

IMPROVING ENERGY DATA TO ENHANCE GENDER EQUALITY

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Acronyms

ADB	Asian Development Bank
AMDA	Africa Minigrid Developers Association
ESG	Environmental, social and governance
ESMAP	Energy Sector Management Assistance Program
GBA+	Gender-based Analysis Plus
GOGLA	Global Off-Grid Lighting Association
GWNET	Global Women's Network for the Energy Transition
IEA	International Energy Agency
IRENA	International Renewable Energy Agency
MEL	Monitoring, Evaluation and Learning
NGO	Non-Governmental Organization
NSO	National statistical office
NSS	National statistical system
RISE	Regulatory Indicators for Sustainable Energy
SDG5	Sustainable Development Goal 5
SDG7	Sustainable Development Goal 7
SDGs	Sustainable Development Goals
STEM	Science, Technology, Engineering and Mathematics

TAG	Technical Advisory Group
UN	United Nations
UNFPA	United Nations Population Fund
UNIDO	United Nations Industrial Development Organization
WEDO	Women's Environmental and Development Organization
WICC	Women in Clean Cooking Mentorship Programme





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Summary

Sex-disaggregated data – data collected and analyzed separately for women and men – is crucial for understanding gender gaps and promoting gender-responsive policies and practices. Although organizations in the energy sector have programmes and policies to empower women, persistent challenges – including limited capacity and resources, as well as methodological inconsistencies – still need to be overcome to collect and analyze disaggregated data. The lack of sex-disaggregated data hinders the identification and addressing of gender disparities, with many countries falling short in monitoring the gender-specific dimensions of the Sustainable Development Goals (SDGs) as set by the United Nations (UN) in Agenda 2030.

Women and girls are disproportionally impacted by energy poverty and climate change,¹ and yet they are significantly underrepresented in decision-making, as well as in the design and delivery of energy solutions. Women represent only 32 percent of the renewable energy workforce, despite being on the frontlines of the sustainable energy transition.² The gender gap in the energy sector means that women's perspectives, needs and experiences are often overlooked in the development of energy policies and technologies. Closing this gender gap and ensuring equal participation of women is crucial to a sustainable and equitable energy transition.

To overcome these challenges, it is important to define gender indicators that capture gender-specific information and monitor progress toward gender equality in the energy sector, as well as the gender impact of energy policies, projects and programmes. By integrating gender indicators and utilizing sex-disaggregated data, policymakers and development practitioners can design tailored policies and programmes that address gender inequalities and contribute to the achievement of the interconnected SDGs.



Sustainable Development Goal 7 (SDG7) background

SDG7 calls for universal access to affordable, reliable, sustainable and modern energy for all by 2030. It is key to mitigating and adapting to climate change, focusing on expanding universal access to modern energy services, increasing substantially the share of renewable energy in the global energy mix, and doubling the global rate of improvement in energy efficiency.

At today's rate of progress, the world is not on track to achieve SDG7 by 2030. Based on current trends, achieving SDG7.1.1 – universal electricity access by 2030 – is unlikely; an estimated 660 million people will still lack electricity access by 2030. Similarly, achieving SDG7.1.2 – clean cooking access – is also unlikely; an estimated 1.8 to 1.9 billion people may still lack access to clean cooking by 2030. Furthermore, according to UN Women, SDG7 is one of six SDGs that have no gender-specific indicators.³

The interlinkages between SDG7 and all other SDGs are crucial for achieving sustainable development globally by 2030.⁴ Energy plays a fundamental role in enhancing well-being and livelihoods and supporting various other aspects of human development. From job creation to economic development, from security concerns to the elimination of violence against women, from the eradication of poverty and access to education infrastructure and learning opportunities, energy lies at the heart of the SDGs.⁵ Immediate, comprehensive action is needed to transform the global energy landscape and ensure a sustainable, equitable future for all.

STATISTICS IN STATISTICS

2 Gender inequality in the energy sector

Gender gaps in the energy sector are significant and pose a long-standing challenge for the historically male-dominated industry. Furthermore, while gender equality in the sector is firmly established in the international policy agenda, gender equality issues are rarely addressed in national energy sector policies and strategies.⁶

The International Energy Agency (IEA) reports that the gender gap in the energy sector is twice that of the non-energy sector, with significantly fewer women working in the sector than men, particularly in Science, Technology, Engineering and Mathematics (STEM) and technical non-STEM positions.⁷ According to the International Renewable Energy Agency (IRENA), women represent only 32 percent of the renewable energy workforce globally.⁸

Shares of women in STEM, non-STEM and administrative jobs in renewable energy, 2019



Women are particularly underrepresented in the sector's higher-paying technical and managerial roles,⁹ and face a range of barriers to entry and progression, including gender bias, lack of access to education and

finance (which particularly affects women as energy entrepreneurs), gender stereotypes and prejudice, gender-based violence and lack of support for worklife balance. Barriers to women's employment in the energy sector may also include legal restrictions, such as including legislation that prevents them from working at night in the generation of electricity (including in Belize, Cameroon, Kiribati and Nigeria) or from working with specific amounts of electric power. They may also lack necessary technical, construction and professional engineering skills.¹⁰ Gender-insensitive work environments are an additional obstacle to women participating in the energy workforce, as many largescale energy infrastructure projects are associated with a number of health risks and gender impacts, including HIV, gender-based violence and workplace injuries. Housing conditions on-site or for fieldwork are often inadequate and women may have caretaking responsibilities that require them to be at home.¹¹ These barriers are systemic and exacerbated by cultural and social norms, which reinforce gender stereotypes and limit women's participation in the sector.



Gender inequality further impacts women in the context of energy access. Data from 2021 demonstrate that globally, 675 million people still lack access to electricity, and 2.4 billion people lack access to clean cooking technology and fuels.¹² Women are considered the primary energy managers in households and are often the most dependent on energy for cooking and cleaning appliances.¹³

Gender disparity within the energy access gap is particularly concerning.¹⁴ Energy poverty widens gender gaps and negatively affects women's access to income-generating opportunities and education,¹⁵ as well as health outcomes. Women and children are disproportionately impacted by a lack of modern energy, both at home, where they may lack access to clean cooking technologies and electrification, and within the community, where, for example, there may be no running water or latrines in schools. The collection of traditional biofuel cooking sources, a task that often falls to women and girls, can result in increased exposure to the risk of gender-based violence.¹⁶

Women and girls benefit significantly from increased access to energy services. Gender equality and energy access are interconnected, offering multiple development gains such as poverty reduction, food security, access to health services, education and jobs, reduced inequality and climate protection. With increased access to energy, both for electrification and clean cooking, women benefit from having to work fewer hours, having more time for themselves and improved health outcomes. Increased access to energy services also allows women and girls to

Women's representation across solar PV jobs, 2022

participate in educational activities, employment and entrepreneurship opportunities in their communities and in politics.¹⁷ A recent study in Nature Sustainability estimated that access to clean cooking technologies that replace wood- and charcoal-burning stoves could prevent an estimated 463,000 deaths per year and reduce healthcare costs by USD 66 billion in Sub-Saharan Africa.¹⁸ Several studies have indicated that electrification triggers a rise in female workforce participation, with emerging market opportunities leading to increased employment for women, including young women.¹⁹ Research in rural villages in Madagascar found that electrification of households helped to reduce gender inequalities by enabling girls to study after sunset.²⁰ The implementation of energy policies that benefit women as energy consumers, energy producers and household energy managers is an essential step in establishing and increasing gender equity in the energy sector.²¹

Furthermore, women's representation in decisionmaking roles in the energy sector is crucial to unleash their potential and foster a more gender-balanced energy sector that contributes to broader socioeconomic development. A large body of research has found that an increase in women's participation in politics, particularly the presence of women and minorities working together in decision-making bodies, tends to result in the implementation of more inclusive and gender-conscious policies; women in decisionmaking positions focus on legislation to address genderbased violence, climate change and natural resource management, issues that tend to have disproportionate effects on women.²²

However, the implementation of policies that address such gender disparities is difficult due to women's persistent exclusion from positions as policymakers and decision-makers. Unfortunately, women have limited opportunities to shape energy policy on national, regional and international platforms, as evidenced by the mere 11 percent of ministerial positions responsible for energy, natural resources and mining held by women across 190 countries, as of January 2023.²³

Beyond direct political participation, women face obstacles in making individual-level decisions concerning the purchase of products and services for both households and businesses. These include historical, social and cultural barriers, such as limited decision-making power and economic assets.²⁴ Women experience increased community- and household-level restrictions on their ability to participate in decisionmaking due, in part, to a lack of time as a result of household tasks that fall to them; financial constraints; and self-imposed restrictions, such as feelings that they do not have the technical knowledge to contribute to decision-making on energy, which tend to arise as a result of pervasive stereotyping and unconscious bias.²⁵

To ensure equitable outcomes in efforts to achieve SDG7, women must be educated, consulted and empowered to make and enforce decisions regarding modern energy services.²⁶



3 Lack of sex-disaggregated data and associated challenges

For a gender-responsive energy transition, the collection of sex-disaggregated data is a critical tool in guiding informed decisions. Sexdisaggregated data, or data collected and analyzed separately for women and men, allow for a more accurate understanding of gender differences and inequalities tracking the progress of the SDGs and guide programme design and policy interventions to address the gender gaps in the energy sector.²⁷ Yet, only limited sex-disaggregated data on energy use and energy poverty are currently available.²⁸ SDG7 is one of six SDGs that have no gender-specific indicators.²⁹ The lack of sex-disaggregated data and the lack of standardized disaggregated data collection and analysis effectively hinder the way in which women can contribute to and benefit from the energy transition.

