# ENERGY TRANSITION

The Annual Conference Report

2022

COVER

### LEAVE **NO ONE** BEHIND

The commitment of the mozambican Government, aid partners. a Just Energy Transition.





PAGE 28

TRANSITION IN CABO DELGADO CDD REPORT

CDD JUST ENERGY TRANSITION MAGAZINE The Annual Conference Report

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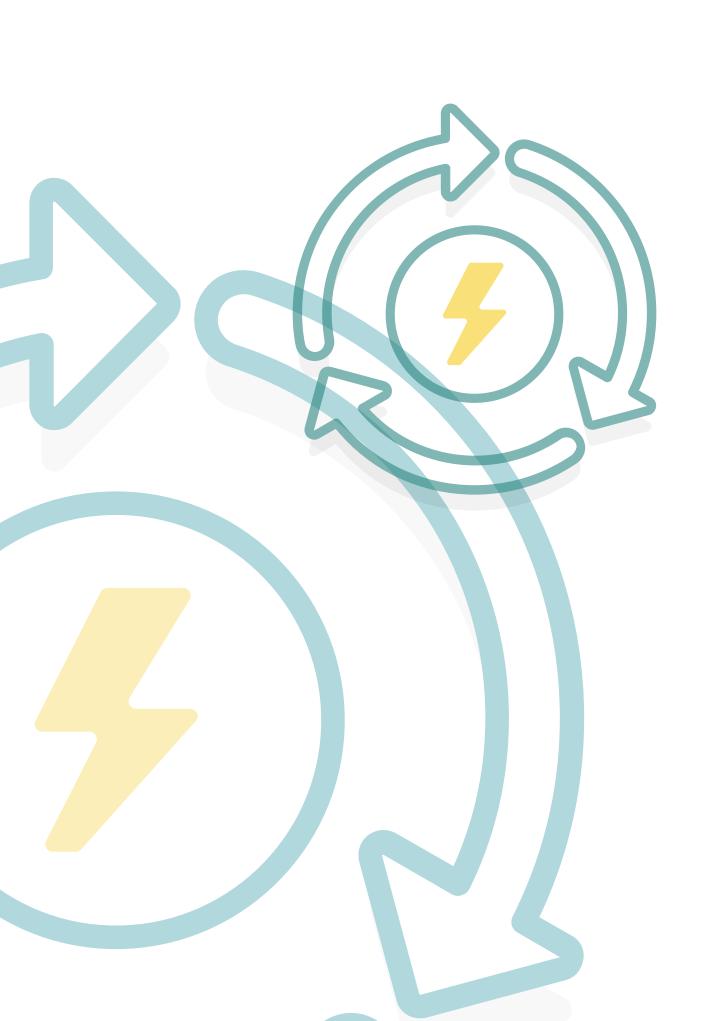
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AfDB African Development Bank

ALER Lusophone Association of Renewable Energies
AMER Mozambican Renewable Energy Association

ARENE Energy Regulatory Authority

CDD Centre for Democracy and Development

CSOs civil society organisations EDM Electricidade de Moçambique

EnDev Energising Development

FUNAE Energy Fund

GBE Grüne Bürgerenergie GDP gross domestic product

GIZ German Agency for International Cooperation

IPP independent power producer

IRENA International Renewable Energy Agency
MIREME Ministry of Mineral Resources and Energy

MWE Mozambique Women in Energy

PAYGo pay-as-you-go

REmap Renewable Energy Roadmaps

RES4Africa Renewable Energy Solutions for Africa Foundation

SDGs Sustainable Development Goals

TPLA Taciana Peão Lopes & Advogados Associados

YTF Youth Task Force

# Statement of the Director

The transition from fossil fuels to renewable energy is a global imperative. Resource-rich countries such as Mozambique are challenged to adapt their governance model to manage their resources more effectively and become more resilient to climate change.

As the world has recently witnessed, Mozambique faces the most severe effects of climate change, despite being a nation least responsible for the problem. Intense and frequent droughts, floods and severe storms have already affected the lives of 70% of the population. Among other emerging measures, adaptation to climate change involves adopting an appropriate energy-transition model in policy formulation.

The energy transition must be understood as a complex process that requires the involvement of multiple stakeholders. Some of the challenges of the energy transition are related to the lack of trust, transparency, inadequate or unstable financing of the process and disconnection between actors, which results in isolated initiatives with little impact.

In this regard, civil society can contribute to building a more responsible and legitimate state, leading to greater social cohesion and inclusive development. With the slogan "Leaving no one behind", the CDD Just Energy Transition Programme aims to promote the involvement of all stakeholders to generate a sustainable process that improves the well-being of people, the environment and the economy.

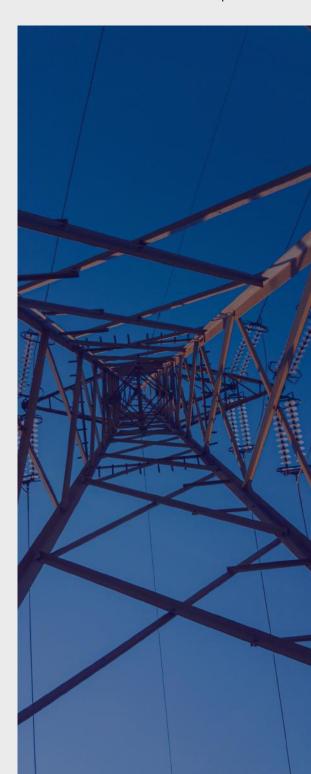
Adriano Nuvunga
Adriano Nuvunga

DIRECTOR

CDD Just Energy Transition Programme



**Prof. Adriano Nuvunga**Executive Director | CDD



# JUST ENERGY TRANSITION CONFERENCE



From left to right: Prof. Adriano Nuvunga (Executive Director of CDD), Lothar Freischlader (Ambassador of Germany), António Sanchez-Benedito Gaspar (Former Ambassador of the EU Delegation in Mozambique), António Osvaldo Saíde (Deputy Minister of-MIREME), Cesar Abogo (Country Manager - AfDB), Laurence Janssens (Belgian Cooperation), Matt Lowe (Political-Economic Adviser at the US Embassy).

n 21st July 2022, the Center for Democracy and Development (CDD) held the Just Energy Transition Conference in Maputo City.

