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Policy Assessment for the Economic Empowerment of Women in Green Industry

Executive Summary: South Africa



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Department:
Trade, Industry and Competition
REPUBLIC OF SOUTH AFRICA



**women, youth &
persons with disabilities**

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What is this report about?

This South Africa country report is part of the global joint programme, “Economic Empowerment of Women in Green Industry” (EeWiGI). Its purpose 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 and participate in green industry as entrepreneurs or industry professionals.**¹

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 2017² has led to a fully-fledged project to advise the Ministry of Trade, Industry and Competition, and the Ministry for Women, Youth and Persons with Disabilities, as well as private sector associations and enterprises, on the design and implementation of gender-responsive green industry policies. This national 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 industrial policies and adopt them; and
3. Facilitate efforts to prioritise areas for work plan development.

Why is it important?

The South African government prioritises policies and programmes intended to promote gender equality and empowerment. These include, the Department of Mineral Resources and Energy strategy on Women’s Empowerment and Gender Equality (WEGE), the Framework and Strategy towards Gender Mainstreaming in the Environmental Sector, the National Development Plan (NDP) 2030; and the National Green Fund, which helps the nation adapt and mitigate climate change. Green growth and the promotion of green industry are goals that fall within this overarching priority. **However, the data available on women’s economic empowerment in green industry is scarce. This study aims to provide the necessary data to fill this gap.** Policies like the Department of Environmental Affairs’ Strategic Plan and Re-imagining the Future Strategy (the DTIC), in addition to others mentioned above, have further scope to mainstream gender. **To develop gender mainstreaming policies, strategies and action plans for green industry, a solid foundation of knowledge and deep understanding of the challenges facing women entrepreneurs and professionals in green industry is required.** Hence, this project conceptualises women’s economic empowerment as requiring advancement and transformation.

Advancement includes increased resources such as income and employment, human capital (education, skills, training), financial capital (loans, savings), social capital (networks, relationships, mentors), and physical capital (land, machinery, tools, inventory). Achieving *transformation* necessitates women having the power to use their newly gained skills and exercising agency to make decisions over resources. This requires transforming underlying structural gender constructs and social norms that reinforce and perpetuate gender inequalities^{3, 4}.

1 UNIDO and UN Women (2019). Global Programme: Economic Empowerment of Women in Green Industry Phase 1: Policy prioritization, pp 1-21.

2 UNIDO (2019). The Economic Empowerment of Women in Green Industry: A Synthesis Report. Unpublished, pp 1-82.

3 See UN Women’s Glossary of Terms: <https://trainingcentre.unwomen.org/mod/glossary/view.php?id=36&mode=letter&hook=G&sortkey&sortorder&fullsearch=o&page=2>.

4 GWNEN (2019). Women for Sustainable Energy: Strategies to Foster Women’s Talent for Transformational Change, p.52.

The impact of COVID-19 on women's economic empowerment in green industry in South Africa

Across the globe, women earn less, save less, hold less secure jobs, and are more likely to be employed in the informal sector.⁵ Women have been 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.⁶

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.⁷

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 economical 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.⁸ 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 a more conscious consumer. It offers many opportunities for women.

South Africa is part of the “**Just Transition**” countries transitioning to a climate-resilient and low carbon/carbon neutral economy. Here, it is of paramount importance to maximise the benefits of climate action in equitable and socially inclusive ways; ensure gender equality; and secure inclusivity of other marginalised groups in green industry policy. Indeed, progression towards large-scale deployment of renewable energy sources and efficient use of resources must involve assessments of socio-economic shifts. Particularly around employment and women's economic empowerment, there are significant implications arising from the switch from coal-based to low-carbon-based energy sources.⁹

In support of the “Just Transition” for South Africa, this report highlights the various gaps and opportunities for women's economic empowerment in green industry, and recommendations for the design and implementation of policies and strategies that advance gender equality.

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.¹⁰

How were the sectors and sub-sectors selected for this report?

“Green industry” incorporates many traditional sectors that mainstream environmental and social considerations into their operations. Based on an analysis that was conducted as part of the project, the following sectors of interest were identified as particularly relevant to the South African context: the renewable energy sector (sub-sector: wind and solar); waste management (sub-sector: plastics); and land transport (sub-sector: public transport).

Table 1: Sectors and sub-sectors examined

Sectors	Sub-sector
Renewable energy	Wind and solar
Waste management	Plastics
Land transport	Road transport

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

6 Ibid.

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

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

9 Mapungubwe Institute for Strategic Reflection (MISTRA) (2018). Focus on Just Transition in South Africa Policy Brief, pp. 1-7.

10 CARE (2020). *COVID-19 Condemns Millions of Women to Poverty When they could be a Solution to Prosperity*.

An analysis was performed using a points matrix that evaluated each sector and sub-sector in five (5) main aspects: (1) gender mainstreaming and the role of women; (2) market size and potential; (3) entrepreneurial level; (4) environmental consciousness of sector players; and (5) potential synergies with UNIDO's Programmes for Country Partnership (PCP) projects. Each sub sector was assigned points for indicators under each aspect. The sub-sectors selected were those with the highest scores (see Appendix 1 for selection matrix in the main report).

