

Gender Sector Brief: Infrastructure



How to Apply a Gender Lens to the Evaluation of Infrastructure Investments

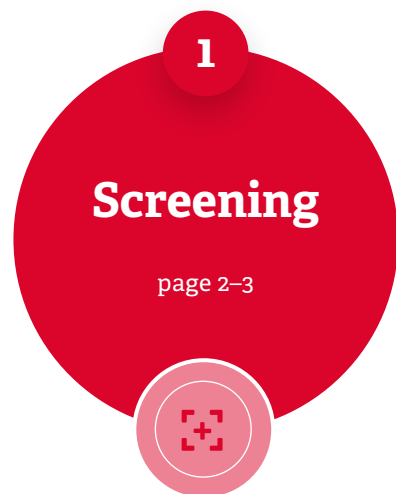
This is a sector-specific diagnostic guide to support investors and fund managers to identify existing and future opportunities for gender-smart investing in the infrastructure sector. It provides investment assessment guidance across project stages of sustainable infrastructure financing, including construction, maintenance and delivery of infrastructures. It covers water and sanitation, municipal and environmental infrastructure, power and energy, and transportation sectors.

This guide contains questions for investors to ask during screening and due diligence, and suggests possible actions to take depending on the answers to these questions. Depending on the structure of your organisation, responsibility for covering gender impact opportunities in due diligence and portfolio management will vary and can be led by investment, environmental, social and governance (ESG), impact, or gender teams. It is down to the investor or fund manager to determine where responsibility sits.

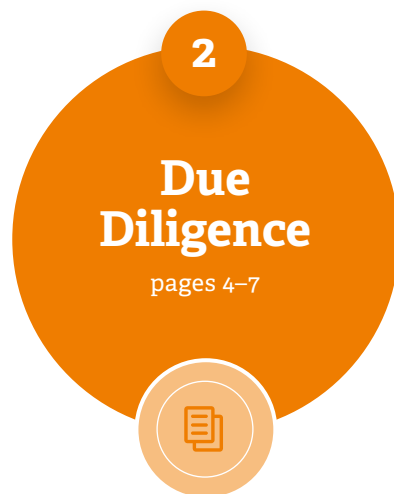
Gender-smart investing is smart business. While women have historically been under-represented across the infrastructure value chain, we know that gender inclusivity leads to increases in business performance, innovation, company reputation, and profitability. We also know that integrating women's needs in the design of infrastructures leads to increased service usage, resilience, sustainability, consumer satisfaction, and economic opportunities for all. This presents a significant business and impact opportunity.

Additional information on the rationale for taking a gender-lens to infrastructure investments and relevant trends in the sector can be found within this brief.

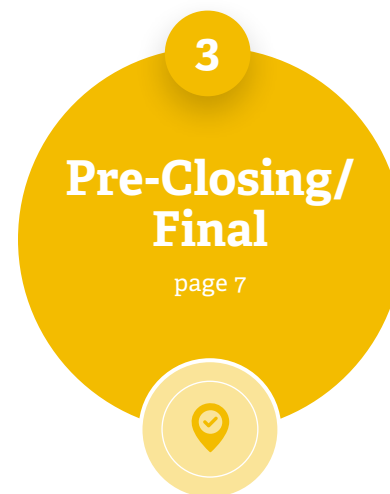
Click on each stage of the deal process to access relevant information:



Screen for gender-based opportunities and 2X eligibility



Collect information to confirm gender-smart investing opportunities and (if applicable) 2X eligibility



Finalise gender-smart investing approach and identify gender-smart business solutions



Provide support to gender-smart business solutions

The investor should answer screening questions before the deal is submitted for approval. The questions explore gender-based opportunities and focus on the company's smart inclusion of women across its workforce and supply chain, and its efforts to serve female customers.

