



Violence Against
Women & Girls
VAWG
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INTRODUCTION

The energy sector plays a vital role in driving economic growth, enhancing quality of life, and addressing energy poverty. Yet, like many development initiatives, energy projects can inadvertently contribute to or amplify risks of violence against women and girls (VAWG),¹ especially in vulnerable communities. Energy projects, whether related to infrastructure, household access, or clean energy transitions, can introduce significant risks if gendered considerations and protections are overlooked. Marginalized groups, particularly women and girls, often face increased exposure to exploitation and abuse due to factors such as displacement, job loss in energy transitions, and economic insecurity tied to limited energy access.

The occurrence of VAWG in the context of energy operations is highly context-specific, with risks heightened in settings where harmful gender norms that perpetuate VAWG are deeply entrenched and the prevalence of violence is already high, such as in fragile and conflict-affected settings. These risks may be compounded by factors such as financial distress, weak institutions, gender imbalances in the workforce, as well as power differentials between project actors and beneficiaries, unsafe working conditions, and the lack of accountability mechanisms to prevent and respond to sexual exploitation, abuse, and harassment.

At the same time, the energy sector presents a powerful opportunity to prevent violence and promote women's empowerment. Energy operations, when designed with gender-responsive strategies, can contribute to transformative outcomes—enhancing women's agency, supporting prevention and response to violence, and fostering more inclusive and equitable communities. By centering women's safety, participation, and leadership in energy systems, development actors can not only mitigate harm but also unlock the sector's full potential as a driver of gender equality and social change.

Integrating VAWG prevention and response measures into energy operations is therefore not only essential for project success and community well-being, but also for advancing broader development goals. This brief provides development practitioners and policymakers with guidance to embed VAWG considerations into energy projects, highlighting key risks, interventions, and strategies to support safer, more equitable energy solutions.

¹ VAWG is any act of gender-based violence that results in, or is likely to result in, physical, sexual, or mental harm or suffering to women, including threats of such acts, coercion or arbitrary deprivation of liberty, whether occurring in public or in private life (UN General Assembly 1993). VAWG is a subset of gender-based violence that specifically refers to violence targeted at women and girls, due to their gender. It emphasizes the structural inequalities and societal norms that make women and girls disproportionately vulnerable to certain forms of violence. Gender-based violence, by contrast, is a broader term that encompasses all forms of violence directed at individuals based on their gender, including violence against men, boys, transgender, and non-binary individuals. It recognizes that gender norms and power imbalances can affect all people, although women and girls are often most affected.



KEY POINTS

Energy sector projects intersect with VAWG in multiple ways. When gender-related risks are not addressed, energy initiatives can inadvertently increase exposure to violence. However, when designed intentionally, these same projects can serve as powerful platforms for prevention, response, and the advancement of women's agency and safety.

Large-scale infrastructure projects may lead to community displacement and an influx of male laborers, thus increasing VAWG risks. Yet these interventions also offer opportunities to implement gender-responsive resettlement plans, improve public lighting and safety infrastructure, and promote inclusive community engagement that enhances protection and cohesion. Similarly, limited energy access—particularly to lighting and clean cooking—can restrict women's mobility, increase their exposure to violence, and limit economic participation. Expanding affordable and equitable energy access can empower women, reduce time burdens, and foster independence.

Affordability challenges, such as rising energy prices, can increase household stress and domestic violence, especially for women-headed households. At the same time, energy pricing reforms present opportunities to integrate targeted subsidies and social protection mechanisms that reduce vulnerabilities and support safer, more resilient households. In the workplace, gender imbalances in the energy sector expose women to harassment and discrimination. Addressing these gaps through inclusive workforce policies, safe infrastructure, and grievance redress mechanisms can create safer, more equitable employment environments.

The energy transition away from fossil fuels, while essential for sustainability, can also disrupt traditional male-dominated industries and lead to job losses, thus raising risks of backlash or household tensions that may trigger violence. However, transition planning offers a key opportunity to promote gender-equitable workforce reskilling, support men and women equally through social safety nets, and expand women's participation in the green economy through entrepreneurship and leadership roles.

The increasing digitalization of energy systems brings new risks of cyber harassment and exploitation. However, it also offers opportunities to enhance women's access to energy services, information, and digital platforms, provided these tools are designed with gender-sensitive safeguards and digital literacy support. Finally, while women's participation in energy entrepreneurship and decision-making can provoke backlash or intimate partner violence, such risks highlight the importance of pairing empowerment initiatives with male engagement, community sensitization, and psychosocial support to sustain transformative outcomes.

Recognizing both the risks and opportunities at these intersections enables energy practitioners to move beyond harm mitigation toward proactive strategies that advance gender equality and support safe, inclusive development outcomes.



INTERSECTION BETWEEN ENERGY SECTOR PROJECTS AND VIOLENCE AGAINST WOMEN AND GIRLS

Violence against women and girls (VAWG) risks in energy operations arise across both the demand and supply sides of the sector. On the demand side, limited access to energy, particularly lighting and clean cooking, can restrict women's mobility, increase their exposure to violence, and limit economic participation. Financial stress linked to rising tariffs may heighten domestic tensions and trigger intimate partner violence. On the supply side, risks emerge throughout planning, construction, and operations. Large-scale projects may displace communities and bring an influx of male laborers, heightening sexual exploitation and abuse and sexual harassment (SEA/SH) risks (World Bank 2017). Gender imbalances in the workforce and weak labor oversight can further expose women to harassment and exclusion. Moreover, the digitalization of energy services introduces new risks of cyber harassment and data breaches. Yet, if designed with appropriate safeguards and digital literacy support, digital platforms can improve women's access to services, information, and decision-making spaces. Even efforts to empower women through energy entrepreneurship may provoke social stigma or intimate partner violence—underscoring the need to pair such interventions with community sensitization, male engagement, and psychosocial support.

However, these challenges also create entry points to implement gender-responsive resettlement plans, strengthen grievance mechanisms, and promote inclusive recruitment and retention strategies. Similarly, the energy transition presents both threats and openings: while job losses in male-dominated fossil fuel industries can lead to backlash or economic stress in households, transition planning offers an opportunity to invest in gender-equitable reskilling, expand access to green jobs, and support women entrepreneurs. Recognizing both the risks and opportunities at these intersections allows energy practitioners to move beyond harm mitigation toward proactive strategies that advance gender equality, enhance safety, and contribute to inclusive development outcomes.

In this context, the note aims to distinguish broader prevention and empowerment strategies from specific mitigation measures in World Bank-supported projects that address VAWG and SEA/SH risks in infrastructure development, such as energy projects that entail civil works. Such projects require specific measures under the World Bank's Environmental and Social Framework (ESF), namely, conducting SEA/SH risk assessments, enforcing codes of conduct, training staff and communities, ensuring gender-sensitive site design, integrating SEA/SH clauses in contracts, establishing grievance redress mechanisms, and linking survivors to support services, all accompanied by regular supervision and adaptive management.² Additional details on the World Bank's ESF can be found in Box 1 below.

² World Bank. 2017. Environmental and Social Framework: Setting Environmental and Social Standards for Investment Project Financing. Washington, DC: World Bank. [\[LINK\]](#).



This section, as summarized in Table 1, provides a high-level overview of the VAWG risks linked to energy sector operations and maps each risk to its corresponding level of influence based on Lori Heise’s ecological framework.³ Using the ecological framework helps project teams to map risks comprehensively, beyond isolated incidents, and tailor interventions to specific entry points—for example, policy reform, infrastructure design, or service delivery.

Table 1 Mapping VAWG Risks Across Energy Operations Using the Ecological Framework

Sources of VAWG Risk in Energy Operations	VAWG Risks	Ecological Level
Energy infrastructure construction and labor dynamics	Displacement and livelihood disruption: Loss of safety networks, increased vulnerability in resettlement, economic insecurity.	Community
	Migrant labor and health risks: Heightened SEA/SH risks due to male labor influx, increased sexually transmitted infection risk, varying by project type.	Community
	Supply chain and vulnerabilities: Subcontractor oversight gaps leading to harassment of women in supply chains.	Institutional
Lack of energy access and poor infrastructure design	Impact of lack of energy access: Limited mobility and safety, exposure to violence during resource collection, domestic stress.	Community
	Risks from poor design and lack of inclusive consultation: Unsafe location of infrastructure increases exposure to violence; lack of consultation.	Institutional/ Community
Energy pricing and affordability challenges	Energy pricing and affordability risks: Removal of subsidies or rising prices increases household tension; domestic violence.	Family/ Community
Sexual exploitation for energy access	VAWG risks from sexual exploitation for energy access: Bribes or coercion for access to energy resources, lack of grievance mechanisms.	Institutional
Male-dominated energy workplaces	Workplace gender imbalances: Sexual harassment and exclusion in male-dominated sectors, lack of redress channels.	Institutional
	Institutional weaknesses and lack of infrastructure: Lack of VAWG-sensitive policies and infrastructure, weak reporting and prevention.	Institutional

³ Lori Heise’s ecological framework (Heise 1998) is a widely recognized model for understanding the multiple, intersecting drivers of VAWG. It identifies five levels of influence:

- **Individual** – personal factors like knowledge, attitudes, and past experiences of violence.
- **Family/Relationship** – power dynamics, economic stress, or control within intimate and family relationships.
- **Community** – safety of public spaces, social cohesion, and informal norms around gender and violence.
- **Institutional** – systems and structures, such as labor practices, workplace policies, grievance mechanisms, or justice sector responses.
- **Societal/Policy** – broader laws, policies, and cultural norms that shape gender roles and institutional behavior.

Using the ecological framework helps project teams to map risks comprehensively beyond isolated incidents and to tailor interventions to specific entry points, such as policy reform, infrastructure design, or service delivery.



Table 1 Mapping VAWG Risks Across Energy Operations Using the Ecological Framework (*Continued*)

Sources of VAWG Risk in Energy Operations	VAWG Risks	Ecological Level
Backlash against women’s empowerment in energy access and entrepreneurship	Economic empowerment and male backlash: Men’s resentment over women’s income gains or assertiveness, domestic abuse.	Family/ Community
Energy transition impacts on gender roles and economic security	Disruption of traditional gender roles and power dynamics: Job loss among men in traditional sectors triggers household tension and violence.	Family/ Community
Digital exploitation and online safety	Digital harassment and exploitation risks: Online harassment, data breaches, lack of protection in digital energy platforms.	Institutional/ Community

Energy Infrastructure Construction and Labor Dynamics

Displacement and livelihood disruption: Energy projects, particularly large-scale ones, often lead to community displacement, causing significant social upheaval. The resulting loss of social cohesion can exacerbate VAWG as traditional social structures dissolve (Halford 2024; World Bank 2023; UN Women 2022; Hill et al. 2017). Moreover, changes in land use for project sites may displace individuals from agricultural or other livelihood activities, which can increase economic insecurity, particularly for women. Displacement and resettlement often force women and girls into vulnerable positions, as they may lose traditional safety networks, face hostility in new environments, and experience heightened VAWG risks in temporary housing settings (Women’s Refugee Commission and Mercy Corps 2019).

Migrant labor and health risks: Energy infrastructure projects often require a large, mobile workforce, primarily composed of male laborers brought in from outside the community. This results in a disproportionate male-to-female ratio in project areas, particularly in remote or rural locations, which can increase the risk of sexual harassment, exploitation, and other forms of VAWG in local communities in absence of strong safeguards (Inspection Panel and World Bank 2016; World Bank 2022; World Bank 2023). Importantly, the nature and scale of VAWG risks vary significantly depending on the type of infrastructure project. For instance, hydropower developments typically involve prolonged construction timelines and permanent labor camps, resulting in a sustained presence of male workers in concentrated areas. This can contribute to social disruption and long-term SEA/SH risks. In contrast, transmission and distribution line projects often rely on mobile labor teams that move quickly between sites, generating short-term but recurring VAWG risks across multiple dispersed communities. Given these variations, mitigation strategies must go beyond a ‘one-size-fits-all’ approach. Effective VAWG risk assessments should be tailored to the specific project type, geographic context, and engagement duration. Additionally, health-related risks associated with male labor influx, including the potential spread of sexually transmitted infections, can disproportionately affect women in nearby communities and contribute to further vulnerability and exploitation.



