract signed between the concessionaire of the mini-grid whose concession is terminated by the interconnection, and the Bidder, for the activities of distribution and supply of electricity.

Mini-grid: an integrated system of electricity generation, distribution and trading installations, which may include storage, using mainly small scale renewable energy sources, of less than or equal to 10 MW, and not connected to REN. In this regulation, it may also be simply referred to as "grid".

Power Purchase Agreement: the agreement signed with the mini-grid concessionaire to buy and/or sell electricity.

Purchase price: electricity purchase price paid by the mini-grid concessionaire, calculated in MZN/kWh or USD/kWh.

Regulatory Asset Base (RAB): (from the acronym in English RAB - Regulatory Asset Base) is, according to the formula appearing in Article 12 of the Tariff Regulations, the compilation and sum of the Net Asset Balance, which is calculated on the basis of the current cost of the assets (financed with the funds of the concessionaire and excluding the assets contributed by the customer and any subsidies) plus the prudent cost of capital minus the liquidated assets (being the Asset Balance) minus the value of accumulated amortizations (being the Net Asset Balance).

REN (REN): comprises the Electricity Distribution Network and the National Electricity Transmission Network.

Rural areas: areas characterised by low population density which are not part of an urbanisation zone, or which do not have a distribution network accessible to consumers.

Selling price: selling price of electricity produced and sold by the mini-grid calculated in MZN/kWh or USD/kWh.

Tariff Regulation: instrument whose purpose is to standardise the tariff regulation of the activity of energy supply through mini-grids in off-grid areas.

Annex II

Contract N.º:

INTERCONNECTION AGREEMENT FOR OFF-GRID ENERGY SUPPLY ACTIVITIES IN OFF-GRID AREAS THROUGH MINI-GRIDS

between
The National Electricity Grid Concessionaire
and
the Mini-grid Concessionaire.....

Mini-grid Concession n. ### Energy Registration n. ###
Concessionaire Representative:
Contacts (telephone and e-mail):
Address:
Validity of the concession:
Power Source:
Installed capacity: MW

- Category I: installed capacity between 1,001 MW - 10 MW
- Category II: installed capacity between 150 kW - 1 MW
- Category III: installed capacity up to 150 kW

Location of the Concession Area (single/multiple)¹:
Activities covered:
Generation
Storage
Distribution and Marketing

REN Concession n. ### Energy Registration n. ###
Concessionaire Representative:
Contacts (telephone and e-mail):
Address:

¹ The map and coordinates of the concession area as well as the list of customers of the concession are included in Annexes I and VI of this contract.

INTERCONNECTION METHOD

Modality 1 - Interconnection to REN while maintaining the mini-grid concession, allowing the mini-grid concessionaire to purchase electricity from the concessionaire of the electricity distribution grid.

Modality 2 - Interconnection to REN with conversion of the mini-grid concession into an electricity generation concession, allowing the mini-grid concessionaire to sell electricity to the distribution grid concessionaire and the transfer of the electricity distribution infrastructure and facilities and the supply activity forming part of the mini-grid to the electricity distribution grid concessionaire.

Modality 3 - Interconnection to REN with termination of the Mini-grid concession and subcontracting of the concessionaire for the management and operation of electricity distribution and supply activities.

Modality 4 - Interconnection to REN with termination of the concession and total transfer of the activities and electricity infrastructure and facilities forming part of the Mini-grid to the concessionaire of the electricity distribution grid or other public entity to be specified.

TECHNICAL CHARACTERISTICS OF THE INTERCONNECTION

Point of interconnection

Geographical coordinates:

Interconnection voltage (kV):

Manual power disconnection device:

Protections:

Energy metering equipment:

Mini-grid Power Plant

Source and conversion technology:

Installed capacity: kW / MW

Maximum generation capacity: kW / MW

Generation voltage (kV): Continuous / Alternating (3~)

Inverter characteristics:

Storage characteristics:

Mini-grid distribution network

Distribution voltage (kV): Continuous / Alternating (3~)

Type of conductors:

Length (km):

Diameter (mm):

Core: Al / Cu

Isolation:

Number of poles:

Type: Height (m): Qty:

.....

GENERAL PROVISION OF THE INTERCONNECTION CONTRACT FOR MINI-GRIDS

The concessionaire of the Mini-grid and the concessionaire of the National Electricity Grid (REN), hereinafter referred to as Parties and individually as Party, enter into this interconnection contract, governed by the following provisions and in accordance with the regulatory norms in force in the Republic of Mozambique.

CLAUSE 1 Definitions

For the purposes of this interconnection contract, the terms and expressions used have the meaning ascribed to them in the Regulations for Access to Energy in Off Grid Areas approved by Decree n.º 93/2021 of 10 December, Electricity Act n.º 12/2022 of 11 July or other applicable legislation, unless otherwise explicitly defined in this contract.

CLAUSE 2 Object

This contract establishes the terms and conditions governing the interconnection of a Mini-grid to the National Electricity Grid (REN) through the distribution network from a single point of interconnection and a single metering system installed therein.

CLAUSE 3 Mini-grid concessionary's rights and duties

3.1. In addition to those provided for in the respective concession contract and legislation in force, the Mini-grid concessionary's duties are as follows:

- a)** under the terms of the agreed interconnection regime [indicate the regime adopted], generate electricity and sell it to REN, with delivery at the interconnection point;
- b)** obtain and maintain valid, during the term of this contract, all approvals required for the performance of its activities;
- c)** allow the REN concessionaire access, free of charge, to the electrical equipment and metering systems of the interconnection point, part of the Mini-grid concession located in the respective area;
- d)** maintain the installations of its generation power plant and distribution network in the technical conditions of conformity required by the concession;
- e)** immediately inform the REN concessionaire of any defect or occurrence that may affect the safety or integrity of operations on the interconnected distribution network;
- f)** send to the Energy Regulatory Authority (ARENE), the annual report concerning the interconnection activity, by 31 May of each year;
- g)** provide any and all information requested by ARENE within the scope of the exercise of the regulation of interconnection activities.

3.2. In addition to those provided for in the respective concession contract and in applicable legislation, the Mini-grid concessionary's rights are as follows:

- a)** access to the National Electricity Grid;
- b)** receive payment resulting from the sale of energy generated;
- c)** purchase electricity to be supplied at the interconnection point, where the mode of the interconnection allows for it;
- d)** receive compensation for the transfer of its assets for the partial loss of the initial concession rights, where the interconnection regime adopted so provides.

3.3. The rights and duties foreseen in this Clause apply according to the interconnection regime adopted.

CLAUSE 4 - Rights and duties of the distribution concessionaire

4.1. In addition to the other rights provided for in the applicable legislation, the distribution concessionaire has the right of ownership of the electrical equipment and the metering systems of the interconnection point.

4.2. In addition to the duties of the distribution concessionaire provided for in the applicable legislation, it is also responsible for the following:

- a)** ensure that the interconnection point has the safety, protection and control mechanisms required by the National Electricity Grid Code and other applicable legislation and by electrical safety standards, as applicable;
- b)** install, operate and maintain at its own cost the electrical equipment and the metering systems of the interconnection point;
- c)** send to the Energy Regulatory Authority the annual report concerning the interconnection activity, by 31 May of each year;
- d)** provide any information requested by the Energy Regulatory Authority within the scope of the regulation of interconnection activities.

CLAUSE 5 Information obligations

Both parties shall keep a joint record of active and reactive power flowing at the interconnection point, electrical frequency and voltage, operating states, planned and unplanned outages, the characterisation of faults, disturbances and anomalies, including transients, and others agreed by the parties.

CLAUSE 6 Obligations in synchronous operation

6.1. Both parties shall maintain, on their respective sides of the interconnection point, a disconnection circuit breaker operating with protection or by manual operation, to be disconnected in the event of a disturbance or fault affecting their customers as a result of synchronous operation.

6.2. The occurrence of a defect or anomaly at the interconnection point or in any of the distribution networks of the Mini-grid concessionaire and/or the distributor, which affects the quality and reliability of the supply to customers of any of the networks or the integrity of the operation of the National Electricity Grid (REN), shall immediately trigger notification to the other party of its occurrence and may require the disconnection of the interconnection point, to allow the separate operation of the networks.

6.3. Once the interconnection point has been disconnected, it can only be reconnected after checking and correcting the causes that led to its disconnection.

6.4. Any technical intervention, operation, maintenance, modification or modernisation must comply with the applicable quality and technical safety standards and be in accordance with the technical and safety requirements for the operation of electricity grids set out in the code and regulations of the National Electricity Grid (REN).

CLAUSE 7 Electricity metering systems

7.1. The distribution concessionaire must keep metering equipment at the interconnection point, whose calibration and characteristics are described in annex I of this contract.

7.2. Active energy metering at the interconnection point shall be bi-directional and integrated with a maximum interval of 5 minutes, to enable the purchase and sale of energy between the Mini-grid concessionaire and the distributor.

7.3. The gauging of the metering equipment must be regular and certified by both parties. The Mini-grid concessionaire may request an extemporaneous gauging at its own expenses, which will be reimbursed if it is found to be justified.

7.4. Reactive power will be measured at the interconnection point and billed according to the terms agreed under the power purchase agreement.

CLAUSE 8 Tests and inspections, manoeuvres and access rights

8.1. Both parties have the right to disconnect at the interconnection point, for a period of time defined in accordance with the annual intervention plan in annex II of this contract, for the purposes of maintenance, repair, modification or modernisation of their equipment and systems, upon a duly justified 30 (thirty) day notice.

8.2. Inspections and tests of the interconnection point due to suspected defects or anomalies in any of the distribution networks must be carried out after prior notification and in the presence of representatives of both parties, and the resulting technical reports must be signed and made available to the technical teams of both parties.

8.3. The connection manoeuvre at the interconnection point, allowing synchronous operation, can only be executed after the electrical safety protocols have been fully checked, and together with the other party.

8.4. The Mini-grid concessionaire shall provide the right of access to the interconnection point, in its concession area, and to the facilities of its power plant and distribution network, upon request of the distributor for the purpose of verifying the security and quality of operation of the two interconnected grids.

8.5. The electrical safety protocols for manoeuvres at the interconnection point are defined in conformity with the applicable technical and safety standards and are included in Annex V of this contract, which is an integral part thereof.

CLAUSE 9 Term, interruptions and extinction of the interconnection

9.1. This contract is valid for 12 (twelve) months, from the date its signature, and may be automatically extended for an equal period, and so on, provided that no notice to the contrary is given by either party, at least 90 (ninety) days prior to the end of its validity.

9.2. If mutually agreed, either party may request a temporary interruption of the interconnection, with disconnection at the interconnection point, for a defined period of time. In such circumstance, the party proposing the interruption must ensure full and quality supply to all customers of both parties and compensate the other party for any damage or financial loss resulting from the interruption.

9.3. Either party may terminate the contract, upon 30 (thirty) days' duly justified notice, and the disagreeing party may complain to the Energy Regulatory Authority, for breach of obligations that:

- a)** endangers the safety of people, goods and the environment in the concession area;
- b)** changes the nature of the interconnection and the conditions and quality of its operation.

9.4. Once this contract is terminated and there is no ongoing litigation, the disconnection at the interconnection point is immediate, safeguarding the rights of consumers in the Mini-grid concession area.

CLAUSE 10 Maintenance and modernisation responsibilities

10.1. Maintenance and modernisation facilities at the interconnection point are the responsibility of the distribution concessionaire, in accordance with an annual intervention plan as per Annex II to this contract, in coordination with the Mini-grid concessionaire, and in compliance with the technical and safety standards and the specific requirements of the National Electricity Grid Code, included in Annex IV of this contract, and other applicable legislation.

10.2. The maintenance and modernisation of the auxiliary equipment of the power plant and of the Mini-grid distribution network, as well as of the distribution network of the distribution concessionaire, shall be the responsibility of the respective concessionaire, and shall be carried out in coordination with the other party on the basis of an annual intervention plan, in accordance with the technical and safety standards and the requirements of the National Electricity Grid Code and other applicable legislation.

10.3. In the event of an unforeseen need for technical intervention at the interconnection point or in any of the distribution networks, the parties undertake to agree on the nature, cost-sharing and timing of the intervention, as well as the expected results.

CLAUSE 11 Invoicing, payments and other interconnection charges

11.1. In the interconnection with the National Electricity Grid, the Mini-grid concessionaire shall be entitled to recover the cost of financing commitments for assets that are part of its Regulatory Asset Base, in accordance with the Interconnection Regulation approved by Resolution ... of

11.2. The cost of the electricity purchased or sold shall be calculated on the basis of the contractual provisions of the respective power purchase agreements on the quantity and quality of the electricity traded.

11.3. The provision of related services and the transit of energy shall be invoiced and collected in accordance with the terms established in Annex III of this contract.

11.4. Monetary transactions between the parties to this contract shall be made by means of bank transaction and shall be subject to the procedures of accounting verification and audit, in accordance with the applicable legislation.

