



UNITED NATIONS  
INDUSTRIAL DEVELOPMENT ORGANIZATION



# Policy Assessment for the Economic Empowerment of Women in Green Industry

Synthesis Report of the Country Assessments in  
Cambodia, Peru, Senegal and South Africa



# Table of Contents

<b>Acknowledgements.....</b>	<b>3</b>
<b>Disclaimer.....</b>	<b>3</b>
<b>List of acronyms and abbreviations.....</b>	<b>4</b>
<b>Glossary.....</b>	<b>6</b>
<b>1. Executive Summary .....</b>	<b>8</b>
<b>2. Introduction.....</b>	<b>14</b>
2.1 Background and rationale .....	15
2.2 Project objectives and expected outcomes.....	15
<b>3. Conceptual and analytical frameworks.....</b>	<b>17</b>
3.1 Understanding the problem in question .....	18
3.2 Research questions.....	18
3.3 Conceptual framework addressing research question 1: conceptualising women's economic empowerment .....	18
3.4 Conceptual framework addressing research question 2: towards a gender-responsive green industrial policy framework.....	20
3.5 Analytical framework.....	20
<b>4. Data collection methods .....</b>	<b>21</b>
4.1 Research design.....	22
4.2 Desk review and initial policy review.....	22
4.3 Feminist critical policy analysis .....	22
4.4 Sectors and sub-sectors examined in the study .....	24
4.5 Key informant individual interviews .....	24
4.6 Focus group discussions .....	25
4.7 Online surveys.....	25
4.8 Research limitations .....	25
4.9 Research strengths and advantages .....	26
4.10 Research ethics.....	26
<b>5. Background comparison between countries .....</b>	<b>27</b>
5.1 Background characteristics.....	28
5.2 Country priorities in national policies.....	29
<b>6. Policy analysis comparison .....</b>	<b>33</b>
6.1 Selection of policies methodology .....	34
6.2 Results of analysis: similarities and differences .....	34
6.3 Specific recommendations regarding policies: similarities and differences.....	35
<b>7. Women entrepreneurs in green industry.....</b>	<b>38</b>
7.1 Countries' differences and similarities specific to the green industry .....	39
7.3 Opportunities for women entrepreneurs in green industry.....	41
7.4 Comparing women's experiences in green and conventional industry.....	44
<b>8. Women professionals in green industry .....</b>	<b>46</b>
8.1 Countries' differences and similarities specific to green industry.....	47
8.2 Barriers faced by women professionals in green industry .....	47
8.3 Opportunities for women professionals in green industry.....	47
8.4 Opportunities for women in green industry across all countries .....	48
<b>9. Comparative recommendations.....</b>	<b>49</b>
9.1 Towards gender-responsive green industry policy frameworks.....	50
9.2 Closing the gaps between policy and implementation on the ground .....	51
9.3 Future research questions.....	55
9.4 Examples and learning from success stories in neighbouring countries.....	55
<b>10. Conclusion .....</b>	<b>57</b>
<b>References .....</b>	<b>59</b>
<b>Appendixes .....</b>	<b>64</b>
Appendix 1 .....	65



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# List of acronyms and abbreviations

ACHPR	African Charter on Human and Peoples' rights
ADEPME	Agence du Développement et Encadrement des Petites et Moyennes Entreprises / Agency for the Development and Coaching of Small and Medium Enterprises
AIDS	Acquired Immunodeficiency Syndrome
APEC	Asia-Pacific Economic Cooperation
AMEP	Association of Women Entrepreneurs of Peru
CEDAW	Convention on the Elimination of All Forms of Discrimination against Women
CGE	Commission for Gender Equality
CONCYTEC	The National Council of Science, Technology and Technological Innovation
CSDGs	Cambodian Sustainable Development Goals
CTIS	Cambodia Trade Integration Strategy
CWBF	Cambodia Women Business Federation
CWEA	Cambodia Women Entrepreneurs Association
DoE	Department of Energy
DPES	Document ed Politique Economique et Sociale
EESC	Conseil Économique, Social Et Environnemental / Economic, Social and Environmental Council
EEWiGI	Economic Empowerment of Women in Green Industry
EG	Empower Generation
ESCP	Environmental and Social Commitment Plan
FAO	Food and Agriculture Organization
FGDs	Focus Group Discussions
GBV	Gender Based Violence
GCCAP	Gender and Climate Change Action Plan
GCWG	Gender and Children Working Group
GFP	Gender Focal Points
GMAGs	Gender Mainstreaming Action Groups
HIV	Human Immunodeficiency Virus
IDP	Industrial Development Policy
ILO	International Labour organization
IRP	Integrated Resource Plan
IT	Information Technology
ITA	Institut Technologie Alimentaire / Food Technology Institute
KII	Key Informant Individual Interviews
MAFF	Ministry of Agriculture, Forestry and Fisheries
MDGs	Millennium Development Goals
MIMP	Ministry of Women Affairs and Vulnerable Populations
MINAM	Ministry of the Environment
MISTI	Ministry of Industry, Science, Technology and Innovation (renamed from Ministry of Industry and Handicraft in March 2020)
MoP	Ministry of Planning
MoWA	Ministry of Women's Affairs
MTSF	Medium-Term Strategic Framework
NC	National Coordinator
NCSd	National Council for Sustainable Development
NDC	Nationally Determined Contributions
NDP	National Development Plan
NESAP	National Environmental Strategy and Action Plan
NGOs	Non-Governmental Organisations



NSDP	National Strategic Development Plan
NWMS	The National Waste Management Strategy
OWIT	Organisation of Women in Trade
PAGCC	Action Plan on Gender and Climate Change
PAGE	Partnership for Action on Green Economy
PCP	Programme for Country Partnership
PLANGRACC	The Management Plan of Risks and Adaptation to Climate Change in the Agricultural Sector
PRODUCE	The Ministry of Production
PROMPERU	Peru Export and Tourism Board
PROMUDEH	Ministry for the Promotion of Women Affairs and Human Development
PRSP	Poverty Reduction Strategy Paper
PSE	Plan Sénégal Emergent / Plan for an Emerging Senegal
PUDC	Programme d'Urgence des Domaines Communautaires / Community Emergency Programme
RGC	Royal Government of Cambodia
SAFEE	South African Females in Energy Efficiency
SANEDI	South African National Energy Development Institute
SAWEA	South African Wind Energy Association
SDG	Sustainable Development Goal
SHE	Support Her Enterprise
SMART	Specific, Measurable, Achievable, Relevant and Timely
SMEs	Small and Medium-sized Enterprises
SMMEs	Small, Medium and Micro Enterprise
SNDES	Stratégie Nationale de Développement Economique et Social/ National Strategy for Economic and Social Development
SSP	Swayam Shikshan Pravog
STEM	Science, Technology, Engineering and Mathematics
TVET	Technical Vocational Education and Training
TWG-G	Technical Working Group on Gender
UN	United Nations
UNDP/PNUD	Programme des Nations unies pour le développement / United Nations Development Programme
UNEP	United Nations Environment Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNIDO	United Nations Industrial Development Organization
UNITAR	United Nations Institute for Training and Research
WDCs	Women Development Centres
WEE	Women's Economic Empowerment
WEGE	Women's Empowerment and Gender Equality
YEAC	Young Entrepreneurs Association of Cambodia

# Glossary

**Circular economy:** is an alternative to the traditional linear economic model where resources are kept in use for as long as possible, maximum value is extracted from them, and waste is relocated from the end of the supply chain to the beginning, giving the used materials a new life.<sup>1</sup>

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**Conventional industry:** is an industry that promotes industrial production with expense to the environment or adverse impact on human health. Conventional industry promotes unsustainable patterns of production and consumption i.e. patterns that are resource and energy-inefficient, high carbon-intensive and high waste, polluting and unsafe. Conventional industrial activities are not directed towards reducing greenhouse gas emissions and are generally reliant on fossil fuels. Also commonly referred to as “traditional industry,” “non-green” and/or “conventional industry.”

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**Engendering:** refers to the incorporation of gender issues and concerns into a policy’s content.<sup>2</sup> Engendering applied to assess the quality criteria of policy content includes determining whether a policy aims for gender equality, includes sex-disaggregated data consistently, considers gender differences to create more equality, challenges gender stereotypes and mainstreams gender.<sup>3</sup>

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**Feminist policy:** prioritises gender equality and enshrines the human rights of women and other traditionally marginalised groups, allocates significant resources to achieve that vision and seeks through its implementation to disrupt patriarchal and male-dominated power structures, informed by the voices of feminist activists, groups and movements.<sup>4</sup>

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**Gender equality:** refers to “the equal rights, responsibilities and opportunities of women and men and girls and boys. Equality does not mean that women and men will become the same but that women’s and men’s rights, responsibilities and opportunities will not depend on whether they are born male or female. Gender equality implies that the interests, needs and priorities of both women and men are taken into consideration, recognising the diversity of different groups of women and men. Gender equality is not a women’s issue but should concern and fully engage men as well as women. Equality between women and men is seen both as a human rights issue and as a precondition for, and indicator of, sustainable people-centered development.”<sup>5</sup>

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**Gender mainstreaming:** is the “process of assessing the implications for women and men of any planned action, including legislation, policies or programmes, in any area and at all levels. It is a strategy for making the concerns and experiences of women as well as of men an integral part of the design, implementation, monitoring and evaluation of policies and programmes in all political, economic and societal spheres, so that women and men benefit equally, and inequality is not perpetuated. The ultimate goal of mainstreaming is to achieve gender equality.”<sup>6</sup>

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**Green economy:** is an economy “that ends extreme poverty, improves human well-being and enhances social equity while reducing carbon dependency and ecosystem degradation and furthering sustainable and inclusive growth.” This definition corresponds to the definition of sustainable development and its three dimensions, being economic, social and environmental.<sup>7</sup>

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**Green employment:** is a labour market in which all employment is decent, and in which jobs contribute to a reduction of energy use and raw material consumption, limit greenhouse gas emissions, minimise waste and pollution, protect and restore ecosystems, and enable the adaptation of companies and communities to climate change.<sup>8</sup>

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**Green industry:** is an industry that promotes industrial production without expense to the environment or adverse impact on human health. Green industry promotes sustainable patterns of production and consumption i.e. patterns that are resource and energy-efficient, low-carbon and low waste, non-polluting and safe. Green industry is also related to sustainable industrialisation, an objective of Agenda 2030 as embodied in Sustainable Development Goal (SDG) 9.

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1 <https://www.unido.org/unido-circular-economy>.

2 Krizsan, A. & Lombardo, E. (2013). The quality of gender equality policies: A discursive approach. *European Journal of Women’s Studies*, 20(1), 77-92.

3 Drucza, K. and Rodríguez, C.M. (2018). Feminist policy analysis: implications for the agricultural sector in Ethiopia. CIMMYT, Addis Ababa, Ethiopia.

4 Thompson, L. (2020). *Feminist Foreign Policy: A Framework*. Washington, DC: International Center for Research on Women.

5 UN Women (2012). *Gender Equality Glossary*. Available at: <https://trainingcentre.unwomen.org/mod/glossary/view.php?id=36&mode=letter&hook=G&sortkey=&sortorder=>.

6 This definition follows the UN Economic and Social Council Resolution 1997/2: Agreed Conclusions. See also UN Women: <https://www.unwomen.org/en/how-we-work/un-system-coordination/gender-mainstreaming>. Cited in GWNEN (2019). *Women for Sustainable Energy: Strategies to Foster Women’s Talent for Transformational Change*, p.90.

7 Petrović, N. (2016). *Women in the Green Economy*.

8 UNIDO (2016). *Practitioner’s Guide to Strategic Green Industrial Policy*, Vienna, UNIDO/PAGE.

*Green industry policy:* is an industrial policy that is meant to trigger and facilitate structural changes as entailed, or required, both to respond to environmental conditions or situations, and to develop a green, circular economy.<sup>9</sup>

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*Intersectionality:* “a prism for seeing the way in which various forms of inequality often operate together and exacerbate each other.”<sup>10</sup> This includes social variables such as age, ability, indigeneity, ethnicity, language group, religion, education, etc., that typically cause marginalisation from voice and agency in any context.<sup>11</sup>

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*Women’s empowerment:* is about the process by which women who have been denied the ability to make strategic life choices acquire such an ability. The ability to exercise choice incorporates three interrelated dimensions: resources (defined broadly to include not only access, but also future claims, to both material and human and social resources); agency (including processes of decision-making as well as less measurable manifestations of agency such as negotiations); and achievements (well-being outcomes).<sup>12</sup>

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*Women’s economic empowerment:* is the process which leads a woman to have both the ability to succeed and advance economically, and the power to make and act on economic decisions. To succeed and advance economically, women need the skills and resources to compete in markets, as well as fair and equal access to economic institutions. To have the power and agency to benefit from economic activities, women need to have the ability to make and act on decisions and control resources and profits.<sup>13</sup>

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9 Ibid.

10 Crenshaw, K. (1989). Available at: <https://www.unwomen.org/en/news/stories/2020/6/explainer-intersectional-feminism-what-it-means-and-why-it-matters>.

11 GWNET (2019). Women for Sustainable Energy: Strategies to Foster Women’s Talent for Transformational Change, p.91.

12 Kabeer, N. (1999). Resources, Agency, Achievements: Reflections on the Measurements of Women’s Empowerment, Development and Change Vol. 30.

13 UNIDO (2014). Guide on Gender Mainstreaming Energy and Climate Change Projects, Vienna, UNIDO/UN Women, p.52.





# 1. Executive Summary





## What is this report about?

This report is part of the global joint programme, “Economic Empowerment of Women in Green Industry” (EEWiGI). The purpose of this report is to advise policymakers and practitioners on the establishment and implementation of a policy framework to integrate gender into green industry policies. **The aim is to affect change and empower more women to take leadership roles in green industry as entrepreneurs or industry professionals.**<sup>14</sup>

Accordingly, the United Nations Industrial Development Organization (UNIDO) and the United Nations Entity for Gender Equality and the Empowerment of Women (UN Women) are working together to assess the need for gender-responsive green industrial policy actions in four participating countries: Cambodia, Peru, Senegal and South Africa.

This report aims to provide policymakers and practitioners with an evidence-base that will enable them to:

1. Establish and implement a policy framework to better integrate gender equality into green industry policies;
2. Formulate new, or reformulate existing, gender-responsive green industry policies and adopt them; and
3. Facilitate efforts to prioritise areas for workplan development.

Transitioning to sustainable industrialisation and global gender equality requires inter-related action and coordination among diverse policy stakeholders. At present, the implementation of gender-responsive green industry policies is a joint effort between the MISTI and MOWA in Cambodia; the Ministry of Environment, the Ministry of Production (PRODUCE) and the Ministries of Women’s Affairs in Peru; and the Ministry of Industry and the Ministry of Women’s Affairs in Senegal and South Africa. To further mainstream gender issues into industry policies, strategies and action plans; research studies and statistics are needed on the realities of women working as entrepreneurs and professionals in green industry in low- and middle-income countries.

This project aims to address the gap in available research by providing an empirical baseline of gender-specific barriers and opportunities for women working as entrepreneurs and professionals in green industry in Cambodia, Peru, Senegal and South Africa. Studies conducted within the project will look into possibilities to meet the dual needs of alleviating environmental threats, whilst realising women’s potential in green industry, green economy and entrepreneurship. The findings in this report will be available to policymakers and practitioners as a baseline to inform the effective development of gender-responsive green industrial policy in the future.

## How was the study conducted?

A mixed-methods approach has been applied, which combines qualitative and quantitative data collection methods. The research was collected in four phases:

- Phase 1: desk review and initial policy review;
- Phase 2: feminist critical policy analysis;
- Phase 3: qualitative data collection in the form of key informant individual interviews (KIIs) and focus group discussions; and
- Phase 4: quantitative data collection in the form of an online survey.

All data was collected January-March 2020.

In each of the four countries – Peru, Cambodia, South Africa and Senegal – KIIs took place in the respective capital cities: Lima, Phnom Penh, Pretoria and Dakar. In addition, with the exception of Cambodia, focus group discussions were held in regions outside the capital. Through this approach, it was possible to capture the heterogeneity of the baseline context for green industry and women’s economic empowerment in each country.

## Conceptual framework

The project defines *women’s economic empowerment* as the combination of women’s ability to succeed and advance economically and the power to make and act on economic decisions. To succeed and advance economically, women need the skills and resources to compete in markets, as well as fair and equal access to economic institutions. In order to have the power and agency to benefit from economic activities, women need to have the ability to make and act on decisions and control resources and profits.<sup>15</sup>

Taking these definitions as a starting point, the project conceptualises women’s economic empowerment as requiring *advancement and transformation*:

- *Advancement*: includes increased resources including income, employment, human capital (education, skills, training), financial capital (loans, savings), social capital (networks, relationships, mentors), and physical capital (land, machinery, tools, inventory); and
- *Transformation*: necessitates women having the power and agency to make decisions over control and use of newly gained skills and resources.

<sup>14</sup> UNIDO and UN Women (2019). Global Programme: Economic Empowerment of Women in Green Industry Phase 1: Policy Prioritisation, pp 1-21.

<sup>15</sup> Ibid.

## What are the key findings across targeted countries?

### *Findings from Phase 2: Feminist critical policy analysis*

All the policies reviewed have room to enhance measures to address gender equality and the empowerment of women. Most of the policies reviewed in the four participating countries fail to include concrete gender equality measures. A select few reference “women” or “gender” in their conclusions. Although many of the policies have good implementation plans, there is certainly scope for active policies to become more gender-responsive.

This could be achieved by:

- Revisiting policies to include language and plans that address the key factors underpinning the economic empowerment of women in green industry (as they relate to economic advancement and social transformation);
- Revisiting and developing specific M&E frameworks that collect baseline sex-disaggregated data with indicators for gender equality in green industry;
- Revisiting policies to ensure the differential needs of women are meaningfully included in policies;
- Conducting mid-term evaluations that will help contextualise the progress of the policy; and
- Using intersectional gender data to understand the multi-dimensional and unique social positions women occupy and identify equitable opportunities for diverse groups of women to succeed in green industry as entrepreneurs and professionals.

### *Findings from Phase 3 and 4: qualitative and quantitative data collection*

In all countries, there is currently limited evidence of women’s economic empowerment and the involvement of women in green industry. Gender inequality is very present in green entrepreneurship and green businesses. Moreover, women are overrepresented in less secure roles, and are routinely subjected to a myriad of direct, indirect, institutionalised and structural discrimination. However, the project found that **women are more attracted to opportunities as entrepreneurs in green industry than in conventional industries, due to the strong perception that there are more opportunities in green industry for women to progress.**

The women entrepreneurs interviewed in the four participating countries reported similar barriers to **starting a green business**, principally:

- Lack of gender-sensitive budgeting, access to funding and financial services;
- Lack of access to technology;
- Lack of information and resources on how to start a business;
- Lack of a clear definition of “green industry” (no defined scope of activities or characteristics);
- Difficulty maintaining competitive pricing on the consumer market. Due to lower production costs, products manufactured by “conventional industries” are often cheaper; and
- Lack of incentives for businesses operating in green industry.

The women entrepreneurs interviewed in the four participating countries reported similar barriers to success in green industry.

A summary of barriers to women’s economic empowerment in green industry is provided in Table 1.

**Table 1:** Barriers to women’s economic empowerment in green industry

Barriers to advancement	Barriers to transformation
- Lack of awareness about policies and programmes	- Harmful social norms
- Lack of access to technology, market, capital, collateral and credit resources, network, mentoring	- Restricted mobility
- Lack of necessary skills	- Unpaid care work
	- Intersectional inequalities
	- Discriminatory hiring practices
	- Lack of self-confidence
	- Lack of access to information

<sup>16</sup> GWNET, 2019. Women for Sustainable Energy: Strategies to Foster Women’s Talent for Transformational Change, p.52.



Despite the constraints, the key informants voiced that things are changing and considered the situation to be comparatively better today than 10 years ago. For example, most entrepreneurs reported being “really or somewhat excited” about the growth of their business.

Green industry has a high potential to act as a catalyst for enhanced gender equality and the empowerment of women in wider society. Examples of phenomena that encourage women to start green industry businesses are provided in the table below.

**Table 2:** Examples of phenomena that encourage women to start green industry businesses

	Cambodia	Peru	Senegal	South Africa
Green businesses are more likely to provide equal pay for equal work for women and men	77%	88%	75%	91%
Entrepreneurs reported receiving “a lot of support” from their families to start the business	54%	65%	63%	70%
Entrepreneurs reported that they did not feel that family obligations had limited their opportunities today as an entrepreneur	31%	42%	38%	64%
Entrepreneurs need to consult with a man (spouse or family member, for example) before making decisions on how to spend the income from their business	31%	19%	0%	0%

Recommendations for green industry business, policy and civil society stakeholders to encourage more women to become green industry professionals include:

1. Generate **visibility and role-models**: e.g. the South African Women in Science Awards which profiles women scientists and researchers as role models for young women and girls;
2. **Strengthen opportunities for women** in certain sectors, such as renewable energy and green industry: e.g. In South Africa, The National Cleaner Production Centre’s Accredited Energy Training Program is free for women in August 2020; and
3. **Provide mentoring and networking opportunities**: e.g. the CISCO Connected Women Program in Peru provides women workers with professional training, coaching, an executive shadowing programme and advocates for “flexi-work” to provide employees with location and time flexibility. In Cambodia, SHE investments, GROW Asia, and other organizations are playing a crucial role in capacity building, mentoring and networking.

While there are separate policies on women’s economic empowerment and on climate change adaptation, there is a general lack of synergy between the two. As a result, coordinated, gender-responsive green industry policies are almost non-existent. The study found organisations and institutions working for women entrepreneurs across the four participating countries, but they were not specifically in green industry. This could be attributed to the fact that green industry is new and not yet well defined across countries.

