

# TOOLS FOR A GENDER RESPONSIVE TRANSITION TO THE GREEN ECONOMY: A STEP-BY-STEP METHODOLOGY TO INTEGRATING GENDER IN LONG-TERM LOW EMISSIONS DEVELOPMENT STRATEGIES (LT-LEDS) BASED IN THE CASE OF BURKINA FASO

This note presents a methodology to integrate gender in Long Term Low Emissions Development Strategies (LT-LEDS), developed by the Global Green Growth Institute and UN Women in the context of the formulation of Burkina Faso LT-LEDS in 2022. LT-LEDS are important policy instruments to define low emissions development paths for countries as part of their implementation of the Paris Agreement. LT-LEDS long-term outlook offers tremendous opportunities for leveraging socio-economic transformations associated to low carbon economic paths to achieve gender equality and women's empowerment. The methodology presented in this note can be applied in other countries or regions to help countries maximize gender co-benefits as part of LT-LEDS processes. The lessons drawn from the process of application of the methodology in Burkina Faso can help other countries in making progress towards gender-responsive, just, green transitions.

## 1. Introduction

Throughout 2022, the Government of Burkina Faso, with financial contributions from Agence Française de Développement (AFD) and technical support from the Global Green Growth Institute led the process of formulation of its Long-Term Low Emissions Development Strategy (LTLEDS), which in the context of Burkina Faso is titled *“Burkina Faso’s 2050 Vision for Low-Carbon and Climate -Resilience Development”*.<sup>1</sup>

LT-LEDS are key policy instruments that outline **“pathways that will help to envision the transition to low carbon economic development integrating the needed institutional, economic, technological and social changes, and the phases to achieve them”**.<sup>2</sup> As part of the Paris Agreement, countries are encouraged to produce a LT-LEDS to provide a roadmap for long-term decarbonization. Understanding a country's decarbonization options is particularly useful in the context of Nationally Determined Contributions (NDCs) since these trajectories can then be used as a benchmark for revised and

new NDCs. The LT-LEDS will typically follow the projections in line with the Intergovernmental Panel on Climate Change (IPCC) scenarios towards achieving the goals of the Paris Agreement, which will require net zero emissions by 2050.

For Least Developed Countries (LDCs) like Burkina Faso, whose contributions to the climate crisis is negligible but who is disproportionately impacted, the LT-LEDS provides guidance towards achieving sustainable development while highlighting the opportunities for stronger and more resilient, green economies through projections of socio-economic co-benefits of climate actions such as green employment, economic growth, and SDG alignment. To ensure that the LT-LEDS addresses the priorities, particularly in most climate vulnerable countries, the GGGI has developed methodologies to, alongside mitigation objectives, integrate the adaptation and resilience perspectives to ensure the priorities of the countries are addressed.<sup>3</sup>



The long-term planning horizon of an LT-LEDS provides an opportunity to consider interactions, synergies and trade-offs between different sectoral goals, mitigation and adaptation objectives and national development priorities, modelled in different scenarios. A LT-LEDS is based on the contrast between Business-as-Usual (BAU) and Low Emission (LE) scenarios with different levels of ambition to indicate which could be the goals that the Country can reach by mid-century. Burkina Faso's LT-LEDS identifies three net zero scenarios that provide a variety of decarbonization pathways for the economy:

- A. The **High ambition scenario** envisages high ambition starting from 2022, leading to CO<sup>2</sup> emissions reaching Net Zero around the year 2045 and remaining below zero after that, creating a net sink of around 7 Mt per year by 2050. The average annual number of green jobs generated in this scenario averages 192,190 between 2020 and 2050, which is 79,620 additional jobs per year compared to the BAU (on average) and the highest number of green jobs of the three net zero scenarios simulated.
- B. In the **Moderate ambition scenario**, ambition is phased as in the High ambition scenario, however with slightly lower levels of effort, achieving net zero emissions by 2047 and remaining below zero afterwards. The total number of green jobs averages 167,500 per year between 2020 and 2050, which is 54,930 jobs more relative to the BAU scenario.
- C. In the **Late action scenario**, ambitions are reduced and most ambition is implemented between 2030 and 2050. This scenario assumes increased ambition only after 2030 to allow the government to focus on socioeconomic development over the next decade before engaging in decarbonization efforts. On average, between 2020 and 2050, the number of green jobs in the Late-Action scenario is 141,260 per year, which is 28,690 jobs more (on average) compared to the BAU scenario.



