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Preliminary Findings Report on *Gender-Inclusive Approaches in Private Participation in Infrastructure*

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About the GIF

The Global Infrastructure Facility, a G20 initiative, has the overarching goals of increasing private investment in sustainable infrastructure across emerging markets and developing economies and improving services that contribute to poverty reduction and equitable growth aligned with the Sustainable Development Goals (SDGs). The GIF provides funding and hands-on technical support to client governments and multilateral development bank partners to build pipelines of bankable sustainable infrastructure. The GIF enables collective action among a wide range of partners—including donors, development finance institutions, and governments, together with inputs of private sector investors and financiers—to leverage both resources and knowledge to find solutions to sustainable infrastructure financing challenges.

About PPIAF

PPIAF helps developing-country governments strengthen policy, regulations, and institutions that enable sustainable infrastructure with private sector participation. As part of these efforts, PPIAF promotes knowledge-transfer by capturing lessons while funding research and tools; builds capacity to scale infrastructure delivery; and assists subnational entities in accessing financing without sovereign guarantees. Donor-supported and housed within the World Bank, PPIAF's work helps generate hundreds of millions in infrastructure investment. While many initiatives focus on structuring and financing infrastructure projects with private participation, PPIAF sets the stage to make this possible.

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Executive Summary

Infrastructure in emerging markets and developing economies (EMDEs) connects markets to services and economic opportunities. While the importance of increased investments in infrastructure is well-understood, it is crucial to ensure the benefits from these investments are equitable and informed by an understanding of gender impacts to effectively contribute to inclusive growth. Yet the business case for integrating gender considerations throughout the infrastructure project lifecycle—from the earliest stages through to tendering and delivery—remains nascent, particularly for private investors looking to direct their investments into infrastructure.

It is within this context that the Global Infrastructure Facility (GIF) and Public-Private Infrastructure Advisory Facility (PPIAF), housed within the World Bank, embarked on a survey to better analyze perceptions of private financial firms regarding the integration of gender issues and the inclusion and empowerment of women and girls in the infrastructure projects in which they invest—assessing where opportunities lie in closing gender-related project gaps in infrastructure and aligning private sector investment decision making around gender inclusion. Arranged as semi-structured interviews conducted with private investors and lenders that invest in or finance infrastructure projects in EMDEs, the surveys provided insight into: level of gender awareness of investors and lenders; gender considerations during investment decision making processes; and gender integration during the project cycle. Key findings that surfaced during these interviews include:

- **Key finding #1:** Private investors and lenders' awareness of the linkage between gender and infrastructure is often informed by the role they themselves play in infrastructure projects.

- **Key finding #2:** Investors and lenders do not have their own consistent standards to screen for social (and gendered) impact during investment decision making. Instead, they typically rely on national laws and policies to provide the framework for environmental and social compliance. In the absence of these frameworks they face challenges.

- **Key finding #3:** The absence of standards among private investors and lenders for vetting investments for their potential gendered impact is exacerbated by their limited understanding about why and how inclusion of women and girls may affect financial performance and long-term value of investments.

- **Key finding #4:** Many respondents had a limited understanding of why and how gender matters to the success of investments in infrastructure and its performance as a social asset.

- **Key finding #5:** Limited involvement of investors and lenders in the project cycle, along with constraints imposed by competitive procurement, limit their influence to create and implement plans for inclusion of women and girls. There are, however, opportunities to mitigate these constraints.

- **Key finding #6:** While some active investors have social and gender equality plans and on-site capacity to implement them, they have faced cultural challenges in doing so.

The survey's principal findings have led to various recommendations for mainstreaming gender in infrastructure investment—by maximizing the understanding of the linkages between infrastructure development and the barriers women and girls face, as compared to men and boys. The following

recommendations have been specifically tailored for key stakeholders participating in the infrastructure project lifecycle in EMDEs, such as governments, multilateral development banks/development finance institutions (MDBs/DFIs), and private investors and lenders:

- **Recommendation #1**: Governments should create legal and policy frameworks for social inclusion and for the protection and empowerment of women and girls.

- **Recommendation #2**: Governments should develop robust gender action plans during project preparation. Moreover, procuring agencies should consider using bid evaluation criteria and payment mechanisms to incentivize investors and developers to achieve gender equality objectives.

- **Recommendation #3**: MDBs**/**DFIs need to assume a leadership role to create awareness, standards, and incentives with respect to gender lens investing and gender equality. Likewise, they can make private investors depending on multilateral sources take gender more seriously by tying specific funding or financing conditions to gender KPIs.

- **Recommendation #4**: MDBs**/**DFIs can assist governments in strengthening their legal and policy frameworks, building their capacity on the nexus of gender equality and infrastructure, and devising gender action plans that clarify strategy, approaches, and resource requirements for specific projects.

- **Recommendation #5**: Investors and lenders should make gender equality visible in their corporate policies and strategies regarding internal human resources processes, their partnership arrangements, their investment decision processes, and their financing conditions. The most active investors, usually driven to create social impact, are well-placed to take the lead in creating collaborative platforms to establish standards and best practices for mainstreaming gender.

- **Recommendation #6**: Investors and lenders should develop tools and in-house resources to support gender-informed decision making and ensure consistent implementation of policies, strategies and action plans, including considering gender dimensions in screening and monitoring of investments, both focusing on gendered risk (negative screening) and on opportunities for contributing to gender equality (positive screening).

1. Introduction

This investor survey is part of a larger, multi-product project *Mainstreaming Gender in Infrastructure* led by GIF and PPIAF. Responding to the demand for socially responsive and gender-inclusive infrastructure, this project comprises four sub-tasks:

1. **Desk review** — A critical overview of existing literature on gender and infrastructure to identify broad gaps and weaknesses in gender-related interventions in infrastructure projects, which would act as a point for departure for the rest of the products in the project.

2. **Investor survey** — This analyzes perceptions of private financial firms regarding the integration of gender issues and the inclusion and empowerment of women and girls in the infrastructure projects in which they invest.

3. **Case studies** — These highlight best practices and practical challenges of including a lens on gender in important public-private partnerships (PPPs) for infrastructure projects.

4. **Gender Toolkit** — All the previous sub-tasks are intended to provide insights that will ultimately inform a gender toolkit for investors in infrastructure. Targeted at governments and private partners, the gender toolkit will provide practical, concrete guidelines and tools on how to mainstream gender in PPP project cycles.

The report is a unique investigation into how private investors perceive gender inequality and its importance for their investments. It examines perceptions of private investors and lenders related to gender equality and inclusion of women and girls in infrastructure services and facilities in emerging markets and developing economies (EMDEs). As disclosure of Environmental, Social, and Governance (ESG) information and sustainability reporting becomes more common in the private sector,[1] understanding why and how gender inequalities matter within the sphere of social sustainability and inclusion[2] is becoming increasingly important.

The analysis below is based on original semi-structured interviews conducted with investors and lenders in the private sector that routinely invest in or finance infrastructure projects in EMDEs. It aims to understand (i) how the investor community perceives the intersection between infrastructure and social sustainability and inclusion, particularly with respect to the inclusion of women and girls; (ii) what social issues investors and lenders feel are important; (iii) what actions they take in including women and girls in infrastructure projects and the challenges they face in doing so.

[1] https://www.weforum.org/agenda/2022/05/embedding-esg-metrics-time-for-companies/

[2] According to the World Bank Group, social sustainability and inclusion is essentially concerned with ensuring that members of a society can participate in it irrespective of their identity, demographic status, and geographic location. A **socially sustainable** society is one that is inclusive and resilient and the government responds to concerns of citizens. Whereas a **socially inclusive** society creates opportunities for its members and addresses deep-rooted systemic inequality. See https://www.worldbank.org/en/news/feature/2020/09/02/five-things-about-social-sustainability-and-inclusion

2. Methodology

Global commitments to achieve gender equality apply to the infrastructure sector.[3] A deeper understanding of the linkages between infrastructure development and the barriers women and girls face, as compared to men and boys, is fundamental to the achievement of the 2030 Sustainable Development Goals (SDGs). Understanding these linkages requires considering women as community members, employees, decision makers, entrepreneurs, corporate leaders, and infrastructure users. The methodology used for this survey effort was aimed at maximizing the understanding of these linkages.

Utilizing a mixed-methods approach

A mixed-methods approach was used as many research questions, particularly complex research questions, cannot be answered by relying solely on either a quantitative or qualitative method. By using this approach, we were able to explore the full breadth and depth of our research questions, resulting in a spectrum of responses that provided for a rich analysis. This would not have been possible had we utilized either a quantitative or qualitative approach. Our selected approach, therefore, deepens our understanding of the intersections between gender and infrastructure.

It became clear during in-depth interviews with respondents that many used the online survey to express aspirations rather than actual practices. The qualitative interviews, therefore, allowed us to probe for tangible evidence, including action plans and evaluation methods. This highlighted the importance of a mixed-methods approach.

The mixed-methods approach consisted of an online survey and semi-structured interviews. The target population for this effort (both online and semi-structured interview portions) was *all* infrastructure investors and lenders in the EMDE regions of East Asia & Pacific (EAP), South Asia (SAR), (Eastern) Europe & Central Asia (ECA), Middle East & North Africa (MENA), Sub-Saharan Africa (SSA), and Latin America & the Caribbean (LAC). Infrastructure investments for the purposes of this survey effort were those investments in Transport; Water & Sanitation; Urban development; Energy & Mining; and Information and Communications Technology.

Challenges in collecting and analysing survey data

Investors and lenders demonstrated hesitancy in participating in the survey and interviews. Despite reaching out to more than 100 investors and lenders, leveraging professional associations and personal networks, directly following up with many potential survey respondents, and promoting the survey through social media, the online survey response was relatively modest and a limited number of respondents demonstrated willingness to participate in interviews. The main reasons for this seem to be (i) a lack of familiarity with terms and confusion about the topic, (ii) no desire to expose lack of action on reported vision and/or policies, and (iii) scarcity of results.

[3] The World Bank Gender Equality Strategy 2016–2023 builds on the 2012 World Development Report and the 2015 World Bank Report to identify four objectives that need to be addressed to achieve gender equality: (i) Improving human endowments, (ii) Removing constraints for more and better jobs, (iii) Removing barriers to women's ownership and control of assets, and (iv) Enhancing women's voice and agency and engaging men and boys.

Semi-structured interviews

Respondents were selected in a way that would allow us to maximize variation in response. This has proved indispensable in understanding the full breadth of the role gender plays in infrastructure investing. Interviewees included 18 leading impact investors, infrastructure funds, institutional investors, commercial banks and infrastructure developers and contractors, and some DFIs all actively investing in or financing infrastructure in EMDEs.

Respondents first completed an online survey to better guide the virtual, semi-structured interview. Most interviews conducted were approximately one-hour long, allowing for an in-depth discussion to take place around the various sub-topics of interest. It became clear during in-depth interviews with respondents that many used the online survey to express aspirations rather than actual practices. The qualitative interviews, therefore, allowed us to probe for tangible evidence, including action plans and evaluation methods. This highlighted the importance of a mixed-methods approach.

3. Key findings and recommendations

Key findings

Level of gender awareness of investors and lenders

<u>Key Finding #1:</u> Private investors and lenders' awareness of the linkage between gender and infrastructure is often informed by the role they themselves play in infrastructure projects.

Investors and lenders have different levels of involvement in infrastructure projects. Depending on the extent to which investors and lenders get involved in the infrastructure project cycle and whether that involvement is direct or indirectly, the scope of influence and level of gender awareness differs. Many investors and lenders, including some commercial banks and institutional investors, play a limited or passive role in projects because they 'enter' only late in the project development and focus exclusively on the financing of the project (**Role 1)**. Other investors and lenders, including project developers and multilateral development banks / development finance institutions (MDBs/DFIs), often enter at the midstream phase and are more active in project appraisal, development, procurement, structuring, and implementation (**Role 2)**. Some investors and lenders invest indirectly in multiple projects, through their investments in funds, developers, and contractors, and thus (indirectly) have the most leverage in the project cycle of multiple projects (**Role 3**).

The analysis of interview data shows that the gender awareness of investors and lenders in infrastructure projects is often associated with their influence in infrastructure projects. Investors and lenders do not always hold the same role in projects. Their roles are fluid and can be different for different projects. Investors and lenders that have the most limited role (**Role 1)** are often *gender blind* or do not deem gender to be an important consideration in their investments. They may consider gender, but only if not doing so would lead to reputational risks. Whereas most investors and lenders who play a greater role in projects (**Roles 2 and 3**) are typically *gender aware*—they are primarily interested in complying with gender quotas for employment and in preventing (reputational) risks from, for example gender-based violence (GBV) or the failure to consult local men and women equally. Lastly, some

investors that invest in funds, together with developers and contractors (**Role 3**) are aware of gender inequality in the contexts where they work and of their potential for influencing positive change and have the most influence to implement social and gender equality plans and can be classified as *gender responsive*.

Gender during investment decision making

Key finding #2: ***Investors and lenders do not have their own consistent standards to screen for social (and gendered) impact during investment decision making. Instead, they typically rely on national laws and policies to provide the framework for Environmental and Social (E&S) compliance. In the absence of these frameworks, they face challenges.***

Financial investors and lenders lack industry standards on what criteria to employ for (i) 'negative' screenings for social risks, and (ii) 'positive' screenings for exploring interventions to create a positive social impact in investment. In the absence of MDB's participation in or support to the project, the lack of an otherwise guiding environmental and social framework or performance standards often result in ad hoc screening for gendered risks and opportunities and inconsistent criteria employed in ESG frameworks across firms. As one respondent explained, investors face challenges in factoring in gender in the consideration of risks:

> *"It's very hard to do that [gender] screening [during due diligence] and, of course, also because we don't have that kind of [gender-disaggregated] data. And even if you had that data, I don't think it could be the main reason why we choose or don't choose somebody to partner with or do business with."*

Key finding #3: ***The absence of standards among private investors and lenders for vetting investments for their potential gendered impact is exacerbated by their limited understanding about why and how inclusion of women and girls may affect financial performance and long-term value of investments.***

Investment teams are less familiar with the intersection of gender and infrastructure and lack hard data on how women's inclusion in infrastructure can improve financial performance of investments. Although some investors are undertaking measures to empower women through employment, they are still unclear about how these interventions relate to the value of their firms in the long run. This is in stark contrast with experiences in financial inclusion. As explained by a respondent, microfinance and small loans were targeted at women because they were believed to be loyal customers.

Key finding #4: ***Many respondents had a limited understanding of why and how gender matters to the success of investments in infrastructure and its performance as a social asset.***

Respondents during the semi-structured interviews exhibited a limited understanding of (i) how gender determines demands for and access to infrastructure services and facilities, and (ii) how infrastructure can directly or indirectly perpetuate, exacerbate, or alleviate gender inequality in society. This is reflected in the discussion on interventions to close gender gaps where respondents often disregard the difference in usage of infrastructure services between women and men, and girls and boys.

Gender during the project cycle

Key finding #5: ***Limited involvement of investors and lenders in the project cycle, along with constraints imposed by competitive procurement, limit their influence to create and implement plans for inclusion of women and girls. There are, however, opportunities to mitigate these constraints.***

As discussed in Key Finding #1, most investors and lenders 'enter' after the project development and structuring phase of the project cycle and do not have influence in project planning and implementation. Most of the time, they depend on under-resourced governments to implement social risk mitigation plans. Moreover, competitive procurement evaluation methods used by governments in PPP projects often do not incentivize the development of robust social and gender equality plans. Some investors and lenders see both opportunities to influence projects and the potential of these projects to positively contribute to social impact and gender equality. Key entry points mentioned include procurement and contract provisions, as well as project evaluation. These investors and lenders also mention baseline studies, targets, and key performance indicators (KPIs) as key tools.

Key finding #6: ***While some active investors have social and gender equality plans and on-site capacity to implement them, they have faced cultural challenges in doing so.***

Gender inequality underpins a patriarchal social order where women are expected to play more of a role in the home, and men a role in public. This social order is essentially rooted in disparities in power and agency between men and women at all levels of society, including the household. Some investors mention that interventions to enhance women's empowerment run the risk of causing protest by disrupting the existing patriarchal social order by reconfiguring power relations between men and women at the household level. As a result, active investors, who operate globally, may often encounter many practical, localized challenges in implementing their social and gender equality plans in EMDE countries for which they lack approaches to counter.

Recommendations

Governments

Recommendation #1*:* In support of the SDGs, governments should create strong enabling legal and policy frameworks in relation to gender equality and social inclusion that investors and lenders can rely on and/or comply with in their discussions with partners and project stakeholders and that procuring agencies can enforce in the implementation in PPP agreements.

Recommendation #2*:* On a project level, governments should develop robust gender action plans[4] during project preparation, not just for PPP projects but for all infrastructure projects. For PPP projects, procuring agencies should consider using bid evaluation criteria and payment mechanisms to incentivize investors and developers to achieve gender equality objectives.

[4] These gender action plans should cover protective legal and policy initiatives concerning health and safety, equal pay, safeguarding against sexual exploitation, abuse and harassment, safe whistle blowing, and grievance redress mechanisms for the safety of vulnerable communities.

MDBs/DFIs

***Recommendation #3**:* MDBs/DFIs need to take the lead in (i) defining terms and concepts associated with gender lens investing, (ii) clarifying how infrastructure can both exacerbate gender inequality as well as promote gender equality, women's economic empowerment and social inclusion, (iii) standardizing criteria for gender screening tools, including ESG frameworks used at the due diligence stage, (iv) standardizing KPIs and impact evaluation vis-a-vis gender used in corporate sustainability reporting, and (v) changing market norms on socially responsible investing.

***Recommendation #4**:* MDBs/DFIs can assist governments in strengthening their legal and policy frameworks, building their capacity on the nexus of gender equality and infrastructure, and devising gender action plans that clarify strategy, approaches, and resource requirements for specific projects.

Private investors and lenders

***Recommendation #5**:* Investors and lenders should make gender equality visible in their corporate policies and strategies regarding internal HR processes and procedures, their partnership arrangements, their investment decision making frameworks, and their financing conditions. The most active private investors, who are driven by a mission to create social impact, are well-placed to take the lead in building learning communities on social sustainability, gender equality, and social inclusion in the delivery and impact of infrastructure and demonstrate how gender inclusion in infrastructure can improve financial performance of investments.

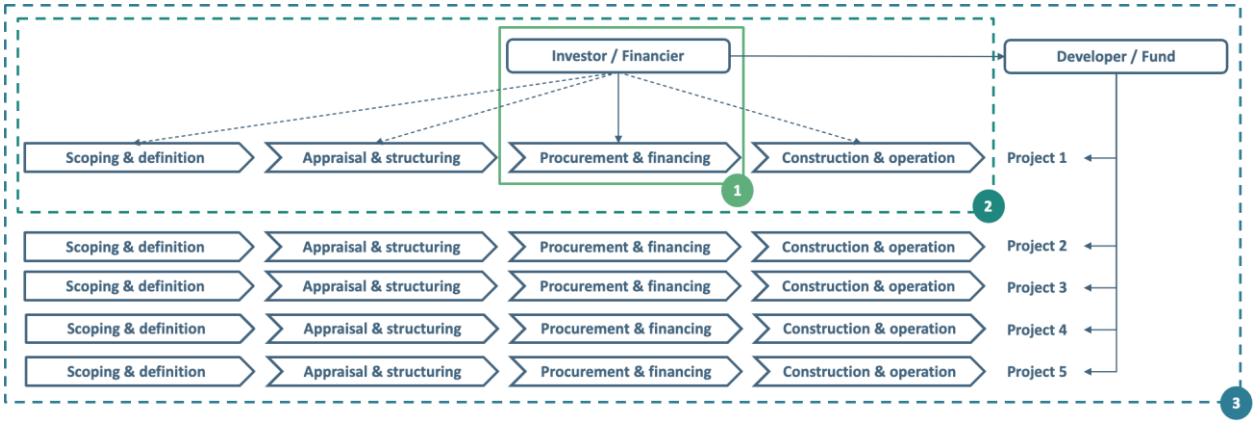
***Recommendation #6**:* Investors and lenders should develop tools and in-house resources to support gender-informed decision making and ensure consistent implementation of policies, strategies, and action plans, including considering gender dimensions in screening and monitoring of investments, both focusing on gendered risk (negative screening) and on opportunities for contributing to gender equality (positive screening).

4. Types of investors and lenders and their level of gender awareness

Investor and lender types and their involvement

Many different types of (equity) investors and (debt) lenders play a role in infrastructure financing in emerging markets, including development finance institutions, impact investors, infrastructure funds, institutional investors, commercial banks, and infrastructure developers. They differ in the extent to which they get involved in the infrastructure project cycle and whether that involvement is direct or indirectly through developers, contractors, or funds, as shown below. The diagram below highlights the different scopes of influence of Role 1, Role 2, and Role 3 investors and lenders.

Figure 1: Scopes of Influence of Role 1, Role 2, and Role 3 Investors and Lenders



- **Role 1 – Project financing** – Many commercial lenders, institutional investors and infrastructure funds get involved late in the infrastructure project cycle at the financing stage, particularly when projects are publicly initiated and developed and competitively procured. This limits their leverage in the project and their influence in requiring gender considerations in the project's development. Particularly commercial lenders see their roles minimized to raising red flags related to gender-related risks—such as GBV, sexual exploitation, abuse, and harassment—that can derail the project and affect their organization's reputation and returns. Investors and lenders offering non-commercial conditions have the potential to pursue gender equality-related opportunities, despite getting involved late in the infrastructure project cycle.

- **Role 2 – Project development** – More active investors and funds, and typically also DFIs and impact investors, engage more in the infrastructure project cycle, particularly when there are opportunities for privately initiated projects. This allows for them to play a greater role in assessing and mitigating negative impacts for women and girls, but also creating opportunities to ensure workplace policies and practices that promote diversity, inclusion, safeguarding, and jobs for women in communities. This role may provide some influence over investment partners and subcontractors.

- **Role 3 – Portfolio investment** – Impact investors and DFIs can pursue a more structural gender agenda by investing in developers, contractors, or funds. Such activities typically provide leverage for indirectly impacting more infrastructure projects.

Levels of gender awareness of investors and lenders

The level of gender awareness of different infrastructure investors and lenders can be categorized as (i) gender blind, (ii) gender aware, and (iii) gender responsive. These categories are fluid and investors are largely in a dynamic process of positive change and evolution, especially given that social sustainability and inclusion is a burgeoning concern in the investor community. Therefore, we observe that in different projects, investors and lenders are likely to take on different roles leading to different levels of gender awareness within the context of those roles.

The level of gender awareness of the different investors and lenders interviewed is directly related to their sphere of influence in infrastructure projects. Investors and lenders that are active

in Role 1, and some that are active in Role 2, can be broadly classified as *gender blind*. Most investors and lenders that are active in Roles 2 and 3 are more *gender aware*. They perceive gender in terms of compliance with workplace policies and practices that promote gender equality, diversity, and safeguarding and prevent reputational risks and risks to communities.[5] Some investors and lenders that are active in Roles 2 and 3 are establishing policies and practices that put them on a trajectory that is *gender responsive*. These investors not only consider risks, but also establish an association with like-minded partners. This allows them to explore opportunities for social impact that includes gender equality and the empowerment of women and girls. Moving away from a risk-based approach is what distinguishes them from investors and lenders active in Role 1.

Gender-blind **investors and lenders are concerned with reputational risks associated with the environmental and social impact of their investments, but they are not yet exposed to the relevance of gender.** Gender-blind investors may have workplace policies and practices promoting gender equality, diversity, inclusion, and safeguarding (DEIS). These policies and practices are not necessarily extended to areas of operations where all male working environments are often the norm. One investor mentioned action to address toxic masculinity and the need to 'protect women' from employment in high-risk environments, such as cargo shipping. Respondents from institutions that would qualify as gender blind stated they would be motivated to do more on gender if they understood the business case.

Gender aware **investors and lenders recognize the need to explicitly consider gender in the project appraisal and screening stages.** They do this by assessing risks around GBV, sexual harassment, and exploitation in the communities where the project will take place. When appropriate, they will consider mitigation strategies or health, safety, protection, and safeguarding measures. They also engage in community consultation with an emphasis on women's participation and set goals regarding women's employment. Gender aware institutions may have in-house ESG advisors—either one person or a small ESG team with some gender expertise—or draw on outside gender expertise.

Gender-responsive **investors and lenders—a smaller sub-set of institutions—aspire to create a positive social impact.** They are in the early stages of supporting their investees to achieve impact from the inclusion of women and girls throughout the project cycle. They consider not only the risk of gender inequality to the success of their investments, but also opportunities for contributing to gender equality and social inclusion. Examples of best practices include: screening potential investee companies on their gender policies, practices, and performance to establish a baseline; using these baselines to monitor investee companies to measure progress towards gender equality; seeking alliances and assistance from recognized leaders in gender equality, such as UN Women, to inspire innovation and meet goals; and joining communities of best practice, such as the 2X challenge[6] and the Women's Empowerment Principles (WEP), and experimenting with their tools to measure impact.[7]

> *"We've taken steps to implement [gender mainstreaming] and we currently working on adopting the 2X challenge, so we have been certified as 2X compliant. There's a range of criteria, but generally at least 30% of our current portfolio complies with 2X and going forward we're going to use that as [our] framework."*

[5] Risks to communities can include (but are not limited to) gender-based violence, sexual exploitation, abuse, and harassment. These risks often become visible during the implementation of infrastructure projects.
[6] https://www.2xchallenge.org/
[7] https://www.unglobalcompact.org/take-action/action/womens-principles

Motivations for gender lens investing

Although the majority of interviewees cannot be considered gender responsive, they did provide useful insights into what motivates gender lens investing. Their responses can be divided into internal and external drivers. These motivations provide relevant context for the deeper analysis of the current practices in gender lens investing and facilitate the identification of recommendations for mainstreaming gender in investments that will be discussed in subsequent chapters of this report.

Internal drivers

Many respondents to the online survey mainly see gender lens investing as a way to avoid risks or minimize damage to their organization's reputation. At the same time, just over half (55%) also state that gender considerations are not an organizational priority. Several interviewees also noted the need to avoid negative press surrounding their investment activities.

In-depth interviews suggest that when social impact is emphasized in a company's mandate, staff are more likely to be actively engaged in developing approaches to social sustainability and gender lens investing. For example, several investors mentioned that it was in their 'DNA', 'mandate' or 'vision' for the future. One investor highlighted that they purposefully develop infrastructure for local communities and that their leadership expected projects to integrate the needs of women, and those of vulnerable communities as part of their overall approach. Several institutions indicate that their investors (often DFIs) increasingly demand a focus on social sustainability, gender equality, and social inclusion in the delivery and impact of infrastructure.

Many investors mentioned that their internal ESG and gender capacity and expertise is an important factor for action on gender. Those interviewed usually had just one or two officers with ESG expertise. These officers typically have a background in the 'E' in ESG, but indicate they want to learn about the 'S' and gender, and to be part of a community of practice. The 2X Challenge was mentioned as an example in several interviews. Most ESG officers are engaged in creating awareness, particularly of internal gender biases, and building internal capacity. One example included a commercial bank training client-facing teams to look for projects that have opportunities for gender equality and women's economic empowerment. ESG officers indicate that they compete for resources internally and they feel they need a stronger business case for gender lens investing to convince key decision makers to invest in this area.

External drivers

Compliance with international or country-level policy and regulatory frameworks is a key motivating factor for investors and lenders engaging in gender lens investing. Other investors and lenders who are actively pursuing opportunities in gender lens investing also noted these policies and frameworks were an important factor in that decision. Some investors and lenders said they seek to comply with international standards even in 'challenging geographies. Others are motivated to comply if there are strong country-level policies and norms existing in place, like in South Africa.

> *"In the South Africa economy, it is a really big deal…there is a strong gender focus. It really does drive decision making around recruitment and participation. Developers are making increasingly substantial efforts—it's not just window dressing."*

MDBs/DFIs' emphasis on the importance of including gender and women in the 'S' in ESG was noted as another important incentive for action. One investor stated that this acts as an incentive, particularly if demonstrated action on the part of investors resulted in access to funding or better funding costs. Another investor noted that their relationship with the GIF and PPIAFwas a motivating factor for action on gender.[8]

Peer influence plays a role in motivating action to mainstream gender. Investors are concerned with what their peers are doing. They want to be forward leaning in their efforts, but not out in front or exposed; nor do they want to be left behind.

5. Gender in investment and financing decision making

Adopting a gender lens during investment and financing decision making

Understanding of gender in investment and financing decision making

In-depth interviews show that investors and lenders typically have a limited understanding about what a 'gender lens' means in relation to the complex intersection of gender and infrastructure. Some respondents focus on the need for mitigation strategies to reduce GBV and other gendered risks, whereas most investors see risk identification and mitigation as a regular due diligence activity. Many respondents mention that gender lens investing includes achieving a gender balance in the work force, both within their own organizations and within partner entities and projects. Some respondents understand that infrastructure benefits women and men, and girls and boys differently, and how infrastructure can play a role in empowering women.