### Key recommendations for all countries

A lack of policies geared towards gender equality and women’s empowerment in green industry was highlighted throughout this project. In order to progress, it is recommended that all four participating countries proactively work with stakeholders to:

1. **Raise awareness of opportunities** for women in green industry; for example, women focused green energy business campaigns; increased access to Technical Vocational Education and Training (TVET) and public information; targeted support of small scale women entrepreneurs; women-only information sessions introducing the concept “green industry”;
2. Review existing green industry **policies and mainstream gender**. This could be achieved by updating and/or effectively implementing existing plans, enhancing commitments to advancing gender equality and the empowerment of women, and coordinating relevant policies across government ministries to leverage a cross-cutting approach to gender equality in green industry;
3. **Roll-out capacity building initiatives in local government institutions, for example municipalities**, on the design, planning and execution of green initiatives to enhance understanding of “green” laws;
4. **Invest in training and capacity building initiatives for women who are professionals in green industry**, in order to encourage equal access to promotions, management and leadership roles;
5. Develop a **pipeline of female talent with the technical skills** and knowledge required to secure green industry jobs and advance to senior levels;
6. Develop targeted leadership and management training programmes for women green industry professionals, in order to support their career advancement;
7. **Promote highly visible** women entrepreneurs who are successful in green industry as **role models**, in order to attract women and girls to green industry careers;

8. **Collect reliable sex-disaggregated data nationally** with measurable indicators, monitoring and evaluation, in order to develop a more accurate picture of the current context and track progress;
9. **Apply gender-responsive budgeting principles**, in order to raise awareness and understanding of gender issues in budgets and policies; maintain government accountability for progress, and ensure gender equality commitments are prioritised;
10. **Apply gender-responsive procurement principles** in both the public and private sector, by hiring women-owned businesses as vendors. Hiring women-owned businesses as vendors presents a significant opportunity to enhance the representation of women in green industry. Databases of women-owned vendors could be initiated. Additionally, targeted assistance and positive action for women-owned businesses would enable them to compete in the procurement market for government contracts.<sup>17</sup> UN Women defines a women-owned business as, “a legal entity in any field that is more than 51% owned, managed and controlled by one or more women;”<sup>18</sup> and
11. **Encourage private sector actors to adopt business practices** that empower women in green industry. The Women’s Empowerment Principles (WEPs)<sup>19</sup> provide guidance on promoting gender equality and the empowerment of women in the workplace, marketplace, and community.

### *The impact of COVID-19 on women’s economic empowerment in green industry*

Across the globe, women earn less, save less, hold less secure jobs, and are more likely to be employed in the informal sector.<sup>20</sup> Women are disproportionately affected by the COVID-19 pandemic as they tend to hold more precarious employment, especially in the informal sector, where their benefits and protection, including access to social protection, are inadequate or lacking.

COVID-19 has had a major impact on women across entire supply chains – executives in large companies, women working in the service sector, women who own or work in small and medium-sized enterprises (SMEs); women engaged in manufacturing, including the informal sector; and women migrant workers. This is accentuated by the uneven division of care and domestic responsibilities at home due to gendered social expectations, limiting women’s livelihood choices even more.<sup>21</sup>

COVID-19 is exposing those vulnerabilities in social, political, and economic systems that were always present. It is forcing a shift in priorities and funding across public and private sectors, endangering the progress so far made towards gender equality and the empowerment of women and girls. Action must be taken now to stop this backsliding. Women must be the architects as well as the beneficiaries of efforts to build back stronger and better in response to these highly visible fault lines.<sup>22</sup>

Despite these challenges, the COVID-19 crisis also offers unique opportunities for enabling women’s empowerment, bringing the transformative changes needed to address the longstanding climate, social and environmental issues and inequalities that have contributed to the devastation of this pandemic. Prioritising women and economic recovery along more equitable lines is not only morally right, it is also an economic imperative. Women are critical agents of post-crisis recovery and investing in gender equality has the potential to stimulate the economy and reverse losses to global wealth.<sup>23</sup> Additionally, gender mainstreaming needs to be prioritised in all sectors to help women entrepreneurs start and sustain green businesses. Green industry is new, innovative, and part of a growing market pushed by more conscious consumers. It offers many opportunities for women.

In summary, women are critical agents of post-crisis recovery and investing in gender equality has the potential to stimulate the economy and reverse losses to global wealth.<sup>24</sup>

### *Conclusion*

This project has highlighted the many opportunities to incorporate gender equality into the emerging green industry of Cambodia, Peru, Senegal and South Africa. However, there is no clear-cut definition defining the scope, activities and characteristics of “green industry.” Due to this lack of clarity, sex-disaggregated data on green businesses is inconsistent and there is limited documentation to understand the marginalisation of women within the sectors identified.

COVID-19 is exposing those vulnerabilities in social, political, and economic systems that were always present. It is forcing a shift in priorities and funding across public and private sectors, endangering the progress so far made towards gender equality and the empowerment of women and girls. Action must be taken now to stop this backsliding. Women must be the architects as well as the beneficiaries of efforts to build back stronger and better in response to these highly visible fault lines.<sup>25</sup>

17 UN Women (n.d.). Gender-responsive Procurement. Available at: <https://www.unwomen.org/en/about-us/procurement/gender-responsive-procurement> (Accessed on 17th Dec, 2020).

18 Ibid.

19 Established by UN Global Compact and UN Women, the WEPs are informed by international labour and human rights standards and grounded in the recognition that businesses have a stake in, and a responsibility for, gender equality and women’s empowerment. For more information, see <https://www.weps.org/about>.

20 United Nations (2020). Policy Brief: The Impact of COVID-19 on Women.

21 Ibid.

22 UN Women (2020). From Insights to Action, Gender Equality in the Wake of COVID-19.

23 CARE (2020). COVID-19 Condemns Millions of Women to Poverty When They Could be a Solution to Prosperity.

24 Ibid.

25 UN Women (2020). From Insights to Action, Gender Equality in the Wake of COVID-19.

In order to develop a more accurate picture of the current context, **national monitoring mechanisms are needed for the collection of sex-disaggregated data**. This mechanism should encompass measurable indicators, reporting and evaluation in order to track progress towards clear milestones on gender equality and the economic empowerment of women in green industry.

Moreover, findings from the study suggest **that collaboration between the private and public sectors should improve**. Businesses are a vital contributor to realising gender equality and the economic empowerment of women in society. It is essential that they proactively get on board with government targets for gender equality.

Currently, there is scarce evidence of any intentional coordination between green businesses, green industry policy, women's economic empowerment policy and gender equality policy in the four participating countries. This is a missed opportunity to contribute to gender equality and the economic empowerment of women more effectively. **Ultimately, narrowing information gaps** to establish a clearer picture of the economic conditions affecting women in green industry would strengthen the case for governments, the private sector, and civil society to take coordinated action.





## 2. Introduction

## 2.1 Background and rationale

This synthesis report is part of a series of country reports for the larger global joint programme, “Economic Empowerment of Women in Green Industry” (EEWiGI).<sup>26</sup>

The United Nations Industrial Development Organization (UNIDO) and the United Nations Entity for Gender Equality and the Empowerment of Women (UN Women) are working together to assess the need for gender-responsive green industry policy actions in four participating countries: Cambodia, Peru, Senegal and South Africa. The preparatory assistance project undertaken in 2017<sup>27</sup> led to a fully-fledged project to advise the ministries, as well as private sector associations and enterprises, on the design and implementation of gender-responsive green industry policies. This report is a component of Output 1.1. of Phase I of EEWiGI (Figure 2.1).

**Figure 2.1:** Situating output 1.1. within the broader EEWiGI outcomes and impact pathway



## 2.2 Project objectives and expected outcomes

The objective of the project is to initiate a significant push to improve the representation of women as leaders and entrepreneurs and industry professionals. Ultimately, the desired outcome is to prepare the ground for the advancement of gender equality and green indus-

<sup>26</sup> UNIDO and UN Women (2019). Global Programme: Economic Empowerment of Women in Green Industry Phase 1: Policy Prioritisation, pp 1-21.

<sup>27</sup> UNIDO (2019). The Economic Empowerment of Women in Green Industry: A Synthesis Report. Unpublished, pp 1-82.

trialisation in line with the SDGs in four participating countries (Cambodia, Peru, Senegal and South Africa). To that end, the project focuses on identifying needs and gaps to improve leadership and participation of women as entrepreneurs and/or industry professionals through strengthened integration of gender and green industry policies.

This report aims to provide policymakers and practitioners with an evidence-base that will enable them to:

1. Establish and implement a policy framework to better integrate gender equality into green industry policies;
2. Formulate new, or reformulate existing, gender-responsive green industry policies and adopt them; and
3. Facilitate efforts to prioritise areas for work plan development.

In order to attain these objectives, the project undertakes further national gender and green industry diagnostics, technical assessments and policy analyses for evidence-based policymaking, including:

1. *Assessment of opportunities, constraints and possible measures to increase women's leadership in green industry and green entrepreneurship*, including:
  - General research on opportunities and synergies between green industry and gender mainstreaming; and
  - Review of current green industry gender mainstreaming action plans.
2. *Identification of recommendations and specific measures to redress gender imbalances in selected industrial sub-sectors where women have high impact*, including:
  - Identifying the needs of women development schemes;
  - Identifying the of needs of government, civil society and private sector stakeholder's capacity building; and
  - Identifying accountability, oversight and dissemination mechanisms for institutional gender mainstreaming initiatives.
3. *Study of constraints to entrepreneurship development, analysing formal and informal institutional barriers to female entrepreneurship*, including:
  - Analysis of institutional, cultural and societal inequalities.



A person is shown from the side, writing on a whiteboard with a blue pen. The whiteboard is covered with numerous colorful sticky notes (yellow, green, blue, pink) arranged in a structured manner. The image has a blue tint.

### **3. Conceptual and analytical frameworks**



### 3.1 Understanding the problem in question

The Economic Empowerment of Women in Green Industry (EEWiGI) programme contributes to the 2030 Agenda for Sustainable Development by championing the global Sustainable Development Goals (SDGs) of Sustainable Industrialisation (SDG 9) and Gender Equality (SDG 5).<sup>28</sup> It also contributes to a lesser extent to Promote Sustained, Inclusive and Sustainable Economic Growth (SDG 8) and Responsible Consumption and Production (SDG 12).

Climate change, environmental degradation and the resultant loss of livelihoods have sex-differentiated impacts. Moreover, the over-exploitation of natural resources further exacerbates existing inequalities and social vulnerabilities. Transitioning to green industry promotes a future that supports environmental sustainability and gender equality by offering science-based solutions to climate change, and facilitating the systematic socio-political transformation needed to address social inequalities.

Transitioning to sustainable industrialisation and global gender equality requires inter-related action and coordination among diverse policy stakeholders. At present, the implementation of gender-responsive green industry policies is a joint effort between the MISTI and MOWA in Cambodia; the Ministry of Environment, the Ministry of Production (PRODUCE) and the Ministries of Women's Affairs in Peru; and the Ministry of Industry and the Ministry of Women's Affairs in Senegal and South Africa. To further mainstream gender issues into industry policies, strategies and action plans; research studies and statistics are needed on the realities of women working as entrepreneurs and professionals in green industry in low- and middle-income countries.

This project aims to address the gap in available research by providing an empirical baseline of gender-specific barriers and opportunities for women working as entrepreneurs and professionals in green industry in Cambodia, Peru, Senegal and South Africa. Studies conducted within the project will look into possibilities to meet the dual needs of alleviating environmental threats, whilst realising women's potential in green industry, green economy and entrepreneurship. The findings in this report will be available to policymakers and practitioners as a baseline to inform the effective development of gender-responsive green industrial policy in the future.

### 3.2 Research questions

In alignment with the aims and objectives of the broader EEWiGI project, this study addresses two main research questions:

- (1) What are the country specific needs, opportunities, specific drivers and constraints to women accessing and benefitting equally from the advancement of green industry:
  - As industry professionals?
  - As entrepreneurs?
- (2) How should countries develop or revise existing gender-responsive green industrial policies?

Alongside these main research questions; the analysis considered the following sub-questions in developing a suitable methodology, collecting data and reviewing policies. Therefore, the following elements also contributed to a holistic understanding of green industry, green economy and entrepreneurship:

- Are current policies delivering results in line with the promises on which they were initially formulated?
- Are current green industry policies gender-responsive?
- Are the policies having a positive/negative impact on women and/or their relations with others?
- Which policies are hindering gender equality and the inclusion of women?
- Which policies are helping? How are these implemented?

The conceptual and analytical frameworks applied in the study were designed with these research questions in mind. A conceptual framework on women's economic empowerment was used to understand the root causes of barriers and gaps in gender equality in green industry; both for women entrepreneurs and women working as professionals in green industry.

### 3.3 Conceptual framework addressing research question 1: conceptualising women's economic empowerment

The project defines *women's economic empowerment* as the combination of women's ability to succeed and advance economically and the power to make and act on economic decisions. To succeed and advance economically, women need the skills and resources to compete in markets, as well as fair and equal access to economic institutions. In order to have the power and agency to benefit from economic activities, women need to have the ability to make and act on decisions and control resources and profits.<sup>29</sup>

<sup>28</sup> SDG 9: to "build resilient infrastructure, promote inclusive and sustainable industrialisation" and SDG 5: to "achieve gender equality and empower all women and girls".

<sup>29</sup> Ibid.

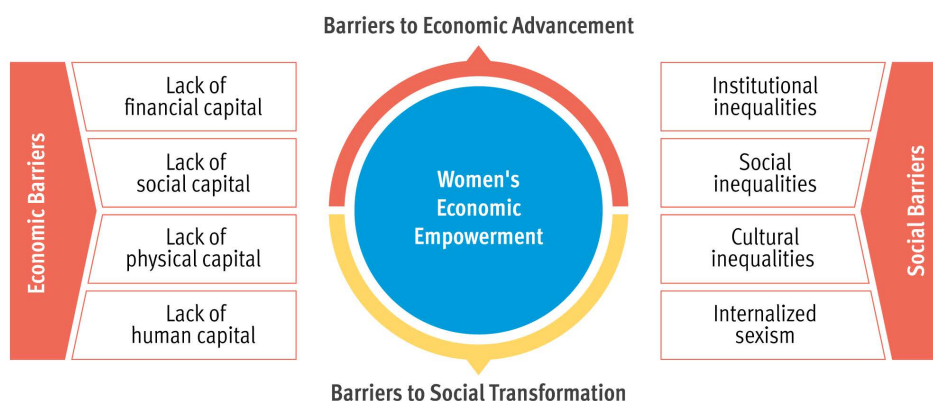
Taking these definitions as a starting point, the project conceptualises women’s economic empowerment as requiring advancement and transformation:

- *Advancement*: includes increased resources including income, employment, human capital (education, skills, training), financial capital (loans, savings), social capital (networks, relationships, mentors), and physical capital (land, machinery, tools, inventory); and
- *Transformation*: necessitates women having the power and agency to make decisions over control and use of newly gained skills and resources.

Advancement and transformation require the disruption of accepted social norms and structural gender roles.<sup>30</sup>

See Figure 3.1 for the EEWIGI conceptualisation of women’s economic empowerment.

**Figure 3.1:** Study’s conceptualisation of Women’s Economic Empowerment



In order to understand factors related to women’s economic advancement and women’s economic transformation in green industry, this report analyses gendered norms, power relations and inequalities in the overlapping spheres of agency, structures and relationships (Figure 3.2).

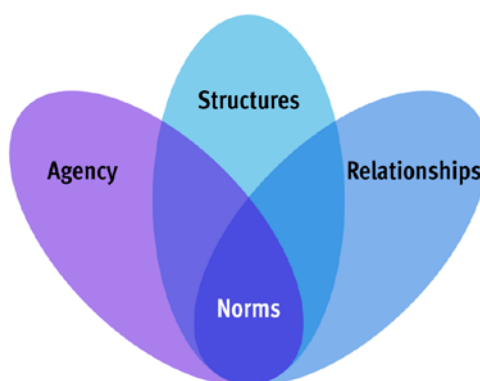
#### **Empowerment requires:**

- **Agency**: the ability to make choices and act upon them. This is similar to autonomy but more comprehensive;
- **Structures**: processes to enable change rather than resist change. This is also known as an enabling environment; and
- **Equal relationships**: assurance that power does not corrupt, exploit or block access to opportunities.

This conceptual framework facilitates an analysis of the institutional, cultural and societal inequalities causing barriers to women’s economic advancements. These concepts also guide the transformation required to enable positive change towards gender equality. Approaching women’s economic empowerment using this conceptual framework will enable policymakers and practitioners to better understand the causal pathways to advance gender equality and improving the leadership and participation of women as entrepreneurs and industry professionals in green industry in Cambodia, Peru, Senegal and South Africa, in line with the SDGs.

See Figure 3.2 for the relationship between norms and empowerment.

**Figure 3.2:** Relationship between norms and empowerment



<sup>30</sup> GWNET, 2019. Women for Sustainable Energy: Strategies to Foster Women’s Talent for Transformational Change, p.52.

### 3.4 Conceptual framework addressing research question 2: towards a gender-responsive green industrial policy framework

The purpose of EEWiGI is to advise policymakers and practitioners on the establishment and implementation of a policy framework to integrate gender and green industry policies. The aim is to affect change and empower more women to take leadership roles in green industry as entrepreneurs and industrial professionals. Based on the conceptualisation of women's economic empowerment applied in this project, gender-responsive green industrial policies must work to address both advancement and transformation.

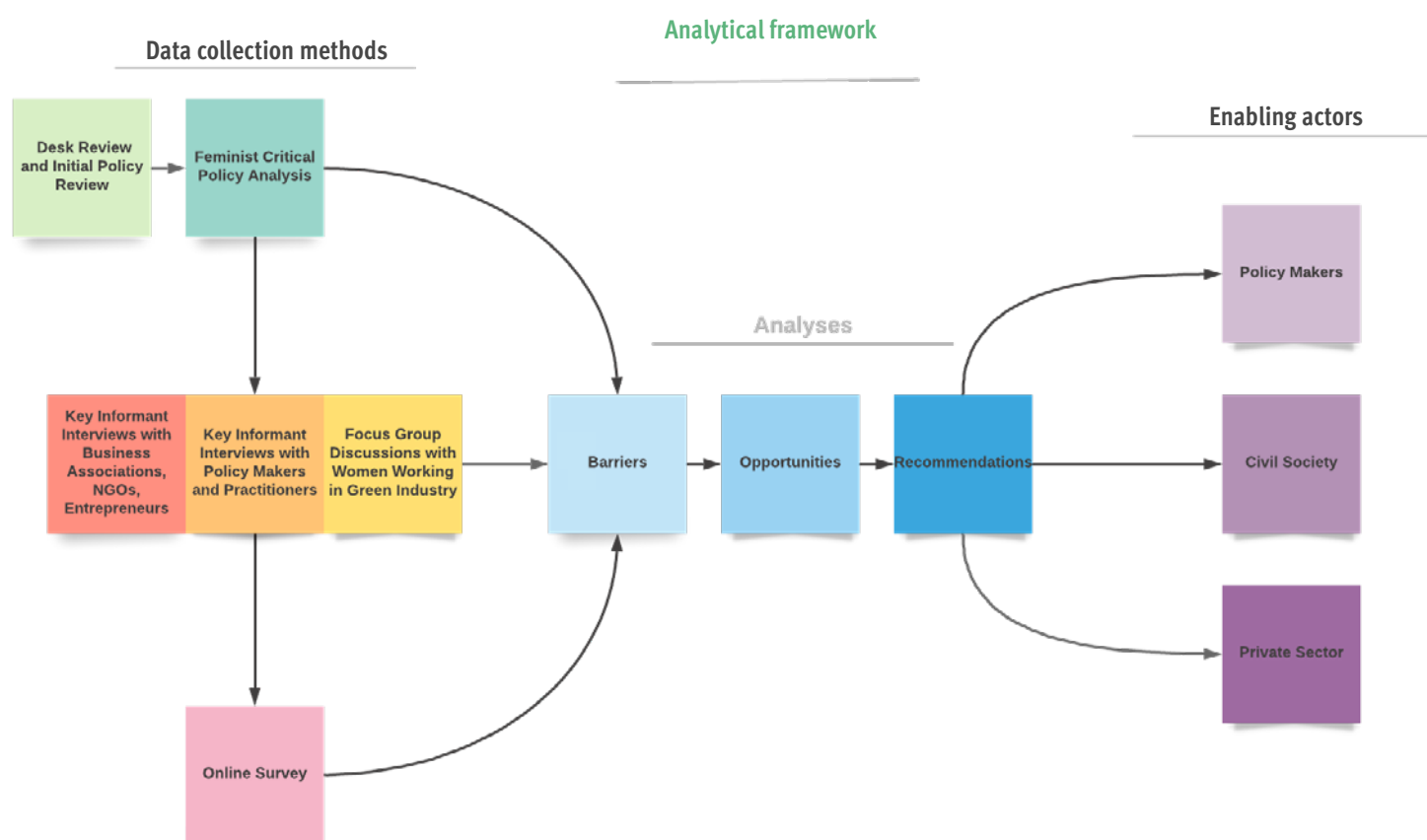
The qualitative and quantitative components of the study reveal key factors underpinning the barriers and opportunities women face in accessing economic empowerment in green industry. These findings, combined with critical feminist criteria, form the framework to assess the gender-responsiveness of current policies' content, processes and adaptation. Furthermore, these policies will be evaluated on their commitments to gender equality.

### 3.5 Analytical framework

Figure 3.3 presents the study's analytical framework. The details on the data collection methods used in the study are covered in the next section.

See Figure 3.3 for the analytical framework of the study

**Figure 3.3:** Analytical framework



A large, disorganized stack of papers and documents, some with yellowed edges, is shown against a light blue background. A magnifying glass with a black handle and frame is positioned in the lower right corner, focusing on the papers. The entire image has a light blue overlay.

## **4. Data collection methods**

## 4.1 Research design

The process began with a preparatory assistance project, undertaken by UNIDO and UN Women in Cambodia, Peru, South Africa and Senegal in 2017. The objectives of this phase were to gain a better understanding of the challenges facing governments in coordinating gender-responsive green industry policy and to identify the needs of female entrepreneurs in business development. The methodology of this research was shaped by the findings of the preparatory phase and inputs from UNIDO and UN Women in 2019-2020.