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## 2. Why is it important to integrate gender in LT-LEDs?

LT-LEDs identify long term low emissions paths of economic development, and in so, they propose changes to the economic development model of a country. Such economic changes have social outcomes associated, some of them positive, and some of them negative. For example, some sectors/sub-sectors/activities of the economy will shrink, and others will expand with the subsequent employment gains and losses for workers in different areas of the economy. Such impacts are usually not distributed equally among men and women. It is therefore important to ensure broad participation and engagement of both men and women in the process of formulation of the strategy, and – further – to conduct gender differentiated analysis of the impacts of LT-LEDs implementation (also known as co-benefits) ensure that the transition to a low carbon and climate resilient economy is just, inclusive and gender responsive.

In the process to establish the LT-LEDs of Burkina Faso, the national stakeholders made the strategic decision to focus the gender analysis on the job creation potential (and risks) that the decarbonization efforts represent for women. Other gender related impacts are equally important - for example, the questions of access to resources, services, education, etc. in the decarbonized economies - but the scope of the exercise in Burkina Faso called to focus the analysis on impacts with the highest potential for maximizing co-benefits. In addition, existence of suitable statistical data is a condition for a meaningful gender analysis, and gender disaggregated data to capture non-employment related gender impacts was missing in Burkina Faso.

In relation to the sectors prioritized in the LT-LEDs in Burkina Faso, women's employment is particularly important in agriculture, forestry, waste management, energy and to some extent transport. Based on current employment levels, women are well-positioned to access green jobs in the renewable energy, waste, circular economy, and agriculture.

The gender analysis indicated that women can access opportunities in green jobs in:

- **sustainable farming**, breeding, sustainable forestry and ecotourism;
- **renewable energy**, working across the various stages of the renewable energy value chains (solar in particular) from construction of renewable energy infrastructure (photovoltaic solar power plants, thermal, hydroelectric, dams) to installation, production and distribution of solar panels, as well as providing technical advice in energy efficient projects including to address the issue of harmful traditional cooking practices;
- **waste management**, as waste pickers in the recycling and circular economy activities, workers constructing recycling units, and as entrepreneurs in composting-related business activities and the management and implementation of green infrastructure (recycling units), in the structuring and/or organization of waste collection, the use for the recovery of solid and liquid waste, the exploitation of carbon credit (through the use of biodigester), as well as jobs in organic farming through the use of compost produced from organic waste; and
- **sustainable transport**, both public and private, as bus drivers, as well as in taxi companies and jobs arising from the conversion to electric cars in the longer term.

### Towards a Just Transition: 3 Reasons to apply a gender lens in LT-LEDs formulation

- To avoid disproportionate impact (positive and negative) of the transition on a particular group.
- To ensure that all groups, and men and women within those, have access to the new opportunities generated in the green economy (green jobs)
- To leverage the transition for a more just society and for women and girls' empowerment by reducing gender gaps and ensuring that women leapfrog to decent, high-value added green jobs

