

Integrating Gender Considerations into Energy Operations





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ACRONYMS AND ABBREVIATIONS

AFREA	Africa Renewable Energy and Access Program
BTORs	Back to Office Reports
CAS	Country Assessment Strategy
DPO	Development Policy Operation
ESMAP	Energy Sector Management Assistance Program
EI	Extractive Industries
GAP	Gender Action Plan
HH	Household
ICR	Implementation Completion Report
LED	Light Emitting Diode
ESCOs	Energy Service Companies
M&E	Monitoring and Evaluation
MDG	Millennium Development Goal
NGO	Non-governmental Organization
PDO	Project Development Objective
PROGEDE	Second Sustainable and Participatory Energy Management Project
PSIA	Poverty and Social Impact Analysis
RAP	Resettlement Action Plan
REAs	Rural Energy Agencies
SDP	Social Development Plan
SDV	Social Development
STD	Sexually Transmitted Disease
TOR	Terms of Reference
TTL	Task Team Leader
UNDP	United Nations Development Program
WB	World Bank
WDR	World Development Report



1 | GENDER MAINSTREAMING IN WORLD BANK OPERATIONS

As highlighted in the World Development Report (WDR) 2012, gender equality is critical in order to fully realize the potential development impacts of World Bank programs across all sectors. Towards this goal, the World Bank has scaled up gender mainstreaming as a corporate priority, with a particular focus on the WDR's framework focusing on:

- 1 | *Endowments* | Key inequalities related to education, health and/or physical assets;
- 2 | *Economic Opportunities* | Inequalities related to jobs, land, agricultural, technology or markets; and
- 3 | *Agency* | Ability to make choices and take action to achieve desired outcomes, including voice in decision making.

Box 1.1 | Energy Multiplier—The Impact of Gender and Energy on the MDGs

Since women and their dependent children make up the majority of those living in poverty, energy initiatives that increase income-generating opportunities for women can be important factors in reducing hunger and poverty levels (MDG1), and can enhance women's social and political status—thereby promoting the empowerment of women (MDG3). When women have access to adequate fuel, water supplies, and money for school fees, their children are more likely to attend school, especially the girls, who will not be kept home to help their overburdened mothers (MDG2). Having money for food and the fuel and equipment needed for processing and cooking also promotes better health for women and their families (MDG4, 5, and 6), and reduces pressures on forests and other ecosystems vulnerable to depletion (MDG7).

Source | UNDP 2008.

In the energy sector, the gender dimensions of access to services, access to benefits, and exposure to risks and benefits, are being increasingly recognized as important elements to be considered for effective policy making and project design. In practice, this translates into integrating a gender perspective throughout the operational cycle to improve gender equity in project participation, benefits and opportunities. *The objective of this briefing note is to provide World Bank energy task teams a brief overview of the key issues, resources and tools to help integrate gender considerations into energy sector operations.*

This briefing note discusses the key elements of the “gender in energy” topic and provides specific examples on “how to” integrate gender considerations in energy policy dialogue and the project cycle. This note draws on recent experience within the World Bank and elsewhere in mainstreaming gender in energy projects. It aims to consolidate this knowledge and make it available to energy practitioners addressing gender aspects of energy projects. This note is complemented by a compendium of online resources to provide energy teams with basic tools, such as sample questionnaires, Terms of Reference, and screening guidance, as well as reference material on gender and energy. These resources have been developed by drawing on the experience of ESMAP's Africa Renewable Energy and Access (AFREA) gender and energy program, where gender considerations have been integrated into five energy operations in Senegal, Mali, Benin, Tanzania and Kenya. Section 3 of this note and the ESMAP/AFREA online resources are organized around the three key areas the World Bank considers essential parts of a gender-informed project: assessment, actions, and monitoring and evaluation. The resources are available on ESMAP's website (www.esmap.org) and will be updated on an on-going basis. Box 1.2—Resources on Gender and Energy—lists some current resources available on-line, in addition to the ESMAP compendium.

Box 1.2 | Resources on Gender and Energy

Key Analytical Reports

- [Steps to Strides: Sustainable Development Network's Companion to the World Development Report](#)
- [World Bank: Energy, Gender and Development – What are the Linkages? Where is the Evidence?](#)

Tools - Sample Terms of Reference, Surveys, Rapid Reviews, Data and Guidance Notes

- [ESMAP: Gender and Energy Online Resources](#)
- [World Bank-wide Data, Consultant Roster and Guidance Notes on Gender Mainstreaming](#)
- [UNDP: Gender & Energy for Sustainable Development: A Toolkit & Resource Guide](#)
- [Asian Development Bank: Gender and Energy Toolkit: Going Beyond the Meter](#)



2 | UNDERSTANDING THE GENDER AND ENERGY CONTEXT

Many countries conduct national household surveys aimed at understanding poverty, social, and economic issues. National-level gender assessments, gender policy and gender action plans, where they exist, may provide the context and framework for developing gender-focused activities in the energy sector. National-level gender activities are good vehicles for forming linkages between those responsible for national surveys and national gender assessments, and entities specifically concerned with gender in the energy sector. Such linkages can help ensure that data-gathering for the broader efforts also provides useful information for understanding the gender-energy linkages. Assessing and addressing social aspects of energy projects and energy policy operations is now common practice, providing a good entry point to introduce a gender focus. Explicitly incorporating a gender focus within work targeting social safeguards and the social development of a specific energy intervention can be an efficient approach to generating data needed to understand and address the gender dimensions of an energy sector intervention.