A mixed-methods approach has been applied, which combines qualitative and quantitative data collection methods. The research was collected in four phases:

- i. Phase 1: desk review and initial policy review;
- ii. Phase 2: feminist critical policy analysis;
- iii. Phase 3: qualitative data collection in the form of key informant individual interviews (KIIIs) and focus group discussions; and
- iv. Phase 4: quantitative data collection in the form of an online survey.

The data collection phase in Peru, Senegal and South Africa took place in January-February 2020 and in Cambodia, the data collection was done during February-March 2020. The data cleaning, translation and analysis was completed from February/March to July/August 2020, and the individual country reports and single synthesis report were completed in August 2020.

In each of the four countries – Peru, Cambodia, South Africa and Senegal - key informant individual interviews took place in the capital cities (Lima, Phnom Penh, Pretoria and Dakar). In addition, focus group discussions took place in areas outside of the capitals (except Cambodia). Through this approach, it was possible to capture the heterogeneity of the baseline context for green industry and women's economic empowerment in each country.

## 4.2 Desk review and initial policy review

A desk review of current policies and projects was undertaken with two components: one component focused on existing policies and projects promoting the advancement of green industry and the other component focused on the baseline situation in each country vis-à-vis women's economic empowerment. The desk review also included identification of research and case studies on successful women entrepreneurs operating in the green sector in each country.

The desk review and initial policy review served the following purposes:

- (1) Providing context for feminist critical policy analysis by presenting an overview of policies aimed at empowering women in each country, thereby identifying overlaps with green industry policy;
- (2) Building a network based on the case studies of successful women in green industry;
- (3) Identifying relevant gender and green industry policies that could be reviewed in-depth using the critical feminist policy analysis; and
- (4) Informing the development of qualitative and quantitative tools by identifying key themes to be explored further in key informant individual interviews and focus group discussions.

## 4.3 Feminist critical policy analysis

The purpose of the feminist critical policy analysis was to analyse and expose gender inequalities and power relations that are embedded in each country's policies, with the goal of rectifying gender biases in existing and future policies (McPhail, 2003).

The feminist critical policy analysis herein is based on the work of Kanenberg et al. (2019),<sup>31</sup> Druzca and Rodriguez (2018),<sup>32</sup> Krizsan and Lombardo (2013)<sup>33</sup> and McPhail (2003)<sup>34</sup>. The analysis is based on three steps: policy selection, assessment I and assessment II.

**Policy selection criteria:** a maximum of 10 policies were selected in consultation with the national coordinator (NC), national focal points and the respective UNIDO Country Representative; based on their relevancy to at least one of the following tiers:

- Tier 1: national laws, policies and strategies with “green”, “green industry”, “green economy”, “green jobs”, “entrepreneurship”, “low carbon”, identified in the title;
- Tier 2: national laws, policies and strategies that specifically address the sectors and sub-sectors identified and prioritised in this project in the title;
- Tier 3: national laws, policies and strategies with “climate change”, “adaptation”, and/or “environment” identified in the title, or “sustainable development”, “circular economy”, or “bio economy” and/or other type of green industry sector; and/ or
- Tier 4: National laws, policies and strategies related to general industrial development and growth.

After the final list of policies was selected, three assessments were conducted.

<sup>31</sup> Kanenberg, H. and Leal, R. (2019). Revising McPhail's Feminist Policy Analysis Framework. *Advances in social work*, 19(1), 1-22.

<sup>32</sup> Druzca, K. and Rodriguez, C.M. (2018). *Feminist Policy Analysis: Implications for the Agricultural Sector in Ethiopia*. CIMMYT, Addis Ababa, Ethiopia.

<sup>33</sup> Krizsan, A. and Lombardo, E. (2013). The Quality of Gender Equality Policies: A Discursive Approach. *European Journal of Women's Studies*. Vol 20, Issue 1: 77 – 92.

<sup>34</sup> McPhail, B. (2003). A Feminist Policy Analysis Framework. *The Social Policy Journal*, (2), 39-61.



The first assessment<sup>35</sup> depicted in Table 4.1, is an index for assessing the quality of policies using a ranking system. For each of the seven quality criteria categories, the research questions are scored on a scale of 0-1, whereby: 1 indicates that the criteria is met; 0.5 indicates that the policy meets the criteria to a certain extent; and 0 indicates that the policy poorly meets the criteria.

The first assessment used seven different criteria categories:

- (1) Engendering of the policy;
- (2) Structural understanding of gender equality;
- (3) Intersectionality;
- (4) Women's empowerment;
- (5) Incremental transformation;
- (6) Gender responsiveness; and
- (7) International and regional contextualisation.

Regarding the quality criteria categories, note that:

- Quality criteria categories 1-3 focus on policy content;
- Quality criteria categories 4-5 focus on the process to ensure women's participation and inclusion in the policy-making process; and
- Quality criteria categories 6-7 focus on the intersection of gender and green industry policies, and on how the national policies relate to regional and international gender frameworks.

**Table 4.1: Feminist policy analysis criteria and research questions**

Quality criteria categories	Research questions
1. Engendering of the policy (policy content)	1.1. Does the policy aim for gender equality? 1.2. Does the policy include sex-disaggregated data consistently? 1.3. Does the policy consider gender differences in order to create more equality? 1.4. Are gender stereotypes challenged? 1.5. Is gender mainstreamed throughout the document (as opposed to being regulated to a separate section)?
2. Structural understanding of gender equality (policy content)	2.1 Does the policy consider the structural factors (beyond the individual level) that impact gender equality? Examples include historical, legal, socio-cultural, economic and political factors?
3. Intersectionality (policy content)	3.1. Does the policy incorporate the concept of "intersectionality"? (see definition of intersectionality in glossary)
4. Women's empowerment (policy process)	4.1 Does the word "empowerment" appear in the policy associated with women? 4.2 Does the policy refer to women's economic empowerment? 4.3 Does the policy refer to women's empowerment in terms of increasing women's agency, resources, and/or achievements? 4.4 Does the policy mention consulting women, or women's civil society groups and associations during its development?
5. Incremental transformation (policy process)	5.1. Does the policy build on national previous gender-equality achievements/policies?
6. Gender-responsiveness (policy adapted to project context)	6.1. Does the policy address the specific needs and interests of women entrepreneurs/ women working in green industry? 6.2. Does the policy consider ways to overcome gender norms and social traditions that impair women's involvement in green industry? 6.3 Does the policy address steps necessary to increase women's leadership roles in green industry?
7. Regional and international contextualisation (policy adapted to project context)	7.1. Does the policy comply with international and regional conventions, policies, laws and commitments to safeguard women's rights? <sup>36</sup>

## Assessment II

The second assessment in the feminist critical policy analysis assesses the quality of the policy's conclusions on specific gender planning targets, commitments, indicators and/or "next steps". In order to ensure the accountability of gender targets/plans, these findings are rated based on the following criteria:

<sup>35</sup> The criteria and research questions for the first exercise are adapted from: Druza, K. and Rodriguez, C.M. 2018. Feminist Policy Analysis: Implications for the Agricultural Sector in Ethiopia. CIMMYT, Addis Ababa, Ethiopia.

<sup>36</sup> Criteria 7.1: The list of international and regional conventions will include the Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW), Sustainable Development Goal number 5, Protocol on Violence against Women, Beijing +25, and the Maputo Protocol, African Charter on Human and Peoples' Rights on the Rights of Women in Africa (not applicable to Peru/Cambodia).

- (0)= No mention of gender in the conclusion;  
 (1)= Irrelevant/tokenistic conclusion;  
 (2)= Has some sex but not gender conclusions;<sup>37</sup>  
 (3)= Has some gender conclusions but basic or unhelpful; or  
 (4)= Highly relevant gender-aware conclusion.

Lastly, the policies were assessed based on their level of implementation to date, as of April 2020. The results of the critical feminist policy analysis are presented further in detail in Section 4 of this report.

## 4.4 Sectors and sub-sectors examined in the study

At the time of writing, there have not been any large-scale reports about the state of women's participation, barriers and opportunities for women in the green industry, or the synergies that exist between women's economic empowerment and the advancement of green industry. "Green industry" incorporates many traditional sectors that are willing to mainstream environmental and social considerations into their operations, from agriculture and energy to waste management and tourism.

The selection of sectors and sub-sector was based on collaborative discussions between the project's National Coordinators, UNIDO Country Representatives and the National Focal Points. Potential synergies with UNIDO's Programme for Country Partnership (PCP) projects and the alignment with the government's priority sectors were taken into consideration. In Peru, Senegal and South Africa, an analysis was also performed using a points matrix that evaluated each sector and sub-sector in five (5) main aspects: (1) gender mainstreaming and of the role of women; (2) market size and potential; (3) entrepreneurial level; (4) environmental consciousness of sector players; and (5) potential synergies with PCP projects. Each sub sector was assigned points for indicators under each aspect. The sub sectors selected were those with the highest scores.

**Table 4.2: Sectors and sub-sectors examined**

Sectors	Sub-sector
<b>Cambodia</b>	
Garment, textile and footwear	
Agribusiness	Organic agriculture and transformation of agri-foods
Energy	Solar
Tourism	Hospitality and restaurant
<b>Peru</b>	
Textiles	Tanneries for leather and footwear Industries
Agro-foods	Coffee and cocoa
Waste management	Waste recycling
<b>Senegal</b>	
Energy	Mixed energy combining electricity, solar, wind, and biomass energies
Agribusiness	Organic agriculture and transformation of agri-foods
Animal husbandry and production	Leather and animal skin
Fishing	Fish processing
<b>South Africa</b>	
Renewable energy	Wind and solar
Waste management	Plastics
Land transport	Road transport

## 4.5 Key informant individual interviews

The two target groups for the Key Informant Individual Interviews (KIIs) were policymakers and practitioners (KII Type 1 – government actors) and entrepreneurs, members and/or leaders of a business organisation, NGO leader/management, or other persons of influence in green industry (KII Type 2 – business actors). KIIs with policymakers and practitioners were conducted to develop an in-depth understanding of government priorities, interests and incentives in the green economy, including current competing priorities and its effects of current policies on gender issues. The aim of KIIs with members and/or leaders in the industry was to understand specific barriers and constraints faced by women entrepreneurs, businesses, NGOs and community leaders and influencers; and identify ways to change policies to better support women entrepreneurs.

<sup>37</sup> "Sex" includes reference to "women" or "men". "Gender" refers to the relations, social norms and power dynamics between "women" and "men."

## 4.6 Focus group discussions

Focus group discussions were held with women working in green industry in a professional role, with five participants in each FGD. The purpose of these FGDs was to gain a more in-depth understanding of issues identified in the KIIs (e.g. specific barriers and constraints faced by women working in green industry).

See Table 4.3 for the list of samples by instrument type per country.

**Table 4.3:** Samples by instrument type

Instrument Type	Cambodia	Peru	Senegal	South Africa
KIIs: Policy makers and practitioners	7 (2 women, 5 men)	15 (8 women, 7 men)	18 (10 men, 8 women)	13 (11 women, 2 men)
KIIs: Business associations, NGOs, Entrepreneurs	21 (17 women, 4 men)	16 (12 women, 4 men)	13 (1 man, 12 women)	17 women
Focus group discussions	3 groups, total 15 participants FGD 1: 4 women Location: Phnom Penh  FGD 2: 5 women Location: Phnom Penh  FGD 3: 6 women Location: Phnom Penh	5 groups, 100+ FGD 1- 34 women Location: Lima  FGD 2- 9 women Location: Lima  FGD 3- 30+ women Location: Arequipa  FGD 4- 25+ women Location: Cuzco  FGD 5- 25+ women Location: Cuzco	2 groups, total 10 participants FGD 1 – 5 women Location: Ziguinchor (Chamber of Commerce)  FGD 2 – 5 women Location: Diamniadio, Dakar	2 groups, total 13 participants FGD 1: 6 women Location: Sandton  FGD 2: 7 women Location: Pretoria
Online surveys	16 (15 green entrepreneurs, 1 conventional entrepreneur)	42 (26 women green entrepreneurs, 16 women conventional entrepreneurs)	20 (8 women green entrepreneurs, 12 women conventional entrepreneurs)	25 (23 women green entrepreneurs, 2 women conventional entrepreneurs)

## 4.7 Online surveys

The last method of data collection was the quantitative online survey, which was sent to women entrepreneurs in both green and conventional industries. The purpose of the survey was to identify the opportunities and challenges faced by women entrepreneurs in green industry, and how these overlap with or differ from women entrepreneurs outside of green industry. The results of the survey were used to analyse the current situation of women entrepreneurs in both green and conventional industries in each country. The survey included information on the type of enterprise (i.e. size, sector, number of employees, years in operation), linkage to green industry; identified opportunities; and identified constraints.

## 4.8 Research limitations

Despite the best efforts of all contributors, the project has faced the following research limitations:

1. **Lack of clarity on the term “green industry”:** since the green industry is a new concept, there is a lack of clarity about the concept and what businesses require to be considered within the term “green”. Hence, it was difficult to segregate the sectors and sub-sectors into “green” versus “conventional”/ “non-green” industry;
2. **Recruitment of key informants:** the recruitment of the key informants started at the end of December 2019. Due to the Christmas and New Year holidays, it was difficult to recruit participants. For example, it was difficult to schedule interviews in January 2020 because either the key informants were still on leave or busy catching up on their work schedule. The key informant individual interviews were mostly conducted in the capital cities. The inclusion of women entrepreneurs and policy influencers from other cities would have provided useful viewpoints;
3. **Recruitment of focus group participants:** in Senegal, the recruitment of focus group participants was challenging. In one of the FGDs, not all the participants turned up, and with only 3 participants, the FGD could not be conducted as the minimum requirement for each FGD was 5 participants.

## 4.9 Research strengths and advantages

The objective of the project is to initiate a significant push to improve leadership and participation of women as entrepreneurs and industry professionals, and advance gender equality, as well as green industrialisation in line with the SDGs in the four participating countries: Cambodia, Peru, Senegal and South Africa. Some of the strengths of the study include:

1. **A novel initiative:** this research is the first of its kind to investigate women's economic empowerment in green industry; as both entrepreneurs and industry professionals;
2. **Research across the globe:** the research has produced an impressive international dataset, with qualitative and quantitative data gathered in 4 countries on 3 different continents;
3. **Robust, gender-responsive policy analyses:** the bespoke critical feminist policy analyses used in the study is an innovation in international development research. While there are several policies in the countries on climate change and sustainable development; the extent to which these policies have been gender mainstreamed was previously unknown. Our analyses create a way forward for all the policies in this area to be revisited and strengthened in terms of their gender content and commitments;
4. **Involvement at the policy level:** government stakeholders and policymakers are involved from the inception phase in evaluating the research findings;
5. **Bottom-up approach:** the study used a bottom-up approach to elicit the perceptions and everyday challenges of green industry women entrepreneurs and professionals. The data they shared will be used as a baseline and facilitate the design and revision of green industry policies according to the needs and priorities identified; and
6. **Bridging the green industry knowledge gap:** the study revealed a persistent knowledge gap of existing green industry policies in the country among entrepreneurs, professionals and policymakers themselves. By exposing this gap, this report proposes recommendations for raising awareness and exposing people to the opportunities present in green industry.

## 4.10 Research ethics

The research received ethical approval from the Internal Ethical Review Board of Includovate 6 January, 2020.<sup>38</sup>

### *Participant recruitment*

Individual participants were selected based on criteria (see Appendix 1) defined jointly by the national coordinator (NC) and in-country researchers, in close consultation with UNIDO. Together, the NC and researchers compiled individual lists of prospective interviewees. These lists emerged from desk-based reviews and in consultation with relevant stakeholders. Relevant stakeholders included ministries, industry institutions, and women's economic empowerment programme implementors. Following this process, inclusion and exclusion criteria were established for each type of data collected, which determined the final selection of participants.

### *Consent*

Key informant individual interviews, focus group discussions and online quantitative surveys were subjected to two forms of consent from participants. In all three interactions, informed consent was obtained at the time and place of the interview by the enumerator or interviewer. Additionally, in the case of the online interviews, there was an explicit statement proceeding the questions advising participants that their participation was voluntary and could be withdrawn at any time. When the survey was considered completed and returned by the participant, their consent was implied.

<sup>38</sup> A full copy of the approved ethics application is available upon request via email: o.iti@unido.org



A hand holding a magnifying glass over a wooden surface with small green house-shaped blocks.

## **5. Background comparison between countries**

## 5.1 Background characteristics

In all four countries, gender relations are shaped by strongly patriarchal and conservative socio-cultural norms. The influence of these norms varies by ethnic group, religion and level of urban development. However, Senegalese society broadly defines the socio-cultural role of women to be one focused on obligations as wives and mothers. Women are expected to perform the majority of unpaid household responsibilities such as housework, child rearing, and subsistence agricultural labour. Decision-making, independent income, formal employment, entrepreneurship and roles in public life are generally opportunities limited to men. Men are more visible as leaders, public officials and active citizens.

Table 5.1 depicts the gender gap score of all four countries. Although the countries have closed the gender gap in education, health and quality of life; much needs to be done to close the gender gap in economic participation and political empowerment.

**Table 5.1:** Gender gap score, 2020<sup>39</sup>

	Cambodia	Peru	Senegal	South Africa
Global gender gap score	0.694	0.714	0.684	0.780
Economic participation and opportunity	0.759	0.652	0.552	0.649
Educational attainment	0.939	0.981	0.888	0.994
Health and survival	0.975	0.977	0.976	0.980
Political empowerment	0.103	0.247	0.320	0.497

### *Mechanisms and institutions for the promotion of gender equality*

Each participating country has mechanisms and institutions for the promotion of gender equality and the empowerment of women.

**Cambodia:** the national mechanism for the promotion of gender equality and the empowerment of women is led by the Cambodian Ministry of Women's Affairs (MoWA). Other government bodies provide synergy, support and reinforcement. For example, the Cambodian National Council for Women, an inter-ministerial coordination body, gathers high-ranking representatives from all corresponding ministries and government agencies. Furthermore, the Technical Working Group on Gender (TWG-G), chaired by MoWA, is the coordination body for the formulation of policies, legislation, strategies, and aid effectiveness. Specific sectors are gender mainstreamed by Gender Mainstreaming Action Groups (GMAGs) who are responsible for sectoral gender plans and strategies.

**Peru:** in 1996, the Peruvian State, through Legislative Decree No. 866, passed the Law for the Organisation and Functions of the Ministry for the Promotion of Women Affairs and Human Development (PROMUDEH). PROMUDEH is the governing body responsible for the "Promotion and development of women and family; the general population and minors at risk."<sup>40</sup> PROMUDEH has led efforts to gender mainstream government policies aimed at gender equality and the empowerment of women. Subsequently, the National Plan for Equal Opportunities for Women and Men, 2000-2005 (Decree No. 001-2000-PROMUDEH) and the National Plan for Equal Opportunities for Women and Men, 2006-2010 (Supreme Decree No. 009-2005-MIMDES) were established. On 16 March 2007, the Peruvian Congress approved the Equal Opportunities Act, Law No. 28983. This law was aimed at "establishing the regulatory, institutional and public policy framework at national, regional and local levels; to ensure women and men exercise their rights to equality, dignity, free development, well-being and autonomy; preventing discrimination in all spheres of their public and private lives; and establishing full equality."<sup>41</sup> Decree No. 1098, dated 23 January 2012, approved the Law for the Organisation and Functions of the Ministry of Women Affairs and Vulnerable Populations (MIMP). MIMP also became the governing body of national and sectorial policies on women; and the promotion and protection of vulnerable populations.

**Senegal:** as part of their mandate, the Ministry of Women, Family and Childhood seeks to promote equality between genders throughout the country. There are other mechanisms for the promotion, monitoring and control of gender equality and the elimination of discrimination against women in policy and programming implementation. In particular, the Advisory Committee on Women brings together civil society organizations with government representatives. There are several institutions responsible for monitoring gender equality. Established by Decree No. 2008-1047 of 15 September 2008, the National Observatory of Women's Rights monitored all violations of women's rights. Subsequently, the National Observatory of Women's Rights was established by Decree No. 2011-819 of 7 March 2011. It was replaced by the National Parity Observatory and is tasked with monitoring, evaluating and making proposals for promoting parity between men and women in public policy.

**South Africa:** a number of processes and mechanisms were adopted to advance the country towards gender equality. The principal structures of the national gender equality policy framework are the Ministry for Women, Youth and Persons with Disabilities, Gender Focal Points (GFPs)

<sup>39</sup> World Economic Forum (2019). The Global Gender Gap Report 2020.

<sup>40</sup> Article 2, Dec. Leg. No. 866. Law of Organization and Functions of the Ministry for the Promotion of Women and Human Development (PROMUDEH).

<sup>41</sup> Peruvian Congress, "Equal Opportunities Act", Law No. 28983 on 16 March 2007.

in national departments, Commission for Gender Equality (CGE), National Parliament and other organs of civil society. This institutional framework is in line with the South African National Policy Framework for Women's Empowerment and Gender Equality.

Table 5.2. below presents the components of the national gender equality policy framework in South Africa.

*Table 5.2: Components of the national machinery*

Government	Parliament	Independent Bodies	Civil Society
The presidency	Portfolio committees	Constitutional court	Non- governmental organisations
Cabinet	Parliamentary Multi-Party women's caucus	Other courts	Religious bodies
Former Office on the status of women and currently the Ministry for Women, Youth and Persons with Disabilities	Steering committee to women's caucus	Commission for Gender Equality	Contralesa
Provincial offices on the status of women	Provincial women's caucus group	Public Service Commission	SALGA BUSA NEDLAC Black Business Forum
Gender units in line department	Women's empowerment unit	Human Rights Commission, SALRC, Office of the Public Protector, Land Commission, NYDA (National Youth Development Agency), IEC.	
Gender units in local government structures			
National Departments			

## 5.2 Country priorities in national policies

**Cambodia:** gender equality and the empowerment of women is an integral part of the policy of the Royal Government of Cambodia (RGC). It is also recognised in the Constitution and in all the government's major policy documents that have been adopted since 1998. This commitment is reinforced by Cambodia's ratification of the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) in 1992, and its signing of the "Platform for Action" agreed at the 1995 Fourth World Conference on Women in Beijing.

