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POLICY BRIEF

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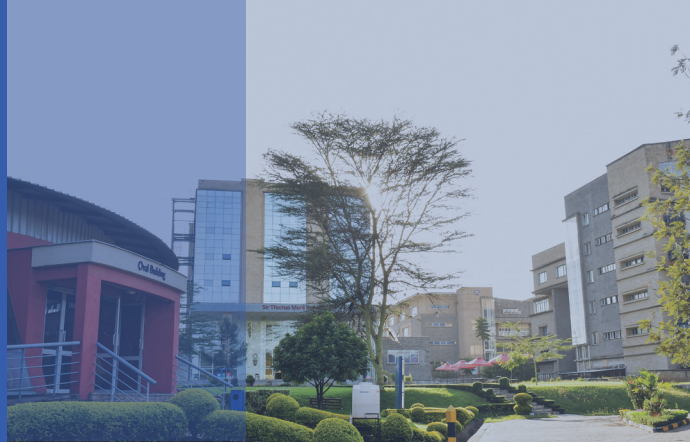


MEASURING GREEN JOBS IN THE ENERGY SECTOR: INDICATORS AND THRESHOLDS FOR SUSTAINABLE EMPLOYMENT

Francis Kangure, Izael Da Silva, Francis Wachira

Executive Summary

The energy sector is crucial in transitioning to a green economy for sustainable development and climate change mitigation. Green jobs in this sector support environmental sustainability, economic growth, and social inclusion. However, evaluating green jobs remains difficult due to inconsistencies in definitions, indicators, and data-collection methods.

This study analyzed indicators and thresholds for assessing green jobs. Using the Sustainable Livelihoods Framework (SLF) as a guiding perspective, the research examined aspects of green employment, including human, social, natural, physical, and financial capital. Exploring these factors, the study revealed insights into the scope, quality, and sustainability of green energy jobs sector. The results clarify green employment trends, helping policymakers and stakeholders improve job quality, track progress, and align workforce development with sustainability goals. This research supports efforts to ensure that green jobs in the energy sector generate both economic and environmental benefits, thereby promoting a more inclusive, low-carbon economy.

Keywords: Green jobs, sustainable economy, indicators and thresholds

Background

The transition to a green economy is widely recognized as a crucial pathway to achieving sustainable development and addressing the challenges of climate change. Significant to this transition is the concept of green jobs, defined as employment opportunities that contribute to preserving or restoring the environment across sectors, including manufacturing and construction, as well as emerging fields such as renewable energy and energy efficiency. Accurate assessment of green jobs is essential for policymakers, researchers, and stakeholders to assess the impact of green policies on employment and ensure that these jobs meet sustainability criteria.

This research focused on measuring green jobs within the energy sector by identifying key indicators and establishing thresholds for sustainable employment. By examining factors such as environmental impact, economic viability, and social inclusiveness, the study provided a comprehensive analysis of the scope and quality of green jobs.

This study sought to bridge the gap of a standardized approach to green jobs by providing a clearer understanding of the essential indicators and thresholds that define sustainable green employment.

Problem Statement

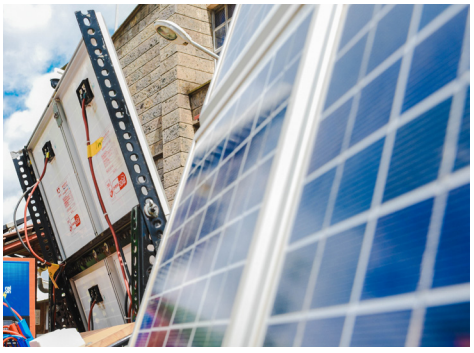
The transition to a green economy is essential for addressing environmental sustainability and economic development challenges. While green jobs are crucial to this transition, accurately measuring and evaluating them is a significant challenge. The current methodologies for assessing green jobs lack consistency, comparability, and comprehensiveness. This makes it difficult for policymakers, researchers, and stakeholders to track progress and develop effective strategies.

Several studies have attempted to address this issue. For instance, the C40 Cities Climate Leadership Group explored diverse methodologies for measuring green jobs in six cities, utilizing business surveys, econometric analysis, and job advert analysis. Similarly, the US Bureau of Labor Statistics (BLS) implemented the Green Jobs Initiative, employing both output and process approaches to provide data on the number, distribution, and wages of green jobs. The International Labour Organization (ILO) has also contributed significantly through its 2013 report on methodologies for assessing green jobs, emphasizing the need for consistent and comparable approaches.

Despite these efforts, significant gaps remain in the measurement of green jobs, particularly in de-

fining key indicators and establishing thresholds that determine job sustainability. This inconsistency limits the ability to assess employment trends, identify best practices, and ensure that green jobs contribute effectively to environmental sustainability, economic stability, and social inclusiveness.