This guide focuses on gender-based opportunities and gender-smart investing as an investment strategy. For gender-smart investors, screening for gender-based risks and negative impacts is an important aspect of ESG due diligence. Guidance on gender-based environmental and social (ESG) screening and due diligence is provided in the BII ESG Toolkit.¹

Screening questions will determine:

1. If the deal meets thresholds and/or qualifies under the 2X Challenge.²
2. If there are potential gender-based opportunities to be explored further in due diligence.

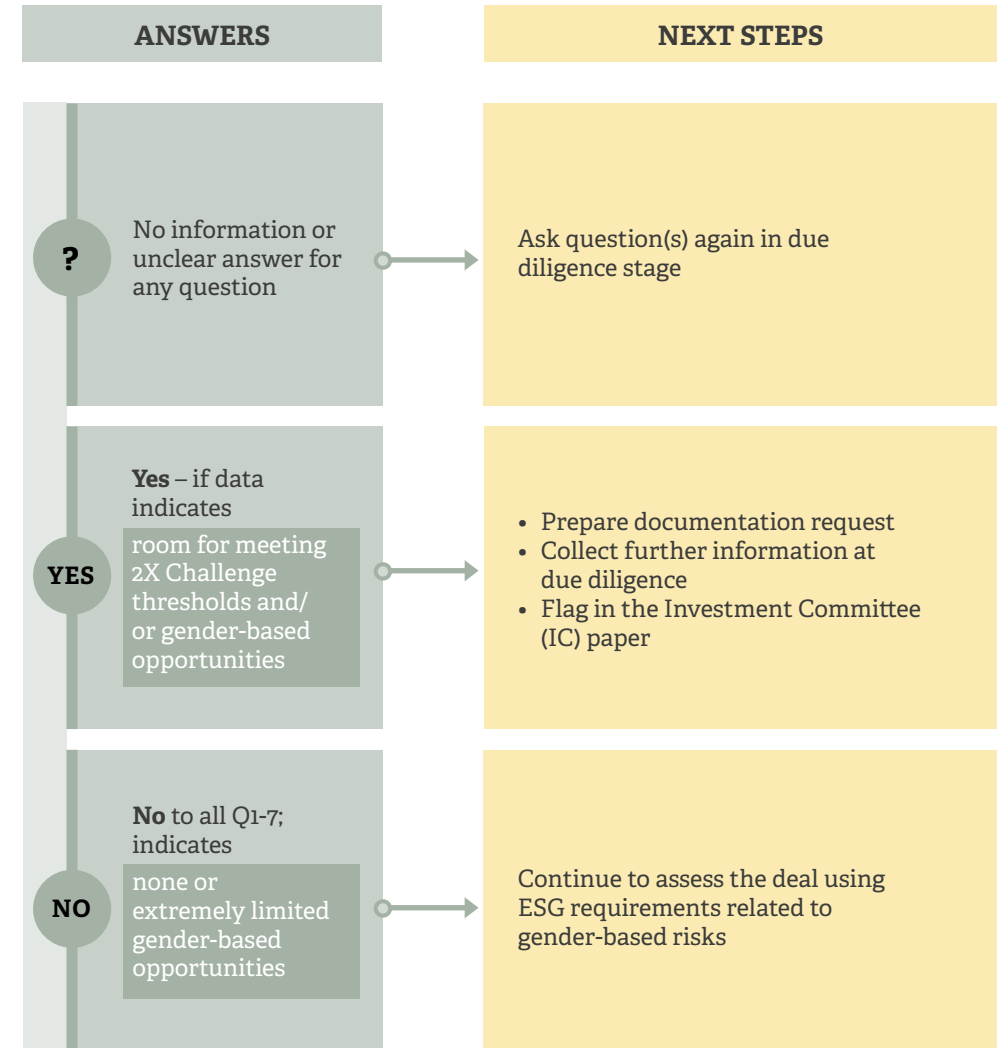
¹ Improper screening and poor management of gender-based risks can prevent effective gender-smart investing and have a detrimental impact on a company's performance in terms of operational costs, reputational damage, stakeholder engagement, employee productivity and loss of confidence. [Access the BII ESG Toolkit.](#)