Two laws referring to women's rights and protection were approved respectively in 2005 and 2008: the Law on the Prevention of Domestic Violence and the Protection of Victims, and the Law on Suppression of Human Trafficking and Sexual Exploitation. The Rectangular Strategy phase III (2014-2018) recognised that women are the backbone of Cambodian society and economy. The National Strategic Development Plan (NSDP) 2014-2018 attempts to put forth actionable proposals for achieving the objectives of the Rectangular Strategy Phase III.

Neary Rattanak IV is the National Strategic Plan (2014–2018) for Gender Equality and the Empowerment of Women which represents the guiding policy plan to promote gender equality and the empowerment of women in Cambodia. The Gender Mainstreaming Policy and Strategic Framework 2016–2020 was developed by the Gender and Children Working Group (GCWG), within the Ministry of Agriculture, Forestry and Fisheries (MAFF). This policy is the result of intensive consultation between the GCWG and MAFF central and provincial officers, line ministry representatives from the Ministry of Planning (MoP) and MoWA, and development partners, including FAO.

**Peru:** in 1995, Peru signed the Beijing Platform for Action, which aims to close the gender gap and eradicate all forms of gender discrimination. Subsequently, the National Plan for Equal Opportunities for Women and Men, 2000-2005 (Decree No. 001-2000-PROMUDEH) and the National Plan for Equal Opportunities for Women and Men, 2006-2010 (Supreme Decree No. 009-2005-MIMDES) were established. On 16 March 2007, the Peruvian Congress approved the Equal Opportunities Act, Law No. 28983. This law was aimed at "establishing the regulatory, institutional and public policy framework at national, regional and local levels; to ensure women and men exercise their rights to equality, dignity, free development, well-being and autonomy; preventing discrimination in all spheres of their public and private lives; and establishing full equality."<sup>42</sup>

On 4 April 2019, the Peruvian government's Women & Vulnerable Population Groups Ministry (MIMP) published its National Gender Equality Policy<sup>43</sup> to tackle the causes and effects of structural discrimination against women; in compliance with international obligations on human rights. These policies are implemented via the National Agreement<sup>44</sup> and the National Development Strategic Plan of Peru 2030<sup>45</sup>. In addition, the policy entered into force immediately and is mandatory for all public administration bodies. The MIMP will lead and manage oversight and evaluation.

<sup>42</sup> Peruvian Congress, "Equal Opportunities Act", Law No. 28983 on 16 March 2007.

<sup>43</sup> Supreme Decree No. 008-2019-MIMP (04/04/2019).

<sup>44</sup> The National Agreement is a forum that prepares and approves guidelines on State policies based on dialogue and agreement between the three levels of government and the political and social institutions of Peru. The agreement was signed on July 22, 2002.

<sup>45</sup> Directive No. 001-2017-CEPLAN / PCD.



**Senegal:** the 2001 Constitution of Senegal strengthened the principles of gender equality and the elimination of all forms of discrimination against women. Article 7 stipulates that *“All human beings are equal in the eyes of the law. Men and women have equal rights.”*<sup>46</sup>

Senegal ratified the Protocol to the African Charter on Human and Peoples’ Rights on the Rights of Women in Africa in 2004.<sup>47</sup> The government of Senegal made significant progress towards the promotion of a gender-sensitive environment, through the adoption of the Parity Law, the Standard Operating Procedures on gender-based violence (GBV), a National Action Plan on GBV/Human Rights and Human Rights Promotion; and the National Strategy for Gender Equality and Equity (2016-2026).

The Government explicitly articulated gender equality as a development objective in legal and planning instruments. The Poverty Reduction Strategy Paper (PRSP) II 2006- 2010<sup>48</sup> of the Document de Politique Economique et Sociale (DPES) 2011-2015;<sup>49</sup> and the Stratégie Nationale De Développement Economique et Social (SNDES) 2013-2017,<sup>50</sup> govern economic and social policy. Both have applied gender equality considerations in their development. The Plan Sénégal Emergent / Plan for an Emerging Senegal (PSE, 2015-2035)<sup>51</sup> prioritises women and girls in a number of flagship projects and programmes.

Senegal has ratified the ILO Convention 100, the Equal remuneration convention; and 111, the Discrimination employment and occupation convention. Moreover, 183, the Maternity protection convention was ratified 18 April 2017. Conventions 156, the Workers with family responsibilities convention; and 189, the Domestic workers conventions are not yet not ratified. The Senegalese Constitution prohibits all employment, wage or tax discrimination between men and women (Constitution, Art. 25, paragraph 2) but does not specifically cover job advertisements, selection criteria, recruitment, hiring, terms and conditions, promotions, training, assignments and termination. The law mandates equal remuneration for work of equal value (Labour Code, Art. 105).

**South Africa:** the National Policy Framework for Women’s Empowerment and Gender Equality was formulated by the former National Office on the Status of Women; which was located in the Presidency. This policy framework was adopted by Cabinet in 2000 and provides guidance to spheres of government with regards to the formulation of gender policies.

Commitments to international policies include the Beijing Declaration and Platform for Action (1995), the Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW), ratified by South Africa in 1995; and the UN Millennium Development Goals (MDGs) objective of halving poverty and unemployment by 2014.

Regional policies include the SADC Declaration on Gender and Development (ratified by South Africa in 2008 and amended in 2017/18) and the Protocol to the African Charter on Human and People’s Rights on the Rights of Women in Africa (ratified by South Africa in 2004). National policies include the Reconstruction and Development Programme (1994), the Women’s Charter for Effective Equality (1994), South Africa’s National Policy Framework for Women’s Empowerment and Gender Equality (2000). Gender considerations have been effectively mainstreamed across national priorities which are comprehensively reflected in the MTSF 2019-2024.<sup>52</sup>

### Country priorities in national policies for green industry

**Cambodia:** the Royal Government of Cambodia (RGC) is one of the first national governments<sup>53</sup> in the world to have established green policies such as the National Green Growth Roadmap (2010), the National Green Growth Policy (2013-2030), the National Green Growth Strategic Plan (2013-2030), and the Cambodian Climate Change Strategic Plan (2014-2023) to demonstrate its desire for green growth in achieving its development objectives. The RGC is currently developing an Environmental Code and a National Environmental Strategy and Action Plan (NESAP) (2017-2023). Through international fora, Cambodia has committed to sustainable use of natural resources, green growth principles, and taking action to improve Cambodia’s resilience to climate change. The National Council for Sustainable Development (NCSD), established in May 2015, is the primary government institution responsible for the coordination of green growth. As part of its Women’s Economic Empowerment (WEE) strategy, MoWA aims to utilise its network of Women Development Centres (WDCs) to introduce innovative models for cooperation with the private sector, particularly in developing “green” and social enterprises. Cambodia’s key national policy framework supporting gender equality and green industry includes the Neary Rattanak IV Strategic Plan, 2014-2018,<sup>54</sup> the National Strategic Plan on Green Growth, 2013-2030<sup>55</sup>, the Rectangular Strategy Phase III,<sup>56</sup> the National Strategic Development Plan (NSDP), 2014-2018,<sup>57</sup> and the Climate Change Action

46 Constitution of the Republic of Senegal of January 22, 2001 (as Last Amended by the Constitutional Law No. 2007-2).

47 UN Women, Africa (n.d.). Available at: <https://africa.unwomen.org/en/where-we-are/west-and-central-africa/senegal>.

48 International Monetary Fund (2007). Senegal: Poverty Reduction Strategy Paper, Washington DC, USA. Available at: [imf.org/external/pubs/ft/scr/2007/cro7316.pdf](http://imf.org/external/pubs/ft/scr/2007/cro7316.pdf).

49 Republique du Senegal (2011). Document de Politique Economique et Sociale DPES 2011-2015, Dakar, Sénégal Available at: <http://servicepublic.gouv.sn/assets/textes/dpes-version-finale.pdf>.

50 Republique du Senegal (2012). Stratégie Nationale De Développement Economique et Social 2013-2017, Dakar, Sénégal. Available at: [http://www.ipar.sn/IMG/pdf/SNDES\\_2013-2017\\_-\\_consolidation\\_version\\_24\\_oct\\_2012.pdf](http://www.ipar.sn/IMG/pdf/SNDES_2013-2017_-_consolidation_version_24_oct_2012.pdf).

51 Ministry of the Economy, Republic of Senegal (2018). Plan Sénégal Émergent (PSE) (2019-2024). Dakar, Senegal. Available at: <https://www.sentresor.org/publication/plan-senegal-emergent-plan-dactions-prioritaires-2019-2023/>.

52 [https://www.dpme.gov.za/keyfocusareas/outcomesSite/MTSF\\_2019\\_2024/2019-2024%20Comprehensive%20Document.pdf](https://www.dpme.gov.za/keyfocusareas/outcomesSite/MTSF_2019_2024/2019-2024%20Comprehensive%20Document.pdf).

53 Global Green Growth Institute (2018). Green Growth Potential Assessment. Cambodia Summary Report.

54 [http://www.kh.undp.org/content/cambodia/en/home/library/democratic\\_governance/cambodian-gender-strategic-plan---neary-rattanak-4.html](http://www.kh.undp.org/content/cambodia/en/home/library/democratic_governance/cambodian-gender-strategic-plan---neary-rattanak-4.html).

55 <http://www.greengrowthknowledge.org/sites/default/files/downloads/policy-database/CAMBODIA%29%20National%20Strategic%20Plan%20on%20Green%20Growth%202013-2030.pdf>.

56 <http://www.cambodiainvestment.gov.kh/wp-content/uploads/2013/11/2013-Rectangular-Strategy-III-En8.pdf>.

57 [https://www.ilo.org/wcmsp5/groups/public/---asia/---ro-bangkok/---sro-bangkok/documents/genericdocument/wcms\\_364549.pdf](https://www.ilo.org/wcmsp5/groups/public/---asia/---ro-bangkok/---sro-bangkok/documents/genericdocument/wcms_364549.pdf).



**Peru:** the economy of Peru remains highly dependent on its natural resources. Therefore, the importance of a transition to a green economy is clear. Peru has experienced a decade of economic prosperity, predominately driven by raw material exports. This includes trade in fisheries, mining and agriculture.<sup>59</sup> Statistics on the participation of women in these specific sectors are scarce. However, the Peruvian labour force participation rate of women is 69.9%, whilst that of men is 84.7%.<sup>60</sup> Women across all sectors experience lower wages, less employment and less training rates. Women are also less likely to be promoted to management positions. Socially constructed gender roles and the gendered division of labour are embedded in the cultures and traditions of Peru and will take a sustained-efforts to change over time. Hence, in order to increase women's participation in green industry, the systems and behaviours behind intersecting inequalities must be addressed. Indeed, they must be systematically deconstructed, if we are to achieve a balanced and just green economy.

**Senegal:** Senegal faces major challenges to development, such as high risks of desertification, overexploitation of forestry resources and overfishing, widespread youth unemployment and persistent poverty. In recent years, Senegal has made significant strides towards improving the well-being of its population and has established itself as one of the key economic hubs of West Africa. It has demonstrated leadership in making the transition to an inclusive green economy, but still faces persistent development challenges. Senegal is a signatory to the African Charter on Human and People's Rights (ACHPR), and as such has ratified all of its binding legal instruments. This includes recognising the right to life (Article 4), the right to health (Article 16), and the right to economic, social and cultural development (Article 22).

Senegal recently transformed its Economic and Social Council into an Economic, Social and Environmental Council (EESC), which makes it an influential institutional actor in advancing the green economy and sustainable development in the context of the country's national objectives. Senegal officially launched its national Partnership for Action on Green Economy (PAGE) initiative in 2014, which brings together the expertise of UNEP, ILO, UNITAR, UNIDO and UNDP, to implement national strategies and policies for a green economy. PAGE has been particularly committed to promoting green industry, trade and employment as well as institutional capacity building for the green economy through training and support in the implementation of national policies. PAGE is supporting on-going efforts in the context of the set priorities outlined in the Plan Sénégal Emergent / Plan for an Emerging Senegal (PSE) – the country's national development framework for medium to long-term economic and social policies.

There is a growing body of literature that focuses on the synergies between women's economic empowerment and the expansion of clean energy. This includes global barriers and enablers for the participation of women in the clean energy sector;<sup>61</sup> data on the positive synergies between rural electrification and women's empowerment;<sup>62</sup> research on the benefits of women's entrepreneurship for clean energy expansion;<sup>63</sup> and studies into the impact of global trends towards greener energy on gender equality.<sup>64</sup>

**South Africa:** the mandate for a Green Economy in South Africa derives from the South African constitution, which enshrines sustainable development in the Bill of Rights. However, the concept– along with the associated idea of “green jobs”– the global financial crisis increased interest in green industry. In 2011, stakeholders in government, business, trade unions, and other civil society organisations, signed the Green Economy Accord. This endorsed a shift to a greener economy as a means for both improving the resilience of the economy against external shocks and as a driver for more job-intensive growth.

The Paris Agreement was adopted on 12 December 2015 at the 21st session of the Conference of the Parties to the United Nations Framework Convention on Climate Change (UNFCCC CoP21) held in Paris from 30 November to 13 December 2015. The Agreement is a comprehensive framework which will guide international efforts to limit greenhouse gas emissions and to meet all the associated challenges posed by climate change.<sup>65</sup> South Africa has a large number of policies and strategies in place with respect to the green economy, many of which originated before the concept came into widespread use around 2008, as a result of the publication of the Green Jobs Report by the ILO/UNEP/ITUC/ IOE. However, in the report attention was not given to sex-disaggregated data.<sup>66</sup>

### *Country priorities in national policies for women entrepreneurs*

**Cambodia:** the first Operational Strategy for Women's Economic Empowerment (2014-2018) built on the MDG Acceleration Framework Cambodia Action Plan (2013–2015) which prioritises the enhancement of micro, small and medium-sized enterprises owned by women.

In Cambodia, women entrepreneurs are important contributors to business development. They actively participate in SMEs in urban and rural areas. Women run 65% of all businesses in Cambodia, primarily concentrated at a micro-level, particularly in the wholesale and retail

58 <http://www.camclimate.org.kh/en/documents-and-media/library/category/128-climate-change-action-plan.html?download=723:ccap-for-ministry-of-environment-2016-2018-en>.

59 Ibid.

60 UNDP (2019). Human Development Report 2019.

61 GWNET (2019). Women for Sustainable Energy: Strategies to Foster Women's Talent for Transformational Change.

62 Deloitte (2019). Positive Synergies Between Rural Electrification and Women's Empowerment. Deloitte SHIFTS.

63 UNEP and UN Women (2016). Global Programme Document Women's Entrepreneurship for Sustainable Energy (WESE).

64 Martinez (2020). Global Trends Impacting Gender Equality in Energy Access.

65 <https://www.environment.gov.za/mediarelease/southafricansignsparisagreementonclimate>.

66 [https://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/documents/publication/wcms\\_098504.pdf](https://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/documents/publication/wcms_098504.pdf).

trade; and the services sector.<sup>67</sup> Their businesses are on average smaller and less profitable than businesses run by men and are more likely to be in the informal sector. Women in Cambodia only own an estimated 1.7% of registered businesses, compared to 6.6% for men.<sup>68</sup> Despite their importance, the achievements of women entrepreneurs go largely unrecognised. Indeed, the overall impact of women on the Cambodian economy and society will continue to stagger, unless steps are taken to reduce persistent barriers to the growth of women-owned businesses.<sup>69</sup>

**Peru:** despite the aforementioned policies, women in Peru continue to face blocks and challenges in accessing education, work, entrepreneurship and leadership opportunities in green industry.<sup>70</sup> The majority of businesses in Peru, particularly those owned by women, are informal. As a result, these businesses are nominally engaged with the legal requirements of registration, regulation, and taxation; and employ few people. Most woman-led businesses remain in the informal economy or remain a micro-enterprise. According to the Peru National Survey of Businesses 2015 INEI<sup>71</sup> women represent only 33% of personnel employed in businesses and only 28% of businesses are led by women. Furthermore, women are heavily concentrated in micro and small businesses. The reasons why women are overrepresented in the informal sector and are more likely to remain there, is increasingly a point of public discussion in Peru.

In 2014, APEC's Women's Entrepreneurship initiative created a profile for Peru that illustrates the range of networks and associations available to women business owners.<sup>72</sup> This is a resource of networking opportunities for women-owned enterprises, from home-based microenterprises to companies that employ 100 or more people. WEConnect International's national chapter in Peru connects women entrepreneurs to major global corporations, seeking to diversify their supplier base. The Association of Women Entrepreneurs of Peru (AMEP) founded in 2009, and the International Organization of Women in Trade—Peru (OWIT-Peru, a chapter of OWIT International) bring together over 200 women entrepreneurs, executives and professionals.

**Senegal:** married and unmarried women have the right to open a bank account at a formal institution (Civil Code, Art. 371) and can obtain credit. In addition, Art. 54 of the Agro-Sylvo-Pastoral Orientation Act provides for the facilitation of access to credit by women and young people which means that women are granted special conditions to access loans. Furthermore, the National Women's Credit Fund and the National Fund are government programmes focused on supporting women's access to formal financial resources for the promotion of female entrepreneurship. There has been a noticeable improvement in female entrepreneurship in Senegal. From 2007 to 2014, the total share of female-owned firms in the country grew from 23.8% to 32.1%.<sup>73</sup>

**South Africa:** for the next five years, South Africa commits to focusing on: equal representation, the economic empowerment of women, financial inclusion, job creation, women's health and ending violence against women. Two of South Africa's legislative mechanisms for equality and equity—the Promotion of Equality and Prevention of Unfair Discrimination Act and the Employment Equity Act—will be fully implemented with the aim of reaching gender parity by 2030, in accordance with the UN Agenda 2030. This will include mandatory affirmative action, as well as the enforcement of a Code of Good Practice to ensure equal pay for equal work within the next five years. The She Trades Invest initiative 2019 is a step towards connecting investors and women entrepreneurs in developing markets such as South Africa.

<sup>67</sup> Ibid.

<sup>68</sup> Ibid.

<sup>69</sup> UNIDO (2017). Women's Economic Empowerment in Green Industry. Cambodia Need Assessment.

<sup>70</sup> Nathan Associates Inc. (2016). Women's economic participation in Peru.

<sup>71</sup> [https://www.inei.gob.pe/media/MenuRecursivo/publicaciones\\_digitales/Est/Lib1430/index.html](https://www.inei.gob.pe/media/MenuRecursivo/publicaciones_digitales/Est/Lib1430/index.html).

<sup>72</sup> Nathan Associates Inc. (2016). Women's economic participation in Peru.

<sup>73</sup> Seck et al. (2015). Female entrepreneurship, access to credit and firms' performance in Senegal.



## 6. Policy analysis comparison

## 6.1 Selection of policies methodology

Ten policies per country were selected by the National Coordinators and National Focal Points using the selection criteria listed in section 4.3 of this report. Using these criteria, they narrowed their selection to 10 policies based on consultation with national stakeholders (except Cambodia). The UNIDO country partnership programme (PCP) was also consulted. Table 6.1 includes all 40 policies analysed across the four participating countries.

## 6.2 Results of analysis: similarities and differences

This section provides a summary of the in-depth analyses of 40 policies (listed in Table 6.1) used to review the inclusion of gender integration in policy content and formulation. As outlined in section 4.3 of this report, set criteria were used to review each policy. Appendix 1 presents the full individualised analysis for each policy.

### *Assessment I (Table 6.1)*

#### ENGENDERING OF THE POLICY

The majority of the policies reviewed across countries were not gender mainstreamed, in that they did not address gender equality, gender stereotypes or include sex-disaggregated data. However, there are policies that are exceptions in this regard, such as:

- The Gender and Climate Change Action Plan (GCCAP), Cambodian Sustainable Development Goals (CSDGs) Framework, National Strategic Development Plan (NSDP) in Cambodia;
- The National Determined Contributions, Action Plan on Gender and Climate Change (PAGCC) and Peru 2021 Bicentennial Plan in Peru;
- The Environmental and Social Commitment Plan (ESCP) in Senegal; and
- The Framework and Strategy towards Gender Mainstreaming in the Environmental Sector, the Department of Energy (DoE) policy on Women's Empowerment and Gender Equality (WEGE), the Department of Environmental Affairs Strategic Plan, and the National Development Plan (NDP) 2030 in South Africa.

#### STRUCTURAL UNDERSTANDING OF GENDER EQUALITY

The policies reviewed have limited consideration of structural reasons beyond the individual level that impact gender equality, except for:

- The Gender and Climate Change Action Plan (GCCAP), the Cambodian Sustainable Development Goals (CSDGs) Framework, and the National Strategic Development Plan (NSDP) in Cambodia;
- The National Determined Contributions, the Action Plan on Gender and Climate Change (PAGCC), The National Forest and Climate Change Strategy, and the Peru 2021 Bicentennial Plan;
- The Environmental and Social Commitment Plan (ESCP), Plan Sénégal Émergent (PSE) and The Senegal National Adaptation Plan in Senegal;
- The Department of Energy (DoE) policy on Women's Empowerment and Gender Equality (WEGE), The Framework and Strategy towards Gender Mainstreaming in the Environmental Sector, and the National Development Plan (NDP) 2030 in South Africa.

Most of the policies do not include reference to historical, legal, and/or socio-cultural factors that influence gender equality.

#### INTERSECTIONALITY

There is limited consideration given to the intersections between gender and other factors such as disability, race, youth or rurality. Exceptions are the policies mentioned above (e.g. in the engendering of the policy and structural understanding of gender equality criteria categories) for each country which all address women and other vulnerable groups such as children, the elderly, ethnic and religious minorities.