The lack of sex-disaggregated data also poses a significant obstacle to achieving gender equality. Shaped by the male-dominated history of the energy sector and the underrepresentation of women's voices and experiences, data collection and analysis have predominantly been gender-blind. Without sex-disaggregated data, it is difficult to identify and address existing gaps and disparities between women and men in the energy sector, which affects diverse economic and social outcomes beyond SDG7. Thus, a pervasive cycle results in which the lack of sex-

disaggregated data reinforces a 'male-orientation' in policymaking, with gender-neutral policies, practices and programmes unequally serving women and men and potentially furthering existing inequalities already present in societies.³⁰ Promoting a just and equitable energy transition is rendered difficult, if not impossible, in the absence of high-quality sex-disaggregated data.

The limited availability of sex-disaggregated data is widespread, ranging beyond the energy sector. According to UN Women, as of June 2022, an average of only 42 percent of the data needed to monitor gender-specific dimensions of all SDGs was available. Moreover, 136 out of 193 countries fell below the 40 percent mark, while 39 failed to reach 25 percent.³¹ According to the 2022 Sustainable Development Goals Report, out of the 32 SDG indicators with a requirement for sex-disaggregated data, only 21 had the disaggregated data from 2015 available in most countries. Eight indicators lack any available sexdisaggregated data, and of the 21 indicators with a sex- and age-disaggregation requirement, only seven meet this criterion.³² This means that many countries and organizations are not tracking progress toward gender equality and women's empowerment effectively, which contributes to the lack of political understanding and committed resources for addressing gender gaps.

Gender data availability for SDG monitoring by region, 2022



📕 Available data 📃 Unavailable data

Source: UN Wome





Gender data availability for SDG monitoring by country, 2022*

*For a country breakdown, please refer to the table in the appendix on page 24

In addition to sex-disaggregated data, there is a stark need for data disaggregated by age.³³ Over 1.8 billion youth worldwide, 90 percent of whom live in the global south, have only limited access to educational opportunities and decent jobs within the energy sector. These challenges are exacerbated for female youth. Effectively addressing these disparities requires the integration of relevant and meaningful

age-disaggregated data to address the specific needs of young women.

Source: UN Women

Concurrently, inequalities in the energy sector persist around geographic location. Available data on climate resilience and the energy transition are produced in the global north. Research finds that energy and climate research funding is concentrated within the European Union, the United Kingdom and the United States of America.³⁴ A study by Carbon Brief found that 90 percent of the 100 most cited climate research publications from 2016–2020 were affiliated with institutions in the global north, while less than 1 percent represented African institutions, with only 12 of 100 lead authors being women.³⁵ Such a skewed knowledge accumulation can potentially lead to a strong bias in analytical understanding and solutions, as genderrelated issues specific to the global south are not captured and understood correctly.

Percentage of authors from the Top 100 most-cited climate science papers during 2016-20, from each continent



This prevailing trend results in a data deficit, hindering a comprehensive understanding of persistent issues and the impacts of programmes and policies, particularly those in Africa and Southeast Asia. Addressing these data disparities and diversifying energy epistemology is essential for an accurate understanding of challenges and impacts and for fostering inclusive and targeted interventions that address the needs of communities worldwide.

Three primary reasons for the lack of sexdisaggregated data are:

i. Limited capacity, time and resources: Collecting and analyzing sex-disaggregated data requires trained personnel, complex and costly data collection instruments and a larger sample size than is the case for non-disaggregated data. The responsibility of producing statistics on women, men, boys and girls typically falls on national statistical offices (NSOs). Unfortunately, many countries, especially low-income countries, lack the resources and capacity to collect and analyze disaggregated data.³⁶ To ensure that NSOs can produce high-quality disaggregated data, the development community needs to share the responsibility by providing funding and capacitybuilding support.³⁷

It is equally important to recognize that gender impacts may not be seen until after a project is completed. Even then, many social and economic impacts take time to bear fruit. This time lag is a critical factor when assessing the overall impact of a project on women, men, boys and girls. Therefore, the assessment timespan and inclusion of the wider socio-economic context of the targeted community by the policy, project or programme can influence how gender dynamics unfold over time in post-project evaluations. There is an urgent need for a nuanced understanding of gender impacts that exist beyond the project's immediate implementation timeline.

The PARIS21 Partner Report on Support to Statistics 2022 reveals a concerning trend regarding resources: there was a 50 percent drop in funding for gender data in 2020 despite an increase in overall funding for gender equality. This highlights the need for greater awareness regarding the importance of a gendered approach to data production and use. Without such an approach, policymakers and stakeholders lack critical insights

needed to inform policies, projects and programmes aimed at achieving gender equality.³⁸

ii. Methodological inconsistencies: The need for universal, standardized definitions, sampling methods and data collection instruments poses a challenge to producing high-guality disaggregated data and analytics consistent across timespans and geographical areas for comparison. Additionally, while NSOs may have experience in curating data, many do not have the capacity for data cleaning, analysis and reporting. Initiatives have arisen to address some of these challenges, such as the Counted and Visible Toolkit by UN Women Women Count, which enables national statistical systems (NSSs) to utilize data from household surveys to generate sex-disaggregated statistics that can inform gender-responsive policies and catalyze action. Through further capacity and technology transfer, NSOs can learn best practices in data collection and analysis, which helps increase the availability of sex-disaggregated data.

Defining gender indicators is crucial for collecting sexdisaggregated data. Gender indicators are quantitative or qualitative measures that capture gender-specific information and help to track progress towards genderequality goals. They are important in illustrating positive or negative changes in gender relations and progress over time (e.g., changes in women's employment in the sustainable energy sector) and allow for comparisons across geographical areas, countries, or different groups of women and men (e.g., comparisons between younger women and older women).³⁹ Gender indicators are helpful in creating and analyzing data at the national and sub-national levels to inform policy and planning processes and to identify challenges faced by women at the individual level.⁴⁰ These indicators are often used in policy and programming to monitor gender gaps; measure the impact of gender-specific interventions; and assess progress towards gender equality. It is essential to define the specific indicators that will be used to measure gender differences, which may require designing new indicators or refining existing ones to ensure that they capture gender-specific information.

iii. Gaps in assessing gender impact: Within standardized data interpretation and measuring gender impact, significant challenges arise around sector definitions and disaggregated data analysis. For example, what is considered 'electrification'? Does it entail providing electrical power for lighting, heating, cooling, cooking and more, or merely supplying solar lamps for lighting? Notably, providing a solar lamp may neither lead to substantive improvements in productivity nor fulfil energy needs, including heating and cooling. In a different context, electrification means a fuel switch in energy services and products, such as changing a fossilfuelled motor vehicle or heating device to an electric one. The renewable energy sector must establish a consensus on what gualifies as gender impact and what does not.

Collecting sex-disaggregated data requires standardized means and analysis. This is crucial to identifying needs and challenges correctly; ensuring genderresponsive policies and programmes; securing funding for gender-equality initiatives; and making progress towards SDG7 and Sustainable Development Goal 5 (SDG5). Several instruments presently exist to provide guidance and resources for designing, monitoring and evaluating gender indicators for the development of projects and programmes. These instruments aim to help project staff and stakeholders integrate gender equality and gender considerations into their work and measure progress toward women's empowerment.

4 Efforts to address gender inequality in the energy sector through sex-disaggregated data

Efforts to address gender inequality in the energy sector have gained momentum in recent years, with international frameworks such as the SDGs and the Paris Agree-ment including targets for reducing gender gaps.