Box 2.1 | Definition of Key Terms

“Gender” is not another word for “women” Gender refers to the culturally based expectations of the roles and behaviors of males and females. The term distinguishes the socially-constructed from the biologically-determined aspects of being male and female. It is about women and men, their socially constructed roles, socially learned behaviors, and expectations of being male and female, and the responsibilities, the power and other relations between them.

Gender equality refers to equality under the law, equality of opportunity (rewards for work, equality of access to human capital, and other productive resources), and equality of voice (ability to influence and contribute to the development process).

Empowerment refers to change in relationships among individuals and groups. Empowerment is a process of enhancing an individual's or group's capacity to make strategic choices and transform those choices into desired actions and outcomes. This involves improving their assets and their capabilities so they can become agents of positive social change on their own behalf.

Social inclusion refers to the development of inclusive institutions, policies, social norms, and behaviors that provide an opportunity for previously marginalized groups to increase their voice and access to assets.

Source | The World Bank, 2010.

GENDER-ENERGY INTERACTIONS

Women and men have different roles, responsibilities and voice within households, markets, and their communities. This leads to differences in their access and use of energy, and the impact of energy services on their lives. Some of the main areas of gender-energy interactions are the following:

Consultations

Impacts and access to benefits of energy projects may be different for men and women. Ensuring that both men and women are included in consultations on interventions in the energy sector is essential. When organizing community consultations it is important to ensure both women and men are able to attend and actively participate in the consultation, taking into consideration that women may need special arrangements to facilitate physical access (e.g., due to childcare, transportation, or interference with domestic duties) and possibly dedicated women-only consultations if social/cultural norms discourage women from speaking openly with men.

Health, Safety and Quality of Life

In many developing countries, women and girls are responsible for most of the household cooking, which often puts them at greater risk of the negative impacts of cooking with solid fuels in poorly ventilated stoves and kitchens. The high reliance of households in Sub-Saharan Africa and South Asia on woodfuels and charcoal for cooking is a major health hazard. Indoor air pollution from incomplete combustion in inefficient cooking and heating stoves contributes to poor health outcomes among women and girls, including ailments such as cataracts—the leading cause of blindness in developing countries. The World Health Organization estimates that

about 2 million people die prematurely every year from exposure to smoke from traditional cookstoves and open fires; this is about twice the number of people who die every year from malaria. Where women and girls are responsible for gathering cooking fuel, they are vulnerable to gender-based violence during fuel collection and transport. Use of more efficient stoves reduces the amount of fuel needed per meal, reducing the drudgery associated with fuel collection (World Bank, 2011). Access to electricity in health centers facilitates improved care during child birth. Street-lighting contributes to a safer environment for traveling after dark, potentially opening up opportunities for women who otherwise may not have been able to undertake activities outside the house after dark. Large infrastructure often brings temporary workers into an area, which has been linked to the spread of HIV/AIDS and sexually transmitted diseases (Ekouevi and Tuntivate, 2012). These potential issues are already usually considered in social assessments, or through discussions with women's groups and trained experts.

Income generation and opportunity

Better access to electricity in households and in communities opens new, and often distinct, opportunities for women and men to generate income. New energy investments may also offer new employment opportunities. The type of opportunities for men and women will differ in many situations. In many developing countries, women may not automatically be considered, or qualified, for the types of new jobs associated with an energy investment. In the mining industry, for instance, when women were trained in non-traditional roles, such as truck driving and operating heavy equipment in countries like Chile, Ghana and Papua New Guinea, mining companies found that women tended to operate heavy mining equipment more efficiently and with lower operating costs than men. Women's effectiveness in managing finances has also been demonstrated. In a rural water and sanitation project in Nepal, for example, nearly three-quarters of the treasurers for the water users groups were women. A rural roads project in Peru reported that women treasurers were viewed as more transparent than men with regard to record-keeping and negotiating payments. In a water and sanitation project in Peru, women played an important role in managing water users associations and safekeeping collected money to cover water-system operating costs (World Bank, 2010). In the energy sector, as in these other related sectors, incorporating approaches to ensure women have the same opportunity as men to benefit from new employment opportunities can reduce disparities in opportunity for income generation.

Resettlement

In addition to creating jobs and other benefits, large infrastructure projects often result in resettlement and compensation. There may be a gender disparity in terms of who is involved and has voice within the consultations. When individuals or communities are resettled, the livelihood and income generation losses and new opportunities may differ between men and women. Understanding the lost and potential new opportunities for both men and women is important in designing a successful resettlement plan. Taking gender differences into account in the consultation process, and the design and implementation of resettlement and compensation plans, is essential for a successful resettlement process.

Household expenditures on energy services

Energy sector interventions that impact household expenditure on energy services include reforms or other actions that raise electricity tariffs and activities aimed at improving energy efficiency, which has the potential to reduce household's expenditures on energy for a given level of service. The change in household energy expenditures will impact men and women differently due to their roles in household decision making and use of disposable income after paying for energy services.

Table 2.1 shows categories of energy sector interventions and some possible actions that could be considered in each type of project category. Box 2.2 provides some examples of how gender has been integrated into specific projects.