² The 2X Challenge is a global initiative launched in 2018 by BII and development finance institutions (DFIs) from the G7 countries to direct \$3 billion to investments that help advance women's economic empowerment. To do this, 2X Challenge's members built a qualifying framework and defined a set of gender metrics adopted today by 15 DFIs and defined as industry standard by other investors. The 2X metrics are now used by the GIIN IRIS+. [Learn more about 2X and IRIS+ indicators.](#)



2X-related questions	YES	NO	Current %	No data/ unclear
1. OWNERSHIP. Was the business founded by a woman or do women own a majority share of the business?				
Notes				
2. BOARD. Do women represent 30% or more of the board?				
Notes				
3. SENIOR MANAGEMENT. Do women represent 30% or more of the senior management team? ³				
Notes				
4. EMPLOYEES. Do women make up 30% or more of the workforce? ⁴				
Notes				
5. CUSTOMERS. Does the business specifically target female customers and/or design products or services tailored to women's needs, preferences or behaviours? ⁵			N/A	
Notes				
6. [FOR INFRASTRUCTURE-FOCUSED FUNDS ONLY] Do 30%+ portfolio companies answer yes to at least one of the questions 1-5?				
Notes				

Opportunities for gender-smart business solutions	YES	NO	Current %	No data/ unclear
7. Is there commitment or capacity to create significant jobs for women, refine product and/or service offerings to better serve female customers and/or undertake workforce gender diversity efforts? Is the investee interested in scaling-up its efforts?			N/A	
Notes				



³ Room for judgment: Investees in unique sectors, especially across infrastructure industries, may require case-by-base consideration.
⁴ Ibid.

⁵ Infrastructures may serve 50% or more women without having a specific strategy to target or benefit women. To be included explicitly in the design phase, the infrastructure project will need to disproportionately benefit women or gender needs.

Gender due diligence is the process of gathering gender-related data and information from the potential investee company for analysis to determine whether gender gaps present opportunities that may impact performance or affect an investee company's operations and financials. Deal teams can integrate these questions into existing due diligence workstreams (e.g. ESG, impact, commercial).

The investor should collect the due diligence information and proceed to:

- Confirm 2X qualification (as applicable)
- Confirm gender-based opportunities to take forward compared to other impact investing themes.

2 Due Diligence



Leadership

1. Does the board and/or senior management have strong oversight and a clear governance process to support gender diversity and inclusion? Are any initiatives in place to promote women in leadership?

Rationale: Confirms commitment and ability to launch initiatives to drive greater gender diversity and inclusion for better corporate performance; identifies opportunities to provide guidance on governance structures and processes.

YES	NO

Notes

Workforce

2. Are there specific policies and programmes to support inclusiveness of both men and women at work? If so, what are they? For example, specific HR policies that go beyond basic regulatory requirements (e.g. childcare support, flexible work, gender targets for construction and maintenance, standardised pay rates for each role).

Rationale: Determines the level of inclusiveness of existing policies, facilities and programmes, and how this will affect key business performance indicators such as retention, absenteeism, turnover, and maternity return rate; highlights opportunities to support the business case for inclusive workforce improvements.

YES	NO

Notes

3. Building on recent and/or existing data, are there differences between the roles/responsibilities/functions/levels/grades undertaken by men and women in the workforce, including permanent, contracted, seasonal staff as well as contractor construction and maintenance staff?

Rationale: Highlights opportunities to support recruitment, advancement or efforts to support women in leadership roles. If women are segregated into only a subset of roles and are therefore underutilised, or if certain teams, functions or levels are dominated by one gender, the business may underperform due to lack of diversity.