CLAUSE 12 Responsibilities

12.1. Insurance

a) during the term of this contract, the parties shall maintain at their own cost a valid insurance, in accordance with applicable law, covering any loss or damage to their own facilities and systems.

b) insurance relating to equipment and facilities at the interconnection point is the responsibility of the distribution concessionaire.

12.2. Civil liability

The parties shall maintain a third-party liability insurance valid for the duration of this contract covering any eventual damage to consumer units or other facilities belonging to third parties.

12.3. Compensation

The parties are liable for any costs, losses, damages and liabilities arising from the breach of the obligations of the provisions of this contract and for compensation due to the other party and third parties under the applicable law.

CLAUSE 13 Force Majeure

13.1. Force majeure is an event or circumstance or combination of events and circumstances, which are unforeseeable and irresistible, whose effects occur regardless of the will or action of the invoking party, even if indirectly, they prevent the compliance with its obligations. In particular, acts of war or subversion, hostilities or invasion, rebellion, terrorism or epidemics, acts of expropriation, foreclosure, ransom and government requisitions or nationalisations that do not comply with the terms set forth in the applicable legislation; lightning, explosions, strikes, floods, cyclones, earthquakes and other natural disasters that directly affect the authorised activities constitute force majeure.

13.2. The delay or partial or total non-fulfilment of the obligations set forth in this contract, by any of the parties, resulting from the occurrence of an event of force majeure shall not be considered as a breach of the parties' obligations, under the terms of the applicable legislation.

CLAUSE 14 Final provisions

14.1. Confidentiality

Both parties fully adhere to the precepts of confidentiality about this contract and the terms and conditions of its implementation, as well as about the data concerning customers connected in both distribution networks.

14.2. Inspection

The Energy Regulatory Authority shall carry out and promote the carrying out of verification actions, namely audits and inspections relating to all or part of the provisions of this contract.

14.3. Dispute Resolution

Disputes arising under this contract involving regulatory matters shall be subject to mediation, conciliation, arbitration and decision by the Energy Regulatory Authority, in accordance with the provisions of the Regulation on Access to Energy in Off Grid Areas approved by Decree n.° 93/2021 of 10 December.

GLOSSARY

Electricity generation: conversion into electricity of any energy source.

Electrical Installation: the equipment, electrical circuits and the infrastructures and related ancillary equipment intended for the supply of electricity, up to the point of connection to the consumer if they form part of a distribution network.

Energy Regulatory Authority: also known as ARENE, created by Law n.° 11/2017 of 8 September, responsible for ensuring the regulation of energy supply activities, in accordance with the aforementioned Law, its Organic Statute and its Internal Regulations.

Interconnection Bidder or Tenderer: any legal entity under public or private law responsible for the operation and management of REN, RNT, the National Market or concessionaire of a distribution network that is part of REN or otherwise involved in a venture to expand REN to the geographical location of a Mini-grid concession area, the holder of a Mini-grid concession may also be an interconnection bidder.

Interconnection Contract: the contract between the mini-grid concessionaire and the Bidder governing the terms and conditions of the interconnection.

Interconnection point: physical infrastructure and/or equipment that interconnects a mini-grid with generation, storage and/or distribution network and REN, through the distribution network of a distribution concessionaire.

Mini-grid: an integrated system of electricity generation, distribution and trading installations, which may include storage, using mainly small scale renewable energy sources, of less than or equal to 10 MW, and not connected to REN. In this regulation it may also be simply referred to as "grid".

National Electricity Network (REN): comprises the electricity distribution network and the national electricity transmission network.

Power Purchase Agreement: the agreement signed with the mini-grid concessionaire to buy and/or sell electricity.

Regulatory Asset Base (RAB): (from the acronym in English RAB - Regulatory Asset Base) is, according to the formula appearing in Article 12 of the Tariff Regulations, the compilation and sum of the Net Asset Balance, which is calculated on the basis of the current cost of the assets (financed with the funds of the concessionaire and excluding the assets contributed by the customer and any subsidies) plus the prudent cost of capital minus the liquidated assets (being the Asset Balance) minus the value of accumulated amortizations (being the Net Asset Balance).

Related services: all operation, maintenance, technical assistance, and supply services provided by interconnected operator, and related to maintaining the integrity and quality of synchronous operation.

Synchronous operation: synchronous operation of a generator connected to an electrical network, or of two interconnected electrical networks, occurs when power transits from one to the other at the same electrical frequency.

Annexes

Annex I Map and geographical coordinates of the concession area, description of the Mini-grid electricity power plant, the interconnection point and installations and metering equipment. This description is accompanied by the electrical diagram of the interconnection point, including the characterisation of the metering equipment, protections and command and control systems.

Annex II Annual plan of interventions for maintenance and/or modernisation of the interconnection point and the distribution networks on both sides that require their disconnection.

Annex III Terms and charges relating to the transit of energy and the provision of related services by either party.

Annex IV Particular requirements for the operation of the Mini-grid power plant interconnected to the National Electricity Grid (REN).

Annex V Protocols for electrical safety in manoeuvres at the interconnection point.

Annex VI List of customers in the concession area subject to interconnection.

Annex III

n.° of contract:

Power purchase agreement for mini-grids interconnected to the national grid¹

between
National Electricity Grid Concessionaire

and
the Concessionaire

Mini-grid Concession n. ###

Energy Registration n. ###

Installed capacity: MW

- Category I: installed capacity between 1,001 MW - 10 MW
- Category II: installed capacity between 150 kW - 1 MW
- Category III: installed capacity up to 150 kW

Location of the Concession Area (single/multiple)²:

Activities covered:

- Generation
- Storage
- Distribution and Trading

Power Source:

Validity:

Dealer Representative: Contacts:

Address:

National Electricity Grid Concession n° ###

Energy Cadastre n°3 ###

Dealer Representative:

Contacts:

Address:

TECHNICAL CHARACTERISTICS AND PROJECTIONS IN THE ELECTRICITY TRANSACTION

Delivery point

Geographical coordinates:

Delivery voltage (kV):

Manual cutting device:

Protections:

Metering equipment:

Number of the interconnection contract:

Mini-grid Power Plant

Source and generation technology:

Average annual generation: kWh / MWh

Maximum generation capacity: kW / MW

Generation voltage (kV): Continuous / Alternating (3~)

Inverter characteristics:

Storage characteristics:

1 It applies up to a capacity of 10 MW.

2 The map and coordinates of the concession area are included in Annex I of this contract.

Electricity to be traded

YEAR	VOLUME OF ACTIVE POWER MWH/YEAR	MAXIMUM POWER MW	AVERAGE PRICE MT/MWH	MT/MW POWER RATIO
Year 1				
Year 2				
Year 3				
Year 4				
Year 5				
Year 6				
Year 7				
Year 8				
Year 9				
Year 10				

This table shall reflect the entire period of validity of this contract
 Tariff applicable to reactive energy: MT/kVArh

General Clauses of the Power Purchase Agreement for Mini-Grids Interconnected To The National Electricity Grid

The concessionaire of the National Electricity Grid (REN) and the generation or distribution concessionaire, hereinafter jointly and separately referred to as the Parties, enter into this contract for the purchase and sale of electricity, to be traded after the interconnection of the Mini-grid, between the concessionaire of REN and the generation or distribution concessionaire connected to REN, governed by the following contractual clauses, as well as by the regulatory norms in force in the Republic of Mozambique.

CLAUSE 1 Definitions

For the purposes of this interconnection contract, the terms and expressions used have the meaning ascribed to them in the Regulations for Access to Energy in Off-Grid Areas approved by Decree n.º 93/2021 of 10 December, Electricity Act 12/2022 of 11 July or in other applicable legislation, unless otherwise explicitly defined in this contract.

CLAUSE 2 Object

2.1. This contract contains the terms and provisions governing the purchase or sale of energy by the concessionaire of a Mini-grid interconnected to the National Electricity Grid (REN), in the volumes, terms, conditions, tariffs and prices, and in the schedule agreed herein.

2.2. The purchase and sales of energy referred to in the previous number takes place through a single delivery point and the metering equipment installed therein is characterised and described in Annex I of this contract.

CLAUSE 3 Rights and duties of the parties

3.1. The rights and duties of the concessionaire selling power, hereinafter referred to as the "seller", are:

- a)** determine the quantity and quality of electricity to be supplied and negotiated sales prices which provides a reasonable return on its investment, subject to approval by the Energy Regulatory Authority;
- b)** obtain and keep up-to-date all authorisations, including operating, technical, labour and environmental licences and certificates from the relevant authorities;
- c)** operate its facilities prudently and safely and manage its obligations to third parties so as to comply with the terms and conditions of the delivery/supply of electricity to the buyer in accordance with this contract;

3.2. The rights and duties of the concessionaire who purchases electricity, hereinafter referred to as the "buyer", are as follows:

- a)** receive electricity at the point of delivery and under the terms and conditions agreed upon in this contract;

- b)** timely pay the invoices issued by the seller in exchange for the supply of electricity or other services provided, under the terms and conditions agreed in this contract;
- c)** maintain its distribution network facilities in a technically compliant condition and ensure their prudent and safe operation to avoid events that may cause damage to the seller's facilities.

CLAUSE 4 Supply and interruption forecasts

- 4.1.** The amount of active energy to be traded shall be provided for in the annual generation plan, which shall include details of the operation of the generation's units, including the dates and duration of planned outages, as well as expected capacity constraints.
- 4.2.** The annual plan of planned interruptions for maintenance, modification or modernisation of installations or manoeuvres or connection, repair or conservation work on the seller's power plant and network, included in Annex III to this contract, shall be provided to the buyer at the beginning of each calendar year, but shall not exempt the seller from giving 36 hours' notice of the interruptions.
- 4.3.** The occurrence of defects or anomalies that prevent the seller from delivering / supplying electricity to the buyer and/or the buyer from receiving and consuming it, shall:
- a)** be immediately notified to the other party, and the defaulting party shall initiate corrective actions in accordance with the safe and coordinated intervention procedures described in Clause 6 of this contract;
 - b)** be assessed to determine the allocation of costs and related charges between the parties, with mutual agreement and in case of dispute, with the mediation of the Energy Regulatory Authority.
- 4.4.** Failure by the seller to supply with active energy to the buyer in quantities greater than 20% of those agreed in this contract, except in case of force majeure, shall make this contract amendable by mutual agreement and with the mediation of the Energy Regulatory Authority.

CLAUSE 5 Quantity and quality of electric power

- 5.1.** The electrical energy delivered to the buyer is measured by the amount of active energy delivered in kWh, specifying the times and dates of delivery.
- 5.2.** The power factor of the electrical energy delivered shall not be less than 0.80.
- 5.3.** The electrical installations of the buyer and seller, as well as the delivery point and metering equipment, shall comply with the applicable technical and safety standards and the technical requirements of the National Electricity Grid Code (REN), and shall not cause any disturbances to REN's operation and management.

CLAUSE 6 Inspection, manoeuvring and access rights

- 6.1.** Inspections and tests of the point of delivery, planned or due to the suspicion of defects or anomalies in any of the distribution networks or in the power plant, shall be carried out with prior notice and in the presence of representatives of both parties, and the resulting technical reports shall be signed and made available to the technical teams of both parties.
- 6.2.** The connection manoeuvre at the metering point, allowing synchronous operation, can only be executed after full verification together by both parties, of the electrical safety protocols, described in Annex V of this contract.
- 6.3.** Each party shall have the right to request the other party to have access to the premises of the delivery point and the premises of the power plant as well as the distribution networks for the purpose of checking the security and quality of the energy supplies.
- 6.4.** The protocols of electrical safety in manoeuvres at the delivery point are defined in this contract in accordance with the applicable technical and safety standards, and these protocols shall be annexed to this contract.

CLAUSE 7 Obligations in synchronous operation at the point of delivery

7.1. Both parties shall maintain on their respective side of the delivery point, a disconnection circuit breaker operating with protections or by manual operation, to be disconnected in the event of a disturbance or defect affecting their customers, resulting from synchronous operation.

7.2. The occurrence of a defect or anomaly at the point of delivery or at any point of the buyer's distribution network, as well as at the installations of the power plant and the seller's distribution network, which affects the quality and reliability of the supply to customers of either network or the integrity of the operation of the National Electricity Grid (REN), must immediately generate a notification of its occurrence, to the other party, about its occurrence and may require the disconnection manoeuvre of the point of delivery.

7.3. The occurrence of reactive energy at any of the purchaser's or seller's installations may give rise to a corrective intervention or modernisation of the installed equipment, to be agreed between the parties.

7.4. Once the delivery point has been disconnected, it can only be reconnected after checking and correcting the causes that led to its disconnection.

7.5. Any technical intervention, operation, maintenance, modification or modernisation must comply with the applicable quality and technical safety standards and be in conformity with the technical and safety requirements for the operation of electricity grids set out in the Grid Code and in the legislation applicable to the regulation of the National Electricity Grid (REN).