Table 2.1 | Examples of Options for Getting Started and the Value Added of Integrating Gender

Project Type	WHAT Options for Action/Monitoring	WHY Value Added
Clean and Improved Cooking	Focus program design on the needs of women and girls who often have the responsibility for cooking.	Reduced incidence of adverse health impacts associated with traditional cooking methods; reduced time and effort to gather fuel for inefficient stoves may allow women and girls to participate in more productive activities.
Rural Electrification	Targeted financing mechanisms for female-headed households which may lack collateral/credit to pay for connection fees.	Attention to barriers specific to female-headed households can increase overall connection rate.
Energy Efficiency/Demand Management	Targeted information and training activities for women. As managers of the household (HH), women are often in a good position to monitor and manage electricity use within the HH.	Better HH demand management, less HH expense from excessive consumption, fewer disconnections.
Distribution Projects (loss reduction, consumer connections)	Women may spend more time in HH and can be impacted to a greater degree by reduced or improved HH service levels. Female-headed HHs may need targeted assistance for financing connections.	Increase overall connection rate. Women can be key partners in monitoring illegal connections to help lower losses.
Large Infrastructure	During resettlement/right-of-way payments consider dual spouse land titles and women's use of lands for informal livelihood.	Contributes to restoring livelihoods and income-generating opportunities for both men and women.
Energy Policy/Power Sector Reform	Explicitly look at gender impacts in Poverty Social and Impacts Analysis for DPOs.	Mitigating impact on the most vulnerable.
Tariffs/Demand	In demand and willingness to pay studies, collect data from both the male and female heads in a HH.	Female and male preferences on duration, time and value of electricity use may differ. For example women may be more likely to use electricity in the HH during the day and in some countries women are the ones paying the bill.

Note: Further details and examples can be found in Annex 1.

REALITY ON THE GROUND | BARRIERS AND ENTRY POINTS IN ENERGY PROJECTS

Barriers to gender mainstreaming include cultural and social norms that may exclude women from political, social and economic opportunities. The cultural and social context should be factored into the assessment of gender issues so that recommended actions are sensitive to the reality within countries and cultures. Lack of institutional capacity to address gender disparities is another common barrier. Identification of weaknesses and solutions should be considered at an early stage of project design to support successful implementation. Frequently, lack of gender-disaggregated data or analysis hinders efforts to recognize the need for, and design of specific gender-focused interventions. For example, large-scale expansion of the electrical grid without support for household connections may bypass the poorest households, often female-headed, who do not have the financial resources to connect or make electricity payments (see Box 2.2, Lao PDR). Addressing these barriers and gaps requires participation and outreach across a range of stakeholders including governments, utilities, financial institutions, technology manufacturers, distributors, consumer marketing programs, consumers and potential beneficiaries.

In many developing countries, women or female-headed households are disproportionately represented in poor or vulnerable sections of society, while frequently opportunities for women's participation in or influence on decision-making are more limited than for men. Lacking time for productive activities or time poverty has been increasingly recognized as a dimension of poverty, especially amongst women and the associated drudgery of their tasks (Blackden and Wodon, 2006). In the past, energy sector policy and planning often did not take into account the reality that energy sector decisions and implementation can differently impact men and women. This is now changing.

A possible hierarchy for consideration of gender aspects of interventions in the energy sector can be grouped into the following three categories.

1. Do No Harm | Ensure the design will not lead to unintended negative gender impacts as a result of the energy project.

For example:

- If women are not fully consulted in the design of a resettlement program, resources specific to women's livelihoods may not be given sufficient priority, which could lead to an unintended negative impact for women.
- If female-headed households are disproportionately represented among the poorest and most vulnerable electricity consumers, an energy sector reform intervention that leads to electricity tariff increases could disproportionately impact women.

2. Achieve the Project Objective | Ensure the design incorporates any gender-specific elements that are necessary to achieve the Project Development Objective.

For example:

- Projects focusing on increasing adoption of clean cookstoves should ensure the users, often predominantly women, are consulted during the design and dissemination of the improved technology.
- An energy efficiency program targeting appliances typically used by women may need to include a micro-financing facility for women if they do not have the collateral to access credit.

3. Seek Opportunities to Improve Gender Equity | Incorporate design features that capitalize on opportunities to reduce gender disparities and improve overall development outcomes.

The first two considerations above are mandatory for project success, whereas this third consideration depends to a large extent on client demand and readiness, and can produce important co-benefits for the project.

For example:

- Including quotas and targets for women within new job markets and developing training for these skills may improve gender equity. In Mali, for example, accounting functions within the energy project created jobs for rural women.
- Creating dual-title land deeds may include and protect women's access and voice to assets and land-use, such as the case in Lao PDR's Nam Theun 2 Hydropower project.

Box 2.2 | Examples of Integrating Gender in Energy Operations

- **LAO PDR | The Rural Electrification project** during its mid-term assessment survey revealed that 20-40% percent of rural households, nearly half composed of female headed households were not connected due to up-front connection costs. The program provided subsidies targeted to the poor, with gender sensitive design/consultation and eligibility criteria. Connection rate among female headed household from 67% to 95%, the program proved cost effective and is being scaled up nationally.
- **HAITI | The Energy Infrastructure and Access project** included dedicated consultations with women and with the Ministry in charge of Women's Affairs as part of the social and environmental analysis, and on specific issues of electricity grid and off-grid extension and rehabilitation, and public lighting.
- **BANGLADESH | The Rural Electrification and Renewable Energy Development project** focuses on increased access in poor rural areas. It included analysis of the likely impact on women's security, income generation opportunities and knowledge via access to modern media (radio, television). The project includes indicators for measuring outcomes for women and girls, such as the number of hours that girls study at night, access to news by women, improved reproductive health and increased HIV/AIDS information and awareness.
- **SENEGAL | The Second Sustainable and Participatory Energy Management project** conducted an analysis of a closing project which found that women were largely excluded from the fuel-wood and charcoal value chain, investment and capacity development opportunities, and decision-making in village committees. Findings led to gender dimension being integrated into the PDO and project design with targeted activities and investments for women, and indicators related to participation, income and beneficiaries.
- **DOMINICAN REPUBLIC | Electricity Sector Rehabilitation project** demonstrated how women can be instrumental in monitoring illegal connections. It also showed that women benefit from improved hours of electricity service in the home. Electricity reduces the time for household chores, freeing up time and facilitating options for engaging in more productive activities. The project demonstrated that engaging women on demand management can be a good approach to improving cost recovery levels, and in reducing debt accumulation by households. In rehabilitation areas where social compacts were signed with committees (mostly composed of women), electricity cost recovery rates have increased.