YES	NO

Notes

4. Does the company collect and monitor gender-disaggregated staff data (e.g. average salary, turnover, absenteeism, retention, and promotion)? How is the data analysed and to what extent is data used for decision-making on gender-related efforts (e.g. to better serve women customers)?

Rationale: Highlights a commitment to understanding gender diversity and measuring improvements; helps identify opportunities to improve data collection and areas to support the company and further its strategic priorities.

YES	NO

Notes

5. What training or skills development schemes are in place to address existing or emerging skills gaps (e.g. disruptive and/or green technologies, smart cities, sustainable energy, and/or climate resilience)?

Rationale: Identifies industry skills gaps and ways for the company or project to expand its talent pool and 'future-proof' its business in the long term. Evidence shows women are highly adaptable and responsive to such training programmes.

YES	NO

Notes

2 Due Diligence



Supply Chain

6. Does the company have any active inclusive sourcing or procurement initiatives in place to source from women-owned businesses?

Rationale: Determines if there is a market opportunity to support greater gender inclusion in sourcing and procurement policies and strategies, promoting the selection of services, goods, and civil works that considers their impact on women's economic empowerment.

YES	NO

Notes

Products and Services

7. Does the company collect and monitor gender-disaggregated data on demand, service usage and/or customer segmentation? For example, related to access, availability, affordability, feasibility, and satisfaction.

Rationale: Highlights a commitment to understanding the distinct impacts of infrastructures and differentiated needs of women and men; identifies opportunities to improve data collection as well as demand, service and consumer analysis.

Notes

8. If demand, service usage and/or customer segmentation data is collected, how is this data analysed and to what extent it is used for decision-making related to planning, design, marketing, sales, pricing, service(s) and distribution?

Rationale: Determines if usage and consumption data is relevant and actively utilised; helps assess progress-to-date on women's access to infrastructure products and services, and identifies technical areas to provide business support.

Notes

9. Does the company offer any community engagement programme supporting women's adoption and use of the company's infrastructures or services? (e.g. financial literacy, entrepreneurship, climate resilience, clean cooking, road safety)

Rationale: Highlights opportunities for differentiation through value added services and enables the investor to identify what other services might be beneficial to raise the infrastructure provider's presence, public reputation and image.

Notes

USEFUL DATA AND DOCUMENTATION

- Gender-disaggregated data on internal staff (including ownership, board, senior management, middle management, technical roles (e.g. STEM) and all employees, seasonal and contractors); data at contractor and sub-contractor levels as relevant
- Gender-disaggregated information on income levels and pay gap
- Organisation diagram/chart by gender
- Documentation on initiatives to advance gender diversity and inclusion in the workforce and supply chain (e.g. gender action plans; HR policies; mentorship programmes, childcare provision, learning and development)
- Documentation related to product design and/or service provision, including affordability, technical, pre-feasibility and feasibility studies (e.g. impact study, affordability assessment, household surveys on usage and needs).
- Documentation related to products/services targeted to women-owned businesses in the supply chain and community members.

2 Due Diligence

3 Pre-Closing/ Final

Gender-smart business solutions to consider

If opportunity identified based on Leadership questions:

Advancing Management's Commitment to Gender & Women's Leadership on boards and senior management through placement and expanding networks through training, placement and expanding networks

If opportunity identified based on Workforce questions:

Driving Gender Diversity and Inclusion within the workforce through gender diagnostics and action plans

If opportunity identified based on Supply Chain question:

Promoting Gender-Inclusive Sourcing and Procurement within supply chains through strategies to increase gender diversity and participation of women SMEs

If opportunity identified based on Products and Services questions:

Building Gender-Smart Infrastructures to tackle gaps in access to infrastructure-enabled services and unlock economic opportunities for women and girls

Next steps

Next steps:

- Align on and further develop gender-smart business solutions identified
- Discuss proposed opportunity and approach with investee
- Where required, develop a Gender Action Plan (GAP), including targets, roles & responsibilities, allocated resources and timelines

Action as relevant:

- Integrate agreed gender-smart business solutions into the deal structuring
- Include gender metrics in reporting template
- Write up case for gender within the Investment Committee (IC) paper

For more guidance on the investment cycle and portfolio management, including BII case studies, please refer to the BII Gender Toolkit.