Supply chain and vulnerabilities: Supply chains associated with energy projects often involve subcontractors whose labor practices may lack adequate oversight (World Bank 2021). For example, a qualitative study of women entrepreneurs in the construction industry in Guinea and Uganda found that women entrepreneurs reported harassment, including unwanted sexual proposals and threats to shut down their businesses (Aneke, Derera and Bomani 2017). Without robust monitoring, subcontractors may engage in practices that increase risks of sexual exploitation and harassment, particularly for female workers in supply chain roles.

Lack of Energy Access and Poor Infrastructure Design

Insufficient access to modern energy services places women and girls at heightened risk of various forms of gender-based violence (GBV) due to the physical, social, and economic vulnerabilities it creates.

Impact of lack of energy access: In underserved and rural areas, the lack of modern energy services constrains women's mobility, economic participation, and autonomy while increasing their exposure to violence. Without electricity or clean energy, women often spend long hours on labor-intensive tasks such as collecting firewood and water, at times in unsafe areas, limiting their ability to pursue education, employment, or community participation. This drudgery contributes to time poverty and reinforces gender inequality in both domestic and public spheres. The lack of lighting and household energy also creates safety concerns: poorly lit streets, isolated cookstove locations, and unsafe energy collection points expose women to harassment or assault, especially in the evening or early morning hours. These risks can discourage women and girls from leaving home, thereby reducing their physical mobility and access to opportunities. In addition to these mobility-related risks, energy poverty contributes to household stress that can trigger or exacerbate domestic violence. In Lebanon, for example, prolonged electricity shortages have led to significant strain in households. Financial stress and the inability to meet basic needs during daily blackouts have been linked to heightened tensions and increased reports of marital conflict and abuse (World Bank 2024). Similarly, a cross-country study in Sub-Saharan Africa found that electrification was associated with reduced domestic violence, likely due to better access to media and information, which can shift harmful norms and increase awareness of rights and services (Sievert 2015).

Risks from poor design and lack of inclusive consultation: Poorly planned placement of energy-related infrastructure—such as public lighting, household cookstoves, or phone charging stations—can further exacerbate these risks. When inclusive consultation processes are absent, infrastructure may be sited far from women's homes or in unsafe locations, inadvertently increasing exposure to VAWG. For example, women who need to charge phones or access energy services may have to navigate isolated areas, heightening their vulnerability to violence. This underscores the importance of participatory planning and design processes that meaningfully engage women and community stakeholders. Ensuring that infrastructure placement reflects women's preferences, movement patterns, and safety concerns can significantly reduce risks while enhancing access and usability.



Public infrastructure and safety concerns: VAWG risks are often heightened in public spaces such as streets, walkways, and areas surrounding communal infrastructure, particularly when lighting is inadequate or unreliable. Poorly lit environments can leave women vulnerable to harassment or attacks when traveling at night or during power outages. The absence of lighting, particularly during power outages, can expose women to increased risks of assault, as they may have to travel through unsafe areas or rely on unsafe public utilities. For instance, during the 2008 economic recession in the United States, many cities reduced street lighting to cut costs, leading to a spike in GBV and harassment (Hazelton 2017). In refugee camps and displacement settings, research has found increased VAWG risks due to poor public lighting resulting in reduced privacy and security (Corbyn and Vianello 2018; Listo 2018; Global Alliance for Clean Cookstoves 2016).

Risks linked to resource collection: In regions where households lack access to modern energy sources, women often bear the responsibility for collecting firewood or other resources, exposing them to potential VAWG risks (Clark 2021; Global Alliance for Clean Cookstoves 2016). The journey to collect firewood or other resources can leave women isolated in remote locations, where they may be vulnerable to assault or harassment. Ensuring safer resource collection options is essential to reducing these risks.

Energy Pricing and Affordability Risks

Energy pricing and affordability directly impact household well-being, and price hikes—particularly when energy subsidies are removed without adequate social protection measures—can disproportionately burden women-headed households (Rebosio Calderon and Georgieva 2016). These households, often already vulnerable due to limited income sources and a greater reliance on affordable energy for cooking, heating, and lighting, face heightened financial stress when energy prices rise. This strain can trigger an increase in domestic violence.

Sexual Exploitation for Energy Access

Clean cooking programs may expose women to VAWG through exploitative practices, such as demands for bribes or favors in exchange for access to subsidies or equipment (Energia 2014; Women's Refugee Commission and Mercy Corps 2019). Often the primary beneficiaries of clean cooking initiatives, women may encounter demands for bribes, sexual favors, or other forms of exploitation in exchange for access to subsidized stoves, fuels, or equipment. These exploitative practices can occur during registration, distribution, or maintenance phases of the program. The involvement of intermediaries, officials, or contractors with unchecked authority over the distribution of benefits creates an environment ripe for abuse. Women, especially those from marginalized or low-income backgrounds, may feel powerless to resist demands due to their economic dependency on program benefits. An absence of robust reporting, monitoring, and grievance redress mechanisms increases the likelihood of abuse going unnoticed or unaddressed. Fear of retaliation, stigma, or disbelief may discourage women from reporting incidents of exploitation.



Male-dominated Energy Workplaces

Workplace gender imbalances and VAWG risks: The energy sector workforce frequently exhibits gender imbalances, with men occupying most roles in construction and technical fields. This gender disparity can create environments where women are more susceptible to VAWG, including sexual harassment (World Bank 2017). Women in construction or technical roles often face harassment, which may go unchecked in predominantly male environments (Schomer and Hammond 2020). The power dynamics inherent in such settings can further exacerbate harassment and make it difficult for women to report issues or seek support. Additionally, many energy companies lack comprehensive VAWG and harassment policies, leaving women without clear avenues for redress or protection. This absence of institutional safeguards, such as anti-harassment laws and confidential reporting mechanisms, further perpetuates a culture of impunity and discourages women from participating in or advancing within the sector.

Institutional weaknesses and lack of infrastructure: Energy projects can suffer from weak institutional mechanisms for addressing VAWG, making it challenging to prevent or respond effectively to harassment and violence. This lack of support is often compounded by inadequate gender-sensitive infrastructure, such as separate facilities or safe workspaces, leaving women more exposed to risks (World Bank 2017). Insufficient resources for training and sensitization on VAWG issues can further weaken the capacity of institutions to foster a safe and inclusive environment. Inadequate worker housing and lack of attention to personal safety exacerbate risks for female workers, who may have to endure unsafe conditions in project areas with minimal recourse.

Backlash Against Women's Empowerment in Energy Access & Entrepreneurship

Economic empowerment and male backlash: Women participating in energy-related income-generating activities (for example, selling solar lanterns or managing renewable energy kiosks) gain financial independence, which can reduce their reliance on male partners. While empowering, this shift may lead to resentment, jealousy, or feelings of emasculation among men, manifesting in verbal, emotional, or physical violence as a means of reasserting control (ICRW 2020; Miedema, Hennink, and Naved 2021). This risk is well documented in the literature (Bulte and Lensink 2019; Désilets et al. 2019; Eggers del Campo and Steinert 2022). It materialized, for example, in the World Bank-supported Peru Decentralized Rural Transport Project (2007–11). The project brought positive results in women's agency and access to economic opportunities, but many female workers in road construction projects reported facing severe mistreatment from their spouses, including domestic abuse. Their husbands expressed discontent over the women's prolonged absence from home and, in some cases, felt jealous of their wives' higher income (Casabonne and Müller 2015).

Domestic tensions over energy decision-making: In households where men traditionally control energy-related decisions, women's advocacy for or adoption of modern energy solutions may be viewed as



challenging male authority (Energia 2019; Rebosio Calderon and Georgieva 2016). This tension can result in domestic violence or coercion to prevent women from adopting these solutions.

Energy Transition Impacts on Gender Roles and Economic Security

Disruption of traditional gender roles and power dynamics: The energy transition away from coal and fossil fuels disrupts traditional male-dominated industries such as mining and power generation, leading to job losses for men (Climate Investment Funds 2024; Lahiri-Dutt et al. 2022). There is a strong association between mining work and dominant blue-collar masculinities, which encapsulates physical strength and toughness (Abrahamsson and Johansson 2020). During mining sector restructuring and retrenchment, this traditional masculinity can become dysfunctional and result in tensions in the household and an increase in VAWG. This economic displacement can create feelings of inadequacy, loss of identity, or diminished status, especially in societies where men are seen as primary breadwinners, leading to a higher likelihood of domestic violence as a coping mechanism for these pressures. While there is limited direct scholarly research linking this transition specifically to domestic violence, various studies have established that financial strain can exacerbate domestic violence situations (Hsiu-Fen, et al. 2023). While not directly linked to energy transitions, the findings suggest that economic hardships such as those potentially caused by job losses in fossil fuel industries can increase vulnerabilities to domestic violence.

Backlash against women entering new job sectors: As energy transition initiatives promote women's employment in emerging sectors like renewable energy, some men may perceive these opportunities as a threat to their traditional roles or sources of income (Eggers Del Campo and Steinert 2022; Bolis and Hughes 2021). This can lead to workplace harassment, social ostracism, or domestic violence targeting women who take on these roles.

Digital Exploitation and Online Safety⁴

The intersection of VAWG and digital technologies has garnered recent attention. Research indicates that the proliferation of information and communication technology has facilitated new forms of VAWG, which encompasses behaviors such as cyberstalking, online harassment, nonconsensual distribution of intimate images, and other forms of digital abuse (Bansal, et al. 2024). In the context of energy projects, several digital vulnerabilities can increase VAWG risks:

Digital harassment and abuse: The growing use of digital platforms in energy projects, such as mobile apps for accessing subsidies or managing energy usage, creates new avenues for harassment. Women using these platforms may experience online stalking, unsolicited messages, or other forms of digital

⁴ While this section provides an overview of digital vulnerabilities within energy sector projects, we recognize that the intersection of GBV and digital technologies is an emerging and complex area that cuts across multiple sectors. The examples and risks described here are intended as an initial framing within the energy context.



abuse (Affoum, et al. 2023). This risk is heightened for women who lack digital literacy or are unfamiliar with privacy settings.

Exploitation via digital platforms: Women participating in energy-related work, such as entrepreneurs in renewable energy businesses, may face exploitation or abuse on digital marketplaces or payment systems (European Institute for Gender Equality 2024). For example, male customers, clients, or intermediaries may use these platforms to harass or intimidate women.

Inadequate data protection: Poor data protection policies in energy projects can expose women's personal information, such as addresses or contact details, making them vulnerable to stalking, identity theft, or targeted abuse (USAID 2015). This is particularly concerning in contexts where women already face societal stigma or VAWG risks.

Social media harassment linked to energy initiatives: Women who advocate for energy access, take on leadership roles in energy projects, or engage as entrepreneurs may become targets of social media harassment, including cyberbullying, online stalking, defamation, or other forms of digital abuse. Trolls or community members resistant to gender equality may use online platforms to publicly demean, intimidate, or discredit these women, especially when their visibility challenges traditional gender norms.

Annex 2 summarizes gender and VAWG risks associated with three key energy programmatic areas—energy access, foundational energy systems, and energy transition—highlighting how each area impacts women's safety, inclusion, and economic opportunities within the evolving energy landscape.



ETHICAL AND SAFETY RECOMMENDATIONS FOR VAWG INTERVENTIONS

Any energy sector intervention designed to prevent or address VAWG should include precautions in addition to routine risk assessment to guarantee that no harm is caused. This includes following ethical guidelines related to respect for persons, nonmaleficence (minimizing harm), beneficence (maximizing benefits), and justice to protect the safety of service providers and survivors. Interventions should:

- Assess whether the intervention may increase VAWG
- Minimize harm to women and girls
- Prevent revictimization of women and girls
- Consider the implications of mandatory reporting of suspected VAWG cases
- Be aware of the co-occurrence of child abuse
- Minimize harm to staff working with survivors
- Provide referrals for care and support for survivors

For further details on these ethical and safety recommendations, see the [Ethics](#) section of the online [Violence Against Women & Girls — Resource Guide](#).



RAPID SITUATION ANALYSIS

Developing effective, coherent VAWG prevention and response interventions for inclusion in energy sector operations requires a broad understanding of the legal, social, and epidemiological contexts of VAWG in the country, region, or local community. In general, teams should work with governments, private sector partners, nongovernmental organizations (NGOs), local experts, and other counterparts in the country to answer some or all the following questions. World Bank teams, specifically, should build on questions used in social impact assessments that are carried out as part of project-specific mitigation measures, such as those required by the World Bank's ESF.⁵

For general questions that should be asked when undertaking a rapid situation analysis, see the [Integrate](#) section of the online Resource Guide.