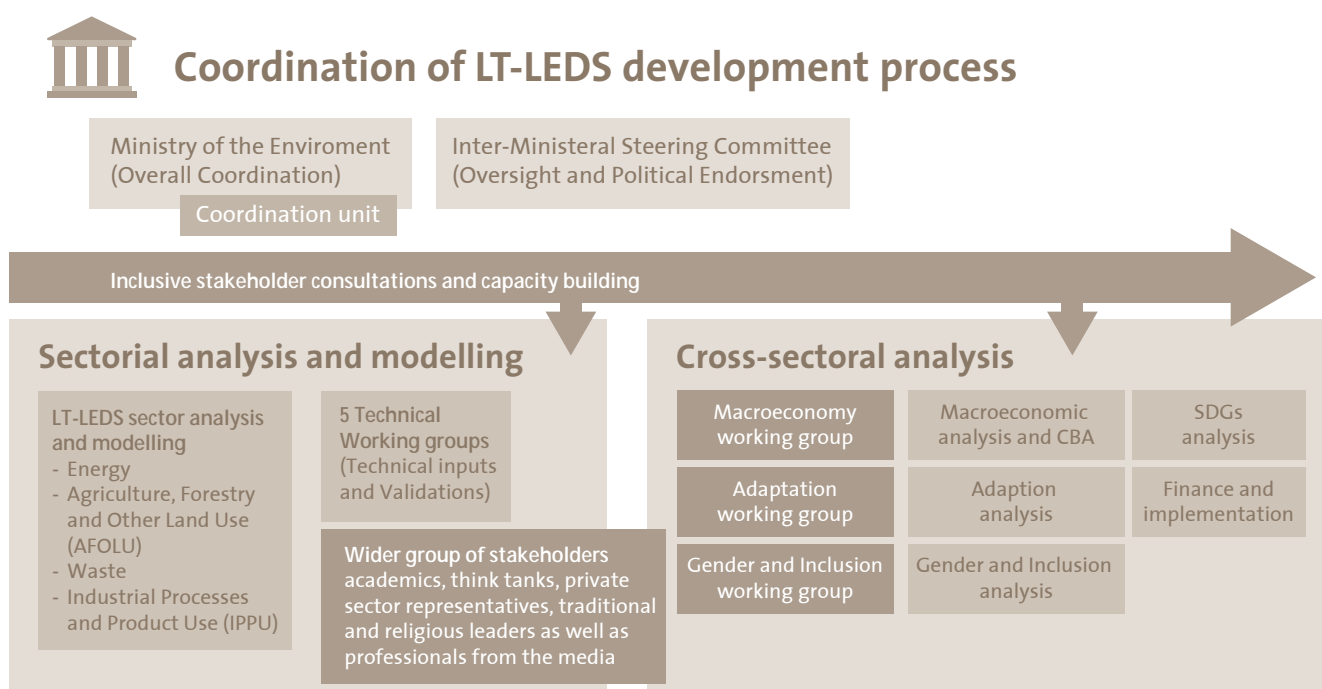
### 3. Integrating gender in the Burkina Faso LT- LEDS

As illustrated in Figure 1, the LT-LEDS process combines expert technical modeling and analysis, inter-ministerial engagements, dialogue, and capacity building to formulate the strategy. Leadership and oversight were executed by an Inter-Ministerial Steering Committee, while the Ministry of Environment, with support from GGGI, ensured the overall coordination. The process required participation from different sectors of government and civil society organized into sector specific and cross-cutting working groups that

met regularly throughout the process to provide inputs and validation of the strategy.

To strengthen the gender component of the LT-LEDS, GGGI collaborated with UN Women in this process, and a Gender and Inclusion Technical Working Group was set up to identify the entry points for gender in the strategy, provide inputs to the analysis and verify the recommended actions. The process to integrate gender into the strategy, can be broken down into a number of steps.

FIGURE 1 LT-LEDS PROCESS (GGGI, 2022)



**Step 1. Mapping of gender governance infrastructure and gender assessments.** GGGI had, prior to the LT-LEDS process, supported the government’s formulation of an updated NDC in 2021 when gender focal points were appointed in climate related ministries. The focal points were activated as part of a **Gender Technical Working Group** for the LT-LEDS which met twice through the LT-LEDS process. Sector specific rapid gender assessments were carried out for the NDC revisions, which along with a more in-depth assessment carried out for the National Adaptation Plan (NAP), were used for the situational analysis of the LT-LEDS. In other countries where

this type of gender assessment is not available, it would be advisable to conduct it early on in the LT-LEDS process.