The conference was hybrid: about 80 people participated in person at the Indy Village Hotel and almost 500 joined virtually to witness the launch of the CDD Just Energy Transition Programme. With the slogan "Leaving no one behind", this initiative aims to promote greater involvement and participation by civil society in the energy transition in Mozambique, in order to create a more equitable and sustainable process that improves people's wellbeing, the environment and the economy.

CDD understands that the transition to renewable energies is a complex process that requires the involvement of multiple stakeholders. This urgent and necessary process cannot ignore

# WITHOUT THE INVOLVEMENT OF CIVIL SOCIETY, THE TRANSITION MAY PRESENT RISKS AND BE LESS LIKELY TO SUCCEED."

civil society and local communities. Therefore, the local communities must be empowered to defend their inclusion in projects – renewable or not – that affect their lives. The government, development partners and the private sector can help strengthen civil society's role in and capacity for such projects, alongside the ability to anticipate energy-change needs and planning for the population's basic needs.

As Professor Adriano Nuvunga said, "The energy transition has its social and economic impacts, for which the intervention of civil society is important for mitigation. Without the involvement of civil society, the transition may present risks and be less likely to succeed." Cooperation among stakeholders is required for these ambitious sustainability goals to accelerate the use of renewable energies. The Executive Director of CDD said that climate change and other social and economic problems can only be effectively addressed through the systematic and coordinated use of а multistakeholder implementation approach.

Winning the cooperation and support of civil society is key to making a better transition. The civil society promotes equity, transparency, accountability, gender sensitivity and active participation and engagement to enhance mutual trust.



Just Energy Transition 2022 Conference Attendees

While the government seeks to implement measures to ensure that energy transition pathways are implemented without conflicting with other priorities, including access to energy and agricultural production, the private sector can contribute to increasing energy efficiency and phasing out the use of fossil fuels, through the creation of "green jobs" and the integration of the Sustainable Development Goals (SDGs) in the activities of the private sector. Civil society can contribute to the dissemination and awareness of sustainability and equitable treatment of vulnerable groups, as well as promoting more sustainable

practices in the use of natural resources, including the promotion of the green economy.

Without civil society advocacy for investment in renewable energy, the energy transition will be a slow process. The transition from fossil fuels to renewable energy is a global imperative. Resource-rich countries such as Mozambique are challenged to adapt their governance model to manage their resources more effectively and become more resilient to climate change. Mozambique faces the most severe effects of climate change, despite being one of the countries least responsible for the problem. Natural disasters such as

MOZAMBIQUE
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and severe storms have already affected the lives of 70% of the population. In March and April 2019, two devastating cyclones (Idai and Kenneth) hit Mozambique. Hundreds of people died and millions of those affected still needed humanitarian support, such as access to clean water, food and shelter. Cyclone Idai was considered the second deadliest ever to hit the Southern Hemisphere, while Kenneth was the strongest to hit Africa. Among other emerging measures, adaptation to climate involves adopting change appropriate energy-transition model in policy formulation.

intense and frequent droughts, floods

### **OPENING REMARKS**



**H.E. António Saíde**Deputy Minister of Mineral
Resources and Energy (MIREME)



**Hon. Gurbuz Gonul**Director, Country Engagement and Partnerships Division, IRENA



**H.E. António Gaspar**Former Ambassador of
European Union



**H.E. Lothar Freischlader**Ambassador of
Germany



**Hon. Cesar Abogo** Country Director, AfDB



**Hon. Laurence Janssens**Belgium Cooperation



**Hon. Matt Lowe**Political-Economic Counselor at the US
Embassy Maputo



H.E. António Osvaldo Saíde - Deputy Minister of Mineral Resources and Energy (MIREME)

The government of Mozambique understands that the energy transition is no longer an adopted concept, but a global requirement in the face of the imperatives of climate change. "Renewable energies and natural gas are crucial in the energy transition", declared António Saíde, Deputy Minister of Mineral Resources and Energy (MIREME), during the opening of the CDD Just Energy Transition Conference. Saíde stressed that the government is committed to reforming regulatory instruments to promote investments in the energy sector.

According to the Paris Agreement and the Sustainable Development Agenda (in particular, SDG 13 - take urgent action to combat climate change and its impacts), the current challenges such as the decarbonisation of the planet make the energy transition agenda a priority. The government understands that the energy transition is based on promoting the



### **MOZAMBIQUE IN IRENA**

### Renewable energies and natural gas are crucial in the Energy **Transition**

efficient use of energy through projects and programmes that aim to maximise benefits for society and accelerate market transformation. encouraging the creation of new technologies and the adoption of rational practices. demonstrates the importance of this option in the global context.

According to António Saíde, "when the government οf Mozambique recognises the need for energy transition, it is with the understanding of the need of a just transition, that is, a transition in which renewable energies and natural gas are an integral part." MIREME announced that the national energy matrix and the governance programme indicate that, for the 2020-2024 period, of the additional 600 MW of energy planned to be provisioned, 200 MW would be renewable energy and 400 MW would be from natural gas.

Biomass is still the Mozambican population's main source of energy. which raises concerns for the government of Filipe Nyusi. The government created the programme "Energia Para Todos" ("Energy for All"), with a view to improve access to energy in rural areas, with particular emphasis on renewable sources, due to their being relatively easy and quick to implement in remote areas.



### International Renewable Energy Agency

# A GLOBAL PLATFORM FOR INCLUSIVE COOPERATION

IRENA publishes statistics on renewable energy capacity, renewable energy generation and balance. Data is obtained from a variety of sources, including IRENA questionnaires, official national statistics, industry association reports, consultant reports and news articles.