CLAUSE 8 Electricity metering and metering systems

8.1. The selling concessionaire shall keep metering equipment at the delivery point, the calibration and characteristics of which are described in annex II of this contract.

8.2. The active energy metering at the point of delivery shall be integrated within a maximum interval of 5 minutes.

8.3. The calibration of the metering equipment shall be carried out regularly and certified by both parties, and the purchasing concessionaire may request an untimely calibration at its own expense, to be reimbursed if it is found to be justified.

8.4. The reactive power will be measured at the point of delivery and invoiced under the condition and at the price agreed under this contract.

CLAUSE 9 Selling price, invoicing and collection

9.1. Applicable prices: the prices for the sale of electricity shall be agreed in this contract, by both parties, under the conditions described in annex IV, and approved by the Energy Regulatory Authority, ensuring that the sale of energy from the Mini-grid concessionaire to the distribution concessionaire maintains the return capacity foreseen in the original concession.

9.2. Payment currency: all payments shall be invoiced and collected in the national currency, the Metical, and transacted electronically through the national banking institution.

9.3. Monthly energy invoice: within 25 (twenty-five) days of the end of the invoicing period, the selling concessionaire shall issue an invoice for the collection of the energy sold in the previous month, which includes the detail and charges, the tariffs applied, the quantity and type of the energy sold, as well as and the applied taxes.

9.4. Late payment: once the invoice has been received, the purchasing trader shall make the correspondent payment within 14 (fourteen) days, after which, the seller may apply a late payment penalty not exceeding 10% of the total amount invoiced, cumulatively for each 30 (thirty) days of delay.

9.5. The purchasing trader may notify the selling trader of his disagreement with the calculations and details in the invoice issued within 7 (seven) days, with the selling trader having a further 7 (seven) days to correct it or reject the complaint, in which case the purchasing trader may refer it to the Energy Regulatory Authority for mediation and arbitration.

CLAUSE 10 Deadline, interruptions and termination

10.1. This contract shall be valid for 12 (twelve) months, from the date of its signature, and may be automatically renewed for an equal period and so on, provided that no notice to the contrary is given by either party, at least 90 (ninety) days prior to the end of its validity.

10.2. By mutual agreement between the parties, either party may request a temporary interruption of supplies for a specified period of time, in which case the party proposing the interruption shall ensure compensation to the other party for any damage or financial loss resulting from the interruption.

10.3. Either party may terminate this contract, by giving 30 (thirty) days' duly justified notice, with the dissenting party being entitled to lodge a complaint with the Energy Regulatory Authority, for the following reasons:

- a)** non-payment of the traded energy and resulting charges, if the debt exceeds 3 (three) unpaid invoices;
- b)** changes in the quality of the energy supplied that result in charges to the purchaser;

10.4. Upon termination of this contract, and in the absence of any ongoing litigation, the interruption of supply at the point of delivery shall be immediate.

CLAUSE 11 Power Registration

Both parties shall keep joint records of active and reactive power flow at the point of delivery, of electrical frequency and voltage, operating conditions, planned and unplanned outages, the characterisation of events and anomalies, including transients and other aspects agreed in advance.

CLAUSE 12 Compensations

The parties are liable for any costs, losses, damages and liabilities arising from the breach of the obligations of the provisions of this contract and for compensation due to the other party and third parties under the applicable law.

CLAUSE 13 Force Majeure

13.1. Force majeure is an event or circumstance or combination of events and circumstances, which are unforeseeable and irresistible, whose effects occur regardless of the will or action of the party that invokes it, even if indirect, that prevent the compliance with its obligations. In particular, acts of war or subversion, hostilities or invasion, rebellion, terrorism or epidemics, acts of expropriation, foreclosure, ransom and government requisitions or nationalizations that do not comply with the terms provided for in applicable legislation; lightning, explosions, strikes, floods, cyclones, earthquakes and other natural disasters that directly affect the authorized activities constitute force majeure.

13.2. The delay or partial or total non-fulfilment of the obligations set forth in this contract, by any of the parties, resulting from the occurrence of an event of force majeure shall not be considered as a breach of the parties' obligations, under the terms of the applicable legislation.

CLAUSE 14 Dispute settlement

Disputes arising from this contract concerning regulatory matters shall be subject to mediation, conciliation, arbitration and decision by the Energy Regulatory Authority, in accordance with the provisions of the Regulation on Access to Energy in Off Grid Areas approved by Decree n.º 93/2021 of 10 December.

Glossary

Approval: means any and all grant, permission, consent, licence, permit, authorisation, registration, exemption, submission, assignment, expedition, recognition or approval required to be obtained from or to be granted by any Administrative Authority under any Applicable Law in relation to the Development;

Delivery point or supply: physical infrastructure and/or equipment that represents the physical border through which a Mini-grid carries out transactions for the purchase and/or sale of electricity, by agreement with a generation or distribution concessionaire, in an interconnection regime with the National Electricity Grid (REN);

Electricity generation: conversion into electricity of any energy source;

Electrical Installation: the equipment, electrical circuits and the infrastructures and related ancillary equipment intended for the supply of electricity, up to the point of connection to the consumer if they form part of a distribution network.

Energy Regulatory Authority: also known as ARENE, created by Law n.º 11/2017 of 8 September, responsible for ensuring the regulation of energy supply activities, in accordance with the aforementioned Law, its Organic Statute and its Internal Regulations.

Interconnection: the contract entered into between the Mini-grid concessionaire and the Bidder setting out the terms and conditions of the interconnection;

Mini-grid: an integrated system of electricity generation, distribution and trading installations, which may include storage, using mainly small scale renewable energy sources, of less than or equal to 10 MW, and not connected to REN. In this regulation it may also be simply referred to as "grid".

National Electricity Network (REN): comprises the electricity distribution network and the national electricity transmission network.

Power Purchase Agreement: the agreement signed with the mini-grid concessionaire to buy and/or sell electricity.

Annexes

Annex I Map and geographical coordinates of the concession area, description of the power plant, the point and delivery facilities and the metering equipment. This description is accompanied by the electrical diagram of the delivery point, metering systems, protections and command and control systems.

Annex II Characteristics of metering equipment installed at the delivery point.

Annex III Annual intervention plan for the maintenance and/or modernisation of the delivery point and the power plant, and of the distribution network that receives the electricity.

Annex IV Terms and charges associated with the billing of active and reactive energy by either party.

Annex V Protocols for electrical safety at the point of delivery.



NORMATIVE RESOLUTION N° 3/ARENE-CA/2022 OF 19 DECEMBER

Technical And Safety Standards Regulation



NORMATIVE RESOLUTION Nº 3/ARENE-CA/2022 OF 19 DECEMBER

Given the need to establish the technical and safety standards applicable to electrical equipment and installations, for mini-grids and autonomous systems, used in carrying out energy access provision activities in off-grid areas, within the scope of the powers provided for in paragraph r) of number 1 of article 23 of the Internal Regulations of the Energy Regulatory Authority, approved by Ministerial Order n.º 17/2020 of 14 April, the Board of Directors determines:

ARTICLE 1

The Regulation on Technical and Safety Standards, attached as an integral part of this Resolution, is hereby approved.

ARTICLE 2

Any doubts arising from the interpretation and execution of the approved Regulation shall be clarified by the Board of Directors of the Energy Regulatory Authority.

ARTICLE 3

This Resolution shall enter into force immediately.

Approved by the Board of Directors in Maputo, on 19 December 2022.

The Chairman of the Board of Directors, Paulo da Graça



Technical And Safety Standards Regulation

Chapter I - General provisions

ARTICLE 1 Definitions

1. For the purposes of this Regulation, the meaning of the terms and expressions used is provided in the attached glossary, which is an integral part of it.
2. Any term used in this regulation to which a different meaning has been assigned in the Regulation on Access to Energy in Off-Grid Areas approved by Decree 93/2021, of 10 December or in Electricity Act n.º 12/2022, of 11 July, shall have the meaning assigned to it, unless explicitly indicated otherwise in this regulation.

ARTICLE 2 Subject matter

This regulation defines and standardises the technical and safety regulations applicable to electrical equipment and installations of mini-grids and autonomous systems, used for the provision of energy access in off-grid areas.

ARTICLE 3 Scope

This Regulation applies to legal entities, whether public or private, engaged in supply activities for access to energy in off-grid areas through mini-grids and autonomous systems.

ARTICLE 4 Standardisation

1. For the definition and standardisation of technical and safety standards for mini-grids and autonomous systems, the Energy Regulatory Authority shall:
 - a) propose to the Competent Authority the adoption of technical and safety standards applicable to the equipment and components of electrical installations;
 - b) propose to the Competent Authority the regulation of the certification of compliance with technical and safety standards applicable to equipment and components of electrical installations, subject to joint approval;
 - c) approve guidelines that require compliance with technical and safety standards and ensure their implementation and compliance by mini-grid concessionaires and autonomous system distributors;
 - d) supervise the conformity assessment and final certification of equipment, components and electrical installations for mini-grids and autonomous systems
 - e) verify the compliance with technical standards during construction, installation, commissioning, operation and other phases of the mini-grid concession project;
 - f) verify the compliance with the applicable technical and safety standards for autonomous systems.
2. The collection, processing and management of electrotechnical waste generated by the energy supply activities in off-grid areas must be included in a Solid Waste Management Plan in accordance with the applicable legislation and the standards established by the Energy Regulatory Authority.

Chapter II - Mini-grids technical quality and safety standards

ARTICLE 5 Technical and safety standards for mini-grids

1. Without prejudice to the national technical and safety rules applicable to mini-grids, whatever their category, the norms and standards issued by the International Electrotechnical Commission (IEC) listed in Annex II, with their updates, shall apply.
2. Without prejudice to national certification of mini-grid equipment, components and installations, certification issued by internationally recognised certification bodies is also accepted.
3. The preparation and execution of projects and the installation and operation of electrical mini-grid installations must be carried out by technicians registered in accordance with the applicable legislation.

ARTICLE 6 Electricity quality

1. The quality of the electrical power is determined by acceptable variations based on frequency, voltage and harmonic indicators, described in the table in Annex III.
2. The electrical installation of the mini-grid must have a network protection system that includes devices for protection against overcurrent and protection against variations outside acceptable values.

Chapter III - Technical and safety standards for autonomous systems

ARTICLE 7 Categories of autonomous systems

1. Autonomous solar photovoltaic systems fall into two categories:
 - a) **category 1** - are solar photovoltaic systems such as solar lanterns, solar pico systems and "plug-and-play" solar kits with a power rating less than or equal to 350W_p, whose photovoltaic production and operation voltage is continuous and not greater than 35 V;
 - b) **category 2** - are composite solar photovoltaic systems, whose components can be sold separately, with a power rating exceeding 350W_p, and their photovoltaic production and operation voltage can be either direct (DC) or alternating (AC).
2. The Energy Regulatory Authority shall establish the categories of the other autonomous systems.

ARTICLE 8 Category 1 autonomous solar photovoltaic systems

1. Without prejudice to the national technical and safety standards for category 1 autonomous solar photovoltaic systems, the norms and standards issued by the International Electrotechnical Commission (IEC), listed in Annex II, with their respective updates, shall apply.
2. Without prejudice to national certification for Category 1 autonomous solar photovoltaic systems, certification issued by internationally recognised certification bodies shall also be accepted.
3. For the installation and distribution of category 1 autonomous solar photovoltaic systems, technicians are not required to be registered, in accordance with applicable legislation.

ARTICLE 9 Category 2 autonomous solar photovoltaic systems

1. Category 2 of autonomous solar photovoltaic systems is subdivided into two subcategories:
 - a) **subcategory 1:** autonomous solar photovoltaic systems with energy storage consisting of a solar photovoltaic system, a charge controller/regulator, a battery bank, inverter and accessories, as applicable; and
 - b) **subcategory 2:** autonomous solar photovoltaic systems for productive applications without storage capacity, made up of a solar photovoltaic system, inverter and accessories, as applicable.
2. Without prejudice to national technical and safety standards for category 2 autonomous photovoltaic systems, the norms and standards issued by the International Electrotechnical Commission (IEC) corresponding to the equipment and components of the system, listed in Annex II, with their respective updates, shall apply.
3. Without prejudice to national certification for Category 2 autonomous solar photovoltaic systems, certification issued by international certification bodies shall also be accepted.
4. The design and installation of category 2 autonomous solar photovoltaic systems require registered technicians.
5. The components of autonomous solar photovoltaic systems should:
 - a) be selected and installed in accordance with the manufacturer's instructions;
 - b) comply with all instructions related to component interoperability;
 - c) be capable of operating when combined as a complete system.

Chapter II - Final provisions

ARTICLE 10 Supervision of Regulation's Implementation

1. Supervision of implementation of this regulation falls under the responsibility of the Energy Regulatory Authority, in accordance with the Law establishing it, its Organic Statute, Internal Regulations and other applicable legislation.
2. Supervisory actions shall be carried out in accordance with plans previously approved by the Energy Regulatory Authority and whenever deemed necessary to ensure the regulation of the energy sector.
3. The Energy Regulatory Authority shall carry out or promote verification actions, including audits and inspections actions, which may cover all or part of the provisions of this Regulation, as determined by the Energy Regulatory Authority.