**Step 2. Calculation of Employment Impacts.** Following the definition and modeling of low emission scenarios, analytical work is conducted to determine the employment impacts associated with the low emission scenarios. This part of the process is highly dependent on employment data availability. For Burkina Faso, the ambitions envisaged for the decarbonization scenario **generate additional jobs** relative to the **Business as Usual (BAU) scenario**, through increased



growth and the use of green technologies as well as land-based interventions. In the moderate climate ambition scenario, total employment in the country is projected to increase by 2% by 2050 compared to BAU. The total number of green jobs would then average 167,500 per year between 2020 and 2050, which is 54,930 green jobs more relative to the BAU scenario.

While the Green Economy Model (GEM) was able to calculate the aggregated employment impact associated with the low emissions scenarios, lack of sex-disaggregated data at the sub-sector and position level precluded further disaggregation onto the number of jobs to be generated for men and women.

### Box 1: Women's Obstacles to Access Green Jobs in Burkina Faso

During the workshop, participants identified the following barriers for women's to access green jobs opportunities: women's **lack of technical skills** in male-dominated sectors (such as transport and energy), extensive **informality** in the agriculture, forestry and waste management sectors, difficult working conditions, **poor work-life balance** and increased **unpaid household and care work**, affecting women's participation across all sectors of the green economy. Entrepreneurship was identified as a short-term strategy to accelerate women's participation in the green economy but key barriers for women-led businesses included limited **access to finance** which was identified as an impediment to women's aspirations for setting up and running renewable energy, waste management and agriculture/forestry micro-enterprises, especially in areas that require capital investments upfront. Participants also identified the **security** situation as further compounding these challenges as it impacts women's mobility and personal safety.

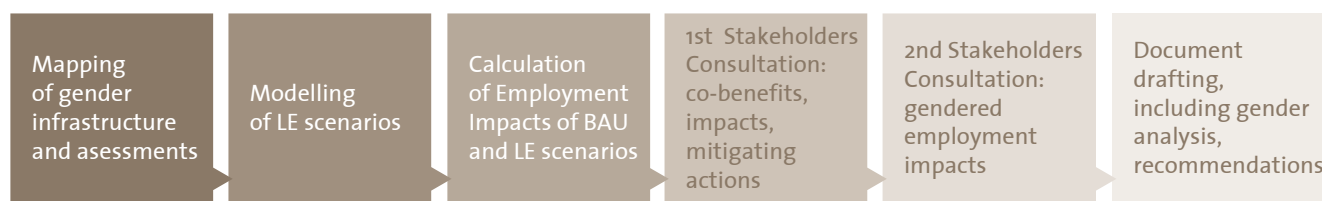
**Step 3. Analysis of gender impacts.** In order to shed some light into the potential distribution of LT-LEDS impacts across gender lines, qualitative analysis was conducted to complement the quantitative assessment provided by the GEM. As part of this process, the **gender technical working group** met in two workshops in 2022: the first one with the objective of **identifying overall gender co-benefits**, negative impacts and mitigating actions associated with the strategy. The second workshop, focused on analysis of employment impacts through an **in-depth discussion** on challenges and opportunities for **women to access green jobs in the specific sectors/activities** associated with the low emissions scenarios. Annex I and II to this note include examples of tools that were developed to conduct the gender analysis during the two workshops.

**Step 4. Drafting of the document.** The results of the workshops informed the drafting of the strategy. The document integrated gender analysis in its fourth section on the vision and its operationalization (see box 2 for examples). Most importantly, the strategy includes a recommendation to establish a national **Program on Green Jobs for Women and Youth**. The LT-LEDS document also refers to the need to establish a robust monitoring and evaluation framework that enables the gender specific monitoring of impacts. In addition, the document calls for the establishment of a gender responsive climate budget to finance gender related actions during the implementation of the strategy.