These questions are recommendations for possible areas of inquiry on VAWG specific to the energy sector that can be selectively incorporated into assessment and routine monitoring that development practitioners working in energy projects and programs perform.

Energy infrastructure construction and labor dynamics

Displacement and livelihood disruption of large energy infrastructure projects

- How does the project plan to maintain or recreate social cohesion for displaced communities, particularly for women and girls?
- What specific support is provided to women who have lost their livelihoods due to displacement?
- What safety measures are in place for women and girls in temporary housing or resettlement areas?

Migrant labor and health risks

- What steps are being taken to address potential VAWG risks associated with an influx of male migrant workers?

⁵ Some of the questions included here are also examined as part of the World Bank's ESF requirements to identify and manage potential risks associated with projects, such as during the social impact assessment and the development of an environmental and social risk management plan, an SEA/SH action plan, a resettlement action plan, and a labor management plan. Since this note is tailored for a broader audience, World Bank teams are requested to refer to the ESF guidelines and coordinate closely with ESF colleagues *before* conducting a rapid situation analysis to ensure alignment and accounting for institutional protocol, and to avoid duplications and build synergies between risk management work and work to strengthen GBV prevention and response outcomes. Similarly, some of the actions that will be required to address them are similar to key SEA/SH risk mitigation actions that are recommended for projects with civil works by the World Bank ESF "Good Practice Note on Addressing Gender Based Violence in Investment Project Financing involving Major Civil Works" ([link](#)).



- How are local health risks, including the spread of sexually transmitted infections, being monitored and mitigated in communities impacted by migrant labor?
- Are there awareness programs or support mechanisms to protect community members, particularly women, from exploitation or harassment by migrant workers?
- What oversight mechanisms are in place to ensure that subcontractors adhere to VAWG prevention policies?
- How is VAWG risk being assessed and mitigated within the project's supply chain?
- What training or guidance is provided to subcontractors to prevent exploitation and harassment, particularly for female workers?

Male-dominated energy workplaces

- What is the gender composition of the workforce, particularly in construction and technical roles?
- Are there specific policies to address sexual harassment in the workplace, and how are these policies communicated to all employees?
- Is there a confidential, accessible reporting mechanism for employees to report instances of VAWG or harassment?
- Does the institution have a designated VAWG prevention team or representative?
- Are there gender-sensitive facilities, such as separate restrooms and safe spaces, for women in project sites?
- How are employees trained or sensitized on VAWG issues, and how frequently is this training conducted?
- Are adequate housing and personal safety measures provided for all workers, especially women?

Energy poverty

- How does the project ensure affordable energy access, particularly for economically vulnerable women?
- How does the project address the unique needs of women who are disproportionately affected by energy poverty?

Public infrastructure and safety concerns

- What safety measures are incorporated into public infrastructure, such as street lighting, to protect women from VAWG risks?
- Are there contingency plans for power outages to minimize VAWG risks, especially in poorly lit or high-risk areas?
- How does the project collaborate with local authorities to address public safety concerns related to energy infrastructure?



Risks linked to resource collection

- What alternative energy sources (for example, clean stoves) are provided to reduce the need for resource collection that may expose women to VAWG risks?
- How does the project engage with local organizations to identify safe areas for resource collection?
- What support is provided to women to reduce their reliance on firewood or other resources that require travel to remote areas?

Energy pricing and affordability challenges

- How will energy price changes affect household financial stress and intrahousehold dynamics, particularly for women?
- Are vulnerable groups—especially women-headed households—adequately protected through subsidies or social assistance?

Sexual exploitation for energy access

- What mechanisms are in place to protect women from exploitation (for example, transactional sex) in exchange for energy services?
- Does the project have clear anti-harassment and anti-exploitation policies, and how are violations enforced?
- Are there confidential and accessible reporting mechanisms for beneficiaries and staff to report cases of sexual exploitation or harassment, and how effective are they?

Energy transition impacts on gender roles and economic security

- Have any assessments been conducted on the potential job losses in male-dominated industries (for example, mining, coal, fossil fuels) due to the energy transition? If yes, do these assessments include gendered impacts?
- Are there programs or resources in place to support men who may lose jobs in traditional energy sectors (for example, retraining programs, counseling services)? Are these accessible and inclusive?
- Have there been any observed or reported changes in household dynamics, such as increased financial strain or shifts in decision-making roles, because of economic displacement?
- How are women being integrated into new energy sectors (for example, renewable energy, green jobs)? Are there measures to ensure their safety and inclusion in these spaces?



- Have there been reports of resistance or backlash (for example, harassment, domestic violence, ostracism) against women entering these new sectors or leadership roles in energy transition projects?
- Are gender-sensitive approaches embedded in the energy transition strategy? For example, are VAWG risks assessed and mitigated in the design of retraining programs or new job opportunities?

Digital exploitation and online safety

- Are robust data protection policies in place to safeguard women's personal information in energy programs, and how is compliance ensured?
- Are there clear policies addressing digital harassment, and how are incidents reported, addressed, and monitored?
- Are women provided with digital literacy training to enhance their ability to safely use digital platforms and recognize online risks?



KEY AREAS FOR INTEGRATING VAWG PREVENTION AND RESPONSE MEASURES INTO ENERGY PROJECTS

Effectively addressing VAWG in energy operations requires targeted and context-specific interventions that reflect the diverse risks women and girls face in different environments—at home, in the workplace, or within community programs. Energy programs can reduce exposure to violence by improving public lighting near schools and pathways, promoting safe working environments in male-dominated energy sectors, offering digital literacy training for women using energy technologies, and providing clean and safe energy solutions, such as solar lighting and fuel-efficient cookstoves, that reduce dependence on unsafe energy sources. These interventions not only improve physical safety but also contribute to women's economic and social empowerment, thereby reducing long-term vulnerability to violence.

It is important to distinguish these broader prevention and empowerment strategies from project-specific mitigation measures that focus more narrowly on VAWG risks associated with infrastructure development. In energy projects involving major civil works, such as the construction of power plants, transmission lines, or off-grid systems, these risks are addressed through measures required under the World Bank's ESF. These include conducting SEA/SH risk assessments, enforcing codes of conduct for workers, training project staff and communities, ensuring gender-sensitive site design, integrating SEA/SH clauses in contractor contracts, establishing confidential grievance redress mechanisms, and linking survivors to local support services. These actions are accompanied by regular supervision, community consultations, and adaptive management to sustain mitigation throughout the project life cycle. In this context, activities that mitigate against the negative social impacts of projects (including GBV) must be introduced early on, carried out in a timely manner, and bound to the calendar of project implementation. Guidance for implementing these measures is detailed in the World Bank's Good Practice Note on SEA/SH (see Box 1).



Box 1 Operational Instruments and Mitigation Measures for Addressing VAWG Risks in World Bank Energy Projects

World Bank-financed energy infrastructure projects, particularly those involving major civil works, labor influx, and resettlement, carry significant risks of VAWG, including SEA/SH. To mitigate these risks, the World Bank uses various frameworks and instruments that are all interlinked, namely:

- The ESF.
- A risk-based classification system to guide the scope of SEA/SH mitigation measures.
- Procurement provisions are embedded in project implementation.

Environmental and Social Framework (ESF)

The ESF⁶ provides an overarching framework for assessing and managing environmental and social risks. It includes several standards relevant to VAWG risk mitigation:

- ESS1: Assessment and Management of Environmental and Social Risks and Impacts: Requires SEA/SH risks to be identified and addressed in Environmental and Social Impact Assessments (ESIAs) and project planning.
- ESS2: Labor and Working Conditions: Mandates codes of conduct (CoCs) prohibiting SEA/SH, worker training, and accessible grievance mechanisms.
- ESS4: Community Health and Safety: Addresses risks of SEA/SH arising from labor influx and community interactions, requiring community-based mitigation.
- ESS5 – Land Acquisition and Involuntary Resettlement: Requires tailored consultations and mitigation for women and girls affected by resettlement. The Good Practice Note Addressing SEA/SH in Investment Project⁷ supports implementation of these standards by providing detailed guidance on assessing SEA/SH risk, coordinating with GBV service providers, and developing survivor-centered mitigation plans.

6 World Bank. 2017. Environmental and Social Framework: Setting Environmental and Social Standards for Investment Project Financing. Washington, DC: World Bank. [\[LINK\]](https://documents.worldbank.org/en/publication/documents-reports/documentdetail/829941500374150317/environmental-and-social-framework)
<https://documents.worldbank.org/en/publication/documents-reports/documentdetail/829941500374150317/environmental-and-social-framework>.

7 World Bank. 2022. Addressing Sexual Exploitation and Abuse and Sexual Harassment (SEA/SH) in Investment Project Financing involving Major Civil Works: Good Practice Note (Third Edition). Washington, DC: World Bank [\[LINK\]](#).



SEA/SH mitigation through procurement

The World Bank's procurement processes reinforce SEA/SH safeguards by requiring contractors and consultants to comply with specific risk mitigation standards:

- **Mandatory CoCs:** All workers must sign and be trained in CoCs that prohibit SEA/SH and outline sanctions.
- **SEA/SH Clauses in Procurement Documents:**⁸ Contractors must include SEA/SH risk management in their environmental and social management plans and demonstrate capacity to implement these.
- **Bid Evaluation Criteria:** For high-risk projects, bidders must show prior experience managing GBV risks and demonstrate institutional capacity.
- **Contractual Enforcement:** Noncompliance with SEA/SH measures can result in penalties, suspension, or termination. Supervision consultants monitor implementation.

Risk-based SEA/SH mitigation framework

Projects are classified into four SEA/SH risk levels—Low, Moderate, Substantial, and High—using the SEA/SH Risk Assessment Tool.⁹ Each level dictates a corresponding set of mitigation measures (see table below). This tiered approach ensures that mitigation measures are proportional to the context and risk profile of the project and are backed by enforceable legal and operational instruments.

Risk Level	Typical Project Features	SEA/SH Mitigation Measures
Low	• Small-scale work • Minimal labor influx	• SEA/SH-sensitive ESIA • CoCs for workers and associated training • Basic grievance mechanism with pathways to receive and respond to SEA/SH • Mapping of GBV services and establishment of referral protocols • Community outreach • Women-inclusive consultations • SEA/SH language in contracts

⁸ World Bank. 2023. Procurement Regulations for IPF Borrowers: Procurement in Investment Project Financing – Goods, Works, Non-Consulting and Consulting Services. Fifth Edition, September 2023. Washington, DC: World Bank [\[LINK\]](#); World Bank. 2021. Questions & Answers for Borrowers and Contractors: Procurement SEA/SH Prevention and Response Measures. Washington, DC: World Bank [\[LINK\]](#).

⁹ World Bank. 2022. SEA/SH Risk Assessment Tool. Washington, DC: World Bank.



Risk Level	Typical Project Features	SEA/SH Mitigation Measures
Moderate	• Medium civil works • Moderate influx • Some community interaction	• All low risk measures, plus: • SEA/SH Action Plan
Substantial	• Large infrastructure • Labor influx • Limited services • Resettlement involved	• All moderate risk measures, plus: • Engagement with GBV service providers for technical assistance • SEA/SH monitoring by supervision consultants with GBV expertise • Gap-filling resources for GBV services recommended
High	• Very large/remote civil works • Weak rule of law • High GBV prevalence	• All substantial risk measures, plus: • Dedicated GBV expert in project implementation unit • Third-party monitoring • Independent grievance and accountability mechanisms • Contractor disqualification • Pre-construction readiness audits

Beyond project-level risk mitigation

To advance transformative change, building on and going beyond the mitigation of project-level risks, energy operations have the opportunity of incorporating broader VAWG prevention and response efforts at the policy, sectoral/institutional, and community levels. This should be carried out by building on the foundations of risk management guidance offered through established frameworks, such as the ESF (for World Bank-supported projects), through the mobilization of GBV expertise embedded as part of project teams, and in coordination with NGOs that can provide technical assistance throughout project preparation and implementation.