The annex contains:

1. Further information on the business and impact case for taking a gender lens to infrastructure investments and relevant trends facing the sector.
2. Screening and due diligence questionnaires and data and information request form. These can be sent directly to the potential investee if remote or desktop-based due diligence is being used.

Quick Facts

ENHANCING PRODUCTIVITY, ATTRACTIVENESS AND TEAM PERFORMANCE

Increasing gender diversity and inclusion can help businesses strengthen their productivity, drive innovation, optimise team and worksite performance, retain talent and increase levels of engagement.⁹

In the infrastructure sector, the global share of the female workforce is very low:

2% of CEOs are women,



and women occupy

9% of senior roles, 13% of mid-level roles, and 22% of junior roles.¹⁰

The same holds for utility companies, with 22% of all utility workers being women. In Africa, women make up 6% of executive directors and 8% of senior management roles.¹¹ Women comprise less than 1% of the hydropower workforce, still perceived as a “male sector”.¹²

Research shows that a diverse workforce signals a positive work environment for talent, boosts productivity, and drives team performance.

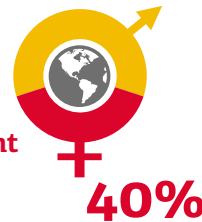
A recent survey found 61% of women look at the gender diversity of the employer's leadership team when choosing where to work.¹³



BOOSTING INNOVATION AND PERFORMANCE IN SUPPLY CHAINS

As entrepreneurs and owners of small- and medium-sized enterprises (SMEs), women are key contributors to infrastructure supply chains and can help drive innovation and supply chain performance.

By the end of 2020, women-owned companies will represent over 40% of registered businesses worldwide.



Increasing women-owned representation in infrastructure supply chains can help anticipate customer needs, drive innovation and competition, and enhance brands and corporate reputations. Supplier diversification is becoming increasingly adopted across the infrastructure sector, driven by public procurement initiatives and policies that promote women's participation in civil works.

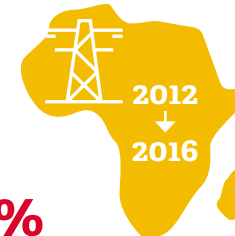
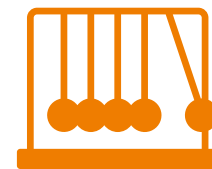
Evidence shows companies that prioritise supplier diversity have a 133% greater return on procurement investments and spend 20% on buying operations.¹⁴



ADDRESSING SKILLS AND LABOR SHORTAGES

The infrastructure industry is going through rapid change fostered by shifts to green, sustainable and tech-enabled materials, power and technologies. Tapping into the female talent pool and providing women with STEM skills development opportunities can address skills shortages induced by the rapid revolutions the sector is going through. The lack of skilled workers inhibits the ability of contractors to deliver infrastructure projects. However, women are generally not benefitting from training and mentoring, as these are often technically-focused.¹⁵ Women are motivated to work in the sector as worksites become more gender-sensitive, physical jobs become automated, workplace cultures grow increasingly inclusive, and the industry adopts environment-friendly practices.

Female attendance at the Africa Energy forum moved from 8% in 2012 to 21% in 2016.



8% >> 21%

EXPANDING MARKET SHARE

According to the WEF Fourth Industrial Revolution Report,¹⁶

women currently represent 19% of the workforce in the energy sector, yet the B2B customer base will be 23%, 26% in B2C and 19% in B2G by the end of 2020.



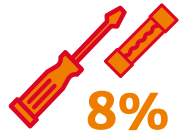
In the Asia Pacific region, women are found in fewer than 20% of transport jobs. 3% of students joining ICT courses across the globe are women. 8% in engineering, manufacturing and construction courses.