- **UZBEKISTAN | Power Sector Talimarjan Transmission Project** produced analysis showing that women, the main users of electricity at home, were disproportionately affected by power outages due to the disruption of household chores, lack of refrigeration leading to more frequent trips to the market to purchase food each day. It also showed that women who do not work outside their homes were cut off from electronic media, local and international news and information. This analysis informed the resettlement action plan which included compensation with specific consideration for women's and men's requirements.
- **INDONESIA | Renewable Energy Upper Cisokan Pumped Storage Hydro-Electrical Power Project** analysis found that an influx of workers would likely increase public health risks for both the construction workers and the local population. Relocating households would also potentially have health impacts during the relocation process. A gender strategy was prepared and included in the Land Acquisition and Resettlement Action Plan (LARAP) to ensure both women and men participate fully in consultations and negotiations, have access to grievance redress, and share benefits of employment and replacement assets. Spouses will countersign documents for replacement asset purchase and for cash compensation and support will be provided to women to ensure access to training, credit and business development services.
- **LAO PDR | NamTeun 2 Hydropower Project: Gender in Resettlement.** Gender considerations were mainstreamed into the project's Social Development Plan (SDP) and Resettlement Action Plans (RAPs), which are legally enforced. The power company hired gender specialists to support and work closely with local government agencies led by Lao Women's Union to ensure the effective implementation of gender sensitive SDP and RAPs and to facilitate women participation in all stages of the project cycle. Gender-disaggregated data was obtained through surveys and socioeconomic monitoring to identify project impacts on both male and female resettlers and other groups of project affected people. Key actions and results included land titles for resettlers were issued jointly to husband and wife and all compensation payments have to be handed over jointly to husband and wife. For downstream livelihood programs, when it became clear that some vulnerable households (often elderly widows) were unable to take advantage of the more labor intensive opportunities, new livelihoods were added, such as raising chickens and making handicrafts. Women are active in the management of Village Income Restoration Fund for the downstream program and other income generating groups.

Source | The World Bank.

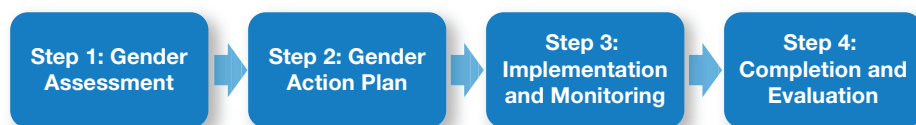


3 | PRACTICAL APPROACHES TO INTEGRATING GENDER INTO ENERGY OPERATIONS

National gender assessments, gender policy and gender action plans are typically the responsibility of a central ministry or an entity with a cross-sectoral mandate within the government. From the World Bank side, the dialogue and support on overall gender considerations is usually part of the engagement with the government in the areas of human development, social development or poverty reduction and economic management. Data and analysis developed as part of the overall national approach to addressing gender issues are important inputs in developing baseline indicators and targeting sector-specific efforts. National, cross-cutting gender assessment, policy and planning provide the context and framework for more focused assessments and actions directly related to a proposed energy sector intervention. The steps discussed below focus on understanding and addressing gender aspects of energy sector interventions. The energy-specific gender assessment draws on, but does not replace, a broader economy-wide national gender assessment. A gender action plan developed in the context of a specific energy sector intervention should be consistent with the overall national gender action plan and considered an integral part of achieving the broader national gender goals.

Figure 3.1 shows basic steps on how to integrate gender considerations into energy sector activities. Figure 3.2 provides various project cycle entry points where these actions can be considered. The annexes provide some examples of topics for gender assessments, actions and M&E indicators and a project checklist. More detailed resources can be found online (www.ESMAP.org).