How was the study conducted?

The research study used a mixed-methods approach combining qualitative and quantitative data collection. The research was conducted in four phases: (1) desk review and initial policy review; (2) critical feminist policy analysis (10 policies); (3) qualitative data collection in the form of Key Informant Individual Interviews (30 KIIs) and Focus Group Discussions (2 FGDs); and (4) quantitative data collection in the form of an online survey with women working as entrepreneurs (25 respondents). All data was collected from January to February 2020.



Limitations of the research

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 in order 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 holidays and New Year season, 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. Furthermore, the KIIs were mostly conducted in the capital cities. The inclusion of women entrepreneurs and policy influencers from other cities would have provided useful information.

Strengths of the study

Some 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 novel in international development research. While there are several policies in the country on climate change and sustainable development, the extent to which these policies have been gender mainstreamed was previously unknown. This analysis creates 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 for required changes in policy by facilitating the design and revision of green industry policies around their needs and priorities; and
6. **Bridging the green industry knowledge gap:** the study revealed a persistent knowledge gap regarding existing green industry policies in the country among entrepreneurs, professionals and oftentimes policymakers themselves. By exposing this gap, this report proposes recommendations for raising awareness and exposing people to the opportunities present in green industry.

What are the key findings?

Key results from phases 1 and 2: policy analyses

Ten policies were evaluated based on feminist policy analysis criteria and research questions listed in the main report. It comprised of 3 assessments:

- Assessment I: the first assessment¹¹ is an index for evaluating the inclusion of gender in green industry plans across seven criteria categories. Each quality criteria category had corresponding research questions that were used to analyse each policy. The complete list of research questions is in Table 3.1 of the full report. A summary of the categories and the issues queried in each are listed in the table below:

Table 2: Summary of assessment 1 quality criteria categories and corresponding questions

Quality criteria categories	Does the policy...
1. Engendering of the policy (Policy Content)	Aim for gender equality? Include sex-disaggregated data consistently? Consider gender differences in order to create more equality? Challenge gender stereotypes? Mainstream gender throughout the document?
2. Structural understanding of gender equality (Policy Content)	Consider structural factors that impact gender equality?
3. Intersectionality (Policy Content)	Incorporate the concept of “intersectionality”?
4. Women’s empowerment (Policy Process)	Include the word “empowerment”? Refer to women’s economic empowerment? Refer to women’s empowerment in terms of increasing women’s agency, resources, and/or achievements? Mention consulting women, or women’s civil society groups and associations during its development?
5. Incremental transformation (Policy Process)	Build on previous national gender-equality achievements and policies?
6. Gender-responsiveness (Policy Adapted to Project Context)	Address the specific needs and interests of women entrepreneurs/ women working in green industry? Consider ways to overcome gender norms and social traditions that impair women’s involvement in green industry? Address steps necessary to increase women’s leadership roles in green industry?
7. Regional and international contextualisation (Policy Adapted to Project Context)	Comply with international and regional conventions, policies, laws, and commitments that safeguard women’s rights?

- Assessment II: the second assessment evaluates the specific targets, commitments, indicators and/or “next steps” regarding gender planning. This is to ensure accountability in terms of gender targets/plans. The assessment used a scoring guide from 0 - 4, where 0 = no mention of gender in the conclusion; 1 = irrelevant/tokenistic conclusion; 2 = has some reference to sex but no gender conclusions¹²; 3 = has some gender conclusions but basic or unhelpful; and 4 = highly relevant gender-responsive conclusion.
- Assessment III: the policies were assessed in terms of their level of implementation to date (as of April 2020).

¹¹ The criteria and research questions for the first exercise are adapted from: Druzca, K. and Rodriguez, C.M. 2018. Feminist Policy Analysis: Implications for the Agricultural Sector in Ethiopia. CIMMYT, Addis Ababa, Ethiopia..

¹² ‘Sex’ includes reference to ‘women’ or ‘men’. ‘Gender’ refers to the relations, social norms, and power dynamics between ‘women’ and ‘men’.

Table 3: Summary table of assessment I¹³

National laws, policies and strategies assessed	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) ¹⁴	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) ¹⁵	0.5/5	0.5/1	0.5/1	0.5/4	0/1	0.5/3	0.5/1	3/16
Department of Mineral Resources and Energy (DMRE) policy on Women's Empowerment and Gender Equality (WEGE) (2017) ¹⁶	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) ¹⁷	0/5	0/1	0/1	0/4	0/1	0/3	0/1	0/16
Climate Change Bill (2018) ¹⁸	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) ¹⁹	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) ²⁰	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) ²¹	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) ²²	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) ²³	0/5	0.5/1	1/1	2/4	0.5/1	0/3	0.5/1	4.5/16

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.

