



Woman entrepreneur in Madagascar installing and operating small mini grids. Credit: U.S. EMBASSY MADAGASCAR

GENDER ANALYSIS& ACTION PLAN

Madagascar National Child Project under the GEF Africa Minigrids Program - AMP

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I. GENDER ANALYSIS

A. Introduction and Rationale

The gender analysis is key to integrate gender mainstreaming in the AMP Madagascar project. Adopting a gender-responsive approach is critical to achieving the overall objective of the project. It aims at supporting equal opportunities to participate in, contribute to, and benefit from project resources, activities and results for women, men, youth and people with disabilities.

It shall be the basis for the Gender Action Plan to provide concrete approaches to address gender inequalities and identify strategies to advance women's and other marginalized groups' participation and empowerment in the project. As each group is heterogeneous and their interactions differ at various levels, the gender analysis not only helps preventing a harshening of imbalances but also supports the reduction of the latter to contribute to a meaningful participation of women and other vulnerable social groups.

A number of factors demonstrate the importance of taking a gender-sensitive approach to energy access.

In many developing countries for example, including Madagascar (see below), women and men have different health sensitivities towards firewood usage, as well as the source of CO₂ exposure in the workplace and in daily life. Women and men often have different levels of access to participation, decision-making, information, education, or justice, and face different constraints in their efforts to improve their environment and living conditions. They may also play distinct roles and have different power in making decisions about energy, pollution prevention, waste management, natural disasters, and building safer environments for communities. Based on these potential differences and imbalances, and other important links between gender and energy, this report aims to assess potential gender gap during the lifetime of the AMP Madagascar project as well as and serve as the basis for the Gender Action Plan.

During project implementation with the support of the PMU and the national Gender expert (proposed in Component 4) an updated baseline and monitoring will be undertaken in Madagascar.

B. Methodology

The methodology used for the gender analysis is the framework provided in the ***Guide to Conducting a Participatory Gender Analysis and Developing a Gender Action Plan for projects supported by UNDP***

The gender assessment, herein, identifies:

1. National and local context around gender, including policies and strategies
2. Gender roles (women, men, youth, persons with disabilities and other vulnerable people) in terms of labor in general and energy in particular
3. Gender-specific access to and control over resources
4. Power and decision-making processes
5. Capacity needs, skills, knowledge levels depending on gender

The assessment will ensure the disaggregation and targeting of interventions towards addressing the needs of women, men, youth and persons with disabilities are included in the final project design, implementation plans and monitoring & evaluation plans.

The assessment is based on:

- I. Desk research of key literature (policies, national strategies, statistics, reports, articles and project documents)
- II. Meetings with key stakeholders (list of contact in annex)
- III. AMP Madagascar project result framework and project document (incl. theory of change)
- IV. UNDP's Gender Equality Strategy 2018-2021

C. Context

1. Overall Context

Madagascar is an island country with a population of 27.5 million in 2021 (estimated), mainly living in rural areas (60.8% of the population) with a balanced ratio of 100 men for 100 women in 2020 (estimates)¹.

59% of the population is under the age of 25, hence a high level of youth. The population growth per annum is 2.31% and among the highest worldwide (30th rank, with a fertility rate of 4 children per woman in 2020 vs. 7.2 back in 1971²).

The Malagasy society is patriarchal with about 20 different ethnic groups and their specific cultures.

Madagascar has a Gender Development Index, ratio of female for male HDI (Human Development Index) values (UNDP-GDI) value of 0.952, ranking it 164 out of 189 countries in the 2019 index³. The GDI measures gender gaps in human development achievements by accounting for disparities between women and men in three basic dimensions of human development—health, knowledge and living standards using the same component indicators as in the HDI.

- Poverty

About 75% of the population lives under the international poverty line of \$1.90⁴ in 2019, which is one of the highest in the world (3rd highest⁵). The poverty situation in rural areas is twice as bad on average than in rural areas according to World Bank⁶. According to a study of the National Statistics Institute in June 2020 indicates that 64% of the surveyed household have seen a significant decrease of their income due to COVID-19 and related lockdowns since March 2020.

- Education

School is compulsory for children between 6 and 14 in Madagascar. According to UNICEF only 1 child out of 3 completes primary school in Madagascar⁷. There is a close parity between boys and girls in terms of school enrollment at national level⁸. However, in the Southern part of the country, i.e., the project's intervention zone, there are only about 40 girls for 100 boys attending high school. After 15, girls often tend to drop from school and support the household. According to UNESCO, in 2018 adult literacy rate amounted to 74.8% whereby men

¹CIA Fact Book, viewed on 19 May 2021

²<https://knoema.com/search?query=Total+fertility+rate+madagascar&pageIndex=&scope=&term=&correct=&source=Header>, viewed on 19 May 2021

³<http://hdr.undp.org/en/countries/profiles/MDG>, viewed on 19 May 2021

⁴<https://www.worldbank.org/en/country/madagascar/overview>, viewed on 19 May 2021

⁵<https://worldpopulationreview.com/en/country-rankings/poverty-rate-by-country>, viewed on 19 May 2021

⁶ World Bank Group, 2016, *Shifting Fortunes and Enduring Poverty in Madagascar – Recent Findings*

⁷<https://www.unicef.org/madagascar/en/programme/education>, viewed on 19 May 2021

⁸ National Institute of Statistics of Madagascar – INSTAT, Ministry of Education 2015-2016 Study

reached 77.3% and women 72.4%. The gender gap is lower when considering adult literacy rate for young adults between 15 and 24.

It is common practice in households, especially in the Southern part of the country, that decisions around education of children are made by men for their sons and by women for their girls⁹. However, women remain in charge of ensuring that educational tasks are accomplished by their children (e.g., homework, etc.), as well as their food intake, a safe journey to and from school, etc.

- Family

About a fifth of households in Madagascar are headed by women (mainly widowed, divorced or separated)¹⁰. Particularly in the South, traditional customs tolerate polygamy, and a number of men leave their previous household(s) leaving their wives as family heads. Lately, some changes have brought about more gender equality, such as the minimum age of marriage for girls and boys set to 18 since 2007 (Law on Marriage and Matrimonial Regimes #2007-022) instead of 14 for girls and 17 for boys as was the case before 2007. However, in rural areas including in the South, early marriage remains a common practice. “Valifofo” prones the marriage of a very young girl to marry an older man whereby a gift of oxen or cash is offered to her parents¹¹. In the South, girls are considered a burden when they remain single. 40% of girls under 18 are married in the country, according to 2019 OECD statistics¹². While inheritance under the Law on Estate (Article 16, 1968), and without a written will, stipulates that the deceased assets should be split among its heirs regardless of their sex, customary practice tend to favor male heirs in most of the present ethnic groups and keep the estate in the hands of the given family.