- *Policy-level measures* refer to national or subnational laws, regulatory frameworks, policies, and strategies that aim to create an enabling environment for preventing and responding to VAWG within the energy sector. These measures address structural drivers of inequality by integrating gender and VAWG considerations into energy governance, pricing, access, and transition planning. They are typically designed and implemented by government bodies, with the support of development partners and advocacy coalitions. Examples include:
 - Integrating VAWG considerations into energy access and pricing policies.
 - Leveraging development policy operations to promote gender-responsive energy reforms.
 - Embedding gender equity and VAWG risk mitigation in just energy transition strategies.



- *Institutional/sector-level* measures target public and private sector actors involved in the planning, delivery, and regulation of energy services, including ministries, utilities, contractors, and project implementation units. These interventions aim to build the institutional capacity, accountability, and gender responsiveness of energy institutions to prevent and respond to VAWG, especially in contexts involving civil works, labor influx, displacement, and new technologies. Examples include:
 - Training energy staff and leadership on gender equity and VAWG prevention.
 - Gender audits of utilities and inclusion of gender KPIs.
 - Establishing sectoral workplace policies that promote gender diversity and prevent harassment.
- *Community-level measures* involve locally driven, culturally appropriate initiatives that engage communities in addressing the social norms, behaviors, and vulnerabilities that contribute to VAWG. These interventions empower women and girls, promote collective accountability, and support safe access to energy services through participatory approaches. Examples include:
 - Awareness campaigns and community dialogues on VAWG, energy rights, and gender equality.
 - Creation of safe spaces, lighting, and infrastructure improvements.
 - Livelihood and skills training for women affected by displacement or energy poverty.
 - Community-based distribution models and energy committees with women's leadership.
 - Mental health and psychosocial support services tied to energy transition impacts.

Taken together, these strategies not only address immediate risks of VAWG but also lay the groundwork for more inclusive, equitable, and gender-transformative outcomes in the energy sector. They span short-term safeguards as well as structural interventions that shift institutional norms, empower communities, and influence national policy frameworks. Table 2 provides an at-a-glance overview of these measures, categorized by the source of VAWG risk and the level of intervention (policy, institutional, or community).

Table 2 At-a-Glance: Interventions to Prevent and Respond to VAWG Risks in Energy Operations

Risk Type	Policy/Legal	Institutional/Sectoral	Community Level
Risks from construction (displacement, labor influx, supply chain)		Policy frameworks for displacement and resettlement; train resettlement teams; gender-sensitive monitoring; independent grievance systems; secure worker housing.	Safe spaces; livelihood restoration; joint titling; community vigilance; one stop center services; social cohesion.
Risks from lack of energy access and poor infrastructure design	Policies to promote equitable energy access in underserved areas.	Smart lighting; GPS-enabled safety tools; energy kiosks; inclusive infrastructure.	Women-led solar farms; collective resource collection; community safety audits.



Table 2 At-a-Glance: Interventions to Prevent and Respond to VAWG Risks in Energy Operations
(Continued)

Risk Type	Policy/Legal	Institutional/Sectoral	Community Level
Risks from energy pricing and affordability challenges	Align energy pricing with gender equality and VAWG prevention.	Affordable energy programs; flexible payment systems.	Awareness campaigns link affordability, stress, and VAWG.
Risks from sexual exploitation for energy access		Digital registration; independent oversight; monitoring committees.	Women technicians; community-based service centers; awareness on entitlements.
Risks in energy workplaces		Implement sexual harassment policies in utilities; train leaders on gender equity and male allyship; design inclusive workplaces; conduct regular staff training; and perform gender audits to address VAWG risks.	
Backlash from women's empowerment via energy access and entrepreneurship	Energy access policies ensuring affordability and autonomy for women.	Empowering distribution models; technology training; user-friendly tools.	Awareness campaigns; male/female champions; community showcases.
Energy transition impacts on gender roles and economic security	Inclusive transition plans; economic diversification policies; just transition frameworks.	Reskilling for both women and men; equitable workforce policies; workplace safety investments.	Mental health support; community job creation; public education on gender roles.
Digital exploitation and online safety		Anti-harassment and data protection policies, secure digital platforms; encrypted systems; financial literacy; audits; incident response.	Training on digital safety; community awareness campaigns; positive digital engagement.

VAWG Risks from Energy Infrastructure construction (displacement, labor influx, supply chain)

Institutional and sectoral level

- **Gender-responsive resettlement policies:** Develop resettlement frameworks that address the specific vulnerabilities of women and girls, including access to safe housing, livelihood restoration, and community safety.
- **Capacity building:** Train resettlement teams and local government actors on gender-sensitive approaches to mitigate VAWG risks during displacement.



Community level

- **Community safety initiatives:** Incorporate lighting and secure transport facilities in temporary housing and resettlement areas. Create safe spaces and support networks for women and girls in displaced communities.
- **Livelihood restoration programs (including financial literacy and joint titling):** Provide women with skills training and support for alternative livelihoods (see Box 2). Ensure access to financial assistance and land titles for women affected by displacement. Evidence from the World Bank-supported Mozambique - Malawi Regional Interconnector Project (P164354) (2018–25) shows that financial literacy and joint titling training for project-affected couples can reduce intimate partner violence. Joint titling ensures women's names are included on property titles for land or other assets received through compensation, providing collateral for future business ventures. Financial literacy enables women to manage compensation funds effectively, facilitating investments in small enterprises, property acquisition, or income-generating activities. Together, these interventions enhance women's financial security and bargaining power within the household.
- **Secure worksite designs:** Ensure that workers' accommodations are separate from residential communities to reduce contact risks.
- **Community awareness programs:** Conduct awareness campaigns on VAWG, gender equality, and health risks associated with migrant workers. Establish community vigilance groups to address issues of harassment or violence.¹⁰
- **Health and psychosocial support services:** Implement a comprehensive program for migrant workers and communities, including health screenings, awareness sessions, reproductive health services, sexually transmitted infection prevention, and mental health support. Focus on women and vulnerable groups, ensuring access to safe spaces and recovery resources. For example, in Malawi, the World Bank-funded Shire Valley Transformation Program (P158805) (2018–24) revamped the services of an existing one stop center, which was a remarkable resource because a survivor could easily access different services (legal, medical, counseling and security) under one roof. Using the World Bank's ESF as an entry point, the project made it easier and safer for women to report violence not only in the project, but also in the community at large (Thokozani Chayala, Davies Madalitso, and D'Lima 2022).

¹⁰ In World Bank projects, this is carried out as part of broader risk management guidance. Teams should coordinate closely with ESF teams to ensure alignment.



Box 2 *Promising Practices: Interventions to Address VAWG Risks of Displacement and Livelihood Disruption*

In the Lao People's Democratic Republic, hydropower development has been a key driver of economic progress. However, such projects often necessitate the resettlement of communities, leading to social challenges, especially for women and vulnerable groups. To address these issues, the Lao government introduced *Policy Guidelines for Sustainable Hydropower Development* (2015) to provide a framework for hydropower development that is environmentally sustainable and socially inclusive. The guidelines emphasize comprehensive and inclusive resettlement planning to address the social impacts of hydropower projects. Key provisions include the development of a resettlement action plan to ensure displaced communities have access to adequate housing, livelihoods, and services, with a strong focus on gender equality. The guidelines require the inclusion of a gender development plan within the resettlement action plan to address the specific needs of women and vulnerable groups, ensure their participation in decision-making, and promote livelihood restoration. Community consultations, gender-sensitive approaches, and monitoring mechanisms are mandated to ensure equitable outcomes and sustainable improvements in living conditions for all affected individuals.

In Ethiopia, the World Bank-supported Ethiopia Geothermal Sector Development Project (P133613) (2014–23) activities (including land acquisition and construction) faced the risks of disrupting the livelihoods of the affected households, particularly those engaged in agriculture and animal rearing. These disruptions had the potential to exacerbate VAWG and domestic violence, as economic stress and displacement often heighten such risks. In response, the project included a livelihood restoration plan to support project-affected people, with a strong emphasis on gender-sensitive measures. Key actions included providing matching funds for establishing local savings and credit associations for women, supporting irrigation systems with water pumps, offering tailored training programs, distributing livestock, and supplying start-up capital to help households establish or expand businesses. Additionally, the livelihood restoration plan included the development of irrigation projects to enhance agricultural productivity, directly benefiting affected communities. To ensure effective implementation, the plan incorporated robust monitoring and evaluation systems, with both internal and external oversight to address challenges proactively. These measures aim to restore and improve livelihoods, mitigate social risks such as VAWG, and promote sustainable economic growth and better living standards for all affected households.

Building on these successful practices, efforts are underway to replicate and develop sectoral and institutional GBV prevention and response legal frameworks in various projects across the Africa region. Some of these projects include:

- Tanzania-Zambia Transmission Interconnector (P163752) (2018–26)
- Zanzibar Energy Sector Transformation and Access Project (P169561) (2019–27)



- Kenya Green and Resilient Expansion of Energy Program (P176698) (2022–28)
- Power Sector Reform, Investment and Modernization in Ethiopia (PRIME-1) (P176731) (2023–24)

Additionally, the Women in Energy Network – Africa (WEN-Africa) initiative encourages its partners to engage in activities to create institutional frameworks to prevent and respond to GBV under its Pillar 4, which focuses on institutional policy.

Although these sectoral and institutional legal frameworks are adopted under Bank-financed projects, they become integral parts of the energy sector system and are expected to remain in place even beyond the project timeframe. The sustainability of such systems in the energy sector is crucial for creating an inclusive workplace environment that helps bridge the gender gap.

Sources: Lao People's Democratic Republic 2015; World Bank 2023.

Note: See <https://collaboration.worldbank.org/content/sites/collaboration-for-development/en/groups/wen-africa.html>.

VAWG Risks from Lack of Energy Access and poor infrastructure design

Institutional and sectoral level

- **Electrification:** Provide financing schemes and cost-savings energy efficiency solutions to make electricity and household appliances accessible for women in underserved areas. Support programs to distribute energy-efficient lighting and cooking technologies that reduce women's reliance on unsafe or labor-intensive methods. Prioritize policies that ensure equitable access to modern energy services in underserved and rural areas.
- **Reliable street lighting:** Deploy renewable energy solutions such as solar-powered streetlights in remote or poorly serviced areas. Maintain backup power systems for critical public infrastructure to ensure functionality during outages. Leverage smart technologies like solar-powered lights with motion sensors or closed-circuit television camera integration.



- **Energy alternatives to address VAWG risks associated with resource collection:** Distribute clean energy solutions such as solar stoves, mini-grids, and energy-efficient cookstoves to reduce dependence on firewood collection (see Box 3). Programs providing alternative energy to vulnerable households can integrate empowerment training on personal agency and economic independence and can challenge harmful gender norms, while also engaging male partners to promote supportive behaviors and reduce intimate partner violence. A study in Rwanda's Kigeme refugee camp found that combining clean cookstove distribution with empowerment training and male engagement reduced nonpartner violence and strengthened women's economic agency, while showing promise in addressing intimate partner violence among those previously affected (Kalra, Habumugisha, and Shankar 2024).
- **Introduce technology-enabled safety solutions:** Explore the use of technology, such as GPS-enabled safety alerts, to improve security for women who must collect resources in isolated areas (see Box 4).

Box 3 *Promising Practices: Reducing Fuel and Firewood Collection*

Various organizations have introduced energy access solutions in humanitarian settings to reduce VAWG risks linked to fuel and firewood collection. These interventions improve safety and well-being by offering safer, more efficient alternatives for women and girls in vulnerable contexts.

- *Firewood provision:* In Dadaab, Kenya, a United Nations High Commissioner for Refugees and Deutsche Gesellschaft für Internationale Zusammenarbeit initiative provided firewood to refugees, significantly reducing the frequency of collection trips and, consequently, leading to fewer cases of violence against women during these activities. This example highlights how addressing fuel needs can enhance women's safety and well-being.
- *Fuel-efficient cookstoves:* In refugee camps in Darfur (Sudan) and Kakuma (Kenya), fuel-efficient cookstoves were distributed to reduce the need for frequent trips to collect firewood.
- *Alternative fuel provision:* In Cox's Bazar (Bangladesh) and Dadaab (Kenya), programs provided alternative fuels, such as compressed biomass briquettes and solar cookers, to displaced populations, decreasing women's reliance on firewood collection and enhancing safety. Similarly, in countries like South Sudan and Ethiopia, the World Food Programme (WFP) implemented the Safe Access to Fuel and Energy (SAFE) Initiative as part of emergency responses, aiming to reduce VAWG risks by ensuring that women and girls have safe access to fuel and energy. These programs address both protection and livelihood concerns.

