



Gender and energy country briefs

RWANDA

Energy is a critical enabler in reaching development goals. However, the benefits of increased access to modern and cleaner energy services often fail to accrue evenly to men and women. The African Development Bank and ENERGIA recognise the need to prioritise policy action in the field of gender and energy to meet the international Sustainable Development Goals (SDGs). This country brief on gender and energy in Rwanda is one in a series to support equality of access and use of energy by women and men through evidence-based initiatives.

Universal access to affordable, reliable and clean energy by men and women is a key element in the Vision 2050 strategy document through which Rwanda aims to reach an upper middle-income level by 2035 and a high-income level by 2050. Gender equality is a key for the Rwanda strategy (Ministry of Gender 2010). Although the Gender Index score is above the average for the African continent, gender gaps remain a barrier to equal benefits from energy access to all. With the large steps to be made in providing access to electricity for homes and for income generation, and reducing the dependency on wood fuel for cooking, deliberate effort need to be made to ensure gender responsiveness in energy programmes and policies.

This brief provides insights into the current status of gender and energy in Rwanda through a policy analysis. It presents key data, an overview of the institutional set-up and targets on gender and energy, and an analysis of barriers and opportunities based on expert review of policy documents and consultations with key stakeholders. This leads to a set of recommendations for effective integration of gender in energy planning, implementation and monitoring.

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I Gender and energy statistics

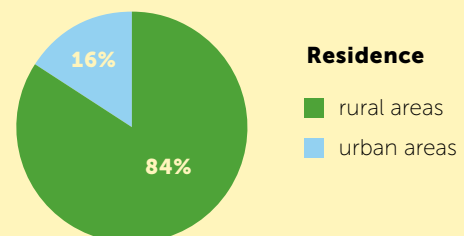
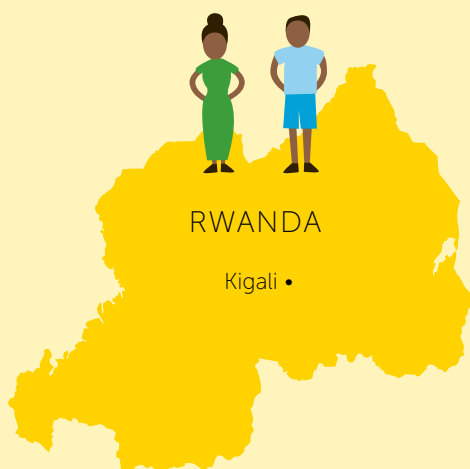
General country statistics

- The total population is 12.1 million.¹
- 84% of the population live in rural areas.
- 28% of the population are between 16 and 30 years old.
- 39.1% of the population live below the poverty line of USD 1 per day.
- 25% of households are permanently headed by a female, and 6% are headed by a female due to the absence of the male head.
- 17.8% of female-headed households are classified as extremely poor compared to 15% of male-headed households.
- The Rwandan economy is mainly based on services (48% of GDP) and agriculture (33% of GDP), with the industrial sector contributing 14% to the GDP.
- Since 2020, Rwanda has been categorised as a low-income country.

Gender equality in Rwanda

In the Africa Gender Index (AGI) report of 2019, Rwanda scores 0.761 (1.00 is gender parity), significantly above the 0.484 average of African countries.²

The country has emerged as one of the leaders in advancing gender equality on the continent. Rwanda performs very well on the social dimension of the index (1.064), close to the average on the economic dimension (0.662) and with a score of 0.626 well above the average of 0.224 for the empowerment and representation dimension. Gender equality is good in terms of education, life expectancy and political representation, but relatively poor on many indicators related to the equal participation of women in paid labour.



¹ Source: NISR, 2018, NISR, 2015.

