BACKGROUND PAPER

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Women's Economic Empowerment Through Energy Access in the Mano River Union (MRU) Sub-Region

IMPRINT

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Through Energy Access in the Mano
River Union (MRU) Sub-Region
Background Paper

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Background Paper: Women's Economic Empowerment through Energy Access

1 Introduction

In May 2013, the Government of Sierra Leone, the Mano River Union (MRU), the ECOWAS Centre for Renewable Energy and Energy Efficiency (ECREEE), the United Nations Industrial Development Organization (UNIDO) and the African Development Bank (AfDB) jointly organized a gender conference on **Women's Economic Empowerment through Energy Access in the MRU Sub-Region** in Sierra Leone. This regional conference was hosted by the Government of Sierra Leone from May 7th- 9thin the nation's capital, Freetown. In attendance were the Ministers responsible for Energy and Gender in the Mano River Union (Sierra Leone, Liberia, Guinea, and Côte d'Ivoire), the ECOWAS Commissioners for Infrastructure and Gender, as well as other key experts from the ECOWAS region.

The Mano River Union, formed in 1973, brings together Liberia, Sierra Leone, Guinea and Côte d'Ivoire towards economic cooperation. In recent years, the links between economic growth and energy access have become pronounced and the need to address gaps more pressing. The MRU sub-region has a population of approximately 40 million, and an average electricity access rate of 22.6 per cent.[1]With biomass as the primary source of energy for cooking and heating for countries of the MRU, this reliance on inferior fuels, particularly at the household level, has implications for economic development and deepens existing gender gaps. Women continue to carry the burden of a lack of access to modern, efficient fuels. Gender bias in energy access has widespread, long-term effects as evidenced in a variety of socio-economic factors, including health and life expectancy, literacy, quality of life, contributions to output in both the formal and informal sectors, and the overall development of a nation. With women lagging behind their male counterparts in most socio-economic indicators in developing countries[2]there is a need to address gender equality and energy access in the effort to advance sustainable development. This conference addressed both women's energy needs and economic empowerment.

The Freetown conference was organized as a follow-up to the Economic Community of West African States' (ECOWAS) high-level energy forum held from 29 to 31 October 2012 in Accra, Ghana. The Forum saw the adoption of new renewable energy and energy efficiency policies by the ECOWAS Ministers. The policies envision that by 2014, Member States will develop and adopt their own "gender-sensitive" national renewable energy policies to contribute to the achievement of regional ECOWAS targets.

The May 2013 conference on Women's Economic Empowerment through Energy Access in the MRU Sub-Region presented a draft Action Plan for discussion, and created a platform for the establishment of a sub-regional working group on women and sustainable energy. Conference participants were able to review and comment on the draft Action Plan, and contribute in a practical training workshop on gender mainstreaming in renewable energy and energy efficiency projects. The highlight of the conference was the adoption of the Action Plan by the ministers of the MRU countries.

This background paper presents: (a) an overview of the current state of affairs in the MRU sub-region with regard to gender, the energy sector, and women's economic empowerment at the

[1] UNIDO, "Mano River Union countries endorse action Plan on Energy for Women's Empowerment," 9 May 2013. < http://www.unido.org/media-centre/press-releases/news/article/date/2013/06/05/mano-river-union-countries-endorse-action-plan-on-energy-for-womens-empowerment.html>

[2] Ibid.

regional and national levels based on a desk review and input from the organizing parties; (b) an assessment of existing gaps and opportunities related to improving women's economic empowerment through energy access; and (c) recommendations.

2 Why Focus on Women's Economic Empowerment Through Energy Access?

The environment plays an integral role in supporting worldwide close to 2.7 billion people who rely on traditional biomass for cooking and heating; 1.4 billion people who have no access to electricity, and another one billion who only have access to unreliable electricity networks. Women represent 70% of the 1.3 billion people living on less than 1 dollar a day, due in large part to limitations on women's social, political and economic opportunities. The effects of advancing women's economic empowerment through access to energy are widespread and diverse, and result in positive impacts on social and economic development, as well as human security. Women are caretakers of resources, their families, and their communities. Access to clean and affordable modern energy is critical to fostering sustainable development, realizing human rights, and achieving the Millennium Development Goals (MDGs). One of the most pressing challenges to sustainable development is the pervasive inequality and discrimination that women and girls face. Across sectors and issues, and regions and countries, "evidence suggests that sustainable development strategies that do not promote gender equality and the full participation and empowerment of women and girls will not succeed."[3]

While there have been efforts to address energy needs in developing countries by the global community, energy needs as related to women have been overlooked. Women are lagging behind their male counterparts in most indicators of socio-economic growth. Access to efficient energy is an essential element of economic development where women remain disproportionately affected. In 2011, the UN Commission on the Status of Women recognized that women and girls are "disproportionately burdened by a lack of access to modern energy sources" and that "significant social and economic benefits can be realised by enhancing women's access to energy."[4]Acknowledging women's energy needs and women's critical contributions to economic progress is essential for sustainable development strategies and eradicating poverty.

2.1 Neglecting Women's Energy Needs: Poverty, Lack of Energy Access, and Gender Inequality

There are clear correlations between poverty, lack of access to energy, and gender bias. It is now well known that men and women in developing countries have differing roles and responsibilities, and this is reflected in their energy needs and priorities. Women and men play distinct roles in natural resource and environmental use, management and protection. Many women in developing countries depend on biomass energy to carry out household tasks and income-generating activities due to poverty, traditional gender roles, and gender inequalities, which together perpetuate the dependency on biomass energy. Much of women's time is spent collecting and managing wood and other biomass fuels, particularly as women bear a disproportionate share of the burdens of ensuring energy, limiting the time women can spend engaging in other activities such as schooling or

[3] Introduction in Powerful Synergies: Gender Equality, Economic Development and Environmental Sustainability, United Nations Development Programme, 2012.

[4]United Nations Entity for Gender Equality and the Empowerment of Women. "UN Women: Equality, Empowerment, and Energy."
http://www.un.org/womenwatch/daw/csw/csw56/side_events/MRFCJ_and_UNW_sideevent_FINAL.pdf

working.[5]At the same time, although women are crucial actors in managing households, bearing and raising children, in food production and managing land, forest, and water resources, their roles and responsibilities are often taken for granted."[6] Moreover, much of women's work is generally unpaid and not accounted for in national energy statistics. This frequently represents a large portion of national energy supply and consumption in poor countries. Meanwhile, policy-makers prioritize areas that do not respond to women's needs.

Since women's energy contributions are largely in the informal sector, and women are generally constrained in their roles in the social, economic, and political spheres, women are limited in their power and **participation in making decisions** regarding the development and implementation of energy policies, mechanisms, and investments. As a result, women's energy priorities, including their needs for cleaner, more efficient fuels and equipment for household and productive uses, are rarely considered in decisions made in the energy sector. There is a need to draw on both women's and men's perspectives, and needs, to inform energy strategies, and secure women's participation in all stages of decision-making to support their specific needs. Across sectors and issues, and regions and countries, "evidence suggests that sustainable development strategies that do not promote gender equality and the full participation and empowerment of women and girls will not succeed."[7] Moreover, women are the primary caretakers of families, communities, and natural resources, and research gathered by the UNDP illustrates the benefits of addressing women's energy needs to national sustainable growth; "women are more inclined than men to choose sustainability as a lifestyle, engage in environmentally appropriate behaviour and make sustainable consumption choices."[8]

> *"Women perform 66% of the world's work, and produce 50% of the food, yet earn only 10% of the income and own 1% of the property. Whether the issue is improving education in the developing world, or fighting global climate change, or addressing nearly any other challenge we face, empowering women is a critical part of the equation."*
>
> Former President of the USA, Bill Clinton, addressing the annual meeting of the Clinton Global Initiative. September 2009

Women's lack of alternatives to biomass-derived energy for cooking is associated with significant health problems. The World Health Organization (WHO) estimates that exposure to smoke from cooking is the fifth largest risk factor for disease in developing countries, and causes almost two million premature deaths per year, exceeding the number of deaths that are attributable to malaria or tuberculosis. Women in developing countries are also at risk for head and spinal injuries, pregnancy complications, and maternal mortality from the strenuous task of carrying heavy loads of firewood and other fuels. Additionally, women face increased threats to their physical safety, including sexual exploitation and assault, in the often-long journeys to fetch firewood and water.

2.2 Benefits to Improving Women's Energy Access

Women's empowerment is closely linked to efficient energy solutions. Women in developing countries can benefit significantly from improved access to energy through cleaner, more efficient stoves and fuels, as well as motorized equipment for food processing, water pumping, lighting, communications and business enterprises. Energy technologies reduce the drudgery involved in

[5]Powerful Synergies: Gender Equality, Economic Development and Environmental Sustainability, United Nations Development Programme, 2012. 17

[6]Dankelman, Irene in *Powerful Synergies*, UNDP, 29.

[7] Introduction in Powerful Synergies: Gender Equality, Economic Development and Environmental Sustainability, United Nations Development Programme, 2012.

[8] Key Message and Recommendations in Powerful Synergies: Gender Equality, Economic Development and Environmental Sustainability, United Nations Development Programme, 2012, 4.

traditional household work, increase family education and literacy rates, and improve health by reducing the health risks associated with inefficient energy sources. Improved energy options for lighting, efficient stoves, electrical equipment and communication devices allow women to become more successful in their existing businesses and expand into new activities.