Sources: Gerrard and Myers 2016; Global Alliance for Clean Cookstoves 2016; Women's Refugee Commission 2020; WFP 2019.



Box 4 *Promising Practices: Technology-Enabled Safety Solutions*

SafeBoda Safety Features for Resource Collection (Uganda) is a mobile app-based motorcycle taxi service in Uganda that integrates GPS-enabled safety alerts and tracking features to enhance the safety of women traveling to collect resources in remote areas. By providing real-time tracking and emergency alert functions, the app offers a secure transportation option for women. Key features include:

- *GPS tracking:* Rides are tracked in real-time, allowing users to share their location with trusted contacts.
- *Emergency button:* Women can activate a safety alert that notifies the SafeBoda support team and designated emergency contacts.
- *Driver vetting:* All drivers are background-checked and trained in customer safety and gender sensitivity.
- *Local accessibility:* Affordable ride fares and widespread availability make it a practical solution for rural and peri-urban women.

Impact: Women using the app report feeling safer during resource collection trips and have reduced their exposure to risks associated with isolation in remote areas. The success of SafeBoda demonstrates how technology can improve security and accessibility for vulnerable groups.

Source: Nesbitt-Ahmed and Fraser 2017.

Community level

- **Community-led safety audits:** Involve women in identifying unsafe public spaces and in planning street lighting and public utility improvements. Collaborate with law enforcement, NGOs, and local communities to enhance patrols and surveillance in poorly lit areas.
- **Safe resource collection practices:** Organize community-led collection groups to reduce the risks of isolation. Partner with local authorities to monitor resource collection routes and provide patrols in high-risk areas.
- **Infrastructure for resource collection:** Establish energy kiosks or centralized resource hubs in villages, reducing the need for long-distance travel. Equip resource collection routes with adequate lighting and emergency call stations.
- **Community-based energy initiatives:** Promote small-scale, renewable energy programs such as community solar farms and biogas systems. Establish local energy committees with a strong representation of women to oversee energy distribution and resource collection alternatives.



VAWG Risks from Energy Pricing and Affordability Challenges

Policy level

- **Policy integration:** Align energy pricing policies with national strategies for gender equality and VAWG prevention. For example, policymakers can identify overlaps and gaps where energy pricing policies could integrate gender-sensitive measures (for example, cost-reducing energy efficiency solutions, tiered tariffs, or targeted social safety nets) and push for amendments to energy pricing policies that account for gendered economic vulnerabilities.

Institutional and sectoral level

- **Gender-sensitive and affordable energy access programs.** Develop gender-sensitive energy access initiatives that integrate subsidized energy options and affordable safety nets. These programs should prioritize women's energy needs by providing flexible payment models (for example, pay-as-you-go systems) and community-based solutions, such as capped tariffs and prepaid systems. The aim is to enhance affordability, reduce economic vulnerability, and eliminate reliance on transactional relationships for energy services, thereby addressing VAWG risks linked to energy pricing and accessibility.

Community level

- **Awareness and norms-change campaigns:** Implement public awareness initiatives that go beyond information-sharing to include community dialogue, male engagement, and role model approaches aimed at shifting harmful social norms related to violence. Highlight the links between economic stress, energy affordability, and domestic violence, while promoting knowledge of available support services.

VAWG Risks from Sexual Exploitation for Energy Access

Institutional and sectoral level

- **Governance and ethical standards:** Establish clear governance frameworks defining roles, responsibilities, and ethical standards in energy practices. Provide anti-corruption and anti-exploitation training to staff and contractors. *Note: This is also key to managing SEA/SH risks at the project level.*
- **Zero-tolerance policies and codes of conduct:** Implement and enforce zero-tolerance policies explicitly prohibiting exploitative practices, with clear consequences for violations. Require all contractors and intermediaries to sign codes of conduct aligned with these standards. *Note: This is also key to managing SEA/SH risks at the project level.*



- **Independent oversight and monitoring:** Create independent monitoring committees with representatives from women’s organizations and community groups to oversee program activities. Conduct regular audits of processes such as registration, distribution, and maintenance to detect and prevent exploitation.
- **Centralized system:** Implement centralized beneficiary selection systems (for example, using social registries) to significantly reduce the risk of SEA/SH (see Box 5). These systems limit the influence of individual project actors over the selection process (Botea, et al. 2021).
- **Transparent registration and distribution processes:** Implement digital registration systems with unique beneficiary IDs to minimize the involvement of intermediaries and reduce opportunities for exploitation. Use community-based distribution models that ensure equal and fair access to subsidies and equipment (Botea, et al. 2021).

Box 5 *Promising Practices: Implementing Robust Digital Registration Systems*

The United States Department of Energy’s Clean Energy Connector, formerly known as the Low-Income Clean Energy Connector, is a software tool designed to simplify the enrollment of income-verified households into community solar programs. By integrating with existing assistance programs, the tool assigns unique identifiers to participants, reducing administrative burdens and ensuring accurate targeting of beneficiaries. The Clean Energy Connector primarily serves recipients of the Low-Income Home Energy Assistance Program (LIHEAP)—a program under the Department of Health and Human Services that helps eligible low-income households manage home energy costs. Expanding community solar access to all LIHEAP recipients has the potential to enable gigawatts of new community solar capacity, significantly increase clean energy access for low-income households, and generate billions of dollars in energy savings.

Source: US Department of Energy n.d.

Community level

- **Capacity building for local authorities:** Train local officials and program staff to recognize and prevent VAWG and exploitation. Ensure gender-sensitive programming through regular workshops and engagement with local communities.
- **Decentralized maintenance support:** Train local women as technicians to handle equipment maintenance, reducing reliance on external contractors who may exploit beneficiaries. Establish local women-managed service centers to provide ongoing support and equipment repairs.



- **Community-based awareness programs:** In coordination with risk management practices around community engagement, raise awareness about mechanisms in place to protect against exploitation through community outreach and education campaigns. Empower women to recognize and resist exploitative practices by providing clear information about program procedures and entitlements.
- **Safe travel and safe spaces:** Programs should prioritize the proximity of activities to women's homes to minimize travel distances and encourage group travel to reduce the risk of opportunistic harassment or assault (Botea, et al. 2021). Activities should also be scheduled at safe travel times, avoiding dark hours to mitigate safety risks. Additionally, creating safe spaces at work sites is crucial, ensuring they are not isolated and include safe, sex-segregated sanitary facilities for women, with regular monitoring and enforcement of codes of conduct to maintain safety and dignity. Establishing safe service delivery points is equally important, as these spaces can provide opportunities for women to disclose VAWG experiences and access support. Training staff to recognize and respond to VAWG cases, while recruiting women as service providers, fosters a more supportive environment, as women experiencing VAWG are more likely to report incidents to female providers.

VAWG Risks in Energy Workplaces

Institutional and sectoral level

- **Gender diversity policies:** Establish policies to actively recruit, retain, and promote women in construction and technical roles. Set gender diversity targets for the workforce and hold contractors accountable for meeting them (World Bank 2017). Provide scholarships, apprenticeships, and mentorship programs for women pursuing technical careers in the energy sector. Collaborate with educational institutions to create pipelines for women entering the workforce.
- **Codes of conduct:** Encourage sector-wide implementation of codes of conduct to require all staff and contractors across energy projects to sign and adhere to a code of conduct that explicitly prohibits VAWG, harassment, and discrimination (World Bank 2022; USAID 2015). Enforce clear consequences for violations and provide regular monitoring of adherence.¹¹
- **Grievance mechanisms:** Create accessible, confidential, and gender-sensitive systems for reporting harassment and VAWG incidents at the utility or institutional level. Ensure grievance mechanisms are independent of the workplace hierarchy to prevent retaliation. Establish an independent, on-site ombudsperson to address harassment complaints, mediate conflicts, and ensure accountability.
- **Safe and inclusive workspaces:** Design workplace environments to include gender-sensitive infrastructure, such as separate facilities for women, lactation rooms, and well-lit areas (Schomer and Hammond 2020). Prioritize infrastructure investments to create gender-inclusive project sites, such as separate changing rooms, restrooms, and well-lit pathways. Ensure housing for workers is safe, with security measures like fencing, surveillance, and designated women-only areas.

¹¹ Codes of conduct for contractors as well as subcontractors are required under the ESF for Bank-supported projects.



- **Leadership training:** Train supervisors and managers on gender equity, VAWG prevention, and appropriate complaint response. Encourage male allies in leadership to champion gender-sensitive workplace practices. For example, in the Electricity Supply Corporation of Malawi (ESCOM) Limited, the introduction of the HeForShe Champion program focusing on male leadership engagement resulted in zero reported sexual harassment cases over a period of three years.¹²
- **Staff training:** Introduce country-level, sector-wide opportunities to conduct regular VAWG prevention and gender sensitivity training for all employees, focusing on creating an inclusive workplace culture. Use posters, workshops, and online campaigns to educate workers on recognizing and preventing harassment. In coordination with risk management teams, require contractors to undergo VAWG prevention training as a condition to participate in the project. Establish incentives for contractors who demonstrate strong adherence to gender-sensitive practices.
- **Gender audits:** Conduct regular gender audits of energy utilities to assess institutional capacities and identify gaps in addressing VAWG risks. Use findings to inform infrastructure investments and policy adjustments.

Box 6 *Promising Practices: Implementing VAWG Prevention and Response Measures in Ethiopia's Energy Utility*

The Ethiopian Electric Utility (EEU) has implemented targeted measures to prevent and address VAWG as part of the World Bank-supported Ethiopia Electrification Program (ELEAP) (P160395) (2018–26). These initiatives aim to create a safer and more equitable workplace, addressing systemic barriers for women in the energy sector. Key VAWG prevention and response measures include:

Policy development and legal frameworks

- **Sexual harassment policy and code of conduct:** Adopted a sexual harassment policy and code of conduct to establish clear guidelines for behavior and accountability.
- **Grievance redress mechanism:** Developed a formal mechanism to report and address instances of sexual harassment and workplace misconduct.

¹² Parliamentary Women's Caucus. 2025. Meeting with ESCOM Officials on Gender Policies and Sexual Harassment Prevention. February 4. Lilongwe, Malawi. Available at: <https://www.facebook.com/ParliamentOfMalawi/videos/4th-february-2025-parliamentary-womens-caucus-meeting-with-escom-officials-on-th/949245600251476>.



Capacity building

- **Training programs:** Delivered training to 282 EEU staff members (129 women, 153 men) to enhance understanding and implementation of VAWG prevention and response measures.
- **Educational materials:** Developed communication materials to raise awareness about VAWG prevention and response within the utility.

Institutional structures

- **Gender Steering Committee (GSC):** Established a GSC chaired by the CEO to provide leadership and accountability for gender and VAWG initiatives.
- **Gender focal points:** Appointed full-time gender focal points across all EEU regions to promote gender equality and handle VAWG-related grievances.

Monitoring and progress

- **Institutional review:** Conducted a comprehensive review to identify gaps and challenges in VAWG prevention and response, informing targeted interventions.
- **Annual reporting:** Instituted annual progress reporting on VAWG-related initiatives, linking funding disbursements to measurable results.

Safer workplace environment

- **Workplace safety measures:** Incorporated VAWG-related key performance indicators into regional CEO performance metrics to ensure sustained focus on prevention and response.

These initiatives demonstrate EEU's commitment to institutionalizing VAWG prevention and response measures, creating a safer and more supportive environment for women employees.

Source: Schomer and Hammond 2020.

VAWG Risks from Backlash Against Women's Empowerment Stemming from Energy Access and Clean Energy Entrepreneurship

It is important to emphasize that the risk of backlash must never be interpreted as a reason to avoid or scale back efforts aimed at women's empowerment. On the contrary, the potential for backlash underscores the critical importance of pairing empowerment initiatives with complementary measures that



anticipate, prevent, and mitigate such risks. Energy projects should continue to promote women's agency, participation, and access to economic opportunities while incorporating safeguards—such as community sensitization, male engagement, grievance mechanisms, and psychosocial support—to ensure women's safety and the long-term sustainability of transformative outcomes.