Investors and lenders are generally aware of GBV and other gendered risks. GBV, sexual harassment, exploitation in affected communities and other gendered risks are frequently mentioned as regular due diligence items. When identified, such risks would be seriously considered—even by gender-blind investors and lenders—if only to avoid reputational issues.

Most respondents understood gender equality as achieving gender balance in the workforce, both within their own organizations and within partner entities. A respondent from a development bank noted that they mainly focused on creating 'benefits' for women in infrastructure (i.e., ensuring their employment in projects).

> *"Gender lens investing means an explicit focus in investment decisions and in on-going management about how you can promote gender equality and other underrepresented groups in both the sector and in the companies, as employees."*

Similarly, another respondent from a global commercial bank explained:

[8] PPIAF helps developing-country governments strengthen policies, regulations, and institutions that enable sustainable infrastructure with public sector participation. PPIAF promotes knowledge transfer by capturing lessons while funding research and tools; builds capacity to scale infrastructure development; and assists entities in accessing finance without sovereign guarantees. It is donor supported.

> *"[Considering gender] is nascent. It is something we just started to do and it's capturing relevant information in terms of both the management and ownership of the clients that we are supporting—whether there are women in senior positions, if a woman is maybe a co-founder."*

Some respondents were aware of gender differences in access to infrastructure services, but very few understood the need for adopting a gender lens in planning and design. Most investors and lenders did not appear to have a strong understanding of (i) how gender determines demand for, access to, and benefits of infrastructure services, and (ii) how infrastructure can directly and indirectly close gender gaps in society. Some respondents, particularly those that depend on MDB/DFI funding, also understood the different ways in which women and girls can be included in infrastructure projects. Two respondents said their firms have comprehensive social inclusion and gender equality plans, which entail 'multidimensional approaches to protecting and empowering women and girls' in infrastructure projects through consultation and employment opportunities.

Gender screening during investment and financing decision making

For most in-depth interview respondents, the mitigation of risks associated with gender—known as 'negative' screening for gender—was not an explicit, consistent focus in their due diligence procedures. As discussed earlier, the social component of ESG screenings is still a nascent and ill-defined area for lenders and investors. Within the 'S' in ESG, gender often does not get explicit attention, but may be considered as part of the larger consideration for reducing social risks. As one respondent explains:

> *"No, I don't think we do [adopt a gender lens] yet…it's not explicitly stated…but it's inherent in the way that we do our due diligence…The way that we screen…sponsors, the way that we screen the borrowers…it's picked up in that process. So, it's done indirectly."*

Similarly, a manager of an infrastructure fund based in South Africa described their firm's previous approach of assessing the broad environmental and social impact of projects on communities. They did not focus on how these impacts may vary or manifest more intensely for certain vulnerable groups (including women) within communities:

> *"It [our approach] was much more broad, (and) based on the social aspects of…the ESG of investing....So especially from an economic and social point of view, we'd approach the communities, (but) it wasn't specifically focused on women or gender."*

Risks related to GBV—a well-documented reputational and operational risk in energy and transport projects—are often considered in 'negative' screenings in ESG frameworks, but rarely lead to a no-go decision for an investment. In such cases, it is likely that GBV is seen as a risk that can be mitigated. Two respondents from organizations involved in creating socially sustainable infrastructure said they did not have standards for screening for GBV risks. Instead, both organizations relied on existing national-level legal and policy frameworks to comply with safety standards related to GBV. Other interviewees saw any reduction in violence, including GBV, as a positive externality of infrastructure and not something that infrastructure projects should actively prevent. When asked whether investors should include GBV screenings in projects as a 'bare minimum' measure vis-a-vis gender, a manager of an infrastructure fund provided an example of where infrastructure implicitly and indirectly addresses GBV, but without improving the culture of gender relations. This leaves women and girls unprotected:

"I think the nature of infrastructure projects is such that putting the project in place is not…[a] first port of call to prevent gender-based violence. Putting a project in place is to promote socioeconomic benefits…one of the examples is on our rail rolling stock company…getting more freight moved via rail than road has decreased the amount of gender-based violence and HIV in Africa because often truck drivers [used to] stop on the side of the road in the evenings…. The driver needs to rest and then that would result in gender-based violence or HIV or rape, whereas if you put your goods on a train, you don't have those truck drivers."

Similarly, standardized 'positive' screenings for gender—actions for enhancing inclusion of women and girls—were not routinely part of typical due diligence procedures. Existing literature shows that 'positive' screenings for ESG are still rare among investors.[9] Our interviews corroborate this finding, but also show that even those investors that are looking to include women and girls and reduce gender inequality as part of their overall goal to create a positive social impact did not use standardized criteria and approaches for reducing gender inequality. For instance, a respondent—Head of Social Finance at a large financial institution—informed us that their firm's leadership had mandated that all investments and transactions should be geared towards achieving a gender-specific target, which was part of the company's wider social goal of assisting low-income households. However, the firm did not have a standardized approach for finding what they described as the 'gender angle' in any given investment.

Challenges in adopting a gender lens during investment and financing decision making

Gaps in knowledge on what social sustainability & inclusion in ESG frameworks mean

Most investors interviewed consider ESG important as a whole, but they put more emphasis on the environment, rather than on social sustainability and inclusion. This emphasis is not surprising given that the ESG concept was created in 2004 as part of the 'global compact' in the wake of corporate environmental scandals such as the Exxon Valdez oil spills. All investors interviewed said they considered ESG important, but most highlighted that environmental concerns were paramount, with social sustainability less so. The focus on the 'E' rather than the 'S' or 'G' is driven by a number of factors: demands by government that ESG certification complies with regulatory frameworks; and fear of reputational risks associated with causing environmental damage, and to some extent corporate social responsibility; and lack of awareness and understanding on how to approach social sustainability and inclusion. As noted by a respondent:

"ESG is a big topic, but this is only recent. The environmental focus was there before, now the social has been added. Intuitively, I would rate environment higher. We can't afford to do anything stupid there."

All investors interviewed who do consider the S to be 'very important' and 'somewhat important' talk about social sustainability in broad terms, rather than offering a concise definition. The term is frequently aligned with workforce health and safety issues, or diversity, inclusion and safeguarding rather than positive benefits for communities in the long term. The exception is some investors and lenders who link social sustainability with cultural heritage.

[9] https://www.oecd.org/finance/ESG-Investing-Practices-Progress-Challenges.pdf

> *"I think for us we probably have a stronger focus on health and safety. Complemented by the environmental and social."*

Few interviewees mention clear indicators for measuring social sustainability. Some interviewees provided insights into the reasons for this, which included: perception by board members and directors that social sustainability is less important than the 'E' in ESG; challenges associated with risks and costs associated with measuring social impact; lack of defined approaches and tools; and lack of standardization around social metrics. The few interviewees who did talk about social impact noted recent efforts to raise awareness internally: to train staff to identify opportunities; to find communities of practice use as the 2X Challenge, and to use their tools; and to identify partners who could offer technical advice and know-how, such as UN Women and nongovernment organizations (NGOs), including at a local level.

> *"It's challenging to integrate risks and costs associated with feasibility assessments and social impact. To persuade [boards and senior staff] proof of concept is required."*

Since ESG frameworks typically assess materiality of risk factors as unrelated variables, investors and financiers often lack an understanding of the complex intersections between 'E' and 'S'. Climate change is often operationalized as environmental variables in ESG frameworks. However, mitigation or adaptation measures that a company may plan to counter these risks must account for the fact that climate change does not affect everyone equally in a society. In fact, gender, ethnicity, class, and other identities often intersect to determine vulnerability to climatic hazards. This intersection between climate and social vulnerability must be the point of departure in planning climate action measures. For instance, an infrastructure company may want to mitigate long-term flooding risks to its coastal assets by investing in mangrove forests. Long-term conservation and management of these forests may require involvement of nearby coastal communities. This raises concerns about equal inclusion of vulnerable groups, including women, in community-centered efforts in climate adaptation and resilience. Studies show that while women are more vulnerable to impacts of flood and coastal erosion, they often have limited participation in managing natural resources in coastal communities.[10]

Gaps in knowledge on how inclusion of women and girls in infrastructure matters

Investors lack incentives to pay attention to gender in due diligence procedures because they do not understand how it will contribute to the investment's performance and value in the long run. As discussed in previous sections, private investors do not have consistent industry standards for screening investments for social impact. Since there is no industry-wide consensus on the criteria for assessing social impact, screenings for gender inequality and opportunities for gender equality and gender lens investing are ad hoc. Furthermore, the criteria used by firms are likely to exhibit considerable variability. Consequently, why and how gender matters for financial returns and the performance of investments is unclear to investors.

Insights from the in-depth interviews show that while investors and financiers often initiate interventions to enhance women's financial inclusion, they are far less likely to include women as community members and users in infrastructure projects. For the former, they lack hard data on how women's inclusion in infrastructure can improve the financial performance of investments. For the latter, as one respondent explained, microfinance and small loans are now routinely targeted to

[10] See Pearson, Jasmine, Karen E. McNamara, and Patrick D. Nunn. "Gender-specific perspectives of mangrove ecosystem services: Case study from Bua Province, Fiji Islands." Ecosystem Services 38 (2019): 100970.

women because they are loyal customers whereas investment teams are less familiar with the intersection of gender and infrastructure and the benefits of action in this area for lenders and investors. As one respondent said:

> *"In terms of energy and infrastructure, there is a lot less information out there [about the business case]. I can point them out, you know, reputational risks and things like that… the cost of gender-based violence and harassment in society...but…that business case [is missing]….We're making claims on the effect of gender diversity...I think that sometimes, it's presented as a causation, but I think there is more of a correlation between these kinds of things."*

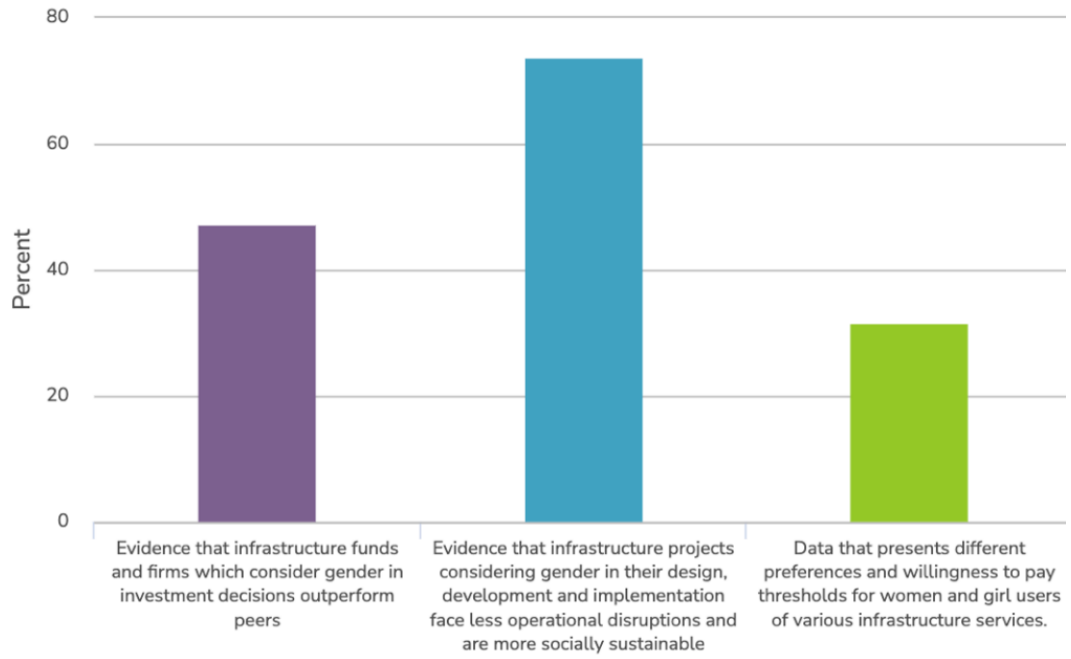
Although some investors are undertaking measures to empower women through equal employment measures, they are still unclear about how these interventions benefit or accrue the value to their firms in the long run. For instance, interviewees frequently cited measures being taken to improve their human resource policies and practices to ensure equal recruitment and benefits. Some go further and extend these practices to partners. Others consider employment opportunities/jobs created by investments; and a few consider gender in procurement processes. Many respondents say their companies profess making progress on internal gender balance, but this does not generally extend to boards, which range from 15–20% representation of women at best.

The understanding of why environmental factors are material for investments is much more developed than knowledge on why social inclusion matters. Investors and lenders are aware of climate change and believe that environmentally irresponsible investments are a risk to a firm's reputation and portfolio. Moreover, some also see environmental responsibility—example: zero carbon emissions—as important for competitive positioning. However, they are less aware of the social impact of their investments. Unlike environmentally irresponsible investing, which now increases the risk of assets being stranded in the market, it is unclear how the social impact of investments will determine market pricing. While some do see GBV as a major concern in infrastructure investments, most are not incentivized to reduce gender inequities in society. As one of the respondents said:

> *"I would personally rank mangroves higher [than social issues]. We cannot afford to do anything stupid with that. Social issues are a bit more on the back burner."*

Similarly, another respondent stressed that the norms pertaining to environmental impact have changed rapidly in the last decade and 'dirty assets' face the risk of being stranded in the market. This is not yet the case for social impact and gender equality. These sentiments are reflected in the online survey, where the majority of respondents stated they need more evidence on the positive benefits of gender lens investing in order to progress further, as demonstrated in the chart below.

Figure 2: Respondent's Need for furthering gender mainstreaming



Limited capacity to conduct gender screenings at due diligence

Many investors lack institutional capacity to conduct detailed due diligence on social impact, including issues related to both gender inequality and the protection of women and girls and vulnerable groups. They also lack the capacity to explore relevant opportunities to close gender gaps in, for example, access to services, and to promote empowerment of women through harnessing women's voices in decision making. Many of the investors simply rely on basic ESG checklists and most of their capacity for gathering ESG information pertains to the 'E' and 'G' components, rather than 'S'.

> *"We are relying on consultants to do this [gender screening], just like most large international organizations. At the moment we're doing mostly desktop work, to be honest with you, because we've been living in a COVID world for two years and the ability to get out there and do a lot of field work and early stakeholder engagement around the issues, it's very difficult. So, a lot of the work that's done during due diligence on the issue of gender is based on publicly available information and other reports that are available in the country."*

A lack of social development specialists and/or gender specialists on investor teams adds to the limitations surrounding gender screenings. Several respondents noted that gender experts (or ESG specialists more generally) are only involved with investor teams when this is deemed to be relevant. As a result, this limits the possibility of engraining an understanding of gender(ed) impacts within the foundation of organizations. One investor mentioned the need for acquiring more ESG expertise and to mainstream data collection and analysis. They felt they required 'generalists with more of a background on impact' than environmental or gender specialists. Another investor highlighted the challenges faced by ESG staff in persuading project managers to examine both risks and opportunities.

> *"[Gender experts] do become part of the project team if there's a specific gender target."*

6. Gender in project development

The role of investors and lenders in project development

Traditionally, investors and lenders play a limited role in infrastructure initiation, appraisal, structuring and procurement—arguably the most important stages with respect to mitigating gendered risks and empowering women and girls. Private sector participation in infrastructure is most often structured in the form of regulated and competitive solicited procurement and contracting processes. Private sector participation projects typically are in line with a national infrastructure plan and identified in government budgets. Also, the procurement of these projects typically follows the assessment of the project's purpose and need by the government, as well as a government-led appraisal and structuring processes.

Lenders operating in competitive markets especially do not have much leverage in project preparation. Lenders typically get involved when the project has been developed and structured, which dramatically reduces their possibilities to contribute to mitigating gender risks and contributing to gender equality. Moreover, often lenders are competing for projects, which does not incentivize them to insert additional conditions regarding gender equality, or as one respondent put it:

> *"Clearly we're in competition for all of these assets. If we're asking questions and others aren't, and borrowers having an easier time providing answers to somebody else, they're going to go with those lenders, not us."*

However, some active investors—typically impact investors and some infrastructure funds—do have on-site capacity and political influence in determining project development. Many respondents described their firms' involvement in building (i) capacity of contractors with respect to environmental and social safeguards, (ii) imparting skills training to men and women in target communities to enhance employment, and (iii) hiring local NGOs and networks to assist with women's inclusion in stakeholder engagement. One respondent described how her firm ensures the gender mitigation plan is implemented:

> *"In part of project finance, this [implementation] can be difficult. You're dependent on project capacities, and it's generally a short process. If we feel the capacity isn't there, we hold an intervention. We often require an E&S [environmental & social safeguards] officer to be hired to be our counterpart. That happens quite often."*

Respondents also described their firms' strong involvement with governments and other multilateral forums that give them leverage in the project preparation, especially in PPP projects. As one investor explained:

> *"Our [company] president is quite involved with the government representatives where we work. He sets the tone. He participates in all kinds of forums. The same goes for gender equality."*

Challenges and gaps in mainstreaming gender in project development

Limited leverage in the project cycle

As mentioned above, many investors and lenders are not typically involved in project initiation, appraisal, and structuring for the project and thus lack leverage in planning interventions for social sustainability and inclusion. Several of the respondents in the study stressed that they typically do not have control over responding to gendered concerns in projects because they 'enter' during midstream or downstream phases of the project or are only passively involved. This can lead to significant challenges when it comes to mainstreaming gender in project development. As one respondent explained:

> *"Construction sites result in an influx of male workers. This leads to GBV. It's quite difficult to do something about this. We come in during the project finance phase. We come in at a late stage [after] there are public tenders for the construction. And we don't have that much leverage."*

Moreover, even when private investors want to mitigate social risks and/or create a positive impact, the execution of social plans may be poor due to low capacity of public partners. One manager described how the government in an EMDE country botched the rehabilitation plan:

> *"People were relocated and this was done very poorly. We needed to do the social relocation again. We had to document who was moved, how they were compensated. It's almost accountancy. You destroy 10 [homes], you build 10 [homes]. That's what you need to report on. Our intentions aren't wrong, the execution just wasn't good enough."*

Constraints imposed by competitive procurement

Competitive procurements do not generally encourage commercial investors to go above and beyond the minimum gender equality ambitions as specified by the procuring agency. Unless action on gender is seen to improve the project's business case, 'investing' in gender equality may not be automatically in the bidding teams' interest, as it may decrease the chances of them winning the procurement. Unfortunately, the business case for gender is often unknown and several of the main benefits of gender lens investing lie outside of the project's direct business case. Since competitive procurement is desirable for most infrastructure projects, procuring agencies, transaction advisors, and multilaterals supporting the procuring agencies should take the lead in setting gender equality goals.

Even though gender-related obligations in the evaluation criteria and payment mechanism invite private investors to do more, this can be quite challenging. The most straightforward evaluation mechanisms in PPP procurements are based on lowest cost, with all qualitative goals and ambitions included as minimum requirements. Expanding the evaluation mechanism to also include qualitative considerations, in this case the extent to which the proposals are expected to mitigate gendered risks and contribute to gender equality, invites bidding teams to go above and beyond the minimum requirements. This may make sense if the bidding teams are expected to be able to come up with creative proposals and if the benefits of having competing teams each develop these plans outweigh the associated costs. The use of 'best value'-based evaluation can be interesting but is also complex and prone to discrimination allegations if not structured well.

While unsolicited proposals (USPs) or private initiatives can offer more opportunities for investors and lenders to pursue gender lens investing goals, this is not without challenges. In unsolicited proposals, investors take a leading role in the project initiation, and potentially also throughout the appraisal and structuring process. This also allows them to play a much bigger role in contributing to gender equality. However, unsolicited proposals are challenging to implement successfully, if the government lacks technical capacity to evaluate, prepare, procure, and implement PPPs. They may also create difficulties with fiscal planning if they were not part of normal infrastructure-budgeting processes. Other challenges relate to creating competitive conditions and aligning public and private interests. Finally, the public agency may need to overcome adverse perceptions associated with USPs, including perceptions of corruption.[11]

Cultural and gender challenges

Several active investors have the capacity to influence project development and implementation, but they can face challenges in including women in projects. As discussed above, respondents who are actively involved in creating social impact typically have capacity and resources on the ground to implement their social and gender equality plans. However, some stressed 'complications' were involved in executing these plans. These complications highlight the backlash associated with changes in power relations and the status quo. Interventions to enhance women's empowerment often threaten to disrupt the existing patriarchal social order by reconfiguring power relations between men and women at the household level. Typically, investors do not have strategies and approaches to deal with conflicts that arise from changing the accepted gender order and there is a danger that this deficit could deter them from mainstreaming a lens on gender in their operations. One Head of Responsible Investing explained the issues faced by her firm's interventions to empower women at project sites:

> *"We have had issues. Sometimes, when a woman comes into success and becomes a bigger earner than the husband, if you don't plan for that properly, you can have very negative unintended consequences (including resentment and violence). It is a lot more complicated than it seems."*

7. Recommendations for mainstreaming gender in investments

The role of governments

Governments should create legal and policy frameworks for social inclusion and for the protection and empowerment of women and girls. Private investors will gladly comply with legal obligations in contexts where clients operate in a strong enabling environment for including women and minorities, such as laws against GBV and employment quotas. As one respondent explained about their firm's engagement in South Africa:

> *"In South Africa, you have the Triple B requirement, there it really matters how you're perceived. You need to have sufficient black people, women, and disabled people on a team. So, we…look at what the market wants."*

[11] World Bank Group, PPIAF, Policy guidelines for managing unsolicited proposals in infrastructure projects – Volume I Main findings & recommendations.

In the absence of strong legislation and policy on social inclusion—'the more challenging contexts' as described by a respondent—some investors dependent on DFI funding are inclined to adopt international standards or standards of DFIs (e.g., IFC Performance Standards) for social sustainability and inclusion. However, most private investors lack the incentive, capacity, awareness, and resources on the ground to plan for investments to protect and include women and girls.

On a project level, governments should create strong gender action plans. Having a solid gender action plan is important for setting the agenda on gender for all stakeholders from the very start. This action plan should ensure gender-inclusive design, implementation, and monitoring of projects. It is essential that this plan is informed by comprehensive gender analysis and entails actions and indicators for tracking progress. Moreover, during competitive procurement, governments can evaluate private partners on their proposals to implement those gender action plans.

> *"If you are a government entity or building facility, you have to follow rules which include gender mainstreaming. Existing laws also need to be complied with in private sector and public entities."*

Through bid evaluation criteria in PPP procurements and payment mechanisms in PPP contracts, governments can incentivize investors and developers to achieve gender equality objectives. If bidding teams are expected to be able to come up with creative proposals and the costs associated with developing and evaluating these proposals are acceptable, it may make sense to require them to submit gender action plans as part of their technical proposals. This may encourage them to go above and beyond the minimum requirements. After the procurement phase, the payment mechanism in PPP contracts may include financial incentives, such as deductions for not meeting gender equality commitments.

The role of MDBs/DFIs

MDBs/DFIs need to assume a leadership role to create awareness, standards, and incentives with respect to gender lens investing. The following are the ways in which MDBs/DFIs can make private investors and lenders take gender seriously by creating demand for social inclusion in financial markets, creating standards for women's inclusion and monitoring social impact, and disclosing non-financial information.

Mainstreaming gender lens investing

MDBs/DFIs can take the lead in defining terms and concepts associated with gender lens investing, gender inequality and equality, women's empowerment, social exclusion, and inclusion. This would help investors and lenders understand the scope of what to address when it comes to the 'S' in ESG—both in terms of risk and opportunity, but also in measuring impact. MDBs/DFIs can also contribute to clarifying how infrastructure can both exacerbate gender inequality as well as promote gender equality, women's economic empowerment, and social inclusion. Governments, investors, developers, contractors, operators, lenders, and other stakeholders need this information in a compelling format and framed in a manner that attracts the attention of their key decision makers (board, directors, and project managers).

MDBs/DFIs should assume a leadership role in standardizing screenings to address gender inequality and specifically violence against women and girls, boys and men, and social exclusion and marginalization in due diligence procedures. As discussed earlier, the interviews highlighted a lack of common understanding among investors of what 'negative' or 'positive' screening with respect

to gender entails in ESG frameworks. This point corresponds with the plethora of existing literature that shows the private sector lacks criteria for gathering and disclosing standardized ESG information, especially indicators related to social impact and governance, which can be used for investment analysis[12,13].

MDBs/DFIs can play a pivotal role in setting market standards for interventions, and monitoring and evaluating impact with respect to gender (closing the gender gap, promoting gender equality and social inclusion, and reducing inequality and poverty). Of key importance are relevant indicators and evaluation methods for measuring change. Three respondents in our study stressed that while financial investors have the most experience with gender mainstreaming with respect to financial inclusion, the intersection of gender and infrastructure is still a nebulous area for them. As one respondent put it:

> *"I think the challenging part is that there is no common denominator. There is no market standard about what needs to be incorporated….This sort of focus on activities really comes from agencies and DFIs, the first movers into the emerging markets when you are looking at projects and things outside financial inclusion, which is where private sector banks have mostly been focused on."*

Thus, there is a need for more initiatives such as the 2X Challenge. Led by the 2X Collaborative, a global investment funded by G7, the 2X Challenge provides a framework comprising measurable interventions to benchmark gender inclusion in investments. Three respondents in our sample highlighted that they were 2X compliant in their investments.

MDBs/DFIs can also assist private sector firms with sustainability reporting that includes performance on gender KPIs. Non-financial disclosures and sustainability reporting have become more common among businesses. However, the use of different ESG frameworks and highly variable metrics make comparability and transparency in sustainability reporting a challenge[14]. DFIs can establish standards for social and specifically gender-related KPIs in sustainability reporting for infrastructure projects.

With expert support, MDBs/DFIs can take the lead in creating awareness and building capacity on gender equality and social inclusion in infrastructure among investors and lenders to change market norms and behavior. Just like a large number of data-driven initiatives on climate change—routinely propagated on global platforms such as the IPCC, World Economic Forum, and UN Climate Change Conference—have successfully built a global consensus on tackling the climate emergency in the development and financial community, MDBs/DFIs can create awareness on the social impact of infrastructure investments and develop consensus on reducing gender inequities in society through infrastructure investments. Capacity-building initiatives will be needed to contribute to a better understanding of the full breadth of the role gender plays in infrastructure investing and why and how inclusion of women and girls may affect financial performance and long-term value of investments.

[12] https://link.springer.com/article/10.1057/s42214-020-00092-4
[13] https://lifescienceglobal.com/pms/index.php/jrge/article/view/5732
[14] https://www.weforum.org/agenda/2022/06/sustainability-reporting-why-important/

Supporting clients in creating gender action plans during project preparation

MDBs/DFIs can assist governments in strengthening their legal and policy frameworks. With respect to PPPs, establishing a strong framework for investments is critical for ensuring it is mandatory for all stakeholders to comply with specific standards for ensuring social sustainability and inclusion in projects. Laws related to GBV and employment quotas are critical for mitigating gendered risks inherent in projects and empowering women.

By assisting governments in devising gender action plans that clarify strategy, approaches, and resource requirements for specific projects, MDBs/DFIs can align all stakeholders in an infrastructure project (including private investors) on gender. As discussed earlier, private investors and lenders lack a clear, standardized approach to reducing risks and creating a positive impact with respect to gender equality and social inclusion in investments. Moreover, several respondents who participated in this study highlighted they have little influence in devising plans for stakeholder engagement and positive social interventions because they enter at the financial closure stage. Therefore, gender action plans created at project preparation stage can serve as a foundation for setting expectations, interventions, and monitoring related to gender in a project.

Tying funding to gender-related conditionalities

MDBs/DFIs can make private investors, such as infrastructure funds and impact investors dependent on multilateral funding sources, take gender seriously by tying funding or financing conditions to gender KPIs. A recent study based on a global survey shows that investors typically use ESG information for financial reasons—82% of the respondents said they use ESG information because it mattered in the financial performance of the investment.[15] Several of the organizations that we interviewed noted that collaboration with MDBs/DFIs has pushed them to take social issues more seriously in their investments. Therefore, clear financial incentives can drive private investors to focus more on gender during ESG screenings. This could include (i) better financing conditions based on ESG information/rating during financial closing, and (ii) lower interest rates for actual performance on ESG indicators.

The role of private investors and lenders

Infrastructure investors and lenders in EMDEs can take concrete steps towards becoming gender aware or gender responsive. The first step often is the explicit decision to strengthen gender in the organization's vision, mission, strategy, and policy, and subsequently in partners and investee organizations. This requires leadership. The operational implications that stem from a public declaration on the part of investors is accountability for action, which at the very least should require that gender inequality and opportunities for gender equality through closing gender gaps in employment and service delivery are considered in screening and monitoring of investments, initially often focusing on gendered risk (negative screening) but subsequently also on opportunities for contributing to gender equality (positive screening). Practical tools and in-house resources will be needed to support the operations and ensure consistent implementation of the policies. Finally, requirements and ambitions regarding gender equality should be reflected in the investment and financing conditions to incentivize investees and borrowers to deliver on their commitments and ambitions. The table below describes concrete actions for each of these steps.