#### EMPOWERMENT OF WOMEN

The policies have limited reference to women's empowerment, except for:

- The Gender and Climate Change Action Plan (GCCAP), the Cambodian Sustainable Development Goals (CSDGs) Framework, the National Strategic Development Plan (NSDP) in Cambodia;
- The National Determined Contributions, the Action Plan on Gender and Climate Change (PAGCC) and the Peru 2021 Bicentennial Plan;
- The Plan Sénégal Émergent (PSE), the Environmental and Social Commitment Plan (ESCP), the National Strategy for the Promotion of Green Jobs in Senegal; and



- The Department of Energy (DoE) policy on Women's Empowerment and Gender Equality (WEGE), and The Framework and Strategy towards Gender Mainstreaming in the Environmental Sector in South Africa.

Most of the policies do not mention consulting women or women's civil society groups and associations during its development.

#### INCREMENTAL TRANSFORMATION (policy process)

Policies reviewed generally do not build on previous national policy, specifically policies that aim to advance gender equality or the empowerment of women. Exceptions to this are the policies listed above in the engendering of the policy, structural understanding of gender equality and women's empowerment categories.

#### GENDER-RESPONSIVENESS

The policies mentioned in the engendering of the policy, structural understanding of gender equality sections and women's empowerment incorporate gender responsiveness to some extent; however, most of the policies do not address the specific needs and interests of women entrepreneurs or women working in green industry. To ensure policies are gender-responsive, they should be revised to consider ways to overcome gender norms and social traditions that impair women's involvement in green industry. Moreover, the policies do not address steps necessary to increase women's leadership roles in green industry.

#### REGIONAL AND INTERNATIONAL CONTEXTUALISATION

Few policies analysed referenced regional or international policies that safeguard women's rights, such as CEDAW. This is a missed opportunity to build on existing legislation, and can be easily remedied in the policy revision process to ensure green industry policies are aligned with regional and international commitments to gender equality.

#### *Assessment II (Table 6.2)*

Specific targets, commitments, indicators, and/or next steps regarding gender planning in the policies assessed were rare, with most policies not referencing gender at all in these areas (resulting in a score of 0). Exceptions to this were: the Cambodia Trade Integration Strategy (CTIS) (2019-2023) and the Gender and Climate Change Action Plan (GCCAP) (2014-2018) in Cambodia; the National Determined Contributions (2015, 2017-2018), the Action Plan on Gender and Climate Change (PAGCC) (2016-2021), the Framework Law on Climate Change - Law No. 30754 (2018), and the Peru 2021 Bicentennial Plan (2021); the Plan Sénégal Émergent (PSE) (2019-2024) in Senegal, and the National Green Fund (2012), Department of Energy (DoE) policy on Women's Empowerment and Gender Equality (WEGE) (2017), the Framework and Strategy towards Gender Mainstreaming in the Environmental Sector (2016-2021) and National Development Plan (NDP) 2030 (2012-2030) in South Africa.

#### *Assessment III (Table 6.3)*

The policies have implementation plans but there is limited evidence of implementation of the policies.

## 6.3 Specific recommendations regarding policies: similarities and differences

Regarding the existing green industry policies that were reviewed in-depth, specific recommendations are given for each in terms of improving their quality and implementation. The broad recommendations for **the new policies that started recently or will continue for the next 5-10 years are:**

1. To **use the gender-responsive green industry policy framework** (see Figure 9.1) to strengthen existing policies in terms of content and commitments to advancing gender equality and the empowerment of women in green industry;
2. To conduct a **mid-term evaluation** that will help understand the progress of the policy in terms of its implementation and outcomes related to gender equality and the empowerment of women;
3. To create a **gender-specific M&E** framework and collect a baseline of sex-disaggregated data and plan for a final evaluation to assess outcomes related to gender equality and the empowerment of women; and
4. To **revise the policy** (if needed) to demonstrate how it will ensure social inclusivity in terms of job opportunities for more vulnerable groups, such as women, disabled, youth, and others.

**Table 6.1: Summary table of assessment I**

No.	Cambodia	Peru	Senegal	South Africa
1	National Strategic Plan on Green Growth (2013-2030) <sup>74</sup>	National Determined Contributions (2015, 2017-2018) <sup>75</sup>	National Strategy for the Promotion of Green Jobs (2019) <sup>76</sup>	National Green Fund (2012) <sup>77</sup>
2	Strategic Development Plan for Cambodian Agro-industries (2019-2030) <sup>78</sup>	Peruvian National Coffee Action Plan (2018-2030) <sup>79</sup>	National Strategy for Green Growth in Senegal (2016-2020) <sup>80</sup>	Green Transport Strategy (2018-2050) <sup>81</sup>
3	The Strategic Planning Framework for Fisheries (2010-2019) <sup>82</sup>	Circular Economy Roadmap in Industry Sector (2020) <sup>83</sup>	LAW No. 2010-21 of December 20, 2010 (2010) <sup>84</sup>	Department of Energy (DoE) policy on Women's Empowerment and Gender Equality (WEGE) (2017) <sup>85</sup>
4	Cambodia Trade Integration Strategy (CTIS) (2019-2023) <sup>86</sup>	Action Plan on Gender and Climate Change (PAGCC) (2016-2021) <sup>87</sup>	National Strategy for Sustainable Development (2015) <sup>88</sup>	The National Waste Management Strategy (NWMS) (2011) <sup>89</sup>
5	National Technical Vocational Education and Training Policy (TVET) (2017-2025) <sup>90</sup>	The Framework Law on Climate Change - Law No. 30754 (2018) <sup>91</sup>	Environment and Natural Resources Sector Policy (2009-2015) <sup>92</sup>	Climate Change Bill (2018) <sup>93</sup>
6	NDC Roadmap and Stakeholder Engagement Plan (2019-2030) <sup>94</sup>	The National Climate Change Strategy (2024) <sup>95</sup>	National Climate Fund (2015) <sup>96</sup>	Department of Environmental Affairs Strategic Plan (2019/20 to 2023/24) <sup>97</sup>
7	Gender and Climate Change Action Plan (GCCAP) (2014-2018) <sup>98</sup>	The Management Plan of Risks and Adaptation to Climate Change in the Agricultural Sector (2012 -2021): The PLANGRACC <sup>99</sup>	The Senegal National Adaptation Plan [to climate change] (2006) <sup>100</sup>	The Framework and Strategy towards Gender Mainstreaming in the Environmental Sector (2016-2021) <sup>101</sup>
8	Cambodian Sustainable Development Goals (CSDGs) Framework (2016-2030) <sup>102</sup>	The National Forest and Climate Change Strategy (2015) <sup>103</sup>	Environmental and Social Commitment Plan (ESCP) (2019) <sup>104</sup>	The Integrated Resource Plan (IRP) 2019 (2010-2030) <sup>105</sup>
9	National Strategic Development Plan (NSDP) (2014-2018, 2019-2023) <sup>106</sup>	Peru 2021 Bicentennial Plan (2021) <sup>107</sup>	Plan Sénégal Émergent (PSE) (2019-2024) <sup>108</sup>	National Development Plan (NDP) 2030 (2012-2030) <sup>109</sup>
10	The Cambodia Industrial Development Policy (IDP) (2015-2025) <sup>110</sup>	National Plan for Competitiveness and Productivity (2018-2030) <sup>111</sup>	Ministry of Industry Development Sector Policy Letter (2018-2023) <sup>112</sup>	Re-imagining the Future Strategy (The DTI) (2019) <sup>113</sup>

Table Keys: 1=The policy meets the criteria; 0.5= The policy meets the criteria to a certain extent; 0= The policy poorly meets the criteria.

Out of total score of 16, the policies that scored 8/16 and more are coded green.

- 74 National Council of Green Growth (2013). National Strategic Plan on Green Growth 2013-2030. Royal Government of Cambodia.
- 75 Republic of Peru (2015). National Determined Contributions (2015, 2017-2018). Lima, Peru.
- 76 Republic of Senegal, Ministry of the Environment and Sustainable Development, National Strategy for the Promotion of Green Jobs (2019). Dakar, Senegal.
- 77 Department of Environmental Affairs, Republic of South Africa. National Green Fund (2012). Pretoria, South Africa: Department of Environmental Affairs.
- 78 Ministry of Agriculture, Forestry, and Fisheries (2020). Strategic Development Plan for Cambodian Agro-industries 2019-2030.
- 79 Ministry of Agriculture and Irrigation (2018). National Plan of Action for Peruvian Coffee 2018-2030. Lima, Peru: Ministry of Agriculture and Irrigation.
- 80 Partnership for Action on Green Economy (PAGE) (2015). National Strategy for Green Growth in Senegal (2016-2020). Dakar, Senegal.
- 81 Department of Environment, Forestry, and Fisheries, Republic of South Africa (2011). The National Waste Management Strategy (NWMS) (2011). Pretoria, South Africa: Department of Environment, Forestry, and Fisheries.
- 82 Fisheries Administration of the Ministry of Agriculture, Forestry and Fisheries (MoAFF), Kingdom of Cambodia (2011). The Strategic Planning Framework for Fisheries 2010-2019 Cambodia.
- 83 Ministry of Production (PRODUCE) and the Ministry of the Environment (MINAM), Republic of Peru (2020). Roadmap towards a Circular Economy in the Industry Sector (2020). Supreme Decree No. 003-2020-Produce. Lima, Peru.
- 84 Republic of Senegal (2010). LAW No. 2010-21 of December 20, 2010 (2010). Dakar, Senegal.
- 85 Department of Energy Republic of South Africa. Department of Energy (DoE) policy on Women's Empowerment and Gender Equality (WEGE) (2017). South Africa.
- 86 Ministry of Commerce (2019). Cambodia Trade Integration Strategy (CTIS) 2019-2023.
- 87 Ministry of the Environment and Ministry of Women and Vulnerable Populations, Republic of Peru (2014). Action Plan on Gender and Climate Change (2016-2021). PAGCC- Perú.
- 88 Ministry of the Environment and Sustainable Development, Republic of Senegal (2015). National Strategy for Sustainable Development (2015). Dakar, Senegal. Available at: [https://chm.cbd.int/api/v2013/documents/1B1ECE54-E678-582A-3206-64226B5FF510/attachments/SNDD%202015\\_Fersion%20Finale.pdf](https://chm.cbd.int/api/v2013/documents/1B1ECE54-E678-582A-3206-64226B5FF510/attachments/SNDD%202015_Fersion%20Finale.pdf).
- 89 Department of Environment, Forestry, and Fisheries, Republic of South Africa (2011). The National Waste Management Strategy (NWMS) (2011). Pretoria, South Africa: Department of Environment, Forestry, and Fisheries.
- 90 Ministry of Labour and Vocational Training (2017). National Technical Vocational Education and Training Policy 2017-2025.
- 91 Congress of the Republic of Peru (2018). The Framework Law on Climate Change – Law No. 30754 (2018). Lima, Peru.
- 92 Environment and Natural Resources Sector Policy (2009-2015). Dakar, Senegal.
- 93 Department of Environmental Affairs, Republic of South Africa (2018). Climate Change Bill (2018). Pretoria, South Africa: Department of Environmental Affairs.
- 94 National Council for Sustainable Development (2019). NDC Roadmap and Stakeholder Engagement Plan 2019-2030.
- 95 Ministry of the Environment (2014). The National Climate Change Strategy (2024). Lima, Peru: Ministry of the Environment.
- 96 Republic of Senegal, Ministry of the Environment and Sustainable Development (2015). National Climate Fund (2015). Dakar, Senegal.
- 97 Department of Environment, Forestry, and Fisheries, Republic of South Africa. (2020). Department of Environmental Affairs Strategic Plan (2019/20 to 2023/24). Pretoria, South Africa.
- 98 Gender and Climate Change Committee (GCCC) and Ministry of Women's Affairs (MoWA) (2014). Gender and Climate Change Action Plan (GCCAP) 2014-2018.
- 99 Ministry of Agriculture (2012). The Management Plan of Risks and Adaptation to Climate Change in the Agricultural Sector (2012 -2021): The PLANGRACC (2012 -2021). Lima, Peru: Ministry of Agriculture.
- 100 Republic of Senegal, Ministry of the Environment and Nature Protection (2006). The National Action Plan for Senegal's Adaptation [to Climate Change] (2006). Dakar, Senegal. Available at: [https://www.preventionweb.net/files/8570\\_seno1f.pdf](https://www.preventionweb.net/files/8570_seno1f.pdf).
- 101 Department of Environmental Affairs Republic of South Africa. The Framework and Strategy towards Gender Mainstreaming in the Environmental Sector (2016-2021). Pretoria, South Africa.
- 102 Royal Government of Cambodia (2018). Cambodian Sustainable Development Goals (CSDGs) Framework (2016-2030).
- 103 MINAM (2016). The National Forest and Climate Change Strategy (2015). Lima, Peru: MINAM.
- 104 Government of the Republic of Senegal, Ministry of the Environment and Sustainable Development. Environmental and Social Commitment Plan (ESCP) (2019).
- 105 Department of Energy, Republic of South Africa. (2019). The Integrated Resource Plan (IRP) 2019 (2010-2030). Pretoria, South Africa: Department of Energy.
- 106 Royal Government of Cambodia (2019). National Strategic Development Plan 2019-2023.
- 107 Republic of Peru (2021). Peru 2021 Bicentennial Plan). Lima, Peru.
- 108 Ministry of the Economy, Republic of Senegal (2018). Plan Sénégal Émergent (PSE) (2019-2024). Dakar, Senegal.
- 109 South African Government (2012). National Development Plan (NDP) 2030 (2012-2030). Pretoria, South Africa.
- 110 Royal Government of Cambodia (2015). Cambodia Industrial Development Policy 2015 – 2025.
- 111 Republic of Peru (2018). National Plan for Competitiveness and Productivity (2018-2030). Lima, Peru.
- 112 Ministry of Industry and Mines, Republic of Senegal (2016). Ministry of Industry Development Sector Policy Letter (2018-2023). Dakar, Senegal: Ministry of Industry and Mines Republic of Senegal.
- 113 DTI (2019). Re-imagining the Future Strategy. Pretoria, South Africa.

**Table 6.2: Summary table of assessment I**

No.	Cambodia	Peru	Senegal	South Africa
1	National Strategic Plan on Green Growth (2013-2030)	National Determined Contributions (2015, 2017-2018)	National Strategy for the Promotion of Green Jobs (2019)	National Green Fund (2012)
2	Strategic Development Plan for Cambodian Agro-industries (2019-2030)	Peruvian National Coffee Action Plan (2018-2030)	National Strategy for Green Growth in Senegal (2016-2020)	Green Transport Strategy (2018-2050)
3	The Strategic Planning Framework for Fisheries (2010-2019)	Circular Economy Roadmap in Industry Sector (2020)	LAW No. 2010-21 of December 20, 2010 (2010)	Department of Energy (DoE) policy on Women's Empowerment and Gender Equality (WEGE) (2017)
4	Cambodia Trade Integration Strategy (CTIS) (2019-2023)	Action Plan on Gender and Climate Change (PAGCC) (2016-2021)	National Strategy for Sustainable Development (2015)	The National Waste Management Strategy (NWMS) (2011)
5	National Technical Vocational Education and Training Policy (TVET) (2017-2025)	The Framework Law on Climate Change - Law No. 30754 (2018)	Environment and Natural Resources Sector Policy (2009-2015)	Climate Change Bill (2018)
6	NDC Roadmap and Stakeholder Engagement Plan (2019-2030)	The National Climate Change Strategy (2024)	National Climate Fund (2015)	Department of Environmental Affairs Strategic Plan (2019/20 to 2023/24)
7	Gender and Climate Change Action Plan (GCCAP) (2014-2018)	The Management Plan of Risks and Adaptation to Climate Change in the Agricultural Sector (2012 -2021): The PLANGRACC	The Senegal National Adaptation Plan [to climate change] (2006)	The Framework and Strategy towards Gender Mainstreaming in the Environmental Sector (2016-2021)
8	Cambodian Sustainable Development Goals (CSDGs) Framework (2016-2030)	The National Forest and Climate Change Strategy (2015)	Environmental and Social Commitment Plan (ESCP) (2019)	The Integrated Resource Plan (IRP) 2019 (2010-2030)
9	National Strategic Development Plan (NSDP) (2014-2018, 2019-2023)	Peru 2021 Bicentennial Plan (2021)	Plan Sénégal Émergent (PSE) (2019-2024)	National Development Plan (NDP) 2030 (2012-2030)
10	The Cambodia Industrial Development Policy (IDP) (2015-2025)	National Plan for Competitiveness and Productivity (2018-2030)	Ministry of Industry Development Sector Policy Letter (2018-2023)	Re-imagining the Future Strategy (The DTI) (2019)

Table Keys: 0= no mention of gender in the conclusion; 1= irrelevant/tokenistic conclusion; 2= has some sex but not gender conclusions; 3= has some gender conclusions but basic or unhelpful; 4= highly relevant gender responsive conclusion

**Table 6.3: Summary table of assessment III**

No.	Cambodia	Peru	Senegal	South Africa
1	National Strategic Plan on Green Growth (2013-2030)	National Determined Contributions (2015, 2017-2018)	National Strategy for the Promotion of Green Jobs (2019)	National Green Fund (2012)
2	Strategic Development Plan for Cambodian Agro-industries (2019-2030)	Peruvian National Coffee Action Plan (2018-2030)	National Strategy for Green Growth in Senegal (2016-2020)	Green Transport Strategy (2018-2050)
3	The Strategic Planning Framework for Fisheries (2010-2019)	Circular Economy Roadmap in Industry Sector (2020)	LAW No. 2010-21 of December 20, 2010 (2010)	Department of Energy (DoE) policy on Women's Empowerment and Gender Equality (WEGE) (2017)
4	Cambodia Trade Integration Strategy (CTIS) (2019-2023)	Action Plan on Gender and Climate Change (PAGCC) (2016-2021)	National Strategy for Sustainable Development (2015)	The National Waste Management Strategy (NWMS) (2011)
5	National Technical Vocational Education and Training Policy (TVET) (2017-2025)	The Framework Law on Climate Change - Law No. 30754 (2018)	Environment and Natural Resources Sector Policy (2009-2015)	Climate Change Bill (2018)
6	NDC Roadmap and Stakeholder Engagement Plan (2019-2030)	The National Climate Change Strategy (2024)	National Climate Fund (2015)	Department of Environmental Affairs Strategic Plan (2019/20 to 2023/24)
7	Gender and Climate Change Action Plan (GCCAP) (2014-2018)	The Management Plan of Risks and Adaptation to Climate Change in the Agricultural Sector (2012 -2021): The PLANGRACC	The Senegal National Adaptation Plan [to climate change] (2006)	The Framework and Strategy towards Gender Mainstreaming in the Environmental Sector (2016-2021)
8	Cambodian Sustainable Development Goals (CSDGs) Framework (2016-2030)	The National Forest and Climate Change Strategy (2015)	Environmental and Social Commitment Plan (ESCP) (2019)	The Integrated Resource Plan (IRP) 2019 (2010-2030)
9	National Strategic Development Plan (NSDP) (2014-2018, 2019-2023)	Peru 2021 Bicentennial Plan (2021)	Plan Sénégal Émergent (PSE) (2019-2024)	National Development Plan (NDP) 2030 (2012-2030)
10	The Cambodia Industrial Development Policy (IDP) (2015-2025)	National Plan for Competitiveness and Productivity (2018-2030)	Ministry of Industry Development Sector Policy Letter (2018-2023)	Re-imagining the Future Strategy (The DTI) (2019)

Table Keys: 1=The policy is fully implemented; 0.5= The policy is partially implemented; 0= The policy is not implemented





## 7. Women entrepreneurs in green industry



## 7.1 Countries' differences and similarities specific to the green industry

*“What are the key country specific drivers and engagements as entrepreneurs in green industry?”* Using the primary quantitative and qualitative data collected, the key factors underpinning the economic empowerment of women in green industry are identified and discussed in this section.

In all participating countries, there is currently limited evidence on women's empowerment and involvement in green industry. This is a problem given the existing gender inequalities in green entrepreneurship and the undeniable presence of direct and indirect discrimination. Women interviewees highlighted that they lack access to networks, markets, finance, technical skills and information. However, many participants reported that **more women are becoming entrepreneurs in green industry than in conventional industries and there was a strong perception that there are more opportunities for women to progress in green industry**. Some women also stated that they feel more connected to green industry jobs, due to a sense of “reconnecting to nature”. Reasons given for this connection included women's traditional or historic roles working with natural resources, subsistence farming and care work.

Although there were no nationally representative statistics available, there was a general consensus among the private and public KILIs that women entrepreneurs are underrepresented across all green industry sectors. Existing gender inequalities and social stereotypes are mentioned as contributing factors to women's low participation as workers, entrepreneurs and professionals. The ability to measure women's participation rates in green industry is hampered by a lack of consistent data across all sectors; and across all levels- national, provincial and local.

An online survey was conducted as part of this project. The small but robust sample of green entrepreneurs who contributed provide a useful insight into the characteristics, challenges and perspectives of women active in green industry.

Table 7.1 lists the basic demographic information for the survey population in the four participating countries.