Assessment I (Table 3)

ENGENDERING OF THE POLICY

All the policies reviewed have room to enhance measures to address gender equality and gender stereotypes. Moves to improve the collection of sex-disaggregated data and gender statistics would also be beneficial. Examples of policies which have taken steps to adopt a gender mainstreaming approach throughout include: the Framework and Strategy towards Gender Mainstreaming in the Environmental Sector; the Department of Mineral Resources and Energy's (DMRE) policy on Women's Empowerment and Gender Equality (WEGE); the Department of Environmental Affairs Strategic Plan, and the National Development Plan (NDP) 2030. Policies that have integrated a limited "gender" or "women" approach are: the National Green Fund; the Green Transport Strategy and the Integrated Resource Plan (IRP) 2019.

STRUCTURAL UNDERSTANDING OF GENDER EQUALITY

Policies that consider structural gender equality beyond an individual level include: the Department of Mineral Resources and Energy (DMRE) policy on Women's Empowerment and Gender Equality (WEGE); the Framework and Strategy towards Gender Mainstreaming in the Environmental Sector; the National Waste Management Strategy (NWMS) (2011); and the National Development Plan (NDP) 2030. Policies or initiatives that have limited structural understanding of gender equality include: the National Green Fund; the Green Transport Strategy, and the

¹³ These policies were selected by the Project's Country Coordinator and National Focal Points using selection criteria listed on page 26 of the main report. Using these criteria, the Project Country Coordinator and National Focal Points narrowed their selection to 10 policies based on consultation with national stakeholders.

¹⁴ Department of Environment, Forestry and Fisheries, Republic of South Africa (2011). National Green Fund (2012). Pretoria, South Africa: Department of Environmental Affairs.

¹⁵ Department of Transport, Republic of South Africa. (2018). Green Transport Strategy (2018-2050). Pretoria: South Africa: Department of Transport

¹⁶ Department of Mineral Resources and Energy, Republic of South Africa. Department of Mineral Resources and Energy (DMRE) policy on Women's Empowerment and Gender Equality (WEGE) (2017).

¹⁷ Department of Environment, Forestry, and Fisheries Republic of South Africa. (2011). The National Waste Management Strategy (NWMS) (2011).

¹⁸ Department of Environmental Affairs, Republic of South Africa (2018). Climate Change Bill (2018). Pretoria, South Africa: Department of Environmental Affairs

¹⁹ 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.

²⁰ Department of Environmental Affairs, Republic of South Africa. The Framework and Strategy towards Gender Mainstreaming in the Environmental Sector (2016-2021). Pretoria, South Africa.

²¹ Department of Mineral Resources and Energy, Republic of South Africa (2019). The Integrated Resource Plan (IRP) 2019 (2010-2030). Pretoria, South Africa.

²² South African Government. National Development Plan (NDP) 2030 (2012-2030). Pretoria, South Africa.

²³ The DTIC (2019). Re-imagining the Future Strategy. Pretoria, South Africa. Available: <http://www.thedtic.gov.za/wp-content/uploads/Re-imagining-Industrial-Strategy-FINAL-13-June-2019.pdf>.

INTERSECTIONALITY

Satisfactory consideration is given to the intersection of gender with other factors such as disability, race, youth and/or rurality in: the Department of Mineral Resources and Energy (DMRE) policy on Women's Empowerment and Gender Equality (WEGE); the Department of Environmental Affairs Strategic Plan; the Framework and Strategy towards Gender Mainstreaming in the Environmental Sector; and the National Development Plan (NDP) 2030. The aforementioned policies and strategies all address women and other marginalised groups such as children, the elderly; and ethnic and religious minorities.

WOMEN'S EMPOWERMENT

The South African Government has committed itself to advocating for gender equality and the empowerment of women; however, consideration given to women's empowerment beyond strategic plans and programmes is still limited. For example: the more notable policies include, the National Development Plan (NDP) 2030, the DMRE's policy on Women's Empowerment and Equality (WEGE); and the Framework and Strategy towards Gender Mainstreaming in the Environmental Sector.

It is worth noting the following:

- The development of the Gender Mainstreaming Environment strategy included women's advocates in the formulation of policy, through the "Women in Environment Dialogue", hosted by the then Deputy Minister of the former Department of Environment Affairs.
In the future, the "Re-imagining the Future Strategy", led by the DTIC, would present an additional opportunity to enhance gender mainstreaming in green energy policy.
- South African green industrial policy generally does not build on previous national gender-equality measures. This is a missed opportunity given the robust national framework in place to ensure gender equality.

INCREMENTAL TRANSFORMATION

Generally, the policies do not build on previous national gender-equality achievements/policies. Exemptions to this rule include policies enacted by the Department of Mineral Resources and Energy (DMRE) 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.