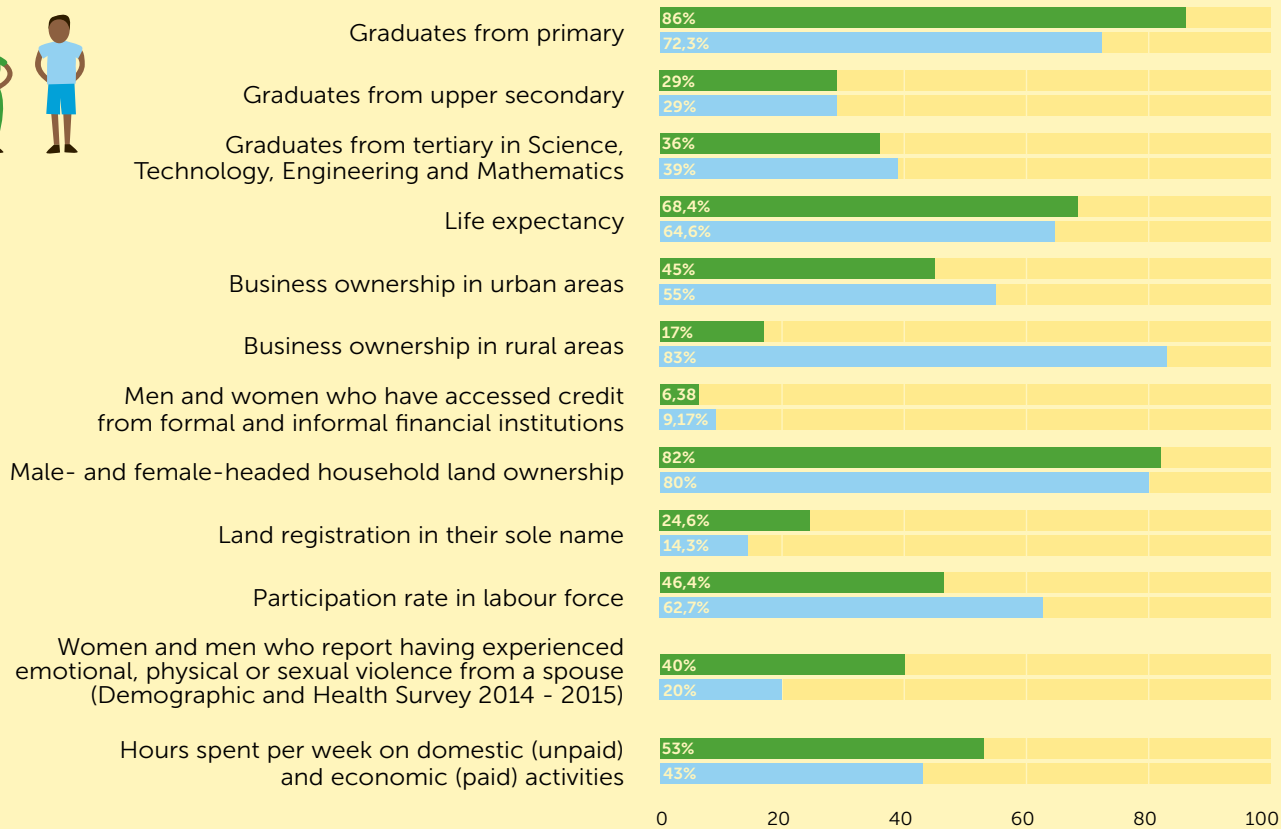
² The data used in the construction of the Africa Gender Index (AGI) are largely supplied by National Statistical Offices. While indicators have been defined in a standard manner, the reference periods for a number of indicators vary across countries.

Policies and legal frameworks to support gender equality

Rwanda's government offers strong support to address gender inequalities as evidenced by:

- The Constitution of Rwanda is committed to promoting equality and equity amongst all Rwandans. Article 16 of the Constitution of the Republic of Rwanda of 2003, which was revised in 2015, prohibits discrimination based on sex, and Article 10 on fundamental principles stipulates that women must occupy at least 30% of positions in decision-making bodies to affirm equality between men and women. Gender equality in terms of rights and responsibilities between spouses within households is explicit under Law n° 32/2016 of 28/08/2016 governing persons and family.³
- The Gender Monitoring Office (GMO), as one of the four institutional bodies for the promotion of gender equality and women's empowerment in Rwanda, has the role of monitoring gender mainstreaming in all sectors, by all stakeholders, and progress towards gender equality. The other institutions dealing with gender issues are the Ministry of Gender and Family Promotion (MIGEPROF), the National Women's Council (NWC) and the Rwandan Forum for Women Parliamentarians (FFRP).