ARTICLE 11 Provision of information to the Energy Regulatory Authority

The concessionaires are obliged to provide all the information and documents at any time and within the time limits specified by the Energy Regulatory Authority, and must do so in writing, both in physical and electronic format, unless otherwise specified by the Energy Regulatory Authority.

ARTICLE 12 Penalties

1. Failure to comply with the provisions of this regulation shall constitute a punishable offence under the terms of the applicable sanctioning regime approved by the Energy Regulatory Authority.
2. All information and documents obtained in the implementation of this Regulation, including those resulting from audits, enforcement actions, inspections, petitions, complaints, denunciations and claims, may be used in accordance with the applicable sanctioning regime.

ANNEX I - Glossary

Access to energy in off-grid areas: provision of facilities, infrastructure, systems, equipment and services, including their interconnection, wired or wireless, access to infrastructure, both physical and virtual, mobile and fixed, for the provision of energy access.

Autonomous System(s): equipment and installations for the production and consumption of electrical energy for domestic or productive use, including solar home systems.

Competent Entity: the public law body or legal entity that has the functional powers granted by law to exercise its competences and attributions.

Concessionaire: the holder of a concession awarded in accordance with the Off Grid Energy Access Regulation approved in Decree n.° 93/2021, of 10 December.

Consumer: a natural or legal person, including final consumers, other distributors, sellers subject to the supply of electricity or autonomous systems, for domestic, industrial or commercial use. For the purposes of this regulation, the concepts of customer and consumer itself are considered to be used as having the same meaning.

Consumption: the use of electricity by a natural or legal person, including residential, commercial, factory and/or industrial production or agricultural units, other distributors, export consumers and sellers.

Distributor: the holder of a concession that includes the activity of electricity distribution, including a grid distribution operator, responsible for the delivery of energy to supply the consumers or distribution stations that sell energy to consumers, as well as distributors of autonomous systems.

Distributors of autonomous systems: as distributors of energy services, these are natural and legal persons, under public or private law, who provide energy services, including activities of importing, distribution, marketing and/or selling of autonomous systems.

Electrical Installation: the equipment, electrical circuits and infrastructures and related ancillary equipment intended for the supply of electrical energy, up to, if part of a distribution network, the point of connection to the consumer.

Electricity Distribution: transit of electricity by a distributor through medium and low voltage networks to be delivered to the consumer.

Electricity Production: conversion into electricity of any energy source.

Energy Regulatory Authority: also referred to as ARENE, established by Law n.° 11/2017 of 8 September, in accordance with that Law, its Organic Statute and its Internal Regulations.

Energy services: include services for energy consumers, preferably renewable, such as the supply, financing, installation, operation, and maintenance of electrical equipment and installations including autonomous systems and other energy technologies.

Frequency: the electrical frequency of the system expressed in hertz (Hz) which can be measured in all parts of the synchronous area, its nominal value being 50 Hz.

Harmonic Distortion: occurs when a signal passes through a non-ideal, non-linear device, where additional content is added to the harmonics of the original frequencies.

IEC: International Electrotechnical Commission an organisation dedicated to the preparation and publication of international standards in electro technology namely electrical, electronic and related technologies. <https://www.iec.ch/homepage>.

Infrastructure: the set of systems, installations, equipment, software and other components, both physical and virtual, which enable access to energy outside the grid.

INNOQ: National Institute for Standardisation and Quality.

kW (Kilowatt): unit of power.

kWh (Kilowatt-hour): unit of electrical energy.

Mini-grid: an integrated system of electricity generation, distribution and trading installations, which may include storage, using mainly renewable energy sources, of small scale less than or equal to 10 MW, and not connected to the National Electricity Grid. In this regulation it may also be simply referred to as "grid".

National Electricity Network (REN): includes the electricity distribution network and the national electricity transmission network.

Power plant: Electric installation destined to produce electrical energy.

Rural areas: areas characterised by low population density which are not part of an urbanisation zone, or which do not have a distribution network accessible by consumers.

Solid Waste Management Plan: plan including elements related to the demobilisation and recycling of autonomous systems, installations, equipment, and components of autonomous systems, as well as the treatment and disposal of waste.

Supply Activities for Access to energy in off-grid areas: includes initiatives and undertakings considered to be of a social nature and sustainable development, aimed at carrying out the activities, jointly or separately, the activities of generation, distribution and commercialisation of electricity, and may include storage, through mini-grids and the provision of autonomous systems, aligned with the National Electrification Strategy, the National Energy for All Programme and the Sustainable Development Goals under 2030 Agenda and other Government policies and strategies instruments.

Technical and Safety Standards: set of national and international technical and safety standards equipment and applicable norms for access to energy provision activities in off-grid areas.

Voltage: the difference in electrical potential between two points of measurement.

Zones Outside the National Electricity Grid or Off Grid: areas not served by REN, with current and potential consumers, located in rural areas and remote communities.

Annex II - International standard and certifications

International Electrotechnical Commission (IEC) standards and certifications applicable to mini-grid and autonomous system electrical installations, as amended by IEC.

Mini-grids

- The IEC TS 62257 series covers different technical aspects of mini-grids including the production and distribution grid.
- **IEC TS 62257-5:2015**: specifies the general requirements for the protection of persons and equipment against electrical hazards to be applied in decentralised rural electrification systems. The requirements dealing with protection against electric shock are based on the standards of IEC 61140 and IEC 60364

For the construction and implementation of mini-grid infrastructure and production facilities:

- **IEC TS 62257-7:2017**: Provides the general requirements for generators in decentralised rural electrification systems, including mini-grids. This standard is complemented by the following standards, from the same series, IEC TS 62257 - (7 to 12);
- **IEC 62548**: sets out the requirements for the design of photovoltaic (PV) arrays, including DC array wiring, electrical protection devices, switching and earthing provisions;
- **IEC 61400 series**: Defines the requirements for wind turbines;
- **IEC 60308: 2005**: defines the characteristics of control systems for hydro-electric mini-grids and is the basis for documents that underpin applications and tenders for mini-grid concessions as well as other technical tenders;
- **IEC 62257-7-3**: specifies the general requirements for the selection, sizing, assembling and operating generators sets in decentralized rural electrification systems.

For the construction and implementation of mini-grid distribution networks:

- **IEC TS 62257-9-2:2016**: Specifies mini-grids made of overhead lines due to technical and economic reasons in the context of decentralised rural electrification, including mini-grids.

For operation and maintenance of mini-grids:

- **IEC TS 62257-6:2015**: Describes various technical and commercial rules to be applied for acceptance, operation, maintenance and replacement of equipment for decentralised rural electrification systems, including mini-grids, that supply electricity to localities not connected to the national electricity grid.

AUTONOMOUS SOLAR PHOTOVOLTAIC SYSTEMS

CATEGORY 1

- **IEC TS 62257-9-8:2020**: Basic requirements for quality, durability and truth in advertising to protect consumers of solar systems under 350Wc.

CATEGORY 2

- **IEC 61215 (all parts)**: Certifies a quality assurance in terms of mechanical stability and compliance with electrical parameters.
- **IEC 61730 (all parts)**: Provides minimum design requirements to ensure the safety of the solar PV module during its operation.
- **IEC 62509 Ed.1**: Provides minimum requirements for the operation and of battery charge controllers used with lead-acid batteries in terrestrial photovoltaic systems.

- **IEC 62109-1:** Defines minimum requirements for the design and manufacture of power conversion equipment for protection against electric shock, energy, fire, mechanical and other hazards.
- **IEC 62109-2:** Provides the relevant safety requirements for DC-AC inverters as well as products that have or perform inverter functions, in addition to other functions, where the inverter is intended for use in photovoltaic power systems.
- **IEC 62619:** Provides requirements and tests for safe operation of secondary lithium cells and batteries used in industrial applications, including stationary applications.
- **IEC 61056-1:** Provides the general requirements, functional characteristics and test methods for all general-purpose valve-regulated type lead-acid cells and batteries.
- **IEC 60896-11:** Provides the general requirements and principal characteristics together with the associated test methods for all types and construction of stationary lead-acid batteries, except valve-regulated types.
- **IEC 61427-1:** Part of a series of standards that provides general information concerning the requirements for secondary batteries used in photovoltaic power systems and the typical test methods used for verifying the batteries' performance.
- **IEC 62619:** Specifies the requirements and tests for safe operation of lithium cells and batteries used in industrial applications, including stationary applications.
- **IEC 62253:2011:** Provides requirements for design, qualification and performance measurements of photovoltaic pumping systems in autonomous operation.

SOLID WASTE MANAGEMENT PLAN

- Environmental management systems and practices in accordance to the NM ISO 14001 standard.

INTERNATIONAL CERTIFICATIONS

Verasol: certifies category 1 pico-solar products and solar home system kits according to internationally recognised standards of quality, durability and reliable advertising.

TUV (Technischer Überwachungsverein): Certifies various products and services from different sectors, including solar system equipment and installations.

CE: Certifies the conformity of products with all requirements applicable throughout the European Union, including solar energy equipment.

Annex III - Permitted variations in the quality of electrical power system

The table below shows the acceptable variations of the three indicators for the different categories of mini-grids:

	Mini-grids up to 150kW	Mini-grids from 151kW to 10MW
Permissible Frequency Variation (f) (nominal value - 50Hz)	±2% of nominal frequency	±1% of nominal frequency
Voltage variation 400V (three-phase) or 230V (single-phase)	±10% of nominal voltage	±5% of nominal voltage
Permissible harmonic distortion	10%	8%



NORMATIVE RESOLUTION N° 4/ARENE-CA/2022 OF 19 DECEMBER

Quality of service and commercial relations regulation



NORMATIVE RESOLUTION Nº 4/ARENE-CA/2022 OF 19 DECEMBER

Given the need to establish the provisions governing the quality of service and commercial relations in the provision of access to energy in off-grid areas, and within the scope of the powers provided for in subparagraph a) v) of paragraph 1 of Article 17 of the Regulation on Access to Energy in Off-Grid Areas, approved by Decree n.º 93/2021, of 10 December, the Board of Directors determines:

ARTICLE 1

The Regulation on Service Quality and Commercial Relations attached to this Resolution, which form an integral part thereof, is hereby approved.

ARTICLE 2

Any doubts arising from the interpretation and implementation of the approved Regulation shall be clarified by the Board of Directors of the Energy Regulatory Authority.

ARTICLE 3

This Resolution shall enter into force immediately.

Approved by the Board of Directors in Maputo, on 19 December 2022.

The Chairman of the Board of Directors, Paulo da Graça



Quality of service and commercial relations regulation

Chapter I - General Provisions

ARTICLE 1 Definitions

1. For the purposes of this Regulation, the meaning of the terms and expressions used is set out in the glossary in the Annex, which forms an integral part of it.
2. Any term used in these regulations to which a different meaning has been assigned in the Regulation on Access to Energy in Off-Grid Areas approved by Decree n.° 93/2021 of 10 December or Law n.° 12/2022 of 11 July shall have the meaning assigned to it, unless explicitly stated otherwise.

ARTICLE 2 Subject matter

1. This Regulation establishes the provisions applicable to the energy supply service in off-grid areas with regards to the following aspects:
 - a) the technical and commercial quality standards, to which the service provided by the Mini-grid concessionaires shall be subject to;
 - b) the system of commercial relations between the Mini-grid concessionaire and the customers.
2. The technical parameters of the quality of service, such as frequency, voltage and harmonics, which are the subject of separate regulations, are excluded from this regulation.

ARTICLE 3 Scope

This regulation applies to concessionaires carrying out supply activities for access to energy in off-grid areas through mini-grids, as well as to electricity consumers.

ARTICLE 4 Principles of service quality and commercial relations

The following principles are observed in the commercial relationship between the concessionary and the customer:

- a) ensure the efficient and rational electricity supply and related services, in accordance with the needs and options of consumers in the concession area;
- b) impartiality of treatment and the electricity supply energy service;
- c) transparency of the commercial relationship processes;
- d) right to information;
- e) confidentiality of personal and commercial information.