GENDER-RESPONSIVENESS

The policies that consider gender responsiveness, include: the National Green Fund, the Department of Mineral Resources and Energy (DMRE) policy on Women's Empowerment and Gender Equality (WEGE), the National Development Plan (NDP) 2030, and the Framework and Strategy towards Gender Mainstreaming in the Environmental Sector. The remaining policies consider ways to challenge and overcome discriminatory gender norms and social traditions that impair women's involvement in green industry.

REGIONAL AND INTERNATIONAL CONTEXTUALISATION

Regional and international contextualisation is present in policies such as the National Green Fund, the Department of Mineral Resources and Energy (DMRE) policy on Women's Empowerment and Gender Equality (WEGE), the Climate Change Bill; the Framework and Strategy towards Gender Mainstreaming in the Environmental Sector; and the National Development Plan (NDP) 2030. For example, the National Development Plan (NDP) 2030 builds on foundational international normative frameworks, including the Convention for the Elimination of All Forms of Discrimination Against Women (CEDAW); while the Department of Mineral Resources and Energy (DMRE) policy on Women's Empowerment and Gender Equality (WEGE) builds upon the following international policies:

- CEDAW;
- African Union Protocol to the Charter on Human and People's Rights on the Rights of Women in Africa;
- 2030 Agenda for Sustainable Development; and
- The Beijing Platform for Action.

Assessment II (table 4)

Six of the policies do not mention "gender" in the conclusion as specific targets, commitments, indicators and/or "next steps" regarding gender planning. The Department of Mineral Resources and Energy (DMRE) policy on Women's Empowerment and Gender Equality (WEGE) and the Framework and Strategy towards Gender Mainstreaming in the Environmental Sector have highly relevant gender-responsive conclusions;

while the National Development Plan (NDP) 2030 has some basic gender conclusions.

Assessment III (table 4)

The policies have solid implementation plans, but with the exception of the National Green Fund, there is limited publicly available documentation on the status of implementation and outcomes. As a result, it is unclear the extent to which any gender measures present in a policy have been implemented. This presents a challenge to monitoring and evaluating their effectiveness.

Regarding the existing green industry policies that were reviewed in depth, specific recommendations are given for each in terms of improving their integration of gender and implementation.

Table 4: Summary table of assessment II and III

Name	Assessment II score	Assessment III score
Re-imagining the Future Strategy (the DTI) (2019)	0	0
Green Transport Strategy (2018-2050)	0	0.5
Department of Mineral Resources and Energy (DMRE) 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
National Green Fund Facility (2012)	2	1.0

Assessment II 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.

Assessment III Keys: 1=The policy has been fully implemented; 0.5= The policy has been partially implemented 0= The policy has not been implemented.

Table 5: Recommendations for improving gender integration in policies assessed

Existing national laws, policies and strategies assessed	Recommendations for improvement		
	In content	Conclusions	In implementation
Department of Mineral Resources and Energy (DMRE) policy on Women's Empowerment and Gender Equality (WEGE) (2017)	Go beyond the "business case" for gender equality. However, this framing of gender equality as good for business often falls short of the necessary steps that lead from employment to empowerment. This narrative operationalises women for the attainment of other goals, without focusing primarily on their empowerment.	An actionable plan to address inequalities in access to and use of energy from an intersectional approach.	Establish a process for internal review and make annual reports open access on the DMRE website for independent review.
The National Waste Management Strategy (NWMS) (2011)	While the 2011 NWMS was fully implemented, the updated 2019 policy should mainstream gender and follow steps 1-3 of the proposed framework.	Integrate with "Women of Waste" programme which is fully gender mainstreamed. Policy should demonstrate how it would aim for job opportunities for more vulnerable groups, such as women, disabled, youth, black or minority candidates.	An actionable plan to address inequalities in access to and use of energy from an intersectional approach
Climate Change Bill (2018)	This policy needs to ensure gender mainstreaming and illustrate gender responsiveness. Consider integrating gender equality and follow steps 1-3 of the proposed framework.	Use Step 3 to generate commitments to gender equality.	Follow through with the approval of the bill in Parliament.
Department of Environmental Affairs Strategic Plan (2019/20 to 2023/24)	Consider the structural gender issues, and intersectional inequalities by targeting and recruiting young women graduates for 2-year internship programme and bursaries. Currently uses quotas but does not support environment and build on international conventions for women's rights; focuses on women's empowerment but not leadership.	Use Step 3 to generate commitments to gender equality.	Follow through with transparent Annual Performance Plans.
The Framework and Strategy towards Gender Mainstreaming in the Environmental Sector (2016-2021)	Enrich by including women in leadership positions beyond blanket employment.	More robust M & E criteria needed. Advised to consider Steps 1-3 of framework	Increase transparency by making internal reviews publicly available
The Integrated Resource Plan (IRP) 2019 (2010-2030)	Despite the policy's desire to have a "strong gender dimension" this policy needs to follow steps 1-3 of the proposed framework.	Use Step 3 to generate commitments to gender equality.	Requires a clear plan for monitoring, evaluation, and implementation.
National Development Plan (NDP) 2030 (2012-2030)	Women's empowerment is only indirectly addressed, and the policy only promotes women's employment, but not leadership.	Mentions "role confusion" amongst policy stakeholders. The mandate of the Commission of Gender Equality overlaps with that of the Ministry of Women, Youth and Persons with Disabilities. For example, the M & E function is both the mandate of the ministry and the statutory mandate of the Commission for Gender Equality. This results in role confusion and political conflicts over authority.	Commit to interacting with local government representatives in a more structured way. Follow through with forums to identify lead departments that assemble and coordinate implementation teams to minimize role confusion.