### **HISTORY**

The formation of an international agency dedicated to renewable energies was first proposed in 1981 at the United Nations Conference on New and Renewable Sources of Energy.

As global interest in renewable energy steadily increased, world leaders held several meetings. Key meetings included the 2002 World Summit for Sustainable Development in Johannesburg, South Africa, the annual G-8 Dialogue, the 2005 Beijing International Renewable Energy Conference, and the 2004 Bonn International Renewable Energy Conference.

## IRENA Founding Conference (Bonn, January 26th, 2009)



IRENA was officially founded on 26 January 26 2009 in Bonn, Germany – a moment that represented a turning point for renewable energies and a sign that the global energy paradigm was changing.

The intergovernmental organisation supports countries in their transition to sustainable energy and serves as the main platform for international cooperation, a centre of excellence and a repository of policy, technology, financial resources and knowledge renewable energy. **IRENA** on promotes the widespread adoption and sustainable use of all forms of renewable energy, including bioenergy, geothermal, hydro, ocean, solar and wind, in the pursuit of sustainable development, energy access, energy security and lowcarbon economic growth and prosperity.

With more than **180 countries** actively engaged in its programme, IRENA helps countries reach their renewable energy potential.

# The World Energy Transitions Outlook 2022

Although investments in energy-transition technologies are reaching record levels, they are still not large enough. According to recent data from IRENA, in 2021 about 84% of these investments were in China, Europe, the United States, Japan and India. The Middle East and Africa accounted for a mere 2% of total investments.



Hon. Gurbuz Gonul - Director, Country Engagement and Partnerships Division, the International Renewable Energy Agency (IRENA)



The energy transition is a path for the transformation of the global energy sector from fossil based to zero carbon by the second half of this century. At its heart is the need to reduce energy-related CO2 emissions to limit climate change. Decarbonising the energy sector requires urgent action on a global scale, and while a global energy transition is under way, more action is needed to reduce carbon emissions and mitigate the effects of climate change. Renewable energy and energy-efficiency measures can potentially achieve 90% of required carbon reductions.

The energy transition will be enabled by information technology, smart technology, policy frameworks and market instruments. IRENA has assessed decarbonisation pathways through Renewable Energy Roadmaps (REmap) and is equipped to support and accelerate the energy transition, providing the necessary

knowledge, tools and support to member countries as they increase the share of renewable energy in their energy sectors.

The challenges faced by developing countries in mobilising resources before existed the Covid-19 pandemic, but have intensified as a result of problems in accessing finance, limited public and private investment. and meeting debtservice obligations. **IRENA** furthermore considers the crisis in Ukraine as having increased the levels of uncertainty.

In his opening remarks at the CDD conference, Gorbuz Gonul, Director of Country Engagement and Partnerships, said that IRENA has organised high-level meetings to mobilise resources to support developing countries in accelerating the energy transition.

"Mozambique has been a partner of

Mozambique has been a partner of IRENA since the early days. One of the first IRENA assessments was carried out in the country in 2012.

IRENA since the early days. One of the first IRENA assessments was carried out in the country in 2012. We have had constant collaboration, especially in the production of data for the sector. In the next few years we want to extend our support to the country," said Gonul in his virtual intervention at the conference, from Abu Dhabi.

### THE EUROPEAN GREEN DEAL

The European Green Deal, announced by Ursula von der Leyen, President of the European Commission, at the end of 2021, challenges the 27 countries of the

European Union to reduce carbon emissions by 5% by 2030, taking

as a reference the 1990 levels . At the end of his term in Mozambique, Ambassador António Sanchez-Benedito

Gaspar shared the European challenge: "We have to reduce dependence on fossil fuels and, above all, from partners we cannot trust." The ambassador assures us that Mozambique's resources are considered as alternatives for Europe.

The Global Gateway Africa-Europe Investment Package, a financing package that aims to support the African continent for a strong, inclusive, green and digital recovery and transformation, was approved at the last EU-AU Summit in Brussels last February. To address the global challenge of climate change, the EU is working with Africa to maximise the benefits of the green transition and minimise threats to the environment. in full compliance with the Paris Agreement. The investment package will make it possible to increase renewable energies in the energy mix, improve access to affordable, reliable and sustainable energy, and support market integration sectoral reforms.

Ambassador Gaspar considers that as a country of entry to the coast of the Indian Ocean, Mozambique is well positioned. "We will help Mozambique to capture a significant part of the €150 billion that Europe will mobilise in the coming years, within the scope of this programme," he assured.

The country is already accelerating structural reforms in the energy sector to achieve SDG 7. As a result of the government programme "Energia Para Todos", supported by the European Union and other partners, more than 150,000 families and companies are connected to the on-grid system.



From left to right: 1. Lothar Freischlader (Ambassador of Germany); (Belgian Cooperation); 4. H.E. António Saíde (Deputy Minister of MIREME) 6. Matt Lowe (Political-Economic Adviser to the US Embassy);

H.E. António Sanchez-Benedito Gaspar - Former Ambassador, European Union

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### AND FINANCING THE TRANSITION

"The 2019 cyclones showed the severity of climate change impacts in Mozambique. An ambitious climate denergy policy is needed, which quires efforts from all countries, from the public and private sectors. This is a global challenge!" declared Lothar Freischlader, German Ambassador.

The ambassador noted that massive investments in energy efficiency, renewable energies, sustainable grids and efficient electricity systems, as well as decentralised off-grid systems at affordable prices, are crucial.



2. Prof. Adriano Nuvunga (Executive Director of CDD); 3. Laurence Janssensemphasised 5. António Sanchez-Benedito Gaspar (Former Ambassador - EU Delegation; Freischlader, 7. Cesar Abogo (AfDB Country Manager)

This inevitable transition must be implemented socially in a just way.