Institutional and sectoral level

- **Energy distribution models that empower women:** Design energy projects to provide women direct access to technologies and decision-making roles, reducing dependency on male gatekeepers. Ensure affordability and accessibility of modern cost-savings energy-efficient solutions for women through microfinancing (see Box 7).
- **Technology that supports autonomy:** Introduce user-friendly and culturally appropriate energy technologies that enhance women's autonomy without triggering resistance. Provide training for women on how to use and maintain these technologies to build confidence and independence (see Box 8).

Box 7 *Promising Practices: Energy Distribution Models that Empower Women*

Solar Sister (Sub-Saharan Africa). Solar Sister is a women-led initiative that trains and supports women as entrepreneurs to distribute clean energy technologies, such as solar lights and clean cookstoves, in underserved communities. Women are empowered as decision-makers and distributors, reducing dependency on male gatekeepers. Key features of the initiative are:

- Women receive business training and starter kits for energy products.
- Affordable pricing models and microfinancing options enable women and households to access modern energy solutions.
- The program enhances women's income and agency, simultaneously addressing energy poverty and gender inequality.

Barefoot College solar electrification program (India). Barefoot College trains rural women, often grandmothers, to become solar engineers. These women install, maintain, and manage solar energy systems in their communities, ensuring direct access to modern energy technologies and reducing reliance on external actors. Key features of the initiative are:

- Community-led and female-driven energy solutions.
- Subsidized solar kits for affordability.
- Long-term capacity building through technical training for women.



Pay-as-you-go solar models targeting women (East Africa). Pay-as-you-go solar models focus on women's energy needs by offering flexible payment plans for household solar systems. Programs like those by M-KOPA and Fenix International work with women as customers and agents, ensuring access to affordable clean energy. Key features of the initiative are:

- Flexible payment plans tailored to women's financial constraints.
- Empowerment of women as sales agents and community facilitators.
- Focus on affordability and energy independence.

These models integrate affordability, accessibility, and women's leadership in energy distribution, addressing structural barriers and fostering gender equity.

Sources: Baroudy and Soikan 2016; IFC 2020; Allen and Chan 2015; World Economic Forum 2017.

Box 8 *Promising Practices: Clean Energy Technologies That Support Women's Autonomy*

Clean energy initiatives that support women's autonomy minimize backlash by using culturally sensitive, user-friendly designs and involving local input. By training women in use, maintenance, and entrepreneurship, these programs empower them incrementally while aligning with social norms. Their practical benefits, such as reduced labor and improved efficiency, create shared value that fosters household and community acceptance. Some examples include:

Biogas digesters for rural women (Nepal). Community-based programs in Nepal have introduced biogas digesters, which convert organic waste into cooking fuel. These systems reduce women's reliance on traditional fuel sources and their dependency on male family members for energy procurement. Key features of the initiative are:

- User-friendly and culturally appropriate, designed for rural settings.
- Training sessions for women on installation, use, and maintenance of the digesters.
- Encourages autonomy by enabling women to manage household energy needs independently.

Solar-powered water pumps (Sub-Saharan Africa). Programs like the ones run by the United Nations Development Programme install solar-powered water pumps in rural communities, allowing women to access water without walking long distances or depending on male-operated systems. Key features of the initiative are:



- Culturally sensitive, integrating local input in design and deployment.
- Training women to operate and maintain the pumps, ensuring their independence.
- Promoting autonomy by addressing energy and water needs simultaneously.

Clean cookstoves programs (Global). Initiatives such as the Global Alliance for Clean Cookstoves distribute efficient and user-friendly cookstoves tailored to cultural preferences, reducing the time and effort women spend on fuel collection. Key features of the initiative are:

- Simple and intuitive designs that align with local cooking practices.
- Training and workshops for women on proper usage and repair.
- Increased women's control over their cooking methods and time management.

Solar charging kits for women entrepreneurs (East Africa). Programs like Solar Sister provide portable solar charging kits that allow women to charge devices or power small appliances. These kits serve personal and entrepreneurial purposes, fostering autonomy and economic participation. Key features of the initiative are:

- Lightweight and portable, designed for ease of use.
- Women are trained to use, maintain, and even sell these kits.
- Greater confidence in managing energy resources independently.

Sources: My Climate n.d.; Ruobin Liu 2024; Clean Cooking Alliance 2021; Borgen Project 2015.

Community level:

- **Community awareness campaigns:** Launch public campaigns showcasing the positive impacts of women's energy use and entrepreneurship on families and communities. Identify and empower male and female community champions to promote shared decision-making in household energy use. Recognize and reward households that adopt equitable energy practices (see Box 9).
- **Training on energy technologies for women:** Deliver hands-on training programs for women on the safe use, maintenance, and troubleshooting of energy technologies, tailored to local contexts and literacy levels. Partner with technical institutions and NGOs to build women's capacity as energy users and service providers. Promote peer learning and mentorship by linking trainees with experienced female technicians or entrepreneurs.



Box 9 *Promising Practices: Engaging Community Leaders to Empower Women in Energy Decision-Making*

The World Bank-supported Yemen Emergency Electricity Access Project (P163777) (2018–22) aims to expand access to solar energy in rural and peri-urban Yemen, with a focus on empowering women through subsidized microfinance packages. In rural Hadramout, a field consultation highlighted the challenges women face, including limited decision-making power, cultural restrictions, lack of identification documents, and financial barriers that prevent access to electricity. Women and girls often bear the brunt of energy poverty, relying on unsafe fuel alternatives and missing educational opportunities to gather firewood. To address these obstacles, the project collaborates with microfinance institutions to integrate a gender lens, modify eligibility requirements, and incentivize sales to female clients. Community leaders and influencers are engaged to promote women's role in energy decisions, and women's organizations are empowered to connect with microfinance institutions. Despite the challenges of working in a conflict-affected country, the project seeks to improve education, health, and safety outcomes for women and children, contributing to gender equality by connecting rural women to affordable, sustainable energy solutions.

Source: Constant and Maier 2022.

VAWG Risks from Energy Transition Impacts on Gender Roles and Economic Security

Policy level

- **Inclusive energy transition plans:** Develop transition strategies that prioritize the inclusion of marginalized communities, focusing on women's economic opportunities in the green economy (UNOPS, IEA, and Arup 2024; IRENA 2024).
- **Develop social safety nets for transition impact:** Create safety net programs that support those economically affected by energy transitions, especially women who depend on traditional energy sources.
- **Economic diversification policies:** Develop policies to create alternative employment opportunities for men displaced from traditional energy sectors. Promote gender-responsive just transition frameworks that include men and women equally in reskilling and upskilling programs.

Institutional and sectoral level

- **Inclusive reskilling programs:** Design reskilling programs that target both men and women for emerging sectors, emphasizing equal access and participation (International Energy Agency 2022). Provide gender-sensitive training that includes modules on diversity, inclusion, and VAWG prevention.



- **Female entrepreneurship programs:** Provide financial support and mentorship for women entering renewable energy sectors or other nontraditional roles (IFC 2023) (Box 10). Facilitate access to credit and business development opportunities to empower women entrepreneurs.
- **Recognition and visibility for women:** Highlight the contributions of women in renewable energy sectors through awards, media campaigns, and leadership showcases. Share success stories of men and women collaborating in the energy transition to normalize women's participation.
- **Male engagement to address backlash:** To reduce backlash against women entering new job sectors, energy projects should actively promote male engagement strategies. The presence of male gender equality champions—particularly in institutional and sectoral leadership—can help shift entrenched gender norms, challenge stereotypes, and foster inclusive workplace environments. These champions play a critical role in normalizing women's presence in nontraditional roles and in supporting organizational change from within. Integrating male allies into training, outreach, and policy reform efforts helps create a culture of shared responsibility for gender equality across the sector.

Box 10 *Promising Practices: Female Entrepreneurship Programs in Renewable Energy Sectors*

Female entrepreneurship programs in renewable energy empower women with skills, funding, and mentorship to enter nontraditional roles, reduce dependence on abusive partners, and promote safe, gender-equitable energy solutions that help prevent and respond to VAWG.

Notable examples include:

- **ENERGIA's Women's Economic Empowerment Program:** Implemented across countries like Indonesia, Kenya, Nepal, Nigeria, Senegal, Tanzania, and Uganda, this program has supported over 4,500 women in establishing micro and small-scale energy enterprises. It offers customized training in technical, business, and financial skills, along with mentorship, to enhance women's participation in the renewable energy sector.
- **UN Women's Sustainable Energy Entrepreneurship Initiative:** This initiative focuses on improving access to finance for women entrepreneurs by strengthening traditional and innovative financial services, such as direct lending and credit enhancement mechanisms. It also promotes women's productive use of sustainable energy, aiming to empower female entrepreneurs in the energy sector.
- **We-Fi's Climate Action Programs:** The Women Entrepreneurs Finance Initiative (We-Fi) has launched programs to support women entrepreneurs in climate-related sectors. These programs provide financial assistance, business training, and mentorship to help women-led businesses contribute to climate action and the renewable energy transition.

Sources: ENERGIA International Network on Gender and Sustainable Energy 2019; UN Women and UNEP 2015; We-Fi n.d.



Community level

- **Mental health and psychosocial support:** Counseling and mental health services for workers and families affected by job losses should be offered collaboratively by energy ministries, utilities, and ministries of health, with support from labor ministries, local governments, and NGOs. Programs should address the psychological impacts of job displacement, particularly on men, to reduce stress-induced violence and support community well-being.
- **Community-based job creation:** Invest in community-level projects that create employment for displaced workers while involving women in leadership and decision-making roles. Promote social enterprises that encourage collaboration between men and women.
- **Community education and awareness:** Conduct community workshops on the benefits of women's participation in renewable energy sectors for families and economies. Address misconceptions about women's roles and emphasize shared benefits.

VAWG Risks from Digital Exploitation and Online Safety

Institutional and sectoral level

- **Comprehensive policies and mechanisms for digital safety:** Establish clear anti-harassment policies for digital platforms and develop complaint mechanisms with rapid response protocols. Require digital platforms associated with energy projects to adhere to strict anti-exploitation policies and monitor transactions to identify patterns of harassment or abuse.
- **Designing safe and secure digital platforms:** Build mobile apps and digital tools with safety features like blocking, reporting, anonymity options, and secure data storage (USAID 2015). Ensure compliance with international data privacy and security standards, such as the General Data Protection Regulation, and integrate robust data security measures like encryption and secure servers. Use anonymization techniques on digital platforms to protect women's identities, limiting direct client communication and managing sensitive information through intermediaries.
- **Gender-sensitive payment systems and financial empowerment:** Implement digital payment systems that prioritize anonymity and minimize personal data collection. Provide financial literacy training to empower women entrepreneurs and reduce reliance on intermediaries.
- **Digital safety skills and capacity building:** Train women on securely navigating digital platforms, including managing privacy settings, creating secure passwords, and recognizing digital harassment.
- **Independent oversight and rapid response:** Engage third-party auditors to certify data security practices and conduct regular audits of digital platforms and databases to identify vulnerabilities. Establish dedicated incident response teams to address data breaches promptly, provide legal assistance, and create safety plans to protect affected individuals.

Annex 3 provides a list of suggested indicators for the interventions described in this section.