[15] Why and How Investors Use ESG Information: Evidence from a Global Survey

Table 1: Concrete steps for becoming gender aware and gender responsive

Step	Becoming gender aware	Becoming gender responsive
Vision, mission, strategy, and policy	• Define and strengthen the 'S' and more specifically gender in ESG strategy. • Develop workplace policies and practices promoting gender equality, diversity, inclusion and safeguarding (DEIS). • Apply workplace policies and practices throughout all areas of operations. • Extend workplace policies and practices to partners.	• Contribute to raising gender awareness and responsiveness through strategic discussions with governments. • Seek likeminded operational partners who are or are willing to adopt gender sensitive workplace practices and create jobs for women. • Seek an alliance and assistance from a recognized leader in gender equality, such as UN Women. • Seek alliances with communities of best practice such as the 2X challenge and the Women's Empowerment Principles (WEP). • Set for women's employment in male-dominated areas.
Screening and monitoring	• Explicitly consider gender risks in due diligence. • Considering gender within health, safety, and safeguarding measures. • Ensure community consultation and women's voice. • Make sure to require monitoring and reporting on performance on gender risks. • Make sure to require monitoring and reporting on jobs for women.	Explicitly consider gender opportunities in due diligence. • Screen potential investee companies, subcontractors, project entities, and developers on their gender policies, practices, and performance (establishing a baseline). • Include gender action plans with goals and targets in investment documentation. • Make sure to require monitoring and reporting on performance on gender equality goals and targets.
Tools and resources	• Include gender risk considerations in due diligence checklists and templates. • Develop in-house expertise on gendered risk and mitigation strategies to counter GBV, sexual	• Make sure to explicitly consider opportunities for achieving gender equality. • Deepen gender expertise in operations.

Step	Becoming gender aware	Becoming gender responsive
	harassment. and exploitation in affected communities. • Make sure that gender experts are available to support the due diligence process.	• Apply 2X challenge screening tool to measure impact. • Support investees in securing impact on the inclusion of women and girls during implementation.
Financial incentives	• Explicitly consider non-compliance with health, safety and safeguarding measures, and gender risk mitigation strategies a ground for termination.	• Consider explicitly translating the 'gender rating' of an investment into financing conditions. • Should consider applying performance-based discounts on interest rates. • Encourage the companies they invest in to create gender action plans and support them in doing so by providing technical assistance.

Investors, who are actively involved in reducing gender inequality, should take the lead in creating collaborative platforms to establish standards and best practices for mainstreaming gender. Our interviews show that a handful of global impact investors have institutionalized standards, capacity, and resources to include women and girls in infrastructure projects. These investors should take the lead in creating collaborative platforms to create industry standards on what 'S' in ESG entails. Currently, most investors have two specific areas on which they focus to evaluate environmental risks in their ESG studies: risks related to carbon emissions and stranded assets. However, the 'S' in ESG remains vague, and differences in reporting standards often make comparability of ESG performance challenging.

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MAINSTREAMING GENDER CONSIDERATIONS INTO INFRASTRUCTURE ADVISORY *Case Study Report*

Abbreviations

Abbreviation	Full Name
ADB	Asian Development Bank
ANARSE	Autorité Nationale de Régulation du Secteur de l'Energie or National Authority for Regulation of the Energy Sector
AfDB	African Development Bank
AFD	French Development Agency
AP	Availability Payment
BPS	Basis Points
BOO	Build Own Operate
COD	Commercial Operation Date
CEDAW	Convention on the Elimination of All Forms of Discrimination against Women
CNMP	National Public Procurement Commission
DFI	Development Finance Institution
DMF	Design and Monitoring Framework
DBFOM	Design Build Operate Finance and Maintain
EAP	East Asia and Pacific
ECA	Europe and Central Asia
EFA	Export Finance Australia
E&S	Environmental and Social
ESG	Environmental, Social and Governance
ESIA	Environmental and Social Impact Analysis
ESMMP	Environmental and Social Management and Monitoring Plan
ESMF	Environmental and Social Management Framework
EHS	Environment, Health, and Safety
EGM	Effective Gender Mainstreaming
EMDP	Ethnic Minority Development Plan
EMRA	Türkiye’s Energy Market Regulatory Authority
EPC	Engineering, Procurement, Construction
ESG	Environmental, Social, Governance
EMDP	Ethnic Minority Development Plan
EU	European Union
EVN	Vietnam Electricity
FiT	Feed-in-Tariff
GAP	Gender Action Plan
GBV	Gender-Based Violence
GoH	Government of Haiti
GoV	Government of Vietnam
GRC	Grievance Redress Committee

IFC	International Finance Corporation
IDB	Inter-American Development Bank
JICA	Japan International Cooperation Agency
JPS	Jamaica Power Service
kWh	Kilowatt-hour
KPIs	Key Performance Indicators
LAC	Latin America and the Caribbean
LREMDP	Livelihood Restoration and Ethnic Minority Development Plan
LRP	Livelihood Restoration Plans
MDB	Multilateral Development Bank
MLA	Mandated Lead Arranger
MENA	Middle East and North Africa
MOIT	Vietnamese Ministry of Industry and Trade
MOIT	Ministry of Industry and Trade (MoIT)
MTPTC	Ministère des Travaux Publics, Transports et Communications
NERAMP	Northeastern Road Corridor Asset Management Project
NTFP	Nontimber Forest Product Collection
O&M	Operations and Maintenance
PAPs	Project Affected Persons
PC1	PC1 Group Joint Stock Company
PHARES	Programme Haïtien d'Accès des communautés Rurales à l'Energie Solaire
PIU	Project Implementation Unit
PPA	Power Purchase Agreement
PPIAF	Public-Private Infrastructure Advisory Facility
PPI	Private Participation In Infrastructure
PPP	Public-Private Partnership
RAP	Resettlement Action Plan
RFP	Request for Proposals
ROI	Return On Investment
ROW	Right-of-way
SSA	Sub-Saharan Africa
SA	South Asia
SDGs	United Nations Sustainable Development Goals
SEP	Stakeholder Engagement Plan
SPS	Safeguard Policy Statement
SPV	Special Purpose Vehicle
STDs	Sexually Transmitted Diseases
UTE-MEF	Unité Technique d'Exécution of the Ministère de l'Economie et des Finances
VGF	Viability Gap Funding

WEP	UN Women's Empowerment Principles
WPP	Wind Power Project
WTG	Wind Turbine Generator

Executive Summary

The following case studies are part of a larger, multi-product project Mainstreaming Gender in Infrastructure, led by GIF and PPIAF, which aims to advance and operationalize the best practices for including gender considerations throughout the infrastructure public-private partnership (PPP) project lifecycle, especially in the project preparation phase.

The case study report profiles three infrastructure PPPs, either currently under procurement or having reached financial close after 2019. These three were selected from a longer list of 24 projects. The team selected them for review based on demonstrated evidence of their integration of gender equality and safeguarding as well as because they represent a diversity of implementation stages, project sizes, country income levels, regions, and investors and lenders. The report's introduction section provides more background on the case selection process.

The cases aim to illustrate how infrastructure PPP projects can contribute to closing gender gaps and provide tangible examples of how projects have included gender equality and safeguarding measures in:

- Project design elements
- Contractual specifications
- Funding and financing instruments
- Risk allocation decisions

Vietnam: Lotus Wind Power Project

The Lotus Wind Power Project—Vietnam's largest wind project—encompasses the development, construction, and operation of three wind farms, each with a capacity of 48 MW, and the internal transmission lines in Quang Tri Province. The wind farms were developed and are owned by three newly created, special purpose companies incorporated in Vietnam: Lien Lap Joint Stock Company, Phong Huy Joint Stock Company, and Phong Nguyen Joint Stock Company. They are majority owned by Power Construction Joint Stock Company No. 1 (PC1) and Renova Inc. Each achieved a commercial operation date in October 2021 and is implemented under a separate 20-year power purchase agreement with Vietnam Electricity (EVN). [16] The Asian Development Bank (ADB) acted as mandated lead arranger (MLA) and bookrunner for the $173 million green loan project financing package financing; Japan International Cooperation Agency (JICA), and Export Finance Australia (EFA) as direct parallel lenders; and Bank of China (Hong Kong) Limited; Bank of China Limited Macau Branch; Société Générale, Singapore Branch; and Triodos Groenfonds N.V. as ADB B loan providers.[17] At the time of writing, the project was operational.

[16] ADB, "Lotus Blossoms in the Wind", 2022

[17] An A/B Loan product enables commercial lenders to partner with development banks (i.e., ADB) in their lending operations. Under this structure, a development bank, in its capacity as lender of record, makes a loan to a borrower that is financed by both commercial participants and the development bank. The portion of the loan supported by commercial lenders is known as the B loan, while the portion funded by the bank is referred to as the A loan.

ADB as key lender helped design and is enforcing the gender equality and safeguarding measures integrated into the Lotus Wind Power Project. The gender equality measures are enforced at the parent company level (i.e., on PPC1), while safeguarding measures at the subsidiary level (i.e., Lien Lap Joint Stock Company, Phong Huy Joint Stock Company, and Phong Nguyen Joint Stock Company).

The gender equality measures stem from a clearly defined process undertaken by ADB that involved sending the parent company (PC1) a due diligence questionnaire. The questionnaire assessed the company's baseline practices for integrating gender equality measures across business functions, including procurement, service and product delivery, training and development, and workplace policies. Armed with the results of this questionnaire and in consultation with the parent company, ADB developed a Gender Action Plan (GAP), which included specific targets for PC1, e.g., for the number of jobs provided to women during the construction phase of project, as well as for the number of women managers employed by PC1 and its subsidiaries; development of an anti-sexual harassment policy and training of staff on the policy; and inclusion of women from the local community (for the first time) in PC1's vocational training on wind power operation and management.[18]

The safeguarding measures proposed for the project stem from the ADB classification as category B on environment, involuntary resettlement, and Indigenous Peoples.[19] On the latter, the ADB considered the impacts of the project on ethnic minority groups. As a result, the ADB required Phong Huy Wind and Lien Lap to develop a combined Livelihood Restoration and Ethnic Minority Development Plan (LREMDP) and Phong Nguyen was required to develop an Ethnic Minority Development Plan (EMDP). The plans aimed to mitigate the impact of the project on ethnic minorities and socially and economically vulnerable groups, including households led by women.[20]

The full case provides more detail on requirements related to gender equality and safeguarding within ADB's lending agreements to the Lotus Wind project companies.

Türkiye: Soma IV Wind Power Project

The Soma Wind Power Plant (WPP) is a wind power plant with 181 turbines and a total installed capacity of 288.1 MW located in the Soma District of the Manisa Province and the Savaştepe District of the Balıkesir Province in Türkiye. The Soma WPP, which started commercial operation in 2012, was developed by Soma Enerji Elektrik Üretim A.Ş. ("Soma Enerji"), a subsidiary of Polat Energi. The Project's "49-year Electric Power Generation License", issued in 2007 by Türkiye's Energy Market Regulatory Authority (EMRA), was originally established for a capacity of 140.1 MW. However, in 2013 and 2018, Soma Enerji was granted two capacity extensions of 100 MW (known as Soma III) and 48 MW (Soma IV), respectively. The Soma IV WPP Project (Soma IV), the focus of this case study, comprised the addition of 12 turbines with a capacity of 4 MW each (thus, increasing overall capacity by 48 MW).[21]

[18] ADB, "Report and Recommendations of the President to the Board of Directors", 2021 and "Gender Action Plan, Lotus Wind Power Project", 2021
[19] ADB Lotus Wind Safeguards Team, interview.
[20] ERM Vietnam for Phong Huy Windfarm Joint Stock Company, Combined Resettlement Plan.
[21] Polat Enerji, Soma 4 Wind Power Plant Non-Technical Summary, 2019

Soma IV's construction was financed by Garanti BBVA, Türkiye's second largest private bank.[22] Garanti BBVA issued a $44 million loan to finance the development of Soma IV, which included a cash facility worth $21.4 million, with an 8-year maturity, as well as a non-cash facility worth $22.6 million, with an 11.5-year maturity. Garanti BBVA structured the loan agreement as a 'gender loan'. Within the scope of this product, Polat Enerji's performance would be assessed periodically against a series of gender criteria. Garanti BBVA was the first bank worldwide to issue a gender loan.[23]

To determine the terms of the gender loan, Garanti BBVA conducted a baseline assessment of Polat Enerji through a questionnaire (approximately 30 questions). The baseline assessment provided Garanti BBVA with critical information on women's employment conditions at Polat Enerji, which served as the basis for the key performance indicators (KPIs) included in the lending agreement.[24] The KPIs included, inter alia, actions related to policies to prevent sexual harassment of female employees; return-to-work programs for employees returning from maternity leave; and ensuring gender equality in the hiring process.

As part of this financial product, Garanti BBVA annually assessed Polat Enerji's progress on the defined KPIs and offered the possibility to enhance the terms of the gender loans based on performance. Essentially, a discount was applied to the interest rate on the cash loan and the commission rate on the non-cash loan.[25] Polat Enerji would receive a 10–30 basis points (BPS) of decrease with each subsequent stage of improvement on the gender equality performance.[26] Through this credit structure, "companies that perform well in gender equality will be rewarded and those who are new in implementing gender initiatives will be incentivized to improve their performance".[27]

The full case provides more detail on the process for structuring the gender loan and its KPIs.

Haiti PHARES program

The government of Haiti (GoH), specifically the Ministry of Public Works, Transport and Communication (MTPTC), through its "Energy Cell" (the energy sector focused unit), ANARSE (the energy regulator), and the Technical Implementation Unit of the Ministry of Economy and Finance (UTE-MEF) launched the PHARES Program (Haitian Program of Access to Solar Energy for Rural Communities) in 2021 with the initial funding support of the Inter-American Development Bank (IDB) and the World Bank.[28,29]. The program creates a framework under which multiple procurement rounds for mini grid development sites by private developers could occur. Via a concession agreement with MTPTC, developers with projects selected under this procurement program will be granted the right to design, build, operate, and maintain the mini grids for a twenty-year term, with a potential to renew in five-year increments. Based on proposed projects in the pipeline, the anticipated average size of each project ranges from $500,000 to $2.5 million and depends on many factors that can be different between sites, such as technology used,

[22] Garanti BBVA "Investor Relations" web page, accessed June 2022.
[23] "Garanti BBVA finances wind farm in Turkey with gender loan to Polat Energy," Garanti BBVA, accessed June 2022, https://www.bbva.com/en/sustainability/garanti-bbva-finances-wind-farm-in-turkey-with-gender-loan-to-polat-energy/
[24] ibid
[25] ibid
[26] Imer and Atmaz, Interview.
[27] "Garanti BBVA finances wind farm in Turkey with gender loan to Polat Energy," Garanti BBVA, accessed June 2022
[28] PHARES, Proposal Concept Form, 2021.
[29] Note: World Bank is managing funds provided by the Scaling up Renewable Energy Program (SREP) in Low Income Countries to Haiti via the Renewable Energy for All Project.

number of clients, logistics, etc.[30] At the time of writing, the PHARES program was finalizing the negotiations for the first round of micro grid projects to be developed under the program.[31]

As designed, the PHARES procurement program integrates gender equality and safeguarding measures into the microgrids at all stages of the project lifecycle from site identification to contract management and handover of the asset. When submitting their concepts for a specific site to develop (a stage akin to project identification), developers must describe at a high level "the specific social impacts" of their proposal, including "aspects related to gender, vulnerable groups, land use and resettlements".[32]

Once developers receive the go-ahead to develop their site, they will be required to lay out full business, engineering, social and technical plans. Their social plans must detail how they will promote gender equality in employment and energy access as well as social management strategy and the community consultation strategy. These plans are then evaluated and scored as part of the competitive bidding process—10 of the 100 possible evaluation points can be awarded based on the quality of environmental and social aspects. In this way, the strength of a developer's plans for promoting gender equality and safeguarding will contribute to whether their proposals are selected.[33]

At operations stage, developers will be held accountable for delivering on their gender equality and safeguarding measures through reporting requirements, including by reporting on the number of female-headed households served by the project as well as the number/proportion of male and female employees hired by the project. At the end of the concession term, per Concession Agreement Article 56, the developer is required to provide guidelines and training to ensure "proper operation of the mini grid" by whomever will take over the asset. As part of these guidelines and training, the developer is to provide information on environmental and social safeguards procedures.[34]

The full case provides more detail on the role the various actors involved in project development lifecycle will play in designing, implementing, and overseeing gender and safeguarding measures included as part of projects developed under an innovative microgrid procurement program in a challenging fragile state context.

The table below provides a summary overview of the three cases profiled in this report.

[30] Georgios Xenakis, Interview.
[31] PPIAF, "Sign-off report", 2020.; Angelou and Nsom, Interview.
[32] PHARES, Proposal Concept Form, 2021.
[33] ibid
[34] ibid

Table 2: Overview of cases profiled

Project and Country	Country Income Level	Sector	Implementation Status	Project Size	Key Financiers + Advisors
Vietnam: Lotus Wind	Middle Income	Energy, wind power	Operational	$173 million	ADB (mandated lead arranger and bookrunner) for the financing, JICA, EFA (direct parallel lenders) Bank of China (Hong Kong) Limited; Bank of China Limited Macau Branch; Société Générale, Singapore Branch; Triodos Groenfonds N.V. (B loan providers)
Türkiye: Soma IV	Middle Income	Energy, wind power	Operational	$44 million	BBVA Garanti (Financier + Advisor on gender measures)
HAITI: PHARES program	Low Income	Energy, mini grid development	Under procurement	~$500,000 – $2.5 million*	World Bank IDB
The Haiti case profiles a procurement program for mini grid projects; project size is an average range.					

Key Takeaways and Recommendations

Key Takeaways

The following key takeaways can be drawn from the research process and from the cases themselves.

Integration of gender equality measures into infrastructure PPPs is still in its infancy: As evidenced by the process conducted by the research team to identify projects worth profiling for this study, there is not a surplus of good examples of PPP projects with well-integrated gender- equality measures. Despite casting a wide net, the team initially (only) identified 24 projects. Ultimately for various reasons, the team did not think many of these projects were good examples to profile. Further,

many of the projects worth profiling are more recent. Of the three examined in this report, Soma IV became operational in 2019, followed by Lotus Wind in 2021. No projects have yet become operational under the Haiti PHARES program.

Project lenders can play a powerful role in incentivizing projects to integrate gender equality and safeguarding measures: All projects examined whether financed through multilateral lenders or commercial banks (e.g., Türkiye Soma IV), demonstrated the power of project lenders to incentivize borrowers to integrate gender equality and safeguarding measures. The Haiti, and Vietnam projects included the presence of multilateral lenders, a group of lenders that all have gender equality and safeguarding requirements included as part of their lending packages. Given these projects needed multilateral financing to unlock commercial financing sources, the high requirements of integrating gender equality and safeguarding measures ultimately enabled projects to access other financing streams. The Türkiye Soma IV case is unique in that a Turkish private lender, Garanti BBVA, incentivized the project company to integrate gender equality measures through the presence of a "gender loan," which offered favorable financing conditions tied to gender-related performance indicators.

In PPPs, government contracting agencies transfer significant risk and operational responsibility to the private sector:

- **Thus, incentive structures and oversight mechanisms need to be in place to ensure adherence to gender-related requirements:** The Haiti PHARES case, clearly shows the links required between different actors in a PPP project development cycle to design and implement gender equality and safeguarding measures. In this case, the government contracting entity, with help from advisors and multilateral lenders, identified the gender equality and safeguarding goals required for the respective projects. The private parties selected to construct and implement those projects will then be contractually required to translate those goals into operational measures with reporting requirements. This handoff underscores how important it is for project planners and contracting entities to structure the right incentive measures in bidding processes and legally enforceable project agreements to encourage and ensure the private sector to properly implement the gender measures. This case also shows the necessity of ensuring proper oversight during project construction implementation—meaning entities overseeing the private parties' delivery of gender equality and safeguarding measures have gender and social safeguarding expertise and capacity to perform this function.

- **Further, it is important that the private parties (e.g., construction contractors and operators) to the infrastructure PPP have the capacity and expertise to implement gender-related requirements:** All cases demonstrate the importance of the private developer/concessionaire in implementing gender equality and safeguarding measures. Contractual and oversight mechanisms in the PPP contract can help spur the private party's acquisition of this capacity and expertise. There could also be scope for general capacity building to private parties from multilateral lenders—something ADB helped provide to the project company in the Lotus Wind Case.

It is possible to evaluate bidders in a competitive PPP procurement on their inclusion of gender and social considerations: In Haiti, social and gender plans were a component bidders competed on. PHARES demonstrates that social and gender plans associated with an infrastructure project can be evaluated as part of the procurement process and that bidders can, in a sense, compete on this angle.

Thorough data collection is needed to inform gender action plans and social management plans and ensure realistic gender targets: To help inform what gender equality safeguarding measures to integrate into a project, proper due diligence and data collection on gender gaps and risks are needed to inform gender action plans and social management plans and ensure realistic gender targets. The Lotus Wind Project prepared by ADB provides an example of a clear process for conducting this due diligence.

Willingness of project sponsors / bidders to integrate gender measures is indispensable to their success: Polat Enerji in the Türkiye Soma IV project and PC1 in the Vietnam Lotus Wind project were willing to comply with the gender and safeguarding terms. Arguably, the benefits of the loans to their respective projects outweighed the costs to them of integrating gender measures; however, in both cases the sponsor entities were willing to take gender equality measures on board. Further, it is worth noting that for the Haiti case, which is still under procurement, most bidders have not expressed concern or hesitation with regards to including gender equality and safeguarding plans or measures as part of the project.

Table 3: Cases that generated key takeaways

Key Takeaway	Cases
Integration of gender equality measures into infrastructure PPPs is still in its infancy.	Case Selection Process
Project lenders can play a powerful role in incentivizing projects to integrate gender equality and safeguarding measures.	Türkiye Soma IV, Vietnam Lotus Wind
In PPPs, government contracting agencies transfer significant risk and operational responsibility to the private sector, meaning: Incentive structures and oversight mechanisms need to be in place to ensure adherence to gender-related requirements. Private parties (e.g., construction contractors and operators) to the infrastructure PPP should have the capacity and expertise to implement gender-related requirements.	Haiti PHARES, Vietnam Lotus Wind, Türkiye Soma IV
It is possible to evaluate bidders in a competitive PPP procurement on their inclusion of gender and social considerations.	Haiti PHARES
Thorough data collection is needed to inform gender action plans and social management plans and ensure realistic gender targets.	Vietnam Lotus Wind, Türkiye Soma IV, Haiti PHARES

Willingness of project sponsors to include gender and safeguards measures helps ensure success.	Vietnam Lotus Wind, Türkiye Soma IV

Recommendations

The case studies and the research underpinning them lead to the following recommendations for multilateral agencies/DFIs seeking to help promote infrastructure PPPs that have fully integrated gender equality and safeguarding measures for government contracting agencies and private concessionaires:

Multilateral Lenders / DFIs

Continue to test, examine, and refine standardized approaches: As illustrated through the key takeaways, integration of gender equality considerations into PPP projects is nascent. Project teams from multilateral lenders and DFIs should see what works and determine what levers are available within the project structure and what private sector bidders will be willing to accept to help ensure proper safeguarding and close gender gaps. With this frontline information, these project teams can help multilateral lenders and DFIs develop standardized best-in-class approaches helpful to all industry participants (advisors, lenders, investors, governments).

Help ensure PPP contracting agencies have the appropriate capacity to oversee gender equality and safeguarding measures to ensure such measures succeed: It is evident in the PPP structure that the strength of the government counterparty's oversight of the PPP project helps ensure that the project meets its contractual milestones, including those related to gender. This suggests that additional multilateral support to such entities through grants and/or capacity-building measures on gender equality and safeguarding more generally, or specifically to the project, would be worthwhile.

Contracting Agencies

Seek additional support to oversee gender equality and safeguarding measures, if needed: Development of PPP projects requires many moving parts and puts lots of demands on government contracting entities. For many of these entities, integration of gender equality measures into projects is new and can thus seem like "one more thing" (i.e., a burden). These entities should seek additional support when needed—either within their own countries from ministries or organizations with responsibility for gender policies or from multilateral entities with available capacity building funding or technical assistance**.**

Concessionaires

Help the infrastructure PPP industry innovate and understand what works with regards to integrating gender equality measures into PPPs: Concessionaires are "in the trenches" when it comes to the final design and implementation of project-related gender equality measures. Given this role, these "downstream" parties (i.e., they enter after much project preparation is done) can help the upstream parties understand which gender measures work economically and financially and what works period.

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1. Introduction

Purpose of Mainstreaming Gender and Infrastructure Project

The following case studies are part of the larger, multi-product project Mainstreaming Gender in Infrastructure led by GIF and PPIAF. Responding to the demand for socially-responsive and gender-inclusive infrastructure, this project comprises four sub-tasks:

1. **Desk review** — A critical overview of existing literature on gender and infrastructure to identify broad gaps and weaknesses in gender-related interventions in infrastructure projects, which would act as a point for departure for the rest of the products in the project.

2. **Investor survey** — These analyses provide perceptions of private financial firms regarding the integration of gender issues, and the inclusion and empowerment of women and girls in the infrastructure projects they invest in.

3. **Case studies** — These highlight best practices and practical challenges of including a lens on gender in important PPP infrastructure projects.

4. **Gender Toolkit** — All the previous sub-tasks are intended to provide insights that will ultimately inform a gender toolkit for investors in infrastructure. Targeted at governments and private partners, the gender toolkit will provide practical, concrete guidelines and tools on how to mainstream gender in PPP project cycles.

Purpose of Case Studies

The cases seek to demonstrate how addressing project-related gender gaps in infrastructure projects with private participation can enhance the overall social and economic sustainability of projects. They seek to reinforce the business case for including gender equality and safeguarding measures in infrastructure PPPs and provide tangible examples of how projects have included gender equality and safeguarding measures in:

- Project design elements
- Contractual specifications
- Funding and financing instruments
- Risk allocation decisions

The case studies also seek—as far as possible in the context of this effort—to highlight potential financial benefits accruing to a private stakeholder by addressing project-related gender gaps and/or long-run financial losses avoided by doing so.

Methodology

Case Prioritization and Selection

The case team began by conducting an electronic search of publicly available information and through outreach to networks of individuals active in the infrastructure PPP and gender space to arrive at a long list of potential projects for further exploration.

In terms of non-gender-related project parameters, longlisted projects selected aligned with the parameters detailed in **Error! Reference source not found.**.

Figure 3: Parameters for Selection of Case Studies

Type of private participation in projects – Focus of cases were on PPP models[35] shown in dark red in 3, but also projects with substantive private participation, e.g., operations and maintenance contracts or 'affermage'[36] contracts or projects delivered through a Special Purpose Vehicle (SPV) or similar entity.

Sectors of focus – Energy, water, sanitation and solid waste management, telecoms, and transport.
Project size – No set parameters for the size (in terms of financial value or physical project area).
Regions – Limited to those in World Bank areas of operation: Latin America and the Caribbean (LAC), Europe and Central Asia (ECA), Middle East and North Africa (MENA), Sub-Saharan Africa (SSA), East Asia and Pacific (EAP), South Asia (SA).
Country income level – Low- and middle-income level countries, using the World Bank classification.
Project stage – Focus on detailing actions taken throughout the project cycle, specifically in project identification, project screening, development of the business case, and transaction advisory work for the project.

Further, longlisted projects needed to demonstrate evidence of integrating:

- **Safeguarding measures** to address gender-related risks (e.g., sexual exploitation, abuse, and harassment) and minimize and mitigate, if not avoid, adverse project impacts.

[35] Figure from *PPP Reference Guide Version 3.0* World Bank 2017, page 9.
[36] From Body of Knowledge on Infrastructure Regulation: Affermage contracts are generally public-private sector arrangements under which the private operator is responsible for operating and maintaining the utility but not for financing the investment.

- **Gender equality measures** to close gaps in development outcomes between men and women in human endowment[37] outcomes, jobs and employment, ownership and control of assets, and voice and agency.

The team used the framework of the World Bank gender tag as a filtering tool to identify infrastructure PPP projects with evidence of measures designed to close gaps in development outcomes between men and women. Further, the team sought to understand if the gender equality measures implemented by projects followed a clear results chain in that projects identified a gender gap, proposed actions to address those gaps, and then effectively monitored progress towards closing the identified.

Initially, the team anticipated focusing on project measures designed to close identified gender gaps and not necessarily safeguarding. However, after initial research and consultations, it became clear that among many stakeholders active in the development infrastructure PPPs, components of safeguarding and gender- equality measures were not always thought of separately. Thus, the team examined both.

Figure 4: World Bank Gender Tag Results Framework

In 2016, the World Bank introduced a **Gender Tag** to track the implementation of the World Bank's Gender Strategy (Strategy) and measure the quality and results of Bank operations across the four pillars of the Strategy. These four pillars stem from key areas where demonstrated gaps in development outcomes persist between men and women. These four gaps include i) improving human endowments (i.e., gaps in education and health outcomes); ii) removing constraints for more and better jobs; iii) removing barriers to women's ownership and control of assets; and iv) enhancing women's voice and agency and engaging men and boys.