"In global climate protection, our guiding principles must be 'just transition' and 'leave no one behind'. This inevitable transition must be implemented socially in a just way," semphasised Ambassador Freischlader, recommending the inclusion of vulnerable groups, women and young people.



Germany considers that the national energy sector is in a permanent process of transformation that points in the right direction, as the Government of Mozambique is pursuing ambitious goals in terms of energy policy, such as access to energy for all, including access to clean cooking, by 2030.

Along with other multilateral and bilateral donors. the German Development Cooperation, with its financial cooperation through KfW Development Bank, and technical cooperation through the German Agency for International Cooperation (GIZ), has had Mozambique as a partner for many years and is supporting the government's efforts in energy supply to achieve climatefriendly economic development and a just transition.

## ADAPTATION TO CLIMATE

"Africa may need \$128



The African Development Bank (AfDB) representative in Mozambique, Cesar Mba Abogo, warned that the surface temperature of the African continent is increasing faster than the global average and, in the future, average temperatures in the northern and southern regions of the continent may increase by 3.6 °C if the global average temperature increases by 2 °C.

"The sea level is also rising," he stressed. "Countries lose between 5% and 15% of their gross domestic product (GDP) due to the effects of climate change, and Mozambique is

one of the most affected countries," he added.

Abogo said that the Bank considers climate resilience and the energy transition in Africa as strategic, which is why it hosted talks after COP26 and before COP27 that allowed timely and frank assessments and discussions. as well ลร recommendations for how Africa can mobilise resources at scale to achieve climate resilience and low carbon transition goals. Africa received around \$18 billion in climate finance between 2016 and 2019. which AfDB[KW2] considers insufficient. "For adaptation to climate change between 2020 and 2030, Africa may need \$1.6 trillion, equivalent to \$128 billion annually".

AfDB estimates that today, around 600 million people on the continent do not have access to electricity and 900 million do not have access to clean cooking facilities, most of them in rural areas.



Laurence Janssesn (Belgian Cooperation)

The Belgium Cooperation in Mozambique considers that in a country where 60% of the population does not have access to modern energy, universal access is a priority. Laurence Janssens from Belgian Cooperation said that at the national level, energy transition can contribute to the vision of industrialisation and be a central pillar in the development

# **CHANGE**billion annually"



of a green economy, while the just transition has the potential to generate livelihood opportunities for communities. The Belgian Cooperation stressed that "it is important to continue a structured and inclusive debate on the meaning of the energy transition for Mozambique" and considers that to ensure that the energy transition is

fair and sustainable, the country will need a framework of policies, institutions and economic models, adjusted in coordination with all interested parties.

The government of Belgium has supported Mozambique in investing in the expansion of the grid and mainly in renewable energies, in partnership with MIREME, the Energy Fund (FUNAE) and the Energy Regulatory Authority (ARENE).

The United States has expressed readiness to support this just and equitable energy transition. The United the helped review States Electricity Law, which will allow for expanded opportunities independent investment in the energy sector. Matt Lowe, Economic and Political Adviser at the US Embassy in Maputo, said that Mozambique will play a critical role in the global energy transition. The mineral security partnership that the United States announced on 14 June with ten partners, including Germany and the European Commission, seeks to capitalise on government and private-



sector investment for strategic mining opportunities. This is an important event that will help accelerate the implementation of sustainable development goals and universal access to energy for all Mozambicans by 2030, said Lowe, stressing that a just and equitable transition should ensure not only that the country continues to export energy for their neighbours, but also that all Mozambicans have access to electricity.

### **PANEL 1: INCLUSION AND GENDER**

How to promote equity of opportunity and social inclusion in investing in affordable, decentralised mixed-energy systems: Defining the justice dimension in the energy transition.

- Different approaches to defining the dimension of inclusion in the energy transition
- Youth/gender perspectives
- The role of civil society on the ground



**Taciana Peão Lopes**Co-Founder Mozambique
Women of Energy (MWE)



**Américo Maluana** Researcher, CDD



**Ivana Senka** Activist - Just Energy Transition, Res4Africa



**Emídio Amadebai** General Manager, ENGIE Energy Access



Eng.ª Olga Madeira Utchavo Renewable Energy Director, EDM



**Prof. Adriano Nuvunga**Executive Director, CDD
(Moderator)

### PANEL 1: INCLUSION AND GENDER



From left to right: Prof. Adriano Nuvunga (Executive Director of CDD), Eng. Olga Madeira Utchavo (Director of Renewable Energies, EDM), Emídio Amadebai (General Manager of ENGIE Energy ACcess), Taciana Peão Lopes (Co-Founder of MWE)

The opening panel, which discussed how to promote equal opportunities and social inclusion in investing in decentralised and affordable mixed-energy systems, was facilitated by Prof. Adriano Nuvunga.

The discussion sought to identify different approaches to define the dimension of inclusion disadvantaged groups, such as the local communities, women and young people. The role of civil society on the ground was also mentioned. The main speakers on this panel were Ivana Senka (Energy Transition Activist, Res4Africa), Taciana Peão Lopes (Co-Founder, MWE) and Américo Maluana (Researcher, CDD). This session included the presentation of some examples of transformational actions regarding

access to on-grid and off-grid energy by Olga Madeira Utchavo (Director of Renewable Energies at EDM) and Emídio Amadebai (Director at ENGIE Energy Access), respectively. The Electricidade de Moçambique (EDM) has invested in the diversification of the energy matrix, through the promotion of clean and renewable energy projects. With the support of the development partners, EDM is enabling the implementation of the 450 MW thermal power station project in Temane, the largest to be built in the country after independence.

In 1977 EDM inherited the country's electrification services with only 15 districts connected to the national grid. In 2018, it reached 154 district headquarters and today it is focused on bringing energy to all

administrative post headquarters by 2024.