This research sought to address these challenges by examining key indicators and thresholds for measuring green jobs in the energy sector to enhance the reliability and comparability of green job measurements. It provided valuable insights that can support policymakers, industry leaders, and researchers in advancing sustainable employment strategies.



Policy Options

The survey responses showed that there was no clear consensus or definition of green jobs within the industry. This is partially because the government has not defined and created green jobs-related policies, which would require such a definition, and partially because companies have not come to a consensus on what constitutes a green job. From the study findings based on the employee respondents, there is a need for a policy shift to have a clear consensus or definition of green jobs.

Skills development

To increase green job development within Kenya, there is need for employees' upskilling. Tertiary education should provide more opportunities for practical solutions and opportunities rather than just theory. Some 38% of employees felt their tertiary education did not adequately prepare them for the renewable energy industry. Most employees' studies are too general, and specifics are only learned on the job. Renewable energy is not covered at all in the curriculum.

Many employees end up in the renewable energy industry by chance, having pursued degrees in entirely different fields during their training. The companies should provide more upskilling opportunities for staff rather than focusing on technical staff only. Only 35% of HR practitioners surveyed indicated that their companies had provided training or guidance to staff on renewable energy in the past 12 months, as Table 1 indicates.

Table 1: Initiatives shown by respondents' companies in the past 12 months.

Initiatives	No. of Respondents
Involved staff from all layers of the organisation in discussions on renewable energy	23 (47%)
Provided training or guidance to staff on renewable energy	17 (35%)
Developed, updated, or implemented green jobs-related HR policies	13 (27%)
Updated or clarified renewable energy policies and procedures	12 (24%)

Decent jobs

Green jobs must also be 'good' jobs that fulfil the demands and goals of labour movements. These include fair pay and working hours, safe working conditions, and workers' rights.

The question of job decency is compromised by adapting the employee survey for a single employer, since some key indicators measuring job decency are not asked. While the industry is growing rapidly and, with it, the number of green jobs available, many of these jobs are lower-level and not directly classified as decent or impactful.

Non-discriminatory involvement

Many companies do not include all staff in discussions on renewable energy. They neither provide training and guidance on renewable energy, nor develop or implement green jobs-related HR policies. They do not update or clarify renewable energy policies and procedures.

Progress can be made toward non-discriminatory development so that all employees are treated with respect and can voice their opinions and concerns. This is a major area of improvement for the industry and individual companies.

Recommendations

There is a need for policymakers and other stakeholders to address the wide gaps in the measurement of green jobs, particularly in defining key indicators and establishing thresholds that determine job sustainability. The current inconsistency limits the ability to assess employment trends, identify best practices, and ensure that green jobs contribute effectively to environmental sustainability, economic stability, and social inclusiveness. This study, therefore, identifies what each stakeholder group can do to support the green jobs industry in Kenya.

Companies

1. Suggest curriculum topics to universities.
2. Provide internship and experiential learning opportunities to students and graduates during and after their studies.
3. Allow staff to put in skills-development requests and listen to their suggestions.
4. Provide more support staff with renewable energy-related training.

Universities

1. Ensure that industry/companies are involved in curriculum development.
2. Strategically link with industry to provide internships and experiential learning opportunities to students and graduates.
3. Update curriculum and provide specialised renewable energy modules and courses.
4. Offer upskilling and professional development short courses to graduates and employees.

Employees

1. Take advantage of professional development courses offered at the workplace.
2. Request specific skills-related courses that will optimise performance for specific roles.
3. Keep up to date with developments in the industry.

Government

1. Develop and enforce national policies supporting the use of renewable energy.
2. Provide subsidised options for procurement of materials and assets to support local businesses.

Conclusion

From this study's findings, it is evident that green jobs in Kenya's energy sector can play significant roles in both climate resilience and inclusive economic growth. However, this is only possible if supported by clear policies and measurable standards. The lack of clear national definition of green jobs, inconsistent indicators, and fragmented data are impediments to the tracking of progress and alignment of employment strategies with sustainability goals. For Kenya to fully realise the potential of green employment, the government must establish a standard framework for measuring green jobs, anchored in both environmental impact and decent work principles. Investment in skills development is also important through curriculum reform, vocational training, and stronger industry/university partnerships. These initiatives will ensure the workforce is well equipped for emerging opportunities and challenges in the renewable energy sector. There should be sound policies to motivate companies to provide fair salaries, safe working conditions, and constant upskilling to improve standards in the green job environment.

Finally, effective enforcement of energy and environmental policies in conjunction with subsidised support for green technologies plays a major role in accelerating uptake and safeguarding livelihoods. By embracing these measures, Kenya can position her energy transition as a catalyst for sustainable employment. This will ensure green jobs are not only plentiful but also transformative in addressing unemployment, poverty, and environmental degradation.

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