Figure 3.1 | How to integrate Gender into World Bank Operations



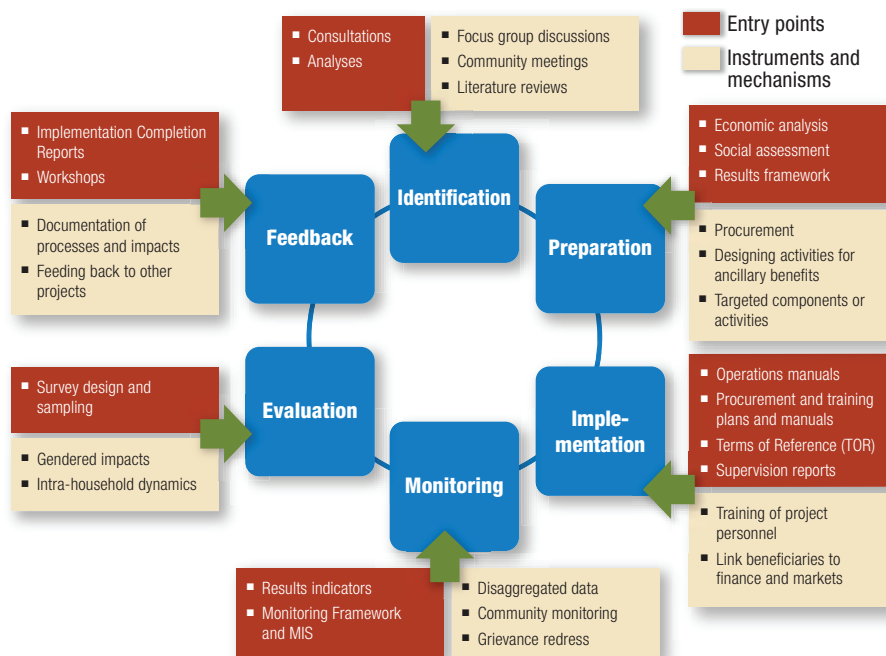
STEP 1: GENDER ASSESSMENT

The aim of a gender assessment is to identify key gender issues, risks, constraints and opportunities associated with a proposed energy sector initiative. A gender assessment is a key input to the development of a gender action plan that will inform the design of activities and M&E framework.

Data-gathering and analysis of the following subtopics may be included in a gender assessment, though the scope of any particular assessment should be tailored to fit the specific situation:

- The environment in which the proposed energy intervention will take place: energy policies and other policies impacting energy sector activities; energy sector responsibilities and mechanisms for decision-making;
- Stakeholders in the energy-in-gender space, generally, and more specifically for the proposed intervention;
- Institutional capacity of institutions that would be important for gender-related decision-making and implementation associated with the proposed energy intervention;
- Other programs and initiatives already engaged in this area; and
- Implications of the above analyses with respect to the proposed energy sector intervention.

Figure 3.2 | Project Level Entry-Points for Gender Mainstreaming through World Bank Instruments and Mechanisms



Source | Steps to Strides, The World Bank 2012.

The first activity in a Gender Assessment is usually a screening overview to determine whether more detailed work is needed. The screening would typically involve a desk review, brief surveys and analysis of available data. In structuring the screening activity, it may be helpful to use the three categories described above (possible unintended negative impacts, critical considerations for achieving the project development objective (PDO), opportunities for reducing gender disparities) as a screening framework. If the assessment identifies significant gender-based risks, constraints, or opportunities, further gender analysis may be undertaken, including more detailed discussions with the government and key stakeholders, during the project preparation phase as the basis for developing gender-related design features.

The gender assessment can either be a stand-alone analysis or can be integrated into ongoing project survey/data collection. For example, sources of information useful for the gender assessment that are commonly available without dedicated data gathering include energy access and end-use data (e.g., from utilities and household surveys); energy policy, legal and regulatory frameworks and budgets; policies and laws outside the energy sector but impacting energy sector activities (e.g., in the areas of industry, labor, land ownership, etc.); and household survey information for poverty assessments, social assessments in other sectors, and household energy surveys related to other energy sector projects. Depending on the information available from existing sources, the gender assessment may require more targeted data gathering through specific surveys, consultations and focus group discussions with men and women.

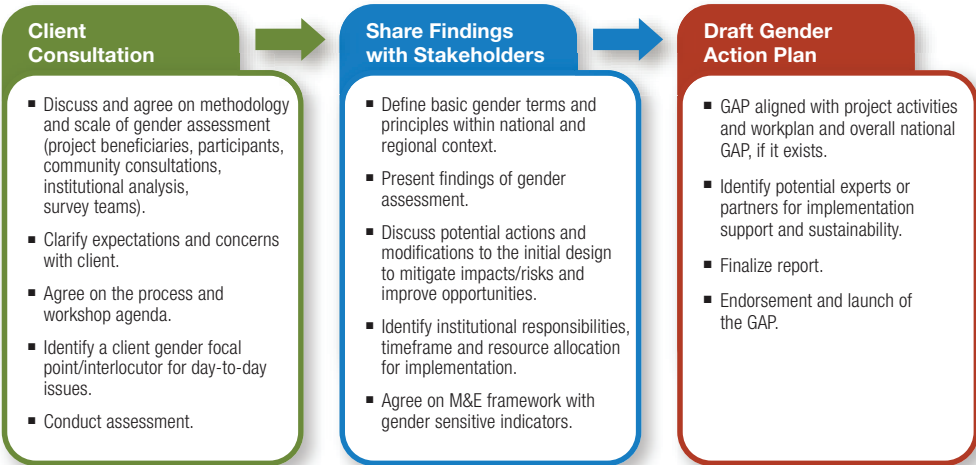
Working closely with the client on all stages of the gender assessment—definition of the scope and methodology, expected outcomes, workshops and participation—is a critical element of the process to build ownership of the assessment results and subsequent gender-related actions.

STEP 2: GENDER ACTION PLAN

Findings of the gender assessment should inform the overall project design (see Figure 3.3). The Gender Action Plan (GAP) sets out a framework to implement the recommendations of the gender assessment. Development of a GAP should include discussion of the implications of the gender assessment for the overall project design, which may lead to adjustments in the project design. The GAP may define specific activities to be included in the project scope. The GAP also sets out milestones and performance indicators through a M&E framework. In many cases the GAP has elements of both institutional capacity building and actions targeted at potentially project affected people and beneficiaries. As shown in Annex 2, some of the key actions are in the area of project management and supervision planning.