Highlighted gender-related facts⁴:



³ National Institute of Statistics Rwanda (2015). Rwanda Demographic Health Survey

⁴ This section is based on African Development Bank (2020 forthcoming), NISR 2017 Labour Force Survey (National Institute of Statistics Rwanda, 2017, NISR 2018 Demographic and Health Survey (2014-15)

Energy situation

The Government of Rwanda's Vision 2050 focuses on high quality living standards including the provision of affordable, reliable and clean energy to men and women. Under the Energy Sector Strategic Plan for 2018/19 - 2023/24, the target is to achieve 100% household electricity access and to reduce the number of households using traditional cooking technologies to 42% by 2024 (MININFRA, 2015). These are ambitious targets, as electricity access was around 30% in 2017 (World Bank, 2017) and 83% of households used firewood for cooking in 2014 (GoR NST1, 2017).

Currently, overall energy consumption is low, and is dominated by households at 82% with transport (8%), industries (6%) and other sectors (4%) responsible for the remainder (MININFRA, 2018).

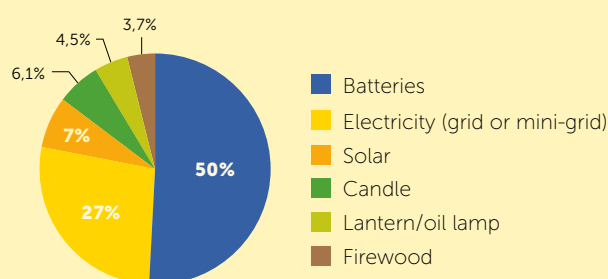
Electricity generation capacity is estimated at 554.5 GWh. Hydropower is a key renewable energy source

providing about 40% of the total 554.5GWh generated annually, and an additional 117GWh is imported (Africa Energy Portal). Other major resources used for grid electricity supply alongside conventional fossil sources are peat and methane from Lake Kivu.

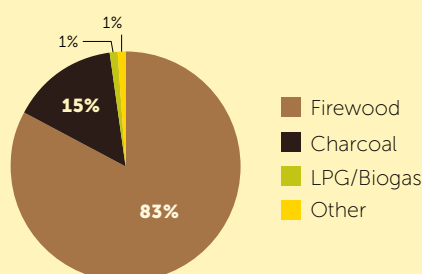
There are large differences in fuels used for cooking between urban and rural areas, with 95% of rural households using firewood as their primary fuel, while the majority of urban households (63%) cook mainly with charcoal. The ban on charcoal announced by the Ministry of Environment in 2020 is expected to lead to increased use of LPG.

Although the government has exempted LPG from tax, the price is still an inhibiting factor for many consumers. Nevertheless, the uptake is slowly increasing with more LPG stores opening up in more dispersed communities.

Main source of lighting (% of population)⁵



Main source of cooking energy (% of population)⁶



Costs of electricity access⁷

- The fee for household grid connection ranges from USD 56 (for those within 37m of the existing infrastructure) to USD 450.

Electricity fee per kWh:

- Residential customers (*monthly consumption < 15 kWh*) USD 0.09⁸
- Residential customers (*15-50kWh*) USD 0.19
- Residential customers (*> 50kWh*) USD 0.22
- Non-residential customers (*< 100kWh*) USD 0.21
- Non-residential customers (*> 100kWh*) USD 0.23
- Industrial tariffs range from USD 0.10 to 0.16 per kWh on top of a customer service charge of USD 10.36.

Costs of LPG

- The retail market price in the area around the capital Kigali is between RWF 1000 (USD 1.14) and RWF 1400 (USD 1.61) per kg.

⁵ NISR, 2018

⁶ Koo et al., 2018

⁷ REG, 2020

⁸ Exchange rate: 1 USD=965 RWF (Sept 2020)

II The gender and energy nexus

Access to clean, affordable energy is necessary in achieving development. Energy policies and programmes are crucial to meeting the energy needs of men and women in households and for income generation. The energy sector itself also provides opportunities for quality paid work. By recognising that men and women have differentiated priorities in energy services, by involving women in decision-making, and by creating opportunities for women in energy, the sector can contribute towards increasing gender equality.

Data on the gender and energy nexus

Although data on gender and energy are still scarce, recent studies in Rwanda have provided some valuable initial evidence. The Government of Rwanda, through its Gender Monitoring Office, has compiled available data in the 'Gender Profile in the Energy Sector' report (GMO, 2018). The World Bank Group's Multi-Tier Framework report on energy access in Rwanda provided recent data on energy access for male- and female-headed households (Koo et al., 2018). In 2020, the Power Africa East Africa Energy Programme published an assessment on women's participation in Rwanda's energy sector.