20%



3%



8%

There is a strong case for gender diversity in the workforce, given the rising number of female customers across infrastructure sectors, and the positive correlation between the gender composition of companies' customer base and the composition of their workforce across various industries.

⁸ Asian Development Blog: [Why invest in infrastructure and services that work for women?](#) (2013)

⁹ Robert Walters: [Diversity and Inclusion in Infrastructure](#)

¹⁰ World Economic Forum: [Gaps in the Female Talent Pipeline](#)

¹¹ EY: [Women in Power and Utilities \(Index 2016\)](#)

¹² International Finance Corporation: [Bringing Gender Equity into Hydropower Development from the Start](#)

¹³ PwC: [Winning the fight for female talent](#) (2017)

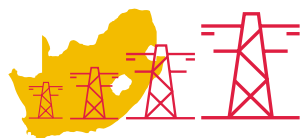
¹⁴ International Finance Corporation: [Women Entrepreneurs are Essential for Private Sector Development in Emerging Markets](#) (2017)

¹⁵ Power Africa: [Powering Africa, empowering women](#) (2017)

¹⁶ World Economic Forum: [The Industry Gender Gap: Women and Work in the Fourth Industrial Revolution](#) (2016)

- **Infrastructure investments can directly and indirectly impact women's economic empowerment:** directly through jobs creation within the formal and informal sector; indirectly through either increasing women's access to the job market or through facilitating women in (household) tasks which lowers the time they spend on unpaid work.¹⁷
- **Applying a gender lens to infrastructure investments presents a significant business and impact opportunity.**

POWER AND ENERGY



In South Africa, rural electrification increased female employment by **9.5%** – likely because it released women from home production and enabled microenterprises.

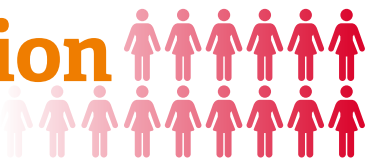
As a result of energy access, women can

save **ONE HOUR** per day when they do not need to collect fuelwood,

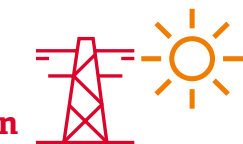


freeing up the equivalent of a workforce of

80 million people

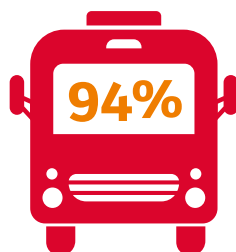


Access to reliable electricity increases the propensity of rural women to work outside the home by approximately **23%**¹⁸



TRANSPORT

Transportation plays a major role in enabling women's economic participation. Women's travel schedules and patterns are distinct from those of men, with a larger number – often shorter – trips, using various modes, at different times of the day, and often involving children. Safety and security concerns also shape women's mobility and transport behaviour.



In Bangladesh, around **94% women commuting via public transport have experienced sexual harassment in verbal, physical or other forms**



In Jakarta, nearly **90% of women found the safety of trains to be poor or very poor, whereas only 35% of men held a similar concern for security** (Turner, 2013)

Planners should adapt transportation projects to women's needs, adding street lights so women were safer walking at night, and widening sidewalks to make it easier to move around with walkers, strollers or wheelchairs.¹⁹ Having access to safe and efficient transports unlocks economic opportunities and reduces time spent on mobility related to care activities.



WATER AND SANITATION

According to UNICEF and the WHO,



2.1 billion people

globally still lack access to safe drinking water.