- Health& Healthcare

Life expectancy is higher for women (68.7years) than for men (65.4 years). Maternal health has improved in the past 20 years but remains relatively high – 335 maternal deaths per 100,000 live births¹³. According to the SADC Gender Protocol Barometer, Madagascar is ranked 9 out of 16 SADC countries and part of the 7 countries over the 300 threshold (Lesotho being the highest at 544)¹⁴. 10 women die daily because of pregnancy or birth-related complications. Child death and under-five child mortality have improved more rapidly and lie at about 50 deaths per 1,000 live births. According to *Médecins Sans Frontières*, “46% of births are attended by qualified healthcare staff, 39% of births occur at a healthcare facility”¹⁵.

Access to health remains a hurdle, especially in rural areas and the South, where limited road infrastructure and remote locations are relatively common. Across Madagascar, 60% of the population lives more than 5 kilometers away from a healthcare facility¹⁶, which adds a financial hurdle related to transportation costs. Chronic malnutrition in Madagascar is a critical public health issue and affects almost 50% of children under the age of five – ranking the country at the tenth worst level worldwide. It cost almost 15% of Madagascar’s GDP according to World Food Programme (WFP)¹⁷.

- Gender-based violence

⁹Stakeholder consultations

¹⁰World Bank, 2014, *Face of Poverty in Madagascar. Poverty, Gender and Inequality Assessment*

¹¹Razafindrakoto, Gaby. 2016. *Gender Equity in Madagascar*, World Policy

¹²<https://www.genderindex.org/wp-content/uploads/files/datasheets/2019/MG.pdf>, viewed on 19 May 2021

¹³<https://www.usaid.gov/sites/default/files/documents/1860/USAID-Madagascar-MCH-English-Fact-Sheet.pdf>, viewed on 19 May 2021

¹⁴<https://genderlinks.org.za/wp-content/uploads/2020/08/Baro2020-ExecSummREV2.pdf>, viewed on 15 June 2021

¹⁵<https://www.medicinsdumonde.org/en/countries/africa/madagascar>, viewed on 19 May 2021

¹⁶<https://www.usaid.gov/madagascar/global-health>, viewed on 19 May 2021

¹⁷<https://www.wfp.org/countries/madagascar>, viewed on 19 May 2021

Over one-third of women have experienced domestic violence in their lifetimes¹⁸. Especially when women are not fulfilling their obligations according to traditions and social norms not considered Violence towards girls under the age of 15 (abuse, prostitution, sexual exploitation, early marriage) are often not considered as violence and hence not reported. Girls between 10 and 14 in rural areas and living in blended families are particularly affected by all sorts of violence¹⁹.

The COVID-19 pandemic and the lockdown led to an increase in gender-based violence in Madagascar due to a rise of poverty and economic dependency of many women in Madagascar²⁰.

- Persons with disabilities

According to data from the Ministry of Public Health²¹, 7.5% of the Malagasy population are considered to have a handicap in the country. Often, local customs consider the handicap as a curse, and people with disabilities tend to be hidden by their families. Combined with the high poverty level across the country and especially in rural areas, persons with disabilities have difficulty accessing education, healthcare, transportation, labor market, etc.

- Climate Change

25% of the Malagasy population lives in an area prone to natural disasters, according to WFP. Almost every year, Madagascar is affected by cyclones, floods, droughts and epidemics (mainly plagues such as bubonic plagues in rural areas)²². Subsequent issues on access to water for crops and humans have largely contributed to food insecurity especially in the Southern part of the country where 30 to 60% of the inhabitants are affected. The island is actually the most cyclone-affected country in Africa due to its location, and the global rise of air and sea temperature²³. Rising sea levels, coastal erosion and receding shorelines are also negative impacts of climate change in Madagascar.

While there are no real sex-disaggregated data related to climate-change in Madagascar yet, women tend to be more affected by climate change due to the traditional division of labor. Women tend to be more vulnerable to decreasing field yields (women are more often less diversifying their crops compared to men²⁴), jeopardized income generating activities, reduced access to water, increased health issues especially maternal health.



2. National policies and strategies, and regional & international conventions

In terms of policy and legal frameworks, Madagascar has made strides towards gender mainstreaming despite the latest multiple government turnover.

At international and regional level, Madagascar is signatory of all major global conventions and frameworks focusing on Gender Equality and Women's Empowerment (GEWE). Among them, and most importantly, there is the Convention on the Elimination of All Forms of Discrimination (CEDAW), which was signed in 2000 by Madagascar²⁵. CEDAW is informally thought of as an international "women's bill of rights": it is exclusively

¹⁸CEDAW Shadow Report on Madagascar, 2015, *The Madagascar Coalition of Civil Society Organizations*

¹⁹<https://banyanglobal.com/wp-content/uploads/2020/08/USAID-Madagascar-Gender-Analysis-for-the-2020-2025-CDCS.pdf>, viewed on 19 May 2021

²⁰Treated like furniture: Gender-based violence and COVID-19 response in Southern Africa, Amnesty International

²¹National Institute of Statistics and Demography (INSD)

²²UNOCHA

²³<https://www.arcgis.com/apps/MapJournal/index.html?appid=d80bf7a8bfca47cbb9a9bbf5f10edb21>, viewed on 19 May 2021

²⁴INSTAT Madagascar

²⁵UN Treaty Collection, CEDAW, <https://treaties.un.org/Pages/showDetails.aspx?objid=08000002800030b1&clang=en>

devoted to GEWE, legally binding, and thus a defining document in gender equality work. The CEDAW Convention's prime objective is the prohibition of all forms of discrimination against women.

Although not legally binding and as members of the UN General Assembly, Madagascar has also adopted the Beijing Declaration and Platform for Action in 1995. This Declaration is often seen as complementary to, and a strengthening of the CEDAW work. It recalls and embodies the same rights and principles as those enshrined in such instruments as the Universal Declaration of Human Rights. It includes women and energy in public investment programmes (Article 167), in knowledge sharing and equal access to sustainable and affordable energy technologies (Article 256).