ARTICLE 5 Rights and duties of the concessionaire

1. The rights of the concessionaire, in the provision of the electricity supply service, shall be to:
 - a) deliver the electricity produced to the customer's consumer's facility against payment of remuneration in accordance with this regulation;
 - b) require from the customers strict compliance with the standards set out in the electricity supply contract;

- c)** have the right to access the facilities of the consumer, where metering and counting equipment, data recording and transmission equipment, as well as the grid elements located therein that, for service or safety reasons need to be operated, are installed.
- 2.** The duties of the Mini-grid concessionaire in the provision of the electricity supply service shall be to:
- a)** supply electricity to the customers in the concession area, whose consumer's facility meet the appropriate technical conditions of safety, protection and operation, subject to the exceptions provided for in this regulation;
 - b)** comply with the principle of fairness in its relations with customers;
 - c)** provide an adequate service that meets the conditions of regularity, continuity, efficiency, safety, universality and courtesy;
 - d)** draw up the annual plan of planned interruptions;
 - e)** inform the customer well in advance of any planned interruptions to the electricity supply;
 - f)** inform the customer of the reasons for any unplanned interruptions as soon as possible and, in the event that they persist, provide an estimate of their duration;
 - g)** inform the customer of anything else that pertains to and falls within the scope of the contractual relationship with the customer;
 - h)** ensure the constant modernisation of the equipment and installations, and their preservation;
 - i)** ensure the continuous improvement and expansion of the supply service;
 - j)** develop and implement, regularly and effectively, campaigns to:
 - i** inform the customer in particular, and the general public, in the concession area, about the special care that the use of electricity requires;
 - ii** disseminate the specific rights and duties of electricity consumers;
 - iii** provide guidance on the rational, efficient and safe use of electricity;
 - iv** disseminate other guidance as determined by the competent authorities;
 - k)** keep the register of consumer's facilities up to date;
 - l)** provide, whenever requested by the competent authority or the customer, the information used for the simulation or estimation of billing;
 - m)** provide the customer with invoices and receipts, in accordance with the applicable legislation;
 - n)** continuously promote actions to combat the irregular or unauthorised use of electricity;
 - o)** have a service structure, which may be in person, by telephone, electronically or via social media, suited to the needs of its market and accessible to all consumers in the concession area, including a system for registering complaints;
 - p)** compensate the customer for any damage resulting from the supply of defective goods or services;
 - q)** comply with the rules set out in this regulation and other applicable legislation.

ARTICLE 6 Rights and obligations of the customer

- 1.** Customer's rights include the following:
- a)** enter into an electricity supply contract;
 - b)** receive electricity at their consumption unit in accordance with the applicable quality standards;
 - c)** be billed only for the charges they incur on the mini-grid;
 - d)** receive attention regarding requests and complaints made to the concessionaire;
 - e)** be objectively informed about the measurements taken regarding their requests and complaints, in accordance with the corresponding conditions and execution deadlines;

- f)** be informed on the invoice about the existence of previous unpaid bills;
 - g)** be reimbursed for incorrectly charged and paid amounts;
 - h)** be informed about scheduled interruptions, through appropriate communication;
 - i)** have access, for consultation purposes, at the service locations, to the standards and regulations related to the general conditions for electricity and other services provided by the concessionaire;
 - j)** be informed of the different tariff structures in force and the conditions for accessing different types of tariffs, as well as the criteria and procedures for obtaining them;
- 2.** Customer duties include:
- a)** make payment for electricity under the supply contract with the concessionaire, as well as for any services, taxes, fines or other charges due under the terms of this regulation, within the applicable timeframe;
 - b)** maintain the technical suitability and safety of the consumer's facility;
 - c)** not transfer to third parties, free of charge or in exchange for payment, the electricity purchased from the concessionaire in its consumer's facility;
 - d)** allow the concessionaire to install, on its property, in an easily accessible and safe location, the equipment necessary for the supply, control, measurement and metering of electrical energy;
 - e)** ensure the right of access by the concessionaire to the consumer's facility, where equipment for measurement and metering, recording and data transmission are installed, as well as the grid elements installed on its property, and which for reasons of service or safety need to be operated;
 - f)** not to change the equipment of the connection point to the consumer's facility;
 - g)** provide information for billing purposes;
 - h)** respond:
 - i)** for damages caused to persons or property, arising from defects in their consumer facility, due to poor use and maintenance of facilities or the inappropriate use of electricity;
 - ii)** for any damages caused to the metering and counting equipment or the concessionaire electrical installations, arising from any irregular procedure or technical defect in its consumer's facility;
 - iii)** for any modifications made to the installation of the consumer's facility, without the approval of the concessionaire, which may result in a change in the tariff category and billing option;
 - iv)** for the custody of the concessionaire's metering and counting equipment when installed in its consumer's facility, acting as a custodian consumer.
- 3.** For the purposes of paragraph 2(d) of this Article:
- a)** the responsibility for damage caused to external metering and counting equipment shall not be attributed to the consumer, except in cases where it is clearly and directly attributable to him;
 - b)** access to the customer's facility is free of charge for the concessionaire.
- 4.** The determination of the customer's responsibility in relation to the damage referred to in sub-paragraph h) of number 2, as well as the determination of the corresponding compensation, shall be subject to inspections and tests at the site of the incident, to be carried out by the concessionaire, and whose results shall be communicated to the customer and to the Energy Regulatory Authority

Chapter II Quality of service

ARTICLE 7 Service quality targets

The Energy Regulatory Authority shall set targets for the following commercial service quality indicators:

- a)** timelines for connecting new customers;
- b)** timelines for meeting requests for power increases;
- c)** deadlines to respond complaints;
- d)** quality of measurement and metering systems, billing and collection of electricity.

ARTICLE 8 Classification of interruptions

1. Interruptions are classified according to their duration and type.
2. According to their duration the interruptions are classified as:
 - a) brief interruption: lasting no longer than 5 minutes;
 - b) long interruption: lasting more than 5 minutes.
3. According to the type, interruptions are classified as:
 - a) planned interruptions: those for which customers are informed in advance or in accordance with Article 9(1)(a) of this regulation;
 - b) unplanned interruptions: all other interruptions.

ARTICLE 9 Causes of interruptions

1. The electricity supply shall be permanent and continuous, in accordance with the technical standards in force, subject to the following exceptions:
 - a) planned interruption or with prior notice of at least 36 (thirty-six) hours, for any of the following reasons, without prejudice to the provisions of number 2 of this article:
 - i maintenance, modification or modernisation of facilities or other types of services;
 - ii public interest;
 - iii consumer-imputable fact;
 - iv in agreement with the consumer;
 - v the imperative need to carry out manoeuvres or work for the connection, repair or maintenance of the grid, provided that all alternative supply possibilities have been exhausted.
 - b) unplanned interruptions or without prior notice for any of the following reasons:
 - i fraudulent uses of electricity;
 - ii existence of a situation that jeopardises the safety of people, property and the environment, while it persists;
 - iii safety of electrical installations and measuring and metering equipment;
 - iv urgent need to shed loads, automatically or manually, to ensure the safety of the electrical system and users;
 - v fortuitous events or force majeure;
 - vi emergency situations, as defined by the competent authority.
2. The electricity supply may be interrupted, for reasons attributable to the customer, due to non-compliance with their contractual obligations, namely:
 - a) non-payment of electricity and other services chargeable;
 - b) failure to pay for damages caused on the concessionaire premises, for which the consumer is responsible, provided that such damages are related to the provision of the electricity supply service;
 - c) when the concessionaire detects that fraudulent consumption of electricity is taking place from the customer's consumer's facility;
 - d) failure to comply with other obligations resulting from the legislation in force.

ARTICLE 10 Continuity of service

The Energy Regulatory Authority shall establish reliability levels for each technology, with reference to the continuity of service according to the table in Annex II, based on the specific relevant conditions of terrain, climate, social, demographic and other factors deemed relevant in the concession areas, namely:

- a) frequency of planned interruptions (planned SAIFI);
- b) duration of planned interruptions (planned SAIDI);
- c) frequency of unplanned interruptions (unplanned SAIFI);
- d) duration of unplanned interruptions (unplanned SAIDI).

ARTICLE 11 Mini-grid connection

1. The concessionaire is obliged to connect to the Mini-grid any natural or legal person who requests it, provided that this connection is located within its concession area and that the applicant is able to guarantee payment for electricity consumed according to the supply contract, to be concluded.
2. The concessionaire is required to connect the consumer's facility to the Mini-grid within 5 (five) working days after approval of the request, unless reinforcement or extension works of the distribution grid are required with the execution plan of the work needing approval from the Energy Regulatory Authority.
3. The connection of the consumer's facility shall comply with the technical, legal and regulatory standards in force and shall not interfere with the normal operation of the Mini-grid or constitute a danger to persons, property and the environment.

ARTICLE 12 Connection of large consumers to the Mini-grid

1. For the purposes of this regulation, large consumer's facilities are those which, due to the amount of their consumption, may cause additional overloads on the network grid or which require reinforcement of the supply systems, including protections.
2. For the purposes of paragraph 1 of this Article, large consumer's facilities shall be:
 - a) those whose main purpose is for productive, commercial and industrial use;
 - b) enterprises with multiple consumer's facilities;
 - c) medium-voltage consumers;
 - d) others, for which the Mini-grid is not technically able to provide the supply service immediately.
3. If the connection to the grid of large consumer's facilities requires an unscheduled reinforcement of the generation plant or expansion of the Mini-grid, the concessionaire must notify and request the necessary authorisation and tariff review from the Energy Regulatory Authority, submitting the studies, budget and project for validation.
4. For the purposes of paragraph 3 of this Article, the Energy Regulatory Authority, shall consider:
 - a) the list of pending requests to fulfil in the concession area;
 - b) the ability of the large consumer candidate to guarantee payment of their consumption, installation costs, branches or extensions;
 - c) the need to reinforce the production capacity of the Mini-grid;
 - d) the investment and expansion plan for the current tariff cycle;
 - e) other aspects in accordance with the applicable legislation.

ARTICLE 13 Connection process

1. Large consumers are responsible for the installation at their consumer's facilities, whose connection process is subject to the following formalities:
 - a) the connection request is made through a form to the concessionaire, who acknowledges its upon delivery and processes it in the order of submission;
 - b) the signing of the electricity supply contract between the applicant and the concessionaire, after the verification of compliance with technical and safety standards;
 - c) the electricity supply to the consumer's facility, within the connection deadlines defined in paragraph 2 of article 11;
 - d) in the event of refusal or delay in connection, the concessionaire must inform the applicant of the reasons for such, and the applicant may appeal to the Energy Regulatory Authority within 15 (fifteen) days from the date of receiving the information.
2. It is the responsibility of the Mini-grid concessionaire to carry out the installation and connection of the other consumer's facilities within its concession area, in accordance with number 1 of this article, with the necessary adaptations.

ARTICLE 14 Inspection process for large consumers

1. The inspection process for large consumers is carried out within 10 (ten) business days, counting from the date of the applicant's request or application for a new inspection, through the completion of a specific form.
2. The inspection period shall begin from the first business day following the completion of the works referred to in paragraph 2 of Article 11.
3. In case of rejection of the installation of the consumer's facility during the inspection, the concessionaire shall inform the applicant, in writing, of the respective reason and the necessary corrective measures, within 3 (three) business days.
4. Once the reasons for the rejection are rectified as per the previous paragraph and the concessionaire is informed, a new inspection is conducted, and the connection of the consumer's facility is made within 5 (five) days.

ARTICLE 15 Complaints

1. Customers may present a complaint arising from breach of the electricity supply contract with the concessionaire.
2. Whenever the resolution of a complaint implies necessary diligences, the complainant must be informed in advance of the process, as well as of the results obtained from the diligences, within a maximum period of 15 (fifteen) days.
3. The complainant must also be informed of the corrective measure that must be taken if the object of the complaint is identified within their consumer's facility, as well as any charges they may need to bear based on the outcome of the requested diligences.
4. If the diligence reveals the concessionary's responsibility for the concessionary must promptly correct the cause of the complaint and bear any damages that may occur.
5. If a satisfactory response to the complaint filed with the concessionaire is not obtained, the complainant may appeal to the Energy Regulatory Authority, following the procedures established in the Complaint Handling Regulation approved by the Regulatory Energy Authority.
6. The intervention of the Energy Regulatory Authority must be requested in writing, or in person, or through other communication channels, citing the facts that justify the complaint and providing all available evidence.

Chapter III - Commercial relations

ARTICLE 16 Electricity supply contract

1. The electricity supply to consumer's facility must be formalised through the electricity supply contract, in a model approved by the Energy Regulatory Authority.
2. At the moment of the supply request and after the payment of the specified charges, the electricity supply contract is signed and a copy shall be delivered to the customer.
3. Without prejudice to other considered specific clauses, contracts must include clauses and information on:
 - a) identification of the delivery point;
 - b) duration of contract;
 - c) definition of the location and procedure for metering and data reporting;
 - d) contracted capacity;
 - e) contracted voltage;
 - f) obligation to comply with the norms and standards in force;
 - g) tariff modalities and billing criteria;
 - h) criteria for fines collection in cases of non-compliance;
 - i) legal and regulatory deadlines incurred in contracting the service;
 - j) conditions for extension and termination of contractual relations;
 - k) ownership of the metering equipment

4. For large consumer's facilities, the contract duration and extension periods may be established by agreement between the parties.

