



GUIDANCE NOTE IN BRIEF



GENDER EQUALITY IN THE SUSTAINABLE ENERGY TRANSITION

Photo © UNIDO

UNIDO and UN Women have joined forces to produce an update of their 2013 guidance note, *Sustainable energy for all: The gender dimensions*. The 2019 guidance note, *Gender equality in the sustainable energy transition*, provides an overview of key and emerging issues in the gender and energy nexus, illustrated by research findings and case studies.

Why a new guidance note?

The landscape on gender and energy has blossomed over the past decade. Effective integration of gender dimensions is crucial for the achievement of all the **Sustainable Development Goals (SDGs)**, in particular SDG 7 to ensure access to affordable, reliable, sustainable and modern energy for all. Gender equality is key in the transition to sustainable energy and ensuring universal energy access. The sustainable energy transition can create benefits and opportunities for both women and men. Women-led initiatives and projects are successful in the new energy space, especially sustainable energy solutions at the community level. Women are also increasingly active in the energy workforce and as entrepreneurs in SMEs, contributing to economic growth and industrial development. The dialogue on gender and energy has clearly shifted from women being identified as a vulnerable group to their recognition as key agents of change as consumers, producers, innovators, and decision makers across the energy sector.

Key issues in the gender-energy nexus

CLIMATE AND ENERGY Climate change is one of the greatest environmental and development challenges facing the world today, and will have critical impacts on human rights and inequalities, including gender inequality. Climate solutions such as renewable energy and energy efficiency technologies and approaches offer a range of unprecedented opportunities for sustainable and inclusive economic growth and industrialization. With public policy support, women can garner a growing share of expanding opportunities and employment in these dynamic sectors.

ENERGY INFRASTRUCTURE Sustainable energy infrastructure has the potential to be transformative by providing much needed energy access, reducing greenhouse gas emissions, as well as increasing opportunities for women's empowerment, employment and gender equality. Studies show that projects with resettlement or involuntary displacement often disproportionately affect women through the induced economic, social and environmental risks. Taking the needs of women and men into consideration can reduce conflicts with communities and make energy infrastructure projects more inclusive and efficient.



AGRICULTURE Energy is needed in all steps along the agrifood and agri-business chain. Processing staple foods, such as grain grinding, is a time-consuming manual task performed daily by women, which can be eased by modern energy. Women's agricultural productivity and incomes can improve through the adoption of agricultural technologies, such as irrigation technologies that reduce the intensive use of energy and manual labor. Access to energy-based technologies – such as low-cost domestic appliances, power water wells, drip irrigation systems and labor-saving technologies for agricultural production and post-production like grinding and milling, refrigeration, and packaging – enhances women's labour productivity and increases the time available for engaging in productive activities outside the household.

TECHNOLOGY Women play key roles in promoting and implementing new clean technologies. Energy interventions that meet the needs of and involve both women and men increase the likelihood of technologies being adopted and used. Innovation accelerator programmes have also proven effective in tapping into women's potential to identify affordable and scalable solutions for cleaner, more resilient economies.

WATER All sources of energy (including electricity) require water at some point during their lifecycle. Gender issues cut across hydropower given the potential community, land and employment impacts; water pumping given women's time spent on water collection and transport; and water sanitation which involves improved hygiene and maternal health. Improved water and energy services can also reduce the burden on women and girls who often spend several hours each day collecting water and gathering biomass for cooking thus freeing up time for their participation in education and income generation activities.

HEALTH AND SAFETY In countries that rely heavily on solid biomass and coal for cooking, WHO notes that household air pollution is responsible for 3.8 million premature deaths every year, linked to fumes from fuels such as wood, animal waste, and charcoal, mostly among women and children. Where women and girls are responsible for gathering cooking fuel, they are vulnerable to gender-based violence during fuel collection and transport, as well

as musculoskeletal damage due to carrying heavy loads. Access to clean and efficient cookstoves can reduce the time spent for biomass collection. Energy is critical for primary health care services, especially during maternal and childbirth emergencies, and for the refrigeration of medicines and vaccines. Yet many clinics, hospitals, and workers do not have access to the power they need. Energy, as an integral part of sustainable urban infrastructure, can help to make cities safer, improve sanitation and health and create transport and mobility concepts that promote gender equality. Electrification can help to increase safety through lighting, which improves the mobility of women and girls to safely access latrines or roads at night.

EMPLOYMENT Women are underrepresented in the energy industry workforce, in ministerial positions in the field of energy and are rarely considered as key stakeholders for energy initiatives. According to IRENA, renewable energy employs about 32% women, compared to 22% in the energy sector overall, and women's participation in science, technology, engineering and mathematics (STEM) jobs is far lower than in administrative jobs. Women are also not equally represented within energy leadership - as Ernst and Young notes, women represent 5% of board executives and 16% of board members in Power and Utility companies. Measures to enhance women's participation in the energy workforce range from increasing representation in leadership and boards, providing technical training and mentoring, and increasing the recruitment, retention, and promotion of women at all levels.

POLICY AND DATA A gender-responsive energy policy assesses gender gaps, identifies actions to close them and promotes women's engagement in the energy sector, including in decision-making processes. Barriers that women face in the energy sector include: female-headed households are often poorer and may suffer more from rapid tariff increases than male-headed households; men often have power over household budgets and decision-making; and women may not be included in policy consultations and decision making due to discriminatory gender norms. Underlying all key policy actions is the need for the generation, collection, and use of sex-disaggregated quantitative and qualitative data that reflect all aspects of energy production, consumption and development impacts.

Key issues are derived from materials produced by international agencies and research organizations working in the field of gender and energy - ADB, ECREEE, ENERGIA, Ernst and Young, IDB, IEA, IRENA, IUCN, SE4ALL, UNIDO, UN Women, USAID, WHO, World Bank Group. A full list of resources and citations can be found in the forthcoming guidance note.

The *Gender equality in the sustainable energy transition* guidance note will be available in the second quarter of 2019. For more information and links, please write to: sustainable.development@unwomen.org or gender-coordinator@unido.org