At regional level, Madagascar has signed the Southern African Development Community Protocol on Gender and Development. It has also signed (but not ratified) the African Union Convention on Protocol to the African Charter on Human and People's Rights on the Rights of Women in Africa (Maputo Protocol) in 2004²⁶. The so-called Maputo Protocol was adopted by the African Union and went into effect in 2005. It guarantees comprehensive rights to women. These include rights in the area of energy. For instance, Article 18 states among other things that women shall have the right to live in a healthy and sustainable environment.

It has also adopted the African Union's Agenda 2063 acknowledging women and girls role in achieving the objectives set in the Agenda, as well as the Gender Policy and Strategy of the Indian Ocean Commission in 2016.

At national level, this is reflected by the creation of the Ministry of Population, Social Protection and Women's Promotion (Decree #2015-1 034 of 30 June 2015) and a dedicated department focusing on gender mainstreaming and women: General Department for Women Promotion (DGPF), as well as relevant policies, strategies and task forces.

A list of relevant policies and strategies at national level have been designed to supporting gender mainstreaming. However, the enforcement seems limited.

The main policies and strategies can be found below:

- Madagascar's Constitution of 2010 promoting gender equality in terms of rights, employment, political, economic and social spheres
- National Policy for Women Promotion (PNPF) adopted in 2000 and ended in 2015. A new Policy should be under development at the Ministry
- National Action Plan for Gender and Development (PANAGED) and Regional Action Plans for Gender and Development (PARGED) 2004-2008 but that is obsolete.
- 2014 Law #2014-040 on the Fight Against Human Trafficking covering topics such as forced work, domestic trafficking etc.
- 2017 Law #2016-038 on the Nationality Code whereby women can as men give the Malagasy nationality automatically to their children
- 2017-2021 National Strategy against Gender-Based Violence on prevention and response of gender-based violence but the enforcement so far was limited to a public awareness campaign on the national radio station
- 2019 Law punishing gender-based violence such as "physical, sexual, psychological and economic violence within the family [...] including traditional practices harmful to both sexes"

²⁶<https://www.mewc.org/index.php/countries/east-africa/madagascar> , viewed on 25 May 2021

There are neither a strategy nor an action plan on mainstreaming gender in energy in Madagascar. Some efforts have been made across Ministries, national agencies and donors, but with a limited impact mainly due to a lack of coordination, prioritization on gender aspects by national and local institutions, budget allocation and technical and institutional capacity:

- Gender focal points have been nominated in all ministries and benefited from targeted gender training by the DGPF²⁷. However, their action and outreach remain very limited especially in terms of impact on policies and strategies.
- Up to date/recent sex disaggregated data are very hard to get.

Despite all these efforts related to policies and programmes promoting gender equality in Madagascar, it is clear that discriminatory social norms and informal laws challenge their implementation and impact. Gender inequalities therefore persist, and national averages often mask strong regional disparities. Urban settings are generally more favorable to women's empowerment compared to rural areas. While some progress has been made, women and girls are still largely discriminated against when it comes to social, economic and political opportunities.

Effective gender mainstreaming at policy and regulatory level can be achieved through its proper institutionalization in Madagascar, based on the various interviews with stakeholders and best practices:

- Develop a National Gender Strategy and enforce relevant Action Plan
- Need for sex-disaggregated data, per sector (incl. energy), baseline and regular updates (in addition to project-level)
- Define clear roles & responsibilities on gender mainstreaming in institutions & projects
- Allocate sufficient dedicated resources (HR, finance, time)
- Build capacities on gender mainstreaming in the energy sector
- Centralize gender assessments and gender M&E of projects & programmes

D. Gender Roles

1. General Labor Aspect

According to Article 27 of the Malagasy Constitution of 2010, equal right to work and access to vocational training for any gender are granted. The Labor Code of 2004 stipulates that men and women at similar jobs, qualifications and work value, should get an equal pay. It also includes articles on the protection of pregnant women as well as the right of a paid 14-weeks maternity leave when in formal jobs. Night shifts in the industry sector are forbidden to women (Article 85), so are immoral and heavy loads tasks for women and children (Article 93)²⁸.

²⁷<https://evaw-global-database.unwomen.org/fr/countries/africa/madagascar/na/points-focaux-genres-au-niveau-de-chaque-ministere> , viewed on 25 May 2021

²⁸<https://www.ohchr.org/Documents/Issues/ESCR/RighttoWork/Madagascar.pdf> , viewed on 25 May 2021

However, in practice, traditional labor division prevails in Madagascar, and women are all in all disadvantaged in the labor market. Women are mostly employed in household-based, precarious and informal jobs, many of them in the household servicing, agricultural and food processing sectors²⁹. Unpaid and under paid work is rather common for women and youth, especially in rural areas. In average, women tend to earn 30% less than men³⁰. Some women, especially in remote areas in the South, have to ask for a man's permission to go to work or to undertake some individual labor tasks such as weaving or handicraft³¹.

A gap between national laws and their application leads to gender inequalities the labor context.

2. Labor division in rural areas



Labor

Gender category	Roles & Responsibilities, Key Findings
1. Women	<ul style="list-style-type: none"> 73% of active women in rural areas work in agriculture Women tend to be involved in production and sales of crops such as rice, cassava, sweet potatoes, corn, etc., sales of fishery and livestock products Jobs in rural areas remain rather gendered and agricultural activities covered by women are less valued and paid³². In average, women-led households tend to earn USD 195 out of agricultural activities vs. USD 343 for men-led households³³ per year. Access to land in practice is often limited for women or for only small parcels. 73.5% of women-led households are small holder farmers with parcels below 1.5 ha vs. 61% of men-led households³⁴. Women have also less access to equipment and mechanization in agriculture. Applying mostly traditional practices, artisanal technologies & basic processes. In coastal areas, women support fishermen with equipment repair, sales and fish processing Often, in rural areas in the South, when a woman wants to develop an income generating activity, the family head's approval is necessary. Women often work longer hours and with almost 4 hours of daily work that are not paid³⁵. In addition to their income generating activities, women are in charge of household chores as well as fetching water (up to 4h20 per day³⁶) and collecting firewood. 31.8% of managers in the formal sector are women³⁷. Female entrepreneurship is growing in Madagascar. 58% of businesses in the informal sector are led by women and mostly in sales and small trade activities. In

²⁹ Stakeholder consultations

³⁰ https://tbinternet.ohchr.org/Treaties/CEDAW/Shared%20Documents/MDG/INT_CEDAW_NGO_MDG_21897_E.pdf, viewed on 25 May 2021

³¹ Stakeholder Consultation

³² 2019, USAID, *Madagascar Gender Analysis*

³³ INSTAT, National Survey on Millennium Development Goals in Madagascar 2021-2013

³⁴ Id.