A focus on promoting women's economic empowerment through improved energy access makes good economic sense. Emphasizing women's energy needs will alleviate the time burden women face from the use of inefficient energy sources, and increase economic benefits – like increasing profits from home businesses - by providing appropriate energy sources.[9] The large amount of time women spend collecting fuel wood (and carrying water) deprives them of educational and economic opportunities. Improved fuels and equipment and access to electricity provide new opportunities for income generation, positively affecting a woman and her family, as well as national economic growth. The number of women-owned businesses in Africa is growing rapidly and with that growth comes direct impacts on job creation and poverty reduction.[10] Women-owned businesses already make up close to 38% of all registered small businesses worldwide, including 60% in Rwanda and 38% in Uganda.[11]

Lighting has been shown to help women extend their workdays, thereby enabling them to increase their incomes. Since many women provide catering services from their homes or operate as street food vendors, the use of more efficient stoves would contribute to making these businesses more profitable. In Ghana for example, when women street food vendors started using gas stoves instead of wood stoves they were able to save money on fuel and also time. One woman reported that instead of waking up at 3:00 a.m. to prepare food for her business, she is now waking at 5:00 a.m.[12] Similarly, women who operate hair salons greatly benefitted from using electric razors and having a radio or television in their shop to entertain customers.

> *"Investing in women and girls has a multiplier effect on productivity and sustained economic growth… Investing in women is not only the right thing to do, it's the smart thing to do."*
>
> United Nations Secretary General, Ban Ki-Moon. 2008

Women can also make significant new economic contributions in the energy sector as actors in the energy value chain, e.g. as stove producers, briquette makers, masons constructing biogas systems, and as promoters and marketers of efficient energy technologies. For example, in the Africa Biogas Partnership Program, women have been targeted for training as biogas plant masons, and have also been highly effective promoters of the systems for their ability to reach women users and explain the expected benefits.

Few women are currently employed in the formal energy sector, and there is considerable room for expansion of women's engagement in energy companies, institutions, and organizations. The Gender Assessment of the Ghana Energy Sector in 2010 showed that most women in the energy sector worked in junior or administrative positions, in part because women must balance work with family life, which limits their flexibility to work extra hours and participate in training to advance their careers. Yet, some women have been successful in building careers in the energy sector, with a lot of hard work and commitment, as well as acceptance and support from colleagues.[13]

[9] United Nations: Sustainable Development Knowledge Platform. http://sustainabledevelopment.un.org/

[10] DfID, 2010. Agenda 2010 - The turning point on poverty: background paper on gender.

[11] ITC, 2011. ITC Gender Mainstreaming Policy

[12] Gender and Energy Network Ghana, 2011. Strengthening Gender and Energy Networking in Ghana.

[13] ENERGIA, 2010. Gender Assessment of the Ghana Energy Sector.

Overall, efforts to promote greater gender equality and economic empowerment for women are engines for poverty reduction, and advancing development, at the both the national and community levels:[14]

- **Income generation:** women's employment and entrepreneurship lead to greater income generation and wealth creation, slowing down population growth, and improving the social status of women at home and in their communities.
- **Benefits to families and communities:** Increases in women's incomes are frequently linked with higher levels of spending on families and communities – as compared to similar increases in the incomes of men - investments in children's education, health and nutrition, and long-term economic growth.
- **Increased employment:** Women are currently engaged in about three-quarters of domestic agricultural work and agro-processing, and over half of non-agricultural self-employment. As opportunities for women entrepreneurs expand, they are more likely to employ other women and purchase from women suppliers. This, in turn, expands the overall value chain and contributes to increased employment.

The MRU recognizes that women's access to sustainable energy is critical to developing the region's economy, and is thereby committed to promoting the full participation of women as key stakeholders at all levels of decision-making, as well as integrating gender perspectives in energy planning, policies, and implementation.

3 The MRU Regional Context

3.1 Background on the MRU

The Mano River Union (MRU) is an international association that was originally established in 1973 between Liberia and Sierra Leone, with Guinea joining in 1980. The goal of the union is to foster economic cooperation among its member countries. It is named after the Mano River, which begins in the Guinea highlands and forms a border between Liberia and Sierra Leone.

Due to civil wars in Liberia and Sierra Leona throughout the 80's and 90's, the achievement of its objectives proved impossible. Conflict in the region led to more than 300,000 deaths and millions of displaced persons, while contributing to widespread economic underdevelopment. The union was reactivated, in 2004, and joined by Côte d'Ivoire in 2008. In 2010, the region had a population of close to 40 million people and a gross domestic product (GDP) of approximately $30 billion. Like many other countries in the sub-Saharan region, countries in the MRU are rich in natural resources, yet have high levels of energy and income poverty.

This year the MRU celebrated the 40th anniversary of its Treaty, with a reaffirmation of the political will of the leadership of its member states to promote regional trade and cooperation. The official

[14] International Trade Centre, 2011. ITC Gender Mainstreaming Policy.

commemoration of the 40th anniversary during the Freetown conference provided an opportunity for the MRU leadership to demonstrate their commitment and achievements in terms of promoting gender equity and women's empowerment, particularly through the recognition of their needs for access to clean energy.

3.2 The MRU Policy Context

At the regional level, countries are faced with significant deficiencies in the energy supply sector. The fifteen nations of ECOWAS have therefore adopted ambitious regional policies, committing themselves to harmonize national energy legislation, increase the autonomy of energy supply, and significantly raise the level of access to modern energy services. A number of important bodies have been established and policies adopted in the effort to advance energy access and energy efficiency for countries of the ECOWAS.

In 2006, the ECOWAS **White Paper for a Regional Policy**: **Geared Towards Increasing Access to Energy Services for Rural and Peri-urban Populations** was adopted. The White Paper is a comprehensive guiding document for all ECOWAS states, including the MRU members. In addition, the West African Power Pool (WAPP) and the Strategic Program on Energy in West Africa have been developed by the United Nations Industrial Development Organization (UNIDO) and the Global Environmental Facility (GEF).

Recognizing that regional integration can facilitate the promotion and implementation of renewable energy and energy efficiency activities and policies at the national level, ECOWAS established a regional centre, the **ECOWAS Regional Centre for Renewable Energy and Energy Efficiency** (ECREEE)[15] in 2010. ECREEE focuses on policy development, capacity development, knowledge management and awareness raising, investment and business promotion, and the implementation of specific programs and projects. ECREEE has been leading the development of regional policies on renewable energy and energy efficiency, and has also forwarded a number of initiatives for implementation, including the ECOWAS Renewable Energy Facility, the West Africa Clean Cooking Alliance, and the ECOWAS Programme on Gender Mainstreaming in Energy Access.

ECREEE's mandate is aligned with the broader strategic goals of ECOWAS Vision 2020, and seeks to realise, 'A region that anchors its development on sustainable development, including agricultural and mineral resource development strategy, and on planned agricultural and industrial strategies; a region that develops its infrastructure and makes services accessible to its citizens and enterprises; region that conserves its environment and resources, promotes modes of equitable and sustainable development in economic, social and environmental fields; a region which brings its contribution to bear on resolution of the common problems and challenges confronting the planet.'[16]

In October 2012, at the High Level Energy Forum in Accra, Ghana, the ECOWAS Ministers for Energy adopted the ECOWAS Energy Efficiency Policy, and the ECOWAS Renewable Energy Policy, that were developed by ECREEE. ECOWAS has also joined the UN Sustainable Energy for All Initiative (SE4ALL), launched by UN Secretary-General Ban Ki-Moon. SE4ALL has developed a Plan for Action to serve as a guide for the development of national SE4ALL action plans. Furthermore, ECOWAS has committed to the Beijing Platform of Action, the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) and the UN Conference on Sustainable Development (Rio+20) outcome document, *The Future We Want*.[17]

[15] See http://www.ecreee.org. The need for a regional centre was articulated in the Ouagadougou Declaration of 2007, adopted by the ECOWAS Conference for Peace and Security in November 2007.

[16] http://www.ecreee.org/page/overview-ecreee

[17] For document, see http://daccess-dds-ny.un.org/doc/UNDOC/GEN/N11/476/10/PDF/N1147610.pdf.

To achieve these regional energy goals, various policy initiatives and programs have been developed in the ECOWAS region. Below, some of the relevant policies (and their goals) as they relate to gender and energy are outlined, as well as key actions/measures towards gender equality.

3.2.1 ECOWAS White Paper

The White Paper recognizes the important role of energy through a multi-sector lens: as a resource, service, productive factor, and as being fundamental to meeting human needs (food, health, and education).[18] As a guiding principle, the White Paper states that Member States are to support gender equality through:

- alleviating women's workloads;
- creating income-generating activities for women, their households and their communities; and
- improving access to quality social services, including healthcare and literacy training.

Moreover, as one of three objectives guiding Member States, the White Paper calls for the development of energy policies and programmes that will focus specifically on, "Improving the situation of women who are disproportionately affected by all aspects of poverty most particularly health problems arising from the difficulty of chores such as wood-gathering, etc."[19]As one element of reaching this objective, the policy calls for:

- at least 60% of people living in rural areas having access to productive energy services, in particular motive power to boost the productivity of economic activities; and
- 100% of the total populations to have access to a modern cooking facility.
- 66% of those in rural and urban areas will have access to electricity service, and 60% the rural population will live in localities with modernised basic social services like healthcare, drinking water, communication, lighting, etc.