### Box 2: Strait from LT-LEDS

The implementation of Vision 2050 will be accompanied by the design of a **gender-responsive climate budget**, under the aegis of the Ministry of Finance, which will support the setting of objectives and the achievement of inclusive results, including the proposed **program for women and youth in green jobs**. In line with the requirement for national plans to **use gender-disaggregated data and information in annual plans and reports**, Vision 2050 will be implemented with **gender-disaggregated targets and indicators**, in line with monitoring frameworks and evaluation of the NDC and the NAP. Improving the availability of sex-disaggregated data at the sector level will progressively strengthen inclusive results management, measurement and reporting.

**FIGURE 2: STEP-BY-STEP TO INTEGRATE GENDER INTO THE STRATEGY**



## 4. A Step-by-Step Guide to integrate gender in the formulation of LT-LEDS.

Based on the example of Burkina Faso, the table below presents a methodology developed by UN Women and GGGI to integrate gender in LT-LEDS:

Phase	Gender entry points/actions	Resources available and data needs	Applied in Burkina Faso
Modelling of Scenarios using the Green Economy Model		Gender analysis conducted for NDCs or NAPs	✓
Prioritizing scenarios/actions within scenarios	Including representatives from women organizations in the validation group	NA	✓
<b>Calculation of co-benefits:</b>			
Calculation of employment impacts associated with selected scenarios	Quantitative analysis: calculate distribution of jobs for men and women	Sex disaggregated employment information for selected sectors, sub-sectors, and positions	
	Qualitative analysis: identification of challenges and opportunities for women to access green jobs in LE scenarios	Examples of tools to gather this information can be found in Annex II	✓
Calculation of positive and negative impacts beyond employment, associated with the LTLEDS scenarios	Identification of potential employment and other (income, time poverty, health, etc.) positive and negative impacts on men and women, associated with the LE scenarios	Examples of tools to gather this information can be found in annex I	✓
Drafting	Integrating gender throughout the strategy including in the diagnostic, recommendations, M&E and governance sections	Examples of text in existing LT-LEDS such as Burkina Faso or Ethiopia	✓
Validation of the Strategy (throughout the process and final validation)	Including representatives from women organizations in the validation process		✓

## 5. Lessons Learned & Way Forward

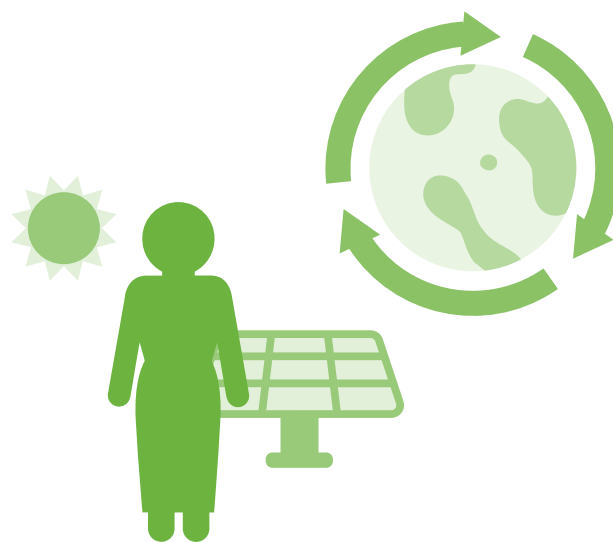
**Embedding gender into the LT-LEDS formulation process must happen at the outset of the LT-LED planning.** In Burkina Faso the early identification of the ministries' gender focal points ensured their engagement in the process in a technical working group for gender and social inclusion.

**Sex-disaggregated data collection to feed the Green Economy Model (GEM).** The experience in Burkina Faso has shown the limitations that the lack of sex-disaggregated data at sector, sub-sector and occupation level, poses for the GEM model to integrate gender analysis. Overall, sex disaggregated data at that level is missing in many countries in sub-Saharan Africa. However, this data is essential to assess the 'gender impact of the green transition' in the region. As data become available in the future, in addition to specific employment outcomes, macro-economic impacts in terms of contribution to GDP, income gap, gender employment gap, and other variables associated with the different scenarios could be calculated to maximize co-benefits of LT-LEDS and contribute to gender responsive, inclusive green transition paths.