ARTICLE 17 Metering and counting the consumption

1. The concessionaire is obliged to install active metering and counting equipment for electricity in the consumer's facilities and public lighting installations, using a credit sales system, i.e. prepayment metering.
2. Exceptionally, the Energy Regulatory Authority may authorise the installation of post-paid metering systems for active and reactive electricity in large consumer's facilities.
3. The metering and counting equipment are not compulsory in consumption units with a fixed monthly tariff, with the amount to be charged based on the installed capacity in the consumer's facility.
4. The metering and counting equipment, as well as the respective accessories, are property of the concessionaire, with customer serving as the faithful custodian of such equipment.
5. The metering and counting equipment are located outside the consumer's facility, in qualified metering boxes, in a location easily accessible from the public road.
6. In apartment buildings, condominiums or similar, the metering and counting equipment must be centralised, located near the building entrance to the building, in an easily accessible location from the public road.
7. Metering and counting equipment, as well as the circuits that feed them, shall be sealed in boxes, and may only be broken by an authorised representative of the concessionaire.
8. Metering and counting equipment shall be calibrated whenever a malfunction is suspected or detected.
9. The concessionaire cannot claim the unavailability of metering and counting equipment as a reason to refuse or delay the connection or commencement of the electricity supply.

ARTICLE 18 Charges for large consumers

1. Large consumers are charged for the following:
 - a) emergency reconnection if the interruption was caused by the customer;
 - b) inspection of the large consumer's facilities;
 - c) issue of a duplicate of the annual statement of discharge of debts;
 - d) execution of works in the large consumer's facilities;
 - e) make the guarantee deposit.
2. The guarantee deposit shall be charged to large consumer's facilities that have a post-payment metering system as specified in the corresponding electricity supply contract.
3. The values to be charged for the services listed in number 1 of this article shall be defined by the concessionaire and approved by the Energy Regulatory Authority based on current market prices.
4. Failure to provide the requested service, for which the large consumer is solely and demonstrably responsible, will allow to charge the corresponding cost.

ARTICLE 19 Replacement of a defective meter

1. The meter is considered to be more than nominally defective if it shows a deviation of 3% from the standard deviation, to the detriment of both the consumer and the Mini-grid concessionaire.
2. In the case provided for in the previous number, the concessionaire shall:
 - a) replace the meter;
 - b) adjust the consumption paid, on a reasonable and fair basis, taking into account the most recent records of the amounts supplied to these consumers;
 - c) issue a credit for future consumption, equivalent to the identified error.
3. When replacing one meter with another, the credit of the original meter shall be transferred in full to the new meter.

4. In the event of a change in the holder of the consumer's facilities, the amount shall be refunded to the original holder on the date of the duplicate payment.
5. The costs related to the replacement of a defective meter will not be charged to the customer, unless the customer is found to be responsible for any damage caused to the meter.

ARTICLE 20 Payment methods

The concessionaire must provide conditions for the payment of electricity and other chargeable services through different means, including:

- a) cash at service stations;
- b) mobile and electronic money;
- c) bank transfer.

ARTICLE 21 Suspension of electricity supply

1. The concessionaire is entitled to interrupt the electricity supply for technical reasons or safety in the consumer's facility, preceded by notification to the customer, in the following cases:

- a) meter replacement and carrying out work without load on the consumer unit;
- b) detection of a non-urgent defect in the consumer's facility, in particular in the connection point equipment;
- c) when the consumer uses loads or equipment in the consumer's facility that cause disturbances or damage to the electricity distribution system of the Mini-grid, or to the electrical installations and equipment of other consumers.

2. The concessionaire is allowed to suspend the electricity supply for non-compliance with contractual conditions by the customer, preceded by notification, in accordance with these regulations, namely:

- a) non-payment for electricity and other chargeable services;
- b) non-payment of damages caused to the concessionaire's installations, for which the consumer is responsible, provided they are related to the provision of electricity supply services;
- c) when the concessionaire detects fraudulent electricity consumption at the customer's facility;
- d) breach of other contractual obligations.

3. The notification of suspension of the electricity supply shall be in writing, specific and accompanied by proof of delivery.

4. The concessionaire shall schedule the suspension of the consumer's electricity supply during business days, from Monday to Thursday, except in cases where consumer's facility fraudulent consumption is suspected, as per applicable legislation.

5. The concessionaire shall restore the power supply within 24 (twenty-four) hours, counting from the uninterrupted after the situation that caused the suspension has been resolved.

CLAUSE 22 Termination of the power supply agreement

1. The concessionaire may unilaterally terminate the contract based on any of the following grounds:

- a) systematic non-payment of energy consumption, as well as any fees, fines or charges for services provided;
- b) systematic obstruction of access to electrical installation without legal basis or assault on its duly identified agents in the line of duty;
- c) systematic fraudulent electricity consumption;
- d) any other act constituting a serious breach of the contractual clauses.

2. Notification of the termination shall be given to the customer by a simple letter or written communication via electronic means, stating the reasons for termination.

3. The termination will take effect 15 (fifteen) days after the communication, for large consumer, and 5 (five) days for other customers.
4. by agreement between the parties or in event of the account holder's death, the electricity supply contract may be terminated, in which case the outgoing account holder or their heirs must fully comply with obligations arising from the terminated contract, including overdue debts, fines or other charges.

ARTICLE 23 Duty to inform the Energy Regulatory Authority

1. The concessionaire undertakes to provide all the information and documents within the deadlines specified by the Energy Regulatory Authority, in physical and electronic form, unless otherwise specified by the Energy Regulatory Authority.
2. The concessionaire shall provide information to the Energy Regulatory Authority on the quality of service and commercial relations of the mini-grid, detailing the evolution of the indicators established in this regulation, namely:
 - a) all interruptions, planned and unplanned, including their cause, date, duration, location, consumers affected and other relevant aspects;
 - b) in the case of emergency or accidental interruptions, the information provided should also include the measures taken to prevent their recurrence;
 - c) records of requests for information, services, suggestions, complaints and reports, with the respective protocol numbers, showing the time and date of the request and of the measures taken;
 - d) information relating to inspections and interventions by the concessionaire in metering equipment, and violation of seals and closures installed on meters and boxes;
 - e) information on charges resulting from faulty metering or irregular or fraudulent procedures;
 - f) new contracts concluded and new connections, reconnections and cancellations.
3. The information referred to in the previous number shall be included in the annual report to be submitted by the concessionaire by 31 May of each year.

Chapter - IV Final provisions

ARTICLE 24 Models and forms

1. The Energy Regulatory Authority shall prepare, approve and publish model contracts, forms and related guidelines for the procedures applicable to the quality of service and commercial relations of this regulation, in Annexes II to VI:
 - a) connection request;
 - b) electricity supply contract;
 - c) inspection template/models;
 - d) invoice and receipt template/models.
2. The Energy Regulatory Authority may approve models/templates, forms and guidelines necessary for the implementation of this Regulation.

ARTICLE 25 Monitoring the implementation of the Regulation

1. Supervision of the application of these regulations shall be the responsibility of the Energy Regulatory Authority, in accordance with the Law establishing it, its Organic Statute, its Internal Regulations and other applicable legislation.
2. The Energy Regulatory Authority shall conduct or promote the carrying out of verification actions, namely audits and inspections, which may cover all or part of the provisions of this Regulation, as determined by the Energy Regulatory Authority.

ARTICLE 26 Penalty regime

1. Failure to comply with the provisions set out in this regulation shall constitute a punishable offence under the terms of the applicable sanctions regime approved by the Energy Regulatory Authority.
2. All information and documents obtained in the implementation of this Regulation, including those resulting from audits, enforcement actions, inspections, petitions, complaints, reports and claims, may be used in accordance with the applicable sanctions regime.

Annex I - Glossary

Ability to Pay: a measure of the value or quantity of a given good or service that a consumer can afford to buy in a given period of time. This value depends on the price of the good or service and the consumer's income, as well as the subjective value attributed to the good or service in comparison with other goods and services that the consumer needs or wants to acquire.

Commercial attendance: structure of attendance, which may be in person, by telephone, electronically or via social networks, adequate to the needs of the local energy market and accessible to all consumers in the concession area, not exclusively dedicated to receiving communications of breakdowns, emergencies and meter readings.

Competent Entity: the entity or collective person of public law, endowed with functional powers attributed by law to exercise its competences and attributions.

Concession Area: geographical area defined in the Mini-grid concession for the performance of supply activities for access to energy, which may be a single area or a set of multiple areas.

Concessionaire: holder of a concession awarded under the Off Grid Power Access Regulation approved by Decree n.º 93/2021 of 10 December.

Consumer: a natural or legal person, including final consumers, other distributors, sellers purchasing electricity, subject of a supply of electricity or energy services for domestic, industrial or commercial use.

Consumer's facility: corresponds to the set of electric equipment, conductors and accessories, prepared for the reception and consumption of electric energy through an Interconnection Point with individualized measurement, belonging to a single customer.

Consumption Tariff: those that are fair and reasonable, which may vary by consumer category, service, voltage or time of use, and which result from the costs of service and consumption, with energy consumption being measured in conventional kilowatt hours, by means of energy limiters, pre-paid meters or devices with a combination of these functions, as approved by the Energy Regulatory Authority.

Consumption: the use of electricity by natural or legal persons in residential, commercial, industrial, agricultural units, other distributors, export consumers and sellers.

Customer: corresponds to the consumer under an energy supply contract.

Distributor: the holder of a concession that includes the activity of electricity distribution, including a distribution grid operator, responsible for the conveyance of energy with a view to its supply to consumers or to distribution stations that sell energy to consumers, as well as distributors of energy services.

Electrical Installation: the equipment, electric circuits and infrastructures and respective accessories intended for the supply of electrical energy, up to, if part of a distribution grid, the point of connection to the consumer.

Electricity consumption measuring and metering equipment or "meter": is a device that measures the amount of electricity in kWh, consumed by a consumer facility, connected directly between the Mini-grid and the load or through voltage and/or current coupling transformers.

Electricity Distribution: transmission of electricity by a distributor through medium and low voltage grid to be delivered to the consumer.

Electricity Generation: conversion into electricity of any energy source.

Energy Efficiency: consists of a set of actions and measures, which aim to a more rational and intelligent use of energy and equipment, to reduce energy consumption, costs and minimise environmental impacts, maintaining or improving the service.

Energy losses: all energy losses that occur in transmission and distribution grids, including technical and commercial losses.

Energy Regulatory Authority: also referred to as ARENE, created under Law n.º 11/2017 of 8 September, responsible for ensuring the regulation of energy supply activities, in accordance with that Law, its Organic Statute and Internal Regulations.

Fair and reasonable tariffs: electricity consumption tariffs are set in accordance with the following criteria, cumulatively:

- a) that reflect the eligible costs on the basis of the principle of full cost recovery, provided they are prudently incurred, reasonable and efficient;
- b) Which ensure the lowest possible cost for final consumers and which are compatible with the quality of the service provided;
- c) that amortise over time the capital and operating costs; and
- d) that provide a compatible return on the invested capital for the respective installation.

Final consumer: a natural or legal person, including residential, commercial, industrial, agricultural units, other distributors, export consumers purchasing energy or energy access supply services for their own consumption.

Force Majeure: event or circumstance or the combination of events and circumstances, which are unforeseeable and irresistible, whose effects are produced independently of the will or action of the invoking party, even if indirect, which prevent the fulfilment of its obligations. Force majeure events include, namely, acts of war or subversion, hostilities or invasion, rebellion, terrorism or epidemics, acts of expropriation, foreclosure, ransom and government requisitions or nationalizations that do not comply with the terms and procedures established in applicable law; lightning, explosions, serious floods, cyclones, earthquakes and other natural cataclysms that directly affect the authorized activities.

Frequency: the electrical frequency of the system expressed in hertz (Hz) that can be measured in all parts of the synchronous area, its nominal value being 50 Hz.

Generation Plant: Infrastructures for the Generation of Electricity.

Infrastructure: set of systems, installations, equipment, software and other components, both physical and virtual, which allow access to energy outside the grid.

Inspection: procedure carried out by the distributor in the consumer facility, prior to the connection, in order to verify its adequacy to the technical and security standards of the grid operator.

Interconnection Point: the boundary between the property of the Operator and that of the Consumer.

Interruption: the absence of electricity supply, in adequate conditions, to a consumer's facility of the Mini-grid.

kW (Kilowatt): unit of power.

kWh (Kilowatt-hour): unit of electrical energy.

Large consumer's facilities: those which, due to the amount of their consumption, may represent additional overloads to the grid or require reinforcement of the supply systems, including protections, and may include production units such as industrial units, commercial units, multi-unit consumer developments and others.

Licence: the administrative act by which the Regulated Entities or others are authorised to provide services not subject to a Concession Agreement.

Load shedding: results from the interruption of the supply of some electricity consumption, to preserve the operation of the electricity system, at local or national level, in acceptable voltage and frequency conditions.

Low Voltage (LV): any composite rated voltage of less than 1 kV, with the typical rated voltage being 400 V three-phase LV and 230 V single-phase LV.

Meter more than nominally defective: that presents a deviation more than 3% higher than the standard register, to the detriment of both the consumer and the distribution concessionary.