Existing national laws, policies and strategies assessed	Recommendations for improvement		
	In content	Conclusions	In implementation
Re-imagining the Future Strategy (The DTI) (2019)	This policy needs to assert gender equality and follow steps 1-3 of the proposed framework. Gender must be mainstreamed to ensure that female youth are also being targeted and trained. This is especially pertinent because these are all male-dominated sectors.	Use Step 3 to generate commitments to gender equality.	Follow through with existing framework for implementation and gender mainstreaming.
Green Transport Strategy (2018-2050)	<p>This policy should be gender mainstreamed and should follow steps 1-3 of the proposed framework. This would involve considering women as users and workers in the transport sector and gendered mobility requirements around women's mobility, accessibility, and safety.</p> <p>Collect sex-disaggregated data and gender statistics to understand female travel patterns as well as taking into consideration informal transport such as walking and cycling data in transport surveys; In formulating such a strategy, include specific questions on short, non-work-related trips and mobility of care in questionnaires.</p>	<p>Women/gender concerns are completely absent from the conclusions with no plans for implementation of gender equality goals.</p> <p>Developing reliable reporting mechanisms for sexual harassment and gender-based violence on public transport; designing open public areas with visibility, lighting and CCTV systems at stations; training public transport staff to deal with sexual harassment situations; increase security staff presence at night; ensuring a greater and gender-mixed staff presence at stations and in vehicles; evaluating the need for women and children-only services in public transport and ride hailing services; providing information on public transport schedules to avoid long waiting times which can be dangerous for lone women; rolling out "on demand" bus stops at night and in the early morning to reduce walking distances in the dark, which pose dangers to women; include security requirements in tendering documents and bonus- penalty clauses in contracts with operators; making cycling attractive for women by providing safe infrastructure and promoting cultural acceptance; use campaigns and social media to encourage a "culture of zero tolerance" against harassment and misbehaviour towards women; and reinforce/establish high fines for harassment and violence against women and communicate strongly against it (as we do now for alcohol and cigarettes in public transit).</p>	Follow through with the 3-year internal reviews in accordance with the established short term and long-term goals.
National Green Fund (2012) <i>Note that this is not a policy but was reviewed as a case study. It must also be noted that Gender Mainstreaming was not prescribed in setting up this facility</i>	Improve women's empowerment through decent work; more attention should be given to social and structural barriers	Conduct a gender impact assessment comparable to the one applied to the Green Climate Fund.	Not applicable – fully implemented.

Key takeaway (policy analysis): although the South African government prioritises policies and programmes to mitigate climate change and support green industry, there is **scope to enhance the presence of gender mainstreamed measures to enhance gender equality and the empowerment of women**. In pursuing a “*Just Transition*” for South Africa; green industry policy must ensure both environmental and socio-economic concerns are met. To this end, the gender-responsive green industry policy framework presented in section 8.1 of the *South Africa Country Report* is a useful reference point.

Key Results Phases 3 and 4: qualitative and quantitative data

Women entrepreneurs in green industry

In South Africa, limited reference is made to women’s empowerment in green industry policy increasing the risk that gender structures present elsewhere in society infiltrate the entrepreneurial and professional culture of green industry. While funds exist that are aimed at investing in women-owned businesses, women interviewees highlighted that they still lacked access to networks, markets, technical skills, and information. Nonetheless, there is hope for the future. **The number of women building careers in green industry is increasing; perceptions of opportunities for women in green industry are improving.**

Narratives from women on why green industry appeals to them, included the connection with nature. Women shared the opinion that there is a traditionally deep connection between women and the natural environment that enhances the appeal of green industry. These roles, such as subsistence farming and nurturing the land, are generally undervalued by wider society and underpaid.

In terms of the green industry working culture, women green industry entrepreneurs frequently stated that they found men in green industry to be more supportive and easier to work with than in traditional industries.

Those interviewed outlined some of the positive skills that women bring to green industry as:

- The ability to look at problems more holistically and think outside of silos;
- The desire to make the world a better place;
- Emotional intelligence;
- Strong interpersonal skills and conflict management skills;
- Problem-solving and critical thinking skills;
- Reaching and leadership skills;
- Community mobilization skills; and
- Determination and commitment.