Companies and organizations including <u>Sustainable</u> <u>Energy for All</u> (SEforALL) and <u>IRENA</u> have also implemented policies and programmes to recruit, train and empower women. The <u>Gender and Energy</u> <u>Compact</u>, a multi-stakeholder coalition led in conjunction by SEforALL, ENERGIA, UN Industrial Development Organization (UNIDO) and the Global Women's Network for the Energy Transition (GWNET), focuses on promoting gender equality and women's empowerment in the energy sector.

Particularly noteworthy is the emphasis on gender indicators and sex-disaggregated data prominent in the chapter addressing interlinkages between energy and gender equality in the *SDG7 Policy Brief in Support of the HLPF 2022*. This document, developed through a multi-stakeholder SDG7 Technical Advisory Group (TAG) convened by the UN Department of Economic & Social Affairs, highlights key areas within the gender and energy narrative that require progress measurement for achieving SDG7 and SDG5. They include access to electricity and clean cooking fuels; employment and leadership opportunities; energy entrepreneurship; and the enabling environment for energy planning and policy. The policy brief proposes specific indicators aligning with existing SDG5 and SDG7 indicators to ensure comprehensive measurement across themes including: access to electricity and clean cooking fuels and technology; employment and leadership, both managerial and political; energy entrepreneurship and productive uses of energy; and the enabling environment for energy planning, policy, budgeting and regulation.⁴¹

Table 1: Proposed and Possible Further Indicators for SDG 7/SDG 5 Interlinkages

	DEFINITION	KEY PARTNERS	ALIGNS WITH
2.1	Proposed indicators with available data		
2.1.1	Proportion of population with access to electricity, disaggregated by female-headed and male-headed households.	World Bank, MTF, OPHI	SDG 7.1.1
2.1.2	Proportion of population with access to electricity, disaggregated by female-headed and male-headed households.	WHO, MTF, OPHI	SDG 7.1.2
2.1.3	Whether or not national, regional, and international energy policies and frameworks are in place that promote, enforce, and monitor equality and non-discrimination on the basis of sex.	RISE/World Bank, UN Women	SDG 5.1.1 SDG 5.C.1
2.2	Other indicators with some available data		
	For Energy Poverty/Access gender gap:		
	A financial target such as "Annual tracked commitments to clean cooking" or the "cost of inaction" on cooking energy	Clean Cooking Alliance	SDG 7.1.2
	Proportion of time spent on fuel collection and cooking by men and women	MTF, RISE	SDG 5.4
	Proportion of households with lighting in kitchen/access to electrical appliances and end-uses that reduce unpaid care work	MTF, CLASP	SDG 7.1.1 SDG 5.4
	Proportion of educational facilities with adequate electricity/clean cooking, by boys/girls' schools	UNESCO, MTF	SDG 4
	Mortality rate attributed to household and ambient air pollution, age- standardized, female (per 100,000 female population) (Indicator SDG 3.9.1)	WHO	SDG 3.9.1
	For Employment and Leadership gender gap:		
	Proportion (%) of women employed in the energy value chain for technical and administrative jobs related to the energy/renewable energy sector	IFC, ILO, IRENA, ESMAP, RISE/ World Bank, IEA, UN Women	SDG 7.2 SDG 8
	Proportion of women in managerial positions and proportion of women in senior and middle management positions in the energy sector	ILO, IRENA, ESMAP, RISE, OECD/IEA, UN Women	SDG 5.5.2
	Proportion of women in senior political positions in relevant ministries, national energy agencies and entities	IRENA, RISE, IEA, UN Women, Clean Energy Ministerial	SDG 5.5.2

(Continues on next page)

Table 1: Proposed and Possible Further Indicators for SDG 7/SDG 5 Interlinkages (continued)

	DEFINITION	KEY PARTNERS	ALIGNS WITH
	For Entrepreneurship gender gap:		
	Proportion of male and female-owned businesses with electricity connections	UNIDO, UN Women	SDG 8
	Proportion of women and men energy owners/managers of established energy businesses	Global Economic Monitor/World Bank, IFC, UNIDO, UN Women	SDG 8
2.3.3	Proportion of finance available for women-led and men-led energy businesses	IFC, UNIDO, UN Women	SDG 8
2.4	For Enabling Environment gender gap:		
2.4.2	Tracking systems and budget allocations for gender equality in the energy sector	RISE/World Bank, UN Women, OECD/DAC	SDG 5.C.1

Table taken verbatim from the TAG SDG7 Policy Brief in Support of the HLPF 2022

Following the publication of this policy brief, several additional actions were taken. As a follow-up to the SEforALL TAG meeting, initial discussions were started in 2022 among key gender and energy data stakeholders to ensure harmonization on technical definitions and methodologies for gender indicators in the energy sector, as well as on how to coordinate on the political side on advocacy for gender indicators in SDG7 as part of the ongoing intergovernmental processes. Organizations including the IEA have conducted advocacy with NSOs in several countries on how to improve their gender and energy data collection. The Gender & Energy Compact co-leads have led advocacy across high-level events to raise the visibility of the importance of gender data in the energy sector, including the urgent need to reach a consensus on gender indicators for SDG7. Additionally, IRENA has been actively working to address the lack of comprehensive gender data in the energy sector, collaborating with partners to establish databases and conduct surveys. IRENA's ongoing research has revealed persistent gender gaps in the renewable energy workforce, with women underrepresented particularly in technical, managerial and leadership roles, despite the sector being more attractive to women than traditional energy industries.⁴²

In a further effort to address the lack of comprehensive and up-to-date data and information on genderrelated indicators in the energy sector, the Energy Sector Management Assistance Program (ESMAP) Gender & Energy Program and Regulatory Indicators for Sustainable Energy (RISE) collaborated to establish a database on gender-relevant indicators to the energy sector. This database offers current information on various aspects, including energy access, women's representation in the energy sector and genderresponsive policies for 217 countries.

Globally, governments have made progress on addressing the lack of gender-impact assessment through planned commitments. The G7 Climate, Energy and Environment Ministers' Meeting from 29–30 April 2024, reemphasized the commitment among its members to increase efforts to collect better gender-disaggregated data to assess their gender impacts across its actions. The G7 will pursue partnerships with the Gender Equality Advisory Council, the Clean Energy Ministerial, IEA and IRENA to work on tracking progress through data collection and analysis efforts.⁴³

These collaborative efforts by various stakeholders demonstrate the growing momentum and commitment to strengthening gender indicators and sex-disaggregated data in the energy sector, primarily around SDG7. Closing the gender data gap is crucial for informing genderresponsive policies and programmes that advance gender equality and sustainable energy access for all.

5 Making the case for sex-disaggregated data and evidence-based policymaking

Sex-disaggregated data are instrumental in shaping gender-responsive policies in the energy sector. SDG7 is one of six SDGs that have no gender-specific indicators, and while various efforts are being developed to measure gender indicators within the energy sector, the data derived remain limited and inconsistent.⁴⁵ Without accurate information on women's participation, roles and experiences in the sector, policymakers may struggle to identify and prioritize key issues affecting women. This gap has a negative impact on the design of targeted interventions and inclusive policies, hindering progress towards gender equality and sustainable energy development. The result has been that energy planning and policymaking remains gender-blind, and in some cases, national energy policies, regulations and subsidies have exacerbated gender inequalities.⁴⁶

To surmount these challenges, it is imperative to enhance women's representation within the sustainable energy sector and broaden the scope of gender-focused data collection in energy contexts. By integrating comprehensive gender data into policy frameworks, decision-makers can craft evidence-based interventions that foster gender equality and empower women within the energy landscape.⁴⁷

The UN Economic Commission for Europe has put forth the key message that assessing indicators and data progress toward achieving SDG7 highlights the need to refine current approaches and strengthen data collection capacities. Adopting international statistical methodologies is essential to enhance analytical quality, global reach and comparability.⁴⁸ Adapting existing indicators for energy access, efficiency and renewable energy is crucial to support policies that drive the energy transition effectively. As the SDG7 TAG proposes, gender indicators for the energy sector should measure across the themes of: access to electricity and clean cooking fuels and technology; employment and leadership, both managerial and political; energy entrepreneurship and productive uses of energy; and the enabling environment for energy planning, policy, budgeting and regulation.⁴⁹ By expanding the scope of indicators to encompass these areas, decision-makers can gain a more comprehensive understanding of the intersections between SDG7 and other SDGs, enabling informed policy decisions that advance sustainable energy practices and gender equality within the sector.



b Designing indicators for sex-disaggregated data collection: guidelines and resources for development projects

Further progress is essential in developing and standardizing gender indicators to bridge existing gaps and enhance accountability for gender equality within the energy sector. The development of gender indicators for SDG7 requires significant attention and proactive measures to integrate gender equality into energy-related policies and initiatives. It is imperative to enhance the availability of sexdisaggregated data related to SDG7 indicators by establishing robust data collection standards, ensuring consistent data reporting and enhancing the quality and scope of gender-specific information in the energy sector.