Implementation will be measured through the increase in the rate of access of energy, and the following indicators that ensure addressing the above objectives:[20]

- at least 36% of households in rural areas will be electrified, easing access to, at least, communication and lighting services;
- 100% of urban and peri-urban households will be provided with an electricity service;
- 100% of the total population will have access to a modern fuel service (LPG, kerosene, etc.) or improved stoves and to sustained biomass supply;
- The share of traditional biomass in the average energy balance in the region will decrease by at least 20% from its current level of 80%; and
- at least 20% of new investment in electricity generation will come from locally available renewable energy resources;

In connection with the process of implementing the White Paper, ECREEE is committed to contributing to the sustainable economic, social, and environmental development of West Africa by improving access to modern, reliable, and affordable energy services and energy security, as well as reducing energy-related greenhouse gas emissions and climate change impacts. Through effective partnerships with a number of international institutions, including the EU, UNDP, the Austrian Development Agency, GIZ, and the Spanish Development Agency, ECREEE has been able to develop two regional energy policies, focusing on energy efficiency and renewable energy.

[18] See http://www.gm.undp.org/Reports/ECOWAS%20energy%20white%20paper.pdf, IV

[19] Ibid, 5

[20] See "Indicators," Ibid, 33

3.2.1.1 ECOWAS Energy Efficiency Policy

To achieve the ECOWAS energy sector goals for energy security and energy access, ECREEE has implemented an Energy Efficiency Policy, [21]which emphasizes a gender-balanced path to achieve the following goals:

- phase out inefficient incandescent lamps by 2020;
- reduce average losses in electricity distribution from the current levels of 15 - 40% to the world standard levels of below 10%, by 2020;
- achieve universal access to safe, clean, affordable, efficient and sustainable cooking for the entire population of ECOWAS, by 2030;
- adopt region-wide standards and labels for major energy equipment by end of 2014;
- develop and adopt region-wide efficiency standards for buildings (e.g. building codes);
- create instruments for financing sustainable energy, including carbon finance, by the end of 2013, and in the longer term, establish a regional fund for the development and implementation of sustainable energy projects.

3.2.1.2 ECOWAS Renewable Energy Policy

The ECOWAS Renewable Energy Policy (EREP), complements the WAPP strategy in the effort to ensure universal energy access in rural areas, and aims to achieve the following:

- increase the share of renewable energy (including large hydro) in the overall electricity mix of the ECOWAS region to 35% in 2020 and 48% by 2030;
- increase the share of renewable energy, such as wind, solar, small-scale hydro and bioelectricity (excluding large hydro) to around 10% in 2020 and 19% by 2030. These targets translate to an additional 2.425 mw of renewable electricity capacity by 2020 and 7.606 mw by 2030;
- by 2030, 75% of the rural population will be served through grid extensions and around 25% by renewable energy powered by mini-grids and stand-alone hybrid systems;
- ensure the entire ECOWAS population will have access to improved cooking facilities either through improved stoves or fuel switching to modern forms of energy, like LPG, by 2020;
- the share of ethanol/biodiesel in transport fuels will increase to 5% in 2020, 15% by 2030;
- by 2030, around 50% of all health centers, 25% of all hotels and agro-food industries with hot water requirements will be equipped with solar thermal systems.

In ensuring energy security, sustainability, and access, EREP specifically notes the importance of gender mainstreaming as one of its seven overall objectives. The policy aims at mainstreaming gender in renewable energy-related issues, particularly those associated with women's productive roles. The policy states that "EREP's renewable energy options will offer abundant job opportunities for both men and women, in the industry and trade sectors, but also in the management and maintenance of decentralized and individual energy systems. EREP will secure equal opportunities for men and women in accessing training, credit, and forums for local decision-making on renewable energy." A second objective addresses household energy uses, and aims to "provide solutions for domestic cooking energy," through the use of improved cook stoves and the promotion of sustainable forest management practices.

[21] See http://www.ecreee.org/sites/default/files/documents/basic_page/151012_ecowas_renewable_energy_policy_final.pdf

EREP further includes the following measures relevant for **gender**:

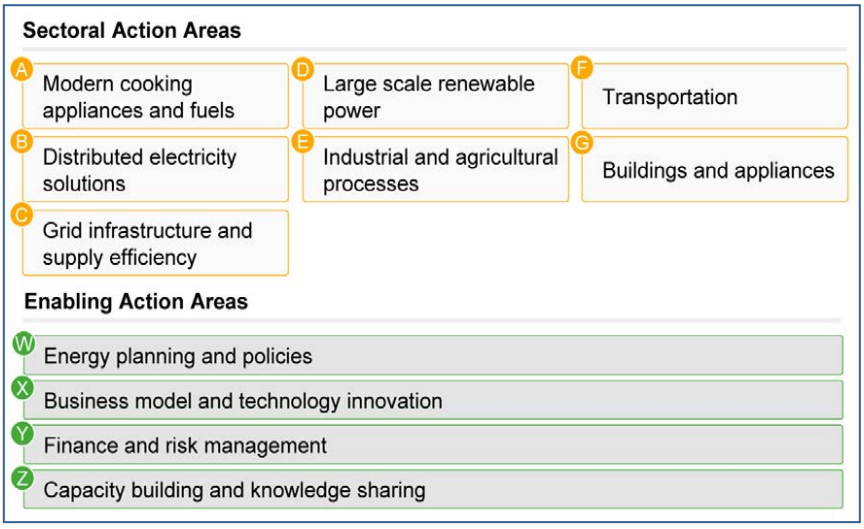
- The policy identifies "support to gender equality" and women's participation as a guiding principle for EREP's implementation: "…in the context of implementation of the EREP, an effort will be made to mainstream gender issues. Participatory approaches will be applied."
- The policy has adopted a concrete target on cooking energy (at par with electricity), "to universalise dissemination of high efficiency cook-stoves (> 35%) to the urban population by 2020." A 100% penetration target has been set for 2020, and all other stoves will be removed from the market and their manufacture banned by 2020.
- EREP requires that each Member State ensure gender mainstreaming through a Gender Action Plan as part of the National Renewable Energy Policy with objectives, outcomes, activities etc. Countries are expected to undertake advocacy to include gender policy and vision in the institutional framework, and ECREEE has been mandated to develop guidelines to mainstream gender in the NREPs. In national budgets, a minimum budget is to be set for renewable energy initiatives for gender/women.

3.2.2 Sustainable Energy for All

The Sustainable Energy for All (SE4ALL) Initiative was launched in 2011 by the UN Secretary-General Ban Ki-Moon, with 2012 being a special year on SE4ALL. All stakeholders are being called upon to achieve three interconnected objectives by 2030:

- provide universal access to modern energy services;
- double the global rate of improvement in energy efficiency; and
- double the share of renewable energy in the global energy mix.

Tangible commitments have been mobilized through the Secretary-General's high-level group on Sustainable Energy for All. The United Nations Conference on Sustainable Development held in Rio de Janeiro, Brazil in June 2012 (Rio+20) concluded with more than $500 billion mobilized and over 700 commitments made, most of them towards advancing sustainable energy.



The Secretary General's group on SE4ALL has created a Global Action Agenda to guide efforts undertaken in support of achieving the initiative's three objectives. It contains eleven Action Areas and provides a framework for identifying high impact opportunities that will act as a catalyst to change and innovation. Using this framework, countries and stakeholders can create their own pathways towards SE4ALL through the development of national action plans. All MRU countries will be developing such a national action plan. Within the SE4ALL framework, ECREEE has the mandate to represent the ECOWAS region on all matters relating to renewable energy and energy efficiency.

The Global Action Agenda of SE4ALL mentions **gender and women** only in relation to their roles as consumers and promoters of efficient stoves and fuels. There is no mention of women's productive roles, female entrepreneurship, or women's employment in the energy sector. Women and girls are of course implicitly included in the first SE4ALL goal of achieving universal access to energy.

3.2.3 Gender Commitments in the Region

In developing and implementing policies that consider both the barriers that women face and their distinct needs in regards to energy access, there a number of treaties to consider. The 1995 Beijing Platform for Action, issued by the United Nations Fourth World Conference on Women and signed by ECOWAS, contains key commitments that governments worldwide should comply with. The Platform recognises that the empowerment of women is of central importance and that advancing women's rights and empowerment are a requirement for the advancement of all humanity. In addition, ECOWAS has ratified the UN Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) and the gender agreements made at Rio+20.

3.2.3.1 ECOWAS Gender Policy

ECOWAS began addressing gender issues in 2000 with an ECOWAS Gender Policy. In 2003, it established a specialized agency that focuses on gender and development, the ECOWAS Gender Development Centre (EGDC). The EGDC replaced the West African Women's Association (WAWA). ECOWAS considers gender equality an engine of regional integration and a development objective of paramount importance, seeking to transform "West Africa into a fair and safe community in which men and women have equal opportunities to participate, decide, control and take advantage of all development initiatives." EGDC is the regional agency charged with the responsibility to contribute to gender equality and women's empowerment in the region. In addition to the EDGC, ECOWAS has a Gender Division, which was established at the Executive Secretariat.