**Table 7.1: Demographics of surveyed women entrepreneurs in green industry**

Demographics	Cambodia (n=15)	Peru (n=26)	Senegal (n=8)	South Africa (n=23)
Average age (years)	34	38	43	46
Age range (years)	26-44	24-70	24-70	29-61
Vocational training (%)	7	19	0	13
Master's degree (%)	21	27	88	39
Married (%)	79	35	25	52
With children (%)	71	77	38	78

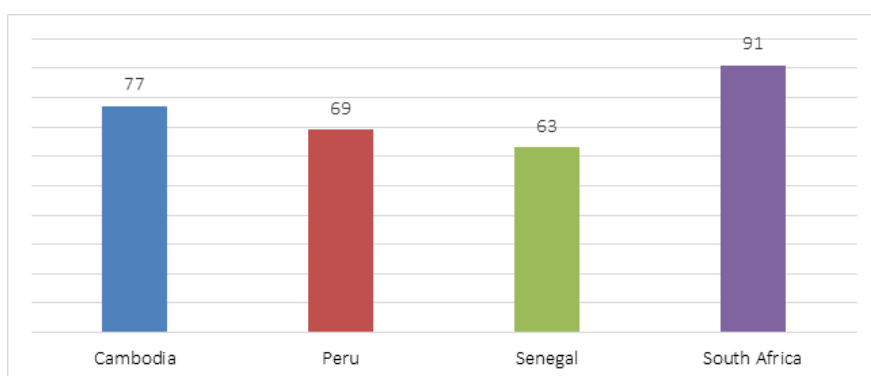
The online surveys included multiple-choice, ranking questions and open-ended questions. The open-ended questions allowed entrepreneurs to share their experiences in-depth. We were particularly interested reveal how green entrepreneurs started their businesses, who influenced their decisions and where they obtained their skills. The responses to these questions have captured several important themes. Women green entrepreneurs tend to be people who are driven to follow a passion through a green business, are inspired by opportunities to enhance their skills outside traditional corporate environments, and aiming to align their professional lives with their unpaid responsibilities as caregivers.

**Table 7.2: Who influenced your decision to start your “green” business (%)?**

	Cambodia (n=13)	Peru (n=26)	Senegal (n=8)	South Africa (n=23)
Self	69	81	88	83
Spouse	23	8	0	17
Family	15	23	0	13
Others	8	4	25	9

Table 7.1 reveals that most respondents to the online survey identify as “self-starters” in that they decided to start their green business independently, on their own initiative. Figure 7.2 reveals that the majority of women entrepreneurs operate their businesses on a full-time basis.

**Figure 7.1:** Percentage of green entrepreneurs who operate their businesses full-time (%)



Funding emerged as a key barrier in both the surveys and interviews to starting and maintaining businesses. This is covered more in-depth in the next section, but some statistics are provided here to contextualise the start-up phase for entrepreneurs' operations. For example, most participants reported that their seed/start-up capital was derived from their personal savings; except in Senegal (Table 7.3).

**Table 7.3:** When you decided to start your business, where did you find seed/start-up capital (%)?

	Cambodia (n=13)	Peru (n=26)	Senegal (n=8)	South Africa (n=23)
My personal savings	69	62	13	78
Credit from formal institution (e.g. bank)	23	12	0	17
Informal credit from my family, friends or creditors	15	15	25	17
Other	23	12	50	22

In acquiring the technical knowledge to start and managerial skills to run their businesses, participants predominately listed themselves as self-taught (Table 7.4).

**Table 7.4:** Where did you acquire the technical knowledge/managerial skills to start your business (%)?

	Cambodia (n=13)		Peru (n=26)		Senegal (n=8)		South Africa (n=23)	
	Technical knowledge	Managerial skills	Technical knowledge	Managerial skills	Technical knowledge	Managerial skills	Technical knowledge	Managerial skills
Self-taught	62	69	46	62	50	38	78	65
Formal training at an education institution	31	31	46	31	50	25	57	52
Personal mentor	31	15	8	12	25	25	35	22
Internet resources	38	31	23	19	13	13	48	17
Other	23	23	19	12	13	0	13	17

## 7.2 Barriers faced by women entrepreneurs in green industry

As part of the project, respondents were asked, "What are the key countries' specific drivers and constraints to women accessing and benefiting equally from the advancement of green industry as industry professionals and as entrepreneurs?" This question was addressed using the primary quantitative and qualitative data collected. The key factors underpinning women's economic empowerment in green industry were also identified and discussed.

The women entrepreneurs interviewed reported that the main barriers to starting a green business are:

- There is no clear-cut definition of "green industry" (what makes a business green and what does not);
- Unavailability of technology and lack of awareness about starting a business;
- There is a lack of incentives for businesses operating in green industry;
- Cumbersome process to register their business;

- The high costs associated with business startup; and
- Due to lower production costs, products manufactured by “conventional industry” are often less expensive than those produced by green industry, putting green industry products at a disadvantage.

**Table 7.5:** Summary table of barriers to the economic empowerment of women in green industry

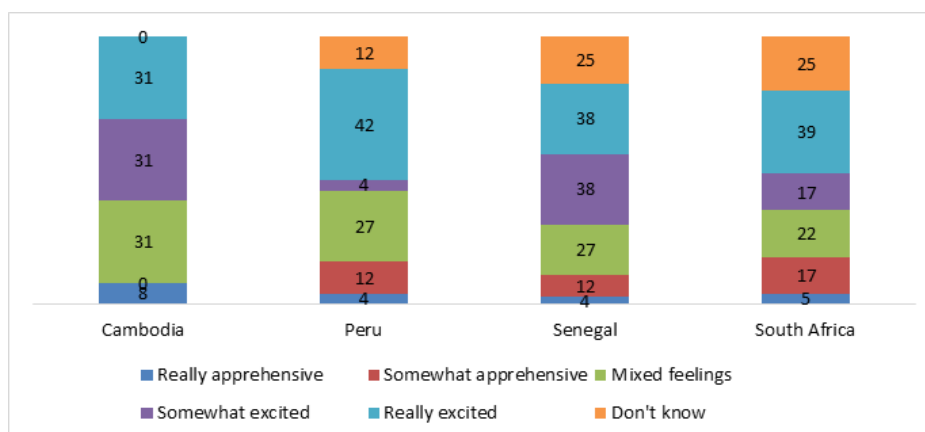
Barriers to advancement	Barriers to transformation
Lack of awareness about policies and programmes designed to benefit women and/or encourage participation in green industry; limited written policies preventing sexual harassment.	Harmful social norms that discourage women from starting their own business. For example, reputational risks associated with working late, restricted mobility, low decision-making authority.
Lack of access to the technology necessary to start green businesses or upscale existing businesses.	Caretaking responsibilities; the women entrepreneurs surveyed worry often or always about work-life balance. All reported worrying about child-care arrangements.
Women entrepreneurs have difficulty in finding and hiring skilled workers. For example, green industry requires very specialised technical skills and lack of girls taking up STEM subjects, therefore they might be under-qualified for jobs in green industry.	Intersectional inequalities: rurality, age and gender intersect to create different and multi-faceted vulnerabilities.
Women entrepreneurs do not have “experience” aka the historical networks of influence that their male counterparts have, making them easily outbid by “experienced” green players and this directly impacts business deals.	Discriminatory hiring practices: prevalence of “boys clubs” and gatekeepers, not being hired based on potentially taking paternity leave, etc.
Women lack access to mentoring which impacts networks for investment funding and job opportunities. For example, customised assistance (mentorship) is an obstacle.	Institutionalised and structural sexism. Moreover, women entrepreneurs either lack self-confidence or are pressured to adopt a “hyper self-confidence”.
Women lack access to necessary capital, collateral and credit resources. For example, women struggled to provide collateral for loans, due to not owning land or property.	Barriers that prevent businesses from becoming greener: lack of awareness on how to make changes, lack of land or property rights, lack of technology, affordability of technology.
Women lack access to markets to sell their products.	Lack of clarity on “green industry” definition: Lack of statistics and lack of clarity about what green industry entails.
Women face other value chain challenges and “hidden costs” of doing business: obtaining a license to run a business, dealing with law enforcement officials, obtaining necessary technical training, accessing basic supplies for business to operate, sexual harassment and paying kickbacks were also listed by green entrepreneurs.	Right to information: Lack of information on laws and tax regulations, and how to formalise the business.

## 7.3 Opportunities for women entrepreneurs in green industry

As part of the project, respondents were asked, “What are the key country specific opportunities, specific drivers to women accessing and benefitting equally from the advancement of green industry as entrepreneurs?”

Data collected from the online surveys and interviews revealed that despite the multifaceted challenges faced by women entrepreneurs; there are also a host of opportunities to advance women as entrepreneurs and leaders in green industry. It is quite telling that the majority of green entrepreneurs surveyed feel positive about the growth of their businesses. As depicted in Figure 7.2, most entrepreneurs reported being “really or somewhat excited” that their business will grow.

**Figure 7.2:** How excited or apprehensive do you feel that your “green” business will grow (%)?



While it is clear that harmful social norms act as barriers to women's economic empowerment in green industry, there were also several key indicators that suggest a high potential for social transformation towards gender equality in green industry (Table 7.6).

**Table 7.6:** Key social transformation indicators highlighted in online survey (%)

	Cambodia	Peru	Senegal	South Africa
Businesses provide equal pay for equal work for women and men	77	88	75	91
Entrepreneurs reported receiving “a lot of support” from their families to start the business	54	65	63	70
Entrepreneurs reported that they did not feel that family obligations have limited their opportunities today as an entrepreneur	31	42	38	64
Entrepreneurs need to consult with a man (spouse or family member, for example) before making decisions on how to spend the income from their business	31	19	0	0

In the online survey green entrepreneurs were asked, “How should your country increase women's leadership and participation as entrepreneurs in the green industry? Please rank each of the below government initiatives from 1 to 5, where 1 is the most important and 5 is the least important”. Prioritised strategies for increasing women's participation and leadership in green industry differed between green entrepreneurs across countries.

**Table 7.7:** Prioritised strategies for increasing women's leadership between green and conventional women entrepreneurs

Prioritised Strategy	Cambodia	Peru	Senegal	South Africa
Change inequitable laws	1	2	2	4
Invest in women's development schemes	2	4	4	3
Increase access to finance for women	3	1	3	2
Affirmative action	3*	5	5	5
Increase access to education	4	3	1	1

\* Two strategies were ranked equally in Cambodia.

## Opportunities for women entrepreneurs in Cambodia

The opportunities in the green industry for women entrepreneurs in Cambodia are immense. For example:

- The best opportunities lie in the garment, agriculture, food processing, energy and tourism sectors. There is room for more incentives for women to get involved in the recycling business, waste management, using clean technology and promoting solar business;
- There are organisations like SHE investments, Impact Hub, EnergyLab, Pact Cambodia, Grow Asia, Cambodia Women Entrepreneurs Association (CWEA), Cambodia Women Business Federation (CWBF), Young Entrepreneurs Association of Cambodia (YEAC), UN agencies and others working for women entrepreneurs and providing them with information, training, seed money for startups, online learning platforms, mentorship;<sup>114</sup>
- Different organisations are taking initiatives to train women entrepreneurs and share information, teach women how to use smart-phones for online banking and access information via Facebook, etc. Due to technological advancement, women can attend webinars (E-learning) at home which is an emerging tool for capacity development. Ngeay Ngeay (easy easy) is Cambodia's first Business Information and eLearning Platform by SHE Investments; providing all of the information and access to reliable services anyone in Cambodia needs to register a business (available in both English and Khmer language); and
- Growing opportunities for younger generations of women as they are better educated and have access to technology and information.

## Opportunities for women entrepreneurs in Peru

The opportunities in the green industry are immense:

- MINAM and PRODUCE are working on promoting private and public financing opportunities for companies that are becoming “greener”. However, there is little evidence on the extent to which the government will make an additional effort to promote women's participation in this context;
- Notwithstanding the marginal role of women in most mainstream business associations, an increasing number of groups have formed in Peru to support capacity building for women, including leadership skills, mentoring programmes, networking, and discussions oriented towards solving common problems;

<sup>114</sup> Organizations should consider adopted the seven Women's Empowerment Principles, including education and training for career advancement. For more information, see <https://www.weps.org/about>.



- MINAM, PRODUCE and Peru Export and Tourism Board (PROMPERU) have ongoing programmes that promote (green/women-led) entrepreneurship (Programa “Ella Exporta”);
- There are several public-private or private initiatives that showcase accomplished women in the sciences or develop mentorship programmes. For instance, the multinational IT company Cisco is developing a mentorship programme for its employees. Moreover, L’Oréal Peru, UNESCO and CONCYTEC have established the National Prize for Women in Science (Por las Mujeres en la Ciencia) to recognise the contribution that women in sciences make in Peru; and
- The Ministry of Women is promoting/fostering and supporting the creation of networks of women entrepreneurs formally constituted in the regions, in conjunction with the different regional governments. This initiative is an excellent opportunity for women entrepreneurs in green industry in Peru.

### *Opportunities for women entrepreneurs in Senegal*

Government programmes from the Ministry of Environment and Sustainable Development require a high representation of women to conduct activities in local territories, but these are not enforced. This same Ministry trains specific groups of women in emerging professions related to solar equipment and installation. Several institutions that offer different services for women were mentioned; however, not all are active in green industry:

- L’Agence du Développement et Encadrement des Petites et Moyennes Entreprises (ADEPME) is the Agency for the Development and Coaching of Small and Medium Enterprises, an operational unit of the Ministry of Commerce. It supports small and medium-sized enterprises who apply for or could benefit from a government loan;
- The Food Technology Institute (ITA) has a wide range of activities: applied research for developing technological methods in the transformation and conservation of local agricultural, meat and fish products; support and advice in technological development; training of technicians in the food sector; and dissemination of knowledge regarding research activities;<sup>115</sup>
- The Programme d’Urgence des Domaines Communaux (PUDC) offers different services to women. These include the distribution of fodder that women can use in their kitchen-garden perimeters for commercial or private consumption; work to access infrastructure and socio-economic equipment (rural road, hydraulics, energy and agricultural production and transformation equipment); and the provision of financial services. PUDC also works to strengthen institutions, professional groups and local actors in rural entrepreneurship and provides capacity building in leadership, technical and community management skills. The programme targets women and youth in socio-economically vulnerable villages in specific regions<sup>116</sup> in the country;<sup>117</sup>
- The national biogas programme offers biogas solutions to address the energy needs of women;
- Other NGOs (not specified by the interviewees) bring in solar panels and ovens using renewable energy, reducing the impact of smoke on the health of women; and
- The Green Fund (Ministry of Environment and Sustainable Development) runs initiatives, however detailed information could not be included in this report due to a lack of clarity.

### *Opportunities for women entrepreneurs in South Africa*

The opportunities in green industry for women entrepreneurs in South Africa are immense. For example:

- The National Green Fund established in 2012 injected funding into women-led green economy projects and has directly employed 812 women. This has helped women in rural areas in particular;
- Women are the demographic that has benefitted the most from government initiatives around environmental conservation, such as their “Working for Water” initiative. The scheme now creates around 50,000 job opportunities every year, 52% of which are occupied by women. The programme also has ambitious quotas for disabled individuals, young people and those living with HIV/AIDS. Working for Water also provides employees with health and reproductive care, education and training, childcare services, HIV/AIDS awareness courses and savings programmes;
- SAFEE (South African Females in Energy Efficiency), a unit within the South African Energy Efficiency Confederation, provides mentoring and networking. SAFEE also holds breakfast workshops where men are free to attend in order to encourage them to support women. While they have hosted some events, SAFEE is an example of how more support is needed to ensure women professionals have access to such support groups;
- SAWEA (the South African Wind Energy Association) runs a mentorship programme;
- “Imvelisi enviropreneurs” is a design bootcamp and training programme for aspiring young “environmental entrepreneurs”. The programme is aimed at young people who are considering starting a business in the water and biodiversity sectors. The week-long bootcamp equips 50 future entrepreneurs with the knowledge to assess market potential, structure a business proposal and test the viability of their ideas and concepts. It also provides guidance for successful implementation. An opportunity to increase entrepreneurship among women in the green economy would be to launch a similar programme specifically for women;
- The Global CleanTech Innovation programme focuses on entrepreneurs and SMEs; and
- SANEDI (the South African National Energy Development Institute) funds clean energy initiatives and has a green skills programme led by the University of Rhodes and Witwatersrand, who assist the government with initiatives on green skills.

<sup>115</sup> <http://www.ita.sn/presentation>.

<sup>116</sup> Louga – St Louis – Matam – Fatik – Diourbel – Kaolack – Kaffrine – Tambacounda –Thies.

<sup>117</sup> UNDP (n.d.). Programme d’Urgence de Développement Communautaire (PUDC).

## 7.4 Comparing women's experiences in green and conventional industry

Table 7.8 presents the main similarities and differences between green and conventional industry across the four participating countries. Similarities include:

- Levels of educational attainment and levels of those who have had vocational training are similar for entrepreneurs in the green and conventional industry;
- Women from both the categories consider limiting social norms to be a barrier i.e. concerns that they will be criticised by their communities and/or family and limited agency to make business financial decisions;
- Women from both the categories find it difficult to find recruit employees with the relevant skills, despite working full-time themselves; and
- Accessing markets to sell products is the biggest challenge for both categories of women, while getting access to finance is their priority.

**Table 7.8:** Comparing women's experiences in green and conventional industry

Key similarities	Women entrepreneurs in green industry (n=72)	Women entrepreneurs in conventional industry (n=31)
<b>Demographics (%)</b>		
Vocational training	13	19
Master's degree	36	35
<b>Social norms (%)</b>		
Entrepreneurs considered that they would be negatively judged by the family	22	13
Entrepreneurs considered that they would be negatively judged by the community	14	10
Obliged to consult a man before making business money decisions	19	16
<b>Business related (%)</b>		
Relied on informal credit from family, friends and credits "loan sharks" to start their business	17	13
Operate business on a full-time basis	75	68
It is difficult/very difficult to find workers with the relevant skills to increase production	42	45
<b>Challenges (%)</b>		
Obtaining a license to run a business	29	26
Dealing with law enforcement officials	28	19
Paying kickbacks	22	19
Obtaining necessary technical training	33	39
Accessing basic supplies for business to operate	35	26
Accessing markets to sell products	58	58
Sexual harassment while conducting business	26	26
<b>Strategy recommendations (Ranked 1-5)</b>		
Increase access to education	2	2
Increase access to finance	1	1
Invest in women's development schemes	4	5
Change inequitable laws	3	3
Affirmative action	5	4

Table 7.9 compares the experiences of women in green industry to the experiences of women in conventional industry. Key take-aways are:

- A lower percentage of women entrepreneurs in green industry are married and have children;
- A higher percentage of women entrepreneurs in green industry are worried about childcare arrangements and work-life balance;
- A lower percentage of women entrepreneurs in green industry are concerned about family obligations limiting opportunities;
- A lower percentage of women entrepreneurs in green industry report difficulty identifying markets, and gender inequality in terms of access to credit and pay; and
- A higher percentage of green entrepreneurs are self-starters, self-taught, are more concerned about the environment, and express excitement about the growth of their business.

**Table 7.9:** Main differences in women's experiences of green industry compared to conventional industry across all countries

Key Differences	Women entrepreneurs in green industry (n=72)	Women entrepreneurs in conventional industry (n=31)
<b>Demographics (%)</b>		
Married	47	68
With children	71	87
<b>Caretaking responsibilities (%)</b>		
Childcare arrangements - worry often/always	45	32
Work-life balance - worry often/always	64	49
Family obligations limited opportunities as an entrepreneur	43	52
<b>Gender issues (%)</b>		
Believe that men have more opportunities to obtain credit	56	71
Businesses provide equal pay for equal work for women and men	82	68
<b>Finance related (%)</b>		
Relied on personal savings to start their business	61	71
Relied on credit from a formal financial institution to start their business	14	3
<b>Business related (%)</b>		
Self-starter (influenced by self to start their business)	78	68
Received "a lot of support" from their families	63	48
Business has an environmental policy	58	42
Started business out of concern for the environment	71	58
Really excited that business will grow	38	19
Difficult/very difficult to identify and access new markets for business, compared to men	36	48
<b>Acquire the technical knowledge to start your business (%)</b>		
Self-taught	58	45
Formal training at an educational institution	46	39
Personal mentor	22	10
Internet resources	32	19
<b>Acquire the managerial skill to start your business (%)</b>		
Self-taught	60	39
Formal training at an educational institution	36	42
Personal mentor	17	13
Internet resources	19	3





## 8. Women professionals in green industry



## 8.1 Countries' differences and similarities specific to green industry

Participants in the focus group discussions shared the perception that women are entering green industry because they want to make a positive difference. The qualitative observations and perspectives provided by focus group participants shed light on the breadth and depth of women's engagement as green industry professionals and the opportunities offered to them.

In the focus groups, it was found that women are generally more drawn to "greener" industries (more so than to conventional industries) for several reasons. For example, the professionals were either influenced by their first "green" job and thought that this is one of the best ways "to help the society" or they were influenced by their supervisors who fostered an environmentally friendly workplace. However, there were also professionals who just needed a job. For those participants, it is entirely by chance that they are working as green industry professionals and working in green industry was not a conscious choice.

### *Gendered division of labour in green industry*

The gendered division of labour as mentioned by the professionals in green industry are:

1. Men are not involved in time-consuming and labour-intensive tasks, which are mostly completed by women. One such task is the packaging products. Men are in finance and marketing. Even though there are larger numbers of women in green business, men are more likely to be in decision-making roles (e.g. in the garment factories, women are the employees and men are the owners); and
2. Women in managerial positions find it difficult to talk to male colleagues because of gendered social norms about appropriate behaviours and activities for men and women.

## 8.2 Barriers faced by women professionals in green industry

Previous generations of women have received less education than men and insufficient numbers of women are accessing the technical training required for green industry. Moreover, due to the unpaid social and work responsibilities that women are expected to perform at home, they have less time flexibility and less availability for training. These are structural and institutionalised barriers related to accessing education.

## 8.3 Opportunities for women professionals in green industry

Interviews revealed that green industry is perceived to be more inclusive and less gender-biased than conventional industry due to its focus on caring for the environment. Women are also deemed suited to green industry because of traditional or historic roles that involve the lived environment. This includes, but is not limited to traditional roles in natural resource management, subsistence farming and "nurturing." Moreover, women working in green industry as professionals also stated that they found men to be more supportive and easier to work with in green industry than in conventional industries. Newer green industry jobs were also reported to be less impacted by traditional gendered stereotypes and more geared towards innovation.