"Gender tagged" projects are those that seek to address the pillars of the Strategy and demonstrate a clear "results chain," meaning they identify a gender gap, propose a specific action to close that gap and provide indicators to track progress towards closing the gap.

[37] E.g., health, education, social protection.

The team found 24 examples of infrastructure projects[38] developed or being developed through PPP structures that have integrated or are integrating gender equality and safeguarding measures. For many projects, the team had trouble confirming the extent and magnitude of gender-related measures through stakeholder outreach and open-source means. In other cases, upon further digging the team found that gender and safeguarding measures of certain projects were poorly executed (e.g., lack of gender expertise or a clear results chain) or were added onto the project after it was already underway and well formulated. 0 provides a list of non-selected projects that were screened as well as reasons why projects were not pursued for further study.

In the end, the team selected three cases for further review representing a diversity of implementation stage, project size, country income levels, and regions. Due to stakeholder availability and limited identification of PPP projects worth profiling in the telecommunications and water sectors[39], the cases profiled are from the energy—specifically renewable energy. **Error! Reference source not found.** provides an overview of the projects profiled in the case studies.

Table 4: Overview of projects profiled in the case studies

Project and Country	Country Income Level	Sector	Implementation Status	Project Size
Vietnam: Lotus Wind Power Project	Middle Income	Energy, wind power	Operational	$173 million
Türkiye: Soma IV Wind Power Project	Middle Income	Energy, wind power	Operational	$44 million
HAITI: PHARES program	Low Income	Energy, mini grid development	Under procurement	~$500,000 – $2.5 million*
The Haiti case profiles a procurement program for mini grid projects; project size is an average range.				

Analytical Approach for Reviewing the Cases

Data Collection Methods

For each of the cases the team collected data an information through two means:

1. **Open-source research**: initially, the team reviewed all publicly available and relevant information about the projects and the context (e.g., MDB loan project appraisal documents, reports, news articles, etc.) to gain a strong foundational understanding.

[38] While the initial cut-off date for documentation collated through the desk review was '2000,' most PPP projects with evidence of gender inclusion and safeguarding were developed after 2015.
[39] Of the 23 projects long-listed for further consideration, there were only two water projects and one telecommunication project. On further examination, these three projects were not good candidates to be profiled as part of this effort.

2. **Interviews with Project Stakeholders:** the team followed its open-source research with semi-structured interviews with key project stakeholders (see **0** for list of stakeholders interviewed). These interviews also enabled the team to access more detailed project-related (e.g., project agreements) documents not available to the broader public.

Analytical Framework

Case Study Aspect	Key Research Questions
Project's Gender Equality and Safeguarding Components	How do relevant project stakeholders define such elements? How are they supported in project design? How are they funded? How are they resourced? Who is responsible and accountable for implementation? How are they supervised?
Capacity of Contracting Entity / Procuring Government	What is the commitment of the contracting agency to gender equality and safeguarding project components? Does the contracting agency have the staff capacity to oversee such elements?
Bidder and Bid Evaluation	How gender equality and safeguarding components of project bids from private bidders were evaluated in competitive procurement processes. How or whether bidders were evaluated based on their experience with gender equality and safeguarding.
Role of Lender	What role did the lender play in encouraging integration of project's gender equality and safeguarding measures? What oversight role does the lender play with regards to implementation of the project's gender equality and safeguarding measures?
Barriers and Enablers to Success of Gender Equality and Safeguarding Components	What were the challenges, barriers, or bottlenecks to integrating gender equality and safeguarding considerations into the project? What do you think helped / could help the projects overcome these challenges?
Cost / Benefit Examination of Including Gender Equality and Safeguarding Components	How did analysis, integration and oversight of gender equality and safeguarding measures increase costs associated with the project? What additional benefits does inclusion of gender equality and safeguarding measures bring that might not otherwise have been realised?

2. Vietnam Lotus Wind

Introduction

The following case analyzes how Vietnam's Lotus Wind Power Project integrates gender equality and safeguarding measures. The Lotus Wind Power Project entails the development, construction, and operation of three wind farms and associated facilities at different sites in Quang Tri Province, each with a capacity of 48 MW (144 MW in total). At the time of writing, the project was in operation.

The team selected this case study for examination as the Lotus Wind Power Project, financially arranged by the ADB, is currently the largest wind power project in Vietnam to be financed by international lenders. Additionally, Lotus Wind provides a strong example from the Asian region of the power that lenders—in this case driven by the ADB—can exercise over project companies through requirements related to gender equality and safeguarding within their lending agreements. In this sense, a review of the gender equality and safeguarding standards and regulations put forth by the ADB as conditions for the financing of the Lotus Wind project can serve as a useful framework for other energy projects in the Asian region and worldwide.

The case study is presented in seven sections. The first section provides an overview of the Lotus Wind project, as well as the proposed transaction structure and financing arrangement. The second section describes Vietnam's gender equality context, including the conditions of women and girls, and important statistics based on the World Bank's Gender Strategy. Then, the case study depicts the gender and safeguarding measures included in the Lotus Wind Project, as well as the barriers and enablers to the success of actions on gender equality and provides a high-level assessment of their costs and benefits. Finally, the case study draws important lessons learned.

Lotus Wind is, to date, the first and largest wind power project in Vietnam to be internationally project-financed on a long-term US dollar limited-recourse basis and under the revised PPA.

Project Overview

Project Overview and Objective

The Lotus Wind Power Project (hereafter, "Lotus Wind" or the "Project") encompasses the development, construction, and operation of three wind farms, each with a capacity of 48 MW, and the internal transmission lines in Quang Tri Province—located in the North Central Coast region of Vietnam. Lotus Wind is Vietnam's largest wind project with a combined installed power capacity of 144 MW. It is estimated to increase the country's wind capacity by 25%[40] and contribute to meeting Vietnam's increasing power demand, which is estimated to grow by 8% annually through 2030.[41]

The wind farms were developed and are owned by three newly created, special-purposed companies incorporated in Vietnam, and majority owned by PC1 and Renova Inc. (Renova): Lien Lap Joint Stock Company, PC1 Group Joint Stock Company (PC1), and Phong Nguyen Joint Stock Company. Each achieved a commercial operation date (COD) in October 2021 and is implemented under a separate

[40] As of July 22, 2021, 13 wind power plants with a total capacity of 611.33 MW have been put into commercial operation. *MOIT Viet Nam.* https://moit.gov.vn/phat-trien-ben-vung/13-nha-may-dien-gio-da-vao-van-hanh-thuong-mai.html

[41] ADB, "Report and Recommendations of the President to the Board of Directors", 2021

20-year power purchase agreement (PPA) with EV.[42] At the time of writing, the project was already in its operations phase.

Figure 5: Lotus Wind Farm (Source: Asian Development Bank, 2022)

A privately developed project as large as Lotus Wind did not always seem likely in Vietnam. Despite steps by the government of Vietnam (GoV) to encourage the development of wind power by private developers, including the 2011 development of a Feed-in-Tariff (FiT) of $0.0780 per kilowatt-hour (kWh) and a standard PPA template for utility-scale wind power projects, only three wind power projects (with a total capacity of 153.2 MW) reached commercial operation between 2011 and 2018. The limited success in the wind (as opposed to the solar) sector has been explained by three key factors[43]:

i) The FiT was insufficiently attractive to project developers and financiers.

ii) The standard PPA was not deemed bankable by international lenders on a non-recourse project basis; and

iii) Local banks were not familiar with the technology used in the wind sector, compared to that in ground-mounted solar projects, as well as with non- or limited-recourse project financing structures.

To increase interest in wind power development, Vietnam raised the FiT to $0.085/kWh for onshore wind projects in 2018. Additionally, the Ministry of Industry and Trade (MOIT) revised the model wind PPA template to enhance its bankability.[44]

In response to these changes, in 2019, PC1, a local project developer, requested long-term US dollar financing from the ADB for the Lotus Wind Farm Project. Lotus Wind attracted the ADB's attention due to its substantial size, excellent location with robust wind resources, and strong grid connections and PC1's local expertise in the power infrastructure sector and willingness to provide thorough sponsor

[42] ADB, "Lotus Blossoms"
[43] ADB, "Report and Recommendations of the President to the Board of Directors", 2021 and "Lotus Blossoms"
[44] One of the main changes included adding termination payments, as these had been previously identified by potential financiers as a key project inhibitor.

support. Further, the cross-border knowledge transfer from an experienced renewable energy developer in Japan was helpful.[45]

Transaction Structure

The Lotus Wind Project was constructed under "three fixed-price, date-certain, turnkey EPC contracts," which operate as a single contract with PC1 as sole contractor responsible for delivering all components of the works. This includes the supply of wind turbine generators (WTGs), which were subcontracted to Vestas. According to the ADB, this contracting structure enhanced the bankability of the project, as it provided project companies "direct recourse against the contractor for defects or non-conformances in any part of the work, including those delivered by Vestas". Each of the project borrowers signed O&M contracts with highly qualified and experienced contractors[46].

The roles and responsibilities of project stakeholders involved are defined below and shown below:

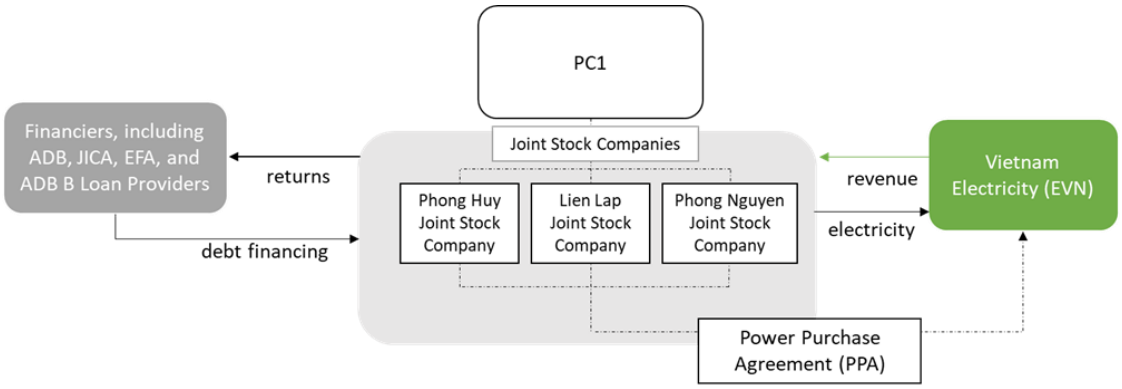
- **Borrowers**: The borrowers are Lien Lap Joint Stock Company, Phong Huy Joint Stock Company, and Phong Nguyen Joint Stock Company—three newly created, special-purposed companies, which are majority owned by PC1 and Renova Inc.[47]

- **Sponsors**: The sponsors are PC1 and Renova. The former is a domestic leader with approximately 60 years' experience in Vietnam's power sector. As one of the largest hydropower developers in the country, PPC1 has seven operational projects with a combined capacity of 168 MW, including two financed by the World Bank. The firm specializes in building power transmission networks and have completed several hundred thousand kilometres of transmission lines and more than 100 substations for EVN. PC1 Group is very familiar with the power supply and demand dynamics in Vietnam. Renova, the second sponsor, is a Japanese renewable energy developer and power producer, with 590 MW of generation assets in operation, 540 MW under construction and a further 400 MW under development across solar, wind, biomass, and geothermal technologies. PC1 and Renova Inc. jointly mange the project.

- **Financiers:** ADB, acting as MLA and bookrunner for the financing, leveraged financing from the JICA, and EFA as direct parallel lenders, and Bank of China (Hong Kong) Limited; Bank of China Limited Macau Branch; Société Générale, Singapore Branch; and Triodos Groenfonds N.V. as ADB B loan providers.

[45] ADB, "Report and Recommendations of the President to the Board of Directors", 2021 and "Lotus Blossoms", 2022
[46] ADB, "Report and Recommendations of the President to the Board of Directors", 2021
[47] Individual shareholders own less than 3% of these companies.

Figure 6: Skeleton of proposed financing flows in transaction structure



**Straight lines represent flow of money / electricity; dashed lines represent legal/contractual agreement.*

Financing Arrangements

The ADB was the MLA of the 15-year, $173 million green loan project financing package to build and operate the three wind farms. As shown in Table 55 below, the financing arrangement includes a $35 million direct senior secured loan (A loan) provided from ADB's ordinary capital resources, parallel loans from JICA and EFA of $25 million and $32 million, respectively, and a syndicated B loan of 81 million to be funded by commercial banks.[48] The ADB B loan providers include Triodos Emerging Markets Renewable Energy Fund, Triodos Groenfonds, Bank of China (Hong Kong) Limited, Bank of China Limited Macau Branch, and Société Générale Singapore Branch.[49].

Table 55: Financial arrangements for Lotus Wind Project

Lender	Amount ($M)
ADB (A loan)	$35
JICA (direct lender)	$25
EFA (direct lender)	$32
ADB B loan providers: Bank of China (Hong Kong) Ltd, Bank of China Ltd Macau Branch, Société Générale Singapore Branch, Triodos Emerging Markets Renewable Energy Fund and Triodos Groenfonds.	$81
Total	$173

[48] ADB, "Report and Recommendations", 2021.
[49] Triodos Investment Management, "From Coal to Wind Power"

Gender Equality and Safeguarding Context in Vietnam

In the last decade, the government of Vietnam (GoV) has taken measures to address gender inequality through national level policies and strategies.

1980 Constitution (amended and supplemented in 2001) "integrated women's rights into basic rights of citizens" and made significant progress in promoting gender equality (VNA 2022).

Law on Gender Equality (2006) and **Law on Prevention and Control of Domestic Violence (2007)** prescribed and protected women's rights more adequately (UN Women n.d.).

- **Creation of Department of Gender Equality in the Ministry of Labour, Invalids and Social Affairs (2008)** to supervise the implementation of the Law on Gender Equality.

National Strategy on Gender Equality (2021–2030) aims to promote gender equality in the workplace and women entrepreneurship, in alignment with the SDGs. Among key goals, the Strategy aims to increase the proportion of female directors and owners of businesses, reduce maternal mortality and the average time women spend doing unpaid housework, and provide access to additional support services to victims of domestic and gender-based violence (Nguyen December).

While the GoV has instituted policies to address gender inequalities, women's "economic opportunities remain constrained due to a persistent gender pay gap, significant segregation of men and women in terms of occupation and industry of employment, an unequal burden of unpaid care work, and general resistance to women taking up leadership positions".[50]

Figure benchmarks Vietnam's performance on certain gender equality-related indicators against regional peers and high-income countries. Figure shows gaps between Vietnam's men and women across certain indicators pertaining to employment and political representation. The data show:

- **Vietnam has a mixed performance on closing voice and agency gaps** with a relatively high prevalence of intimate partner violence. Positively, Vietnam has a relatively high level of female representation in parliament; however as compared to Vietnamese men progress is needed.

- **Vietnam has closed many human endowment gaps:** Compared to regional peers, women in Vietnam have a high literacy rate. Additionally, the country's gender gaps in primary schooling have been virtually closed and women have, almost reached parity with their male counterparts in the attainment of college degrees.

- **Vietnam has strong female labor force participation rates as compared to regional and high-income peers;** yet, Vietnamese women still lag behind Vietnamese men, especially in professional and technical roles. The energy sector, however, is particularly male dominated. As of 2019, women represented 27% of employees in the utilities sector and 16% of management positions in the country. Similarly, in the renewable energy sector, "only a small

[50] Gender Action Plan, Lotus Wind Project

proportion of women are in management, technical, and field-based roles, with the highest concentration of women in administration, finance, and human resources".[51]

- **Vietnamese women have relatively strong ownership and asset rates as measured by women who have an account at a financial institution**.

Figure 7: Gender Equality Indicators – Vietnam as compared to the region and high-income countries.

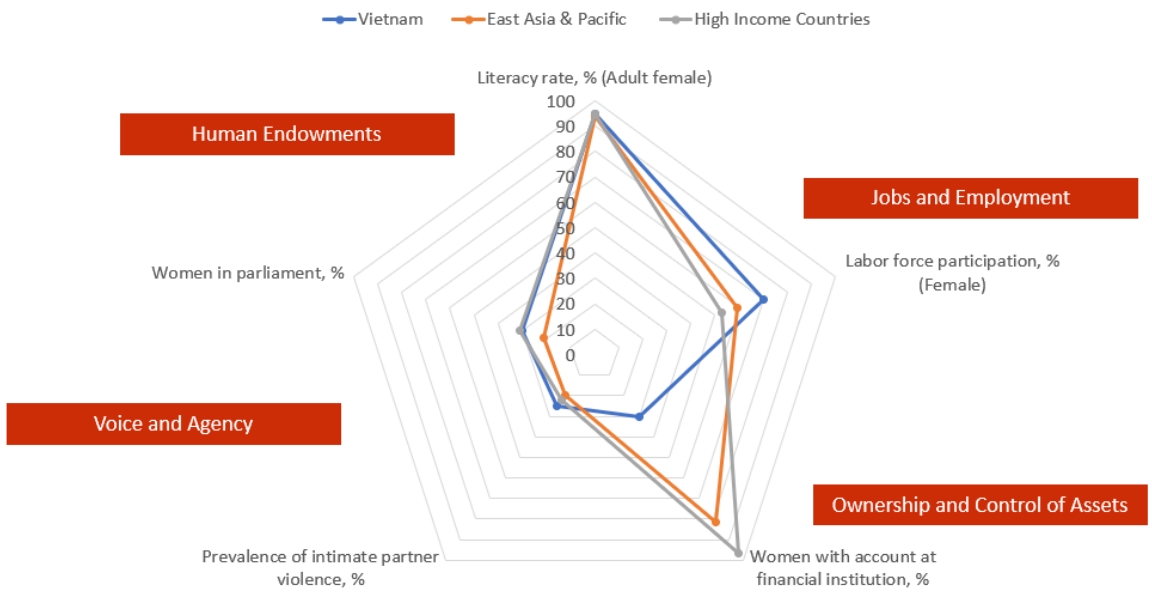
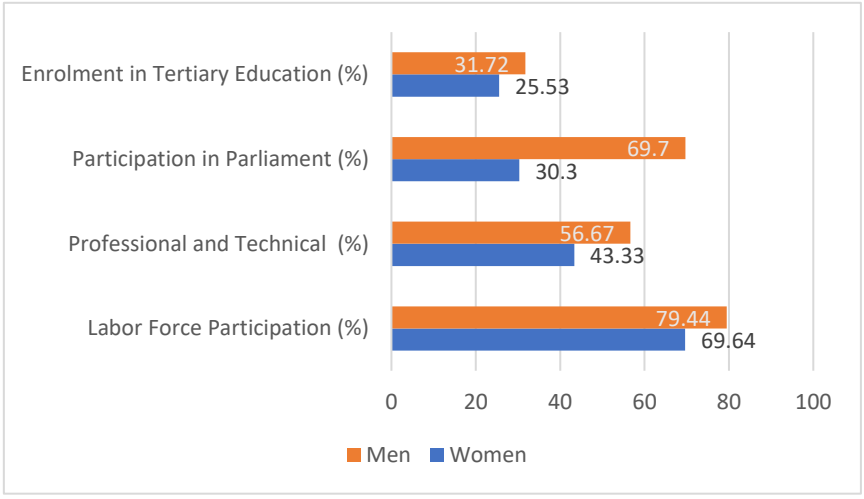


Figure 8: Gap between men and women in voice and agency and jobs and employment indicators, Vietnam[52]



[51] ADB, "Report and Recommendations", 2021 and ADB, "Gender Action Plan, Lotus Wind Power Project"
[52] Data source: Global Gender Gap Report 2022, World Economic Forum, 2022.

Specific aspects of the gender inequalities present in Vietnam imply important considerations for the safeguarding and gender equality measures integrated by Lotus Wind.

- **Considerations for Safeguarding Measures**: On the risk management side, these are specifically related to human endowments and women's voice and agency due to the influx of workers, particularly during construction, which may increase the incidence of sexual harassment, as well as sexually transmitted diseases (STDs) and unwanted pregnancies.

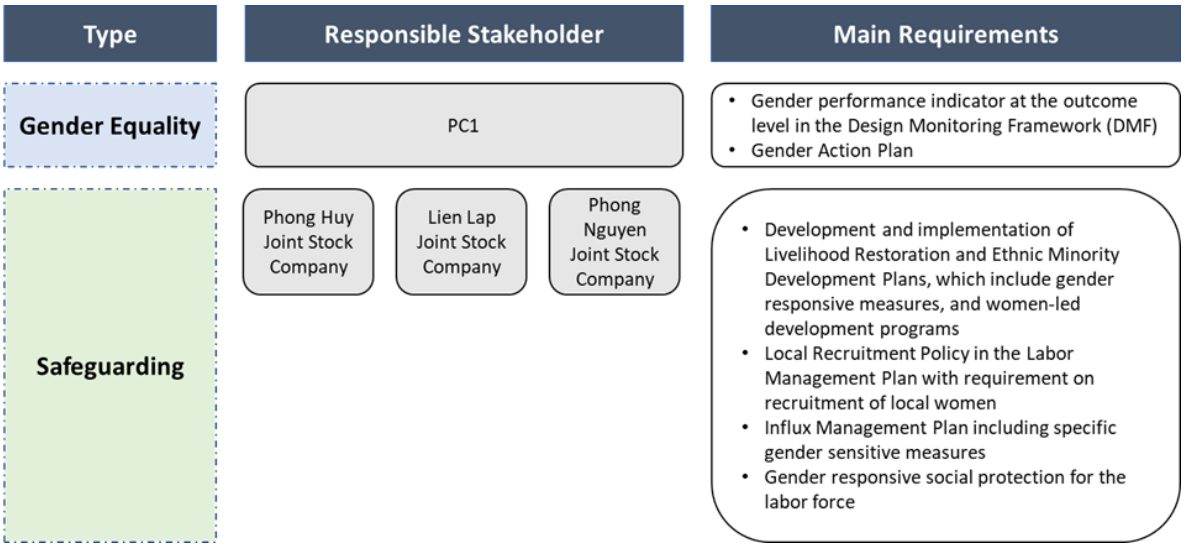
- **Considerations for Gender Equality Measures**: Gaps in employment among men and women, especially for professional and technical positions point to an opportunity for the Lotus Wind project to address this gap. Indeed the project has integrated several measures to help encourage training of women for technical positions and to aim for higher participation of women in such positions.

Lotus Wind's Gender Equality and Safeguarding Measures

The gender-related components integrated into the Lotus Wind Project can be grouped into two categories: gender equality measures and safeguarding measures. The former refers to specific requirements imposed by the ADB on projects classified as Effective Gender Mainstreaming (EGM), which contribute to addressing gender equality and women's empowerment by narrowing gender disparities. On the other hand, safeguarding measures are designed to address gender-related risks and minimize and mitigate, if not avoid, adverse project impacts.

As shown in Figure below, while both requirements are imposed by ADB, the gender equality measures are enforced at the parent company level (i.e., on PPC1), while safeguarding measures are required from each of the sub-subsidiaries (i.e., Lien Lap Joint Stock Company, Phong Huy Joint Stock Company, and Phong Nguyen Joint Stock Company). Sections below provide an overview of the gender equality and safeguarding measures included in the Lotus Wind Project.

Figure 9: Overview of gender-related measures in Lotus Wind



Gender Equality Measures

Per the ADB's gender categorization system, which includes a 4-tier structure to measure and report on the extent to which gender equality issues are incorporated into project design, the Lotus Wind Project is categorized as EGM (ADB 2021). According to the ADB, a project is assigned EGM if "the project outcome does not explicitly address gender equality or women's empowerment, but project outputs contribute to addressing gender equality and/or women's empowerment by narrowing gender disparities, including under the Strategy 2030's Operational Priority 2's five pillars.[53]Requirements for projects with an EGM classification, include:

- Gender Analysis, with relevant sex-disaggregated data and thorough consideration of gender issues, highlighting both constraints and opportunities.

- At least one gender performance indicator at the design and monitoring framework (DMF) outcome level that directly reduces gender gaps, benefits women and girls, and/or promotes women's empowerment is included in the majority (50% or more) of project outputs.

- A GAP that incorporates the project's gender performance indicators.

In alignment with this, the Lotus Wind Design Monitoring Framework (DMF includes three outputs specifically related to gender, which overlap with the performance indicators included in PC1's GAP. The development of the GAP is based on an ADB gender due diligence questionnaire, which evaluates the project company based on the following seven components[54]

- Presence of targeted procurement arrangements, practices, and/or policies focused on women and women-owned companies.

- Distribution of services and products to women or women-owned businesses.

- Customer profile, including market research conducted on specific product/service needs of women, development of products/services or marketing strategies specifically targeting women, and/or favorable payment terms targeting female customers.

- Presence of gender-related workplace practices (i.e., written leadership commitment to gender equality, equal employment opportunity policy, collection and analyses of sex-disaggregated data on compensation; anti-sexual harassment policy, among others).

- Existence of internship and apprenticeship programs.

- Staff development and training opportunities targeting female staff.

- Sex-disaggregated data on the workforce.

[53] ADB, "Guidelines for Gender Mainstreaming Categories of ADB Projects"
[54] ADB, "Gender Action Plan, Lotus Wind Power Project"

The Gender Due Diligence questionnaire is meant to provide information on the baseline of these indicators. As outlined in the Lotus Wind GAP, the results of this evaluation indicated only 17% of PC1 and its subsidiaries' staff were female. In alignment with the trends in the energy sector presented above., office roles concentrated the highest proportion of females (39%), while management (21%), technical (9%), and field (4%) roles show a much lower concentration of female workers relative to male (results shown in detail in Table). Additionally, the results of the ABD's gender due diligence indicated PC1 did not have an anti-sexual harassment policy and, although the company provided vocational training on wind farm operation and management to local people, as of October 2020, all the participants were men.

Table 6: PC1 and subsidiaries staff by gender (Source: ADB)

Item	Male	Female	Total	% Female
1. Board Directors	5	0	5	0%
2. Board of Management	8	0	8	0%
3. Department Heads & Deputy Heads (PCC1 HQ)	16	5	21	24%
4. CEOs and Deputy CEOs (Subsidiaries)	28	0	28	0%
5. Department Heads & Deputy Heads (Subsidiaries)	63	26	89	29%
6. Technical team (PCC1 HQ and subsidiaries)	224	22	246	9%
7. Office workers (PCC1 HQ and subsidiaries)	230	149	379	39%
8. Field workers (Subsidiaries)	563	26	589	4%
Total staff	**1,137**	**228**	**1,365**	**17%**
Total managers (2)+(3)+(4)+(5)	**115**	**31**	**146**	**21%**

That said, the GAP establishes a set of measures for PC1 to promote gender equality and women's empowerment in their business and throughout the Lotus Wind Project. These measures are grouped in three broad outcome categories: gender-inclusive local employment, gender inclusiveness in PC1's work environment, and enhancement of livelihood opportunities of women. Key components of the GAP include targets for the number of jobs provided to women during the construction phase of project, as well as for the number of women managers employed by PC1 and its subsidiaries; development of an anti-sexual harassment policy and training of staff on the policy; and inclusion of women from the local community (for the first time) in PC1's vocational training on wind power operation and management.[55]

The GAP is attached to the facility agreement with the targets included in the GAP expected to be completed by Year 5 of the Project (2023). Therefore, gender-related performance indicators are based on short-to-medium term targets. PC1 is responsible for the submission of periodic reports on the implementation of the GAP to the ABD. The full GAP is available in Annex 6.

Safeguarding Measures

In compliance with its Safeguard Policy Statement (2009) (SPS), the ADB classified Lotus Wind as category B on environment, involuntary resettlement, and Indigenous Peoples.[56] On the latter, the ADB consider the impacts of the Project on ethnic minority groups. As a result, the ADB required Phong Huy and Lien Lap each develop a combined LREMDP, and Phong Nguyen develop an EMDP.

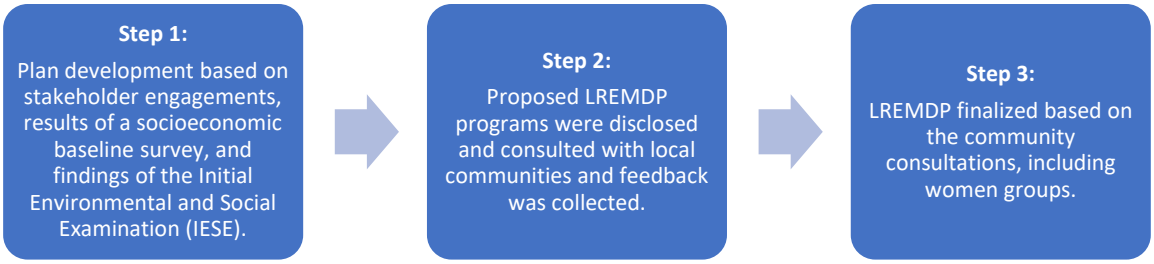
The environmental and social impact assessment was conducted by a consulting firm hired by PC1 for the three project sites, and ADB's Vietnam-based E&S consultants participated in the site visits and

[55] ADB, "Report and Recommendations", 2021 and ADB, "Gender Action Plan, Lotus Wind Power Project"
[56] ADB Safeguards Team, Interview.

consultations with local communities. From the ADB headquarters, a team of nine environment, social and gender specialists conducted virtual due diligence for the project.[57]

The LREMDP and EMDP followed a three-fold process, as shown below.