The EDGC undertakes activities in the following areas:[22]

- **Institutional and organizational capacity building**: Develop capacities of all actors to create an institutional environment that is conducive to gender mainstreaming in regional integration and development processes.
- **Equal access for women and men to basic social services**: Take specific needs, priorities and constraints of women effectively into consideration in all social programs, particularly in the areas of education and health.
- **Economic empowerment**: Ensure women's equal access to economic resources and opportunities through:
  - promoting women's access to resources;
  - strengthening their economic capacities and human rights;
  - improving the visibility of their contributions to the regional economy.
- **Conflict prevention and resolution, governance, peace and security**: Contribute to the elimination of all forms of gender-specific discrimination and the respect of the populations' fundamental rights, including those of women and girls. EGDC promotes women's access to decision-making bodies, strengthening their position within these bodies, and advocates for their involvement in conflict management and peace-building processes.

3.3 Gender and Energy in the Mano River Union

The MRU is coordinated by a Secretariat based in Freetown, Sierra Leone. The Union Ministerial Council is the decision-making body of the MRU. The MRU further has a Union Standing

[22] See http://dummy.ccdg.ecowas.int/what-we-do/priority-areas.

Committee and Union Sub-Committees. All decisions of the Union Ministerial Council are reached by consensus and by means of resolutions – e.g. resolutions for action by the Union Secretariat or by governments. The MRU adopts and operates under ECOWAS policies.

NGOs in the MRU have been actively promoting women's participation in all spheres of society, as well as the protection of women's rights. Through lobbying, training and sensitization campaigns, these NGOs have been advocating for gender integration in policies and programs in order to achieve greater results and impacts. This has contributed to an increased presence of women in various bodies in the MRU countries.

In addition, women in the MRU have been actively involved in and contributing to peace-building efforts in the region, which has suffered from pervasive conflicts. Women's peace efforts led to the establishment of the Mano River Women's Peace Network (MARWOPNET) in 2000, at the initiative of Femmes Africa Solidarites (FAS). The network was charged with the mandate to engender the peace process and has played a leading role in mediating among parties in the region's conflict areas, and has also carried out sensitization work at all levels of society, from the grassroots to policy-makers.

3.4 Regional Actions on Gender and Energy, and Female Entrepreneurship

There are currently a number of regional initiatives in the fields of energy access, gender mainstreaming, and female entrepreneurship, briefly described below.

3.4.1 ECOWAS Federation of Business Women & Entrepreneurs

The ECOWAS Federation on Business Women and Entrepreneurs (ECOWAS/FEBWE)[23] is open to National Federations/Associations of Business Women and Entrepreneurs of all ECOWAS Member States. These national federations/associations practice in all spheres of economic activity, which are in line with the Federation's statutes. National chapters have been launched in Côte d'Ivoire, Guinea, and Sierra Leone. A national chapter for Liberia is expected to be launched in 2013.

ECOWAS/FEBWE has two main objectives:

- create a platform for dialogue and action with a view to promoting entrepreneurship among women in West Africa, thus making it possible for them to contribute to the achievement of the MDGs and the goals of NEPAD, particularly regional integration of West Africa; and
- formulate a support and advocacy policy for:
  - skills and capacity building of business women and entrepreneurs; and
  - promotion of a favourable business environment for business women within ECOWAS.

To reach these objectives, the Federation is undertaking a number of activities, including:

- facilitate capacity building, trade, and other demand-driven basic services for greater competitiveness of women in the business world, and to improve the visibility of their participation in the economy;
- facilitate greater accessibility of women to regional and international markets through participation in e-commerce, fairs, and exhibitions;
- establish a guarantee fund for women's initiative to facilitate their access to formal long-term loans, in collaboration with ECOWAS;
- create a database on the activities of FEBWE women for sharing experiences and developing trade in the region and with partners;
- connect with similar organizations regionally and internationally for exchange;

[23] See the Federation's website at: http://www.fefacedeao.com/

- organize exchange visits to other parts of the world such as Europe, North America, Asia and other regions of Africa in search of joint ventures and partnerships for members;
- carry out research to identify informal businesses owned by women with a view to gradually bringing them into the formal mainstream;

3.4.2 African Women's Entrepreneurship Program

The African Women's Entrepreneurship Program (AWEP)[24] is an initiative launched by the U.S. Department of State in July 2010. Supporting economic growth in sub-Saharan Africa is a policy priority for the U.S. AWEP identifies and builds networks of women entrepreneurs across sub-Saharan Africa, including West Africa. Women are specifically targeted because they are the continent's greatest potential to unlocking economic growth as they provide the majority of labour with the least amount of resources.

AWEP focuses on outreach, education, and engagement and targets African women entrepreneurs to promote business growth, increase trade both regionally and to U.S. markets through the African Growth and Opportunity Act (AGOA), create better business environments, and empower African women entrepreneurs to become voices of change in their communities.

By July 2012, the AWEP network grew to more than 100 alumnae with small- and medium-size enterprises in the agri-business, food processing, textile, fashion, home accessories, and other sectors. AWEP alumnae in West Africa have the opportunity to work with the U.S. Agency for International Development's (USAID) regional trade hub in Ghana (and its satellite in Senegal) to increase international export competitiveness and intra-regional trade. The State Department also works with the private sector to secure targeted public-private partnerships that stimulate business growth, create better business environments, and increase the trade capacity of the small- and medium-size enterprises.

3.4.3 West African Clean Cooking Alliance

In line with its objectives to promote energy access, renewable energy and energy efficiency, the ECREEE initiated a regional cooking energy initiative called the West African Clean Cooking Alliance (WACCA).[25] It was officially launched during the ECOWAS High Level Energy Meeting in Accra, Ghana, in October 2012 and has its first regional stakeholder workshop from 22-24 April 2013 in Ouagadougou, Burkina Faso. At this workshop, the Action Plan for WACCA was adopted by the relevant ECOWAS national ministries. WACCA is an ECREEE-led program that is jointly implemented with several technical partners, including, ETC-ENERGIA, GACC, Austrian Energy Agency, GERES, GIZ, and ICEED.

WACCA aims to ensure that by 2030, the entire ECOWAS population has access to efficient, sustainable, and modern cooking fuels and devices.
Specific objective are to:

- promote the implementation of policies and regulatory framework on clean cooking initiatives in the ECOWAS region;
- enhance capacity building in clean cooking initiatives;
- support and harmonize standards and labelling practices;
- promote networking and knowledge sharing in terms of technologies and innovations

The Action Plan has included specific gender actions and recognizes gender integration in the planning and implementation of activities as important to achieving its objectives. Women are not only seen as important end-users of cooking fuels and technologies, but also seen as key actors in

[24] For more information, visit AWEP's announcement at: http://www.state.gov/p/af/rt/awep/

[25] For more information, see http://www.ecreee.org/page/west-african-clean-cooking-alliance-wacca

the fuel and stoves value chains. This results in a number of actions being geared towards building women's entrepreneurship and business.

3.4.3.1 ECOWAS Renewable Energy Facility

The ECOWAS Renewable Energy Facility (EREF) is a grant facility managed by ECREEE. EREF provides grant co-funding for small to medium-sized renewable energy and energy efficiency projects and businesses in rural and peri-urban areas through regular demand driven calls for proposals. In the first phase of operation (from 2011 to 2016), EREF will test and sharpen its funding policy and find its comparative advantage in the West African market. In the second phase (2016 to 2020), EREF will broaden its portfolio of financial instruments and support schemes (e.g. micro credits). The Facility was established with initial support of the Austrian Development Cooperation (ADC), the Spanish Agency for International Development Cooperation (AECID) and key technical assistance from UNIDO.

The first call for proposals has been issued and projects have been approved for funding through EREF. The list of approved projects[26] shows a mix of energy access projects with the aim of clean and efficient lighting and cooking, productive use of energy, as well as energy for water and health services. A few of the projects are geared specifically towards women, mainly in their role as end-users of an energy service. The Facility, however, shows a clear scope for future proposal calls to have increased attention to financing energy projects that aim at women's economic empowerment.

3.4.4 ECOWAS Programme on Gender Mainstreaming

In early 2013, the ECOWAS Programme on Gender Mainstreaming in Energy Access was established. This was in response to various requests, not on why gender is important to be included in energy policies and programs, but on how different stakeholders in the West African energy sector could integrate gender issues in their policy and program work. The Initiative will be implemented in synergy with all of ECREEE's activities, projects and programs. Specifically, the activities of this initiative will be executed through four key approaches:

- capacity development
- support for gender-sensitive policy development
- knowledge management and awareness creation
- investment promotion and advocacy

Given ECREEE's central role in the West African energy sector in terms of the development and implementation of policies and programs, and given the fact that these policies and programs offer entry points for women's economic empowerment, liaising with this Initiative on gender mainstreaming is highly recommended to the MRU countries.

3.5 Conclusions

- There is agreement across the region that women's energy needs must be better addressed in the effort to advance development, energy security, the MDGs, promote gender equality and reduce poverty.
- The current status of the energy system in the ECOWAS member states hampers the social, economic and industrial development of the entire region, and the energy needs of women in rural and peri-urban populations must be met in facing the challenges of energy access, energy security, and mitigating the effects of climate change.
- At the regional level, there are supportive policies both within the energy and gender sectors. This initiative to economically empower women falls within the frameworks of these policies.