Specific actions are required to design and implement gender indicators that facilitate data collection and analysis distinguishing between women, men, boys and girls concerning energy access, usage patterns and benefits derived from energy services. This approach aims to inform the development of robust and inclusive gender-responsive energy policies that respond to the diverse needs and experiences of all individuals within the energy sector and develop better, more comprehensive gender-responsive energy policies.

By focusing on gender indicator development and standardization, stakeholders can advance gender equality within SDG7 initiatives, promote women's empowerment in the energy sector and contribute to achieving sustainable energy access for all by 2030. The **design** of gender indicators should follow six key principles:

- 1. Identify the gender issues: Identifying the gender issues involves understanding the gender dynamics of the specific context and identifying the gender gap that must be addressed. This should happen before the policy, project or programme planning phase, to inform the entire process from gender analysis through implementation and monitoring. One of the first steps to identifying persisting gender issues is collecting existing databases and assessing what is lacking to guide the definition of gender indicators.
- 2. Define the indicators: Clearly define the gender indicators, considering high-level objectives, usability and usefulness, specifying the data to be collected, the methodology to be used and the target population.
- **3. Design the indicators:** Use a gender lens to design the indicator to ensure that it captures the different roles, responsibilities and experiences of women and men in various contexts, ensuring the indicator is sensitive to existing gender dynamics. Selecting and prioritizing gender indicators will vary depending on the policy, project or programme, and a participatory design process will be key in providing insight into which indicators should be prioritized. Ensure indicators are designed on the principles of validity, specificity, reliability, comparability, feasibility, relevance and verifiability.

- 4. Use a participatory approach: Involve stakeholders, including women and men from different groups, youth, community leaders, activists and female heads of households in the design of gender indicators to ensure that they are relevant and meaningful. A participatory approach ensures all previously marginalized voices within the energy sector are heard, the right needs are prioritized, and communities feel ownership over the policy, project, or programme. A participatory approach should be carried out through all stages.
- **5. Gather baseline data:** Collect baseline data to inform progress made by the policy, project or programme over time. Baseline data through desk research will be important to discover what information already exists and where gender gaps persist.
- 6. Ensure data disaggregation: Ensuring data are disaggregated to the extent possible and necessary for the policy, project or programme is crucial to addressing the intersectional aspects of discrimination against women and girls. Gender indicators and their data should be further disaggregated by sex, age, ethnicity, disability status, education status, income, race and other relevant factors to capture the diversity of experiences and needs of different groups, where possible.

The **implementation** of gender indicators should follow four key principles:

- 1. Gender analysis: Gender analysis is a methodology that describes existing gender relations in a particular environment through collecting and analyzing sexdisaggregated and gender-disaggregated data and other qualitative and quantitative information. It organizes and interprets, in a systematic way, information about gender relations to make clear the importance of understanding gender differences, inequalities and power dynamics in order to achieve development objectives.⁵⁰ In the sustainable energy sector, gender analysis supports translating gender and energy issues into project design, implementation and monitoring, thereby helping to inform genderresponsive policy and project or programme design; mitigate gender risks or negative impacts; and collect disaggregated data to be used for monitoring, evaluation and learning (MEL) purposes.⁵¹ Although there is no 'one-size-fits-all' approach, the quality of gender analysis relies on: a clear purpose of the analysis within the initial stages of project planning and design; a clear methodology comprised of qualitative and quantitative means; the appointment of a focal point with gender expertise; a participatory approach that consults women within targeted communities to reflect issues and local contexts appropriately in the analysis; and ensuring sufficient financing to enable all these aspects. Gender analysis helps contextualize disaggregated data, clarifying the issues with possible causes, and supporting identifying policy and programmatic solutions.
- **2. Integrate findings into policy, project or programme:** Ensure that data derived from gender indicators

and the gender analysis inform the policy, project or programme at the planning, design and implementation stages. The process should be flexible to account for changing community needs and priorities or additional data points as they arise. Effectively disaggregated data and analysis can drive policy, project and programme decisions, garner political will, ensure funder support and gain community buy-in.

- **3. Data-driven financing:** The integration of robust data generated from gender indicators should inform financing strategies and a targeted allocation of resources, as is already the case within environmental, social and governance (ESG) investment criteria. By leveraging sex-disaggregated data, financial decisions become evidence-based, addressing specific needs and disparities faced by women, men, boys and girls. This data-driven approach to financing enhances transparency and accountability in financial planning and fosters inclusive development by recognizing and responding to diverse societal dynamics, including gender, age and economic status.
- **4. Monitor and evaluate:** Regularly monitor and evaluate gender indicators to ensure that they produce reliable data and identify improvement areas. Use the data to inform policies and programmes that address gender inequalities and advance progress toward gender equality and the SDGs.

Gender indicators will vary depending on the type and scope of the proposed policy, project or programme. Indicators must be adaptable to the situation and context in which they intend to provide information, comparison or monitoring.

Box 1: Participatory Data Collection

Several standard data collection methods currently exist and can be adapted to the budget restraints and contextual needs of NSOs and targeted communities. Participatory data collection allows women to become directly engaged in research methodology, challenging traditional methods of extractive data collection that may reflect unequal power relations between women and men. Participatory data collection tools, as opposed to traditional methods, foster partnership, collaboration, empowerment, skill development and efficiency by directly engaging local communities. This approach ensures that outcomes are beneficial to various stakeholders, notably including local communities themselves. Although it is challenging to conduct participatory research in acute emergency situations and communities with limited research capacity, participatory research broadens the spectrum of stakeholders brought into planning, providing access to diverse perspectives and ideas.

The type of participatory data collection tool used will depend on the information sought by the research; different data collection tools are employed at various stages, from problem identification to policy, project or programme design, implementation, and monitoring and evaluation. It is critical that data collection tools are used in combination to ensure data validity and reliability through triangulation.

However, gathering data on demand-side indicators poses a significant challenge compared to the relatively accessible supply-side data. It is crucial to underscore the importance of incorporating demandside perspectives to ensure a more comprehensive understanding of gender dynamics within the energy sector.

Examples of supply-side indicators include:

- Employment statistics: Percentage of women employed in various roles within the energy sector, such as engineers, technicians, managers and executives; data on the overall workforce gender composition within energy companies.
- Industry segmentation: Women's employment within different sectors of the energy sector (e.g., percentage of women employed in the renewable energy sector).
- **Career progression:** Tracking the progression of women's careers in the energy sector, including rates of promotions of women employees; percentage of leadership positions held by women; retention rates of women.
- Workplace policies: Assessing the inclusivity of workplace policies, such as parental leave, flexible working arrangements and policies addressing discrimination & harassment.
- Decision-making bodies: Examining the presence of women in decision-making bodies, including committees, task forces and advisory boards (e.g., the proportion of women compared to men in parliamentary committees).

Examples of demand-side indicators include:

• **Consumer preferences:** Preferences and needs of women as consumers of energy products and services, including energy-efficient appliances, renewable energy sources and sustainable energy practices.

- Household energy consumption: Distribution of energy consumption within households by gender (e.g., the proportion of energy consumed for transportation purposes by each gender).
- Access to energy services: Assessing women's access to reliable and affordable energy services, including electricity, clean cooking technologies and transportation (e.g., the proportion of households headed by women who have access to clean cooking technologies compared to the total number of households headed by women).
- Financial decision-making: Assessing women's involvement in household decision-making (e.g., the percentage of women involved in making financial decisions regarding the purchase of energy-efficient appliances).
- Entrepreneurship: Tracking the number of womenowned businesses and enterprises operating in the energy sector, including those involved in energy production, distribution and service provision (e.g., the proportion of women-owned businesses to menowned businesses operating in the energy sector in a specific locality).
- Policy influence & advocacy: Women's participation in energy policy development processes, advocacy campaigns and regulatory decision-making forums.