Green entrepreneurs’ narratives on why they started their businesses captured several important themes. Green entrepreneurs were following their passions, maximising their skill sets outside of traditional corporate environments, and creating opportunities aligned with their diverse roles as caregivers.

Gendered division of labour in green industry among professionals

Gender inequalities were found to be pervasive in the energy sector in all the participating countries of this study. In the case of South Africa, interviewees made the following points about the gendered division of labour in green industry:

1. The number of women innovating in the waste management sector is on an upwards trend;
2. Women are primarily responsible for sorting waste and men for collecting;
3. Women are more likely to be present in the informal sector;
4. Men are more likely to work in the formal sector, technical roles, top management jobs, jobs that tend to be regular, positions that are higher paid and in the formal sector;
5. Although, there are larger numbers of women in green business; men are more likely to be in decision-making and leadership roles. In the garment factories, most often women are the workers and men are the owners;
6. In terms of public-sector environmental roles, women’s participation is higher than in the private sector; and
7. The working culture in the private sector is perceived to be more sexist and less flexible for mothers.

These differences are said to have naturally formed over time with nobody knowing where they came from; rather than being based on local beliefs that men and women are inherently suited to these different roles. There was optimism that these roles will change as more women become entrepreneurs and leaders in the green industry sector.

Barriers faced by women entrepreneurs and professionals in green industry

“What are the key country specific needs, specific drivers and constraints to women accessing and benefitting equally from the advancement of green industry as industry professionals and as entrepreneurs?”

The primary data collected revealed pervasive barriers to women’s economic empowerment as entrepreneurs and professionals in green industry, including the following:

- **Technical skills and specialised knowledge: women’s access to the technical skills development specific to green industry is limited.** One woman during the focus group discussion spoke of being difficult to **gain the correct skills** or to **“see where things are shifting,”** in emerging industries because of the constant innovation. This also poses a problem for women entrepreneurs; and
- **Bias in privileging STEM qualifications:** given that **qualifications for green industry are yet to be determined or designed,** the strong preference for candidates from traditional STEM subjects over those with a social sciences or humanities background is unfounded. This practice **could disproportionately discourage women from exploring opportunities** in green industry.

Table 6: Summary table of reported barriers to women’s economic empowerment 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: only 27% are aware of any policies or programmes encouraging women to start businesses in green industry.	Discriminatory social norms that discourage women from starting their own business: 77% of respondents reported that growing up, they did not feel girls were encouraged to pursue their own businesses.
Green industry is perceived to require strong STEM skills: lack of girls taking up STEM subjects, therefore women face increased barriers to enter green industry or are perceived to be unsuitably qualified.	Institutionalised and internalised sexism: women entrepreneurs either lack self-confidence or are pressured to adopt an attitude of “hyper self-confidence”.
Lack of access to technology necessary to start green businesses or upscale existing businesses: the technology required in the new green industry is difficult for women to access, especially those without internet, electricity or situated in rural areas.	Caretaking responsibilities: 63% of entrepreneurs surveyed worry often or always about work-life balance: 61% of green entrepreneurs worry often or always about childcare arrangements.
Women entrepreneurs have difficulty in finding and hiring skilled women workers: 55% reported it would be difficult or very difficult to find women workers with relevant skills.	Intersectional inequalities: systems of discrimination built on limiting women’s opportunities because of gender, race, rurality, poverty, and ability.
Women entrepreneurs do not have the informal networks of influence that their male counterparts have.	Violence and harassment: only 13% of green businesses in the online survey had policies on the prevention of sexual harassment in place.
Women’s lack of access to mentoring which impacts formal networks, potential investment sources and job opportunities: the prevalence of male dominated informal networks in green industry, “Boys Clubs” that exclude women and give men preferential access to investment funding, decision makers and power.	Discriminatory hiring practices and ineffective quota systems: not being hired because of the perceived risk of potential maternity leave entitlements.
Women lack access to necessary capital, collateral, and credit resources: 65% of entrepreneurs surveyed think that it is easier for men to secure financing for their business ventures.	
Women lack access to markets to sell their products: 63% of entrepreneurs reported lack of access to markets to sell their products as being a key barrier; 50% of female green entrepreneurs reported it would be difficult to identify new markets.	
Women face other value chain challenges and “hidden costs” of doing business (lack of social capital): accessing basic supplies (32%), paying kickbacks (27%), obtaining a license (23%), and dealing with law enforcement (14%) were also listed by women entrepreneurs.	

Key takeaway (barriers): Women’s barriers to economic empowerment in green industry are multi-faceted and intersectional.

Opportunities for women entrepreneurs and professionals in green industry

“What are the key country specific opportunities, specific drivers to women accessing and benefitting equally from the advancement of Green Industry as industry professionals and as entrepreneurs?”