[26] http://www.ecreee.org/sites/default/files/list_of_approved_eref_projects_0.pdf

- Regional objectives and targets articulated in policies such as EREP and EEEP and their guiding principles of gender mainstreaming together with the FEBWE and other regional actors, can act to assist the MRU in this initiative.
- There is an existing institutional framework – i.e the MRU Secretariat - that could take responsibility in finalizing and implementing the MRU action plan on women's economic empowerment through energy access.
- There are existing initiatives focusing on female entrepreneurship in the region that the MRU could connect to, for sharing knowledge and experiences, including best practices, and possibly for harmonizing efforts.
- However, these existing initiatives do not seem to have a focus on energy as an enabling factor in business growth/development, which gives added value to this initiative to economically empower women through energy access.
- Moreover, there is a need to enhance women's participation in making decisions in the energy sector to ensure their specific needs are met.
- The SE4ALL national action planning processes offer opportunities for inclusion of women's economic empowerment.
- The ECOWAS EREP and EEEP policies also offer opportunities for including women's economic empowerment as part of national policy development or integration into policy initiatives.
- The ECOWAS Renewable Energy Facility offers linkages and real opportunities for accessing project funding.

4 MRU National Context

4.1 Energy Access in MRU Countries

All four countries of the MRU are categorized as Least Developed Countries. All countries are facing challenges, such as population growth and increased urbanization. In 2010, the average GDP growth rate in the ECOWAS region was 5.1%, with the lowest growth rate in Guinea (1.9%). Despite growth in GDP, more than 40% of the total population in the region is still living below the poverty line and lacks access to energy services to meet their basic human needs.

Country	Population in millions (2010)	Rural population (% of total population)	Population below poverty line (%)	Current GDP (US$ 1,000,000 in 2010)	GDP growth (% in 2010)	HDI rank (2010 ranking)
Benin	8.8	58	37.4	6,633	3	134
Burkina Faso	16.5	80	46.4	8,820	9.2	161
Cape Verde	0.5	39	30	1,648	5.4	118
Côte d'Ivoire	19.7	50	42	22,780	3	149
The Gambia	1.7	42	39.6	807	5	151
Ghana	24.4	49	29	31,306	6.6	130
Guinea	10.0	65	30.5	4,511	1.9	156
Guinea-Bissau	1.5	70	51.6	879	3.5	164
Liberia	4.0	39	80	986	5.5	162
Mali	15.4	67	25.5	9,251	4.5	160
Niger	15.5	83	63	5,549	8.8	167
Nigeria	158.4	50	43.1	193,669	7.9	142
Senegal	12.4	57	35.1	12,954	4.2	144
Sierra Leone	5.9	62	47	1,905	4.9	158
Togo	6.0	57	36.8	3,153	3.4	139

ECOWAS	300	57.87	42	5.1
SSA	856	60		
World	6,900	44		

Source: ECOWAS and UNDP (2011) General Energy Access in The ECOWAS Region - Towards universal energy access particularly in rural and peri-urban areas of the ECOWAS Region: Approaches, opportunities and constraints. Final Report.

This lack of access to energy services is characterized by very low energy consumption levels and insufficient levels of electricity and modern fuels, crucial to developing economic activities and reducing poverty levels. The sections below show the energy access situation in each MRU country.

4.1.1 Côte d'Ivoire

Côte d'Ivoire has the highest national electricity access rate in the MRU sub-region. It is one of only seven countries in the ECOWAS region to have an electrification rate of over 20%. The rate has been increasing over time, from 25% in 1999 to 39% in 2002 and 47.3% in 2009. Looking at the gap between urban and rural electrification, in 2008 18% of the rural population and 78% of the urban population had access to electricity. In addition, access to mechanical or motive power is very low in the country, particularly in rural areas. Improved access to motive power is capable of stimulating economic activities, as can be seen from the UNDP Multifunctional Platform project in Burkina Faso, Mali, and Senegal.

UNDP – Multi-Functional Platform Programme

UNDP introduced 600 Multi-Functional Platforms, run by (bio) diesel generators in Burkina Faso, Mali and Senegal with the aim of reducing poverty in rural communities, especially for women. Women were trained to operate and manage the multi-functional platforms, which were used to provide electricity for light and to mechanize labour-intensive tasks, such as grinding grain.

The main impacts of the Multi-Functional Platform Program include: time gain for women as the burden of their domestic tasks is lifted; increased agricultural production; development of income-generating activities, mobilization of local banking systems and introduction to micro-financing; and creation of employment opportunities.

Côte d'Ivoire is still highly dependent on biomass for cooking and heating, as biomass provides 76% of total energy needs in the country. In rural areas, as much as 94.7% of the population relies on biomass, while in urban areas it is 29.4%. In 2006, national access to modern fuels for cooking in the country was estimated at 13.8%, with only 0.3% and 31.4% in rural and urban areas respectively. In addition, improved cook stoves are not commonly used in the country. Only 6.3% of the people relying on solid biomass fuels use improved cook stoves.

To increase the levels of access to modern energy services, and thereby reduce poverty and stimulate economic growth, the government of Côte d'Ivoire has determined to increase the electricity access rate to 55% by 2015 and achieve universal access by 2020. In order to achieve these targets, rural electrification has been made a main priority, with the aim of connecting 200 rural districts to the national grid every year.

Côte d'Ivoire's Poverty Reduction Strategy Paper sets targets for increasing access to modern fuels to 40% in 2013 and 60% of the population by the year 2015. Access to motive power by 2015 is expected to be much lower than access to electricity and modern fuels, simply because the latter two are prioritized at the moment in energy access approaches. In order to reach the targets mentioned here, the government is mainly using subsidies for end-users as an instrument. There

are subsidies for electricity consumption, for connecting to electricity and for consumption of kerosene, LPG and diesel as fuels.

4.1.2 Guinea

Guinea has seen a growth in its electricity access rate from 12.5% in 1996 to 18% in 2009, with an access rate of 45% and 3% in urban and rural areas respectively. As in other countries, the gap in access to electricity is enormous between urban and rural areas and this hit the poor the hardest, as they mainly live in rural areas. Biomass fuels are still the main fuels used by households for cooking, lighting, heating, and ironing. In 2005, 0% of the rural population had access to clean modern fuels for cooking, compared to 1.6% of the urban population.

There is little information regarding access to mechanical power in Guinea. The national Poverty Reduction Strategy Paper 2002 shows the proportion of households with access to mechanized agricultural equipment is insignificant and only 10 per cent of households have animal traction tools.

The Government of Guinea targets an increase of the electricity access rate for its population to 65% by 2015, which means that the target for the rural population is 40%, and that for the urban population is 100% by 2015. In addition, the government aims at ensuring that 24.4% of the total population (20% rural and 30% urban population) will have access to modern cooking fuels by 2015. Access to improved cook stoves is targeted to increase to 75.6% nation-wide by the year 2015, 80% for the rural and 70% for the urban dwellers.

In view of the benefits that multi-functional platforms have brought to the region, the government has recognized this program as one of the solutions in its PRSP.

To guide the government's targets of increasing access to electricity, especially in rural areas, there is a need for better sectoral policy on decentralized rural electrification. In addition, the Guinean government subsidizes grid-connected electricity consumers, as well as the use of butane gas, kerosene and diesel, which are used both in households for cooking and lighting, but are also used for economic activities.

4.1.3 Liberia

Like most countries in the ECOWAS region, Liberia has a low electrification rate, with only 10% of the total population being connected to electricity, with rural populations representing only 2%. Rural electrification is mostly reached through self-generation using relatively expensive imported fuel.

The country also shows a heavy reliance on biomass fuels for cooking, heating and ironing. Less than 1% of the population has access to modern fuels. Data for access to motive power is not documented.

To increase energy access, the government expects to achieve the following goals by 2015:

- 40% of Liberian citizens living in rural and peri-urban areas and using traditional biomass for cooking shall have access to improved stoves and kerosene or efficient-gas cookers in order to reduce indoor pollution;
- 30% of the urban and peri-urban population shall have access to reliable modern energy services enabling them to meet their basic needs (lighting, cooking, communication, and small production-related activities);
- 15% of the rural population shall have access to reliable modern energy services toward meeting the same basic needs;
- 25% of the schools, clinics, and community centres in rural areas shall have access to modern energy services for lighting, refrigeration, information and communication, etc., and shall be equipped with productive energy capacity.

Liberia has a Renewable Energy Policy that has as its objective: to build and increase the application of renewable energy and energy efficiency technologies by promoting investment, technology transfer, market development, and local capacity building.

4.1.4 Sierra Leone

Sierra Leone has seen a growth in its national access to electricity from 10% in 2004 and to 15% in 2009. Only 0.1% of the country's rural population had access in 2007. Electricity is mostly accessible in the western part of the country, where the capital, Freetown, is situated.

Sierra Leone's energy use is characterized by the dominance of biomass fuels—firewood and charcoal in the domestic sector largely for cooking. In 2007, about 85% of the total population of the country used firewood for cooking, which equalled 99% of the rural population and 61% of the urban population. As for charcoal, it was estimated in 2007 that 13.8% of the national population used this fuel, with 37.1% of the population using charcoal in urban areas.

Access to modern cooking fuels is still very low in Sierra Leone with only 0.8% of the national population having access to modern fuels. In 2007 modern fuels accounted for 0.3% of cooking fuels in rural areas while it accounted for 1.7% in urban areas. The use of improved cooking stoves is minimal, as only 9.6% of the national population have access to these technologies, with 9.0% of the rural and 11.1% of the urban people use improved cooking stoves for use of biomass fuels.

The 2007 Statistical Report showed that 0.6% and 3.6% of households had access to milling machines and grinding services respectively. Rice mills/haulers and cassava graters/grinders were predominantly used in the areas were these crops are grown on a very large scale.