Figure 10: Three-fold approach for the development of the LREMDP



The plans aimed to mitigate the impact of the project on ethnic minorities and socially and economically vulnerable groups, including households led by women (ERM Vietnam for Phong Huy Windfarm Joint Stock Company 2021). Figure 11 provides an overview of the identified potential impacts of Lotus Wind during pre-construction, construction, and operations. Safeguarding measures were proposed for each of the impact categories shown below.

Figure 11: Identified social impacts of Lotus Wind throughout the project cycle

Identified Impacts	Stage in the Project Cycle		
	Pre-Construction	Construction	Operations
Impacts on economic and loss of livelihood	X	X	
Government led land acquisition resulting in economic displacement and livelihood impacts	X	X	
Impacts associated with construction workers		X	
Gender impacts		X	X

For instance, to mitigate the impacts on economic and loss of livelihood during pre-construction and construction, the proposed safeguarding measures included the development and implementation of the LREMDP, which would take into account women and other vulnerable groups, to ensure improvement of their standards of living to at least national minimum standards services".[58] The Phong

[57] ADB, "VIE: Lotus Wind Power Project", 2021
[58] ERM, "Resettlement Plan for Phong Huy", "Livelihood Restoration and Ethnic Minority Development Plan Lien Lap Wind Power Project", and "Ethnic Minority Development Plan for Phong Nguyen"

Nguyen EMDP specifically prioritizes women groups affected by nontimber forest product collection (NTFP) activities.

Other safeguarding measures included the establishment of a Local Recruitment Policy in the Labour Management Plan, committing a certain percentage of local female recruitment, measures in the Labor Management Plan to manage the impacts related to labor influx. Specific gender-sensitive measures were also included such as training for workers on mitigating and reporting gender-based violence. Annex 7 provides an overview of all safeguarding measures integrated in the Lotus Wind Project.

In the case of Lotus Wind, the Livelihood Restoration Plans (LRPs) are considered as a Resettlement Plan, given involuntary land use rights acquisition for the project resulted in economic displacement. The LRPs in Phong Huy and Lien Lap's LREMDPs included a component on women-led microbusiness development, aimed at increasing "women's employment opportunities and active participation in the economy, thus improve women's empowerment and overall well-being, through a cost-effective mechanism for providing women managed financial services[59] The program specifically focuses on Van Kieu Indigenous Peoples households affected by the land acquisition and its main components include:

- **Financial Support and Training**: Business training to improve knowledge of business and facilitate business setup.
- **Women's Economic Empowerment**: The formation of women's economic groups, in agricultural development, self-employment and women entrepreneurs, as well as training on women's group leadership, economic planning and budgeting, gender equity, women entrepreneurship.
- **Local Procurement**: Development of a local procurement policy and subsequent disclosure of the policy to all contractors during construction phase and monitoring of implementation.

Other LREMDP programs, such as the Vocational Training, Job Skills and Local Recruitment Program, the Health, Marriage, and Family Awareness, and the Health and Water and Sanitation Program, prioritize vulnerable and women groups.

The LREMDP and EMDP all state one full-time Community and Social Relations Manager with gender and development experience at the site level would be needed to coordinate all the LREMDP/EMDP programs, as well as a Community and Social Relations Specialist responsible for LREMDP implementation in all affected villages.

As a Category B project, the ADB in alignment with the other Lenders safeguards requirements, requires the client to provide quarterly monitoring reports on the E&S safeguards during construction, and semi-annual reporting during operations.

Expected Results of Lotus Wind's Gender Equality and Safeguarding

The Lotus Wind Project demonstrates addressing safeguarding and project-related gender gaps can enhance the project's overall sustainability. Lotus Wind includes strong safeguarding measures in place to help ensure (i) the livelihoods of all Project Affected People (PAPs), including women, are enhanced and/or restored to their pre-project levels and the standards of living of vulnerable groups, including women, are improved; and (ii) the impact of the project on local ethnic minority communities is mitigated

[59] ADB, "Combined Resettlement Plan and Indigenous People's Plan, Phong Huy Wind Farm" and "Livelihood Restoration and Ethnic Minority Development Plan Lien Lap Wind Power Project"

and addressed. Additionally, through the GAP, the Project aims to actively close gender gaps, particularly related to jobs and employment and women's voice and agency.

The expected results of gender equality and safeguarding measures are described below. As the Lotus Wind Project is currently in its operations phase, progress on some of these measures has already been recorded and is included in Table 7. However, as an on-going project, the results below may be subject to change slightly.

Table 7: Expected results of gender equality and safeguarding measures by project component and progress

Project Component	Expected Results	Progress

GAP	• Closing of Gender Gaps
	  ○ Jobs and Employment: Participation of women in project workforce; prevention of sexual harassment through policy and training; participation of women in vocational training.
	  ○ Voice and Agency: Participation of women in managerial positions of the project.
		• PC1 has developed an anti-sexual harassment policy in its code of conduct.
		• Target on employment of female managers (at least 23%) is in progress.
		• Training of women on the wind power project operation and management reported on-hold due to COVID-19.

Social Management Plans – Safeguards (LREMDP and EMDP)	• Safeguards
	  ○ Risks to vulnerable populations including women and children are effectively managed.
	  ○ Information is effectively disclosed to affected communities.
	• Closing of Gender Gaps
	  ○ Jobs and Employment: Recruitment of women from local communities for the project workforce.
		Progress on the following items is reported for all three wind farms (Lien Lap Wind Power Joint Stock Company 2021) (Phong Huy Wind Power Joint Stock Company 2021) (Phong Nguyen Wind Power Joint Stock Company 2021):
		• LREMDP and EMDP were developed. Implementation of some of the proposed programs had taken place as of June 2021.
		• The Project has monitored its E&S performance per IESE and Environmental and Social Management Plan during construction.
		• The Project Owner carried out socioeconomic survey and a census survey presented in the IESE report, EMDP and LREMDP, approved by ADB.
		• Project Owner carried out a range of meaningful consultation with affected people, especially IPs communities during the development of the Project.
		• The Project's land acquisition, compensation, and support process being implemented in line with the requirements of the ADB Safeguard Policy Statement and the regulatory framework.

Potential Barriers and Enablers of Success of the Gender Equality and Safeguarding Measures

The barriers to the success of the gender and safeguarding measures included in the Lotus Wind Project can be categorized as follows:

- **Role of ADB as MLA in the integration of gender and safeguarding measures:**

    - Over the last three years, the ADB has placed significant emphasis on the incorporation of gender-related components into the structuring of infrastructure projects. Following a top-down approach, the integration of gender equality and safeguarding considerations is promoted from the Bank's management starting at the project concept stage. Internally, the social specialists from the ADB identify this internal commitment towards gender equality to be a critical enabler of the integration of these measures into the Lotus Wind Project. The ADB also executes rigorous and regular monitoring to ensure clients are progressing on implementation of their GAP and compliant with the project's safeguard measures.[60]

    - In the additionality side, the ADB has a team dedicated specifically to the development of the GAP, which builds on a due diligence questionnaire that provides critical baseline information and therefore facilitates the creation of realistic targets. The ADB also provided guidance to PC1's E&S consultant on the development of the Project's impact assessment.

    - The presence of a local ADB team in Vietnam with a strong client relationship is identified as a key enabler, as the language barrier between PC1—who speak predominantly Vietnamese, and ADB's headquarters' staff—who speak predominantly English, would have resulted in very challenging negotiations.[61]

- **Willingness of the sponsors (PC1 and Renova) to embrace safeguarding and gender goals embedded in project:** Overall, the ADB team involved in the Lotus Wind Project identifies PC1's receptiveness to be critical to the integration of gender and safeguarding measures. From the start of the engagement, the ADB held conversations with PC1 on the need to be responsive to the impact of the project on social dimensions, including gender equality. The ADB team hypothesizes that, as PC1 is a local client, their willingness to take on ADB requirements may have been higher, as they consider the Bank's "stamp of approval" has a reputational benefit and elevates their E&S standards. Additionally, the ADB's safeguards team identifies the fact that PC1 was both the developer and owner of Lotus Wind, integrating gender components was easier (compared to others in which construction is not executed by the owner of the project) [42]. It is also important to consider that, in order to provide additional flexibility, the ADB set GAP targets on PC1 instead of its subsidiaries.

In terms of the potential barriers to the success of the gender and safeguarding components of Lotus Wind, the following stand out from the interviews with stakeholders:

- **Supply-side issues related to women's technical skills**: As shown in previous sections, the GAP includes specific measures to increase the number of women employed by PC1 and its subsidiaries. Compared to other measures, such as vocational training of women in the project operation and management of wind projects, employment targets generated some pushback as there is a perception that the supply of women with technical skills is limited. Thus, sponsors can perceive

[60] Satterly, Interview.
[61] ADB Safeguards Team, Interview

these targets to be “outside of their control.” In order to overcome these barriers, ADB offers technical assistance to its clients including on techniques and processes that can enhance a company’s ability to attract, retain and advance female staff.

Business Case for Inclusion of Gender Equality and Safeguarding Measures

All stakeholders interviewed with regards to Lotus Wind made it clear the costs to develop the gender action plan and safeguarding components and then to provide resources to support implementation and oversee those components are not significant.[62] The case for including gender and safeguarding measures in Lotus Wind is focused on a common goal of the key stakeholders involved in the project—mainly ADB (and by extension, the other lenders in the financial arrangement)—to achieve inclusive, sustainable development impact.

High-Level Cost Benefit

Although there is no empirical evidence that the integration of gender equality and safeguarding enhanced the business case for Lotus Wind, there is documented evidence globally showing that integrating gender considerations into the energy value chain, including projects and company operations, can contribute to improving measurable outcomes. The following sub-section presents a high-level qualitative overview of the costs borne by various project stakeholders to implement gender equality and safeguarding measures as well as the potential benefits such stakeholders could reasonably expect because of implementing those measures.

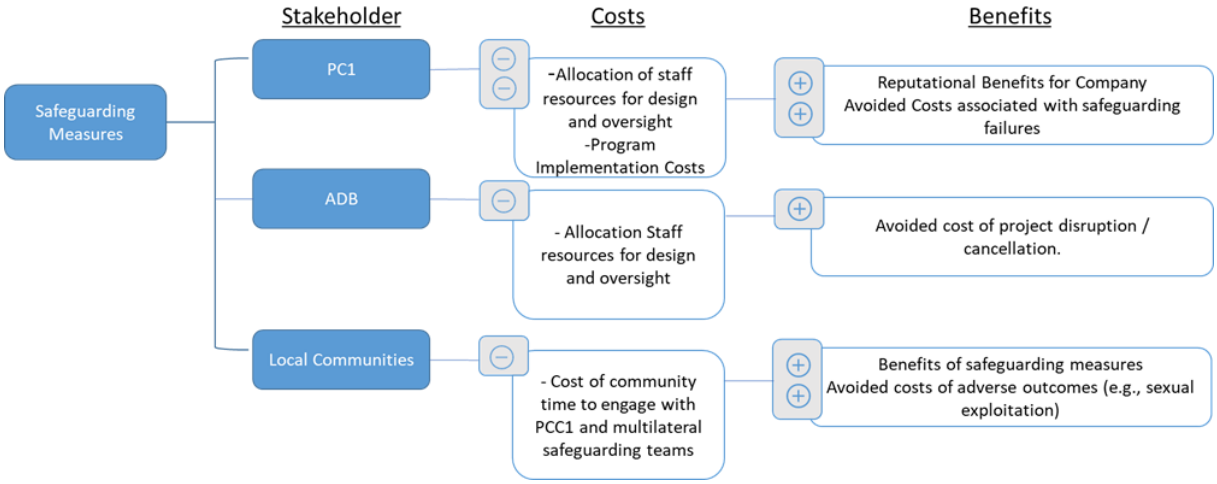
Table 86: Safeguarding – costs and benefits

Stakeholder	Costs (-)	Benefits (+)
PC1	**Staff Costs**: PC1 faced costs related to the development of the LREMDP and subsequent reporting of these plans. These include hiring / retaining staff with gender and development experience to coordinate all the social management plans, as required by the ADB’s safeguarding team. It is worth noting, PPC1 did not necessarily perceive these as “added costs” but viewed these as compliance components needed to access the financing support from ADB.[63] Program costs (trainings, capacity building) associated with the LREMDP.	Potential Company Reputational Benefits – PC1 possibly considered the reputational benefits of obtaining the Bank’s “stamp of approval” for the project and abiding by its “more sophisticated” E&S standards.[64] Avoided costs of project cancellation / disruption due to safeguarding failures.
ADB	Allocation of existing staff resources to design/oversee safeguarding measures. Negligible, though there is an opportunity cost on staff time.	**Avoided cost of project disruption / cancellation.**

[62] ADB Safeguards Team, Satterly, and Zhou Interviews.
[63] ADB Safeguards Team, Interview.
[64] Satterly and Zhou, Interviews.

Local Community	Costs of engaging with the safeguarding teams (in terms of time, potentially lost income).	**Benefiting from livelihood restoration activities**. **Avoided costs of adverse outcomes** to community (e.g., unwanted pregnancies, sexual exploitation).

Figure 12: Overview of costs and benefits of implementing safeguarding measures to Lotus Wind Project stakeholders



Gender Equality Measures

The Lotus Wind Project includes several measures related to training and hiring more women employees at parent company PC1. It should be noted that several studies globally have demonstrated that when women receive proper training, outcomes related to jobs and employment and voice and agency are enhanced, particularly on securing jobs and changing gendered norms surrounding employment.[65]

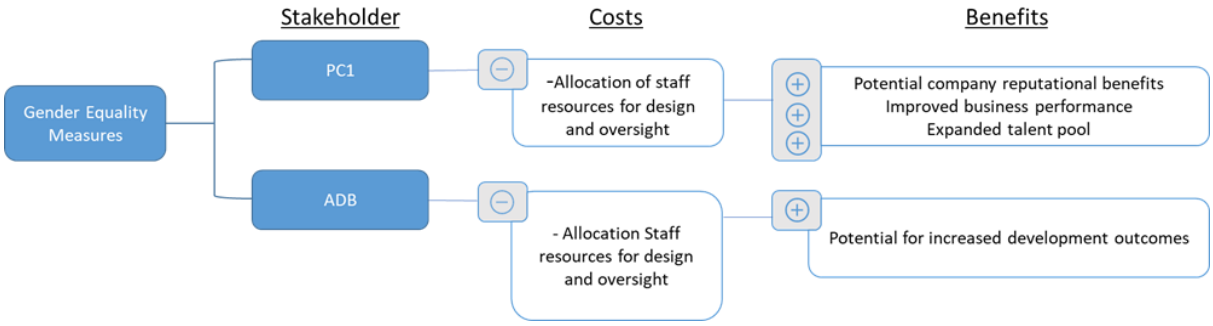
[65] Matinga, "How do grid and off-grid systems enhance or restrict gender equality?" 2020

Table 9: Gender equality measures - costs and benefits

Stakeholder	Costs (-)	Benefits (+)
PC1	**Staff Costs**: related to implementation of the Gender Action Plan, and subsequent reporting of these plans.	**Potential Company Reputational Benefits** – PC1 possibly considered the reputational benefits of obtaining the Bank's "stamp of approval" for the project and abiding by its "more sophisticated" E&S standards.[66] **Improved Business Performance** – Studies indicate that gender diversity in decision making is associated with improved business performance across energy companies. Results indicate companies with at least one female executive board member outperformed those with male-only boards, and that those with a strong female leadership deliver a 36% better return on equity.[67] Women make up 32% of the workforce in the renewable energy (RE) sector, a work force that is growing rapidly. The number of jobs in the sector could increase from 10.3 million in 2017 to nearly 29 million in 2050[68] Increasing women's inclusion expands the talent pool for the renewables sector and ensures that women's contributions – their skills and views – represent an integral part of the growing industry.
ADB	Cost of technical assistance to PC1 for the implementation of the GAP.	Potentially increased likelihood for greater development impact and achievement of ADB gender-related development goals.

[66] Satterly and Zhou, Interviews.
[67] Energy and Economic Growth, "Increasing women's participation in the energy sector" 2020.
[68] International Renewable Energy Agency. 2019. *Renewable Energy: A Gender Perspective*.

Figure 135: Overview of costs and benefits to Lotus Wind Project stakeholders of implementing gender quality measures



Impact on Project Financing

The ADB—acting as MLA—has an institutional mandate to support gender and safeguarding as part of its commitment to sustainable development. Therefore, adhering to and delivering on the aforementioned gender-related components ensured the project financing. Interviews with relevant stakeholders indicate there was no pushback or major hesitation from the client, PC1, in relation to including these components into the project or in regard to the cost of doing so.

Overall, in the absence of this financial support, the project would have potentially been deemed as too risky for international bidders and lenders. Hence, the inclusion of gender and safeguarding measures was critical to unlocking access to international capital. This is particularly relevant as, to date, Lotus Wind is the first and largest wind power project in Vietnam to be internationally project-financed with a long-term US dollar loan.

Lessons Learned from Lotus Wind

The following lessons learned can be drawn from the Lotus Wind Project:

- **Multilateral lenders, such as the ADB, play a critical role in promoting the integration of gender equality and safeguarding:** As previously mentioned, in its role as the MLA, the ADB imposed regulations regarding gender equality and safeguarding in the lending documentation, which included social management plans (i.e., LRP and EMDP) and the GAP.

- **Thorough data collection prior to the creation of the GAP and social management plans is needed to ensure realistic gender targets:** The ADB gender team deployed a robust due diligence questionnaire in order to gather baseline data that informed the targets set forth in the GAP. Similarly, the ADB safeguarding team supervised and supported the social and environmental impact assessments conducted by PC1's E&S consultant, to guarantee the measures included in the subsequent social management plans accurately responded to the identified risks.

- **The willingness of project sponsors to include gender equality and safeguards measures is critical to their success:** According to the ADB team, PC1 was highly receptive to the incorporated of these measures. This may be related to the fact that local companies benefit, from a reputational perspective, from the "stamp of approval" of the ADB, as well as the enhancement of E&S standards and the business benefits that come from advancing gender equality within their corporate operations.

- **Training programs provide an opportunity to encourage female labor force participation and uptake of women in technical positions:** As previously noted, compared to other measures, setting employment targets generated pushback from PC1, as there is a perception that the supply of women with technical skills is limited and therefore, “outside of the company’s control.” Through the GAP, the ADB included an indicator on vocational training for women, which provides a pathway towards building a supply of female labor in technical positions, while responding to PC1’s concerns and what the company was willing to commit to. Although the limited number of women with technical skills speaks to a more systemic issue, providing vocational training is a starting point to building women’s technical capacities in the sector.

3. Türkiye Soma IV Wind Power Project

Introduction

The following case analyzes how Türkiye's Soma IV WPP integrates gender equality. The Soma IV WPP is an extension of the Soma WPP, consisting of 181 turbines and a total installed capacity of 288.1 MW located in the Soma District of the Manisa Province and the Savaştepe District of the Balıkesir Province in Türkiye. At the time of writing, Soma IV was in in operation and was the largest wind power project in the Türkiye in terms of its total installed capacity

The team selected this case study for examination as the Soma IV project was financed through the first gender loan worldwide. This instrument, launched by Garanti BBVA, provides a unique example of the power the lender can exert in incentivizing borrowers to take steps towards gender equality by offering favorable financing conditions (tied to gender-related performance indicators). This case also provides a useful framework, as the gender loan was structured by a commercial bank, rather than a multilateral institution (which are commonly lending these kinds of arrangements). Therefore, important lessons can be drawn for similar projects in the energy sector and in the European and Central Asia regions.

The case study is presented in six sections. The first section provides an overview of the Soma IV Project, as well as its proposed structure and financing arrangement. The second section describes Türkiye's gender equality context, including the conditions of women and girls based on the World Bank's Gender Strategy. Then, the case study describes the gender measures included in the Lotus Wind Project, as well as the barriers and enablers to success of actions on gender equality and provides a high-level assessment of their costs and benefits. Finally, the case study draws important lessons learned.

Project Overview

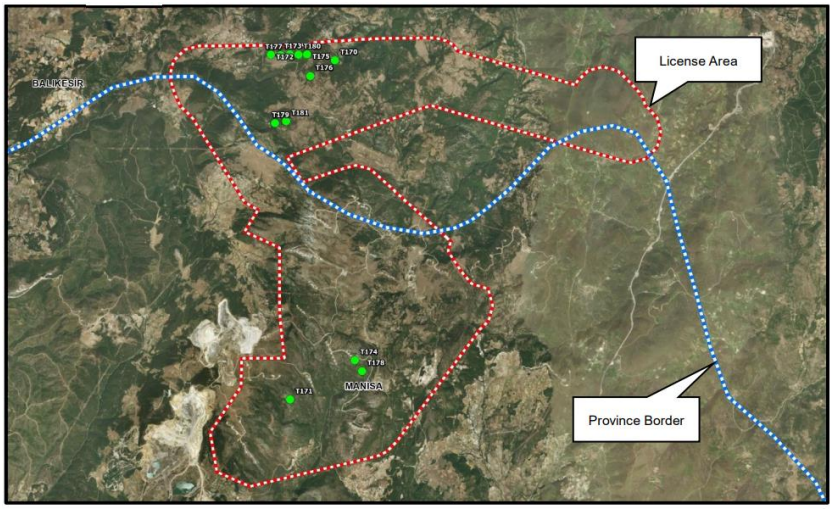
Project Overview and Objective

The Soma WPP is a wind power plant with 181 turbines and a total installed capacity of 288.1 MW located in the Soma District of the Manisa Province and the Savaştepe District of the Balıkesir Province in Türkiye. The Soma WPP, which started commercial operation in 2012, was developed by Soma Enerji Elektrik Üretim A.Ş. ("Soma Enerji"), a subsidiary of Polat Energi. The Project's "49-year Electric Power Generation License", issued in 2007 by Türkiye's EMRA, was originally established for a capacity of 140.1 MW. However, in 2013 and 2018, Soma Enerji was granted two capacity extensions of 100 MW (known as Soma III) and 48 MW (Soma IV), respectively.[69]

The Soma IV WPP Project ("the Project" or "Soma IV"), which is the focus of this case study, comprised the addition of 12 turbines with a capacity of 4 MW each (thus, increasing the power plant's overall capacity by 48 MW). The location of Soma IV project, including the 12 additional turbines, is shown in Figure 14 below. At the time of writing, the Soma WPP was Türkiye's largest wind power project based on total installed capacity.[70]

[69] Polat Enerji, Soma 4 Wind Power Plant Non-Technical Summary, 2019.
[70] ibid

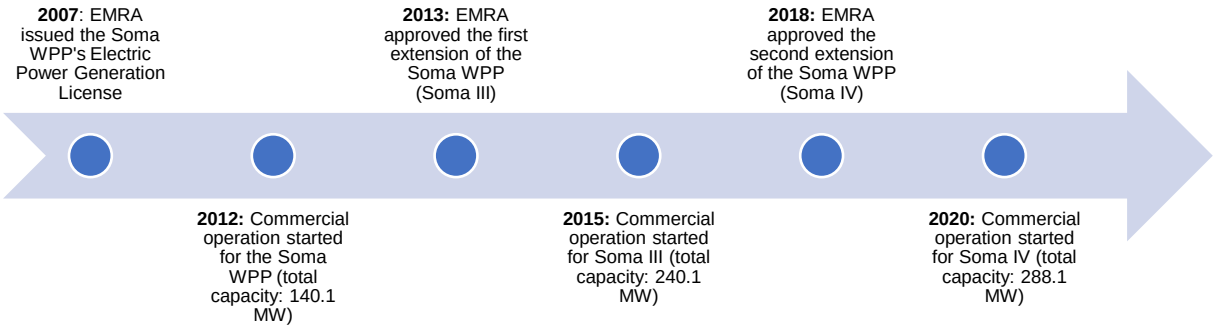
Figure 14: Soma IV Project Turbine Locations (Source: Polat Enerji, 2019)



The main objective of Soma IV was to expand the Soma WPP's installed capacity, and thus, extend the provision of "clean independent energy in a sustainable and cost-effective way". The Soma IV was estimated to increase the Soma WPP's energy production from nearly 700,000,000 kWh/year to 860,000,000 kWh/year. The development of Soma IV was also driven by Türkiye's increasing demand for energy. Between 2016 and 2018, total electricity consumption in the country increased nearly 5%. Therefore, the expansion of renewable energy options was critical, particularly as over 60% of the country's electricity was produced from coal (31%) and natural gas (34%).[71]

The development of the Soma WPP has reached a series of milestones, as shown in . At the time of writing, the Soma IV Project was in its operations phase.

Figure 15: Soma WPP milestones (Source: Polat Enerji, 2019)



Soma IV Project Structure and Financing Arrangements

The Soma IV wind farm is a greenfield project, classified as a build-own-operate (BOO) private participation in infrastructure (PPI) project.[72] As previously mentioned, Soma Enerji is the developer of Soma IV, as well as the broader Soma WPP, which was granted a 49-year Electric Power Generation License by EMRA. After completion of operation, "the entire facility will be dismantled, and the area will

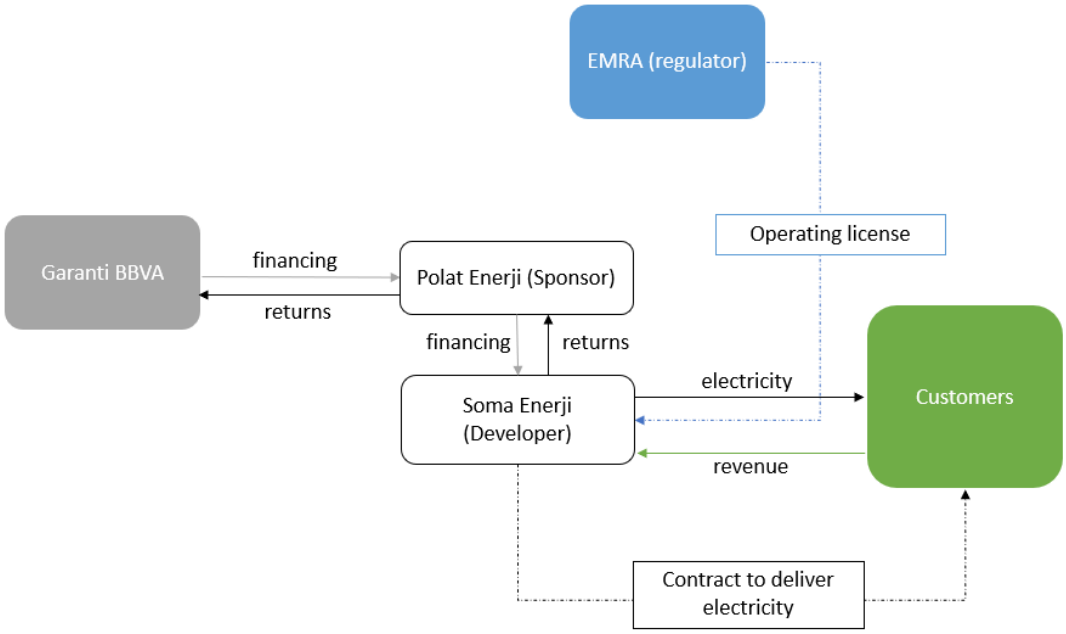
[71] ibid
[72] World Bank Group PPI Database, "Soma Wind Farm", accessed May 2022. https://ppi.worldbank.org/en/snapshots/project/Soma-4-Wind-Farm-10488

be restored to its natural state".[73] Emercon was selected as the supplier for Soma IV's 12 turbines (4 MW nameplate capacity per turbine).

The construction of Soma IV was financed by Garanti BBVA, an integrating financial services group, with consolidated assets exceeding $65 billion (as of March 2022), and Türkiye's second largest private bank.[74]Garanti BBVA issued a $44 million loan to finance the development of Soma IV, which included a cash facility worth $21.4 million, with an 8-year maturity, as well as a non-cash facility worth $22.6 million, with an 11.5-year maturity.[75] As the sole owner of Soma Enerji, Polat Enerji was the sponsor.

A high-level overview of Soma IV's financing arranging is shown in Figure 16 below.

Figure 16: Skeleton of Proposed Financing Flows in Transaction Structure



**Straight lines represent flow of money / electricity; Dashed lines represent legal/contractual agreement*

Garanti BBVA structured the loan agreement as a 'gender loan'. Within the scope of this product, Polat Enerji's performance would be assessed periodically against a series of gender criteria. Garanti BBVA was the first bank worldwide to issue a gender loan. This product will be explained in detail below

Gender Equality and Safeguarding Context in Türkiye

Türkiye has made efforts to increase gender equality through a series of policies and legislative advancements at the national and international level.[76]

[73] Polat Enerji, Soma 4 Wind Power Plant Non-Technical Summary, 2019.
[74] Garanti BBVA "Investor Relations" web page, accessed June 2022.
[75] "Garanti BBVA finances wind farm in Turkey with gender loan to Polat Energy," Garanti BBVA website, accessed June 2022 and "The First Gender Loan of the World will be Used by Polat Enerji," Polat Enerji Website, accessed June 2022.
[76] UN Women Europe and Central Asia webpage, "Turkey", accessed June 2022.