- Women spend substantially more time than men acquiring fuels for cooking. Nationally, this burden for women averages 73 minutes per day compared to 36 minutes for men.
- The time burden in rural areas is twice that in urban areas, but gender differences are similar. Further, women spend twice as long as men on preparation activities to use the collected wood as fuel, such as chopping it into smaller pieces.
- 13% of female-headed households use charcoal for cooking compared to 18.8% of male-headed households.
- 13.5% of female-headed households and a similar proportion of male-headed households have energy saving stoves/efficient cook stoves.



- Women are the sole decision-makers in 49.7% of cook stove purchases, including in over 85.6% of clean fuel stove purchases.
- 29.2% of male-headed households use electricity as the primary source of lighting compared to only 20.3% of female-headed households.
- Although there was a fourfold increase over three years in the use of solar panels for lighting, in part attributed to the strong impact of the government's promotion, there is still a gender gap. Use in female-headed households increased from 1% to 4.5%, while for male-headed households the increase went from 2% to 8.5% (NISR, 2018).
- Only 21.1% of female-headed households have access to any source of electricity, compared to 31.2% of male-headed households.
- For 60.7% of female-headed households and 52.4% of male-headed households, the main barrier to acquiring a grid connection is the high cost.
- Overall, across 11 energy supply sector entities surveyed in Rwanda, men make up 80% of the staff. Women's representation is the highest in middle-level staff functions (USAID and Power Africa, 2020).

Although the above disaggregated data provide some indications of gender inequalities, they do not provide the volume and depth of evidence needed to develop clear policies and targets to inform energy interventions.

Gender in energy policy frameworks

The following policies and legal frameworks demonstrate the progress and commitment to promoting gender equality as a tool for sustainable development.

The National Gender Policy (2010) has the overall objective of promoting gender equality and equity in Rwanda through a clearly defined process for mainstreaming gender across all sectors of development (Ministry of Gender, 2010).

The Rwanda National Energy Policy (2015) commits to mainstreaming gender in national energy planning and implementation. This is further evidenced by the adoption of a subsector gender-mainstreaming strategy as discussed below (MININFRA, 2015).

The Ministry of Infrastructure Gender Mainstreaming Strategy (2017-2022) provides the following guidelines for mainstreaming gender in the national energy planning process (MININFRA 2017):

- Ensure gender issues are considered at every stage of the project cycle, and in all major subsector strategies and action plans.
- Ensure energy concerns are addressed in a gender-sensitive manner while in the process of identifying and evaluating appropriate technologies for any given service.
- Proactively target female-headed households in awareness-raising and behavioural change programmes focused on sustainable energy and clean cooking technologies.
- Develop credit enhancement and micro-finance programmes that specifically target women for driving investments in clean energy technologies, such as solar powered lamps, and promoting women as energy entrepreneurs.
- Incorporate meaningful roles for women in the planning, design and execution of energy programmes, including those relating to energy efficiency and conservation.
- Encourage girls to study STEM (science, technology, engineering, mathematics) subjects and courses related to building knowledge on energy technologies and basic engineering.
- Undertake education, outreach and awareness-raising activities that focus on identifying and influencing those cultural norms, behaviours, structures and practices that can lead, whether intentionally or not, to inequitable energy access.
- Address knowledge gaps in gender and energy through research, advocacy programmes and the provision of information support to improve women's access to energy services in Rwanda.

Assessment of gender in energy policy

In compiling this country brief, an assessment was carried out based on consultations with key stakeholders.

All development sectors in Rwanda are required to mainstream gender. The energy sector has shown a significant improvement in gender mainstreaming at the policy level aligned with the national development strategies. The following are some of the initiatives put in place for the financial and staff capacity to support to engendering of policies and plans in the energy sector.

Financial commitment

Mandatory Gender Budget Statements by all government institutions is a good practise in the success of Rwanda's financial commitment to gender equality. The Ministry of Infrastructure which houses the Energy Division develops a Gender Budget Statement as an annex to the Budget Framework Paper submitted to both chambers of Parliament (OL No.12/2013/OL of 12/09/2013).