In its National Energy Policy, Sierra Leone has set the target to attain electricity access for 35% of its population by 2015. At present the government has no set targets for increased access to clean cooking fuels and technologies, nor does it have targets for access to motive power.

4.2 Gender and Development Overview in MRU Countries

Women in the MRU countries make up a little less than 50% of the total population in the region. In rural areas, women play a major role in the production, processing, and marketing of agricultural produce.[27] Agriculture remains the biggest employer in the West African region, with over 60% of the economically active population engaged in agriculture. In Liberia, rural women in agriculture-producing households are responsible for up to 76% of the cash crop production and 93% of food production. They also conduct 85% of all marketing and trading.[28] Women's share in wage employment in non-agricultural activities is much less substantial, with an average of 21.4% for the four MRU countries.

The West African region is further facing high maternal mortality and adult illiteracy rates. Women's illiteracy at an adult age is especially low, with an average illiteracy rate of 68.35% for adult women in the MRU countries. Recent years do show an increase however in the enrolment of girls at primary and secondary schools, though girls still lag behind boys' enrolment rates. Looking at women's participation in higher (third level) education, the average for the MRU countries lies at 30.45% of the total enrolment. Moreover, women's participation in national parliaments in the region is low. For the three countries that currently have a parliament in place, the average number of

[27] ECOWAS, Regional Agricultural Policy for West Africa: ECOWAP

[28] Honourable Julia Duncan-Cassell, Minister of Gender and Development of the Republic of Liberia, 2012. *The empowerment of rural women and their role in poverty and hunger eradication, development challenges and the way forward*. A presentation at the 56th session of the Commission on the Status of Women (CSW), 28 February 2012.

seats held by women is 11.5%. The table below gives an overview of some economic and social gender indicators per country.

Table 2: Overview of Economic and Social Gender Indicators per Country

	Year	Côte d'Ivoire	Guinea	Liberia	Sierra Leone
Economic Indicators					
Labour force participation, adult female pop. (%)	2010	51.5	65.2	57.8	66.4
Labour force participation, adult male pop. (%)	2010	81.3	78.3	64.0	68.9
Share of women in wage employment in non-agricultural sector	1990-2004	20.6	30.3	11.4	23.2
Women's share of tertiary enrolment in engineering, manufacturing, construction	200-2004	-	7	25	27
Social Indicators					
Sex ratio (males per 100 females)	2011	103.7	102.2	101.1	95.6
Life expectancy at birth (females and males, years)	2010-2011	57.7 / 55.3	56.4 / 53.2	58.6 / 56.4	48.9 / 47.5
Infant mortality rate (per 1000 live births)	2010-2011	68.8	84.2	76.9	103.5
Fertility rate, total (live births per woman)	2010-2011	4.2	5.0	5.0	4.7
Maternal mortality rate (maternal deaths per 100,000 live births)	2000	690	740	760	2000
Education: primary-secondary gross enrolment ratio (f/m per 100)	2005-2011	42.8 / 62.5	56.7 / 73.7	64.0 / 87.4	47.6 / 70.3
Education: female third level students (% of total)	2005-2011	33.3	24.4	35.3	28.8
Adult literacy rate (females and males, %)	2000-2004	38.6 / 60.8	18.1 / 42.6	45.7 / 58.3	24.2 / 46.7
Seats held by women in national parliaments (%)	2011	8.9	_	12.5	13.2

Women make up the majority of the workers in the informal sector, as the informal sector remains accessible to women with low education and skill requirements - overall about 70% of the working population is employed in the informal sector. In addition, working in the informal sector enables women to combine income-earning with their domestic responsibilities. An example from Sierra Leone shows that many women traders with young children already start meal preparation at their

work place so that they can immediately start cooking once home, which saves valuable time for undertaking other household activities.[29]

Women generally enter the informal sector with limited capital and are therefore unable to make large investments in their business. Access to finance is often restricted as women lack the required collateral for accessing bank loans and finance. Their higher levels of illiteracy, lower education and sometimes dependency on male members of the households they belong to (e.g. husband, father) are other factors that make it more difficult for women than for men to access finances.

4.3 National Policy Context on Gender and Energy

Following the endorsement of the White Paper in January 2006, national policy debates started about up-scaling and accelerating on-going national efforts for integrating energy access into MDG-based poverty reduction strategies. A number of countries in the region—including Côte d'Ivoire, Guinea and Sierra Leone—have integrated access to modern energy services into policy documents, such as their PRSP, national energy policy, or renewable energy policy. In these documents, clear policy target were set for access to electricity over a period of time. Most of these national policy documents do not include such targets for access to clean cooking fuels and stoves, or to mechanical power. No country has set a specific target for reducing the share of the population relying on biomass for cooking and heating, despite the White Paper policies of providing modern cooking facilities to 100% of the population, and reducing biomass as a source of energy by 20%.

The existing policies are based mainly on national projects/programs as well as subsidies to electricity, modern fuels and cooking technologies to increase access rate. In addition to national programs and subsidies, some countries have put in place other mechanisms such as dedicated funds for renewable energy technologies research and development or tax exemptions on imported renewable energy equipment, energy-efficient lighting bulbs and modern off-grid lighting products and financial support to private developers through rural electrification funds, as can also be seen the overview of the national energy sectors in Section 4.1 above.

With regards to gender, all 4 MRU countries have ratified the Convention on the Elimination of all forms of Discrimination against Women (CEDAW) in 1995, and all recognize gender equality and equity in their national strategies and policies. It is interesting to note that the region houses the first female head of State in Africa, Ellen Johnson-Sirleaf, President of Liberia. In Liberia a National Gender Policy was launched in 2009, which shows Liberia's commitment to an enhanced role for women and which aims at gender equality and equity. Since 1996, Guinea state policy regarding gender equality has been led by the Ministry for the Promotion of Women and Childhood, while in Sierra Leone the Ministry of Social Welfare, Gender and Children's Affairs is in charge of gender development. The 2011-15 five-year plan notes that promoting gender equality faces big obstacles, mainly weak institutions and coordination, inadequate application of national gender policy and the lack of a funded program to do so.[30]

Government initiatives to promote women's empowerment include Sierra Leone's program on Women and Economic Empowerment, which includes capacity building to enhance women's entrepreneurship skills, capacity building to provide financial credit to women and development of infrastructure to increase income through access to markets. To

Côte d'Ivoire Changes Law on Men as Heads of Households

In 2012, Côte d'Ivoire has removed a rule that places men at the head of the household. The old rule allowed a man to bar his wife from traveling, opening a bank account and having a job. In addition, it allowed married women pay as much as five times more income tax than married men, while only men received child support from the State.

[29] Educational Research Network for West and Central Africa, Education and women's employment: a study of their status and input in the informal sector in Sierra Leone, 2009.

[30] See http://www.africaneconomicoutlook.org/en/countries/west-africa/guinea/

engender micro-finance policies, the Ministry of Social Welfare Gender and Children's Affairs works with stakeholders to sensitize them on gender issues, and collaborates with micro-finance and credit institutions to support loan schemes for women and establish networks for women in small and medium business enterprises.

Among Liberia's efforts to increase opportunities for women within the nation's economy and to economically empower women, the Government of Liberia launched the MDG3 program, where about 12,000 rural women received farming implements, seeds, and agro-processing machines. The Government also started the Economic Empowerment of Adolescent Girls and Young Women Project, where 2,500 schoolgirls between the ages of 16-24 were recruited for business development and job skills training. Another program, implemented under the Ministry of Gender and Development, is the 'Building Women's Entrepreneurship Program,' under which a total of 300 women groups (representing 22,000 women) have benefited from economic empowerment and having their financial capacities strengthened. Another 25 women-groups that were trained in weaving are now earning an income from the sales of their products.

4.4 Overview of Actions on Gender and Energy, and Female Entrepreneurship

In all four MRU countries, interventions exist for strengthening women's entrepreneurship. Some focus on women's access to finance, like the BRAC Sierra Leone Microfinance Company Ltd, but also other microfinance institutions in Sierra Leone, as the table below shows. In Liberia, the government worked to improve the livelihoods of over 1000 women from around the country in the informal sector through the establishment of the Cross-Border Trade Association. The Joint Program on Gender Equality and Women Empowerment (JPGEWEE) increased women's access to financial services where at least 4700 rural businesswomen received macro loans for business expansion.

Table: Overview of Male and Female Access to Microfinance in Sierra Leone

Indicators	Liberty Finance	LEAP	BRAC	Aggregate
Counties Covered	Montserrado, Margibi, Bong, and Nimba	Montserrado, Margibi, Bong, Bomi, Lofa, and Nimba	Montserrado, Margibi, Bong, and Nimba	
# of Branches	6	6	10	22
# of Active Clients	8,096	19,500	4,690	32,286
# of Female	6,054	16,966	4,690	27,710
% of Female	75	87	100	85.8
# of Male	2,024	2,534	0	4558
% of Male	25	13	0	14.1
Loan Portfolio Out-standing	448,191	1,072,106	898,016	2,418,313
Average Loan Size	106	96	191	131
Portfolio At Risk> 30 Days	10.09%	4%	0	7.04

Source: Government of Liberia, The Liberian Strategy for Financial Inclusion (2009-2013), Central Bank of Liberia, June 2009

Attention has also been devoted to developing women's business skills, as was done in Liberia, where 355 rural women established 15 Village Savings Loans Association in 5 of the 15 counties. Part of this effort involved 975 rural women receiving basic literacy training, while 983 women from 17 markets completed training in business planning, saving, credit, record keeping and the use of calculators and personal finance.