It is important that the GAP should not be seen as a stand-alone document. The GAP should be consistent with an overall national gender action plan, if this is in place. The steps included in the GAP must be integrated into project design, appraisal and implementation plans.

Figure 3.3 | Steps in Moving from Assessment to a Gender Action Plan



STEP 3: IMPLEMENTATION AND MONITORING

As appropriate to the country cultural and social context, strengthening implementation support can be done by developing partnerships with women's groups, building capacity—including through on-the-job learning—for the gender focal points and project staff and, where necessary, identifying additional expertise to support the project implementation team. Clients may want to assign or train a dedicated gender expert. It is important that an individual on the WB project team has clear responsibility for supervising and supporting the implementation of the GAP, in line with the agreed M&E framework. Adequate funding for supervision, implementation support, and monitoring is also important. Progress, lessons learned and intermediate results

can be documented through standard project documents, such as back-to-office reports (BTORs), aide memoires, project implementation progress reports prepared by the client, and knowledge exchange. During mid-term reviews, documenting gender-based outcomes has led to improving project implementation. This was the case in Lao PDR with a specific fund established for female-headed households to help with initial payments for grid connection after the mid-term review revealed a disparity in the ability to connect (see Box 2.2).

STEP 4: COMPLETION AND EVALUATION

The initial gender assessment conducted prior to the gender action plan provides a baseline for the impact evaluation. The Implementation Completion Report (ICR) should include analysis of the gender-related outcomes and impacts. The lessons of gender mainstreaming should be integrated into other energy operations within the country and should feed into ongoing dialogue with the government and utilities. A good example of this is in Senegal where the findings of a gender assessment of an energy and forestry project were integrated into the design of the follow-up project, the Second Sustainable and Participatory Energy Management Project (PROGEDE II, see Box 2.2). PROGEDE II included gender equity in the project development objective, with a focus on women's employment and inclusion in the energy value chain. In PROGEDE II, the gender-related activities are assigned to a core team member supporting the integration of the gender aspects into the regular project implementation and dialogue. The work in Senegal highlights how findings from completion and evaluation assessments can continuously feed into the design, M&E and action on the ground for ongoing and future operations.

ANNEX 1 | EXAMPLES OF ASSESSMENTS, ACTIONS, AND M&E IN THE ENERGY SECTOR

Gender Assessment Issues	Gender Actions	Gender M&E
HOUSEHOLD ENERGY: COOKING AND HEATING		
<ul style="list-style-type: none"> Health issues associated with indoor air pollution from traditional cooking methods; Opportunity/Economic cost of using traditional fuels including health impacts and time value; Safety issues associated with open fires for cooking; Women have primary responsibility for domestic (“care”) tasks in the household, including child care, cooking, fuel, and water provisioning; Women and men have different decision-making roles/purchasing powers which affects the ability to choose and purchase improved cooking technologies; Women’s ability to attend trainings/ cooking demonstrations for improved stoves due to childcare, long distances, and domestic responsibilities; Lack of access to finance or other constraints (such as social norms, etc.) may make it difficult for women to participate in non-traditional income-generating activities; Rural households more affected by the lack of affordability and supply of household fuels and technologies. 	<ul style="list-style-type: none"> Inclusive community participation and consultations with women’s groups; Target women and men separately, possibly using different approaches, in consumer campaigns and user feedback for improved cookstove markets; Provide financing mechanism for adoption of cleaner cooking technologies and fuels, possibly targeted at women; Energy efficient stoves designed in consultation with women and women’s groups; Raising men’s awareness of the multiple benefits of energy efficient stoves; Increasing women’s security while collecting fuelwood; Plan for biomass/bioenergy-based operations that could support production and generate cash for farmers (e.g., biofuel production from oil seeds, farm/fish waste, biogas, etc.). Consider opportunities/barriers for both women and men; Support the inclusion of women in decision-making positions of organizations in charge of forest management, biomass charcoal and wood fire production/collection, conditioning, transportation and retailing. 	<ul style="list-style-type: none"> Reduced male/female time required for gathering fuel wood/replacing LPG; Increased male/female income with increased time and opportunity for employment, productivity; Increased female participation in household and community energy decision-making; Fuel used by men/women for cooking/heating; Increased up-take of clean cooking solutions; Reduction in male/female poverty.
SMALL SCALE POWER GENERATION: OFF-GRID/MINI-GRID		
<ul style="list-style-type: none"> Evaluate approach of selling to women—significant decision making market segment; Gather lessons from successful improved household energy technology sales/adoption; Assess market outreach and financial services for gender balance and potential banking alternatives (mobile banking, women’s funds/group lending). 	<ul style="list-style-type: none"> Off grid power (LED battery operated lights, multifunction platforms) business can be led by women or women’s groups; Consider preparation of installations for productive uses other than lighting only; Support distribution chain through micro and pico PV solar solutions microcredit/finance with opportunities for women and men. 	<ul style="list-style-type: none"> Improved social services (for men and women) due to availability of electricity; Number of micro and small enterprises developed by both women and men.

SMALL SCALE POWER GENERATION: OFF-GRID/MINI-GRID (cont.)

- Target providing power to key "social" infrastructures (e.g., water distribution, public lighting, training & health centers);
- In off grid locations, include women in the training in maintenance and development of energy services;
- Targeting women's needs and concerns in developing and accessing off-grid options and distribution networks.