RECOMMENDED RESOURCES

Toolkits and Frameworks

- Bradley, Tamsin, and Katherine Liakos. 2019. *Using Energy Programming to Address Violence Against Women and Girls in Humanitarian Settings*. Washington, DC: Chatham House, Practical Action, NRC, UNHCR, and DFID. [Link](#)
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- World Bank, Inter-American Development Bank, Global Women's Institute at George Washington University and International Center for Research on Women. *Violence Against Women and Girls Resource Guide (includes various Sector Briefs)*. [Link](#)
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- Sievert, M. 2015. Rural Electrification and Domestic Violence in Sub-Saharan Africa, Economic Papers 570. Bochum, Germany: Ruhr University. [Link](#)
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ANNEX 1. SUMMARY OF RESEARCH ON VAWG IN THE CONTEXT OF ENERGY PROJECTS OR SETTINGS

VAWG Link	Context	Key Findings	Sources
Energy Access			
Energy access reduces VAWG	Africa	This quantitative study analyzed survey data across 22 Sub-Saharan African countries, finding that access to electricity is associated with reduced domestic violence. Improved access to information and media played a role in challenging societal norms.	Sievert, M. 2015. Rural Electrification and Domestic Violence in Sub-Saharan Africa, Economic Papers 570. Bochum, Germany: Ruhr University. Link
Energy Access in Humanitarian Settings			
Energy scarcity in displacement settings	Global	The report, using a mixed-methods approach with a literature review, stakeholder consultations, and field data analysis, examines energy access and VAWG in displacement settings in Kenya and Bangladesh. It finds that energy scarcity increases VAWG risks, such as sexual violence during firewood collection and harassment in poorly lit camps. Biomass fuel reliance causes health issues and environmental degradation, escalating tensions with host communities. Income-generating opportunities like solar lantern distribution empower women and reduce VAWG vulnerability.	Chatham House. (2019). <i>Using Energy Programming to Address Violence Against Women and Girls in Humanitarian Settings</i> . Link
Firewood collection risks	Kenya	The report on the Dadaab firewood project, based on field visits, stakeholder interviews, and distribution record analysis, found that providing firewood reduced VAWG risks by minimizing collection outside camp boundaries. It also improved safety, mitigated environmental degradation, and eased host-community tensions, though inconsistent supply occasionally forced risky independent collection.	UNHCR. 2001. Evaluation of the Dadaab Firewood Project, Kenya. Geneva: UNHCR. Link



VAWG Link	Context	Key Findings	Sources
Firewood collection risks	Kenya	The appraisal report on safe access to cooking fuel in Kenya's refugee-hosting areas (Dadaab and Kakuma) and World Food Programme-assisted schools in Nairobi, based on field data and stakeholder consultations, highlights persistent VAWG risks tied to firewood collection. Despite declines since the 1990s due to firewood provision and VAWG awareness, women still collect firewood for household needs, facing risks when distributions deplete, leading to negative coping strategies like survival sex and child labor.	Bizarri M. 2010. Safe Access to Firewood and alternative Energy in Kenya: An Appraisal Report. New York: Women's Commission for Refugee Women and Children. Link
Firewood collection risks, poor lighting	Africa (Sudan, Chad, and Ethiopia), and South Asia (Nepal, Bangladesh)	The report based on case studies in several countries finds increased risks of violence during fuel collection, poorly lit areas, domestic violence from energy scarcity, health issues from biomass use, and resource conflicts.	Parke, A. and Fraser, E. 2015. VAWG and Energy in Camp-based Settings, VAWG Helpdesk Research Report, London. Link
Unsafe cooking fuel and poor lighting	Jordan and Uganda	The report, based on 28 global expert interviews, a literature review, and case studies from Jordan and Uganda with input from 218 stakeholders, highlights how inadequate energy access in emergencies, such as unsafe cooking fuel and lighting, exacerbates VAWG risks for women and girls. It underscores the importance of integrating gender and VAWG considerations into energy programming to address these risks effectively. The report also identifies gaps in tools and methodologies needed to fully operationalize these considerations, emphasizing the need for enhanced frameworks and resources to maximize the impact of energy interventions.	Women's Refugee Commission. 2019. Energy, Gender, and VAWG in Emergencies: Global Learning Report and Case Studies. Link
Portable lighting and VAWG	Haiti	Using mixed methods, including surveys and focus groups, the report evaluates the impact of portable solar lights on VAWG risks in internally displaced persons camps in Haiti. It finds that solar lights provide lighting but do not significantly reduce VAWG risks or perceptions of safety.	Dynes, Michelle, et al. 2014. A Program Evaluation of Handheld Solar Lights Among Displaced Populations in Haiti. International Rescue Committee and US Centers for Disease Control and Prevention. Link



VAWG Link	Context	Key Findings	Sources
Electricity Infrastructure / Energy Transition			
Influx of workers in electricity infrastructure projects	India, Kenya, Nepal, Senegal	This study adopted a mixed-methods approach, including qualitative analyses of various energy projects in India, Kenya, Nepal, and Senegal. It highlights links between electricity infrastructure projects and VAWG, noting increased risks of sexual violence, exploitation, and harassment due to an influx of male workers, community tensions from construction disruptions, and inequitable energy distribution. Domestic violence may also rise as shifting gender roles challenge traditional power dynamics.	World Bank. 2018. <i>Getting to Gender Equality in Energy Infrastructure: Lessons from Electricity Generation, Transmission, and Distribution Projects</i> . Link
Loss of livelihoods, community resettlement	Lao PDR and Viet Nam	The report assessed the gendered impacts of hydropower projects in the Lao People's Democratic Republic and Viet Nam. The assessment found that hydropower projects caused significant livelihood disruptions, including loss of agricultural land, altered water access, and community resettlement. These changes disproportionately affected women, diminishing their economic independence, household status, and food security, while men faced insecure wage labor. Compensation payments often bypassed women, and housing resettlement failed to consider their needs, leading to unsafe living conditions and increased caregiving burdens. Men gained limited formal work opportunities, while women were excluded. These impacts resulted in heightened economic vulnerability for women, escalated household conflict and domestic violence, and women's reduced overall economic and cultural status, underscoring the need for gender-inclusive planning in energy transitions.	Hill, C., Thuy, P.T.N., Storey, J. and Vongphosy, S. 2017. Lessons Learnt from Gender Impact Assessments of Hydropower Projects in Laos and Vietnam. <i>Gender & Development</i> , 25(3), pp. 455–470. Link



ANNEX 2. VAWG RISKS IN ENERGY PROGRAMS AND ENERGY SECTOR REFORMS

The table below outlines the links between three energy sector programmatic areas (Energy Access, Foundational Areas of Energy Systems, and Energy Transition)¹³ and their associated gender and VAWG risks. The **Energy Access** program area focuses on addressing critical energy needs, particularly in Sub-Saharan Africa, by promoting clean, affordable technologies for electricity and cooking, with an emphasis on women and underserved communities. It also supports income-generating activities and sustainable energy access for health and education facilities. The **Foundational Areas of Energy Systems** program area targets decarbonization challenges by modernizing infrastructure, strengthening markets and policies, leveraging digital technologies for decision-making, and advancing equity through job creation and clean energy value chains. The **Energy Transition** program area addresses the shift from fossil fuels to sustainable energy, focusing on scaling renewable energy, improving energy efficiency, and supporting just transitions for coal-dependent economies while tackling financial and policy barriers in low- and middle-income countries.

Key Energy Program Area	VAWG Impacts	Examples	Factors Heightening VAWG Risks
Energy Access			
Energy access for households	Demands for bribes or sexual favors in exchange for access to subsidies or equipment. Exploitation by intermediaries due to lack of grievance mechanisms and oversight.	Women in rural areas being asked for bribes or sexual favors to obtain solar panels or connection to the grid. Local contractors demanding 'extra fees' from women in underserved areas for basic energy installation services.	Lack of oversight and grievance mechanisms; reliance on intermediaries; low literacy levels among women.
Lack of energy access/energy shortages	Limits women's mobility, economic opportunities, and access to education and resources. Exposure to assault during resource collection, higher vulnerability to domestic violence.	Women walking long distances to collect firewood due to lack of electricity, facing safety risks. Girls attacked while collecting firewood in refugee camps or remote regions.	Energy poverty; long travel distances; remote and unsafe regions; limited access to support services.

¹³ These program areas are outlined in ESMAP's Energy Sector Management Assistance Program Business Plan FY2025–2030 (World Bank 2024).



Key Energy Program Area	VAWG Impacts	Examples	Factors Heightening VAWG Risks
Energy access for households and for income generation	Economic empowerment seen as a threat by men, leading to potential backlash and violence. Domestic violence or coercion as women advocate for or adopt modern energy solutions.	Women entrepreneurs using clean energy for businesses facing domestic violence as their income grows. Men restricting women's access to solar cookers due to perceptions of control over household decisions.	Traditional gender norms; unequal power dynamics in households; lack of awareness about VAWG services.
Energy infrastructure investments (grid/off-grid)	Women and girls in remote areas face trafficking and exploitation during infrastructure development. Heightened VAWG risk in temporary housing, hostility in new environments, domestic violence.	Displacement of families for hydroelectric projects increases vulnerability of women to trafficking. Women in temporary camps for displaced populations experiencing harassment by male workers.	Displacement of communities; inadequate safeguards in temporary housing; influx of male workers.
Clean cooking	Efforts to promote energy-efficient solutions empowering women may trigger backlash and domestic violence.	Men resisting women's decisions to adopt clean cookstoves, leading to domestic violence or coercion.	Resistance to shifting gender norms; financial strain; limited awareness; and power imbalances in household decision-making.
Foundational Areas of Energy Systems			
Energy infrastructure investments	Risks of harassment, trafficking, and exploitation in poorly regulated supply chains.	Women in the solar panel supply chain facing forced labor or unsafe working conditions.	Poor labor regulations; absence of worker protections; lack of monitoring in supply chains.
Energy subsidy reform/energy tariffs adjustments	Energy pricing reforms or subsidy adjustments may increase domestic violence in financially stressed households.	Removal of kerosene subsidies forcing households into financial stress, leading to increased domestic violence.	Financial stress; increased household tensions; lack of financial literacy and planning support.
Workplace environment of energy utilities/organizations	Hostile environments for women in male-dominated roles. Sexual harassment and power abuse in predominantly male environment, limited VAWG reporting mechanisms.	Female engineers, technicians in utilities and field offices facing harassment and resistance from male colleagues or community. Lack of complaint mechanisms for women technicians in energy companies leads to unchecked workplace harassment.	Male-dominated workplaces; inadequate anti-harassment policies; limited access to grievance mechanisms.



Key Energy Program Area	VAWG Impacts	Examples	Factors Heightening VAWG Risks
Data-driven and digital technologies to track energy access, optimize grid planning	Online stalking, harassment, and exploitation via insecure digital platforms.	Women users of digital energy access platforms receiving threatening messages or having their data leaked.	Lack of digital safety features; insufficient data privacy regulations; lack of digital literacy among women.
Energy Transition			
Transitioning away from fossil fuel to renewable energy	Job losses in male-dominated fossil fuel sectors may increase social tensions, potentially leading to domestic violence or harassment of women.	Men losing coal mining jobs exhibiting hostility toward women joining clean energy projects.	Economic disruptions; loss of livelihoods for men; cultural resistance to women's participation; unsafe remote work conditions.
Transitioning away from fossil fuel to renewable energy	Women may face barriers to entering green energy sectors and value chains, increasing risks of workplace harassment or discrimination and unsafe working conditions. Women's participation in renewable energy markets may lead to community backlash and harassment due to cultural resistance, a rise in domestic violence against those challenging norms.	Female technicians in solar photovoltaic installations facing harassment or unsafe working conditions in remote locations. Women solar entrepreneurs in patriarchal communities facing threats and restrictions.	Patriarchal societal norms; limited enforcement of workplace protections; lack of gender-sensitive infrastructure; cultural resistance to women's economic empowerment; inadequate policies supporting women's participation; and remote or isolated work environments.



ANNEX 3. MATRIX OF KEY INTERVENTIONS AREAS AND SUGGESTED INDICATORS

The table below presents a set of interventions and corresponding indicators to address VAWG risks in the energy sector. These are organized by key risk areas to support a risk-to-response logic that facilitates actionable planning for different energy sector operations. Interventions are grouped by level—policy, institutional, and community. Each intervention includes both output and outcome indicators intended for integration into project results frameworks to support systematic tracking. While the toolkit aligns with good practices, the interventions and indicators do not automatically fulfill World Bank ‘gender tag’¹⁴ criteria. Task teams should consult with Global Practice and Gender Group specialists to ensure alignment with evolving tagging requirements. The toolkit takes a broader, context-sensitive approach, recognizing that gender tagging frameworks are dynamic, context-dependent, and may not capture all relevant gender-responsive energy interventions.

Intervention Level	Intervention	Key Implementing Agencies and Stakeholders	Associated Indicators
1. VAWG risks from energy infrastructure construction and labor dynamics			
Institutional and sectoral	Develop gender-responsive resettlement policies to address women’s and girls’ vulnerabilities.	Ministry of Energy, Energy Utility Companies, Ministry of Social Welfare, local government bodies	VAWG prevention and response guidelines integrated into resettlement policies (Y/N).
	Train resettlement teams and local authorities on gender-sensitive approaches to mitigate VAWG.	Ministry of Energy, Energy Utility Companies, Ministry of Housing or Urban Development, NGOs and development partners, local government authorities	Number of trained personnel. Number of training sessions conducted.