ENGIE Energy Access Mozambique is a next-generation renewable energy company and a market leader in providing energy and financial services. Since 2019, it has operated a production line allows Mozambique that rural communities to meet their basic energy needs at affordable prices. In July, the company registered 100,000 customers and impacted 500,000 lives in the country.

FUNAE, FAZER/GIZ, BRILHO/SNV and other partners supported the establishment and expansion of services throughout the most of the country, except in Cabo Delgado and Niassa provinces owing to insecurity.

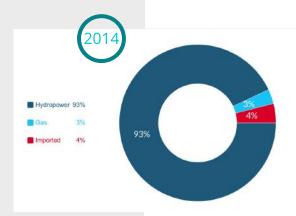


## Transformational Actions **ACCESS TO ENERGY (SDG7)**

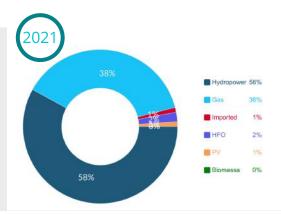
**ON-GRID** 



The contribution of energy sources to the national energy matrix has diversified in the last decade. Natural gas emerges as an important source of energy.









Solutions adopted to meet the demand for electricity access by 2030:









Home solar systems Mini-grids and offgrid solar systems

450MW **Thermal Power** Plant under construction

**200MW of Renewable Energy** by 2025





**Eng.**<sup>a</sup> **Olga Madeira Utchavo**Renewable Energy
Director, EDM

### **Access rate**

Population with access to energy in Mozambique





## **GENDER**

Strategy 2021-2030



EDM aims to achieve 40% women representation by 2030. The goal is to establish gender balance at all levels of the company. The strategic objective is to define performance improvement as the main element in the implementation of the gender strategy.





# Transformational Actions ACCESS TO ENERGY (SDG7)

**OFF-GRID** 



ENGIE is one of the leading providers of Off-Grid, Pay-As-You-Go (PAYGo) and Mini-Grids solutions in Africa.

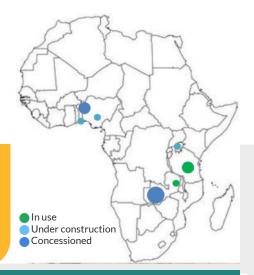








ENGIE invest in Mini-Grids



> 200 Sites

Under Construction from 2022-2023 in 6 African Countries 15000

Beneficiaries

> 1100

kW in use

Projection: +1000 sites in 2027

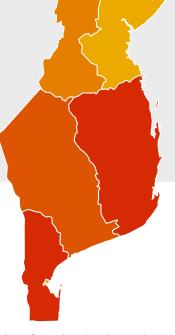




Emídio Amadebai General Manager ENGIE Energy Access Moçambique



ENGIE Energy Access Moçambique is a next generation renewable energy company that has been operating in the country since 2019, offering expandable solar systems, providing lighting, phone charging, TV, radio and other services, in rural areas.



Number of people using the service



### MWE: INCLUSION OF WOMEN

The movement aims to reach and defend the interests of the vast majority of Mozambican women who live in rural areas, the majority of whom are without education.

Their strategy to do so is through the sharing of knowledge and information to make it accessible to women working in the energy sector, especially in the rural areas, said Taciana Peão Lopes, co-founder of MWE, stressing that this is a priority.

The main objective is to bring the challenges of rural women to the public policy discussion forums and design solutions applicable to each context.

### Clean cooking solutions in rural areas

Four out of five Africans rely on solid biomass for cooking, which causes an estimated 600,000 deaths a year as a result of domestic air pollution, in addition to the challenge of deforestation. Lopes warns of an even greater challenge in the areas affected by the violent extremism in Mozambique, where women are subject to different risks, including rape and capture. "In this context, clean cooking solutions would not



Taciana Peão Lopes, Co-Founder of Mozambique Women of Energy (MWE)

only protect the environment, but above all, free these women from these risks. MWE is implementing, with the support of partners, a clean cooking project with some women from Cabo Delgado," she said.

In addition to being an activist for the inclusion of women in the energy transition, Lopes is a lawyer specialising in energy and a founding partner of the firm Taciana Peão Lopes & Advogados Associados (TPLA).

TPLA specialises in the design, construction, management, operation and financing of energy projects, having been involved in many independent power producer (IPP) projects implemented in Mozambique, such as Gigawatt,

MWE expects that by 2030 there will be a shared vision on energy in Mozambique and Africa, driven by the desire to empower women to lead the energy transition towards SDGs 5 and 7.

CTRG (Sasol), CTE (Vale), Kuvaninga (Investec), and Ncondezi,and advised the government on the revision of the Electricity Law.

MWE expects that by 2030 there will be a shared vision on energy in Mozambique and Africa, driven by the desire to empower women to lead the energy transition towards SDGs 5 and 7.

### RES4AFRICA: INCLUSION OF YOUTH





**Ivana Senka**Activist - Just Energy
Transition, Res4Africa

The Renewable Energy Solutions for Africa Foundation (RES4Africa) shared, at the CDD conference, the concept of its Youth Task Force (YTF) movement, a panel of youth representatives with a mutual interest in conveying the voice of youth to shape the opinions of decision makers, with the aim of expanding networks of African and European youth to advocate and implement energy transition actions in Africa.

Ivana Senka, Just Energy Transition activist at RES4Africa said that "it is critical to include and provide opportunities for young people to participate in the energy transition that the African continent is witnessing. It will be up to young people to inject renewed impetus into the global discourse on energy and development."

In this decade of action towards the SDGs, and as Africa strives to

achieve universal access to energy as well as being climate resilient, the role of youth becomes even more important. "Empowering and including young people in the energy transition agenda requires expanding access to quality education, capacity building initiatives, promoting more opportunities for young people in policymaking and, most importantly, ensuring that the voice of young people are heard!" said Ivana Senka.