For further reading on the creatvoion of gender indicators and examples:

- Asian Development Bank: Gender Toolkit: Going Beyond the Meter <u>https://www.adb.org/sites/default/</u><u>files/institutional-document/33650/files/gender-</u>toolkit-energy.pdf
 - Includes a useful overview of supply-side gender analysis & indicators, which assess the disparities between genders and varied opportunities and

constraints women and men encounter in their roles as service providers, government officials and project managers, as well as demand-side gender analysis & indicators, which analyze the differences in opportunities and constraints of women and men as users, consumers, beneficiaries and individuals impacted by a situation.

- World Bank Group: ESMAP Gender and Energy Indicators <u>https://energydata.info/dataset/esmap-gender-and-energy-indicators</u>
- To address the lack of comprehensive and upto-date data and information on gender-related indicators in the energy sector, which complicates efforts to address gender gaps, monitor programme implementation and guide policymaking, the ESMAP Gender & Energy Program and RISE collaborated to establish a database on genderrelevant indicators in the energy sector. This database offers current information on various aspects, including energy access, women's representation in the energy sector and genderresponsive policies for 217 countries.
- USAID: Power Africa Gender Energy Indicators Catalogue <u>https://www.usaid.gov/sites/default/</u> <u>files/2022-12/Power-Africa-Gender-Energy-</u> <u>Indicator-Catalog-Dec22.pdf</u>
 - Stakeholders in the energy sector are increasingly considering gender factors to enhance their effectiveness and meet beneficiary needs. The *Power Africa Gender Energy Indicators Catalogue* aims to aid energy sector actors in measuring the impact of their gender interventions. The catalogue provides both quantitative and percentage-based metrics. The indicators are grouped into seven intervention opportunities, allowing users to adopt and adapt as needed.

It is crucial to recognize that while sex-disaggregated data provide quantitative data, obtaining a com-prehensive understanding of gender disparities requires contextual information. Complementing quantitative data with qualitative insights derived from participatory processes is essential for a comprehensive understanding of gender differences and inequalities in the energy sector (see Box 1 for further information on participatory research approaches). This integration of quantitative and qualitative data enhances the depth of gender analysis, providing valuable context to quantitative findings. For instance, while sex-disaggregated data may tell us the number (quantity) of men and women employed, it does not tell us whether these individuals are employed in decent (quality) jobs. Understanding the nuances and context surrounding gender data collection and analysis is vital to ensure a full gender perspective in the planning and policymaking of energy responses and solutions.



- Clarify the purpose of the gender analysis and how the results will be used.
- Ensure that the parameters are as specific as possible.
- Conduct the gender analysis early on during the design phase of programme development.
- Identify and engage appropriate gender expertise.
- ✓ Undertake stakeholder mapping.
- Secure sufficient financing and include gender analysis in budgetary planning from the outset.
- Develop a methodology for the gender analysis.
- ✓ Use a participatory approach to inform data collection and analysis.
- Ensure accurate data disaggregation by key demographic factors, including sex and age.
- Apply gender analysis results to programme or policy design, implementation and monitoring.
- ✓ Share analysis findings with involved stakeholders and targeted communities.

7 Conclusion

Challenges persist in the clean energy sector in collecting high-quality sex-disaggregated data due to limited capacity and resources, and the complex nature of data collection. These challenges are compounded for low- and lower-middle-income countries. To overcome these challenges and sustain progress toward SDG7, increased funding and support for capacity building and knowledge transfer are necessary. The facilitation of capacity building can be aided by established guidelines, allowing stakeholders to track progress towards gender equality better and ensure that development programmes and policies are more responsive to the specific needs and priorities of women and girls.

Empowering governments and organizations to effectively use gender indicators in data collection, analysis and communication provides a significant opportunity to amplify the impact of SDG7 on expanding access to clean energy for all. Integrating gender-sensitive metrics and indicators will allow policymakers and development practitioners to develop policies and programmes tailored to the specific needs of women and girls and address gender-based inequalities. This concerted effort to strengthen the availability of sex- and age-disaggregated data will contribute to achieving the SDGs and a more equitable and just society for all by ensuring the benefits of clean energy are available to all.



8 Best practices & targeted interventions

The following outlines best practices and examples of targeted interventions by stakeholders to strengthen data collection, analysis and dissemination for a just and equitable energy transition based on the analysis:

National Policymakers:

- 1. Raise awareness about the importance of adopting a gendered approach to data production and utilization, emphasizing the need for genderspecific insights to inform evidence-based policies and targeted programmes.
 - a. The National Institute of Statistics of **Rwanda**, with the support of Paris21, hosted a five-day training session for journalists on gender data storytelling and reporting to equip journalists with the skills to interpret and integrate sexdisaggregated data into their reporting. The training contributed to the wide dissemination of gender data from national surveys and will be critical in the policy process and further awareness-raising campaigns.
- Define gender indicators that capture genderspecific information and facilitate tracking progress towards gender equality, ensuring their relevance, feasibility and the ability to disaggregate data by pertinent factors. This is feasible but will require collaboration and agreement among stakeholders. The primary associated cost lies in organizing collaborative efforts, meetings and discussions to establish and agree upon standardized gender indicators.

- a. A notable example is **Canada**'s successful development and use of gender indicators, as demonstrated in its Gender-based Analysis Plus (GBA+). The analytical process provides a robust model for defining indicators and monitoring progress towards gender equality. GBA+ offers a framework to contextualize data disaggregated by sex, gender, race, ethnicity, religion and disability status. The Government of Canada has renewed its commitment to GBA+ and is working to strengthen its implementation across all federal departments to continuously improve its responsiveness to the specific needs and circumstances facing all Canadians.⁵²
- b. Iceland has prioritized collecting and analyzing sex-disaggregated data across various sectors, including education, employment, health and social welfare. These data are used to monitor progress toward gender equality; identify areas requiring intervention; and inform the development of evidence-based policies and programmes. For example, the Iceland Directorate of Equality regularly publishes gender equality indicators, providing valuable insights into the status of gender equality in Icelandic society.⁵³
- 3. Allocate increased funding and support to NSOs in low-income countries, enabling them to enhance their capacity to effectively collect and analyze sexdisaggregated data. Ensure ongoing and longlasting funding support to enable long-term MEL. This recommendation may prove challenging due to

budget constraints but is feasible through increased political will and priority placed on data collection for the potential reallocation of resources to NSOs. A long-lasting delivery model regarding resources, including the legalization of such funding into the annual national budget and building domestic funding strength, is critical.

- a. The **Philippines** has demonstrated success in allocating increased funding to enhance the capacity of its NSO, leading to improved data collection and analysis, particularly concerning the monitoring of the SDGs and the adaption of SDG indicators to the national context. The Philippines has rooted its success in sustained high-level political will, its implementation of a National Statistical Development Strategy, strong NSO leadership and a priority placed on statistics among the media and public. The NSS in the Philippines has attracted sustained domestic funding, as its financing is primarily sourced from annual budgetary appropriations of the Philippines government.⁵⁴
- 4. Conduct and integrate findings from gender analysis into policymaking.

National Statistics Offices:

1. Design, monitor and evaluate gender indicators within development projects and programmes, focusing on promoting gender equality and women's empowerment. This recommendation is achievable with the right organizational commitment and training, including using existing resources and guidelines, such as the ADB toolkit, to inform training programmes and workshops and establish a dedicated unit or staff for gender statistics.

- a. In **Cameroon**, the Chief Statistician committed to having dedicated staff in the NSO focused on gender statistics work. The initiative to strengthen gender statistics work included coordination between the NSO and the NSS, the formation of a permanent working group on gender statistics, and the publication of a set of data-driven policy briefs on women's entrepreneurship, health and more. The working group has successfully identified and implemented a set of gender indicators addressing priority areas of concern in Cameroon.⁵⁵
- 2. Implement guidelines and toolkits, such as the UN Women Counted and Visible Toolkit, to empower NSSs to utilize data from household surveys, generate sex-disaggregated statistics and guide gender-responsive policy development. This recommendation is achievable with strong organizational commitment and training and resources allocated to training sessions, dissemination of toolkits and potential adjustments to existing data collection processes.
 - a. In **Tanzania**, the Department of Social and Demographic Statistics of the Office of the Chief Government Statistician in Tanzania developed the first SDG Gender Indicators report supported by UN Women's Women Count programme. The report covers detailed disaggregated gender statistics using existing data from household surveys, censuses and administrative records.