Despite the constraints, the key informants voiced that things are changing, and the situation is comparatively better today than 10 years ago. For example, 56% of entrepreneurs reported being “really or somewhat excited” that their business will grow. Indicators that there is high potential for gender equal social transformation in green industry are:

1. 64% of entrepreneurs reported that they did not feel that family obligations have limited their opportunities today as an entrepreneur;
2. 91% of businesses provide equal pay for equal work performed by women and men;
3. 70% of entrepreneurs reported receiving “a lot of support” from their family since starting their business; and
4. 0% of respondents reported they need to consult with a man (spouse or family member, for example) before making decisions on how to spend the income from their business.

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.” The respondents ranked increasing access to education as their top strategy, followed by increased access to finance, invest in women’s development schemes, change inequitable laws and positive action.

Table 7: General recommendations for proposing new gender-responsive green industry policies

Prioritised strategy	Ranking
Increase access to education	1
Increase access to finance	2
Invest in women’s development schemes	3
Change inequitable laws	4
Positive action	5

Specific recommendations for government, civil society, universities and private sector

Formulating gender-responsive green industrial policies:

- The National Green Fund established in 2012 injected funding into women-headed green economy projects and employed 812 women in direct jobs. This has especially assisted women in rural areas;
- Women are the demographic that has benefitted the most from government initiatives around environmental conservation, such as the Working for Water initiative. The scheme now creates around 50,000 job opportunities every year, 52% of which are occupied by women. Moreover, the programme 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, 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 attend to encourage men to be part of the solution. SAFEE is a positive example of providing effective support to women professionals through networks;
- SAWEA, the South African Wind Energy Association, also has a mentorship programme;
- “Imvelisi enviropreneurs” design bootcamp is a training scheme for aspiring young “environmental entrepreneurs.” It is aimed at young people who are considering starting businesses 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 partnership; and test the viability of their ideas and concepts with guidance towards 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 SMMEs; 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.

While not an exhaustive list, existing programs include the following:

- South African Women in Science Awards: these awards recognise and reward excellence by women scientists and researchers, and profile them as role models for younger women;
- Mentorship sessions at universities: these are helpful in raising awareness for young women, demonstrating what jobs are available in this new and emerging sector;

- Networking: for instance, the International Solid Waste Association launched the “Women of Waste” initiative to promote women in the waste sector;
- Gender awareness training, and green industry sector-specific training offered by UNIDO and UN Women;
- The National Cleaner Production Centre’s Accredited Energy Training. This is free for all women in August 2020; and
- The Department of Small Business Development has both an agency that gives non-financial support and one that gives financial support to entrepreneurs (although not exclusively to women).

Key takeaway (opportunities): National Green Fund, SAFEE, SAWEA, SANEDI and similar programmes could act as catalysts of change. There is scope for the EEWiGI to collaborate with green industry projects; provide opportunities for women’s capacity building and channel seed grants for start-ups to women in green industry.

Recommendations for closing the implementation gap in green industry

Many interview respondents stated that existing policies aimed at tackling gender inequalities in green industry in South Africa, have not been implemented. To improve the quality and implementation of policies, these more covert forms of discrimination must be addressed.

Table 8: Key gaps and solutions 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
Hidden costs of training	Providing free trainings for women
Lack of awareness of the opportunities available to women	Information campaign about the need for skills diversity
Lack of an implementation plan with specific targets and timeframes	Increasing M&E and accountability
There is a need to integrate women across the value chain for genuine structural change	Ensuring that women are integrated in decision making processes across the value chain
Men find “loopholes” around existing policy	Closing loopholes in policy
Women fear ostracization and/or risk of violence in accessing essential services	Zero tolerance policy towards gender-based violence
Quotas will not be useful unless women are trained for the jobs on offer	Training and capacity building for women
Work culture of working late, travel and not enough flexible practices	Transform work culture to include flexible working hours, and reasonable travel expectations and practices
Women secure less funding and start-up capital	Create funding calls especially for women
There is a lack of gender-mainstreamed green industry policy and a lack of coordination across government	Gender mainstreaming implementation planning by using the gender-responsive green industry policy framework introduced herein

Table 9: Recommendations for proposing new gender-responsive green industry policies

General recommendations for proposing new gender-responsive green industry policies
Contents/topics to be covered in policy
- Include specific gender targets and indicators; 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
Process
- Integrate women’s agency, 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, urban township economy, race, migration status, and poverty, amongst 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 gender-responsive budgeting and 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; ensure consultation and dialogue with local women’s groups and organised civil society
- Diversify 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 with politicians and other leaders within society

Specific recommendations for government, civil society, and the private sector

Government

- A specific **gender-mainstreamed policy** for green industry, outlining how to enable women's economic empowerment;
- **Facilitate and incentivise collaboration** across departments, but also between the private and public sectors;
- A **small fine for not adhering to quotas** is not enough: gender mainstreaming needs to be more than a tick-box activity;
- **Addressing 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. Promote, incentivise and support fast-track programmes for women. If there are not enough women available for positions, think about supply-side factors as to why women may not be applying. These include investing in outreach, mentoring, networking, and education opportunities for women;
- **Access to affordable childcare** is essential in bridging the gap in representation of men and women in green industry. Actively acknowledging the additional unpaid responsibilities women are tasked with outside of the workplace and offering workplace solutions to them will encourage their equal participation in income generation. It will also enhance work-life balance for women and men;
- **Parental leave for all workers** – when this is the norm, women will be less likely to suffer discrimination based on the expectation of being the primary care givers; and
- **Policy formulation** that does not sit alone in each government department but is **inter-departmental**.