In Africa and South Asia, the task of providing water for households falls disproportionately to women and girls, especially in rural areas. Safe and effective access to water reduces women's time burden linked to collecting and fetching water as well as caring for relatives getting sick from poor quality water. **Women spend**



16 million hours

collecting water each day across 25 countries in Sub-Saharan Africa.²⁰

The water and sanitation sector is a mainly male-dominated industry. **A World Bank study of 64 water and sanitation service providers in 28 countries²¹ found that:**



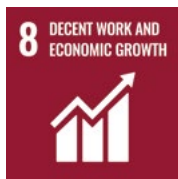
only 18% of water and sanitation workers are women.

32% of the 64 utilities had no female engineers and

12% had no female managers.

SDG INVESTING

Adopting gender as an investment strategy can help investors align their impact with the United Nations Sustainable Development Goals (SDGs). There is significant potential for investors to shape gender outcomes in line with SDG 5 on gender equality and SDGs 6, 7, 8, 9, 10, 11, and 13, linked to access to basic services, inclusive and sustainable infrastructures and a just green transition.



EMERGING GENDER AND INFRASTRUCTURE TRENDS

**Intelligence of Everything:**

Women's needs should be considered when developing future technologies. Artificial Intelligence (AI) and big data could help to create more female-friendly infrastructure, identifying widespread usage patterns, barriers to use and opportunities to increase women's mobility. To harness the potential of AI to create gender-smart infrastructures, businesses can evaluate potential barriers that inhibit women's access to new infrastructures, as well as integrating AI into existing businesses and projects where possible.

**Net-Zero Economy:**

The transition to net-zero economies presents businesses with an opportunity to promote women's inclusion in traditionally male-dominated sectors, by focusing on ensuring access for net-zero and inclusive business models. Gender balance across the sectors will enable businesses to respond to energy transition demands, increase profitability and shift business models.

**Climate Change and Natural Disasters:**

Abnormal and extreme climate and weather events can damage or destroy infrastructure which women, as primary caregivers, rely on for the provision of basic needs (roads, water supply, etc.). Women also tend to have lower levels of access to mobile phones, meaning they are less likely to be able to access help in disaster situations.

**Migration:**

Migration will increase pressure on infrastructure in high-growth emerging markets. For instance, almost all the 1.4 million refugees from South Sudan have fled to neighbouring Uganda, Ethiopia, Sudan, Kenya, and the Democratic Republic of Congo. As primary caregivers (cooks, water collectors, etc.), women often rely more heavily than men on infrastructure for the provision of basic needs (roads, water supply, etc.).

ADDITIONAL RESOURCES

The following resources should help investors and fund managers further develop their gender-smart investing approach in the sector.

African Development Bank:

Empowerment Women in Africa through Access to Sustainable Energy (2016)

OECD:

Bridging the Digital Gender Divide: Include, Upskill and Innovate (2018)

ICRW:

Gender-Smart Investing Resource Hub: Power Infrastructure (2019)

IFC:

Unlocking Opportunities for Women and Business: A Toolkit of Actions and Strategies for Oil, Gas and Mining Companies (2018); Integrating Gender into Power, Transport, and Water and Sanitation Operations (2020)

World Bank:

Women in Water Utilities: Breaking Barriers (2019); Gender Specific Impacts of Road Improvement (2020); A Primer: Gender Equality, Infrastructure and PPPs (2019)

Gender Screening Questionnaire: Infrastructure

This questionnaire is to be completed by investees and/or clients during the screening stage of the deal process to enable potential investors to better understand the current level of gender diversity and inclusion, initiatives to support women entrepreneurs, and efforts to serve female users and customers. Some of the questions are derived from the 2X Challenge.

BII is a founding member of the 2X Challenge, a DFI initiative to mobilise \$3 billion for investment in business activities that benefit women by 2020. To qualify, investments must meet the criteria for female entrepreneurship, leadership, employment or consumption. More details on the 2X Challenge can be found at 2xchallenge.org.