### The "WEF NEXUS" model

RES4Africa presented a model called WEF Nexus: Water–Energy–Food Nexus. It is an approach that aims to redesign rural electrification, taking advantage of the synergies between actors in different sectors. Energy and non-energy actors, such as agrifood and health entities, have the potential to create advantageous partnerships

to optimise costs to achieve financial viability of renewable energy projects. Combined with this, Ivana Senka presented the transformative business models, assuming that it is possible to observe new trends in the sector aiming to pave innovative paths for the banking of renewable energy projects. The organisation

"It is critical to include and provide opportunities for young people to participate in the energy transition."

considers that greater access to energy in Africa is hampered not only by the financial and economic aspects, but also the socio-economic impact related to the lack of energy, adequate infrastructure and quality of service available.

### CDD: INCLUSION OF COMMUNITIES



**Américo Maluana** Researcher, CDD



Global emissions scenarios for 2050 indicate more than 50% reductions in oil and gas-related revenues between now and 2040. According to IRENA, governments should have refused to approve new oil and gas fields until 2021. Therefore, equitable paths still need to be defined to help countries manage macroeconomic risk while providing support for structural economic transition. On the other hand, if countries do not prepare, it is likely that significant fiscal pressures will hamper their ability to meet public expectations and service delivery. This, in turn, can result in increased social tensions. However. potential access to significant liquefied natural gas (LNG) - cleaner fossil fuel - from the Rovuma Basin means that these scenarios need not necessarily apply to Mozambique.

Access to energy is the population's highest priority (especially considering that access to energy is estimated at 22% in Cabo Delgado).

The country has the potential to manage the process in its favour, as long as the sector is governed effectively with a focus on the population, and natural gas is used as a complementary solution in the context of energy transition, along with renewable energies (solar, wind and biomass) for the production of electricity or fuel.

But seizing the opportunities offered by an energy transition to renewable and cleaner energies is

extremely challenging environment where there are significant strategic considerations – as is the case in Cabo Delgado and Pemba including multiple competing interests and priorities in an unstable and insecure province. This is further complicated by having to reconcile political will, private-sector interests and community interests. The understanding of the logic behind the energy transition is limited among civil society organisations[KW2] (CSOs) in Pemba (and Cabo Delgado) and limited extremely among the population. Access to energy is the population's highest priority (especially considering that access to energy is estimated at 22% in Cabo Delgado) and not the energy transition. This is one of several findings from the report on the energy transition in Mozambique 2022, produced by CDD.

# Report Energy Transition in Mozambique Opportunities and Challenges

### Available on our website

justenergytransition.cddmoz.org



### **PANEL 2: POLICY CHANGE**

How to accelerate access to energy in Mozambique, intensify the deployment of renewable energy, and achieve economic growth: Recommendations for designing a transformational policy.

- Possible synergies to combine public and private investments to finance access to energy for the most vulnerable
- Implications of international measures on the domestic economy (CBAM)
- The opportunity to diversify the economy



**Eng.º José Mestre**Country Coordinator,
GET.invest Moçambique/ GIZ



**Dra. Fátima Artur**Policy and Research
advisor, BRILHO/ SNV



**Mayra Pereira**Member of the Board,
AMER



**Eng.**<sup>a</sup> **Felisbela Cunhete** Member of the Board of Directors , ARENE



**Filipe Mondlane** Adviser FUNAE



Jocelyne Machevo Energy Specialist (Moderador)

### PANEL 2: **POLICY CHANGE**



From left to right: Jocelyne Machevo (Energy Specialist), Eng. Felisbela Cunhete (Member of the Board of Directors of ARENE), Filipe Mondlane (Advisor to the Board of Directors of FUNAE), Mayra Pereira (Member of the AMER Board)

This panel was facilitated by energy expert Jocelyne Machevo and aimed to discuss the adequacy of policies for a just energy transition. The main speakers were Felisbela Cunhete (Member of the Board of Directors of ARENE), Filipe Mondlane (Advisor to the FUNAE Board of Directors) and Mayra Pereira (AMER Board Member).

The panel discussed how to accelerate access to energy in Mozambique, intensifying the deployment of renewable energy and achieving economic growth, for a just and more inclusive energy transition. Some of the topics developed included institutional reforms, the regulatory framework, technical support to the private sector and its approximation to the state institutions that regulate the sector.

In the presentation session of transformational actions, GIZ and SNV presented their support mechanisms.

There are four programmes in the GIZ Energy Cluster: Energising Development (EnDev). GBE. GET.invest and GET.transform. In 2009 EnDev started its activities with three components: solar energy, micro-hydro and grid densification, and in 2013 in the field of clean cooking. In 2019. three new started: GBE. programmes GET.invest and GET.transform.

BRILHO is a five-year programme (2019–2024) that will catalyse Mozambique's off-grid energy market in order to provide affordable clean energy solutions to the country's off-grid population.

The overall objective of BRILHO is to improve the lives of low-income people through savings, well-being and livelihood opportunities.

BRILHO offers selected companies a unique combination of non-repayable structured finance and specialised support for risky commercial initiatives aimed at achieving competitive commercial returns by providing off-grid energy solutions for low-yield markets.

Additionally, it supports the development of the sector's ecosystem, improving access to information, stimulating demand, establishing quality benchmarks and supporting the development of a more consistent regulatory framework.