**Research on gender specific obstacles to women's participation in the labor force to complement the GEM model assumptions.** The GEM model assumes that, whatever the labor force needs are in the future under a low emissions path, there will be enough and adequate labor supply to meet those needs. However, the reality is that the female labor force is not fully flexible as social constraints limit the automatic participation of women in the labor force. These constraints vary with context and therefore, country specific research on key constraints for women's participation in the labor force (informality, lack of access to assets and information, burden of unpaid care work, limited work-life balance policies in certain sectors, gender-based violence and other barriers of entry to male dominated areas of green jobs) is essential. LT-LEDS can acknowledge these and include specific measures to address these key obstacles in the medium term, with a view to improving the conditions for women's participation in the green labor market in the future.

**In the case of Burkina Faso,** UN Women is conducting additional research on opportunities and obstacles for women entrepreneurs to access green jobs. Specifically, the research will help identify and understand the drivers as well as barriers that women-led businesses find to access green entrepreneurship and green enterprises, particularly in high-value added sectors of the green economy and/or leveraging innovation and technology.

**Replicability.** The methodology presented in this note to identify and enhance gender co-benefits in LT-LEDS, piloted in Burkina Faso, can be applied to LT-LEDS processes in other countries and regions. The methodology can also be tailored and used to mainstream a strong gender perspective into regional and continental green transition processes and frameworks. To the extent that the data are available, an enhanced version of it, generating gender distribution of employment impacts via the GEM model can be undertaken. If data are not available like in the case of Burkina Faso, qualitative analysis (adapting the tools presented in this note) and complementary adhoc studies (e.g. on structural obstacles for women's participation in green jobs) can provide the necessary information to integrate gender in the LT-LEDS.



## Annex I. Tool to identify gender co-benefits in LT-LEDS processes

### Tool for sector discussions on risks and opportunities for social and gender inclusion in the transition to low carbon development

**Sector:** Waste

**Objective:** To capture gender and social inclusion implications of low carbon options – to ensure policies adopted are fair and inclusive.

**Steps:** Please select, with the group, the low carbon options that seem to have the most impact on this theme of

inclusion. Then discuss, per option selected, how women or marginalized groups may be negatively impacted by the implementation of that option; or who could be excluded from the benefits generated by the implementation of this option (risks); finally, how women and marginalized groups could benefit from this option, and how these benefits for these groups could be maximized.

#### 1. Social risk management and mitigation

##### Option / Low carbon action 1: Recovery and recycling of solid waste

• **Who might be negatively affected by low-emission options?**

- Women's exposure to the risk of disease when conducting sorting activities given the low level of protection (health);
- Risk of excluding women and young people, leading to potential job losses.

• **What actions are needed to offset any negative impact on people and groups associated with the proposed options?**

- Support the organization of women in EIGs and provide entrepreneurial skills capacity-building to enhance their readiness in accessing opportunities in the sector;
- Strengthen the capacities of groups of women and young people working in the informal waste recovery and recycling sector to help mitigate health risks;
- Protect property rights of innovators in waste recycling.

##### Option / Low Carbon Action 2 : Composting organic waste and faecal sludge

• **Who might be negatively affected by low-emission options?**

- Women's exclusion from the benefits of biodigesters (gas and compost);
- Exclusion of access to biodigester technology, for example for land reasons and other bottlenecks (low live-stock capital and information);
- Risk of job loss for women who practiced small-scale composting;
- Risk of confrontation with the lobby of chemical fertilizer producers; the latter being able to destabilize the compost market by lobbying the Government.

• **What actions are needed to offset any negative impact on people and groups associated with the proposed options?**

- Improve legislation to protect small compost producers;
- Encourage small composting units;
- Ensure women's access to biodigester technology and its benefits.