³⁵ <https://interactive.unwomen.org/multimedia/infographic/economicempowermentindianocean/en/madagascar.html>, viewed on 25 May 2021

³⁶ https://www.jica.go.jp/english/our_work/thematic_issues/gender/background/pdf/e04mad.pdf, viewed on 25 May 2021

³⁷ Id.

Gender category	Roles & Responsibilities, Key Findings
	<p>2019, 44.5% of women expressed their intention to launch their own business in the coming years³⁸</p> <ul style="list-style-type: none"> • Women are always in charge of cooking but their access to modern cooking equipment and fuel sources are highly dependent from their husband. In rural Women hence tend to use traditional 3 stones cookstoves with firewood. Firewood is collected by women in some rural areas and by men in other. Firewood is often cut or collected free of charge but is more and more time consuming due to growing distances as well as potential violence on the way. Indoor air pollution and related respiratory and ophthalmic diseases, as well as back pain due to carrying firewood are very common. About 40% of respiratory diseases in the island are imputable to cooking and 1,400 women die every year due to the consequences of chronic bronchitis related to firewood and charcoal usage³⁹. • Access to electricity has been improved through some solar and wind minigrids in remote villages at small-scale with positive impacts on women's empowerment, including through Barefoot College trainings and support for women to become solar power engineers. However, the risk of labor division status to remain unchanged and leading to women having to increase their heavy daily workload by longer hours for household, productive and reproductive tasks in the evening due to access to lighting⁴⁰. • In charge of the health and education of children. School fees are often paid by women but also by men
2. Men	<ul style="list-style-type: none"> • 77% of active men in rural areas work in agriculture • Mainly in charge of commercial agriculture. • Own the land most of the time and hence also better access to finance (collateral) • Along the coast, men are also involved in fishery where they spend most of the day and work for about 210 days a year⁴¹. • Men also work in more diversified activities including transportation, trade and administration⁴². • Men have household decision-making authority over spending which can create practical issues as women are in charge of health, education, hygiene, etc. in the household but no authority over spending.
3. Youth	<ul style="list-style-type: none"> • 68.2% of active youth is working in agriculture (vs. 24.4 in services and 7.4 in the industry sector) in 2018⁴³ • Literacy rate of young men and women between 15-24 are almost at par, respectively 65.4% for men and 64.8 for women⁴⁴ • 14.1% of young Malagasy never went to school, mainly due to economic reasons⁴⁵ • 500,000 young people enter the labor market every year but often end in the informal sector

³⁸2019, Girls Who Venture, *Madagascar Gender Lens Entrepreneurship and Investing Report*

³⁹<http://documents.worldbank.org/curated/en/882081468271813077/pdf/643080WP00FRENCH00Madagascar.pdf>, viewed on 25 May 2021

⁴⁰2019, AfDB, *Madagascar Gender Profile*

⁴¹https://www.jica.go.jp/english/our_work/thematic_issues/gender/background/pdf/e04mad.pdf, viewed on 25 May 2021

⁴²Id.

⁴³AfDB Data Portal

⁴⁴<https://www.youthpolicy.org/factsheets/country/madagascar/>, viewed on 26 May 2021

⁴⁵https://www.ilo.org/wcmsp5/groups/public/---ed_emp/documents/publication/wcms_429073.pdf, viewed on 26 May 2021

Gender category	Roles & Responsibilities, Key Findings
	<ul style="list-style-type: none"> • Unemployment last at least a year for young people (6 out of 10) • 2/3 of young employees are under-qualified • 75.4% of young workers are under-employed • Almost 50% of youth aged between 15-17 are working and not going to school anymore • Young women in rural areas are often taken out from school as teenagers to support the household or to be married⁴⁶ • Half of young workers are unpaid family helpers⁴⁷ • Most paid employment is precarious while 53.1% of the paid employment youth consider being satisfied with the working conditions⁴⁸ • 39.6% of youth consider that the training they received comply with their actual job • 48.4% perceive to have some gaps in terms of knowledge and know-how in their jobs • Entrepreneurship is highly perceived by young people in Madagascar. 31.2% of young entrepreneurs are working on their own.
4. Persons with disabilities	<ul style="list-style-type: none"> • 15.1% of the population have disabilities⁴⁹ • Less than 10% of children with disabilities are enrolled in school⁵⁰ • Social and economic discrimination is common and related to some beliefs and lack of education: witching, inherited, under the influence of a demon, etc. • While the Law # 97–044 stipulated that person with disabilities have the same rights as any other citizen (Article 1), the reality is different • Not much data available on the participation of persons with disabilities in agricultural value chains⁵¹

⁴⁶Id.

⁴⁷2013, INSAT & WTO, Survey on Youth Transition to Active Life (ETVA)

⁴⁸Id.

⁴⁹2011, Word Report on Handicap

⁵⁰<https://handicap-international.fr/fr/pays/madagascar>, viewed on 27 May 2021

⁵¹2019, USAID, Gender Analysis

3. Labor division in the energy sector

Inequalities are present at different levels in the energy sector:



a) At institutional level

Women are well represented in public institutions in the energy sector even though there is no specific policy to promote women's access to this sector in Madagascar. An upward trend in the recruitment of women has been noted in recent years due to the fact that universities are training more and more women technicians and engineers. Thus, the sector's institutions employ women in the different hierarchies of the ministry and its branches: from executive to decision-making positions. However, the number of women in the technical area is still low compared to men in the Ministry, while there are many women in the administrative and logistical area, working as secretaries, administrative assistants and hygienists, according to the Director of cooperation and partnership at the MEH.

b) At supply level

Women are highly involved as intermediary to distribute and sell firewood (as indicated above) and charcoal, but not as producers. Firewood represents up to 95% of energy sources for cooking in rural areas.