¹⁴ The World Bank Gender Tag is an internal monitoring tool used to track the integration of gender into World Bank operations. To receive the Gender Tag, a project must identify gender gaps during analysis, propose specific actions to address those gaps, and include indicators to monitor outcomes. It is not a safeguard or funding requirement, but a tool for accountability and results measurement across the project cycle.



Intervention Level	Intervention	Key Implementing Agencies and Stakeholders	Associated Indicators
Community level	Install lighting, secure transport, and create safe spaces in resettlement areas.	Local government authorities, Ministry of Infrastructure	Number of resettlement sites with lighting and secure transport. Number of safe spaces created.
	Provide skills training, financial aid, and land titles to women for livelihood restoration.	Ministry of Energy, Energy Utility Companies, Ministry of Agriculture and Land, local governments, NGOs and development partners	Number / percentage of women receiving training. Number / percentage of women with land titles.
	Rebuild social cohesion through activities that emphasize women's participation.	Ministry of Energy, Energy Utility Companies, local governments, NGOs and development partners	Number of social cohesion activities conducted. Percentage of women participating in community integration programs.
	Raise VAWG and health awareness through campaigns and vigilance groups.	Ministry of Energy, Energy Utility Companies, Ministry of Health, NGOs and development partners	Awareness campaigns conducted (Y/N).
	Provide health screenings, reproductive health services, and mental health support.	Ministry of Health	Number of women and men receiving health screenings and accessing reproductive and mental health services.
2. VAWG risks from lack of energy access and poor infrastructure design			
Institutional and sectoral	Provide microfinancing and cost-savings energy-efficient solutions to improve women's access to electricity.	Ministry of Energy, microfinance institutions, donor organizations	Number and percent of women-headed households receiving microfinancing. Percentage increase in energy-efficient appliance adoption.
	Install renewable streetlights and backup systems for key infrastructure in underserved areas.	Ministry of Infrastructure, local councils, energy companies	Number of streets with functional lighting. Percentage decrease in reported incidents in previously unlit areas.
	Distribute clean energy solutions like solar cookstoves and other solutions or productive use appliances; encourage last-mile delivery.	Ministry of Energy, NGOs, private sector, microfinance institutions	Number of households using distributed clean energy solutions. Percentage reduction in firewood dependency.
	Use GPS-enabled safety technology for resource collection in isolated areas.	NGOs, tech companies, Ministry of Energy	Number of women using GPS-enabled tools. Percentage of users reporting increased sense of safety during resource collection.



Intervention Level	Intervention	Key Implementing Agencies and Stakeholders	Associated Indicators
Community-level	Conduct safety audits with women to identify unsafe spaces and improve street lighting and utilities.	Local government authorities (that is, municipalities), NGOs and development partners	Safety audit conducted/unsafe areas identified and addressed (Y/N). Percent increase in women reporting safer public spaces.
	Create community-led resource collection groups with monitored routes and patrols.	Community organizations, Ministry of Social Welfare, NGOs	Number of community-led resource collection groups. Percentage reduction in incidents reported during resource collection.
	Set up energy kiosks or hubs to reduce travel for resources; improve lighting and install call stations.	Ministry of Energy, private sector, local councils/local government authorities	Number of operational kiosks. Decrease in travel time for resource collection. Number of call stations installed.
	Establish community solar farms and energy programs with women-led committees.	Ministry of Energy, local councils/local government authorities	Number of women-led energy committees. Percentage increase in households served by renewable energy programs.
3. VAWG risks from energy pricing and affordability challenges			
Policy-level	Align energy pricing policies with gender equality and VAWG prevention strategies.	Ministry of Energy	Energy policies with gender-sensitive provisions (Y/N).
Institutional and sectoral	Develop affordable, gender-sensitive energy programs with flexible payment models.	Ministry of Energy, energy utility companies, financial institutions	Number and percent of women benefiting from subsidized energy programs.
Community-level	Conduct awareness campaigns to link economic stress, energy affordability, and domestic violence.	Ministry of Energy, Ministry of Women's Affairs, development partners	Number of campaigns conducted; percent increase in community awareness of energy-related VAWG risks.
4. VAWG risks from sexual exploitation for energy access			
Institutional and sectoral	Establish governance frameworks and train staff on anti-exploitation standards.	Ministry of Energy, energy utility companies, NGOs, development partners	Number of staff and contractors trained on anti-exploitation standards. Presence of governance framework (Y/N).
	Enforce zero-tolerance policies and mandatory codes of conduct for contractors.	Ministry of Energy, private contractors, energy utility companies	Number and percent of contractors with signed codes of conduct. Number of violations reported and addressed.



Intervention Level	Intervention	Key Implementing Agencies and Stakeholders	Associated Indicators
	Create independent monitoring committees to oversee registration and distribution processes.	Ministry of Energy, civil society organizations, development partners	Independent monitoring committees created (Y/N).
	Implement digital systems for transparent registration with unique IDs to prevent exploitation.	Ministry of Energy, IT service providers, energy utility companies	Number and percent of beneficiaries registered via digital systems.
	Establish grievance mechanisms for confidential reporting and redress.	Ministry of Energy, NGOs, local governments	Establishment of grievances redress mechanism (Y/N). Percentage of women satisfied with grievance redress system.
Community-level	Train local authorities on VAWG prevention and gender-sensitive programming.	Local governments, NGOs	Number of local officials trained; number of workshops conducted.
	Conduct community awareness campaigns to educate women on rights and entitlements.	NGOs, community-based organizations, media outlets	Number of campaigns conducted.
	Train local women as technicians and establish women-led service centers for maintenance support.	NGOs, Ministry of Energy, vocational training centers	Number of women trained as technicians.
5. VAWG risks in male-dominated energy workplaces			
Institutional and sectoral	Establish gender diversity policies with workforce targets and accountability.	HR departments of energy companies	Percentage of women in technical and leadership roles. Presence of gender diversity policy (Y/N).
	Implement codes of conduct prohibiting VAWG and harassment with clear penalties.	HR departments of energy companies	Number and percent of staff/contractors signing codes. Number of reported violations resolved.
	Create confidential, gender-sensitive grievance mechanisms for VAWG reporting.	HR departments of energy companies	Grievances redress mechanism established (Y/N).
	Design safe, inclusive workplaces with gender-sensitive infrastructure.	HR departments of energy companies	Number of facilities with separate amenities for women. Percent of workers feeling safe in the workplace.
	Train leadership on gender equity and VAWG prevention and encourage male allies.	HR departments of energy companies	Number of leaders trained. Percentage of trained leaders implementing gender-sensitive practices.



Intervention Level	Intervention	Key Implementing Agencies and Stakeholders	Associated Indicators
	Conduct regular VAWG prevention and gender sensitivity training for employees.	HR departments of energy companies	Number and percentage of employees trained annually. Number of training sessions conducted.
	Perform gender audits to identify and address gaps in VAWG risk management.	HR departments of energy companies, development partners	Gender audits completed (Y/N). Audit recommendations implemented (Y/N).
6. VAWG risks from backlash against women's empowerment in energy access and entrepreneurship			
Institutional and sectoral	Develop energy distribution models providing women direct access to technology.	Ministry of Energy, energy utility companies, NGOs	Number and percentage of women receiving direct access to energy technologies or microfinancing.
	Ensure affordability and accessibility of modern energy solutions for women.	Ministry of Energy, energy utility companies	Number and percentage of women benefiting from affordable energy solutions. Number of targeted subsidy programs implemented.
	Introduce culturally appropriate energy technologies supporting women's autonomy.	Ministry of Energy, development partners	Percentage of women reporting satisfaction with provided technologies. Number of training sessions conducted.
Community	Launch awareness campaigns highlighting benefits of women's energy use and entrepreneurship.	Ministry of Energy, media outlets, NGOs, development partners	Awareness campaigns conducted (Y/N). Percentage of community members reporting improved perception of women's roles.
	Provide training for women on use and maintenance of energy technologies.	Ministry of Energy, vocational training centers, NGOs	Number and percentage of trained women using or maintaining technologies. Number of training programs delivered annually.
7. VAWG risks from energy transition impacts on gender roles and economic security			
Policy level	Develop inclusive transition plans prioritizing women's economic opportunities in the green economy.	Ministry of Energy, Ministry of Finance, development partners	Energy transition plans with gender inclusion provisions (Y/N).
	Create safety nets for those economically impacted by transitions, with a focus on women.	Ministry of Finance, Ministry of Social Protection, NGOs	Safety net programs implemented (Y/N). Number and percentage of women beneficiaries in safety net programs.



Intervention Level	Intervention	Key Implementing Agencies and Stakeholders	Associated Indicators
	Develop policies for economic diversification and gender-responsive just transition frameworks.	Ministry of Energy, Ministry of Labor, NGOs	Gender-responsive transition policies developed (Y/N). Number and percentage of reskilled women in transition programs.
Institutional and sectoral	Design reskilling programs targeting both genders with gender-sensitive training on diversity, inclusion, and VAWG prevention.	Vocational training centers, development partners, NGOs	Number of men and women completing reskilling programs. Percentage of reskilled women employed in emerging sectors.
	Provide financial support and mentorship for women in renewable energy sectors.	Ministry of Women's Affairs, financial institutions, NGOs, development partners	Number of women receiving financial support and mentorship. Number of businesses owned by women in energy sectors.
	Recognize and promote women's contributions through media campaigns and leadership showcases.	NGOs, media outlets, Ministry of Women's Affairs	Number of campaigns and showcases conducted.
	Engage male champions in training, outreach, and leadership to reduce backlash and promote gender equality in nontraditional energy roles.	Implementing agency with energy companies and gender-focused NGOs.	Number of male champions trained and engaged in gender equality initiatives.
Community level	Conduct campaigns redefining masculinity and promoting men's supportive roles during transitions.	Ministry of Women's Affairs, NGOs, media outlets	Communication campaigns developed and conducted (Y/N).
	Offer counseling and mental health services to displaced workers and families, with targeted support for men.	Ministry of Health, NGOs, community-based organizations	Number of counseling sessions conducted. Percentage reduction in reported stress-related violence.
	Invest in community projects creating employment for displaced workers, with women in leadership roles.	Ministry of Energy, NGOs, local governments	Number of community projects implemented. Percentage of leadership roles held by women in projects.
	Conduct workshops highlighting the benefits of women's participation in renewable energy sectors.	NGOs, training institutes, Ministry of Energy, Ministry of Women's Affairs	Number of workshops conducted. Percentage change in community attitudes measured through surveys.
8. VAWG risks from digital exploitation and online safety			
Institutional and sectoral	Establish anti-harassment policies and develop rapid response complaint mechanisms.	Energy utility companies, digital platform providers	Number of policies adopted. Percentage of complaints addressed within a set timeframe.



Intervention Level	Intervention	Key Implementing Agencies and Stakeholders	Associated Indicators
	Require digital platforms to adhere to anti-exploitation regulations and monitor interactions.	Energy utility companies, digital platform providers	Number of platforms audited. Instances of policy noncompliance identified and rectified.
	Build platforms with privacy features like blocking, anonymity, and secure data storage.	Energy utility companies, digital platform providers	Percentage of platforms with implemented privacy features. User satisfaction with safety features.
	Implement secure and gender-sensitive payment systems and provide financial literacy training.	Energy utility companies, digital platform providers	Number of women trained in digital financial literacy. Reduction in cases of data misuse in payment systems.
	Anonymize customer interactions and encrypt databases to protect personal information.	Energy utility companies, digital platform providers	Number of anonymization measures implemented. Frequency of reported data breaches.
	Train women on digital safety skills, including password management and harassment recognition.	Energy utility companies, digital platform providers, local NGOs	Number of women trained. Improvement in digital safety confidence measured via surveys.
	Conduct independent audits of platforms to certify data security practices.	Energy utility companies, digital platform providers	Number of audits conducted annually. Compliance rate with data security standards.
	Establish incident response teams to address data breaches and provide legal and safety support.	Energy utility companies, digital platform providers	Number of response teams established. Average time taken to resolve data breaches.
Community Level	Conduct awareness campaigns on digital harassment and positive online behaviors.	Energy utility companies, digital platform providers, local NGOs.	Number of campaigns conducted. Percentage change in community awareness measured through pre- and post-surveys.

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