##### Option / Low Carbon Action 3 : WWTP methane management

d. **Who might be negatively affected by low-emission options?**

- Risk of exclusion of women and vulnerable groups from the benefits of this measure.
- Guarantee access to benefits for all.



## 2. Maximization of social co-benefits and inclusion

### Option / Low Carbon Action 1 : Recovery and recycling of solid waste

#### a. Who is positively affected by low emissions actions?

- Disadvantaged women and young people;
- Buyers and exporters of recyclable waste;
- Artisans (small recyclers);
- Industrial;
- MSW management services (lower costs due to lower quantities of waste to be treated).

#### b. What specific actions could maximize social benefits for women, youth, and poor and marginalized groups?

- Enhance women's involvement in governance;
- Improve legislation to protect small operators in green trades;
- Strengthen access and facilitate the exercise of women in green and high-tech trades by strengthening their capacities;
- Promote female role models in the professions;
- Increase access to information by women and vulnerable groups.

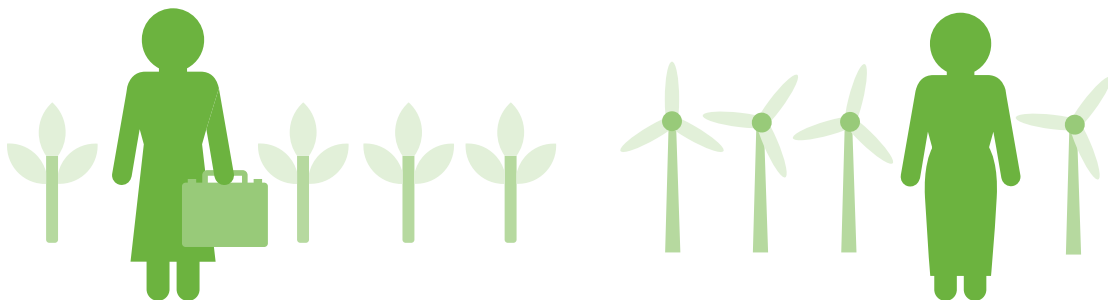
### Option / Low Carbon Action 2 : Composting of organic waste and faecal sludge

#### a. Who is positively affected by low emissions actions?

- Economic interest group of mostly disadvantaged women and young people;
- Farmers (offer cheap fertilizers);
- Households (clean energy supply);
- MSW management services and faecal sludge treatment stations (lower costs due to lower quantities of MSW and sludge to be treated);
- State (lower energy bill and chemical fertilizer subsidy).

#### b. What specific actions could maximize social benefits for women, youth, and poor and marginalized groups?

- Involve women more in governance;
- Strengthen access and facilitate the exercise of women in green and high-tech trades by strengthening their capacities;
- Promote female role models in the professions;
- Increase access to information by women and vulnerable groups.



## Annex II. Tool to identify challenges and opportunities for women's participation in green jobs

### Exercise to discuss gender impacts of LT-LEDS scenarios: Example from the energy sector

#### Introduction to the topic:

- Presentation of the LE scenarios;
- Introduction to challenges and opportunities for women to access green jobs in Africa. See UN Women-AfDB<sup>4</sup> report for reference.

#### Work in groups by sector experts: including gender focal points, other sector specialists TBD (40 min)

- Identify employment opportunities for women associated with the list of low-emission options identified by the low-carbon development strategy in the energy sector in Burkina Faso by completing the matrix below. Please add new opportunities to the list\*

Opportunities for women's employment in the energy sector	Waged workers	Women-led business, cooperatives, informal AGR
e.g. Solar energy engineers	X	
e.g. Solar panel installation		X
e.g. Construction of hydropower plant	X	
e.g. energy efficiency consultants		

- Identify and rank the barriers and obstacles that women face in accessing and remaining in the green jobs identified in point 1 of this exercise by completing the matrix below. You can add other barriers that are not listed.\*