Local Government

- **Consciousness raising:** 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 alongside their male counterparts;
- **Political buy-in:** throughout all three spheres of government, the transition to economic empowerment for 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;
- **Gender-responsive regulations and policies:** promoting environmental and social objectives can be achieved through gender-responsive financial services to women, industrial and technological regulations; and policies. Examples include subsidies, incentives, use of local government investment, budgeting that incorporates economic empowerment revenues and costs, monitoring wasteful expenditure and the over-use of resources; and
- **Stakeholder engagement:** engage 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 the local government level; particularly as set out by SALGA (South Africa Local Government Association) in line with the national government.

Recommendations for civil society

- **Accountability and oversight** for gender mainstreaming can be achieved through interest groups that hold those in power accountable;
- **Advocacy groups** for the demands of women in green industry, such as women's networks in the renewable energy sector, should be supported and encouraged;
- **Promote collaboration** among women's groups and solidarity movements;
- **Women need to be targeted** in a more specific way by programmes related to green industry from the government and from NGO's;
- Create highly **visible role models** of successful women entrepreneurs who can attract or persuade women/girls wanting to participate as entrepreneurs in the green industry. These role models would play a vital role in attracting more women business leaders by coaching them at an individual level and sharing their experiences at collective level. Hence this would lead to a critical mass of women entrepreneurs active in the 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 present recommendations and demands to government; and
- Need to **engage more men** to be the “gender champions” by encouraging them to help their female family members access resources that are essential to their economic empowerment; their business start-up and businesses growth; and to recruit men as change

agents in challenging established gender norms.

Recommendations for private sector stakeholders

- Foster **business practices that empower women**. The Women's Empowerment Principles (WEPs)²⁴ can be used as a set of guiding principles to promote gender equality and women's empowerment in the workplace, marketplace, and community. The WEP principles include equal pay for work of equal value, gender-responsive supply chain practices and zero tolerance against sexual harassment in the workplace;
- **Private actors** with financial resources and capabilities should **lead by example** and assume the responsibility of introducing gender-responsive, environmentally sustainable ways to green their business;
- Private sector stakeholders must work to **create enabling environments** for gender equality and women's economic advancement. This requires actively challenging structural and systematic discrimination 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 in South Africa 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 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 effective 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 abilities and competencies to handle jobs that are traditionally viewed as masculine (and the other way around: men doing more feminine jobs).

²⁴ 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>.

Conclusion

The study has highlighted many opportunities to advance gender equality and women's economic empowerment in the emerging green industry in South Africa. Participants from across government departments; as well as industry professionals and entrepreneurs in the sectors of renewable energy, waste management and clean transport, displayed optimism on the opportunities for women.

In terms of policy, the South African government has made positive pledges in its annual, mid-term and 25-year plans. South Africa has gender equality enshrined in law and ambitious green industry plans situated within the broader framework for a "Just Transition". However, given there is currently limited focus on women's economic empowerment in green industry, **existing policies should be revised where possible, and new policies should be developed that use the criteria developed in Assessments I and II of this report to ensure that quality gender content and commitments are included in new green industry policies.**

Women's barriers to economic empowerment in green industry are multi-faceted and different based on race, rurality, and level of poverty. The barriers identified in this report included: 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 markets to sell their products. Furthermore, discriminatory norms and hiring practices, sexual harassment, and caretaking responsibilities also constrain women's economic empowerment in green industry.

However, **there are many opportunities to advance women's economic empowerment.** For example, the National Green Fund, SAFEE, SAWEA, SANEDI and similar programmes could act as catalysts for change. There is potential for EEWiGI to collaborate with these projects and programmes, work on women's capacity building and channel seed grants for start-ups to women in green industry.

Reflecting the recommendations of this report, the government of South Africa should seek to **build increased transparency and accountability to overcome barriers to gender equality.** Good monitoring and indicators, linking to targets with national and international data collection organisations (such as IRENA, ENERGIA, the ILO, the Sustainable Development Goals, the IEA) will enable the government to be held accountable for ambitious targets. Also, increasing communication and awareness on policies and gender mainstreaming amongst public sector employees should be prioritised.

In terms of eliminating violence against women and creating safe workplaces, the ILO and UN Women produced a [handbook](#) that provides practical guidance and examples of how to **respond to and prevent violence and harassment against women in various work settings.** The WEPS Guidance Note on Tackling Sexual Harassment in the World of Work is an additional resource to guide gender-responsive business conduct in the private sector.



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