- Becoming a party to the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) in 1985 and ratifying the Optional Protocol in 2002.

- Establishing the National Development Plan of 2019–2023, which included goals and measures for the empowerment of women, as well as the prevention of discrimination.

- Publishing policies aimed at protecting women's rights, which included the 2018–2023 National Strategy and Action Plan on Women's Empowerment, the 2016–2020 National Action Plan on Combating Violence against Women, and the National Action Plan on Women's Employment.

However, gender inequalities persist in Türkiye. According to the World Economic Forum's 2022 Global Gender Gap Report, which measures progress in closing gender-based gaps, Türkiye ranks 124 out of 156.

Figure benchmarks Türkiye's performance on certain gender equality- related indicators against regional peers and high-income countries. Figure shows gaps between Türkiye's men and women across certain indicators pertaining to employment and political representation. The data show:

- **Türkiye performs poorly on closing voice and agency gaps** with a relatively high prevalence of intimate partner violence—32% vs a regional average of 20%. Relative to regional peers, Türkiye has much lower representation of women in parliament. Further, Turkish men are five times as likely to hold a parliamentary seat.

- **Türkiye has closed many human endowment gaps:** Türkiye is on par with its regional peers and high-income countries having high female literacy and secondary education levels.

- **Despite high education levels for women, Türkiye has relatively low female labor force participation:** As compared to regional peers, Türkiye's female labor force participation lags by almost 20%. Turkish men are two times as likely as Turkish men to participate in the labor market. The energy sector is one of the sectors with the highest gender gap—women represent only 24% of the energy sector workforce and hold 17% of managerial roles (IICEC 2019).

- **Turkish women have relatively low ownership and asset rates as measured by women who have an account at a financial institution**.

Figure 17: Gender Equality Indicators – Türkiye as compared to the ECA region and high-income countries

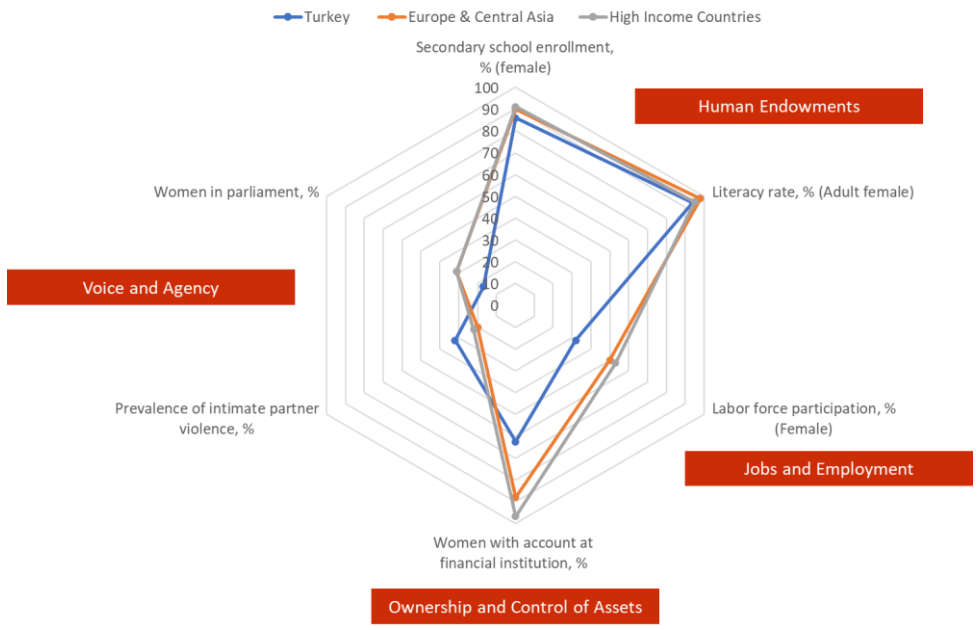
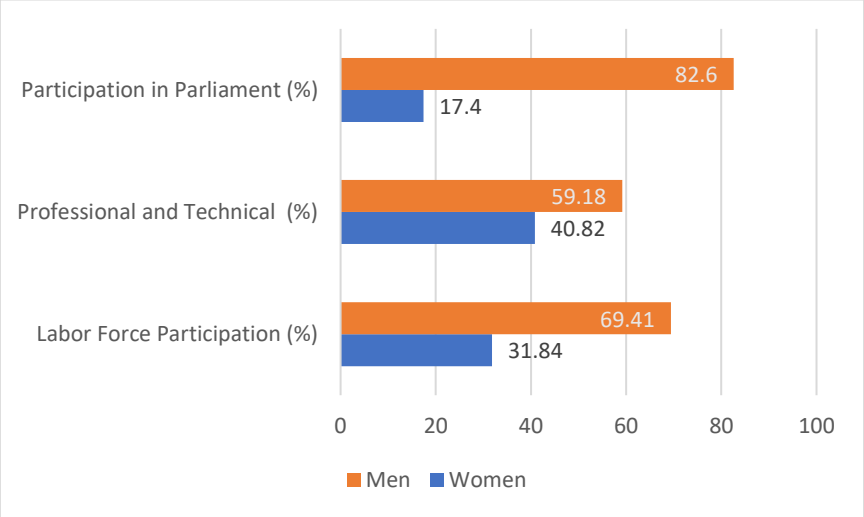


Figure 18: Gap between men and women in voice and agency and jobs and employment indicators, Türkiye[77]



Specific aspects of the gender inequalities present in Türkiye imply important considerations for the gender equality measures integrated by the Soma IV.

- **Considerations for Gender Equality Measures**: Türkiye faces large gaps between men and women in employment and voice and agency. As described before Soma IV targets the jobs and employment and voice and agency areas of the World Bank's gender strategy through proactive measures that may contribute to closing gender gaps in the energy sector, such as anti-sexual harassment policies, trainings to prevent discrimination against women and to

[77] Data source: Global Gender Gap Report 2022, World Economic Forum, 2022.

ensure gender equality in the hiring and compensation processes, and prioritization of women-owned enterprises in the supply chain.

Soma IV Gender Equality Measures

Garanti BBVA's Sustainable Finance Approach

To finance Soma IV, Garanti BBVA issued a gender loan, a financial product that "gives companies the opportunity to get financing with more favorable terms by taking steps that promote gender equality".[78]. In the case of Polat Enerji's gender loan, Garanti BBVA assessed the company's performance in relation to gender equality across its value chain periodically.

Garanti BBVA is a leader in the application of environmental, social, and governance (ESG) considerations in the financial sector.[79] In 2012, to reinforce its commitment to sustainability, climate change, and gender equality, the Garanti BBVA developed a sustainable finance team. Recently, BBVA pledged to mobilize €100 billion in sustainable infrastructure and agribusiness, financial inclusion and entrepreneurship, and green finance by 2025.[80]

BBVA has also pioneered the introduction of the first ESG-linked loans and, more specifically, the first social bond issued by a private bank in emerging markets targeting women entrepreneurs and the first gender loan worldwide. The Bank's commitment to gender equality, specifically, includes adhering to the UN Global Compact target of achieving 30% female representation at top management levels by 2025 Garanti BBVA has been included in Bloomberg Gender Equality Index for six consecutive years and is the first bank in Türkiye to commit to the UN Women's Empowerment Principles (WEPs).[81].

Structure of the Soma IV Gender Loan

In order to determine the terms of the gender loan, Garanti BBVA conducted a baseline assessment of Polat Energy through a questionnaire (approximately 30 questions) aimed at collecting information on the following four categories of indicators related to women's conditions in the company[82]:

- Governance (Soft Controls): Existence of a mentoring program for women talents.
- Governance (Hard Controls): Existence of an executive responsible for company's diversity and inclusion initiatives.
- Performance: Existence of Chairperson or equivalent position held by a woman.
- Leadership & Disclosure: Existence of any community investment initiatives for women.

Based on the responses to the questionnaire, Polat Enerji received a baseline score. Garanti BBVA developed a methodology in which each question was weighted differently based on the level of difficulty and/or length it would take to execute the specific action or activity.[83] The baseline assessment

[78] Garanti BBVA, "Garanti BBVA signed the second Gender Equality Loan with Limak, a first in the world." 2020.
[79] Imer and Atmaz, Interview.
[80] BBVA Website, "BBVA to mobilize €100 billion by 2025 to fight climate change and drive sustainable development" accessed June 2022. https://www.bbva.com/en/sustainability/bbva-to-mobilize-e100-billion-by-2025-to-fight-climate-change-and-drive-sustainable-development/
[81] Imer and Atmaz, Interview
[82] ibid
[83] ibid

provided Garanti BBVA with critical information on women's employment conditions at Polat Enerji, which served as the basis for the KPIs included in the lending agreement.[84].

The KPIs set by Garanti BBVA were based on increasing to the baseline score Polat Enerji initially received to a certain level. Table provides a non-exhaustive list of the gender-related criteria included in the arrangement between Garanti BBVA and Polat Enerji. In order to set these KPIs, Garanti BBVA collaborates with an independent advisor.[85]

Table 10: Non-exhaustive list of criteria included in the Soma IV gender loan

The Soma IV gender loan criteria included actions related to:
• Policies to prevent sexual harassment of female employees • Return-to-work programs for employees returning from maternity leave • Ensuring gender equality in the hiring process • Prioritization of women-owned enterprises in the supply chain • Trainings to overcome unconscious negative bias and discrimination against women • Measures to ensure equal pay for male and female employees

As part of this financial product, Garanti BBVA annually assessed Polat Enerji's progress on the defined KPIs and offered the possibility to enhance the terms of the gender loans based on performance. Essentially, a discount was applied to the interest rate on the cash loan and the commission rate on the non-cash loan. Polat Enerji would receive a 10–30 BPS of decrease with each subsequent stage of improvement on the gender equality performance.[86] Through this credit structure, "companies that perform well in gender equality will be rewarded and those who are new in implementing gender initiatives will be incentivized to improve their performance".[87]

During the first year, Garanti BBVA provided guidance to Polat Enerji, aimed at sharing the Bank's know-how and best practices in relation to gender equality with the client. This included supporting Polat Enerji's human resources department in setting up the agreed-upon policies and procedures.[88] The reporting requirements set by Garanti BBVA depend on the financial needs of the client. For instance, if the loan needs to be paid monthly, check-ins will occur at the same frequency.[89]

Expected Results of the Fender Measures

Due to confidentiality concerns, it was not possible to collect information on the progress of Polat Enerji on the KPIs integrated into Garanti BBVA's gender loan. However, the expectation is that these measures enhance the conditions for Polat Enerji's prospective and current female employees (i.e., anti-sexual harassment policies, return-to-work programs after maternal leave, fair hiring process, training to overcome gender bias, etc.), as well as across the company's value chain (prioritization of women-owned enterprises in the supply chain).

[84] BBVA, "Garanti BBVA finances wind farm in Turkey with gender loan to Polat Energy"
[85] Imer and Atmaz, Interview
[86] Ibid
[87] BBVA, "Garanti BBVA finances wind farm in Turkey with gender loan to Polat Energy"
[88] ibid
[89] Imer and Atmaz, Interview.

Potential Barriers and Enablers of Success of the Gender Equality Measures in Soma IV

Based on interviews with relevant stakeholders, including the Garanti BBVA Sustainable Finance Team, the following enablers of success of the gender equality and safeguarding measures in Soma IV were identified:

- **Role of Garanti BBVA as the lender**: As described above, the role of Garanti BBVA as the sole lender for the development of the Soma IV and its commitment to sustainable financing and gender equality played a critical role in enabling the success of the measures.[90] Gender equality is embedded in the Garanti BBVA's philosophy and business model. The Bank's commitment, from the top-down, is exemplified by the following comment from the Executive Vice President, Ebru Dildar Edin, regarding the launch of the gender loan: "We believe that gender equality is above all a human rights issue. The importance of women needs to be understood, both a fair society that respects human rights and for better economy…. Both the state and the private sector have very important roles to play in this regard".[91] This commitment was translated into a financial product that rewards companies that perform well in relation to gender equality and incentivizes those new to the implementation of gender equality actions to improve their performance through favorable financing conditions. Additionally, the Bank's efforts to provide guidance to Polat Enerji's human resources department in setting up the policies and procedures included in the KPIs likely contributed to their successful implementation.

- **Duration of loan maturity**: The use of a gender loan for the development of the Soma IV was possible due to the duration of the loan maturity, of 8 years and 11.5 years for the cash and non-cash facilities, respectively. These mechanisms can be difficult to apply with shorter loan maturities (i.e., less than 5 years), as they may not provide the sponsors enough time to execute the required actions.[92]

- **Receptiveness of Polat Enerji to the gender loan and long-term relationship with Garanti BBVA**: Polat Enerji's high receptiveness to the KPIs tied to the gender loan was a critical enabler for their successful implementation. It is also possible that, on the reputational side, participating in the first gender loan worldwide may have presented benefits for Polat Enerji. The Company's Chief Strategy Officer, Alkım Bağ, stated: "Despite being a very new method for financing for our country, we have found that the gender loan structure aligns with the current vision of our management and finance teams. We are proud to be the first company in Türkiye to encourage the use of this credit structure".[93] Additionally, the Bank's team indicated there was a strong pre-established relationship with Polat Enerji, which may have also enhanced its receptiveness to the loan structure.

Although the interviews and desk research conducted for this case study did not point towards specific barriers to the implementation of the gender equality measures, it is important to note that these mechanisms are only successful if the Bank can actually provide an incentive for the client to improve. Thus, the implementation of gender loans should consider the company's need for a discount, and whether the incentives are compatible with the required actions (i.e., level of effort, timing).[94]

[90] Imer and Atmaz, Interview.
[91] BBVA, "Garanti BBVA finances wind farm in Turkey with gender loan to Polat Energy"
[92] Imer and Atmaz, Interview
[93] BBVA, "Garanti BBVA finances wind farm in Turkey with gender loan to Polat Energy"
[94] Imer and Atmaz, Interview

Business Case for Inclusion of Gender Equality and Safeguarding Measures

In the case of the Soma IV Project, all stakeholders interviewed agreed that the costs to include gender equality components and then to ensure the necessary capacity to implement and monitor them were negligible. Garanti BBVA's philosophy and business model supports the integration of ESG considerations, including gender equality in the Bank's financial operations. This commitment was translated into the structure of the gender loan, which offered discounts to the interest rate on the cash loan and the commission rate on the non-cash loan if the client enhanced their performance on gender equality across the value chain.. Hence, abiding by and delivering on these gender-related performance indicators ensured the project received favorable lending conditions. Interviews with the Garanti BBVA team indicate that there was no pushback or major hesitation from Polat Enerji, in relation to including the KPIs associated with the gender loan nor the cost of implementing them.

High-Level Cost Benefit

Even though there is no empirical evidence that the integration of gender equality enhanced the business case for Soma IV, there is documented evidence around the world supporting the case for integrating gender measures into the energy value chain, including projects and company operations. The following sub-section presents a high-level qualitative overview of the costs borne by various project stakeholders to implement gender equality measures as well as the potential benefits such stakeholders could reasonably expect because of implementing those measures.

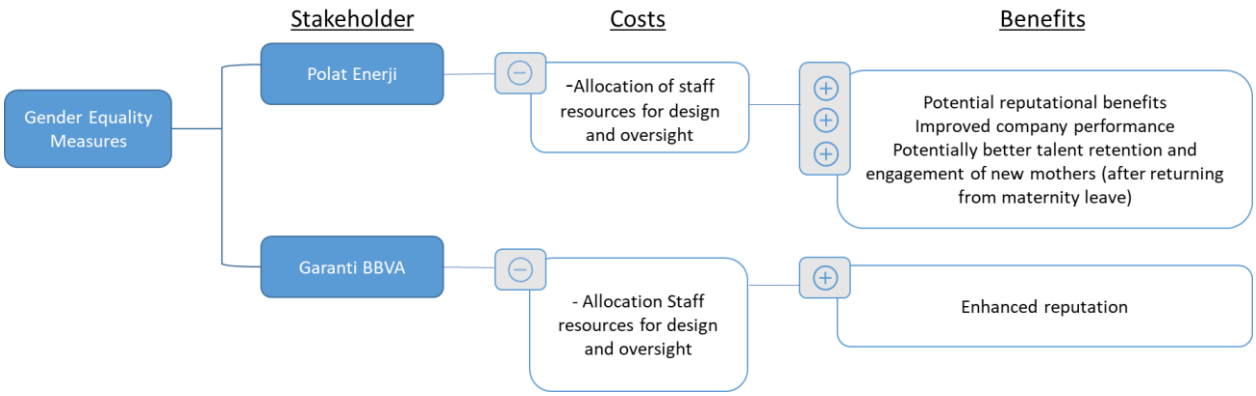
Table 11: Gender equality measures - costs and benefits

Stakeholder	Costs (-)	Benefits (+)
Polat Enerji	Staff Costs: related to the implementation and subsequent reporting of the targets (see 0) set forth by Garanti BBVA in the lending agreement. However, the Garanti BBVA team concludes that the client did not perceive these as additional costs. Rather, these were viewed as "needed" actions to ensure accessing to favorable financing terms from Garanti BBVA for the development of the project.[95].	Potential company reputational benefits from participating in the first gender loan in the world. Improved company performance and higher returns on equity: Across the energy sector, studies show that gender diversity in decision making is correlated with improved business performance. For example, studies show that companies with strong female leadership deliver a 36% higher return on equity and, companies with at least one female executive board member outperformed those with male-only boards.[96] Additionally, global examples point to the fact that integrating women across the energy value chain can unlock greater productivity and return on investment (ROI).[97] In relation to other performance indicators, a case study of the Jamaica Power Service (JPS) customer satisfaction increased from 23% to 70% when the company increased the number of women in their customer service

[95] Imer and Atmaz, Interview
[96] Energy and Economic Growth, "Increasing women's participation in the energy sector" 2020.
[97] USAID, "Advancing gender in the environment: Making the case for women in the energy sector."

		roster.[98]Potentially better talent retention and better engagement of new mothers – One study that looked at post maternity re-entry programs catering towards management-level staff noted that ”availability of communication and psychological support, as well as flexible time management, may result in higher commitment and work engagement for women in management positions who return to work after maternity leave.[99].
Garanti BBVA	Staff Costs associated with designing and overseeing gender loan and with offering technical assistance to Polat Enerji's to human resources department, particularly in the first years, for the development of the policies and procedures included in the KPIs (Imer and Atmaz 2022).	Enhanced company reputational benefits from offering the first gender loan in the world.

Figure 19: Overview of costs and benefits of implementing gender equality to Soma IV project stakeholders



Impact on Project Financing

Adherence to the targets in the Garanti BBVA gender loan to Polat Enerji led to real financial benefits. With each subsequent stage of improvement on gender equality performance, Polat Enerji would receive a 10–30 BPS of decrease on the loan's interest rate. Through this credit structure, "companies that perform well in gender equality will be rewarded and those who are new in implementing gender initiatives will be incentivized to improve their performance".[100]

Lessons Learned from Soma IV

The Soma IV provides a robust example of the power of lenders in incentivizing the incorporation of gender equality measures by companies in the development of infrastructure projects. As explained in prior sections, Garanti BBVA's commitment to gender equality, which translated into the creation of a

[98] Energy and Economic Growth, "Increasing women's participation in the energy sector" 2020.

[99] Constantini,et al., "Return to work after maternity leave", 2020.
[100] BBVA, "Garanti BBVA finances wind farm in Turkey with gender loan to Polat Energy"

gender loan with performance-based discounts to the lending rate based on how well Polat Enerji performed against gender equality performance measures, provided strong financial incentives for the company. The fact that the lender, Garanti BBVA, is a commercial bank is also unique, as these kinds of lending arrangements are typically led by multilateral institutions, as will be seen in other cases included in this report.

Additionally, the receptiveness of the sponsor / project company to the KPIs embedded into this kind of credit structure, is key to their successful implementation. In the case of Polat Enerji, the lack of pushback, which may have been driven by a pre-established relationship with Garanti BBVA and the provision of assistance from the lender to the human resources department, were key enablers of success.

Finally, it is important to keep in mind that the successful execution of a gender loan will also depend on setting an appropriate loan maturity term (which provides enough time for the implementation of the required actions) and creating a structure that balances the proposed discounts with the required gender equality actions.

4. Haiti's PHARES mini grid development program

Introduction

The following case analyzes how the Haitian Program of Access to Solar Energy for Rural Communities Programme[101] or PHARES mini grid development program integrates, or plans to integrate, gender equality, safeguarding, and protection. The PHARES program is implemented by Haiti's Ministry of Public Works, Transport and Communication (MTPTC), through its "Energy Cell" (the energy sector focused unit), ANARSE, and UTE-MEF, as executing agency.[102] It aims to help bring electrification to rural Haitian communities currently lacking electricity through the development of mini grids by private energy developers. At the time of writing, the PHARES program was finalizing the negotiations for the first round of micro grid projects to be developed under the program.[103]

The program was reviewed as it is an innovative program in a challenging fragile state context that has embedded gender equality and safeguarding measures in the PPP structure and contractual documents for the mini grids.

The case study is presented in seven sections. The first section provides an overview of the context leading to the development of the PHARES program as well as the proposed transaction structure and financing arrangement. The second section describes Haiti's gender equality context, including the conditions of women and girls, and important statistics based on the World Bank's Gender Strategy. Then, the case study depicts the gender and safeguarding measures included in the PHARES program, followed by a discussion of the barriers and enablers to success of actions on gender equality, and the business case for including such measures. Finally, the case study draws important lessons learned.

[101] Haïtien d'Accès des communautés Rurales à l'Energie Solaire.
[102] PHARES, Proposal Concept Form, 2021.
[103] PPIAF, "Sign-off report", 2020.; Angelou and Nsom, Interview.

Project Overview

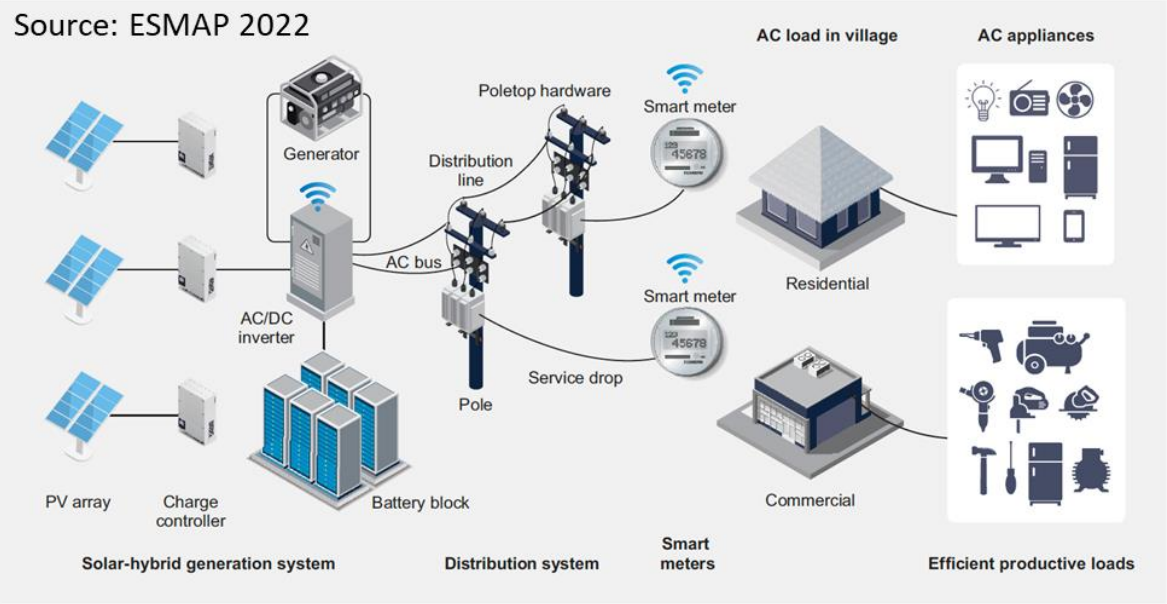
Context leading to development of PHARES Program

Energy sector challenges and emergence of mini grids

Only one-third of Haitians have access to electricity and those with access experience sporadic and unreliable electricity. When specifically looking at rural areas, the access story is even more dire. In rural areas, the electrification rate is only 17%.[104] Several factors contribute to these poor sector outcomes including poor sector governance, technical and commercial losses in the system, and underinvestment in generation and transmission assets.[105]

Mini grids have emerged as a viable solution for rural Haitian towns with no electricity access—and with limited prospects to be serviced via a national grid.[106] This is because mini grids provide a stand-alone electricity generation source and distribution network, often powered via renewable energy sources. Mini-grids can range in size from micro (typically serving 20-100 customers) to full mini grids (serving well over 500 customers) [3].[107] Between 2012 and 2017, on the initiative of private players (both for-profit and not-for-profit entities), four mini grids were developed in rural Haitian villages.[108]

Figure 20: Mini grid system



Formalization of mini grid procurement at national level

Development of a new regulator ANARSE and support of donors between 2016 and 2019, helped the government of Haiti (GoH) formalize mini grid procurement at a national level.[109] In January 2019, the GoH launched its first mini grid tender (RFP1) to award concessions for development and operation of renewable energy mini grids. In this tender, known as a "top-down" approach, the GoH pre-selected

[104] World Bank, "Haiti - Renewable Energy for All Project Appraisal Document", 2017
[105] IMF, "Haiti: Selected Issues (Country Report No. 20/122)"
[106] World Bank, "Haiti - Renewable Energy for All Project Appraisal Document", 2017
[107] World Bank, "Mini-Grids & Gender Equality", 2017.
[108] See: EarthSpark International, "Solar Park Nears Completion." 2015, Sigora Haiti Microgrids, and Streubi et al. "Assessment of Haiti's Electricity Sector" 2018.
[109] PPIAF, "Sign-off report", 2020.

sites for mini grid development. Mini grid developers then bid on those sites. By 2021, seven sites were (pre-) awarded to two developers.[110]

PHARES Program

After a relatively successful RFP1, GoH launched the PHARES Program in 2021 with the initial funding support of IDB and the World Bank. The program creates a framework under which multiple procurement rounds for mini grid development sites could occur.

PHARES is implemented by Haiti's MTPTC, through its "Energy Cell" (the energy sector focused unit), ANARSE (the regulator), and UTE-MEF, as executing agency.[111] In a change from RFP1 in which the GoH selected mini grid development sites, PHARES requires mini grid developers to select their own sites (a "bottom-up" approach). The change came because of a consultation process with market participants after RFP 1.[112]

Procurement of mini grid developers for the design, construction, and operation of renewable energy mini grids occurs through a competitive and transparent two-step process:

- **Submittal of Proposal Concept**: Designed to learn more about the Applicant's organization, its partners, and the planned project, focusing on its overall concept and objectives The Energy Cell and its advisors provide comments on every proposal concept submitted. Applicants with sufficiently high-quality proposal concepts are invited to submit a full proposal.

- **Submittal of Full Proposal**: Where developer lays out full business, engineering, social and technical plans for the mini grid project.

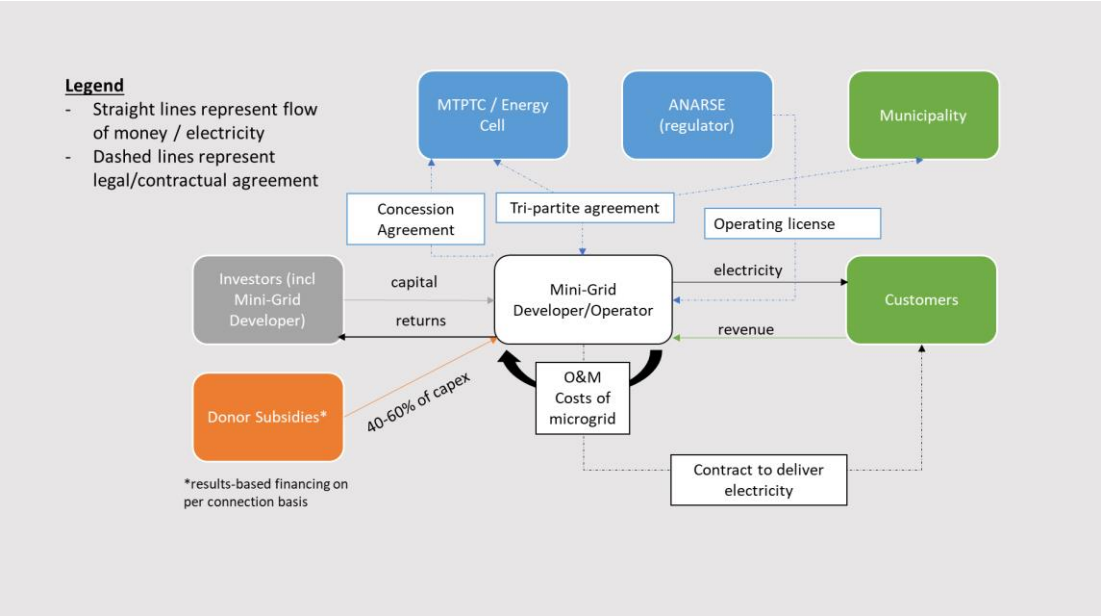
PHARES transaction and financing structure

PHARES mini grid projects are governed through a series of agreements and while requiring equity investment from developers are also made possible through connection subsidies. This is shown graphically in

[110] As of writing in 2022, the negotiations and arrangements with these two developers were being finalized—delayed due to COVID-19 and the assassination of Haiti's president in 2021 (Angelou 2022).
[111] PHARES, Program Concept, 2021.
[112] Angelou and Nsom, Interview.