Examples of obstacles to women's access and retention in green energy jobs in Burkina Faso	To what extent is it a problem for women to access or remain in a green job? Low/Moderate/High
1. Not enough female engineers	
2. Social norms do not encourage women to study engineering	
3. Difficult working conditions and poor work-life balance in engineering jobs	
4. High capital needed to start a solar panel installation business	
5. Absence of training programs for women and young women in the maintenance of solar panels	
6. The security situation makes the role of women in business difficult	
7. Women's burden of domestic work and unpaid care of family members makes it difficult for them to accept engineering jobs	
8. Absence of women in renewable energy jobs who can serve as role models for young women	
9. Legal barriers preventing women from doing certain jobs or starting and running businesses on the same terms as men	
10. Insufficient childcare facilities and solutions in urban and rural areas	

- Identify measures to address such barriers that rank them by importance and feasibility (a template will be provided with a list of examples of measures and blank cells for them to add other measures which they consider important)

	Importance/impact Low/Medium/High	Feasibility Low/Medium/High (if low add main reason)
e.g Skills building of women groups to become solar panel agents		
Programs to support girls' participation in STEM (Science, Technology, Engineering, Mathematics) and technical subjects in higher education		
Subsidies and Soft Loans for Women-Led Businesses in Renewable Energy		
Training, preferential access and other measures to improve access of women-led businesses to green finance		
Green line of credit in commercial banks for women-led businesses		
Programs to support the formalization of women-led businesses (to act as specialized renewable energy agents, distributors, etc.)		
Tax breaks and other economic incentives to support women-led renewable energy businesses		
Strengthening anti-harassment legislation and promoting equal opportunities and work-life balance in the private sector to increase the number of women employed as engineers		
Promoting training, mentorship and networks of women in green jobs where there are not many women - green construction, energy, etc.		
Improving the supply of childcare services in rural and urban areas		

- List existing public and private initiatives that can be leveraged in BF to support women's participation in green jobs in the energy sector\*

Name of initiative/program/policy	Brief description of actions/impacts

**Plenary discussion** and presentation (10 min per working group)

**Conclusions** and wrap up (10 min)

*\*the focus can be at the sectoral, sub-sectoral, action level*

## Endnotes

- 1 Final adoption of the LT-LEDS by the government of Burkina Faso was underway at the time of publishing this note.
- 2 <https://2050pathways.org/resources/2050-pathways-handbook/#:~:text=2017%20July%2C%208&text=The%202050%20Pathways%20Platform%20is,resilient%20and%20sustainable%20development%20pathways>.
- 3 Shammugam, Shivenes & Oberholzer, Basil & Bassi, Andrea & Pallaske, Georg & Grafakos, Stelios. (2022). Integration of climate resilience and low emission pathways: Assessing the environmental and socio-economic impacts in the energy and agriculture sectors. [https://www.researchgate.net/publication/366237920\\_Integration\\_of\\_climate\\_resilience\\_and\\_low\\_emission\\_pathways\\_Assessing\\_the\\_environmental\\_and\\_socio-economic\\_impacts\\_in\\_the\\_energy\\_and\\_agriculture\\_sectors](https://www.researchgate.net/publication/366237920_Integration_of_climate_resilience_and_low_emission_pathways_Assessing_the_environmental_and_socio-economic_impacts_in_the_energy_and_agriculture_sectors)
- 4 UN Women and the African Development Bank (AfDB). (2022). Green jobs for women in Africa. <https://africa.unwomen.org/en/digital-library/publications/2021/11/un-women-green-jobs-policy-briefs-and-reports-en-fr>

*The Global Green Growth Institute (GGGI) is a treaty-based international, inter-governmental organization dedicated to supporting and promoting strong, inclusive and sustainable economic growth in developing countries and emerging economies.*

UN Women is the United Nations entity dedicated to gender equality and the empowerment of women. A global champion for women and girls, UN Women was established to accelerate progress on meeting their needs worldwide.