ACCESS TO ELECTRICITY

- Female-headed households may represent a majority of poor households with inadequate resources or sources of collateral to pay for initial connection costs and the purchase of appliances (fridges, sewing machines, etc.) that can be used for income generation;
- Electricity can increase economic opportunities by lengthening opening times for activities and businesses in which women are involved;
- Powering social services, such as clinics and public lighting to improve maternal health, and safety allowing women to participate in activities outside the home after dark;
- Access to electricity facilitates provision of drinking water, agricultural uses and can reduce the time spent fetching water;
- Understanding intra-household decisions-making can lead to more effective ways of stimulating demand for appliance use;
- Availability and reliability of electricity can affect women and men differently—black outs when preparing a meal; or doing domestic chores, child care.
- Raising women's awareness of rights, entitlements and opportunities;
- Encourage establishment of decentralized energy service companies with consideration of energy service needs of women and men;
- Targeted financing mechanisms for poor households and energy services provision; removing women's barriers to credit;
- Targeted consultation with women groups, and women head of households during the roll out of local grids.
- Increase in use of energy-related appliances and time savings;
- Expanded food production for consumption and sale;
- Increases in girl/boy school attendance and higher levels of education attained;
- Increased productive use of electricity;
- Number of nighttime births benefiting from improved lighting and improved outcomes for childbirth at night.

RENEWABLE ENERGY

- Women traditionally have less access to information about new forms of energy;
- Information and training on energy technologies usually targeted to males;
- Due to traditional land tenure practices, most women lack collateral for loans to form enterprises;
- Skill training and credit to facilitate establishment of women's businesses (e.g., biogas production and PV distribution enterprises);
- Include women in training and staffing of renewable energy projects.
- Number of men/women adopting renewable energy technologies;
- Number of male/female-owned new renewable energy enterprises;
- Increased male/female income from renewable energy enterprise;

Gender Assessment Issues	Gender Actions	Gender M&E
RENEWABLE ENERGY (cont.)		
<ul style="list-style-type: none"> ■ Women are main supplier and users of biomass energy; ■ Evaluate risks, opportunities and access to new renewable energy technologies for women vs. men. 		<ul style="list-style-type: none"> ■ Reduced use of biomass energy; ■ Reduced time collecting fuel wood.
ENERGY EFFICIENCY		
<ul style="list-style-type: none"> ■ Lack of awareness prevents women and men from adopting new energy saving technology and efficiency options; ■ Women and men have different access to finance for improved technology options; ■ Men and women have different roles in decision making from purchasing power to end user adoption; ■ Access to more energy efficient equipment can improve incomes from productive activities and reduce household expenditure on energy bills. 	<ul style="list-style-type: none"> ■ Media campaign targeting different user groups including women; ■ Mobilization of women's groups and social compacts to promote consumer energy efficiency awareness; ■ School programs and fairs on energy efficiency; ■ Include women in household level training for energy efficiency; ■ Train women trainers that take the lead in energy efficiency measures/sensitization campaigns as women are often the main users of energy in a household; ■ Financing mechanisms for appliances and lighting needed in schools, health post, social centers and water delivery services; ■ Include social development and gender related actors/authorities into the planning of campaigns; ■ Promote engagement of utilities with communities, including specifically women, in demand-side management programs. 	<ul style="list-style-type: none"> ■ Increase female/male awareness of energy technology and efficiency options; ■ Percentage of women/men adopting energy-saving technologies; ■ Increased ability of the poor to upgrade to energy efficient appliances.
LARGE SCALE ENERGY INFRASTRUCTURE: GENERATION AND DISTRIBUTION		
<ul style="list-style-type: none"> ■ Displacement, resettlement, livelihood loss, job creation and benefit sharing triggered by large infrastructure can be unequal between men and women; ■ Titles to homestead, affordability, communication with male and female consumers; ■ Influx of migrant workers can stimulate economy but can carry risk of infectious diseases and loss of resources; ■ Grid extension without support to include connections of rural household along the way can be a source of social problems; 	<ul style="list-style-type: none"> ■ Include/monitor gender dimension in environmental and social safeguards preparation and implementation; ■ Train women in jobs related to construction and operation to improve local income generation related to large infrastructure; ■ Ensure that the resettlement process includes women in consultations and assessment of affected persons, husband and wife compensation, training on alternative livelihoods; ■ Programs to provide share of profits to poor displaced by the project; 	<ul style="list-style-type: none"> ■ Number of displaced women and men trained, compensated or established in alternative livelihoods after construction of large infrastructure; ■ Increase in connection for female and male-headed households;

LARGE SCALE ENERGY INFRASTRUCTURE: GENERATION AND DISTRIBUTION (cont.)

- Men tend to make up a higher proportion of the workforce in energy and therefore are more exposed to hazards associated with work in energy-related sectors (in nuclear plants, coal/chemical handling, and live electrical wires).
- Awareness campaigns of the risk of human trafficking and HIV/AIDS and STDs.
- Percent of men and women who are aware of the risk and mitigation measures related to human trafficking and HIV/AIDS and STD in the project areas.