National chapters of AWEP have been formed across Africa in more than 11 countries, including Côte d'Ivoire, Guinea and Liberia. All AWEP chapters share the same mission. They are dedicated to improving the business skills of their members, to helping other women in their countries start their own companies, and to lobbying their governments to improve national business climates for all women. In Sierra Leone, the Cherie Blair Foundation has similarly supported the recent launch of the Organization of Women's Network for Entrepreneurs (OWNERS) in March 2013. The Network will assist women entrepreneurs to organize themselves and improve their networking methods and become better connected; gain access to business and financial services; advocate for policies that will encourage women entrepreneurs; and support women as they grow their businesses and contribute positively to the Sierra Leonean economy.

4.5 Case Studies on Women's Economic Empowerment Through Energy Access

This section provides case studies that showcase initiatives, which are aimed at women's economic empowerment through energy access. Where data is available, the results and challenges will be shared.

4.5.1 Women Barefoot Solar Engineers – Sierra Leone

The Women Barefoot Solar Engineers of Africa aims to improve the lives of the rural poor living on less than $1 a day in remote, inaccessible villages off the energy grids in the 21 least developed countries in Africa, supplying their communities with clean, low-cost household lighting from solar energy.

Since 2005 more than 140 women from Africa, many of them grandmothers, almost all of them illiterate, have trained at the Barefoot College in India. In six months, these women learned how to fabricate, install and maintain solar-powered household lighting systems. For women who have not moved beyond the immediate surroundings of their own villages, it takes courage to leave their homes and families to go to India for 6 months. The many nationalities represented at the Barefoot College forces the women to express themselves through the universal languages of gestures and signs, and broken English.

The Barefoot College has adopted "learning by doing" for training. Practical demonstrations, hands-on experience and regular repetition help trainees get familiar with terms, tools, equipment and components used in solar technology. With each passing day, their level of hesitancy decreases and confidence and technical dexterity increases.

A group of 12 women from Sierra Leone were among those trained in India. The women are all illiterate or semi-literate and used to be subsistence farmers. They are now back in Sierra Leone and assembled 1,500 household solar units at a new Barefoot College in Konta Line village, Port Loko district, which was formally opened in August 2011. The Barefoot College in Sierra Leone is the first in Africa and can enrol up to 50 students in four-month residential courses in solar engineering. The Sierra Leone government has invested about $820,000 in the project. Though the college is funded by the government, the women hope they can run it independently in what they describe as the "barefoot way." The solar equipment the college runs on, and the equipment for 10 villages was provided by the Barefoot College in India; initial training was sponsored by the Indian government as part of its south-south cooperation program.

By getting the communities to pay every month for the use of the solar units (thus reaching the very poorest of the poor, who cannot afford to buy these systems even in instalments), financial security is provided to purchase replacement components and the pay the monthly salary of the woman solar engineer. This salary provides incentive for the woman solar engineer to work and look after the units regularly or she will not receive her monthly salary. Each household agrees to pay a fee between $5 to $10 a month for the solar lighting, roughly what was previously spent on kerosene, candles and flashlight batteries.

In Mali it was seen that after finishing the training program on July 7th, 2007, the Malian women went back to electrify their own village. Timjamban was the first village to be fully solar electrified in the Sahara and in West Africa. It took 7-10 days for the two women to provide solar electricity for the whole village. The difference solar electrification has made is that women can now cook at night in the open with solar lanterns. They can work on increasing their income by making handicrafts at home. Children can study at night. Women no longer have to walk for miles to the city and stand in queues to purchase kerosene at black market rates spending around 3000-4000 FCFA per month. Now they spent only 1000 FCFA per month.

4.5.2 Multifunctional Platform (MFP) – West Africa[31]

To respond to the energy-poverty challenge, the Government of Mali, with support from the UN Development Programme (UNDP) and the UN Industrial Development Organization (UNIDO), implemented the multi-functional platform project starting in the mid-1990s. The project seeks to reduce rural poverty in general, and that of rural women in particular, while creating income-generating opportunities through the provision of affordable energy services. The platform has a simple diesel engine that can power a variety of tools, generate electricity for lighting and refrigeration, or to pump water.

The MFP recognizes the traditional gender-based division of labour in which women perform the tasks of grinding, hulling, and collecting firewood and water, and requires that the platform be owned and managed by women's associations. Training is then provided in areas of literacy, bookkeeping, management and maintenance, which have resulted in women becoming energy entrepreneurs and selling energy to men. Once a platform with the selected equipment is installed and women's association members have gained the necessary knowledge and confidence to manage the platform, a market-based business approach is adopted. The women's association develops a business strategy for its MFP-based rural energy enterprise (pricing of services, etc.), with advice from project staff on an as-needed basis.

Access to platform services frees up both time and energy, reducing daily time spent on chores by 2 to 6 hours. In Guinea, a study indicated that rice de-hulling machines took twenty minutes for a task for which each woman previously needed half a day. Based on the current mean use of the multifunctional platform in Mali, the domestic time that can be freed with 450 platforms amounts to over 1 million hours of tedious work. Women are able to use the freed time for income-generating activities and young girls previously burdened with labour-intensive chores are able to attend primary school. In 350 Malian villages with platforms, women's average annual income has tripled from US$34 to US$101. Men benefit from the use of electricity for hand tools and the creation of jobs as operators and repair artisans. The re-allocation of women's time is visible to the community, allowing women to gain social as well as economic recognition for the work they do. In this way, the results from initial impact reports show the multiplatform machine contributes to increased skill development, economic empowerment, employment opportunities, food security, educational enrolment and literacy rates for women and their children.

[31]Sources: http://www.undp.org; https://energypedia.info/wiki/Mali:_Best_Practice_Case_Studies; UNDP, 2004. Reducing rural poverty through increased access to energy services: a review of the multifunctional platform project in Mali.

During the initial phase of the program, 149 units were in use within Mali. Due to overwhelming demand, the project expanded and there are now approximately 2,000 villages benefiting from the platforms throughout Benin, Burkina Faso, Ghana, Guinea, Niger, Senegal and Togo. Further expansion is underway in Gambia, Guinea Bissau, Madagascar, Sierra Leone, and Chad. While initial investment is required from local institutions or the donor community, almost all platforms were successful in operating on a cash-positive and self-sustaining basis.

A 2004 review of the multifunctional platforms in Mali showed that between 30 and 80% of women use the services provided by the platforms, while 100% of the households were willing to pay for safe drinking water services where a water network was installed. About 99% of the clients of the platforms were women, paying for milling, de-hulling and/or water services once or twice a day for household use.

A potential constraint recognized by this review was that women's associations do not generally have legal recognition, which could hamper their dealings with formal institutions, such as banks. Similarly, these associations generally lack the necessary collateral that banks will recognize. The case study shows it is possible for illiterate women to manage an energy enterprise, provided they receive training to obtain required skills.

4.5.3 Empowering Women Beer Brewers[32]

In Burkina Faso, the local beer, called "dolo," has been produced primarily by women for many generations. The beer is brewed using inefficient cook stoves and women consequently suffer from serious health problems, such as burns, back problems and respiratory issues. In addition, the inefficient stoves consume a lot of firewood, accounting for 50% of the total firewood consumption in the capital, Ouagadougou.

To improve this situation, the Ministry of Environment and Sustainable Development, in partnership with UNIDO and with funding from the Global Environment Fund (GEF), started promoting women's empowerment and clean technologies for the women beer brewers in June 2012. UNIDO is installing over 1,000 energy-efficient stoves in beer breweries in the Plateau-Central Region. The program will establish a credit line provided by a regional African Bank and implemented by a local financial institution. UNIDO also undertakes to develop clusters of beer brewers to generate collective gains and facilitate their integration into the local value chain.

The program aims at reaching women's empowerment through these expected results:

- Provision of technical assistance to 1,600 women beer brewers to improve the efficiency of their production;
- Improvements to the health and environmental conditions experienced by 1,600 women due to the installation of clean technologies and reduced exposure to burning wood fumes;
- A reduction in the levels of drudgery experienced by women and girls, and improvements to their personal security as a result of converting to energy-efficient cook stoves;
- The establishment of four new clusters of beer brewers in order to foster women's collective access to financial institutions, and business and knowledge gateways; and
- An increase in women's profits and incomes achieved by a 40-50% reduction in the amount of firewood consumed.

It is too early to provide results for this initiative, but the approach, the aim and the target group of this program provide an excellent example of what can be done in the field of women's economic empowerment through energy access.

[32] UNIDO Fact Sheet, Burkina Faso: Empowering Women Beer Brewers

4.5.3.1 Ndame Lo Women's Group Economic Empowerment – Senegal

In 1994, the Ndame Lo Women's Group was identified as a good candidate to take part in the UNIDO project "Integrating Women into Senegal's Economic Development." The group was set up in 1980 to boost income-generating activities for the women. Revenues from monthly subscriptions and initial membership fees go towards a revolving fund and savings held in a farm credit scheme, and contribute to community social amenities.

Within the UNIDO project, a semi-industrial plant for the solar drying of fruit and vegetables was established. The Senegalese-German Solar Power Project (PSAES) and the Food Technology Institute (ITA) provided technical support to enable the women to get the project up and running. The initial fruit and vegetable drying plant is powered by a variety of energy sources (gas, solar, electricity). In addition 3 gas dryers and a combined solar and electric dryer were installed to increase both the production and the quality of the produce.