This report has strengthened gender-responsive decision-making in the country.⁵⁶

- 3. Regularly monitor and evaluate gender indicators to ensure the production of reliable data production and identify improvement areas, leveraging the insights gained to inform evidence-based policies and programmes that effectively address gender inequalities. This is feasible but requires sustained effort and resources to establish monitoring and evaluation processes, including staff training and technology infrastructure.
 - a. **Uganda** developed its national priority gender equality indicators framework in 2016. While updating the national priority gender indicators in 2019, the Uganda Bureau of Statistics, in collaboration with other ministries, departments and agencies, initiated the reprocessing of existing census, survey and administrative data to provide disaggregated statistics, particularly those related to SDG Tier 1 indicators.⁵⁷ With the identification and production of these gender equality indicators, reporting of gender indicators in Uganda's Voluntary National Reviews increased from 11 percent in 2016 to 28 percent in 2020.⁵⁸

International Organizations:

1. Promote awareness about the importance of adopting a gendered approach to data production among policymakers and stakeholders, emphasizing the need for gender-specific insights to inform evidence-based policies and programmes through targeted advocacy efforts. Measures to achieve this recommendation include awareness campaigns, workshops and communication materials.

- 2. Advocate for increased funding to NSOs in lowincome countries for long-term monitoring, evaluation and improvement. International organizations can lead data collection for advocacy efforts, but the allocation of funds depends on the priorities of the funding organization or national government.
 - a. The International Monetary Fund (IMF) published its 2019 Staff Discussion Note on a Post-Pandemic Assessment of the Sustainable Development Goals to assess development financing strategies.⁵⁹ The tool monitors the performance of the economy on funding SDGs in education, health, roads, electricity, and water and sanitation. It provides key recommendations for additional financing options that national governments can take.
- 3. Provide ongoing and long-lasting funding support for the long-term monitoring, evaluation and improvement of NSOs. The achievement of this recommendation requires a sustained financial commitment, potentially necessitating a long-term funding strategy and allocation of resources.
 - a. The **World Bank**'s <u>Statistical Capacity Building</u> <u>Program</u> is designed to strengthen the capacity of NSOs over the long term. Through this programme, the World Bank collaborates with countries to enhance their statistical systems, offering financial support, technical assistance and training to build sustainable capacity across Asia and Africa, in countries such as Ethiopia, Kazakhstan, Malawi and Senegal.⁶⁰

- 4. Empower NSOs through targeted support for data collection and dissemination to support disaggregated data collection, specifically emphasizing age, gender and disability. International organizations with the resources and capacity can offer technical assistance and expertise to NSOs in enhancing their data collection methodologies and encourage collaborative efforts between international organizations, governments and NSOs.
 - a. In 2023, the United Nations Population Fund (UNFPA) provided support to the Government of Rwanda to disseminate the Sixth Rwanda Demographic and Health Survey. This was the second such survey to allow for collecting age-, gender- and disability-disaggregated data through the Integrated Household Living Condition surveys.⁶¹ UNFPA further supported the Government of Rwanda in the dissemination of the Sixth Rwanda Demographic and Health Survey 2019–20 and the second NCDs STEP 2021 Survey to promote data-driven decisionmaking at the district level. UNFPA used its comparative advantages to support the Government of Rwanda in generating, analyzing and using data on population dynamics to inform policy and monitor development and humanitarian interventions.62
- 5. Define gender indicators through a collaborative and stakeholder-driven approach to effectively track progress towards gender equality in the energy sector. This can be achieved by standardizing gender-focused indicators by establishing an interorganizational working group or leveraging existing member-based organizations, such as the <u>Global</u> Off-Grid Lighting Association (GOGLA) and the

Africa Minigrid Developers Association (AMDA). The adoption of these best practices and their integration into every project by international organizations in the sector can contribute significantly to genderequitable outcomes.

Non-Governmental Organizations (NGOs):

- 1. Advocate for a participatory environment that strengthens the inclusion of women, men, boys and girls in collecting, analyzing and distributing disaggregated data. Ensure data informs gender analysis and empowers organizations and policymakers to prioritize the needs and experiences of targeted communities in the design and implementation of policies and programmes. This is achievable through organizational commitment, collaboration and resources committed to advocacy and engagement initiatives.
 - a. The Women's Environmental and Development Organization (WEDO) advocates for the inclusion of women and girls in sustainable development and energy initiatives. It emphasizes the importance of sex-disaggregated data to inform policies and programmes. WEDO further brings feminist and environmental justice analyses and voices of grassroots women's rights advocates to global advocacy efforts for gender-responsive policies and participatory data practices.
- 2. Ensure qualitative and quantitative data sets based on valid, reliable and specific gender indicators are integrated into the design and implementation of gender-responsive policies within the energy sector. The achievement of this recommendation is feasible with the right commitment, training and resources, including adjustment to data collection and analysis processes within NGOs.

- a. ENERGIA has conducted research in 12 countries across Africa and Asia exploring the intersections of gender, energy and poverty, and has been instrumental in integrating genderdisaggregated data into energy policies. By collaborating with local NGOs and leveraging community participation, ENERGIA ensures that energy initiatives address the specific needs of women and men, contributing to genderresponsive policies.
- 3. Leverage insights gained from monitoring and evaluation of gender indicators to inform evidencebased policies and programmes addressing gender inequalities. This recommendation is achievable with proper planning and the integration of MEL processes both into existing programmes and those in the initial stages of development. Resources are required, potentially involving the hiring of experts and investment in technology.
 - a. The <u>Clean Cooking Alliance</u> in partnership with <u>SEforALL</u> and <u>GWNET</u>, has effectively leveraged insights from monitoring and evaluation to inform evidence-based practices. Through its Women in Clean Cooking (WICC) Mentorship Programme, which supports women across Africa and Asia, connecting senior professionals to serve as mentors and positive role models for more junior women in the sustainable energy sector, the programme monitors its impact, and uses gained insights to shape practices that address gender inequalities in access to energy and economic opportunities.

References

1 For more information see SDG Action: The lack of gender targets for clean energy is harming women and girls <u>https://sdg-action.org/</u> <u>the-lack-of-gender-targets-for-clean-energy-is-harming-women-</u> <u>and-girls/</u> & United Nations: Women...In The Shadow of Climate Change https://www.un.org/en/chronicle/article/womenin-shadowclimate-change.

2 IRENA: Renewable Energy: A gender perspective <u>https://www.</u> irena.org/-/media/Files/IRENA/Agency/Publication/2019/Jan/IRENA_ Gender_perspective_2019.pdf

3 SDG Action: The lack of gender targets for clean energy is harming women and girls <u>https://sdg-action.org/the-lack-of-gender-targets-</u>for-clean-energy-is-harming-women-and-girls/

4 United Nations: Addressing Energy's Interlinkages with Other SDGs https://sdgs.un.org/sites/default/files/2022-06/Policy%20Briefs%20 -2022%20Energy%27s%20Interlinkages%20With%20Other%20 SDGs.pdf

5 See more at United Nations: Accelerating SDG7 Achievement Policy Briefs in Support of the First SDG7 Review at the UN High-Level Political Forum 2018 <u>https://sustainabledevelopment.un.org/content/</u> <u>documents/18041SDG7_Policy_Brief.pdf;</u> UNESCAP: Visualisation map of the interlinkages between SDG7 and other SDGs* <u>https://</u> <u>www.unescap.org/sites/default/files/Visualisation%20of%20</u> interlinkages%20for%20SDG%207_new.pdf

6 UN Women: Gender Analysis in Technical Areas: Energy Infrastructure https://www.unwomen.org/sites/default/files/2022-12/Gender%20 Analysis%20Guidance_Energy%20Infrastracture.pdf/

7 IEA: Energy and Gender <u>https://www.iea.org/topics/energy-and-gender</u>

8 IRENA: Renewable Energy: A gender perspective <u>https://www.</u> irena.org/-/media/Files/IRENA/Agency/Publication/2019/Jan/IRENA_ Gender_perspective_2019.pdf

9 IRENA: Renewable energy and jobs: Annual review 2023 https://www.irena.org/Publications/2023/Sep/Renewable-energy-and-jobs-Annual-review-2023

10 UN Women: Gender Analysis in Technical Areas: Energy Infrastructure https://www.unwomen.org/sites/default/files/2022-12/ Gender%20Analysis%20Guidance_Energy%20Infrastracture.pdf

11 UN Women: Gender Analysis in Technical Areas: Energy Infrastructure https://www.unwomen.org/sites/default/files/2022-12/ Gender%20Analysis%20Guidance_Energy%20Infrastracture.pdf

12 Tracking SDG7: The Energy Progress Report 2023 https://trackingsdg7.esmap.org/data/files/download-documents/sdg7-report2023-full_report.pdf

13 See United Nations: Accelerating SDG7 Achievement: Policy Brief 12 <u>https://sustainabledevelopment.un.org/content/</u> <u>documents/17489PB12.pdf</u> ;IEIGE: Gender Equality and Climate Change Report <u>https://eige.europa.eu/sites/default/files/documents/</u> Gender-Equality-and-Climate-Change-Report.pdf

14 See International Energy Agency: Energy and Gender https://www.iea.org/topics/energy-and-gender; UNDP: Energy and Gender Equality https://www.undp.org/energy/our-work-areas/energy-and-gender-equality.