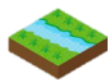
Regarding supply of electricity, men still remain the majority of energy services providers in the country (incl. Solar Home systems-SHS, minigrids, etc.). A few initiatives have fostered women and youth in the renewable energy (RE) business. [Barefoot College](#), an Indian NGO, building the capacities of middle-aged often illiterate women in villages in emerging countries to become solar engineers (so-called Solar Mamas) and install, build and repair solar power systems. A women-led company, [ANKA Madagascar](#), focuses on providing hybrid solar PV minigrids in rural areas, including productive use of energy.

Recent efforts are made and will be made to support capacity building of trainers and students in RE and energy efficiency (EE) in the country through universities and vocational training centers with the support of some technical and financial partners. A particular focus on gender is done with the GIZ's Promotion of Electrification through Renewable Energies Programme (PERER) project where women of the *Groupement des Femmes Entrepreneurs de Madagascar* (GFEM) benefit from training around RE and contribute to promoting women entrepreneurs to work in RE and EE and related business opportunities in the energy sector.

c) At demand level

In rural areas, women are exclusively in charge of cooking (including with some support of their daughters). Women mainly use energy for cooking purposes and especially firewood and charcoal which have negative impacts on their health. Access to electricity for their income generating revenues remain relatively rare, except for some women using some solar PV panels for part of their food processing/productive use activities. Men though are barely concerned with indoor air pollution and contribute a bit to the collection of firewood. Men tend to have more access to electricity for their income generating activities.

E. Gender-specific access to and control over resources



Land

Existing laws promote equal rights to land ownership between men and women, including in Article 34 of the 2010 Constitution on individual property right and on joint land registration in the 2005 New Land Policy. In the 2007 Law related to Marriage and Matrimonial Regimes, both spouses are allowed to own individual land ownership without interference and consent of the other spouse. However, in practice, discriminations against women in terms of land property, asset management and inheritance remain common in a patriarchal society. The Civil Code itself stipulates that women cannot inherit the land of their ancestors – if a woman is married she is at the 8th rank in terms of succession. In rural areas, including in the South, customary laws often prevail leading to secondary land rights for women. Depending on the area, ethnic group and cultural habits, land is either divided among male siblings, or gets one third in case of a divorce or death of her husband, or nothing at all.

In addition, the perception of injustice in access to land happens in areas where a caste system is put in place whereby some groups are not allowed to have any land property rights. Land insecurity is increasing even further especially when close to larger cities where the State grants some land to big national and international companies⁵² and investors, and land seizure and competition is growing.

The relative high costs of getting land registered especially for rural populations represents another hurdle.

The lack of land ownership hampers the access to bank loans as well as to extensive services and inputs and nurtures the level of dependence of women towards men.



Water, Sanitation, Health & Wellbeing

According to UNICEF's Multiple Indicators Cluster Survey in 2018, only 41% of the Malagasy population has access to drinkable water and the situation is even worse in the South oscillating between 11 and 29% depending on the region⁵³. Its particular arid climate with rare precipitations and dried rivers, combined with climate change impact are not helping. 4 people out of 5 drink contaminated water by *e.Coli* (i.e., fecal matter)⁵⁴. Half of the children on the island do not have access to clean water⁵⁵.

Issues related to water supply mean that women and girls spend many hours a day to collect water, at the expense of productive activities for women and education for girls. They are also responsible for the family members' hygiene and keeping the sanitation systems at home clean⁵⁶. This can represent up to 4h20 per day as stated above and security of water collection points and the way there are not guaranteed in rural settings. The impact on livelihood and health of women and girls is not negligible.

Quality of water, including physic, chemical and bacteriological compositions which are only conducted prior a community well's inauguration, stagnation and conservation, is highly questionable in rural areas. This

⁵²<http://www.fao.org/3/ak159e/ak159e26.pdf> , viewed on 28 May 2021

⁵³<https://refesimandidy.org/problematique-de-lacces-a-leau-potable-a-madagascar/> , viewed on 28 May 2021

⁵⁴<https://www.unicef.org/madagascar/media/2381/file/MICS6-Madagascar-2018-WASH.pdf> , viewed on 28 May 2021

⁵⁵<https://www.unicef.fr/article/unicef-ameliore-l-acces-l-eau-madagascar> , viewed on 28 May 2021

⁵⁶https://www.afdb.org/fileadmin/uploads/afdb/Documents/Project-and-Operations/Madagascar_-_Projet_d_alimentation_en_eau_potable_et_d_assainissement_en_milieu_rural_dans_le_grand_sud_-_Rapports_d%E2%80%99C3%A9valuation.pdf , viewed on 28 May 2021

encourages water-borne and vector-borne diseases such as cholera epidemics and diarrhea, and vulnerable populations are particularly affected.

Only 6% of the population has access to sanitation (4% in rural areas)⁵⁷. Often at household levels and in schools and rural workplace, latrines are not available, forcing women and girls to walk long distances to reach such facilities. This has an impact on their time, health, productivity and security.

Women often consume less water during the day to reduce the need to go outside at night, which makes them more sensitive to infectious disease (e.g., urinary tract infections and kidney problems).

Only 1 out of 4 people have access to a system to wash their hands with soap. Lack of handwashing and disinfecting measures after defecating and before caring for children or cooking increases both the spread and prevalence of diseases. Especially in COVID times, access to water and hand washing is more critical than ever before.

→ *The AMP project will support through the rollout of low-carbon minigrids, access to drinking water in the pilot sites as well as power health centers. Women (including female entrepreneurs) could play a crucial role here. Moreover, access to energy could, based on a needs assessment and combined to other initiatives, support sanitation and water treatment efforts in pilot sites.*



Finance

Financial inclusion is rather low at 29% in Madagascar based on the 2016 FinScope Consumer Survey Results. Only 3% of women in rural areas⁵⁸ have access to credit partly due to the limited number of branches of financial institutions and microfinance institutions (accessibility, weak profitability and high risk). Women entrepreneurs, who have limited collaterals as seen above, tend to have business activities with lower profitability impeding their ability to access credit. Offered financial products are not often suitable to women and youth needs, *inter alia* because of high interest rates (around 16% in commercial banks⁵⁹) and complex processes.

Even to access microfinance financial products, women tend to face some challenges. Women savings groups, “Ankadray” or “tontines”, are well developed and used across Madagascar and especially in rural areas, be it at community or cooperative/association levels. Even youth are using it more and more especially due to their lack of interest rates⁶⁰. In addition, trust in banks and financial institutions remain rather low on the Great Island. Village Savings and Loan Associations, based on the “tontines” principles but with some differences, are gaining ground in Madagascar.