Initiatives aimed at encouraging more women to work in green industry include:


1. Efforts to promote positive women role-models in STEM and green industry, e.g. the South African Women in Science Awards which profiles women scientists and researchers as role models for young women and girls;
2. Efforts to strengthen opportunities for women in renewable energy and green industry, e.g. In August 2020 in South Africa, The National Cleaner Production Centre's Accredited Energy Training Programme was made available to women free of charge; and
3. Efforts to enhance opportunities for women to network and be mentored, e.g. mentoring and networking programmes for women help advance in their careers. The CISCO Connected Women Programme<sup>118</sup> is an example of this. Through the programme, female workers at CISCO can connect, network outside of the company, receive professional development training, coaching and participate in an executive work shadowing programme. The initiative also allows "flexi-work" (working outside of the traditional workplace/office space). In Cambodia, SHE investments, GROW Asia and other organisations are playing a crucial role in capacity building, mentoring and networking.

118 <https://newsroom.cisco.com/feature-content?type=webcontent&articleId=1851826>

## 8.4 Opportunities for women in green industry across all countries

There are more opportunities for women in green industry than in conventional industry. For example:

1. More companies are implementing quotas and seeking to hire a gender-balanced workforce in green industry;
2. Green industry is “not something that needs masculinity” and therefore is “anyone’s game”.
3. Synergies between green industry, cultural or traditional roles of women, and an affinity with the environment play to women’s perceived strengths;
4. Women can find opportunities in sectors where they have already been involved informally, for example in the waste management and agricultural sectors. It is easier for women to find work where people are accustomed to it and the reputational risk is potentially minimised;
5. Women-led green industry businesses hire women over men due to the perceived better work-ethics of women;
6. Women-led green industry businesses offer women more possibilities to move horizontally or vertically in the business;
7. Affirmative action to support women was reported to be a common practice by several government interviewees;
8. The market for “green industry products” has a high potential for growth, presenting opportunities for women to step in;
9. Women’s interpersonal skills, communication, teamwork, creative thinking are well suited to professional opportunities in green industry; and
10. Innovation, pushed by more conscious consumers, offers more opportunities for women.

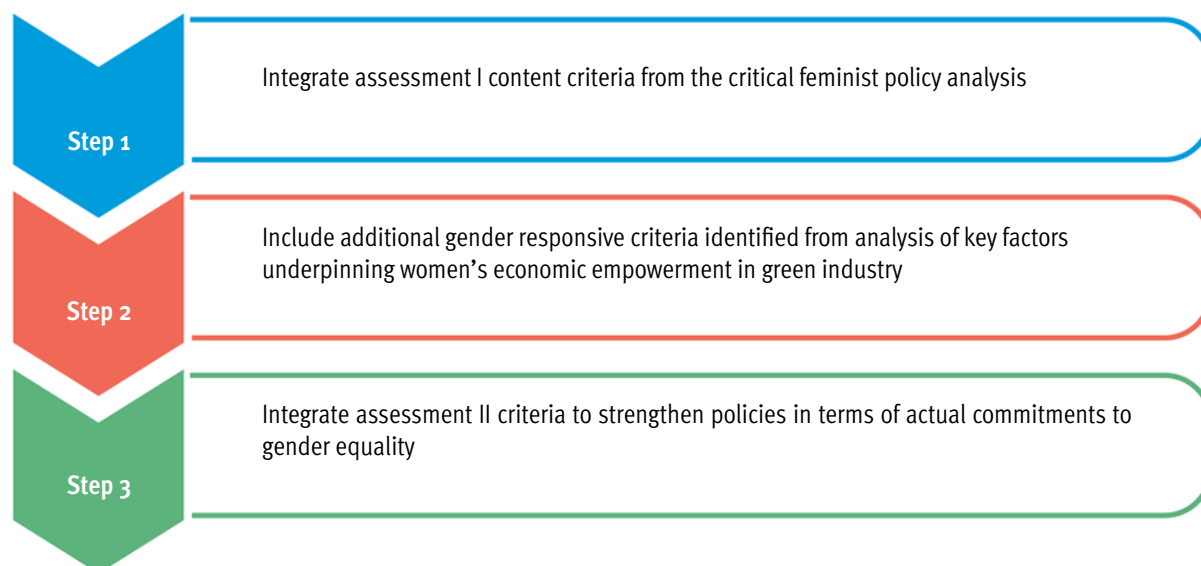
A woman with long dark hair, wearing a light blue and white vertically striped short-sleeved shirt, is looking down at a document held by another person. Her hand is resting on her hip. The background is a blurred office environment. The entire image has a blue color overlay. A red rectangular box is positioned in the lower-left area, containing white text.

## 9. Comparative recommendations

## 9.1 Towards gender-responsive green industry policy frameworks

The purpose of the gender-responsive green industrial policy framework is to enable countries to formulate or revise existing, gender-responsive green industrial policies and adopt them. Based on the study's conceptualisation of women's economic empowerment, gender-responsive green industry policies must address advancement and transformation (Table 7.6, page 42). This report proposes using the following framework for formulating gender-responsive green industry policies (Figure 9.1):

**Figure 9.1:** Gender-responsive green industry policy framework



**Step 1:** this would include content criteria from assessment I of the feminist critical policy analysis to ensure the core characteristics are foundational to the policy. These elements of the feminist critical policy include engendering policy; structural perspectives of gender equality; intersectionality; women's empowerment; incremental transformation; and contextualisation.

**Step 2:** gender-responsive criteria would be identified based on the key factors underpinning women's economic empowerment in green industry to ensure and include criteria to support women's advancement and transformation.

**Step 3:** assessment II criteria would be integrated to improve policies' commitments to gender equality. This step is crucial; 6 out of 10 policies reviewed did not mention gender in their conclusions and did not have further plans or commitments for gender monitoring and evaluation.

In addition to these three steps, and on the basis of the outcomes of this study, general recommendations are proposed to enhance gender equality and the empowerment of women in green industry policy.

**Table 9.1:** General recommendations for proposing new gender-responsive green industry policies

General recommendations for proposing new gender-responsive green industry policies
<b>Contents/topics to be covered in policy</b>
- Include specific gender targets and indicators and collect sex-disaggregated data and gender statistics for monitoring and evaluation
- Eliminate gendered language (e.g. Chairman to Chair)
- Generate S.M.A.R.T. indicators (specific, measurable, achievable, relevant and timely) using robust sex-disaggregated data
<b>Process</b>
- Integrate women's agency and meaningful and equal participation and decision-making at all levels at home, in the economy and in government
- Address the needs of women using an intersectional perspective that takes into consideration the multiple and intersecting forms of discrimination based on gender, rurality, race, migration status, and poverty albeit others
- Support education and awareness (e.g. knowledge and skills transfer, mentorship programmes, partnerships and networking platforms)
- Create and ensure access to financial products, services and information including through gender-responsive budgeting and gender-responsive procurement from women in green industry
- Ensure the engagement of women at every stage of the planning and policy process including consultation, monitoring and evaluation
- Conduct gender impact assessments and ensure consultation and dialogue with local women's groups and organised civil society
- Diversifying women's access to and source of start-up capital
- Promote women's equal access to education and vocational studies to provide the technical knowledge in green industry
- Identify strategies to root out institutionalised sexism/discrimination, especially in the private sector
- Hold national and strategic dialogues – at the level of politicians and other leaders within society



## 9.2 Closing the gaps between policy and implementation on the ground

Moving on from the barriers highlighted in the previous section, many interview respondents stated that existing policy was supposed to be tackling these issues, but that there was a lack of implementation. Interviewees highlighted that “hidden” reasons women are also likely factors preventing women from taking advantage of opportunities. To improve the quality and implementation of policies, covert forms of discrimination must be addressed.

**Table 9.2:** Closing the gap between policy and implementation on the ground

Key gaps between policy and implementation on the ground	Closing gaps between policy and implementation on the ground	Countries that reported the gaps
Lack of clarity on green industry business and gender: green industry has not been defined; lack of understanding about how the green concept fits in existing industry policy (e.g. SME policy); lack of public awareness about green industry; no policy/evidence to show how green growth will impact women entrepreneurs; green industry, gender mainstreaming, women’s economic empowerment are new concepts to most people.	Better understanding of green industry business is needed e.g. incentives available for women to enter green business; public awareness raising about green industry through training/campaign/ TVET/information sharing, primarily focusing on small scale women entrepreneurs; providing information sessions in order to introduce the concept of “green industry.”	Cambodia, Peru, Senegal, South Africa
Few programmes targeting women: although these types of programmes are often more effective than so called “gender-neutral” programmes. Juxtaposition of customary law over with formal legislation (specifically with regards to land rights for women).	Generate more awareness about the benefits of gender equality and women’s inclusion and improve the knowledge and capacities of policymakers in terms of gender mainstreaming.	Peru, Senegal, South Africa
Gap in implementation: policies are there on paper, but the implementation is limited.  Law projects are often approved but take too long to become laws and even longer to be translated into specific plans.  Laws often lack specific guidelines.	As well as developing new policies, existing policies should be implemented more effectively. They should be cooperation across different government ministries, in order to ensure that the relevant green industry initiatives are consistently gender mainstreamed. Local government institutions (for instance municipalities) responsible for executing “green” laws should be trained; successful women entrepreneurs in green industry should be encouraged to be ambassadors/role models sharing their experience to create snowball effects; barriers and challenges to women entrepreneurs at all levels should be identified e.g. from entrepreneurs (big, medium and small) to professionals; ease the process of business registration (irrespective of big/small scale business OR man/woman); involvement of men in gender mainstreaming.	Cambodia, Peru, Senegal, South Africa
Lack of monitoring system: For example, in Cambodia, the Ministry of Women’s Affairs (MoWA) does not have any monitoring mechanism to see whether the policies are really benefitting the entrepreneurs.	There is a need for nationally representative data and research to show how green growth will impact women entrepreneurs. A monitoring mechanism to ensure gender representativeness in design, methodology and structurally is also needed.	Cambodia
Budget constraints: government has budget constraints in full implementation of the policies.	Policies can be divided into short-term and long-term goals and execution can be done step-by-step depending on the availability of the funding.	Cambodia, Senegal

### Recommended accountability, oversight and dissemination mechanisms for institutional gender mainstreaming initiatives:

- Increase accountability through monitoring, evaluation and transparency;
- Collect sex-disaggregated data with regards to the participation of women at all levels – including management, technical and decision-making levels in the green industry;
- Establish safer mechanisms for women to report harassment or discrimination in the workplace and stricter repercussions for perpetrators;
- Develop clear implementation plans for policies, with measurable targets and clear timeframes;
- Conduct performance assessments linked to gender mainstreaming targets, with an independent audit of compliance;
- Develop databanks of lessons learned to encourage the continuous improvement of practices, tackle sexism and enhance women’s participation in green industry;
- Maintain parliamentary oversight and gender auditing ministry work programmes to ensure that gender is mainstreamed into green industry initiatives;
- Conduct regular monitoring and reporting to the Ministry of Women’s Affairs on the behaviour, attitudes and level of compliance across government departments; and

- Maintain equal gender representation in key government steering committees and cross-departmental committees.

### Specific recommendations for government, civil society, and the private sector across participating countries

(See Table 9.2 for country-specific recommendations for government, civil society, and the private sector.)

*Recommendations for policymakers on how to formulate new, or reformulate existing **gender-responsive green industry policies** and adopt them:*

- Align policies with Article 11 of CEDAW, particularly as it relates to the quality of opportunity between women and men in the workplace;<sup>119</sup>
- Redouble efforts to follow-through on *the effective implementation of international gender equality and green industry agreements*. Gender mainstreaming legislation has mostly been built on international agreements and processes with technical and financial partners (like NGOs) from outside the country. The Senegalese government should apply these agreements and concepts of gender into Senegalese law more effectively;
- Reform the banking sector to offer lower interest rates, adjust loan options and tailor these to reflect the seasonality and riskiness of economic activity; adapt insurance provisions to cover unexpected price fluctuations of raw materials and sick-pay for women entrepreneurs;
- Apply gender-responsive budgeting to raise awareness and understanding of gender issues in budgets and policies, and to foster government accountability for gender equality commitments; and encourage gender-responsive procurement by both the public and private sector by hiring women-owned businesses as vendors; and
- Apply gender-responsive procurement practices in both the public and private sector to achieve gender equality and empower women. For example, UN Women's definition of a women-owned business is "*a legal entity in any field that is more than 51% owned, managed and controlled by one or more women*".<sup>120</sup> Through the classification of women-owned vendors, data can be collected on them. Additionally, targeted assistance and preferential treatment to women-owned businesses would enable them to compete for contracts and enter the procurement market.<sup>121</sup>

### *Recommendations for local government:*

- *Engage in consciousness raising activities:* women in local government need to be brought together for adequate women-only training. This must include capacity building until they feel confident, articulate, and empowered to be in mixed-gender meetings to convey their understanding and perspectives on economic empowerment and alongside their male counterparts;
- *Invest in political buy-in:* the transition to green industry requires political buy-in and decisions that deliberately target women including developing consensus around a vision and milestones that are to be regulated and monitored by all spheres of government, citizens, and their stakeholders;
- *Establish gender responsive regulations and policies:* environmental and social objectives must be promoted through gender-responsive financial services to women; industrial and technological regulations, and policies, including subsidies, incentives, use of local government investment and budgeting that incorporates economic empowerment revenues and costs; and monitoring of fruitless or wasteful expenditure, as well as over-use of resources through regulation, policies and strategies; and
- *Foster stakeholder engagement:* engaging in stakeholder dialogues that include women in local communities and address political questions of ownership and entitlement, community mapping and management of the public commons, as well as the economic and social value of environmental resources, infrastructure investments and terms of social investment policies at local government level.

### *Recommendations for civil society:*

- Maintain accountability and oversight for gender mainstreaming through interest groups that hold those in power accountable;
- Establish advocacy groups for the demands of women in green industry, such as women's networks in the renewable energy sector;
- Promote collaboration among women's groups and solidarity movements;
- Target women specifically in programmes related to green industry from the government and NGOs;
- Create highly visible role models of successful women entrepreneurs who can attract or persuade women/girls to engage as entrepreneurs in green industry;
- Encourage these role models to play a vital role in attracting more women business leaders by coaching them at an individual level and sharing their experiences at collective level. This would lead to a critical mass of women entrepreneurs active in green industry, which will have an impact on their effectiveness to formulate their demands towards the government;
- Exchange and network more among each other – form a solid physical and/or digital platform of women entrepreneurs in green industry who can formulate its recommendations and exigencies towards the government; and
- Engage more men as "champions" of gender equality by encouraging them to help their female family members access resources that

119 Full CEDAW document available from the UN Human Rights Office of the High Commissioner: <https://www.ohchr.org/en/professionalinterest/pages/cedaw.aspx>.

120 UN Women (n.d.). Gender-responsive Procurement. Available at: <https://www.unwomen.org/en/about-us/procurement/gender-responsive-procurement>.

121 Ibid.

are essential to their economic empowerment, start-up activities and business growth, and to be the agents of change in challenging established gender norms.

#### *Recommendations for private sector stakeholders:*

- Foster business practices that empower women. The Women's Empowerment Principles (WEPS)<sup>122</sup> can be used as a set of guiding principles to promote gender equality and the empowerment of women in the workplace, marketplace, and community;
- Note the WEP principles, which include equal pay for work of equal value, gender-responsive supply chain practices and zero tolerance against sexual harassment in the workplace;
- Show the way and assume responsibility for trying out new ways of "greening" their business in ways that are gender-responsive and environmentally sustainable, especially private actors with more financial resources;
- Create enabling environments for gender equality and the economic advancement of women. This requires shifting structures that systematically discriminate against women. Mentoring and networking programmes for women in green industry are important tools to support women's career advancement and high-level corporate leadership;
- Invest in exchange visits with other companies within respective countries and abroad to learn from experiences and innovations in green industry;
- Ensure equal terms and conditions of work for men and women in terms of contract, salary and benefits, while addressing the particular needs of breastfeeding and pregnant women; and
- Invest in training and capacity building of women workers to ensure equal access to promotions, management and leadership roles. Dismantling hierarchical ladders is equally suggested where women and men can more easily switch jobs between several (also male-dominated) disciplines and levels. In this way, women are exposed to a broader range of professional experiences which strengthens their ability and competencies to handle jobs that are traditionally viewed as masculine (and the other way around men doing more feminine jobs).

### **COVID-19 mitigation**

Women around the world earn less, save less, hold less secure jobs, and are more likely to be employed in the informal sector.<sup>123</sup> Women have less resources to overcome economic shocks than men.<sup>124</sup> Women are disproportionately affected by the consequences of the COVID-19 crisis because they are overrepresented in precarious employment; including the informal sector, where their benefits and protection are inadequate or lacking. COVID-19 is already having major impacts on women the entire supply chain, including company executives, women working in the service sector and in the informal sector, women who own or work in small and medium-sized enterprises (SMEs), women working in manufacturing, and women migrant workers.<sup>125</sup> This is exasperated by the unequal division of care and domestic work at home due to gendered social expectations, which limit women's livelihoods.<sup>126</sup>

Despite these challenges, the COVID-19 crisis also offers unique opportunities for empowering women, bringing the transformative changes needed to address the longstanding climate, social and environmental issues and inequalities that have contributed to the devastation of this pandemic.

**Cambodia:** the WHO works closely with the Ministry of Health (MoH), the Royal Government of Cambodia and partners on all aspects of responding to COVID-19 in Cambodia, including surveillance, screening, tracing and quarantine, strengthening and enhancing Cambodia's health systems, including public health capacity to respond to the pandemic, providing strategic and technical advice as part of a broader UN support team, and coordinating the international health response among the UN agencies in the country.<sup>127</sup> Public awareness campaigns should highlight the ways in which domestic violence victims can continue to report abuse and access services throughout the pandemic.

**Peru:** the Peruvian government issued several exceptional and temporary measures to prevent the spread of COVID-19 in the national territory. Among these were the Emergency Decree No. 026-2020 that made "remote working" possible; it allowed workers from several industries to carry out their work outside their workplace. Although the positive and negative effects of this massive and abrupt migration to this new way of working are still to be assessed, so far it is showing that remote working is feasible and is contributing to the reduction of Greenhouse Gas Emissions in Peru. Public awareness campaigns should highlight the ways in which domestic violence victims can continue to report abuse and access services throughout the pandemic.

**Senegal:** the Senegalese government should integrate a gender perspective into its national COVID-19 response, including steps to mitigate the problem and ensure that responses do not perpetuate gender inequity. The government should take special measures to protect girls from physical and sexual abuse and exploitation and provide timely help to victims. Public awareness campaigns should highlight the ways in which domestic violence victims can continue to report abuse and access services throughout the pandemic. However, despite the challenges, as part of the programme to strengthen the resilience of vulnerable households launched by the government of Senegal in response to the COVID-19 pandemic, UN Women Senegal is supporting the Ministry of Women, Family, Gender and Child Protection (MFFGPE) in the

<sup>122</sup> Established by UN Global Compact and UN Women, the WEPS are informed by international labour and human rights standards and grounded in the recognition that businesses have a stake in, and a responsibility for, gender equality and women's empowerment. For more information, see <https://www.weeps.org/about>.

<sup>123</sup> See From insights to action: Gender equality in the wake of COVID-19, available at: <https://data.unwomen.org/publications/insights-action-gender-equality-wake-covid-19> and Spotlight on Gender, Covid-19 and the SDG, available at: <https://data.unwomen.org/sites/default/files/documents/Publications/Spotlight-Gender-COVID-19-SDGs.pdf>.

<sup>124</sup> United Nations (2020). Policy Brief: The Impact of COVID-19 on Women.

<sup>125</sup> For additional COVID-19 related resources, see: <https://data.unwomen.org/publications>.

<sup>126</sup> Ibid.

<sup>127</sup> <https://www.who.int/news-room/feature-stories/detail/who-works-closely-with-the-royal-government-of-cambodia-in-the-fight-against-covid-19>.

implementation of a programme titled “Household basket: women are part of the solution”.

**South Africa:** faced with the COVID-19 pandemic, Africa responded swiftly and cohesively under the leadership of Cyril Ramaphosa, President of the Republic of South Africa and Chairperson of the African Union, with the support of Moussa Faki Mahamat, Chairperson of the AUC, who is leading the operationalisation of Africa’s response. Through these coordinated efforts, the Africa Centres for Disease Control and Prevention (Africa CDC) has been at the forefront of Africa’s responses, dispatching personal protection equipment (PPE) to all countries, spearheading the creation of the Partnership to Accelerate COVID-19 Testing in Africa (PACT) and putting in place pooled procurement strategies.<sup>128</sup> Women-led organizations that are dealing with peace, security and development are playing a key role in developing policies, strategies and guidelines for gender-responsive actions to prevent and combat COVID-19, and in planning post-COVID-19 recovery. Public awareness campaigns should highlight the ways in which domestic violence victims can continue to report abuse and access services throughout the pandemic.

The coordination of joint efforts between the government and the international community is crucial to support recovery in each country. Additionally, this research can help governments to identify the gaps in policies in terms of implementation and gender mainstreaming.

UNIDO can contribute by:

- Critically reviewing and deciding on key strategies and actions to promote the strengthening of productive capacities, economic diversification and technological upgrading, while ensuring social and environmental protection;
- Coordinating the development and implementation of strategies to promote science, technology and innovation as well as strengthening eco-systems to promote start-ups in various sectors; and
- Identifying the specific needs and contributions of women as workers, business owners and entrepreneurs while developing the immediate measures for post-COVID recovery.