The Niayes region, where the dryers are located, boasts considerable fruit and market gardening potential. Fruit such as mangos, papaya and bananas which once went to waste are now processed and sold on the domestic and international markets. A similar situation applies to the vegetables that are grown by the women. Through using the dryers, significant value is added to the crops. Several nationwide retail companies buy the produce for sale under their own labels. The women's produce can be found in hotels in the capital as well as in large retail chains such as Leader Price, Select Shell and a range of green grocers. The group takes part in many national food fairs to showcase their produce. They also export to various European countries including Switzerland.

Several training sessions have built the capacity of the women and improved their management skills and their overall abilities in operating the drying plant. They have developed their entrepreneurial capacity and made products that comply with international market standards. All of the women are now literate and have certificates to prove their abilities. They can now read work-related contracts, keep accounts, and take part in international trade fairs. Almost every woman in the village has joined the group and has thus been empowered. These are remarkable achievements for the women and the community.

The women noted the following:

- Increased income, both individually and collectively.
- Increased job creation and enterprise development in the community, such as the purchase of a mill and an electric de-husker for cereal processing. These are managed by two women, who are paid 1,000 CFA francs (€1.50) per day.
- Greater productivity to meet the demand for dried produce.
- New opportunities with the women's group, acquiring 10 hectares on which to grow fruit, and reducing the costs associated with sourcing raw materials.

Overall, the project has been successful in addressing women's needs and interests on several levels:

- **Practical needs**: the project has improved their living conditions and given the women greater access to modern energy services.
- **Productive needs**: it has led to high added-value income-generating activities.
- **Strategic interests**: it has increased women's participation in community decision-making and improved their (and their families') access to essential services by increasing communal funding capacity.

Despite the success of the project, the women have encountered some difficulties relating to product promotion. They sense a need for training in marketing, and access to a larger revolving fund with which to purchase raw materials.

4.6 Key Challenges for Women's Economic Empowerment Through Energy Access

Some achievements have been made in the MRU towards advancing women's economic empowerment, but key challenges remain.

- **Literacy**: Women in the MRU have low literacy and numeracy skills, and this hampers access to information and training.
- **Education**: Women have lower education levels than men, and low technical, business and leadership skills.
- **Capital**: Women have little money to invest, which is accompanied bydifficulty in accessing formal finance. To support the strong, viable women-led businesses, women "need access to the full range of credit, banking and financial services and facilities, essential to fully develop their productive assets, their land and their businesses."[33]
- **Business opportunities**: Women's businesses are often home-based because little capital is needed to operate from home and business activities can be combined with home duties. This limits women's opportunities for networking and gathering information.
- **Decision-making**: Women are generally not included in decision-making processes, from the local to the national levels and are poorly represented in national parliaments. It is important to educate and sensitize men and women about broadening gender roles to expand women's participation and leadership possibilities.

4.7 Conclusions

- At the national level, energy sector policies mainly prioritize access to electricity. Few give attention to cooking energy and motive power.
- Women are more disadvantaged than men, as noted in various regional policy papers (White Paper, EREP, EREE, etc.) and international treaties, and as can be seen from social and economic indicators: lower literacy rates; lower education levels; less participation in non-agriculture employment; involvement primarily in small, informal sector business; lower participation in parliaments and decision-making.
- Women have less autonomy and face barriers in many aspects of work, including social and cultural barriers and limited access to modern energy sources to more efficiently carry out tasks, and yet they also perform the majority of unpaid work and constitute a large part of the informal sector.
- More equitable access to energy will strengthen women's rights, increase productivity in the agriculture sector, and promote national economic growth.
- There are relevant initiatives at the country level, but these need scaling up to reach all women in the MRU. Information exchange between these initiatives is needed for learning and coordination of efforts.
- Gender policies are favourable to women's economic empowerment, gender equality and equity. Government actions in at least Sierra Leone and Liberia support women's economic empowerment, though there seems to be no action directly linking women's economic empowerment to energy access.
- The case studies show that women are able to move outside their traditional roles and spheres, and be successful at undertaking new challenges. With opportunities and improved skills and confidence levels, women are capable of managing, installing, operating and maintaining energy technologies.
- A prerequisite for women's success is that access to (formal) finance is made more accessible and loans are provided. Special attention should be paid to

[33] DAC Network on Gender Equality, *Women's Economic Empowerment, Issues Paper*, April 2011, 12

drawing on lessons learned to ensure access to the full range of financial services and providing supplementary services such as training and networking.

- Energy is one of the drivers of local and national development, including women's economic empowerment, which increases their social status and benefits their families, and women's empowerment and equity advances national socio-economic development.

5 Gaps, Recommendations, and the Way Forward

5.1 Gaps

- Though policy frameworks and basic institutional frameworks are in place that could support women's economic empowerment through energy access, there is currently very little attention devoted to this.
- Gender policies recognize the importance of women's economic empowerment, but make little or no connection to energy access.
- Energy policies pay little attention to women's needs and issues regarding energy. Cooking energy and biomass fuels for household use are generally not addressed in energy policies.
- There are some regional initiatives that have the potential to build women's entrepreneurship and hence their economic empowerment, but there is no coordinated effort to work with these initiatives from a women's economic empowerment and energy access perspective.
- There are gaps in women's skills due to their low socio-economic status, and this hinders women in building their enterprises.
- Traditional roles for women in their households and communities limit their mobility, inhibiting possibilities of breaking the cycle of poverty.
- Women lack access to formal finance because they lack the necessary collateral these formal financing institutions require from their clients. In addition, financing institutions are often unfamiliar with energy technologies, and are risk-averse when dealing with them, whether for user credit or credit for entrepreneurs.
- There is little attention and statistics regarding women's contributions to the informal sector.
- Women's voices are often not heard in policy making processes, which results in these policies not addressing the real issues women face in energy access and economic empowerment. Gender-specific perspectives are missing from policy-making and programming, at every stage, from design to implementation.

5.2 Recommendations

1. The MRU Secretariat offers an opportunity for housing, leading and implementing this initiative on women's economic empowerment through energy access.

- To address the current gap in coordinating efforts in the area of women's empowerment and energy access, the MRU Secretariat should establish a good working relationship with the pre-existing initiatives in the area, for exchange, learning and avoiding duplication of efforts.
- The MRU Secretariat needs to establish close ties with the Gender Ministries and the Energy Ministries to better streamline information and activities between institutions that do not generally have close linkages.
- It is recommended that there be one focal person within the MRU Secretariat responsible for this initiative to ensure its development, and the achievement of results and impacts.

2. The Gender Working Group established must support the MRU Secretariat in taking this initiative forward.

- The Working Group should be responsible for reviewing key strategic documents (such as annual plans, budgets, and progress reports), providing strategic advice to the MRU, and offering networking opportunities.
- The Working Group should be capable of giving advice to the Secretariat on both content and process.

3. The Secretariat should work with National Focal Points who can coordinate the initiative within countries, share information with the regional secretariat and other national focal points for learning and sharing, and collaborate on activities among countries.

- National Focal Points should be responsible, with the assistance of the MRU Secretariat and the Working Group, for developing national action plans through participatory stakeholder processes actively involving grassroots women and women entrepreneurs, as well as policy-makers within the Gender and Energy Ministries.

4. Development of national action plans for MRU countries on women's economic empowerment through energy access should comprehensively consider national context and develop context-specific solutions and actions. If economic empowerment for women through energy access is to be achieved, it is essential to look at the barriers women are facing and to actively address these in order to be successful. The case studies show that if women receive the necessary support, they can move outside traditional roles, trades, and spheres and become successful managers, operators, and installers of energy technologies.

- National action plans on women's economic empowerment through energy access should be integrated into the SE4ALL national action plans when these are being developed.
- Implementation of national action plans should be supported by funding from the ECOWAS Renewable Energy Facility (EREF).

5. It is essential to gain political commitment for this initiative, both at the regional and at national levels in the MRU, possibly with assistance from international initiatives like UNIDO and SE4ALL.

6. In order to effectively address the financing gap, formal financing institutions need to be educated on the importance of extending loans to women energy entrepreneurs or women users of energy technologies. In addition, the initiative should find creative ways of providing informal credit lines to women, like UNIDO has done in the beer brewers program.

5.3 Way Forward

This background paper provides a situational analysis and conclusions and recommendations, and delivers the baseline document upon which the MRU Action Plan was developed.

Through the Conference on Women's Economic Empowerment through Energy Access, the training workshop on gender and energy, and the development and adoption of an MRU Action Plan on this topic, the MRU is showing a clear commitment to this important issue and driver of sustainable development and security. Research illustrates the widespread effects of empowering women; women's empowerment reduces hunger, increases agricultural outputs and productivity, improves literacy rates and healthcare, and contributes to overall national development, economically, socially, and politically. Improving women's access to energy across the MRU through addressing women's specific energy needs and ensuring women are participating in decision-making will benefit families, communities, and the countries.

If this initiative is successful in setting up the right enabling environment and positive results for women's economic empowerment in the region through energy access, there is the potential of up-scaling this initiative to the entire ECOWAS region. Furthermore, this process is of interest not only

to the MRU, but also to the sponsors, UNIDO and SE4ALL, who may see potential for initiating a similar process in other regions of the developing world.

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