Mini-grid: an integrated system of electricity generation, distribution and trading facilities, which may include storage, using mainly renewable energy sources, of small scale of less than or equal to 10 MW, not connected to the National Electricity Grid. In this regulation it may also be simply referred to as "grid".

National Electricity Grid (REN): comprises the electricity distribution grid and the national electricity transmission grid.

Rural areas: areas characterised by low population density that are not part of an urbanisation zone, or that do not have a distribution grid accessible by consumers.

SAIDI: System Average Interruption Duration Index.

SAIFI: System Average Interruption Frequency Index.

Supply activities for Access to Energy in Off-Grid Areas: includes initiatives and undertakings considered to be of a social nature and sustainable development, aimed at carrying out the activities, jointly or separately, of generation, distribution and commercialisation of electrical energy, and may include storage, through Mini-grids and the provision of Energy Services.

Supply of Electricity: the supply of electricity to a customer or intermediary.

Voltage: the difference in electrical potential between two measuring points.

Zones Outside the National Electricity Grid or Off Grid: areas not served by REN, with current and potential consumers, located in rural areas and remote communities.

Annex II - Reliability levels in service continuity

For grid with an installed capacity of more than 150 kW, reliability levels greater than 99.9% are required.

For grids with an installed capacity of up to 150 kW, reliability levels are set by the Energy Regulatory Authority, depending on the technology, based on the specific relief, climatic, social, demographic and other conditions deemed relevant in the concession areas.

RECOMMENDED CONTINUITY LIMITS	MINI-GRIDS UP TO 150KW	MINI-GRIDS FROM 150 KW TO 10 MW
Planned SAIFI (h/year) (frequency of planned interruptions)	< 12	< 2
Planned SAIDI (h/year) (duration of planned interruptions)	< 438 (Minimum 95% reliability)	< 1,5 (Minimum 99.9% reliability)
Unplanned SAIFI (Interruptions/year) (frequency of unplanned interruptions)	<12	<2
Unplanned SAIDI (Interruptions/year) (duration of unplanned interruptions)	438 (Minimum 95% reliability)	< 1,5 (Minimum 99.9% reliability)

Annex III - Request For Connection To Electricity Consumption

Name of the concession in the energy registry¹:
 Registration Number of the Concession in the Energy Registry:
 Contact for customer service:

Name of applicant:
 Address:
 Contacts (phone, mobile phone, email):
 NUIT:
 Company name (if applicable):
 Bank or mobile details, if applicable:
 IBAN* :

Do you have electrical installation ready to be connected? YES / NO

Name of the technician responsible for the electrical installation (if applicable*):

 Professional card number* : Contact* : Installed Capacity (kVA)² : Power to Contract (kW)* : Nature of the activity to be performed at the consumer's facility** :

I hereby request that my consumer facility be connected to electricity under the terms of the applicable legislation.

....., day month year

The Applicant

.....

1 To be completed by the concessionaire.
 2 To be completed with guidance by the concessionaire.

Please confirm that the following documents are attached to the Connection Request:

For all consumer's facilities:

- ID of the applicant or other form of identification
- Confirmation of Property Title of the consumer's facility

For large consumer's facilities:

- Taxpayer identification number NUIT of the applicant
- Electrical project signed by a licensed electrician
- Taxpayer identification number NUIT of the company, when applicable
- Representative's Credentials or Power of Attorney, where applicable
- ID of the Accredited Person or Attorney, when applicable

Notes:

* Verified installation by a technician with a professional card is only required for large consumer's facilities.

* Describe the nature by the following categories of consumers:

- a)** social, covering small-scale uses such as agriculture, cooperatives and associations;
- b)** residential;
- c)** public administration, health centres and schools;
- d)** street lighting;
- e)** commercial and services;
- f)** industrial.

AREA RESERVED FOR THE CONCESSIONAIRE

I confirm that the application is complete and can be processed by Technical Services.

Signature of the verifying technician:

Date: /..... /.....

Annex IV

Electricity Supply Contract

n.º of contract:

Designation of the concession in the energy registry:
 Concession Registration Number in the Energy Registry:
 Contact for customer service:

Name and identification of the holder:

Bank details of the holder:

Address:

Contacts (telephone and electronic):

Geographical coordinates:

Type of installation:

Installed capacity kVA:

Contracted capacity kW:

Voltage contracted kV:

Type and n.º of the meter:

Rate applied:

Duration of the contract:

The electricity supply contract is signed between the parties and is governed by the contractual clauses contained therein, as well as by the regulatory norms in force.

....., day month
 year

For the Concessionaire

The Customer

.....

.....

General Clauses of the Electricity Supply Contract

CLAUSE 1 Pre-conditions for the conclusion of the contract

1.1. The contract is entered into when the customer fully satisfies the following conditions, as applicable:

- a) payment of the inspection fee;
- b) payment for the connection work;
- c) payment of other legally required fees;
- d) security deposit.

1.2. To simplify the procedures for new connections, the concessionaire will charge a single amount which encompasses the fees indicated in the previous number.

CLAUSE 2 General obligations of the concessionaire

In addition to the obligations set out in the Regulation of Quality and Commercial Relations, approved by Resolution, the obligations of the concessionaire are as follows:

- 2.1.** Supply electricity to customers in the concession area, whose consumer's facility meet adequate technical conditions of safety, protection and operation;
- 2.2.** Supply electricity regularly and with quality to the customer;
- 2.3.** Observe the principle of fairness in relations with customers;
- 2.4.** Inform the customer in advance of any planned interruptions to the electricity supply;
- 2.5.** Inform the customer of the reasons for unplanned interruptions as soon as possible and, if they continue, their expected duration;
- 2.6.** Inform the customer in particular, and the public in the concession area, about the rational, efficient and safe use of the electricity;
- 2.7.** Provide, whenever requested by the competent authority or by the customer, the information used in the simulation or billing estimates;
- 2.8.** Provide the customer with invoices and receipts, according to the applicable legislation;
- 2.9.** Continuously promote actions to combat the irregular or unauthorised use of electricity, and promote energy education campaigns;
- 2.10.** Have a service structure that is adequate and accessible to all consumers in the concession area;
- 2.11.** Compensate the customer for damages resulting from the supply of defective goods or services;
- 2.12.** Provide the information requested by the customer, within the scope of this contract.

CLAUSE 3 General obligations of the customer

- 3.1.** Enter into an electricity supply contract with the concessionaire, which contains the terms and conditions, rights and obligations and other aspects relative to the general supply conditions;
- 3.2.** Make payment for electricity under the supply contract with the concessionaire, as well as for services, taxes, fines or other charges due under the terms of the applicable legislation and within the applicable time limit;
- 3.3.** Maintain the technical suitability and safety of the consumer's facility;
- 3.4.** Not to transfer to third parties, either free of charge or in exchange for payment, the electricity acquired from the concessionaire in its consumer's facilities;
- 3.5.** Allow the concessionaire to install, on its property, in an easily accessible, safe and unencumbered location, the necessary equipment for the supply, control, measurement and metering of electricity;

3.6. Guarantee the right of access to the consumer's facility by the concessionaire, where metering, recording and data transmission equipment is installed, as well as to the grid elements established on its property, and which for service or safety reasons are required to operate;

3.7. Not to change the equipment of the connection point with the consumer's facility;

3.8. Provide information for billing purposes;

3.9. Assume Responsibility:

a) for damages caused to people or property, arising from defects in their consumer's facility, due to poor use and conservation of the facilities or the inappropriate use of electricity;

b) for damages caused to the metering equipment or to the concessionaire's electrical installation, arising from any irregular procedure or technical deficiency of its consumer's facility;

c) for changes in the installation of its consumer's facility, without the approval of the concessionaire, which may result in a change in the tariff category and billing option;

d) for the custody of the metering and counting equipment of the concessionaire, as trustee, when installed in its consumer's facility.

3.10. Comply with the other obligations resulting from this energy supply contract and the applicable legislation.

CLAUSE 4 Refusal to connect

4.1. The connection of the consumer's facility shall comply with the technical, legal and regulatory standards in force, and shall not harm the regular operation of the mini-grid, nor pose any danger to people, property or the environment.

4.2. The concessionaire is obliged to connect the consumer's facility to the mini-grid within 5 (five) working days after approval of the application, unless reinforcement or extension works are required for the distribution grid, and the Energy Regulatory Authority shall approve the plan for the execution of the works.

4.3. In the event of refusal or delay in connection, the concessionaire shall inform the applicant of the reasons for this, who may appeal to the Energy Regulatory Authority within 15 (fifteen) days of receiving the information.

4.4. The concessionaire shall send a copy of the information referred to in the previous number to the Energy Regulatory Authority.

CLAUSE 5 Guarantee deposit

5.1. The guarantee deposit will be charged to large consumer's facilities that have a post-payment metering system and corresponds to [] months of active energy billing.

5.2. Changes to the guarantee deposit amounts and terms are subject to prior approval by the Energy Regulatory Authority.

CLAUSE 6 Terms of payment

The concessionaire provides conditions for paying electricity and other services chargeable by cash at service stations, by mobile and electronic money or by bank transfer.

CLAUSE 7 Energy metering

7.1. The meters used for metering energy are calibrated and installed by the concessionaire in accordance with the regulated standards for metering equipment.

7.2. The customer may request the electricity meter to be checked by a third party, when the customer suspects that it is defective, bearing the associated costs, unless this results in the meter being more than nominally defective, in which case the costs charged for the test shall be reimbursed to the customer by the concessionaire.

7.3. The meter is more than nominally defective if it has a 3% deviation from the standard register.

7.4. In the case provided for in the previous number, the concessionaire shall:

- a)** replace the meter;
- b)** correct the consumption paid, on a reasonable and fair basis, taking into account the most recent records of the amounts supplied to those customers;
- c)** assign a credit for future consumption, equivalent to the error found.

7.5. When replacing one meter by another, the credit of the original meter shall be transferred in full to the new meter.

7.6. The costs related to the replacement of a defective meter are not attributable to the customer unless the customer is responsible for any damage caused to the meter.

CLAUSE 8 General causes for interruption of electricity supply

8.1. The electricity supply may be interrupted with at least 36 hours' notice for any of the following reasons:

- a)** maintenance or other types of services;
- b)** public interest;
- c)** fact attributable to the customer;
- d)** by agreement with the customer;
- e)** imperative need to carry out operations or works relating to the connection, repair or maintenance of the grid, provided that all alternative supply possibilities have been exhausted.

8.2. Supply may be interrupted without notice in the following cases:

- a)** the existence of a situation that jeopardises the safety of people, property and the environment, and as long as this prevails;
- b)** the safety of electrical installations and metering and measuring equipment is at stake;
- c)** there is an urgent need to de-activate loads, automatically or manually, to ensure the safety of the electrical system and users;
- d)** there is an emergency;
- e)** fraudulent consumption of electricity;
- f)** force majeure.

CLAUSE 9 Interruption of energy supply for reasons attributable to the customer

9.1. The energy supply may be interrupted, for reasons attributable to the customer, due to non-compliance with their contractual obligations, namely:

- a)** non-payment of electricity and other services chargeable;
- b)** the lack of payment for damages caused on the concessionaire's premises, the responsibility for which has been attributed to the customer, provided that they are linked to the provision of the electricity supply service;
- c)** unjustified or repeatedly preventing access to power control, metering and switching equipment at the consumer's facilities connection point;
- d)** prevention of reading for billing purposes, for two consecutive times, in the case of post-payment system meters;
- e)** when the customer's installation is the cause of a disturbance affecting the technical quality of the supply to other grid users;
- f)** changes in the electrical installation without the approval of the concessionaire or the competent authority;
- g)** tampering with measuring, metering or protection devices;
- h)** fraudulent consumption of electricity;
- i)** unauthorised supply of energy to third parties;
- j)** failure to conclude the electricity supply contract in cases of alienation or transfer of the energy use facility;
- k)** failure to comply with other obligations resulting from the applicable legislation.

9.2. Notice of interruption of electricity supply shall be written, specific and with proven delivery, and shall precede the interruption action by at least 8 days except for that referred to in paragraphs c), d), e), g), h) and i) of this clause, in which case there is no notice.

9.3. The concessionaire shall adopt the daytime period of working days, from Monday to Thursday, to execute the interruption of the supply of the consumer's facilities, except for cases where fraudulent consumption is suspected, under the terms of the applicable legislation.

9.4. The concessionaire shall re-establish the supply of electricity within 24 (twenty-four) hours, counting from the uninterrupted moment after the regularization of the situation that caused it.

CLAUSE 10 Complaints

10.1. Customers may lodge complaints with the concessionaire arising from a breach of this electricity supply contract, including aspects of quality, billing and collection of services, as well as customer service.

10.2. Whenever the processing of a complaint implies the carrying out of necessary diligences, the complainant shall be informed in advance of the procedure, the duration of its carrying out, as well as the results obtained with the referred to diligences, within a maximum period of 30 (thirty) days.