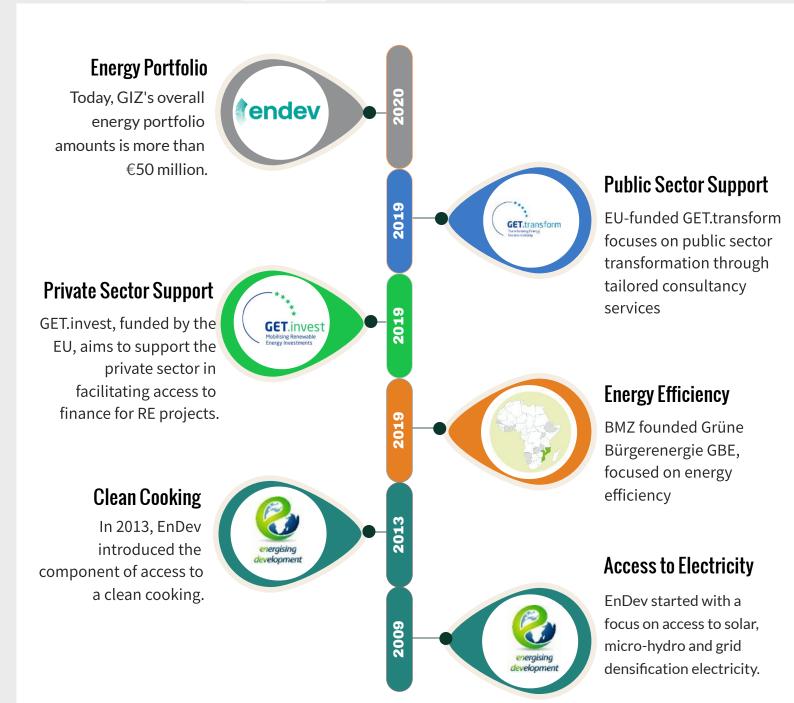


### Transformational Actions

## ENERGY FINANCING AND REGULATORY SUPPORT

giz

Energy Cluster in Mozambique (timeline)







Eng.° José Mestre Country Coordinator, GET.invest Moçambique/GIZ

### **GET**,invest

### **GET.INVEST WINDOW IN MOZAMBIQUE**



Programme supported by the European Union, Germany, Sweden, the Netherlands and Austria mobilizing investments in renewable energy, building a pipeline of investment-ready projects.



### **SUPPORT: RELEVANT MODELS**

Supports all relevant delivery models, including on and off grid electricity, clean kitchen and efficient usage.



### **PARTNERS NETWORK**

Extensive partner network include many funders, as well as industry associations and others.

**GET**,invest **SERVICES** 

ADVICE ON ACCESS TO FINANCING

FINANCIAL SYSTEMS CONSULTING

MOBILISATION

INFORMATION AND DATA



### SUSTAINABLE AND AFFORDABLE ENERGY

Dedicated to promoting sustainable and affordable energy in Mozambique

GETinvest is funded by:









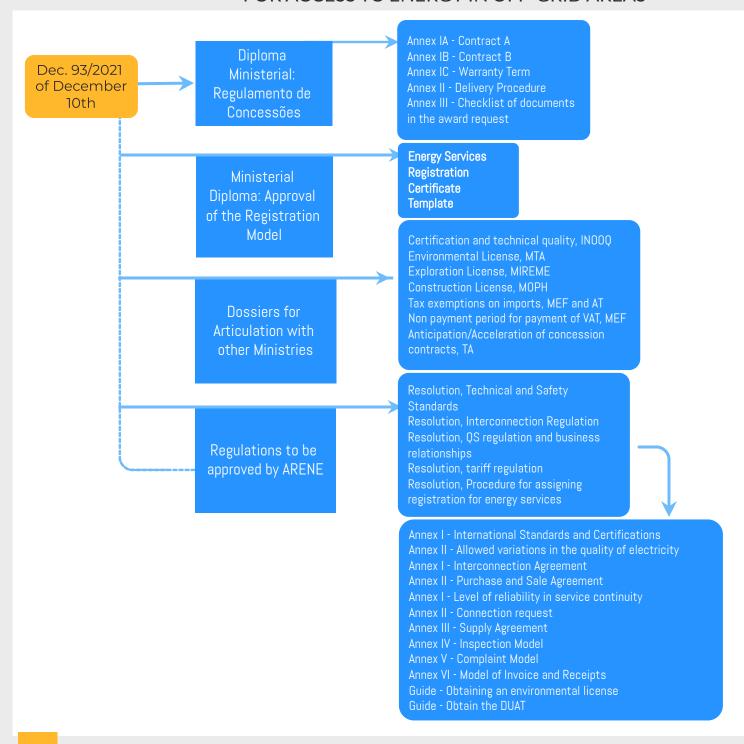




### Transformational Actions

## ENERGY FINANCING AND REGULATORY SUPPORT

## REGULATORY FRAMEWORK FOR ACCESS TO ENERGY IN OFF-GRID AREAS







Dra. Fátima Artur Policy and Research advisor, BRILHO/SNV



### **Objectives**



- Increased access to energy through innovative off-grid business initiatives
- Development of an off-grid business ecosystem
- Support the Government of Mozambique in the creation of strategies, policies and incentives

### 2019 - 2024

BRILHO is a five-year programme that aims to accelerate Mozambique's off-grid energy market in order to provide clean and affordable energy solutions to the country's off-grid population. Overall budget: £29.3 million.

BRILHO is funded by:





### ARENE/ FUNAE:

### FROM ACCESS TO REGULATION



From left to right: Jocelyne Machevo (Energy Specialist), Eng. Felisbela Cunhete (Member of the Board of Directors of ARENE), Filipe Mondlane (Advisor to the FUNAE Board of Directors).

The Energy Regulatory Authority (ARENE) is an energy regulatory body with powers to regulate and supervise the electricity, natural gas and liquid fuels subsectors, thus ensuring the alignment of the energy sector with international best practices. Created by Law No. 11/2017 of 8 September, it is a legal entity governed by public law, with legal personality and administrative, financial, patrimonial and technical autonomy.

According to Felisbela Cunhete, member of the board of directors of ARENE, in the context of the energy transition, ARENE has been working with partners to produce communication tools for citizens, as a way of making regulations more accessible. "We have been working

not only on the regulatory side, but also on activating demand, with a view to educating the consumers about the use, their rights and also raising awareness on safety in the use of these energy systems," she said.