15 UN Women: Gender Analysis in Technical Areas: Energy Infrastructure https://www.unwomen.org/sites/default/files/2022-12/ Gender%20Analysis%20Guidance_Energy%20Infrastracture.pdf

16 UN: Accelerating SDG7: Policy Brief 4 https://sdgs.un.org/ sites/default/files/2021-05/POLICY%20BRIEF%204%20-%20 ENERGY%20AND%20SDG%204%20QUALITY%20EDUCATION.pdf

17 Climate Investment Funds: Gender And Renewable Energy: Entry Points For Women's Livelihoods And Employment <u>https://www.cif.org/</u> sites/cif_enc/files/knowledge-documents/gender_and_re_digital.pdf

18 https://www.nature.com/articles/s41893-022-01039-8

19 https://www.sciencedirect.com/science/article/abs/pii/ S0167268121001098 https://economics.harvard.edu/files/econ/ files/daniela_vidart.pdf?m=1661868232

20 UN: Accelerating SDG7: Policy Brief 4 https://sdgs.un.org/ sites/default/files/2021-05/POLICY%20BRIEF%204%20-%20 ENERGY%20AND%20SDG%204%20QUALITY%20EDUCATION.pdf

21 In 2021, UN Women reported that among 192 national energy frameworks from 137 countries, only one-third included gender considerations to varying degrees. Among those frameworks, women were characterized predominately as stakeholders or beneficiaries. Only two frameworks adequately acknowledged women as agents of change, recognizing their ability to influence energy activities and policy change. (UN Women: Gender integration in renewable energy policy <u>https://wrd.unwomen.org/sites/default/files/2021-11/</u><u>unep_renewable%20energy%20guideline_v2.pdf</u>). By failing to comprehensively address women's diverse roles in policies, projects

and programmes, the energy transition falls short of empowering and involving women.

22 See generally Anne Marie Goetz: Women in Politics & Gender Equity in Policy: South Africa & Uganda https://www.jstor.org/ stable/4006545?searchText=women+in+politics+results+in+gender+equitable+policies&searchUri=%2Faction%2FdoBasicSearch%3FQuery%3Dwomen%2Bin%2Bpolitics%2Bresults%2Bin%2Bgender%2Bequitable%2Bpolicies&ab_segments=0%2Fbasic_search_gsv2%2Fcontrol&refreqid=fastly-default%3A22fca99f25438e7c4927e8762002b580; Susan Franceschet & Jennifer M. Piscopo: Gender Quotas and Women's Substantive Representation: Lessons from Argentina https://www.cambridge. org/core/journals/politics-and-gender/article/abs/gender-guotas-and-womens-substantive-representation-lessons-from-argentina/7AA9E3D4D0DEB6754A4528FDCCD9811D. See further EIGE: Energy https://eige.europa.eu/gender-mainstreaming/policy-areas/ energy?language_content_entity=en/; Mariëlle Feenstra: Gender Just Energy Policy Engendering the energy transition in Europe https://ris. utwente.nl/ws/portalfiles/portal/264781017/561350_Feenstra.pdf

23 Note it was not possible for UN Women to discern women's share in energy ministries alone. UN Women: Gender Equality in the Sustainable Energy Transition <u>https://www.unwomen.org/sites/</u> <u>default/files/2023-05/Gender-equality-in-the-sustainable-energy-</u> transition-en.pdf

24 ENERGIA: Gender in the transition to sustainable energy for all: From evidence to inclusive policies <u>https://www.energia.org/</u> <u>assets/2019/04/Gender-in-the-transition-to-sustainable-energy-</u> for-all_-From-evidence-to-inclusive-policies_FINAL.pdf

25 Mariëlle Feenstra: Gender Just Energy Policy Engendering the energy transition in Europe <u>https://ris.utwente.nl/ws/portalfiles/</u> portal/264781017/561350_Feenstra.pdf

26 UN Resolution adopted during the High-Level Political Forum (HLPF) in 2021

27 ENERGIA: How do we ensure an inclusive and just energy transition where no one is left behind? <u>https://www.energia.org/how-do-weensure-an-inclusive-and-just-energy-transition-where-no-oneis-left-behind/</u>

28 Mariëlle Feenstra: Gender Just Energy Policy Engendering the energy transition in Europe <u>https://ris.utwente.nl/ws/portalfiles/</u> portal/264781017/561350_Feenstra.pdf 29 https://sdg-action.org/the-lack-of-gender-targets-for-cleanenergy-is-harming-women-and-girls/

30 Mariëlle Feenstra: Gender Just Energy Policy Engendering the energy transition in Europe <u>https://ris.utwente.nl/ws/portalfiles/</u> portal/264781017/561350_Feenstra.pdf

31 UN Women: It will take 22 years to close SDG gender data gaps https://data.unwomen.org/features/it-will-take-22-years-close-sdggender-data-gaps

32 Regional groupings for gender data availability for SDG monitoring by region, 2022 chart from UN Stats: SDG Indicators Regional groupings used in Report and Statistical Annex <u>https://unstats.un.org/</u> sdgs/indicators/regional-groups/

33 UN Stats: SDGs report 2022 https://unstats.un.org/sdgs/report/2022/ The-Sustainable-Development-Goals-Report-2022.pdf

34 UN Women: Explainer: How gender inequality and climate change are interconnected <u>https://www.unwomen.org/en/news-stories/</u> explainer/2022/02/explainer-how-gender-inequality-and-climatechange-are-interconnected

35 AbdulRafiu, A., et al.: The dynamics of global public research funding on climate change, energy, transport, and industrial decarbonisation <u>https://www.sciencedirect.com/science/article/pii/</u> S1364032122003288

36 Carbon Brief: Analysis: The lack of diversity in climate science research <u>https://www.carbonbrief.org/analysis-the-lack-of-diversity-</u>in-climate-science-research/

37 A 2020 World Bank survey found that 90 percent of NSOs in lowand lower middle-income countries struggled to meet international reporting requirements (World Bank: Survey of National Statistical Offices NSOs during COVID-19 <u>https://www.worldbank.org/en/</u> research/brief/survey-of-national-statistical-offices-nsos-duringcovid-19), with a 2022 UN Stats report finding that the overall trend of ODA towards data and statistics has remained stagnant at 0.3 per cent of total ODA, with funding for gender data and climate data declining by over 18 percent through 2020 (UN Stats: SDGs report 2022) https://unstats.un.org/sdgs/report/2022/Goal-17/).

37 ADB: Practical Guidebook on Data Disaggregation for the Sustainable Development Goals <u>https://www.adb.org/sites/default/</u>files/publication/698116/guidebook-data-disaggregation-sdgs.pdf

38 The PARIS21 Partner Report on Support to Statistics 2022: A Wakeup Call to Finance Better Data <u>https://www.oecd-ilibrary.org/sites/</u> c3cfb353-en/index.html?itemId=/content/publication/c3cfb353-en

39 OECD: The PARIS21 Partner Report on Support to Statistics 2022: A Wake-up Call to Finance Better Data https://www.oecd-

ilibrary.org/sites/c3cfb353-en/index.html?itemId=/content/publication/ c3cfb353-en

40 Gender Energy Compact: Harnessing the power of gender data to transform the clean workforce https://genderenergycompact.org/ harnessing-the-power-of-gender-data-to-transform-the-cleanenergy-workforce/.