Figure and discussed briefly below.

Figure 21: Financing and transaction structure, Haiti PHARES program



The governance structure for PHARES mini grid projects includes a series of agreements:

- **Concession Agreement:** Key agreement between the MTPTC and the mini grid developer, outlining the terms of the PPP contract (e.g., service standards, E&S requirements, contract length). For a term of 20 years, with a potential to renew in five-year increments, developer is granted the right to design, build, operate, and maintain mini grids.

- **Tri-partite Agreement**: Service agreement signed by the MTPTC, municipality in which a mini grid is being delivered, and developer. An annex to the concession agreement.

- **Operating license:** Once a mini grid developer has been selected it is eligible to receive an "operating license" from ANARSE, the energy regulator.

Contract with customers: The mini grid developers have standard service contracts outlining tariff, service levels, etc. The average size of each mini grid project ranges from $500,000 to $2.5 million and depends on many factors that can be different between sites, such as technology used, number of clients, logistics, etc.[113].Mini grid projects developed under PHARES are made financially possible through a combination of equity investment and results-based grant funding:

- **Equity:** The concessionaire is required to have an equity share in the mini grid equal to 30% of the total initial investment amount less any grants obtained from the concessioning authority. Grants, other than those provided under this RFP, may be counted as part of this equity share (PHARES 2021).
- **Connection Grant / Subsidy[114]:** Developers successfully obtain the rights to develop mini grids can receive a connection grant from the MTPTC Energy Unit (concessioning authority) via funds provided by World Bank[115] and ID (PHARES 2021). Subsidy levels per connection depend on the fraction of renewable energy proposed by bidders and are designed to encourage greater use of renewable energy sources. Subsidy per connection is defined for

[113] Xenakis, Interview.
[114] PHARES Dossier de Demande de Proposition Integrale - Version publiee - 29 jan 2021
[115] Note: these funds are via the the Scaling up Renewable Energy Program (SREP) in Low Income Countries to Haiti via the Renewable Energy for All Project.

each renewable energy fraction limit (see Table 12) Developers are encouraged to request per-connection subsidies below the proposed maximum level allowed for their project's renewable energy fraction. For the 2021 PHARES RFP, the total amount of grants that developer applicants could request was limited to $5 million, for one site or multiple sites.

- **Debt Financing:** Concessionaires are expected to finance the remainder of the mini-grid project costs not covered via an equity investment or connection grant, through debt.

Table 12: Maximum level of subsidy per connection for different renewable energy fractions

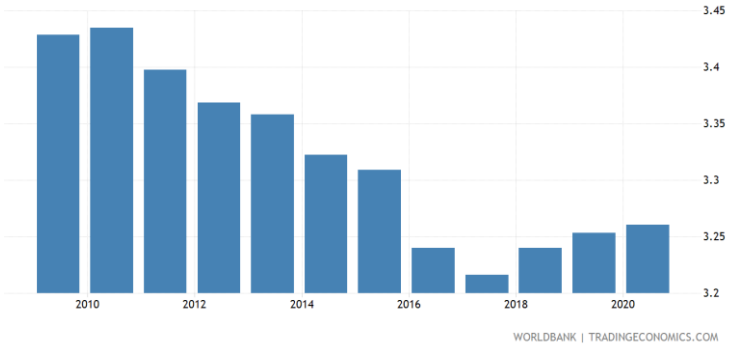
• Fraction of renewable energy	• Maximum level of subsidy per connection
• 50-70 %	• ≤$500
• >70-80 %	• ≤$650
• >80-90 %	• ≤$750
• >90-100 %	• ≤$900

Gender Equality and Safeguarding Context

Nearly 60% of Haiti's population, or 6.3 million people, remain poor (less than $2/day) and 24% (2.5 million) are extremely poor.[116]. Against a backdrop of vast poverty, many inequalities between men and women in Haiti persist across the four areas of the World Bank Gender strategy.

Over the last decade, per the CPIA Gender Equality Rating, which assesses a country's "institutions and programs to enforce laws and policies that promote equal access for men and women in education, health, the economy, and protection under the law", Haiti's standing has deteriorated.[117]

Figure 22: World - CPIA Gender Equality Rating (1=low to 6=high), Haiti[118]



Through background research and 29, which benchmarks Haiti's performance on certain gender equality-related indicators against regional peers and high-income countries, one can draw the following conclusions regarding gender equality in Haiti:

[116] World Bank, "Haiti - Renewable Energy for All Project Appraisal Document", 2017
[117] World Bank, "Metadata Glossary - CPIA gender equality rating long definition"
[118] https://tradingeconomics.com

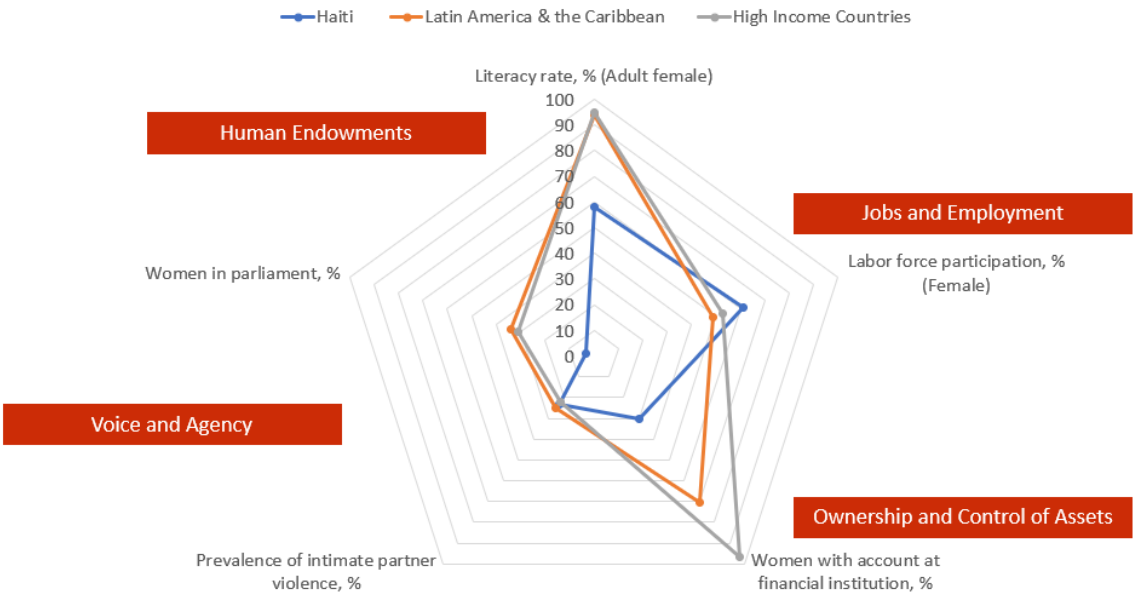
- **Haiti has a mixed performance in closing voice and agency gaps:** Relative to regional and high-income peers, Haiti performs the same on figures of intimate partner violence at 23%, which is still too high. Haitian women are very minimally represented in parliament relatively and absolutely.

- **Haiti still has many human endowment gaps and performs poorly as compared to peers:** As compared to women in peer countries, Haitian women have low levels of secondary education and low literacy rates. Further as compared to Haitian men, Haitian women are likely to be less educated and less literate than men.[119]

- **Compared to female peers in the region, Haitian women have relatively high labor force participation, though there are still gaps between Haitian men and women.** World Bank research found that, holding constant several social and demographic characteristics, women are 20 percentage points more likely than men to be unemployed. Wages among women are also 32% lower than wages among men. About a third of this earnings gap can be explained by factors such as age, number of children, education, and industry of employment, while the remaining two-thirds is unexplained, suggesting some gender discrimination in the labor.[120]

- **Compared to their female peers in the region, Haitian women have relatively limited ownership and control of assets** as measured by women who have an account at a financial institution. Further, as compared to Haitian men, Haitian women are less likely than men to have a bank account at a financial institution or mobile network.[121]

Figure 23: Gender equality indicators - Haiti as compared to LAC region and high-income countries



Specific aspects of the gender inequalities present in Haiti imply important considerations for the safeguarding and gender equality measures integrated by the PHARES Program.

[119] World Bank, "Investing in People to Fight Poverty in Haiti", 2014.
[120] Ibid.
[121] Demirgüç-Kunt, et al. "The Global Findex Database 2017: Measuring Financial Inclusion and the Fintech Revolution", 2017.

- **Considerations for Safeguarding Measures**: On the risk management side, these are specifically related to human endowments and women's voice and agency due to the influx of workers, particularly during construction, which may increase the incidence of sexual harassment, as well as STDs and unwanted pregnancies.

- **Considerations for Gender Equality Measures**: Gaps in employment among men and women, point to an opportunity for projects procured under PHARES to employ women and train them for technical positions. Further, voice and agency gaps point to an opportunity for project developers to empower women as community leaders with regards to building buy-in for the microgrid projects. Indeed, as shown before through explicit gender-related employment goals defined in the contractual structure governing projects, the PHARES program incentivizes project developers to employ women.

Project's Gender Equality and Safeguarding Measures

The following presents how each mini grid developed under the PHARES program incorporates gender and safeguarding components by project development phase.

Table 13: Gender and safeguarding measures by PHARES mini grid project development phase

Stakeholder	Gender-Related measures by PHARES project phase			
	Project Concept	Proposal	Tendering & Evaluation	Contract Mgmt
Developer	Site identification. Submission of Concept note detailing potential social, incl. gender impacts of proposal	Describe social inclusion and Environment, Health, Safety strategy	Develop ESMP and describe how project will prioritize women as employees and clients	Reporting obligations to describe # of female-headed households served; # of female employees; progress reports on ESMP progress
MTPTC – Energy Cell	Review of Concept Note, incl. gender components	Per RFP documents, describe what needs to be incl in social inclusion and Environment, Health, Safety strategy.	Evaluate full proposal incl. social and environmental aspects, which account for 10% of evaluation score	Oversight of gender and social agreements
ANARSE – regulator	Review of Concept Note, incl. gender components	Per RFP documents, describe what needs to be incl in social inclusion and Environment, Health, Safety strategy	Evaluate full proposal incl. social and environmental aspects, which account for 10% of evaluation score	Oversight of gender and social agreements
Local Municipality	Documented support agreeing to mini grid in community	Documented support agreeing to mini grid in community	Consultation with Developers	Oversight of gender and social agreements

[122] This table use the stages of the PHARES Program. Project concept stage could equate to the standard PPP cycle's project identification and proposal development could equate to "appraisal and structuring."

Multilateral Lenders	Support MTPTC and ANARSE in review of concept note	Provide no-objection to approval of Full Proposal	Provide no-objection to evaluation of Full Proposal	Support to MTPTC with capacity / oversight role

Project Concept

In the PHARES program, project identification occurs at the 'Proposal Concept' stage where mini grid developers present to MTPTC Energy Cell and ANARSE initial plans for their proposed mini grids. At this stage, PHARES requires developers to describe at a high level "the specific social impacts" of their proposal, including "aspects related to gender, vulnerable groups, land use and resettlements".[123]

In addition to requiring bidders to highlight a project's social impacts, PHARES requires mini grid developers to describe the local engagement and to present evidence that the local community supports the project at Proposal Concept. Concepts without formal evidence of support do not meet criteria for evaluation. While the local engagement is not necessarily specifically a gender component, many stakeholders interviewed considered the process of local engagement to be linked with the social aims of project development, mentioning essentially that developers need a social license to operate in communities[124] Further, one developer mentioned that there are many risks to developing projects in Haiti; thus, including social development aims and gender components in project development can help eliminate some risks associated with the project. As part of including gender in project development, this developer noted the importance of talking to women stakeholders during project planning.[125]

Full Proposal Development

If the PHARES procurement team approves the 'Proposal Concept', developers draft 'Full Proposals,' which lay out the business case and technical components for a particular mini grid project.[126] As part of their Full Proposals, developers create a "Preliminary Project Plan."

The Preliminary Project Plan includes a couple of areas, where mini grid developers assess social and gender considerations. As part of their technical description, developers must outline key risks, including social risks, which will be further elaborated in the Environmental and Social Management Plan, developed once a Full Proposal has been accepted.

The Preliminary Project Plans' most concrete sections pertaining to gender equality and safeguarding aspects are where developers detail their:

- "Social Inclusion Strategy," which includes elements for promoting gender equality in employment and energy access.

- "Environment, Health, and Safety (EHS)," which includes elements for ensuring safeguarding measures are in place, e.g., for resettlement or livelihood restoration.

The table 14 below provides an overview of what developers need to provide in detailing their strategies for ensuring their projects promote social inclusion and does not result in adverse environment, health, and safety outcomes.

[123] PHARES, "Proposal Concept Form", 2021.
[124] Allien, Interview.
[125] Archambault, Interview.
[126] PHARES Dossier de Demande de Proposition Integrale - Version publiee - 29 jan 2021

Table 14: Environmental and social requirements to include in the preliminary project plan (PHARES 2021)

Describe your social inclusion strategy, including: inclusion of lower-income households and promotion of gender equality in employment in the mini grid, serving women-led households and businesses, and use of local labor for construction, operation, and maintenance of the mini grid.
The approach to effectively engage the local community is key to the success of the mini-network; community engagement activities and documentation of consents/acceptances, including a grievance mechanism for people to report their concerns or complaints (Portfolio Form).
Social inclusion strategy, in particular: strengthening gender equality in employment in the mini grid, serving female-headed households and businesses, and using local labor in the construction, operation, and maintenance of the mini grid (Portfolio Form).
Engagement with the municipality and other local authorities. (Portfolio Form)
Describe your strategy for the EHS aspects: quality of the environmental and social management plan and community consultation plan, in accordance with the Environmental and Social Management Framework (ESMF).
Environmental and Social Management Strategy or summary of ESMF, including at least (Portfolio Form):
Institutional approach to E&S risk management.
E&S review and categorization of potential environmental and social risks and effects of the project and compensation or mitigation measures to be considered.
E&S risk management instruments (ESIA ESMP).
Describe the circumstances in which resettlement action plans and livelihood restoration plans should be required and prepared.
Commitment to continuous E&S monitoring throughout construction and operation.
Processes and deadlines for reporting to Energy Cell on the implementation of appropriate environmental and social management tools, as well as on any incidents or accidents.

Tendering and Evaluation Process

MTPTC and ANARSE representatives evaluate the quality of developer's 'Full Proposals' out of a possible 100 points—10 of which can be awarded based on the quality of ***Environmental and Social Aspects***. In this way, the strength of a developer's plans for promoting gender equality and safeguarding contribute to whether their proposals are selected.[127] The table 15 below presents an overview of the various criteria against which proposals to the PHARES program are judged.

[127] PHARES Dossier de Demande de Proposition Integrale - Version publiee - 29 jan 2021

Table 15: Evaluation criteria PHARES full proposals (PHARES 2021)[128]

Evaluation Criteria	Description	Points
Experience and track record	Evaluation of developer's track record with similar projects in similar contexts and experience with concession arrangements.	15
Technical aspects	Evaluation of technical aspects of the mini grid project, e.g., design, technical components, renewable energy fraction, service-level standards, construction, O&M, risk management plans.	35 points (Min 25 points)
Market Analysis	Evaluation of willingness to pay assumptions, links to the market and productive uses, inclusion of local facilities (e.g., schools, healthcare), and promotion of energy efficiency.	15
Business Plan	Evaluation of quality of investment program, consistency of revenues, cost assumptions, and minimum level of subsidy.	25 points (Min 17 points)
Environmental and social aspects	Evaluation of the social inclusion strategy, including how projects integrate lower-income households, promote gender equitable employment and serve women-led households (5 points). Evaluation of EHS approach including quality of the environmental and social management strategy and the community consultation strategy, in accordance with the ESMF (5 points).	10 points

Proposals must achieve a score of 70 points or higher to be accepted for further consideration.[129] The evaluation committee, inclusive of gender and social specialists, prepares a final evaluation report and sends that report along with meeting minutes to the National Public Procurement Commission (CNMP) for validation and supporting MDBs (IDB and the World Bank) for their no-objection.

After their Full Proposal is selected, developers must submit Final Project Plans, which include both description of gender equality goals and social safeguarding plans. These plans and goals must be elaborated to the specifications laid out in the Tri-partite agreement, which governs the relationship with the municipality, the developer, and MTPTC Energy Cell.

Gender Equality Measures

As per the Tri-partite agreement, Article 10 of the Articles of Agreement, developers have a legal obligation to prioritize women as clients and employees:

[128] See specifically IAS ARTICLE 14 – Evaluation des Propositions Intégrales complètes et définitives. Article 14.1.
[129] PHARES Dossier de Demande de Proposition Integrale - Version publiee - 29 jan 2021

The Developer or its subcontractors, without prejudice to the determination of the overall tariff rate, shall take steps to promote and facilitate access to the mini grid services by the lowest income community members and female-headed households. This includes consultations with women electricity users. In addition, the Developer or its subcontractors, without prejudice to the determination of the overall tariff rate, shall take measures to increase the employment of women in the mini grid project in order to increase the percentage of female staff, by, inter alia, integrating women into the supply chain, developing gender-sensitive job offers and application processes, etc. The Promoter must inform the Municipality and the Energy Unit in writing of the measures it takes in relation to the above.

Further, as per the Tri-partite agreement, Article 5 of the Articles of Agreement, developers must estimate the number and type of clients expected, including the number of women-led households.

Safeguarding Measures

As per the Concession Agreement and the Tri-partite Agreement, developers must develop ESMPs as part of their Final Project Plans. These ESMPs must "meet the requirements of the MEF's UTE and the MTPTC's Energy Unit, as well as the environmental and social safeguard policies of the IDB and the World Bank".[130] Guidelines provided to Developers on what to include in their ESMPs are shown below.

Developers have the option to apply for technical assistance and funding from IDB to support the development of these plans. Further," IDB and the World Bank will supervise and evaluate the process and give their no-objection in case of compliance with their environmental standards and policies".[131]

Developers are required to implement the ESMPs, thus they are required to have environment and social specialists on staff and to already during the drafting of ESMP include this/these specialists.

Table 167: Guidelines provided to developers for conducting ESMPs (PHARES 2021)[132]

For the preparation of the mini grid ESMPs, the following guidelines must be considered by Developers:
I. Description of the project and analysis of its legal, institutional, biophysical, and socioeconomic contexts
A. Presentation of the project
1. Presentation of the physical environment
2. Presentation of the biological environment
B. Presentation of the environmental and social conditions of the project
C. Institutional and legal framework
D. Socioeconomic and cultural environment
II. *Ex-ante* environmental and social impact assessment of the project
III. Assessment of risks related to site work
A. The identification of work-related hazards on a construction site of a solar power plant coupled with thermal modules

[130] PHARES Dossier de Demande de Proposition Integrale - Version publiee - 29 jan 2021
[131] ibid
[132] Refer to "CP Annex 8: Environmental and Social Assessment and Environmental and Social Management Plan".

B. The estimation of the intensity of potential damage for each hazardous situation, as well as the frequency and duration of exposure

C. Prioritization of risks, in order to determine priorities

In addition to developing ESMPs, which will work to safeguard vulnerable populations like women and girls from risks of violence, Article 12.2 of the Tri-partite agreement requires developers to agree on the installation and payment of a public street lighting, which can help contribute to greater feeling of safety and prevent sexual harassment.

Once developers submit their Final Project Plans and achieve all other "conditions precedents" required, the Concession agreement granting the right of the Developer to build, operate, and maintain the mini grids becomes effective.

Contract Management

In this phase, developers transition towards building, operating, and maintaining the mini grid sites in accordance with the legal agreements (Concession agreement, Tri-partite agreement).

With regards to the gender equality and safeguarding components embedded in their projects, provide relevant reports on their progress. Per the Tri-partite agreement, Article 15 of the Articles of Agreement, developers must provide quarterly progress reports during the first two years of operation and annual thereafter.

As pertains to the gender components developers must provide in their reporting:

- Data on gender, including the number of female-headed households and the number/proportion of male and female employees.
- Data and related qualitative information on the inclusion of low-income and female-headed households.
- Information on the implementation of ESMPs and resettlement plans.

During this phase, the role of the MTPTC Energy Cell and local municipality shifts towards monitoring and oversight. Specifically, the Tri-partite agreement, Article 11.5, contractually obligates MTPTC Energy Cell to supervise the implementation of the environmental and social safeguard procedures. Further, Article 12.2 requires the local municipality to accompany the Energy Cell and developer in the implementation of environmental and social safeguard procedures.[133] MTPTC Energy Cell has social and gender staff on hand to help with this monitoring and mentioned that they would have support of IDB and WB to help with this.[134]

At the end of the concession term, per Concession Agreement Article 56, the developer is required to provide guidelines and training to ensure "proper operation of the mini grid" by whomever will take over the asset. As part of these guidelines and training, the developer is to provide information on environmental and social safeguards procedures.

[133] PHARES Dossier de Demande de Proposition Integrale - Version publiee - 29 jan 2021
[134] Allien, Interview.

Gender Equality and Safeguarding Measures – Expected Results

While projects being developed under the PHARES program are still under development, arguably the mini grid procurement program demonstrates the potential for addressing safeguarding and project-related gender gaps to enhance the project's overall sustainability and economic impact.

Many stakeholders interviewed about the program noted the importance of taking social and gender considerations into account when developing mini grids to reinforce the project's "social license to operate". This is because these mini grid projects are being developed in rural areas with no electricity. All community members—both men and women—need to be consulted and engaged in the process for developing these assets to ensure community support and eventual customer willingness to purchase electricity.[135]

Error! Reference source not found. indicates the gender equality and safeguarding results that could be reasonably expected based on the requirements of the PHARES RFP process, the legal agreements (i.e., Tri-partite agreement) governing the projects, and the standards to which ESMPs must be developed.

Table 17: Indicative anticipated results[136]

Project Component	Expected Results

Gender Equality Measures	• Closing of Gender Gaps
	  ○ Human Endowments –
	  ▪ Health Benefits: access to electricity can give community members, generally women, access to different forms of cooking that do not involve kerosene, which "can produce high levels of pollutants, and can significantly contribute to indoor air pollution and ill-health."[137]
	  ○ Jobs and Employment – Given the PHARES program focus on promoting gender equality in employment during the development and operation of the mini grid projects, it can be reasonably anticipated that all mini grid project developed under PHARES will contribute towards closing gaps in employment between men and women (see Gender Equality and Safeguarding Context for more on this gap). Further by extension of being connected to electricity, community members will be able to develop new businesses / expand old businesses, including women customers.
	  ○ Voice and Agency: The PHARES program will help close gaps in voice and agency of women by including them in the planning process for the sites and promoting them as leading employees.

[135] Archambault and Allien Interviews.
[136] Full analysis of anticipated results will require Final Project Plans and Executed Concession Agreements for each mini grid site.
[137] See: https://energypedia.info/wiki/Cooking_with_Kerosene#Cooking_with_Kerosene

	The degree to which this occurs will depend on each individual project. Further by requiring mini grid developers to create street lighting systems in each community, the PHARES program will contribute towards enhancing women's perception of safety at night.
Safeguarding	• Safeguarding: ○ Risks to vulnerable populations including women and children are effectively managed and there are no incidents of GBV or Sexual abuse.

Potential Barriers and Enablers to Success

As PHARES is still under development, the barriers, and enablers of success are seen as potential. Generally, the project developers, government, and multilateral stakeholders support ensuring the mini grids promote gender equality and safeguard women and girls against risks. The key barriers to the success of the gender components have to do with the extremely fragile context of Haiti, which may inhibit development of the infrastructure itself as well as the low capacity / lack of experience of women who may want to gain access to mini grid-related jobs.

Table 18: Barriers and enablers to success of gender and safeguarding components in PHARES

Type	Description	Mitigating / enhancing measure
Barrier	Difficulty getting projects off the ground and thus not being able to implement gender equality measures due to risky and fragile operating environment	Supportive and dedicated government counterparties. Dynamic and committed developers accustomed to working in difficult environments. Support of key multilateral lenders (IDB and World Bank), including through "connection subsidies".
Barrier	Skill set of women in communities may prevent them from taking advantage of economic opportunities offered by program; many women lack energy sector experience	Job postings will use "gender-neutral" language, i.e., make it clear that jobs are open to men and women. One developer mentioned creating an apprenticeship program for more technical jobs to encourage more female applicants. Applicants need not have prior experience but must showcase evidence of hard work (e.g., through good grades).[138]

[138] Archambault, Interview.

Type	Description	Mitigating / enhancing measure
Enabler	Presence of the World Bank and IDB in development of PHARES	Support (through IDB funding) to ensure proper inclusion of gender equality and safeguarding goals through technical assistance. Inclusion of social considerations as an evaluation criterion of mini grid projects. On-going monitoring of project ESMP implementation by IDB and WB specialists.
Enabler	Commitment of Energy Cell/ANARSE	Commitment to gender equality and safeguarding goals of PHARES program and have specialized staff to oversee these components. Inclusion of social considerations as an evaluation criterion of mini grid projects. On-going monitoring of project ESMP implementation by Energy Cell specialists
Enabler	Unique group of developers	Mini grid developers committed to achieving development impact; and some even have explicit goals for gender equality (not including what is imposed by PHARES).

Business Case

Discussions with stakeholders active in the PHARES program made it clear that inclusion of social inclusion, gender, and safeguarding considerations as part of the PHARES program is almost part of the DNA of developing the program. No stakeholder expressed hesitation regarding including these project components or the cost of doing so.

High-Level Cost Benefit

Given PHARES is still under development, there is no empirical evidence that the integration of gender equality or safeguarding measures enhanced the business case for individual mini grid projects. The following sub-section presents a high-level qualitative overview of some of the costs borne by various project stakeholders to implement the gender equality and safeguarding measures as well as the potential benefits such stakeholders could reasonably expect because of implementing those measures. Since PHARES is under development and the team does not have access to the specific gender equality measures each mini grid developer intends to deploy, the overview focuses on those measures, which will be tracked, as per the concession agreement. These are number of women employed by the project as well as number of connections made to female-headed households.