**Table 9.2:** Sample country-specific recommendations for government, civil society, and the private sector

Cambodia	Peru	Senegal	South Africa
The government can promote the introduction of modern green technologies (such as solar panels for companies but also for households) and consumption of local products (instead of importing, especially food items); introduce patents for innovations or to reward entrepreneurs using renewable energy.	Design voluntary sustainability standards/ certifications to promote gender equality in the sectors prioritised for green development (e.g. <i>Empresa Segura</i> ); offer mechanisms for tax incentives for businesses operating in green industry that develop gender-responsive programmes (similar to “ <i>Obras por Impuestos</i> ” <sup>129</sup> and <i>MEP</i> <sup>130</sup> ); offer differentiated tax brackets for “green businesses” lead by women; to allow for telework and other forms of flexibility in order to recruit and retain talent, particularly professional women who have opted to continue working because of this mechanism.	The ministerial gender cells should be strengthened with financial and human resources and allowed to exercise their mandate to enforce the implementation of gender-sensitive strategies and action plans.  GIE’s should try to step out of the (semi-)artisanal level they are operating in and scale-up their business with the aim of increasing profits.	Address systemic discrimination, including racism and gender inequalities. This will require an intersectional approach that considers the diverse social locations and identities of women, including gender, rurality, urban township economy, race and poverty, amongst others.
Invest in exchange visits with other companies in Cambodia but also abroad to learn from experiences and innovations in the green industry.	Create innovation labs that focus on helping women-lead businesses in green industry, generate productive/manufacturing innovations for growth and/or transform women-led businesses into “green businesses” (can replicate the FAB Woman model); <sup>131</sup> provide added incentives/financing to incubators and accelerators sponsored by the PRODUCE that are focused on women in green industry ( <i>Innovate Peru</i> ). <sup>132</sup>	Senegalese policymakers are encouraged to promote entrepreneurship of small and medium-sized enterprises (SME) through incentives like exonerations, simplifying administrative procedures to manage a business, reducing taxes, setting up a one-stop contact center where entrepreneurs can get all the information and support they need in an integrated manner.	Paternity leave for both men and women – when this is the norm, women will be less likely to suffer discrimination based on the likelihood of having children.

<sup>128</sup> <https://www.accord.org.za/analysis/the-impact-of-covid-19-pandemic-on-the-women-peace-and-security-agenda-in-africa/>.

<sup>129</sup> <https://www.mef.gob.pe/es/obras-por-impuestos>.

<sup>130</sup> <http://portal.concytec.gob.pe/index.php/boletin-concytec/1434-beneficios-tributarios-para-empresas-innovadoras-hasta-2019>.

<sup>131</sup> <https://www.fab.pe/portfolio/fabwomen/>.

<sup>132</sup> <https://www.innovateperu.gob.pe/convocatorias/por-tipo-de-concurso/concursos-para-instituciones-del-ecosistema/191-concurso-de-fortalecimiento-de-incubadoras-de-negocios-y-entidades-afines>.



## 9.3 Future research questions

The four phases of this research study were comprehensive and included a wide range of information, data, and findings. However, there are questions that evolved during the research process that could be further explored in future studies to understand the advancement of gender equality and women's empowerment in green industry, namely:

1. What measures can be taken to ensure the success of **current women-led green businesses and promote new entrepreneurs and professionals during the COVID-19 pandemic?**
2. What are the trends and patterns – power relations, division of labour, decision making, and opportunities for women's participation, etc. – of **women's participation** across the **sectors' and sub-sectors' value chains?**
3. Are there any **differences in economic empowerment** for women who are entrepreneurs by choice (e.g. financial independence) or need (e.g. additional family income) in green industry?
4. How could **social media** be leveraged **to create awareness** among entrepreneurs, professionals and aspirants about **current policies and laws** that promote green industry opportunities and gender equality?
5. Emergent research suggests that the transition to **digital services** is a critical survival factor for businesses during the COVID-19 crisis and recovery. Due to the digital gender divide, women are less likely to have access to digital resources and/or be employed in technology-oriented sectors. What **measures** can **encourage more women to pursue businesses and employment** in these sectors?
6. As an emerging industry, what can the green industry glean from other industries that have **family-friendly policies** that have enabled more **equal sharing of care responsibilities** and facilitated more equal access to the labour market for women?
7. What are the implications of this research for **women occupying different intersectional positions and identities?**

## 9.4 Examples and learning from success stories in neighbouring countries

This section provides more information about women working in green industry in neighbouring countries of EEWIGI participating states. Some examples of success stories are:

- **Mulberries** is a socially and environmentally responsible **silk weaving** company established in 1993 by Kommaly Chanthavong in Laos. Its products are certified by the World Fair Trade Organization, given its mission to provide sustainable job opportunities for Lao people by employing them in the whole range of processes involved in silk weaving, from growing mulberry plants and raising silkworms to producing silk threads, dyes and weaved goods.<sup>133</sup>
- **Swayam Shikshan Pravog (SSP)** is an organization based in Pune, India, that promotes grassroots women entrepreneurs and leaders to provide clean energy, water and sanitation, agriculture and nutrition, community resilience and preventative healthcare services. The organization is active in several marginalised regions in India and partners with a consortium of 5,500 self-help groups. Since 2009, SSP has empowered more than 145,000 women farmers, entrepreneurs and community leaders, impacting the lives of over 5 million people in low income and under-served communities.<sup>134</sup>
- **Solar Sister** is a non-profit organization whose mission is to eradicate energy poverty by empowering women with economic opportunity. Based in Tanzania and Nigeria, Solar Sister has established a network of over 2,600 women entrepreneurs in Tanzania, Nigeria, and Uganda. Solar Sister is playing a crucial role in bringing clean energy to hard-to-reach communities that have few options for clean energy access. Their women-led entrepreneurship model has reached over 1 million customers in three countries.<sup>135</sup>
- **Empower Generation (EG)** builds women-led clean energy distribution networks that deliver life improving products (e.g. solar lanterns and home systems; efficient appliances) to energy poor rural communities. Targeting rural women who own and run their own business, or work as door-to-door sales agents, EG builds their capacity through training and business support. Women are trained on how to run successful businesses, distribute clean energy solutions, and become leaders in their communities. In 2012, their first woman-led energy business in Nepal was set up. Today, their network includes 20 women-led businesses in 15 districts with 270 sales agents. Since 2017, EG has also started a pilot project in Myanmar.<sup>136</sup>

Benefits of women-targeted initiatives in neighbouring countries:

1. A notable increase in the importance of women's voices in decisions within the household was observed;
2. Women felt respected and involved in the community;

<sup>133</sup> <https://www.lifegate.com/mulberries-silk-weaving-laos>.

<sup>134</sup> <https://www.globalwomennet.org/wp-content/uploads/2019/02/Best-Practices-in-Accelerating-Access-to-Clean-Household-Energy..pdf>

<sup>135</sup> Ibid.

<sup>136</sup> [https://womengenderclimate.org/gjc\\_solutions/empower-generation-combatting-gender-inequality-and-energy-poverty-through-women-led-social-businesses/](https://womengenderclimate.org/gjc_solutions/empower-generation-combatting-gender-inequality-and-energy-poverty-through-women-led-social-businesses/).

3. In some cases, e.g. Empower Generation, women entrepreneurs gained confidence, agency and became active in their communities; some of them ran for political office in local elections;
4. Education can narrow the gap in technical and skilled jobs;
5. A parallel approach of running a programme supporting women's entrepreneurship and implementing an advocacy programme tack-ling these issues from different perspectives;
6. Empowerment and leadership training increases entrepreneurs' resilience;
7. Involvement of men, especially within the family and community about women's role in the value chain is essential; and
8. Engaging local government in creating an enabling environment for women-owned and operated businesses can have significant benefits.

# 10. Conclusion

**This study has highlighted the many opportunities for incorporating gender equality into the emerging green industry of Cambodia, Peru, Senegal and South Africa. In the four participating countries, no clear definition, nor clear criteria exist for what makes a business “green”. The sectors and sub-sectors reviewed for this project have not yet fully adopted green practices but have great potential for improving their sustainability and environmental impact.** There is limited documentation to understand how women are marginalised within the sectors identified. Sex-disaggregated information and data on green businesses are scattered. However, participants from the government, industry professionals and entrepreneurs in green industry are optimistic about women’s opportunities in their respective sectors. Most importantly, women entrepreneurs are excited about their businesses and are optimistic that their business will succeed.

In terms of policy, governments have made positive promises and have taken steps to incorporate gender equality into legislation, and green industry plans to some extent. **However, amongst the policies reviewed, there is a lack of focus on gender equality and women’s empowerment in green industry. This is in addition to a lack of implementation of current policies.**

Findings from this project suggest a need to increase collaboration between the private and public sector; so that businesses truly get on board with government targets for gender equality. The Women’s Empowerment Principles (WEPS) can be used as a set of guiding principles to promote gender equality and women’s empowerment in the workplace, marketplace, and community. Men’s involvement in gender mainstreaming will play a critical role in challenging gender norms and identifying strategies to root out structural and institutionalised sexism.

Furthermore, **there is a need for a monitoring mechanism to understand the extent to which green industry benefits women entrepreneurs. Currently, the synergies between green industry and women’s entrepreneurship are missing in relevant strategies and policies.** This mechanism should integrate indicators to capture the challenges of different women at all levels, including women entering green industry, women aspiring to expand their businesses, women professionals, etc. These indicators will aid in monitoring and tracking the incentives for advancing gender equality and the economic empowerment of women in green industry.

Notwithstanding recent progress, women spend more than twice as much time as men on unpaid household work. Unequal division of household responsibilities has an impact on all aspects of their participation in the economy, from disproportionate representation in the informal economy, to their relatively weak use of technology to build and expand the enterprises they create. Although woman-run enterprises are present throughout the economy, they need more support. Addressing the lack of sex-disaggregated data available on women’s participation in the economy is key to tackling these issues. Without it, neither the government nor the population at large can have an accurate picture of the true cost of discrimination against women in green industry. **Narrowing information gaps about the economic conditions affecting women would more forcefully demonstrate the case for the government, the private sector, and civil society to prioritise reform and take action.**

**Barriers to the economic empowerment of women in green industry are multi-faceted and different based on race, rurality, and level of poverty.** The findings from this report suggest that across the four participating countries, women entrepreneurs face many barriers, including: lack of technical skills and specialised knowledge, lack of awareness about policies and programmes designed to benefit women and/or encourage participation in green industry, lack of access to technology necessary to start green businesses or upscale existing businesses, difficulty in finding and hiring skilled workers, lack of social capital, lack of access to necessary capital, collateral and credit resources, and lack of access to markets to sell their products. Furthermore, discriminatory norms and hiring practices, sexual harassment, and caretaking responsibilities also constrain the economic empowerment of women in green industry.

**Governments should implement strategies that build increased transparency and accountability as a key strategy to overcome barriers to gender equality.** Targets must be linked to clear indicators and measurable milestones. Cooperation with international data collection organizations will enable governments to be held accountable for ambitious targets. Additionally, increasing communication and awareness around gender mainstreaming policy is crucial in the public sector. Public awareness raising campaigns through training/campaign/TVET/information sharing should be emphasised. Easing the business registration process, developing databases of business case studies and promoting role models could encourage small-scale women entrepreneurs to go “green”.

“Green industry” is new to all four participating countries. Integrating gender in programmes and policies will help them to achieve the global Sustainable Development Goals (SDGs), such as Sustainable Industrialisation (SDG 9) and Gender Equality (SDG 5). **During the current COVID-19 crisis, gender mainstreaming must be prioritised in all sectors; not only to help women entrepreneurs start green businesses, but also to generate the human resources needed for an efficient economic recovery as a whole.**<sup>137</sup> Empowering women is critical to bringing about the transformative change needed to address climate and environment issues. Green industry is new, innovative, and a part of a growing market pushed by conscious consumerism. It offers many opportunities to make gender equality and the economic empowerment of women a reality.

<sup>137</sup> For detailed recommendation on post COVID recovery, please refer to UNIDO (2020). The Impact of COVID-19 on the Private Sector: Firms/Enterprises in Cambodia. Survey Report. UNIDO Cambodia.



A stack of books with various colored tabs (blue, yellow, red, white) sticking out from the top. The books are arranged in a slightly overlapping manner, creating a sense of depth. The background is a solid blue color.

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# Appendixes

# Appendix 1

## Appendix 1a Cambodia

Summary table of Assessment I

	Engendering of the policy	Structural understanding of gender equality	Intersectionality	Women's empowerment	Incremental transformation	Gender responsive industrial policies	Regional/ international context	Total Score
National Strategic Plan on Green Growth (2013-2030)	0.5/5	0/1	0.5/1	0/4	0/1	0.5/3	0/1	1.5/16
Strategic Development Plan for Cambodian Agro-industries (2019-2030)	0.5/5	0/1	0/1	0/4	0/1	0/3	0/1	0.5/16
The Strategic Planning Framework for Fisheries (2010-2019)	1/5	0/1	0/1	0.5/4	0/1	0.5/3	0/1	2/16
Cambodia Trade Integration Strategy (CTIS) (2019-2023)	2/5	0.5/1	0/1	0.5/4	0/1	0.5/3	0/1	3.5/16
National Technical Vocational Education and Training Policy (TVET) (2017-2025)	2/5	0/1	0.5/1	1/4	0/1	1/3	0/1	4.5/16
NDC Roadmap and Stakeholder Engagement Plan (2019-2030)	0.5/5	0/1	0/1	0/4	0/1	0/3	0/1	0.5/16
Gender and Climate Change Action Plan (GCCAP) (2014-2018)	5/5	1/1	1/1	3/4	0.5/1	0.5/3	0/1	11/16
Cambodian Sustainable Development Goals (CSDGs) Framework (2016-2030)	5/5	1/1	1/1	2.5/4	0.5/1	0/3	0/1	10/16
National Strategic Development Plan (NSDP) (2014-2018, 2019-2023)	4.5/5	1/1	1/1	3.5/4	0.5/1	0.5/3	0.5/1	11.5/16
The Cambodia Industrial Development Policy (IDP) (2015-2025)	0/5	0/1	0/1	0/4	0/1	0/3	0/1	0/16

Summary table of Assessment II and III

Name	Assessment II Score	Assessment III Score
National Strategic Plan on Green Growth (2013-2030)	0	n/a
Strategic Development Plan for Cambodian Agro-industries (2019-2030)	0	n/a
The Strategic Planning Framework for Fisheries (2010-2019)	0	n/a
Cambodia Trade Integration Strategy (CTIS) (2019-2023)	3	n/a
National Technical Vocational Education and Training Policy (TVET) (2017-2025)	0	n/a
NDC Roadmap and Stakeholder Engagement Plan (2019-2030)	0	n/a
Gender and Climate Change Action Plan (GCCAP) (2014-2018)	4	n/a
Cambodian Sustainable Development Goals (CSDGs) Framework (2016-2030)	0	0.5
National Strategic Development Plan (NSDP) (2014-2018, 2019-2023)	0	0.5
The Cambodia Industrial Development Policy (IDP) (2015-2025)	0	n/a

Summary table of Assessment I

	Engendering of the policy	Structural understanding of gender equality	Intersectionality	Women's empowerment	Incremental transformation	Gender responsive industrial policies	Regional/ international context	Total Score
National Determined Contributions (2015, 2017-2018)	5/5	0.5/1	0.5/1	4/4	1/1	0.5/3	0.5/1	12/16
Peruvian National Coffee Action Plan (2018-2030)	2/5	0/1	0.5/1	0.5/4	0/1	0/3	0.5/1	3.5/16
Circular Economy Roadmap in Industry Sector (2020)	0/5	0/1	0/1	0/4	0/1	1/3	0/1	1/16
Action Plan on Gender and Climate Change (PAGCC) (2016-2021)	3/5	0.5/1	1/1	3.5/4	1/1	0/3	1/1	10/16
The Framework Law on Climate Change - Law No. 30754 (2018)	2/5	0/1	0.5/1	0/4	0/1	0/3	0/1	2.5/16
The National Climate Change Strategy (2024)	0/5	0/1	0/1	0/4	0/1	0/3	0/1	0/16
The Management Plan of Risks and Adaptation to Climate Change in the Agricultural Sector (2012 -2021): The PLANGRACC	0/5	0/1	0/1	0/4	0/1	0/3	0/1	0/16
The National Forest and Climate Change Strategy (2015)	1/5	0.5/1	0/1	0/4	0/1	0/3	0/1	1.5/16
Peru 2021 Bicentennial Plan (2021)	3/5	0.5/1	0.5/1	2.5/4	0/1	0.5/3	0.5/1	7.5/16
National Plan for Competitiveness and Productivity (2018-2030)	0/5	0/1	0/1	0/4	0/1	0/3	0/1	0/16

Summary table of Assessment II and III

Name	Assessment II Score	Assessment III Score
National Determined Contributions (2015, 2017-2018)	3	0.5
Peruvian National Coffee Action Plan (2018-2030)	0	n/a
Circular Economy Roadmap in Industry Sector (2020)	0	0
Action Plan on Gender and Climate Change (PAGCC) (2016-2021)	2	0.5
The Framework Law on Climate Change - Law No. 30754 (2018)	1	n/a
The National Climate Change Strategy (2024)	0	n/a
The Management Plan of Risks and Adaptation to Climate Change in the Agricultural Sector (2012 -2021): The PLANGRACC	0	n/a
The National Forest and Climate Change Strategy (2015)	0	n/a
Peru 2021 Bicentennial Plan (2021)	1	n/a
National Plan for Competitiveness and Productivity (2018-2030)	0	0



Summary table of Assessment I

	Engendering of the policy	Structural understanding of gender equality	Intersectionality	Women's empowerment	Incremental transformation	Gender responsive industrial policies	Regional/ international context	Total Score
National Strategy for the Promotion of Green Jobs (2019)	2/5	0/1	0/1	2/4	1/1	0.5/3	0.5/1	6/16
National Strategy for Green Growth in Senegal (2016-2020)	0.5/5	0/1	0/1	0/4	0.5/1	0/3	0/1	1/16
LAW n ° 2010-21 of December 20, 2010 (2010)	0/5	0/1	0/1	0/4	0/1	0/3	0/1	0/16
National Strategy for Sustainable Development (2015)	1.5/5	0/1	0/1	0/4	0.5/1	0/3	0.5/1	2.5/16
Environment and Natural Resources Sector Policy (2009-2015)	1/5	0/1	0/1	0/4	0/1	1/3	1/1	3/16
National Climate Fund (2015)	1/5	0/1	0/1	1/4	0/1	0.5/3	0/1	2.5/16
The Senegal National Adaptation Plan [to climate change] (2006)	0/5	0.5/1	0/1	0/4	0/1	0/3	0/1	0.5/16
Environmental and Social Commitment Plan (ESCP) (2019)	4/5	1/1	1/1	2/4	0/1	0.5/3	0/1	8.5/16
Plan Sénégal Émergent (PSE) (2019-2024)	2/5	0.5/1	0/1	3/4	0/1	0/3	0/1	5.5/16
Ministry of Industry Development Sector Policy Letter (2018-2023)	0/5	0/1	0/1	0/4	0/1	0/3	0/1	0/16

Summary table of Assessment II and III

Name	Assessment II Score	Assessment III Score
National Strategy for the Promotion of Green Jobs (2019)	0	1
National Strategy for Green Growth in Senegal (2016-2020)	0	n/a
LAW n ° 2010-21 of December 20, 2010 (2010)	0	n/a
National Strategy for Sustainable Development (2015)	0	n/a
Environment and Natural Resources Sector Policy (2009-2015)	0	n/a
National Climate Fund (2015)	0	n/a
The Senegal National Adaptation Plan [to climate change] (2006)	0	n/a
Environmental and Social Commitment Plan (ESCP) (2019)	0	n/a
Plan Sénégal Émergent (PSE) (2019-2024)	1	0.5
Ministry of Industry Development Sector Policy Letter (2018-2023)	0	n/a

Summary table of Assessment I

	Engendering of the policy	Structural understanding of gender equality	Intersectionality	Women's empowerment	Incremental transformation	Gender responsive industrial policies	Regional/ international context	Total Score
National Green Fund (2012)	3/5	0.5/1	0.5/1	2.5/4	0.5/1	2.5/3	1/1	10.5/16
Green Transport Strategy (2018-2050)	0.5/5	0.5/1	0.5/1	0.5/4	0/1	0.5/3	0.5/1	3/16
Department of Energy (DoE) policy on Women's Empowerment and Gender Equality (WEGE) (2017)	4.5/5	1/1	1/1	3.5/4	1/1	2.5/3	1/1	14.5/16
The National Waste Management Strategy (NWMS) (2011)	0/5	0/1	0/1	0/4	0/1	0/3	0/1	0/16
Climate Change Bill (2018)	0/5	0/1	0/1	0.5/4	0/1	0/3	1/1	1.5/16
Department of Environmental Affairs Strategic Plan (2019/20 to 2023/24)	4.5/5	0/1	1/1	1.5/4	0.5/1	1.5/3	0.5/1	9.5/16
The Framework and Strategy towards Gender Mainstreaming in the Environmental Sector (2016-2021)	5/5	1/1	1/1	3.5/4	1/1	2/3	1/1	14.5/16
The Integrated Resource Plan (IRP) 2019 (2010-2030)	0.5/5	0/1	0/1	0/4	0.5/1	0/3	0.5/1	1.5/16
National Development Plan (NDP) 2030 (2012-2030)	4.5/5	1/1	1/1	2.5/4	1/1	2.5/3	1/1	13.5/16
Re-imagining the Future Strategy (The DTI) (2019)	0/5	0.5/1	1/1	2/4	0.5/1	0/3	0.5/1	4.5/16

Summary table of Assessment II and III

Name	Assessment II Score	Assessment III Score
National Green Fund (2012)	2	1.0
Green Transport Strategy (2018-2050)	0	0.5
Department of Energy (DoE) policy on Women's Empowerment and Gender Equality (WEGE) (2017)	4	0.5
The National Waste Management Strategy (NWMS) (2011)	0	1.0
Climate Change Bill (2018)	0	0
Department of Environmental Affairs Strategic Plan (2019/20 to 2023/24)	0	0.5
The Framework and Strategy towards Gender Mainstreaming in the Environmental Sector (2016-2021)	4	0.5
The Integrated Resource Plan (IRP) 2019 (2010-2030)	0	0.5
National Development Plan (NDP) 2030 (2012-2030)	3	0.5
Re-imagining the Future Strategy (The DTI) (2019)	0	0



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