	YES	NO	Current %	No data/unclear
1. OWNERSHIP. Was the business founded by a woman or do women own a majority share of the business?				
Notes				
2. BOARD. Do women represent 30% or more of the board?				
Notes				
3. SENIOR MANAGEMENT. Do women represent 30% or more of the senior management team? ³				
Notes				
4. EMPLOYEES. Do women make up 30% or more of the workforce? ⁴				
Notes				
5. CUSTOMERS. Does the business specifically target female customers and/or design products or services tailored to women's needs, preferences or behaviours? ⁵			N/A	
Notes				
6. [FOR INFRASTRUCTURE-FOCUSED FUNDS ONLY] Do 30%+ portfolio companies answer yes to at least one of the questions 1-5?				
Notes				
7. Is there commitment or capacity to create significant jobs for women, refine product and/or service offerings to better serve female customers and/or undertake workforce gender diversity efforts? Is the investee interested in scaling-up its efforts?			N/A	
Notes				

Gender Due Diligence Questionnaire: Infrastructure

This questionnaire is to be completed by investees during the due diligence stage of the deal process. Its aim is to enable investors and fund managers to understand the current level of internal gender diversity

and inclusion, to identify initiatives that support women entrepreneurs, and acknowledge efforts to serve women clients and users.

Leadership

1. Does the board and/or senior management have strong oversight and a clear governance process to support gender diversity and inclusion? Are any initiatives in place to promote women in leadership?

YES	NO
Notes	

Workforce

2. Are there specific policies and programmes to support inclusiveness of both men and women at work? If so, what are they? For example, specific HR policies that go beyond basic regulatory requirements (e.g. childcare support, flexible work, gender targets for construction and maintenance, standardised pay rates for each role).

YES	NO
Notes	

3. Building on recent and/or existing data, are there differences between the roles/responsibilities/functions/levels/grades undertaken by men and women in the workforce, including permanent, contracted, seasonal staff as well as contractor construction and maintenance staff?

YES	NO
Notes	

4. Does the company collect and monitor gender-disaggregated staff data (e.g. average salary, turnover, absenteeism, retention, and promotion)? How is the data analysed and to what extent is data used for decision-making on gender-related efforts (e.g. to better serve women customers)?

YES	NO
Notes	

5. What training or skills development schemes are in place to address existing or emerging skills gaps (e.g. disruptive and/or green technologies, smart cities, sustainable energy, and/or climate resilience)?

YES	NO
Notes	

Gender Due Diligence Questionnaire: Infrastructure

Supply Chain

6. Does the company have any active inclusive sourcing or procurement initiatives in place to source from women-owned businesses?

YES	NO

Notes

Products and Services

7. Does the company collect and monitor gender-disaggregated data on demand, service usage and/or customer segmentation? For example, related to access, availability, affordability, feasibility, and satisfaction.

Notes

8. If demand, service usage and/or customer segmentation data is collected, how is this data analysed and to what extent it is used for decision-making related to planning, design, marketing, sales, pricing, service(s) and distribution?

Notes

9. Does the company offer any community engagement programme supporting women's adoption and use of the company's infrastructures or services? (e.g. financial literacy, entrepreneurship, climate resilience, clean cooking, road safety)

Notes

USEFUL DATA AND DOCUMENTATION

- Gender-disaggregated data on internal staff (including ownership, board, senior management, middle management, technical roles (e.g. STEM) and all employees, seasonal and contractors); data at contractor and sub-contractor levels as relevant
- Gender-disaggregated information on income levels and pay gap
- Organisation diagram/chart by gender
- Documentation on initiatives to advance gender diversity and inclusion in the workforce and supply chain (e.g. gender action plans; HR policies; mentorship programmes, childcare provision, learning and development)
- Documentation related to product design and/or service provision, including affordability, technical, pre-feasibility and feasibility studies (e.g. impact study, affordability assessment, household surveys on usage and needs).
- Documentation related to products/services targeted to women-owned businesses in the supply chain and community members.

For questions 7-9, the Head of Product, Service(s) or Planning, Technical Lead would be the relevant company counterpart to ask the question.