Table 19: Gender equality and safeguarding measures - costs and benefits

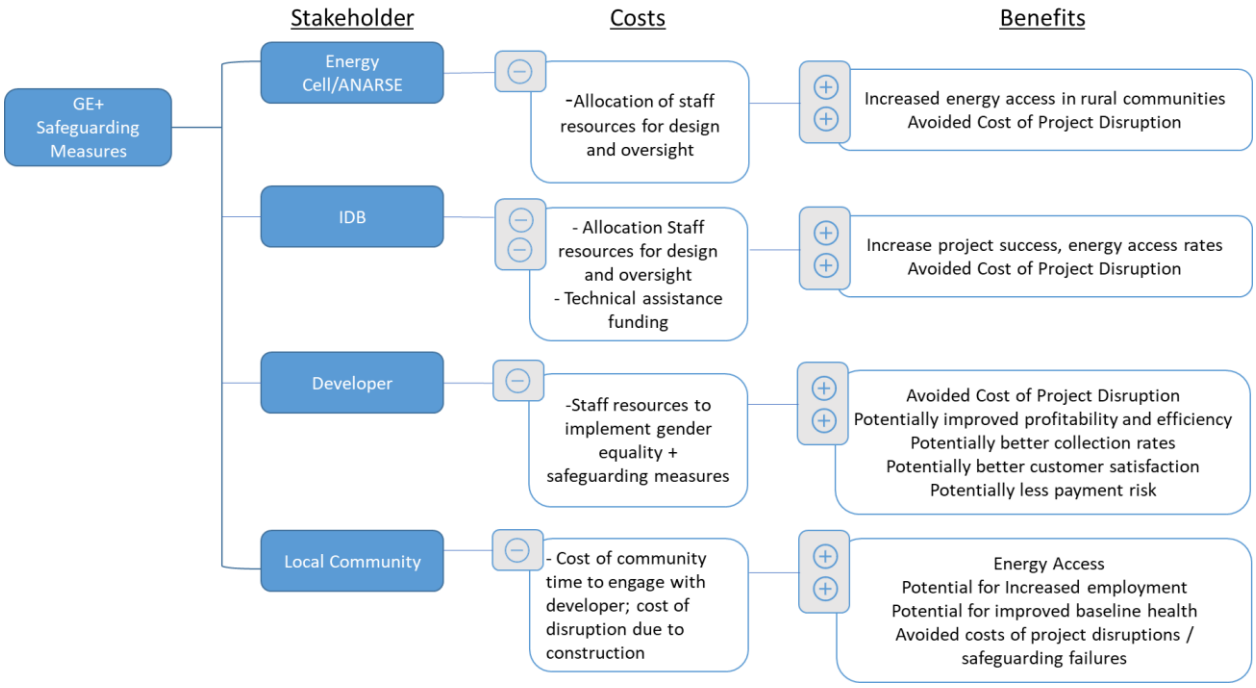
Stakeholder	Costs (-)	Benefits (+)
GoH, Energy Cell, ANARSE	**Staff costs for monitoring and oversight of gender equality and safeguarding measures**. It is worth noting, these stakeholders did not necessarily view these as "added costs", though rather saw looking at gender and social inclusion factors as part of building license to operate in communities.[139]	Development of projects accepted by the local communities and thus, **increased project success and energy access rates.** **No project disruptions due to safeguarding failures.**
IDB, World Bank	Technical assistance grant costs to help developers with final design of ESMP and social inclusion plans.[140]Staff costs for monitoring and oversight of gender equality and safeguarding measures.	Development of projects accepted by the local communities and thus, increased project success and energy access rates. No project disruptions due to safeguarding failures.
Developer	Staff and implementation costs for GE measures • To increase # of women employed in microgrid project • to ensure connection of female-headed households • Ensure proper safeguarding measures in place	**Potentially improved profitability and efficiency for developer –** Across the energy sector, studies show that gender diversity in decision making is correlated with improved business performance. Studies show that companies with strong female leadership deliver a 36% higher return on equity and companies with at least one female executive board member outperformed those with male-only boards.[141] (Energy and Economic Growth 2020). Additionally, global examples point to the fact that integrating women across the energy value chain can unlock greater productivity and return on investment (ROI).[142] **Potentially better collection rates** – Evidence from the water sector suggests that including

[139] Allien, Interview.
[140] PHARES Dossier de Demande de Proposition Integrale - Version publiee - 29 jan 2021
[141] Energy and Economic Growth, "Increasing women's participation in the energy sector" 2020.
[142] USAID, "Advancing gender in the environment: Making the case for women in the energy sector", 2019.

	during construction and operation	female employees as part of the collection process may increase collection rates. A pilot program in Ghazni, Afghanistan, shows the local water utility was able to increase collections by 75% in the first month of a program that employed a brother and sister team to read utility meters.[143] **Potentially better customer satisfaction** – When Jamaica Power Service's customer service team added more women, customer satisfaction jumped from 23% to 70%.[144] **Potentially less payment risk** – Evidence from the microcredit industry suggests that "women are generally better credit risks for lending institutions and have better repayment rates than men."[145] **No project disruptions due to safeguarding failures; continued social license to operate**
Local Community	Time to engage with developers Disruption costs associated with construction of mini grid	**Energy Access** **Potential for increased employment, reduced household burdens** – Studies show that rural women and men with access to energy are 10.2% more likely to be employed than their counterparts without access, after controlling for other important variables such as marital status, ownership of dwelling, household size, education level, and state of residence.[146] Another study showed that access to reliable electricity increases the inclination of rural women to work outside the home by approximately 23% due to more efficient home production in the form of lighting and modern cooking appliances.[147] **Potential for improved baseline health outcomes –** Many studies show that improved access to electricity improves health outcomes for women through cleaner air and better food safety (due to refrigeration).[148] **No project disruptions due to safeguarding failures**

[143] ICRWASH, "Gender: female meter reader raises water revenues in Afghanistan"
[144] USAID, "Advancing gender in the environment: Making the case for women in the energy sector", 2019.
[145] Espallier, et al. "Women and repayment in microfinance: A global analysis" 2011.
[146] O'Dell et al. "Women, energy, and economic empowerment" 2014.
[147] Sadanand, "Rural electrification and employment in poor countries: Evidence from Nicaragua." 2013
[148] World Bank, " Energy, gender, and development: What are the linkages? Where is the evidence?", 2011.

Figure 6: Overview of costs and benefits of implementing gender equality and safeguarding to PHARES project stakeholders



Impact on Project Financing

The multilateral funders involved—World Bank and IDB—have institutional mandates to support gender and safeguarding as part of their commitment to sustainable development. Thus, by being present as funders to PHARES, the PHARES program must adhere to their gender and social safeguarding standards.

Lessons Learned

Potential missed opportunities

Based on the information regarding the PHARES program thus far there do not seem to be "missed opportunities" with regards to gender equality and safeguarding.

Key takeaways and lessons learned

- Multilateral donor presence both requires and supports inclusion of gender equality and safeguarding elements in PHARES program—this is evident in PHARES as well as in other cases investigated as part of this effort.

- PHARES demonstrates that social and gender plans associated with an infrastructure project can be evaluated as part of the procurement process and that bidders can in a sense compete on this angle—while having bidders compete on their gender and social inclusion plans may not work in every competitive bidding process, PHARES demonstrates this is possible, at least for smaller-scale projects.

- Multiplicity of actors in the mini grid concession structure where risk and operational responsibility is handed off to the private sector mean:

    - There needs to be an appropriate incentive structure within concession agreements to ensure micro-developer adheres to gender-related agreements.

    - Oversight becomes important; thus, the MTPTC and local municipalities must have skills to examine the gender and safeguarding components of the project.

- Microgrid developers seem up to the challenge of integrating gender equality and safeguarding and some were even examining this aspect of projects prior to PHARES.

5. Key Takeaways and Recommendations

Key Takeaways

The following key takeaways can be drawn from the research process to develop the cases and from the cases themselves:

- Integration of gender equality measures into infrastructure PPPs is still in its infancy: As evidenced by the process conducted by the research team to identify projects worth profiling for this study, there is not a surplus of good examples of PPP projects with well-integrated gender equality measures. Despite casting a wide net, the team initially (only) identified 24 projects.149 Ultimately for various reasons explained in Annex 6, the team did not think many of these projects were good examples to profile. Further, many of the projects worth profiling are more recent. Of the three examined in this report, Soma IV became operational in 2019, followed by Lotus Wind in 2021. No projects have yet become operational under the Haiti PHARES program.

- Project lenders can play a powerful role in incentivizing projects to integrate gender equality and safeguarding measures: All projects examined whether financed through multilateral lenders or commercial banks (e.g., Türkiye Soma IV), demonstrated the power of project lenders to incentivize borrowers to integrate gender equality and safeguarding measures. The Haiti, and Vietnam projects included the presence of multilateral lenders, a group of lenders that all have gender equality and safeguarding requirements included as part of their lending packages. Given these projects needed multilateral financing to unlock commercial financing sources, the high requirements of integrating gender equality and safeguarding measures ultimately enabled projects to access other financing streams. The Türkiye Soma IV case is unique in that a Turkish private lender, Garanti BBVA, incentivized the project company to integrate gender equality measures through the presence of a “gender loan,” which offered favorable financing conditions tied to gender-related performance indicators.

- **In PPPs, government contracting agencies transfer significant risk and operational** responsibility to the private sector:

    - Thus, incentive structures and oversight mechanisms need to be in place to ensure adherence to gender-related requirements: The Haiti PHARES case, clearly shows the links required between different actors in a PPP project development cycle to design and

implement gender equality and safeguarding measures. In this case, the government contracting entity, with help from advisors and multilateral lenders, identified the gender equality and safeguarding goals required for the respective projects. The private parties selected to construct and implement those projects will then be contractually required to translate those goals into operational measures with reporting requirements. This handoff underscores how important it is for project planners and contracting entities to structure the right incentive measures in bidding processes and legally enforceable project agreements to encourage and ensure the private sector to properly implement the gender measures. This case also show the necessity of ensuring proper oversight during project construction implementation—meaning entities overseeing the private parties' delivery of gender equality and safeguarding measures have gender and social safeguarding expertise and capacity to perform this function.

    - Further, it is important that the private parties (e.g., construction contractors and operators) to the infrastructure PPP have the capacity and expertise to implement gender-related requirements. All cases demonstrate the importance of the private developer/concessionaire in implementing gender equality and safeguarding measures. Contractual and oversight mechanisms in the PPP contract can help spur the private party's acquisition of this capacity and expertise. There could also be scope for general capacity building to private parties from multilateral lenders—something ADB helped provide to the project company in the Lotus Wind Case.

- It is possible to evaluate bidders in a competitive PPP procurement on their inclusion of gender and social considerations. In Haiti, social and gender plans were a component bidders competed on. PHARES demonstrates that social and gender plans associated with an infrastructure project can be evaluated as part of the procurement process and that bidders can, in a sense, compete on this angle.

- Thorough data collection is needed to inform gender action plans and social management plans and ensure realistic gender targets. To help inform what gender equality safeguarding measures to integrate into a project, proper due diligence and data collection on gender gaps and risks are needed to inform gender action plans and social management plans and ensure realistic gender targets. The Lotus Wind Project prepared by ADB provides an example of a clear process for conducting this due diligence.

- Willingness of project sponsors / bidders to integrate gender measures is indispensable to their success. Polat Enerji in the Türkiye Soma IV project and PC1 in Vietnam Lotus Wind were willing to comply with the gender and safeguarding terms. Arguably, the benefits of the loans to their respective projects outweighed the costs to them of integrating gender measures; however, in both cases the sponsor entities were willing to take gender equality measures on board. Further, it is worth noting that for the Haiti case, which is still under procurement, most150 bidders have not expressed concern or hesitation with regards to including gender equality and safeguarding plans or measures as part of the project.

Recommendations

The case studies and the research underpinning them lead to the following recommendations for multilateral development agencies/DFIs seeking to help promote infrastructure PPPs that have fully

integrated gender equality and safeguarding measures for government contracting agencies and for private concessionaires:

Multilateral Lenders / DFIs

- **Continue to test, examine, and refine standardized approaches:** As illustrated through the key takeaways, integration of gender equality considerations into PPP projects is nascent. Project teams from multilateral lenders and DFIs should see what works and determine what levers are available within the project structure and what private sector bidders will be willing to accept to help ensure proper safeguarding and close gender gaps. With this frontline information, these project teams can help multilateral lenders and DFIs develop standardized best-in-class approaches helpful all industry participants (advisors, lenders, investors, governments).

- **Help ensure PPP contracting agencies have the appropriate capacity to oversee gender equality and safeguarding measures to ensure such measures succeed**: It is evident in the PPP structure that the strength of the government counterparty's oversight of the PPP project helps ensure that the project meets its contractual milestones, including those related to gender. This suggests that additional multilateral support to such entities through grants or capacity building measures on gender equality and safeguarding more generally, or specifically to the project, would be worthwhile.

Contracting Agencies

- **Seek additional support to oversee gender equality and safeguarding measures, if needed:** Development of PPP projects requires many moving parts and puts lots of demands on government contracting entities. For many of these entities, integration of gender equality measures into projects is new and can thus seem like "one more thing" (i.e., a burden). These entities should seek additional support when needed—either within their own countries from ministries or organizations with responsibility for gender policies or from multilateral entities with available capacity building funding or technical assistance**.**

Concessionaires

- Help the infrastructure PPP industry innovate and understand what works with regards to integrating gender equality measures into PPPs: Concessionaires are "in the trenches" when it comes to the final design and implementation of project-related gender equality measures. Given this role, these "downstream" parties (i.e., they enter after much project preparation is done) can help the upstream parties understand which gender measures work economically and financially and what works period.

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Zhou, Desiree. 2022. *ADB Deal Team Lotus Wind* (22 June).

Longlist of projects reviewed

No	Project Name	Region: Country	Reason team did not pursue
1	Achiras Wind Farm	LAC: Argentina	Evidence of gender measures present, though confidentiality issues around presenting data for public audience prevented team from further exploring.
2	Bakad Toll Road PPP	ECA: Kazakhstan	While team found a scope of work for integrating gender equality measures into the project, team unable to confirm that gender measures were ultimately integrated into project structure.
3	Benban Solar Park (comprised of 32 separately developed power plants)	MENA: Egypt	Team found some evidence that certain power plants within the larger park had gender equality and safeguarding elements, though there was limited data to suggest these elements were harmonized across power plants developed.
4	Chonburi Natural Gas Power Project	EAP: Thailand	Decision to not review natural gas-related projects.
5	Cote D'Ivoire Abidjan BRT (PPP)	SSA: Cote d'Ivoire	At time cases were being selected, this project was not sufficiently advanced.
6	Gandharbpur Drinking Water Treatment Plant	SAR: Bangladesh	Broader lending program providing support to project had evidence of gender-related measures, though team could not confirm that measures were specifically integrated into the water treatment plant, which is the PPP portion.
7	Jawa-1 Liquefied Natural Gas-to-Power Project	EAP: Indonesia	Decision to not review natural gas-related projects.
8	La Castellana Wind Farm	LAC: Argentina	Evidence of gender measures present, though confidentiality issues around presenting data for public audience prevented team from further exploring.
9	Nam Theun 2 Hydropower Project	EAP: Lao PDR	Decision not to pursue as project was very old (pre-2010) and already profiled in *Gender Equality, PPPs and Infrastructure: A Primer*.
10	Ouarzazate Solar Phase I	MENA: Morocco	Ease of access to project stakeholders limited.

11	Pune Metro Line 3	SAR: India	Team could not confirm whether Pune Metro Line 3, which was developed by private bidders, had gender measures integrated like Pune Metro Lines 1 and 2, which received MDB support.
12	Rantau Dedap Geothermal Power Project (Phase 2)	EAP: Indonesia	Project stakeholders did not think that gender measures, while being present at design phase, had been well-implemented and monitored.
13	Riau Natural Gas Power Project	EAP: Indonesia	Decision to not review natural gas-related projects.
14	Sarulla Geothermal Power Project	EAP: Indonesia	Project stakeholders did not think that gender measures, while being present at design phase, had been well-implemented and monitored.
15	Tina River Hydropower Project	EAP: Solomon Islands	Task team decision not to review case.
16	Tui - Samoa submarine cable connecting Samoa with Fiji	EAP: Samoa	Project renationalized by Samoan government and thus no longer fit PPP criteria. Initial project support that had ADB support theoretically had some gender elements, though these were not explored.
17	Santo Antônio hydroelectricity plant	LAC: Brazil	Potentially a controversial project in the local community so the team did not pursue it for further examination.
18	Kigali Bulk Water Supply Project	SSA: Rwanda	Team could not confirm gender measures associated with project.
19	Jilamito Hydroelectric Plant	LAC: Honduras	Potentially a controversial project in the local community so the team did not pursue it for further examination.
20	Brazil Street Lighting PPPs	LAC: Brazil	While an ancillary study associated with a street lighting project had a gender focus, team concluded projects did not take gender into account in their design, operations, or implementation.

Annex 2 Stakeholders Interviewed by Case

Vietnam's Lotus Wind

- Asian Development Bank
    - Amanda Satterly, Principal Social Development Specialist (Gender & Development)
    - Desiree Zhou, Investment Specialist
    - Melissa Moyano Manguiat, Senior Safeguards Officer Private Sector Operations Department
    - Siela B. Teng-Almocera, Senior Social Development Officer Private Sector Operations Department

Türkiye Soma IV Wind Power Project

- Garanti BBVA
    - Seray Imer, Head of Sustainable Finance under Corporate Investment Bank
    - Yağmur Atmaz, Sustainable Finance Senior Supervisor

Haiti PHARES Mini Grid Development Program

- Energy Unit of the Ministry of Public Works Transportation and Communication ("Energy Cell")
    - Nicolas Allien, Head of Unit
    - Marie Sofonie Louis, Social and Gender Consultant
    - Romial Saint Vil, Environment and Social Safeguarding Specialist
- EarthSpark (bidder to PHARES program)
    - Allison Archambault, CEO
- Trama TecnoAmbiental, S.L. (TTA) (Consulting firm advising PHARES program)
    - Georgios Xenakis, Energy Consultant and Project Manager

Annex 3 Overview of Public-Private Partnerships

The following overview of PPPs is taken from the World Bank's PPP Online Reference Guide[151], housed on the Public-Private Partnership Legal Resource Center website.[152] Readers desiring more of an overview of PPPs are encouraged to visit this site.

What are PPPs?

There is no single, internationally accepted definition of a Public-Private Partnership. The World Bank's PPP Online Reference Guide[153] takes a broad view of what a PPP is, defining it as:

A long-term contract between a private party and a government entity, for providing a public asset or service, in which the private party bears significant risk and management responsibility and remuneration is linked to performance.

This definition:

Encompasses PPPs that provide for both new and existing assets and related services.

Includes PPPs in which the private party is paid entirely by service users, and those in which a government agency makes some or all payments.

Encompasses contracts in many sectors and for many services, provided there is a public interest in the provision of these services and the project involves long-life assets linked to the long-term nature of the PPP contract.

The project functions transferred to the private party—such as design, construction, financing, operations, and maintenance—may vary from contract to contract, but in all cases the private party is accountable for project performance and bears significant risk and management responsibility. PPP contracts typically allocate each risk to the party that can best manage and handle it—risk transfer to the private party is not a goal but is instrumental for full transfer of management responsibility and for the alignment of private interests with the public interest.

Why Use PPPs?

PPPs are a mechanism for governments to procure and implement public infrastructure and/or services using the resources and expertise of the private sector. Where governments are facing aging or lack of infrastructure and require more efficient services, a partnership with the private sector can help foster new solutions and bring finance.

PPPs combine the skills and resources of both the public and private sectors through sharing of risks and responsibilities. This enables governments to benefit from the expertise of the private sector, and allows them to focus instead on policy, planning, and regulation by delegating day-to-day operations. In order to achieve a successful PPP, a careful analysis of the long-term development objectives and risk allocation is essential. The legal and institutional framework in the country also needs to support this new model of service delivery and provide effective governance and monitoring mechanisms for PPPs. A well-drafted PPP agreement for the project should clearly allocate risks and responsibilities.

[151] https://ppp.worldbank.org/public-private-partnership/PPP_Online_Reference_Guide/Introduction
[152] https://ppp.worldbank.org/public-private-partnership/
[153] https://ppp.worldbank.org/public-private-partnership/PPP_Online_Reference_Guide/Introduction

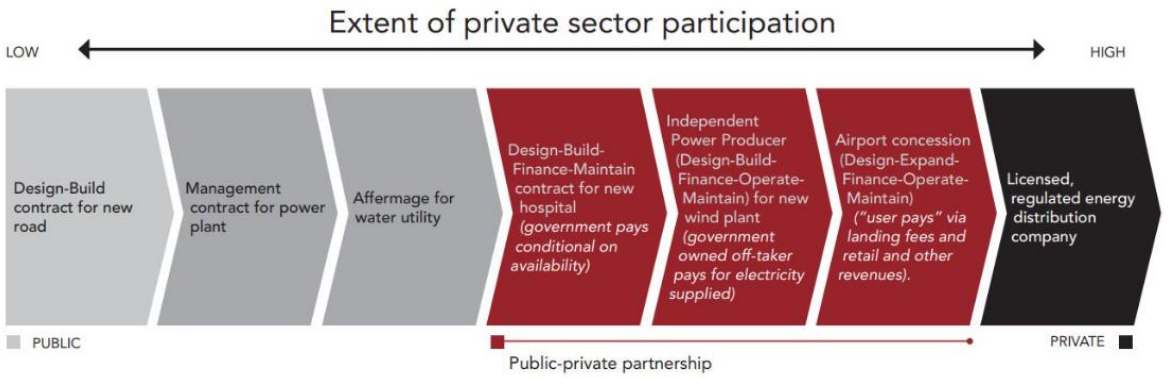
PPP Contract Types

Most PPP projects present a contractual term between 20 and 30 years; others have shorter terms; and a few last longer than 30 years. The term should always be long enough for the private party to have an incentive to integrate service delivery costs considerations into the design phase of the project. This includes maintenance considerations as well, in order for the trade-offs between initial investment cost and future maintenance and operation costs to be optimized. The "whole-life" approach, considering whole-life costs and whole-life benefits, maximizes the efficiency of service delivery. It is at the core of the rationale for using PPPs for the delivery of public services. The precise length of the contract depends on the type of project and policy considerations. Policy makers need to satisfy themselves that the demand for the services delivered by the project will be sustained over the whole life of the contract; the private party should be able to accept responsibility for service delivery over its term; and the procuring authority should be able to commit to the project for its term. The availability of finance, and its conditions, may also influence the term of the PPP contract.

A central characteristic of a PPP contract is that it bundles together multiple project phases or functions. Nonetheless, the **functions** for which the private party is responsible vary and depend on the type of asset and service involved. Typical functions include:

- **Design** (also called *engineering work*)—Involves developing the project from initial concept and output requirements to construction-ready design specifications.
- **Build, or Rehabilitate**—When PPPs are used for new infrastructure assets, they typically require the private party to construct the asset and install all equipment. Where PPPs involve existing assets, the private party may be responsible for rehabilitating or extending the asset.
- **Finance**—When a PPP includes building or rehabilitating the asset, the private party is typically also required to finance all or part of the necessary capital expenditure.
- **Maintain**—PPPs assign responsibility to the private party for maintaining an infrastructure asset to a specified standard over the life of the contract. This is a fundamental feature of PPP contracts.
- **Operate**—The operating responsibilities of the private party to a PPP can vary widely, depending on the nature of the underlying asset and associated service. For example, the private party could be responsible for:
    - Technical operation of an asset and providing a bulk service to a government off-taker—for example, a bulk water treatment plant.
    - Technical operation of an asset, and providing services directly to users—for example, a PPP for a water distribution system.
    - Providing support services, with the government agency remaining responsible for delivering the public service to users—for example, a PPP for a school building that includes janitorial service.

Figure 25: Examples of PPP contract types



Annex 4: Keywords for Online Search

Keywords used to conduct the online search included:

- **For projects** – 'Infrastructure projects private participation', 'PPP', and by sector: 'construction', 'transport', 'water', 'energy', 'telecoms' including 'advisory' and 'investment' projects.

- **For gender measures** – 'Gender methodology in infrastructure projects/programmes' and 'gender' or 'social' + 'analysis', 'frameworks', 'socioeconomic analysis' and World Bank gaps + 'women', 'employment/jobs', 'assets', 'empowerment', 'voice', 'agency', human development / endowment', 'engaging men / boys', 'socially inclusive infrastructure', 'underserved/vulnerable/marginalized groups + infrastructure'.

- **For climate-gender nexus –** 'Gender-climate-infrastructure' and 'gender' + 'renewables', 'renewable energy', 'mitigation project' and 'adaptation' , 'climate-resilient'.

- **For spillover** – 'infrastructure' + 'women/female entrepreneurship', women in leadership', 'gender-based violence, 'sexual exploitation and abuse', 'harassment', 'inequality', 'distributional impacts' , 'voice', 'agency'.

- **For certain sectors (e.g., water)** that seemed underrepresented in the first review, the team also consulted the Private Participation in Infrastructure (PPI) database to proactively cross check whether specific documented PPP projects have considered gender.

Annex 5: Sources and Definitions for Gender Inequality Indicators

Most of the Gender Inequality Indicators presented for each case were retrieved from the World Bank DataBank. Sources and definitions are provided below:

- **Literacy rate, adult female (% of females ages 15 and above):** Adult literacy rate is the percentage of people ages 15 and above who can both read and write with understanding a short simple statement about their everyday life. Data from UNESCO Institute for Statistics as of June 2022.

- **Labor force participation rate, female (% of female population ages 15+) (modeled ILO estimate):** Labor force participation rate is the proportion of the population ages 15 and older that is economically active: all people who supply labor for the production of goods and services during a specified period. Data from the International Labour Organization, ILOSTAT database as of June 2022.

- **Account ownership at a financial institution or with a mobile-money-service provider, female (% of population ages 15+):** Account denotes the percentage of respondents who report having an account (by themselves or together with someone else) at a bank or another type of financial institution or report personally using a mobile money service in the past 12 months (female, % age 15+). Data from Global Findex Database, World Bank.

- **Proportion of seats held by women in national parliaments (%):** Women in parliaments are the percentage of parliamentary seats in a single or lower chamber held by women. Data from the Inter-Parliamentary Union (IPU).

- **School enrollment, secondary, female (% net):** Net enrollment rate is the ratio of children of official school age who are enrolled in school to the population of the corresponding official school age. Secondary education completes the provision of basic education that began at the primary level and aims at laying the foundations for lifelong learning and human development, by offering more subject- or skill-oriented instruction using more specialized teachers. Data from UNESCO Institute for Statistics as of February 2020.

The following indicator was obtained from the World Health Organization's Global Database on the Prevalence of Violence Against Women:

Lifetime prevalence of intimate partner violence among women aged 15–49: The proportion of ever-married/partnered women who reported that they had been subjected to one or more acts of physical or sexual violence, or both, by a current or former husband or male intimate partner in their lifetime (defined as since the age of 15 years).

For all indicators described above, each case study presents data at the country, regional, and international (i.e., High Income Economies) levels. The countries included within the regional and international groups are based on the World Bank's "Country and Lending Groups.

Annex 6: Lotus Wind Power GAP (Source: ADB)

Results Chain	Performance Indicators	Data Sources and Reporting Mechanisms
Outcome: Renewable power delivered to the domestic grid increased	• Number of additional jobs provided by the borrowers and contractors during operation of the project amount to at least 30, of which 6 are for women, by 2022 (2019 baseline: 0, number of women: 0)	Annual development effectiveness monitoring reports by the borrowers
Output 2: Gender-inclusive local employment generated	• Number of additional jobs provided by the borrowers and contractors during construction of the project amount to at least 180, of which 18 are for women, by 2021 (October 2020 baseline: 128, number of women: 13) • Women managers employed by PC1, including its subsidiaries, increased to 23% of total managers by 2023 (2020 baseline: 21%, or 31 women managers of 146 total managers)	Annual development effectiveness monitoring reports by the borrowers
Output 4: Gender inclusiveness in PC1's work environment improved	• PC1 includes an anti-sexual harassment policy in its code of conduct by 2021 (2020 baseline: No policy) • At least 80% of PC1 (including subsidiaries) staff trained on the anti-sexual harassment policy by 2023 (2019 baseline: 0%)	Annual development effectiveness monitoring reports by the borrowers
Output 5: Livelihood opportunities of women enhanced	• At least 5 women from the local community are participants in vocational training on the wind power project operation and management by 2023 (October 2020 baseline: 50 total, number of women: 0)	Annual development effectiveness monitoring reports by the borrowers

Annex 7: Overview of the Lotus Wind safeguarding requirements (Source: ADB)

Identified Impacts	Significance			Proposed Mitigation Measures
	Impact Nature	Before Mitigation	With Mitigation	
Impacts on economic and loss of livelihood (Preconstruction and Construction Phase) *	Negative	Minor	Negligible	• Development and implementation of LREMDP, which will take into account women, the poor, and other vulnerable groups to ensure improvement of their standards of living to at least national minimum standards The LREMDP includes gender analysis, gender- responsive measures, and women-led development programs.
Government-led land acquisition resulting in economic displacement and livelihood impacts (Pre-construction and Construction Phase) **	Negative	Moderate	Minor	• Development and implementation of LREMDP, including gender analysis, gender-responsive measures, and women-led development programs.
Impacts on economic and livelihood ***	Negative	Minor	Negligible	• An (EMDP) developed to enhance, with a priority to ethnic minority women collectors of NTFP and other vulnerable groups. • A Stakeholder Engagement Plan (SEP) developed to ensure effective Project information disclosure and communication with Van Kieu affected communities. • Grievance Mechanism in SEP to support the local communities.
Impacts associated with construction workers	Negative	Moderate	Minor	• Establish a Local Recruitment Policy in the Labor Management Plan that commits a certain percentage of local recruitment, including women from local communities. • Develop Influx Management Plan including specific gender-sensitive measures such as training for workers on gender-based violence, including sexual harassment of women and girls, exploitative sexual relations, and illicit sexual relations with minors from the local community, and commitment/policy to cooperate with

				law enforcement agencies investigating perpetrators of gender-based violence.
Gender impacts (construction and operation phases)	Negative	Moderate	Minor	• Ensure that the Project's social management plans including SEP and LREMDP will include gender mainstreaming measures to ensure women's participation and benefits from all of the Project's activities. This will include but not be limited to: Create job opportunities and adequate trainings for women to increase their income, particularly for poor ethnic minority women and include measures to encourage women's participation in community activities, Project's information disclosure. • Ensure gender-responsive social protection for the labor force during the project implementation and maintenance HIV/AIDS, STDs, and other communicable diseases. • Contractors are recommended to utilize local laborers giving preference to women laborers in both skilled and unskilled types of labor. For unskilled types of labor, it should be ensured they are equally paid with men on time and days. Gender-responsive social protection for the labor force should be implemented by the Project, including awareness-raising on and programming responding to the risks of gender-based violence. • Ensure that occupational safety of women laborers are taken care of by contractors. • Ensure that women are well informed and have full access to the Community Grievance Mechanism and implement a Gender Action Plan agreed with ADB.

*Identified impacts and proposed mitigation measures only correspond to Phong Huy's LREMDP.
**Identified impacts and proposed mitigation measures only correspond to Lien Lap's LREMDP.
***Identified impacts and proposed mitigation measures only correspond to Phong Nguyen's EMDP.