Institutional capacity

The institutional structure for gender mainstreaming is in place. The Ministry of Infrastructure (Energy Division) has a gender focal point to support the integrating process in the energy sector. The Gender Monitoring Office, which supports all sectors, has capacity on general gender issues. However, specific capacity and in-depth information that would support influencing the gender sensitivity of energy policy is lacking. The overview of the available information on gender and energy in the 'Gender Profile in the Energy Sector' report (GMO, 2018) provides some basic insights primarily at the level of differences between male- and female-headed households. Training sessions on gender by the Power Africa East Africa Energy Program are taking place with staff at the parastatal power entity, private sector energy companies, and public sector institutions between 2020 and 2022 to boost institutional capacity to bring more women into the energy sector force.

Assessment of gender mainstreaming in the energy sector

Employment of women in the energy sector

The utility company, the Rwanda Energy Group (REG), is actively developing a gender mainstreaming programme to increase the percentage of female staff. REG has a gender expert and gender focal points, and plans to establish an all-female workforce for the power plant at the new Nyabarongo facility outside Kigali.

Despite the policies and initiatives described above, the following challenges remain in mainstreaming gender in the energy sector:

- **Energy costs:** the Energy Sector Strategic Plan noted that the high cost of energy results in poor access to an energy supply and a lack of energy security. As indicated above, a lack of affordable energy access increases gender inequalities.
- **Inadequate disaggregated data:** data are lacking on gender and energy in general. For example, there are gaps when it comes to information on supply, access, affordability, decision-making, areas for entrepreneurship opportunities and new technologies.
- **Limited capacity and resources:** energy-related institutions are ill-equipped to effectively analyse the gender needs for the sector and generate sufficient data.

Women sales agents in rural village enterprises

In rural Rwanda, one of the business models to increase basic access to clean lighting for the poorest has involved establishing village-level enterprises for the charging of lights. A study on these enterprises (Barron et al., 2020), in the recent ENERGIA research programme, revealed that women sales agents are as successful as men in village-level enterprises involving solar charging of LED lights. In the 847 enterprises run by either a single man or woman, females sold more than men. A factor in the success of women entrepreneurs appeared to be that they were more frequently present at the charging shop.

The study also found that in another part of the programme in which the village level enterprises had been set up as groups, groups of women performed as well as groups of men in what has previously been a male-led domain. In this business model based on providing charging services rather than hardware, women performed at the same level as men with received additional training. However, evidence with solar PV enterprises based on other business models suggests that women typically do require additional training, mentoring and support to overcome barriers related to their lack of access to business networks, financing, markets and restricting gender norms (John Hopkins University, Babson College and ICRW, 2019).

In both cases, involving women in supply has had a positive impact on them and their families, including increased income and positive educational effects on their children.

The Scaling-up Renewable Energy Programme (SREP)

SREP Investment Plan for Rwanda (CIF 2015)

Approved in 2015

Funding agreed: USD 50 million for 2017-2022 in SREP resources for:

- Investments in stand-alone solar PV systems and mini-grids; and
- providing technical assistance in establishing an enabling environment.

The expected outcomes are gender-related, with household and institutional access to electricity expected to especially benefit the quality of life in rural areas for women and children. Further, improvements to gender equality and women's socioeconomic status are expected through women's productive uses of electricity, and their improved access to information and training for new energy services and technologies.

SREP also supported the Multi-Tier Framework (MTF) survey that was conducted in 2016 with the results published in 2018. The Ministry of Infrastructure reports that the new framework has resulted in improvements in how data on access to electricity and access to modern energy cooking solution are collected and reported.

III Strengthening gender in energy

Rwanda, as one of leading African countries on gender equality, has a clearly gender-sensitive policy environment and a commitment to realising gender goals. The guidelines for gender mainstreaming in the energy sector (MININFRA, 2017) indicate a broad range of priority areas as targets for gender mainstreaming activities. Building on this, and based on the observed reality, the following could further strengthen gender in the energy sector in Rwanda.

Support access to clean cooking fuels as a priority to increase energy access, as it provides health benefits and reduces the workload for women and girls in particular.

Develop knowledge and skills in gender analysis within all the relevant energy agencies. While the policies and guidelines provide direction, translating these into action requires knowledge on the gender issues in the specific energy sector context, and skills for appropriate gender analysis to enhance the effectiveness of gender mainstreaming and planning.

Increase access to finance, credit and business opportunities to extend and expand modern and clean energy solutions for women entrepreneurs at all scales.