Digital financial services are growing thanks to mobile money services offered by telecom operators combined with innovative financial products and services. From 2014 to 2017, the percent of adults that had a financial account or used mobile money services doubled from 9 to 18 %⁶¹. Digitalization and innovation seem to be appropriate levers to contribute to access to finance especially for women and youth. Such digital solutions need access to energy (charging phones and often also to Internet), which will be supported by the pilot projects

⁵⁷<https://www.unicef.org/madagascar/media/2381/file/MICS6-Madagascar-2018-WASH.pdf> , viewed on 28 May 2021

⁵⁸2019, AfDB Gender Profile

⁵⁹<https://lexpress.mg/09/03/2021/microfinance-un-segment-concurrent-pour-les-banques/> , viewed on 28 May 2021

⁶⁰<https://www.studiosifaka.org/articles/item/1047-ankadray-une-alternative-aux-prets-bancaires.html> , viewed on 28 May 2021

⁶¹<https://www.brookings.edu/blog/africa-in-focus/2018/08/15/figure-of-the-week-financial-inclusion-in-madagascar/> , viewed on 28 May 2021

within the AMP. Digitalization also creates jobs and at least additional income generating activities thanks to the sales agent network to ensure end-users have access to these digital financial services.

During stakeholder consultations, women indicated that access to finance for income generating activities in rural areas was also limited due to the lack of understanding of specific value chains (agriculture, energy, etc.) by financial institutions agents. For instance, the payback period does not reflect the duration of an agricultural campaign.

Insurance services are another important financial inclusion dimension that helps rural women to mitigate risk. Agricultural and livestock insurance is vital for rural inhabitants. A partnership between IFC and the GoM has been initiated in May 2021 to provide agricultural insurance to smallholders in Madagascar especially against floods, cyclones, droughts, etc. Natural disaster impact about 1% of Madagascar's GDP every year⁶².

Financial literacy on the benefits of finance and insurance products and services, including for productive activities in rural areas, remains a large barrier.

→ AMP envisages to contribute to offering financing schemes supporting minigrid investment and scale-up in Component 3. the Innovative model (holistic approach of solar service provision) for solar mini-grid development will be demonstrated and validated through the AMP pilot project (Output 3.1) and Domestic financial sector capacity-building on business and financing models for mini-grids will also be provided (Output 3.2)

F. Power and decision-making processes

1. Political arena

Women are underrepresented in politics and lack decision-making power: 1 out of 6 seats at the National Assembly, 1 out of 5 at the Senate, 1 out of 3 as Ministers, less than 1 out of 10 governors and 1 out of 20 mayors' positions⁶³. This situation is mainly related to persistent stereotypes for both men and women, and the fact that women are not often interested in public affairs and let men take care of that deliberately. In addition, women tend to have limited financial backing and networks, which are crucial to get elected in the country both at local and national levels.

The Ministry of Population, Social Protection and Women's Promotion is the Government entity responsible for gender equity and each ministry has a gender focal point (as indicated above). However, limited resources allocated to effectively support gender mainstreaming, including financial ones, hampers the expected impacts.

2. Energy field

At the level of institutions and authorities, women are present in decision-making positions. The electricity regulatory body is chaired by a woman, an engineer in the electricity sector.

Currently, various management positions at the Ministry of Energy and Hydrocarbons are held by women, such as the Directorate of Cooperation and Partnership and the Directorate of Energy Emergence. However, these positions may change in terms of leadership as they are politicized, as previously women held leadership positions in legal affairs and environmental issues.

Overall, women's access to these senior positions in the public sector remains relatively open. The number of young female technicians and engineers in the sector coming out of university is starting to grow and this is helping to give women a higher profile in the professional world.

⁶²<https://actu.orange.mg/ifc-et-le-gouvernement-de-madagascar-sassocient-pour-developper-des-solutions-dassurance-agricole-pour-les-petits-producteurs/>, viewed on 28 May 2021

⁶³<https://madagascar.un.org/fr/104238-etat-de-lieu-de-la-participation-des-femmes-madagascar>, viewed on 28 May 2021

There is limited publicly available information on women's representation and decision-making power in the energy sector on the private sector side.

49% of tertiary education students were women in Madagascar, which is a relatively high number in Sub-Saharan Africa⁶⁴. Female tertiary graduates in science represent 32.1% and 24.2% in engineering of the graduates compared to 51.9% in agriculture and 74.1% in health & welfare⁶⁵. Academics deplore the limited number of women in Science, Technology, Engineering, and Mathematics (STEM) and in particular in energy related topics (from electrician to RE engineer).

G. Knowledge levels depending on gender

1. Children's education

Madagascar's education system is marked by low completion rates (26% finish high school), low levels in reading and math, poor teacher quality (18% of primary school teachers have pedagogical qualifications) and high number of out-of-school children. The class repetition rate is high as 1 out of 5 children repeat their class each year.

While child labor is prohibited by law, in practice, almost half of the children between 5 and 17 are working especially in poorer rural households to support the family's livelihood⁶⁶. Early school drop-out are often related to child labor (especially for boys) and of early marriages and pregnancies for girls. Additional factors are the costs of studies, the distance and potential transportation costs to the school, and the quality of the facilities and the equipment.

Inappropriate WASH facilities at school especially for girls represent a supplementary hurdle for regular school attendance.

Children with disabilities are seldomly sent to school as facilities are not adapted and teachers tend to stick to classical teaching without adapting to some children's disabilities.

2. Skills and knowledge for adults

Access to training for women (and sometimes also for girls) can be complicated due to mobility issues and household chores.

Some initiatives and activities targeting women/youth and energy in Madagascar have been put in place but without concrete scale-up so far. As indicated above:

- Barefoot College, an Indian NGO, building the capacities of middle-aged often illiterate women in villages in emerging countries to become solar engineers (so called Solar Mamas) and install, build and repair solar power systems. While trainings occurred for a period of 6 months in India for 27 Malagasy women since 2012, a training center. A training center financed by WWF has been created in March 2019 in the south-eastern part of the Vakinankaratra region to train 12 women per session. Such training centers should be replicated across the country⁶⁷.

⁶⁴https://zh.unesco.org/sites/default/files/usr15_is_the_gender_gap_narrowing_in_science_and_engineering.pdf, viewed on 28. May 2021

⁶⁵Id.

⁶⁶UNICEF, INSTAT. 2018. Multiple Indicators Cluster Survey Madagascar – Travail des Enfants.