Filipe Mondlane, advisor to the board of directors of FUNAE, said that EDM has been concerned with expanding through access densification, where there is a national grid, and where there is not, the company extends it. "For cases of populations more than 30 km away, depending on the density of families and the region's productive potential, FUNAE promotes mini-grids," he explained. For FUNAE. promotion of local development through access to

energy is only possible with the principle of productive use. The dispersion in rural areas is a challenge and in this case, the institution promotes autonomous solar systems using photovoltaic technology (to maintain hospitals, schools and other services) and the promotion of residential solar systems where the private sector has increased its intervention.

FUNAE is a Mozambican public institution created under Decree 24/1997 of 22 July, with the changes introduced by Decree 101/2020 of 12 November, with the aim of financing and implementing energy projects in order to increase their access in rural areas.

### AMER:

### "THE COMMON VOICE OF THE RE SECTOR"



Mayra Pereira - Member of the Board AMER

Despite recognising the improvements in the sector's regulatory environment following the revision of the Electricity Law, which now includes more current issues such as renewable energy generation, storage, self-production, off-grid production, mini-grids and interconnection, among others, the Mozambican Renewable Energy Association (AMER) considers that it is still not possible to see this as an effective change.

Mayra Pereira, board member of AMER, said that the association has received feedback from members regarding the regulatory and tax framework and takes these concerns to the public sector so that they can work on solutions to improve the business environment.

So far, we have seen the public sector open to receiving the concerns of the private sector,

"So far, we have seen the public sector open to receiving the concerns of the private sector," added Pereira, mentioning the legal reforms as a result of the sensitivity of the regulators regarding the challenges and needs of the private sector in the area of renewables.

ARENE asked for AMER contributions on the new Off-Grid Energy Decree Law. To that end, AMER created a working group with its associate members, which provided comments on the decree draft and shared these with ARENE.

AMER is a non-profit association, established in 2017, with the mission of promoting renewable energy in Mozambique. AMER represents the interests of its members, acting as the common voice of the renewable energies sector in the country. It has been an interlocutor with the political, economic and social decision-making bodies, promoting the development of the renewable energies market and projects in the country.

Apart from being a member of the governing body of AMER, elected in July 2022, Mayra Pereira is president of the Lusophone Association of Renewable Energies (ALER). AMER contributes documentation ALERenováveis. a free online database publications renewable energies for Portuguesespeaking countries and regions in which they are located. This is an ALER initiative, joined by AMER and more recently MWE. More partners are expected to join in the future.

## Our main Actividades

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## **STATISTICS**

1

700+



2

Leaders'
speeches

Discussion panels
Launch
Transformational Actions
Network

In person and virtuals



3

NATIONAL AND
INTERNATIONAL SPEAKERS
PUBLIC AND PRIVATE SECTORS

**PARTICIPANTS** 





4

2
NTERNATIONALS SPEAKERS



5

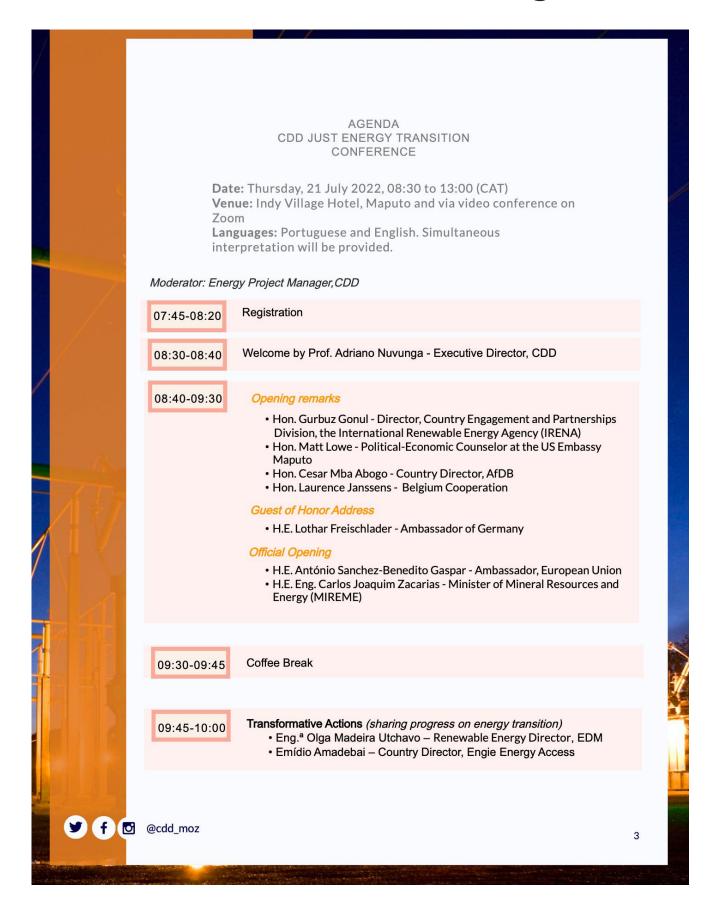
50% 50% WOMEN MEN
GENDER BALANCE
ON DEBATE PANELS



## APPENDIX



### **APPENDIX 1:** Conference Agenda



### **APPENDIX 1:** Conference Agenda



## **APPENDIX 2:** Speakers from the following organisations







Delegation of the European Union to Mozambique



German embassy Maputo

Diplomatic Office of Belgium in Mozambique













RICAN DEVELOPMENT BANK GROUP





















The Centre for Democracy and Development (CDD) is an influential public interest, non-profit civil society organization advocating for accountable democratic governance which serves the citizenry, including the most marginalized communities. As a think & do tank, CDD combines political economy analysis, rights-based approach and participatory methodologies to co-create programmatic priorities, enhance local ownership and ensure sustainability for both short- and long-term changes to contribute to the building of resilient, inclusive, democratic and rights respecting Mozambique society. To achieve this strategic agenda, CDD's work is organized in five pillars: i) Youth Leadership and Gender Justice; ii) Democracy and Human Rights; ii) Economic Justice; iii); iv) Peace and Security; and v) Just Energy Transition.