Employ more women in the energy sector not only to increase good quality employment opportunities for women but also to allow women's perspectives to become engrained in decision-making in the energy sector.

Develop evidence and data that can identify policy measures for key priority areas. Such demand-driven research would provide robust data that can convince energy actors to adapt fresh strategies. Evidence is needed on access and affordability, financial inclusion of women, impacts of access (including on the types of energy needed for income generation), business development opportunities and best practices.



Build the capacity of gender- and energy-related institutions to gather and effectively use data to increase alignment of data with the institutions' requirements and actual use of data.

Measure impacts by establishing a baseline and developing systems for the regular collection of information, which will lead to the informed gender perspective that is necessary to improve the gender sensitivity of programme design, implementation and monitoring and evaluation.

“There is still much more to do, to ensure that women feel safe and enjoy equal opportunity”.

– President Paul Kagame, 8th March, 2018

COVID-19

The global COVID-19 pandemic is influencing the lives of men and women around the world. Energy access is a crucial part of the immediate response and recovery of COVID-19. With people spending more time at home, energy is needed to ensure that people have clean cooking energy, refrigeration to keep food longer, water for sanitation, cooling for vaccination, electrification for health centres and lighting to support studying and leisure activities. The economic downfall and the lockdown measures have a severe impact on low-income households, informal workers, with women over-represented in the most hard-hit sectors (ILO, 2020).

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Key readings

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- ENERGIA (2019). *Gender in the transition to sustainable energy for all: From evidence to inclusive policies*
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- Koo, B., Rysankova, D., Portale, E., Angelou, N., Keller, S. and Padam, G. (2018). *Rwanda—Beyond connections: energy access diagnostic report based on the multi-tier framework*, World Bank Group
- Ministry of Infrastructure (MININFRA) (2017). *Gender mainstreaming strategy*

Consulted stakeholders

- World Bank Country Office: Sr. Energy Specialist
- Belgian Technical Cooperation (Rwanda): Gender Focal Point
- Rwanda Gender Monitoring Office: Chief Gender Monitor
- Electricity Utility Corporation Limited: Gender Focal Point
- Ministry of Gender & Family Promotion: Permanent Secretary
- Rwanda Development Board: Industrial Development Analyst
- Delegation of the European Union to Rwanda: Gender Focal Point
- Rwanda National Women Council (NWC): Executive Secretary

Reference for this document

Gihana, D., Kooijman, A. (2020), *Gender and Energy Country Briefs - Rwanda*, ENERGIA

African Development Bank

The overarching objective of the African Development Bank Group is to spur sustainable economic development and social progress in its regional member countries, thereby contributing to poverty reduction. The Bank achieves this objective by mobilising and allocating resources for investment in its member countries and providing policy advice and technical assistance to support development efforts. Light up and Power Africa is one of the five development priorities of the institution and constitutes an enabler for the other four: Feed Africa; Industrialize Africa; Integrate Africa; and Improve the Quality of Life for the People of Africa. It anchors the essential areas transforming the lives of the African people, consistent with the Sustainable Development Goals. Reducing gender gaps and accelerating women's empowerment are core objectives of the African Development Bank's strategy to ensure sustainable and inclusive development in its regional member countries. As the leading development institution on the continent, the African Development Bank is championing the production of sex-disaggregated data to adequately address the gender gaps and develop responses that leave no one behind.

Climate Investment Funds (CIF)

The USD 8 billion Climate Investment Funds (CIF) accelerates climate action by empowering transformations in clean technology, energy access, climate resilience, and sustainable forests in developing and middle income countries. The CIF's large-scale, low-cost, long-term financing lowers the risk and costs of climate finance. It tests new business models, builds track records in unproven markets, and boosts investor confidence to unlock additional sources of finance. Under CIF, the Scaling Up Renewable Energy Program in Low Income Countries (SREP) aims to demonstrate the economic, social, and environmental viability of low-carbon development pathways in the energy sector by creating new economic opportunities and increasing energy access through the use of renewable energy. The SREP program has 27 member countries and total resources of approximately USD 700 million.

ENERGIA

ENERGIA is an international network of like-minded organisations and professionals, active in Africa and Asia. Our vision is that women and men have equal and equitable access to and control over sustainable energy services as an essential human right to development. ENERGIA is hosted by Hivos, an international organization that seeks new solutions to persistent global issues.