⁶⁷<https://www.afrik21.africa/en/madagascar-women-at-solar-school-from-march-2019-to-equip-households/>, viewed on 28 May 2021

- A particular focus on gender is done with the GIZ's PERER project where women of the *Groupeement des Femmes Entrepreneurs de Madagascar* (GFEM) benefit from training around RE and contribute to promoting women entrepreneurs to work in RE and EE and related business opportunities in the energy sector.
- Some vocational training centers and technical institutes (often as an additional specialization year) offer some curricula and certifications around renewable energies such as at the *Institut Supérieur de Technologie d'Antananarivo*.

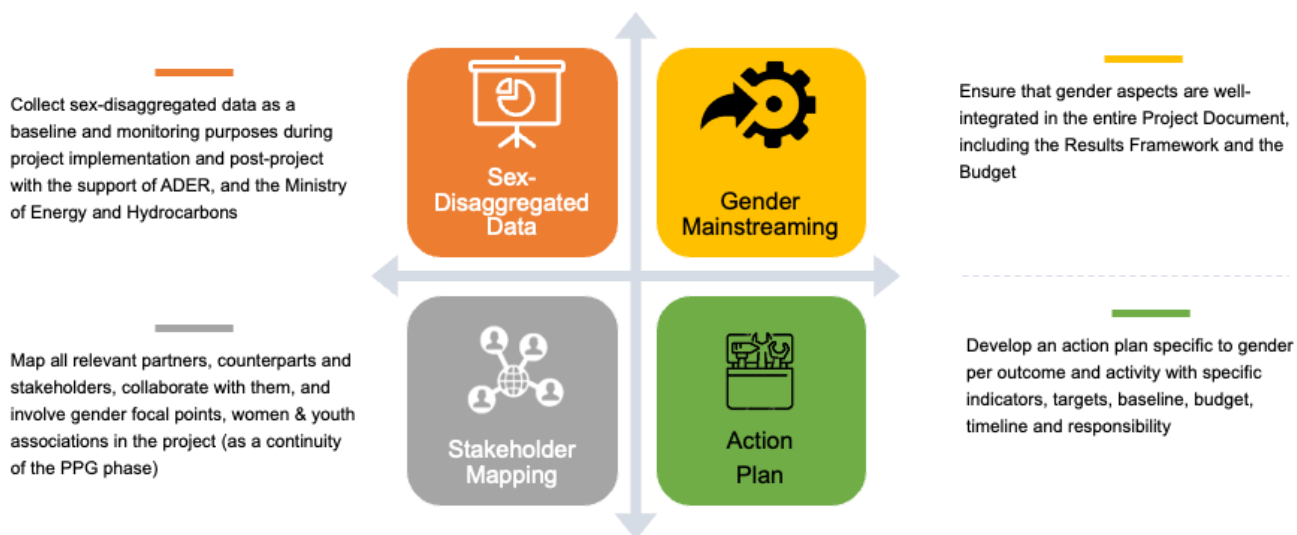
II. GENDER ACTION PLAN

A. Recommendations / Entry points

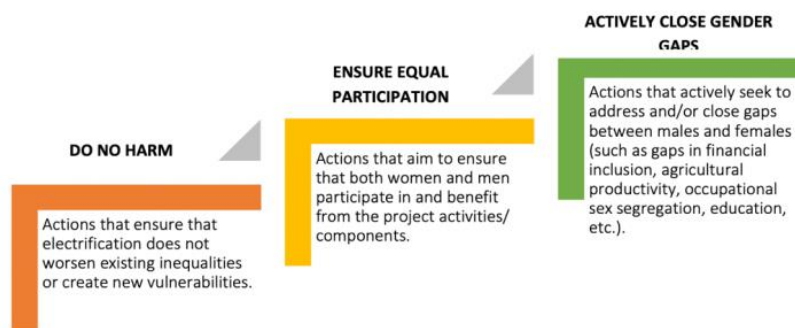
The Gender Analysis above provides a holistic understanding of how relationships between men and women, as well as youth and persons with disabilities, affect their ability to participate in and benefit from the opportunities and impacts offered by the AMP project

Based on the Gender Analysis above, the project's Theory of Change and its Results Framework, concrete tailored measures to mitigate identified challenges are drawn and reflected in a Gender Action Plan with targeted indicators. The Gender Action Plan (GAP) will be monitored and adapted if needed via corrective measures (Activity 4.6.2.). The GAP is key for the PMU to ensure that gender outputs and activities are well-integrated in the annual workplan and budget.

Various aspects need to be considered to ensure the successful integration of the gender aspect throughout the project, combined with the Social and Environmental aspect (see Annexes 9 and 10) and its effective impacts:



Three levels of gender actions are considered in the project⁶⁸:



In addition to the activities to be considered, gender-sensitive indicators are incorporated in the project's Results Framework including:

- Quantitative indicators: that can be counted (in absolute and relative terms);
- Qualitative indicators: that are evaluated based on experiences, perceptions, opinions, attitudes of the different gender and are collected thanks mainly to participatory approaches such as focus groups, social mapping tools, etc.

A preliminary list of indicators can be found in the table of Gender Action Plan below. Changes might occur at project inception phase and during implementation.

B. Proposed Gender Action Plan

The action plan considers the following main topics as critical for the success of the project and its gender mainstreaming impact:



*GEWE = Gender Equality and Women's Empowerment

The six topics from the figure above are integrated in the Gender Action Plan Table below.