10.3. The complainant shall also be informed of the corrective actions that shall be carried out if the object of the complaint is identified in his consumer's facilities, as well as the charges that he may have to bear depending on the result of the diligence requested.

10.4. If the diligence shows that the dealer is responsible for the object of the complaint, the dealer shall correct the cause of the complaint in due time, and bear the damages, if any.

10.5. The complainant may appeal to the Energy Regulatory Authority if a satisfactory response to the complaint is not obtained from the concessionaire, observing the provisions of the Regulation for Handling Complaints approved by ARENE.

10.6. The intervention of the Energy Regulatory Authority shall be requested in writing or person and in the other means of communication to be established, citing the facts that motivated the complaint and presenting all the elements of proof available, including a copy of the complaint submitted to the concessionaire.

CLAUSE 11 Conclusion of a new contract

In case the contract has been terminated by clause 14, the customer may enter a new contract under the same conditions as the previous one, after full compliance with the obligations arising from it, namely as regards overdue debts, fines, or other charges.

CLAUSE 12 Change of ownership

12.1. In the event of alienation of the real estate or infrastructures benefiting from the supply of electricity, under the terms of a contract or through a judicial order, the acquirer may enter a new contract with the concessionaire, and the regime provided for herein shall apply.

12.2. The new electricity supply contract may only be entered into after the holder of the outgoing contract or his heirs have fully complied with the obligations arising therefrom, namely concerning overdue debts, fines, or other charges.

CLAUSE 13 Indemnities

13.1. The concessionaire is solely responsible for the operation of the service, which is the object of this contract, operating and managing it at its own exclusive cost and risk.

13.2. All civil and criminal liability is reserved:

- a)** in cases of force majeure;
- b)** in cases of guilt or negligence of the injured party, duly proven;
- c)** in cases where the accident is attributable to a third party;
- d)** in respect of losses, damages or disasters resulting from the very nature of the installation.

13.3. Force majeure shall mean any unforeseeable event beyond the control of the affected party not caused by itself and which has caused loss, damage or default, including but not limited to flood, storm, tidal wave, earthquake, fire, acts of war, insurrection, public unrest, strike or labour disturbance.

13.4. The concessionaire is not liable for damages or losses resulting from the lack of maintenance of the customer's installation or any changes after the inspection and approval, or its use for non-expected purposes without due authorisation.

13.5. The customer is obliged to compensate the trader for the losses suffered by the latter because of the breach of contractual obligations.

CLAUSE 14 Termination of contract

14.1. The concessionaire may unilaterally terminate the contract based on any of the following facts:

- a)** the systematic non-payment of energy consumption, as well as any fees, fines or charges for services rendered;
- b)** the systematic prevention of access to electrical facilities without legal grounds or aggression against its agents duly identified and on duty;
- c)** fraudulent consumption of electricity in a systematic way;
- d)** any other fact constituting a serious breach of contractual clauses.

14.2. The termination will be made by simple letter and through electronic means, to the customer, in which the reasons for it will be specified.

14.3. The termination will take effect 15 (fifteen) days after the communication, for large consumer's facility, and 5 (five) days for other customers.

CLAUSE 15 Dispute resolution

Disputes arising from the interpretation and application of this contract shall be resolved through negotiation, in which case the dispute shall be referred to the Energy Regulatory Authority, without prejudice to recourse to judicial bodies.

CLAUSE 16 Duration of the contract

The electricity supply contract is concluded for an indefinite period unless the parties agree on a specific duration.

Annex V - Electrical Installation Inspection Order

Inspection n.º:
 n.º of the connection request:

Name of the concession in the energy registry¹:
 Registration Number of the Concession in the Energy Registry:
 Contact for customer service:

Name of applicant:
 Address:
 Contacts (phone, mobile, email):
 Company name (if applicable):

Area reserved for the concessionaire²

Is the electrical installation ready to be connected? YES / NO

Signature of the verifying technician:

Date of inspection: /..... /.....

¹ To be completed by the concessionaire.

² Please confirm that the complete file for the electricity connection request is attached.

Electrical Installation Survey Report

1 With the specification in hand, check the switches, sockets, light points and equipment installed and calculate:

COM-PART-MENT	SWITCHES QTY	QTY AND CAPACITY OF GENERAL PURPOSE OUTLETS (TUG)	QTY AND CAPACITY OF LIGHT POINTS (PL)	QTY AND POWER OF SPECIFIC USE SOCKETS (TUE) ELECTRICAL EQUIPMENT	TOTAL CAPACITY CHARGE W	OBSER-VATIONS
Exam- ple: room 1	1	2x100W	1x60W 1x40W	1x 500W (fridge)	800W	

2 Are the switches, sockets, light points in the places foreseen, according to the project and are they correctly indicated on the light board? YES / NO

3 The installation is prepared to receive three-phase or single-phase energy

4 Describe the type of land installed:

.....

.....

.....

5 Does the earth test show protection of the installation? YES / NO

6 Are there any bare wires or non-standard electrical fittings? YES / NO

#	TYPE	VOLTAGE	PLACES OR COMPARTMENT	TOTAL CAPACITY W)	WIRE	CIRCUIT PROTECTION*	OBSERVATIONS
1							
2							
3							
4							
5							
6							
7							
8							
9							

7 Describe the electrical circuits and circuit breakers installed:

*1 Social lighting (IS), service lighting (ISe), sockets for general use (TUG), sockets for specific use (TUE), distribution panel (QD).

*2 220 V for single phase AC systems, 380 V for single phase AC systems, 5/12/24/48 V for DC systems.

*3 Aluminium or copper, insulated or bare, of ... mm² cross-section.

*4 Circuit breaker or fuse, with ... Amperes of breaking current.

8 Type of meter to be installed:

Manufacturer:Model:Series:

..... Voltage:Other comments:

.....

.....

Date of meter installation: /..... /.....



Annex VI

Name of the concession in the energy registry:
 Registration Number of the Concession in the Energy Registry:
 NUIT: NUEL:
 Contact for customer service:

ELECTRICITY BILL AND OTHER SERVICES IN MINI-GRIDS POST-PAID SYSTEM METERS

Customer Name:Address:
 Contacts (phone/mobile, email):
 n.º of the electrical installation: Single-phase/Three-phase
 n.º of the meter: Invoice n.º:
 Invoice Date:/...../..... Invoice Expiry Date:/...../.....
 Invoice Reference Period:

#	DESCRIPTION	UNIT	UNIT VALUE MT/UN	INVOICED VALUE MT
1	Active energy consume	kWh		
2	Reactive energy consumed	kVArh		
3	Fixed Rate	—		
4	Capacity Rate	KW		
5	Public Lighting charge	—		
6	Fees for Service subject to charg- es	—		
7	Late payment fine	—		
	Previous invoice		Current invoice	
TOTAL INVOICED	..... kWh	..... kWh	..... kWh	..... kWh
	..... kVArh	..... kVArh	..... kVArh	..... kVArh
	..... MT billed	..... MT billed	..... MT billed	..... MT billed
	..... MT (VAT) ¹	..... MT (IVA) ²	..... MT (IVA) ²	..... MT (IVA) ²
	..... MT total	..... MT total	..... MT total	..... MT total

PAYMENT BY
ELECTRONIC MEANS:
 Entity: xxxxx
 Reference:
 xxxxxxx

PAYMENT BY
MOBILE MONEY:
 Mpesa: xxxxxx
 Mkesh: xxxxxx
 E-spring: xxxxxx

BANKING INSTRUC-
TION:
 Holder: xxxxxxxx
 Account: xxxxxxx
 Bank: xxxxxxx

1 To charge...% on the invoice value.

Text Box Invoices for the last 12 months

Invoicing Period	Invoice Date	T o t a l Amount In- voiced MT	Amount Paid MT	B a l a n c e Due MT

BAR CODE

Name of the concession in the energy registry:
 Registration Number of the Concession in the Energy Registry:
 NUIT: NUEL:
 Contact for customer service:

**BILLING RECEIPT FOR ELECTRICITY AND OTHER SERVICES IN MINI-GRIDS
 POST-PAID SYSTEM METERS**

Customer Name:Local Address:
 Contacts (phone/mobile, email):
 N.o of the electrical installation: N.o of meter:

Invoices for energy consumed and other services				Billing for energy consumed and other services		
INVOICING PERIOD	INVOICE DATE	INVOICE NUMBER	TOTAL INVOICED VALUE MV	PAYMENT DATE	AMOUNT PAID MT	BALANCE DUE MT

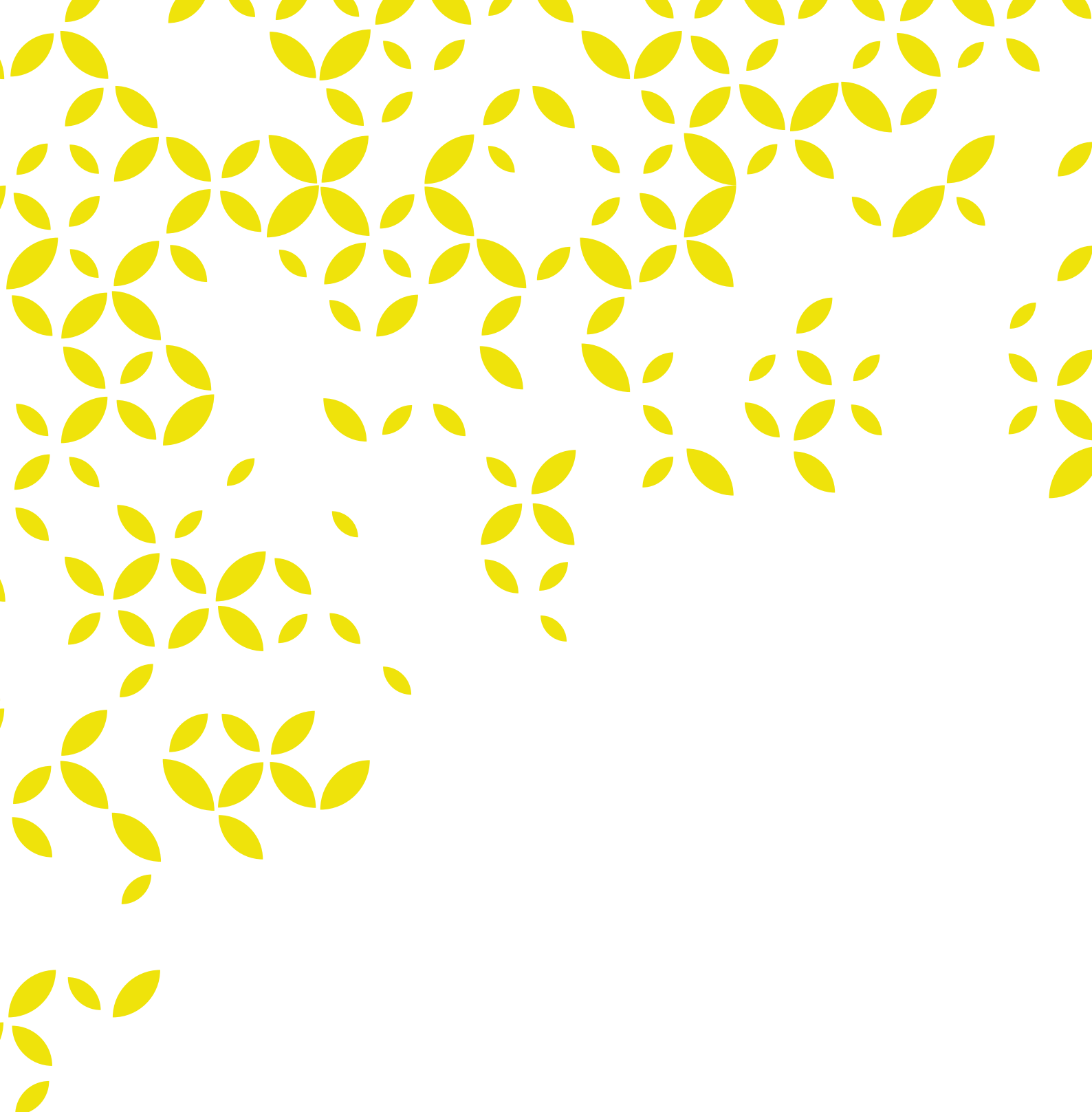
BAR CODE



**BILLING RECEIPT FOR ELECTRICITY AND OTHER SERVICES IN MINI-GRIDS
PREPAID SYSTEM METERS**

Reload Code	
N.o do contador	
Amount for the electricity (MT)	
VAT (MT)	
Debt (MT)	
Other Services subject to charge (MT)	
Total Paid (MT)	
Energy Units (kWh)	
Mini-grid reference	
Customer Location Reference	
Consumer Category Reference	
Receipt Number	
Date of Purchase	





Financed by:



Implemented by:



This document has been developed with the support of the BRILHO programme, funded by the governments of the United Kingdom and Sweden and implemented by SNV, as part of the mission to develop the off-grid energy solutions market.