GENERAL ENERGY POLICY: POWER SECTOR REFORM

- Employment opportunities and labor markets are gender-segmented, due to low levels of education, skills, access to resources and control over assets, legal status and property rights;
- Consultation work to support governments and utilities generally uses gender-neutral terms, such as "households," which "hide" impact and social outcomes;
- Need for demonstrating the added value to energy projects through gender integration;
- Market intelligence and data collection can collect gender-disaggregated information with minimum costs
- Interface with poverty reduction and national gender strategies;
- Need for specific knowledge products to fill up gaps in areas of the energy practice that are not necessary considered as prone to mainstream gender (e.g., impact of power shortages on women);
- Women's voice often missing from policy dialogue.
- TORs can include activities (e.g., assessments, studies, consultations and compensation plans) in ongoing operations to include a gender analysis;
- For new projects check that Social Assessments, such as the Poverty and Social Impact Assessments (PSIA) include a gender analysis;
- Set gender quotas to increase women's employment and participation in decisions making activities;
- Address gender issues explicitly in national electrification policy; and support the inclusion of energy components in the national gender policy;
- Promote working examples of the intersection between gender, energy and poverty policies;
- Training, grants, small business development, loans for electrical connection and renewable energy/energy efficiency equipment, compensation for displacement or loss of livelihood);
- Personnel strategies including hiring, promotion and access to training could include measures to increase women's contribution to policy making and to ensure women's access to opportunities in non-traditional fields.
- Impact of interventions on women's workload, time use, access and control of income, decision making, etc.;
- Number of women in jobs, memberships in market management committees, and vendor spaces in markets;
- Number of male/female-headed households supported with lifeline tariffs or other mechanisms to assist the poor and vulnerable when energy price rises.

Gender Assessment Issues	Gender Actions	Gender M&E
TARIFFS AND PRICING		
<ul style="list-style-type: none"> ■ Need to evaluate the impact on vulnerable sectors/groups due to change of tariffs or introduction of reforms; ■ Lifeline tariffs and/or specific tariff for different areas may impact access for different groups in the population, particularly since women are over-represented amongst the chronically poor; ■ Need to understand the dynamic of access to and control over intra-household energy budgets to propose business models that can help reduce poverty; ■ Women treasurers may be viewed as more transparent than men with regard to record keeping and negotiating payments. 	<ul style="list-style-type: none"> ■ Financing mechanisms to enable the poor to pay connection fees or adoption of efficient appliances. (Explore cost opportunities and cost neutral approaches for HH); ■ Pay as you go models and smart meters progressive tariffs can be linked to poor households that are selected using gender sensitive analysis; ■ Waive import duties for renewable energy products to remove barriers for women and men to access new technologies; ■ Explore alternative methods for payment (e.g., cash/in-kind, remote payment for husband/relatives living in the cities); ■ Special tariffs for social services, such as health clinics, women's workshops, alphabetization centers; ■ Use women groups and solidary associations as way to collect household fees, reduce fraud and/or ensure maintenance of equipment. 	<ul style="list-style-type: none"> ■ Number/percentage of women and men involved in energy policy dialogue; ■ Number/percentage of women and men on "utility" boards; ■ Number of male/female headed households that received financing for electricity connection.

Project Preparation

- ✓ Consult with social/gender expert on project objective, components and scope to identify potential gender-specific activities and if relevant, include expert on team with specific tasks on gender issues.
- ✓ Gender/social aspects should be included in the Project Appraisal Document (PAD) and results framework could target female beneficiaries or sex-disaggregate data when possible. Develop clear targets/indicators to track progress.
- ✓ Social Safeguard—social safeguards aspects, including resettlement and ethnic minorities, should be considered for female and male specific impacts, differences or benefits.
- ✓ Poverty and Social Impact Analysis (PSIA)—if a project is conducting a PSIA, TOR should specifically include an assessment of gender needs, roles within the project and PSIA action plan should indicate any activities to address these difference or opportunities for specific benefits to women or men.
- ✓ During consultation with various stakeholders groups, consider reaching out to the social/ women's ministry, women's organizations and other social groups; ensure beneficiary and civil society consultations include a balance of women and men by arranging meetings that consider various needs, such as childcare or domestic tasks that interfere with attendance, or specifically arrange women-only consultation groups.
- ✓ Consider preparing a template for a gender assessment that is specific to the energy project needs.
- ✓ Engage with energy clients to identify gender focal point who will act as day-to-day client counterpart.
- ✓ Identify national and regional experts who will be able to support the Bank and government during implementation; may be useful to find expert with skill set based in energy sector with experience in social/gender issues to ensure recommendations are relevant to the often technical and specific nature of energy sector.
- ✓ Review key literature and operational documents (e.g., Implementation Completion Report, ICR and Country Assessment Strategy, CAS) and the Country Level Gender Assessment to learn about national gender assessment and plans, better understand country and cultural context.

Implementation

- ✓ Conduct gender awareness training for Bank and Recipients—bring in experiences from other countries and successful programs.
- ✓ Pilot interventions and monitor impacts—e.g., target female-headed households or consumers and compare results overtime with a control group; provide training on new technologies to women's groups; and involve women and men in maintenance of rural electricity infrastructure.
- ✓ Include reporting on gender targets and activities in the regular project implementation reports.

Supervision

- ✓ Document progress and challenges on gender mainstreaming in aide memoires and BTORs.
- ✓ Where feasible, integrate gender into TORs, procurement and contracts of works for the project.
- ✓ Include social/gender expert from Bank and Recipient in key supervision and client meetings so that they have the opportunity to understand the full project scope.
- ✓ Conduct field visits to interview and survey both men and women in communities impacted by the project.

Completion

- ✓ Gender mainstreaming in energy operations is a learning-by-doing process. Teams have piloted/adjusted interventions during the project cycle. Aide memoires and workshops have documented lessons learned. ICRs should highlight these experiences and results so that other teams can learn from shortcomings and success.

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