⁶⁸ESMAP (2017), Minigrids & Gender Equality: Inclusive Design, Better Development Outcomes – Key Issues, and Potential Actions

Gender-related objective	Action	Indicators and targets	Responsible institution	Timeline	Budget (US \$)
Outcome 1: Stakeholder ownership in a national mini-grid delivery model is advanced, and policies and regulations facilitating co-investment in low-carbon off-grid electrification solutions are promoted.					
1. Include gender mainstreaming in regulatory and policy frameworks	Outputs 1.1– The streamlining efforts for minigrids clearly take gender into consideration. Specific paragraphs are dedicated to gender. Minigrid DREI techno-economic analyses assess the gender aspects and evaluates the related risks and relevant mitigation measures. Inter-ministerial coordination efforts encompass gender aspects.	<u>Indicators:</u> Number of relevant strategies and studies including clear gender considerations % of women members in the inter-ministerial coordination <u>Baseline:</u> n.a. <u>Target:</u> Gender aspects are assessed and integrated as specific paragraphs/chapter in all documents (regulatory framework, studies) At least 30% of the inter-ministerial coordination are women	ADER	Year 1	\$6,600 (4 weeks respectively for International and National Consultants working on the minigrid regulatory framework, training and workshop related activities encompass gender balanced representation)
Outcome 2: Innovative business models based on cost reduction and value addition, with strengthened private sector participation in low-carbon progressive, (comprehensive) integral mini-grid development is validated.					
2. Integrate gender in pilot project identification, selection and implementation	Outputs 2.3.: The criteria catalogue for eligible pilot projects includes ‘inclusive, gender-sensitive engagement’ as an eliminatory criterion. Productive uses targeted consider gender as key. Tracked KPIs encompass gender - related indicators.	<u>Indicators:</u> % of women and youth ⁶⁹ as part of the community of selected pilot sites % of households or MSMEs headed by women connected with electricity via the minigrid. <u>Baseline:</u> Pilot site communities have been selected, <i>inter alia</i> ,	ADER	Year 2	\$1,800 (2 weeks respectively for International and National Consultants working on the off-grid design and capacity building)

⁶⁹African Union, African Youth Charter – youth is between the age of 15 and 35

Gender-related objective	Action	Indicators and targets	Responsible institution	Timeline	Budget (US \$)
		because of their dynamic communities. <u>Target:</u> At least 50% of the community members connected at selected pilot sites are women and youth. At least 40% of households or MSMEs headed by women, are connected with electricity via the minigrid			
3. Empower women and youth through additional income generating activities and advocacy around minigrids	Outputs 2.3. and 2.4.: Build the capacities of and create decent jobs for women and youth to become rural electricians, money collectors, recyclers and other jobs related to the minigrid on pilot sites and further. A close collaboration with private sector minigrid developers/operators is key here. Some training will be undertaken by the latter.	<u>Indicators:</u> % of women and youth taking part in training programmes <u>% of women and youth trained who are employed in technical jobs in the minigrids</u> <u>Baseline:</u> Limited trainings on minigrids so far <u>Target:</u> At least 50% of people trained are women and youth At least 30% of women and youth trained are employed in technical jobs related to the minigrids	ADER	Year 2-3	\$4,000 (5 weeks for National Consultant facilitating capacity building, trainings encompass a gender-balanced participation, and promoting integration of trained women and youth in the minigrids with relevant stakeholders)
Outcome 3: Financial sector actors are aware of the investment potential of solar off-grid projects to incentivise scaled-up investment.					
4. Offer financing products & services targeted to gender	Output 3.1 and 3.2.: Capacity building efforts to develop and offer innovative financing solutions to support the scaling-up of minigrids in Madagascar should include gender aspects. Women and youth should be able to have specific conditions and solutions.	<u>Indicator:</u> % of women and youth engaged and trained in the domestic financial sector Submodule on gender aspects integrated in training for financial institutions <u>Baseline:</u> tbd	Financial institutions, Women and Youth associations	Year 2-4	\$4,400 2 weeks of international consultant on financial market analysis and financing mechanism development include gender considerations and mainstreaming, 4 weeks of national

Gender-related objective	Action	Indicators and targets	Responsible institution	Timeline	Budget (US \$)
	Capacities of financial institutions provided should include a sub-module on gender considerations and empowerment through access to finance.	<u>Target:</u> At least 20% of the financial institutions and other stakeholders (diaspora, etc.) engaged and trained are women and youth 1 Submodule on gender aspects integrated in training/workshops for financial institutions			consultant to support dedicated energy finance mechanisms taken gender into consideration as well as trainings, and gender-balanced participation at stakeholder consultation and capacity building workshops)
Outcome 4: Data and digitalization are encouraged across stakeholders into local mini-grid market development. Increased knowledge, awareness and network opportunities in the solar off grid market and among stakeholders, including local communities.					
5. Provide awareness raising and knowledge sharing	Outputs 4.3., 4.4. and 4.5.: Communities of Practice include women and youth. As such study visits, knowledge sharing efforts etc. are provided to targeted women and youth too. Lessons learned to be captured take gender aspects into consideration. Gender perspective included in the knowledge sharing materials. The data strategy and its action plan integrate gender.	<u>Indicator:</u> % of members of Communities of Practice are women and youth (national, regional) Digitalization Strategy and Insight Brief includes gender aspects <u>Baseline:</u> n.a. as not started yet <u>Target:</u> At least 20% of the members of Communities of Practice are women and youth Gender aspects are considered in the digitalization strategy and the Insight Brief	UNDP, AMP Regional Project, National implementer	Year 1 – 4	\$2,500 Share of efforts to include gender aspects into knowledge management provided by contract and professional services, as well as a gender-balanced representation at various types of planned workshops
6. Ensure monitoring and evaluation efforts are gender-sensitive	Outputs 4.2., 4.7., and 4.8.: Monitoring and evaluations will put a particular focus on gender related activities and indicators.	<u>Indicator:</u> <ul style="list-style-type: none"> % of women part of the project management unit and implementation support staff MTR and TE integrating gender-sensitive 	UNDP (Implementation partner)	Year 1-4	\$48,000 Share of the total costs for contractual services for individuals working at the PMU

Gender-related objective	Action	Indicators and targets	Responsible institution	Timeline	Budget (US \$)
		evaluation including disaggregating data on beneficiaries <u>Baseline:</u> n.a. including as pilot projects not identified yet <u>Target:</u> <ul style="list-style-type: none"> At least 20% of the PMU and implementation support staff are women MTR and TE integrate gender-sensitive evaluation including disaggregating data on beneficiaries 			
TOTAL					\$67,300

ANNEX 1

List of contacted stakeholders

- Mamisoa Rakotomanana, Secrétaire exécutif ADER
- RAMIANDRISOA Henri Dorissah, Coordonnateur de projet Angovo Voakajy du programme Mikajy/USAID, Maroantsetra, ancien responsable projet bois énergie de WWF à Toliara, natif de Toliara, appartenant au groupe ethnique Masikoro.
- Manjakalaza ANDRIANARIMANANA, Coordonnateur du projet APAA/ PNUD/MEDD du PNUD, Toliara
- Sandra RATSIAZO, consultante en Genre et Energie
- Léonie Ranarison, conseillère technique en formation, ancienne secrétaire exécutif Groupe de réflexion sur l'énergie