41 United Nations: Addressing Energy's Interlinkages with Other SDGs https://sdgs.un.org/sites/default/files/2022-06/Policy%20 Briefs%20-2022%20Energy%27s%20Interlinkages%20With%20 Other%20SDGs.pdf

42 IRENA: Gender https://www.irena.org/Energy-Transition/Socioeconomic-impact/Gender

43 G7 Italia: Climate, Energy and Environment Ministers' Meeting Communiqué <u>https://www.g7italy.it/wp-content/uploads/G7-Climate-</u> Energy-Environment-Ministerial-Communique_Final.pdf

44 SDG Action: The lack of gender targets for clean energy is harming women and girls <u>https://sdg-action.org/the-lack-of-gender-targets-for-clean-energy-is-harming-women-and-girls/</u>

45 United Nations: Addressing Energy's Interlinkages with Other SDGs https://sdgs.un.org/sites/default/files/2022-06/Policy%20 Briefs%20-2022%20Energy%27s%20Interlinkages%20With%20 Other%20SDGs.pdf

46 United Nations: Addressing Energy's Interlinkages with Other SDGs https://sdgs.un.org/sites/default/files/2022-06/Policy%20 Briefs%20-2022%20Energy%27s%20Interlinkages%20With%20 Other%20SDGs.pdf

47 United Nations Development Programme: Gender Equality Strategy 2018-2021: Accelerating Progress towards Sustainable Development Goals <u>https://www.undp.org/publications/undp-gender-equalitystrategy-2018-2021</u>

48 United Nations: Accelerating SDG7 Achievement Policy Briefs in Support of the First SDG7 Review at the UN High-Level Political Forum 2018 <u>https://sustainabledevelopment.un.org/content/</u> documents/18041SDG7_Policy_Brief.pdf

49 United Nations: Addressing Energy's Interlinkages with Other SDGs https://sdgs.un.org/sites/default/files/2022-06/Policy%20Briefs%20 -2022%20Energy%27s%20Interlinkages%20With%20Other%20 SDGs.pdf

50 UN Women: Gender Analysis in Technical Areas: Energy Infrastructure https://www.unwomen.org/sites/default/files/2022-12/ Gender%20Analysis%20Guidance_Energy%20Infrastracture.pdf

51 ADB: Gender energy toolkit https://www.adb.org/sites/default/ files/institutional-document/33650/files/gender-toolkit-energy.pdf 52 Government of Canada: Gender-based Analysis Plus (GBA Plus) https://women-gender-equality.canada.ca/en/gender-basedanalysis-plus.html

53 Government of Iceland: Jafnréttisstofa https://www.jafnretti.is/is

54 Paris21: Good Practices of Sustained Financing for National Statistics <u>https://www.paris21.org/sites/default/files/2018-08/</u> Good%20Practices%20for%20Sustained%20Financing%20of%20 National%20Statistics%20-%20WEB.pdf

55 UN Women: Counted and Visible: Toolkit to Better Utilize Existing Data from Household Surveys to Generate Disaggregated Gender Statistics <u>https://unstats.un.org/unsd/statcom/52nd-session/</u> <u>documents/BG-3I-Executive_Summary_Counted_and_Visible_</u> <u>Toolkit-E.pdf</u>

56 UN Women: Counted and Visible: Toolkit to Better Utilize Existing Data from Household Surveys to Generate Disaggregated Gender Statistics <u>https://unstats.un.org/unsd/statcom/52nd-session/</u> <u>documents/BG-3I-Executive_Summary_Counted_and_Visible_</u> <u>Toolkit-E.pdf</u>

57 Tier 1 indicators are conceptually clear, with an internationally established methodology and available standards. Data are regularly produced by at least 50 percent of countries and of the population in every region where the indicator is relevant. (UN: IAEG-SDGs Tier Classification for Global SDG Indicators <u>https://unstats.un.org/sdgs/</u>iaeg-sdgs/tier-classification/)

58 UN Women: Counted and Visible: Toolkit to Better Utilize Existing Data from Household Surveys to Generate Disaggregated Gender Statistics <u>https://unstats.un.org/unsd/statcom/52nd-session/</u> <u>documents/BG-3I-Executive_Summary_Counted_and_Visible_</u> Toolkit-E.pdf

59 IMF: Sustainable Development Goals SDG Financing <u>https://www.</u> imf.org/en/Topics/SDG/sdg-financing

60 World Bank: Statistical Capacity Building <u>https://www.worldbank.</u> org/en/data/statistical-capacity-building

61 World Health Organization: Data-Driven Development: How Rwanda is Pioneering Health Information Systems for Improved SDG Monitoring <u>https://www.who.int/news-room/feature-stories/detail/</u> <u>data-driven-development-rwanda-pioneering-health-information-</u> systems-improved-monitoring

62 UNFPA: Data-Driven Monitoring for Improved Maternal and Child Health Outcomes in Rwanda <u>https://rwanda.unfpa.org/en/news/data-</u> driven-monitoring-improved-maternal-and-child-health-outcomesrwanda

Appendix – Gender data availability for SDG monitoring by country, 2022

Afghanistan	48%
Albania	60%
Algeria	35%
Andorra	15%
Angola	34%
Antigua and Barbuda	24%
Argentina	55%
Armenia	62%
Australia	51%
Austria	43%
Azerbaijan	46%
Bahamas, The	16%
Bahrain	38%
Bangladesh	48%
Barbados	40%
Belarus	62%
Belgium	45%
Belize	40%
Benin	50%
Bhutan	35%
Bolivia	57%
Bosnia and Herzegovina	45%
Botswana	33%
Brazil	49%
Brunei Darussalam	37%
Bulgaria	49%
Burkina Faso	52%
Burundi	52%
Cambodia	55%
Cameroon	57%
Canada	40%
Cape Verde	39%

Central African Republic	32%
Chad	40%
Chile	55%
China	22%
Colombia	54%
Comoros	29%
Congo, Republic of	37%
Costa Rica	60%
Côte d'Ivoire	55%
Croatia	44%
Cuba	37%
Cyprus	48%
Czechia	50%
Democratic People's Republic of Korea	23%
Democratic Republic of Congo	35%
Denmark	54%
Djibouti	24%
Dominica	16%
Dominican Republic	57%
Ecuador	62%
Egypt	45%
El Salvador	56%
Equatorial Guinea	21%
Eritrea	17%
Estonia	49%
Eswatini	44%
Ethiopia	49%
Fiji	30%
Finland	55%
France	49%
Gabon	34%
Gambia, The	39%

Georgia	56%
Germany	54%
Ghana	51%
Greece	45%
Grenada	16%
Guatemala	62%
Guinea	48%
Guinea-Bissau	38%
Guyana	40%
Haiti	35%
Honduras	52%
Hungary	50%
Iceland	33%
India	48%
Indonesia	45%
Iran, Islamic Republic of	38%
Iraq	40%
Ireland	44%
Israel	38%
Italy	43%
Jamaica	50%
Japan	38%
Jordan	48%
Kazakhstan	51%
Kenya	52%
Kiribati	30%
Kuwait	26%
Kyrgyzstan	48%
Lao People's Democratic Republic	39%
Latvia	49%
Lebanon	32%
Lesotho	40%

Liberia	39%
Libya	17%
Liechtenstein	12%
Lithuania	52%
Luxembourg	37%
Madagascar	40%
Malawi	52%
Malaysia	43%
Maldives	41%
Mali	50%
Malta	43%
Marshall Islands	22%
Mauritania	34%
Mauritius	46%
Mexico	68%
Micronesia, Federated States of	16%
Moldova	52%
Monaco	7%
Mongolia	52%
Montenegro	50%
Могоссо	43%
Mozambique	41%
Myanmar	54%
Namibia	43%
Nauru	18%
Nepal	57%
Netherlands	56%
New Zealand	40%
Nicaragua	44%
Niger	51%
Nigeria	50%
North Macedonia	51%
Norway	52%
Oman	38%

Pakistan	59%
Palau	21%
Panama	60%
Papua New Guinea	23%
Paraguay	54%
Peru	61%
Philippines	54%
Poland	50%
Portugal	49%
Qatar	40%
Republic of Korea	34%
Romania	50%
Russian Federation	44%
Rwanda	56%
Saint Kitts and Nevis	11%
Saint Lucia	35%
Saint Vincent and the Grenadines	26%
Samoa	35%
San Marino	12%
São Tomé and Príncipe	37%
Saudi Arabia	28%
Senegal	54%
Serbia	56%
Seychelles	22%
Sierra Leone	51%
Singapore	41%
Slovakia	51%
Slovenia	52%
Solomon Islands	27%
Somalia	23%
South Africa	50%
South Sudan	24%
Spain	49%
Sri Lanka	41%

Sudan	35%
Suriname	41%
Sweden	50%
Switzerland	45%
Syrian Arab Republic	23%
Tajikistan	29%
Tanzania	54%
Thailand	46%
Timor-Leste	34%
Тодо	49%
Tonga	32%
Trinidad and Tobago	44%
Tunisia	48%
Turkey	50%
Turkmenistan	33%
Τυναίυ	24%
Uganda	52%
Ukraine	51%
United Arab Emirates	35%
United Kingdom	46%
United States of America	33%
Uruguay	55%
Uzbekistan	34%
Vanuatu	23%
Venezuela	26%
Vietnam	50%
Yemen	32%
Zambia	46%
Zimbabwe	60%

Source: UN Women



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