Ways to Gender-Smart Climate Finance: Sustainable Transport

The transportation industry is one of the fastest growing sources of global carbon emissions and globally, 14 per cent of emissions come from the transportation sector. To mitigate climate change, and other serious impacts such as air pollution, it is necessary to rapidly move transport away from a reliance on fossil fuels and towards a net zero and resilient transport system by 2050. This requires a combined focus on new technologies, accelerating technology transfer and increasing efficiency.

Furthermore, an increase in transport demand per capita is forecast because of rising incomes and infrastructure development in developing countries. Modal shift (for example, from cars to public transport, cycling and walking, or from heavy goods vehicles (HGVs) to trains) can be an alternative to higher private vehicle ownership, and help to meet demand in all markets.

Transport also must be resilient to the physical impacts of climate change, which will vary according to context and location. The impacts will affect both the functioning of vehicles and the infrastructure on which they rely, for example, melting of permafrost threatens stability of roads and railways, while floods have already swept away road bridges in many countries. These physical impacts also lead to economic ones – not only directly through the need to repair or replace infrastructure, but also more broadly due to disruption to transport links on which economies rely.

The transformation to sustainable transport systems is both a technical and social transition and gender-smart investing is a key enabler in this transition. Studies have found that women make 80 per cent of travel decisions and in Europe, women are recognised as being more likely than men to adopt sustainable travel. This presents an opportunity for sustainable transport businesses looking to grow. Research suggests that if men would travel as women already do today, emissions would be reduced by 18 per cent.

Women are not just users of sustainable transport. Women can also speed up the transition towards a sustainable transport sector through their roles as employees, leaders and entrepreneurs. For example, improving women’s representation in the transport industry can enhance institutional capacity, advance decision-making and accelerate planning processes, all of which are crucial to achieving both business and impact goals. Indeed, we know companies that perform well on sustainability and gender diversity measures, and place women at the forefront of transitional issues, are more profitable.

What is a gender-smart climate finance investment?

Put simply, it is an investment that delivers both significant climate outcomes and promotes gender equality and women’s empowerment. A gender-smart climate finance investment can be defined as:

1. Being ‘Paris aligned’ – assessed as consistent with a pathway towards low GHG emissions and climate-resilient development in line with the objectives of the Paris Agreement. Paris aligned projects are characterised by:
   - A carbon footprint or carbon intensity that is limited or declining in line with a Paris aligned trajectory;
   - Limited vulnerability to physical climate hazards;
   - Low transition risk and carbon lock-in risk; and
   - Does not indirectly support non-aligned activities.

2. Meeting climate finance criteria.

3. Meeting 2X criteria.

This brief is part of a series of gender and climate finance thematic and sector briefs produced by the 2X Climate Finance Taskforce. You can access the series here.
Methodologies that assess Paris alignment at the transaction and institution level are emerging, for example Multilateral Development Banks (MDBs) have developed a [joint Paris alignment approach](#) and [CDC has also published its own approach](#). Climate finance eligibility, either as mitigation or adaptation finance (or both), can be defined through established criteria or taxonomies, such as the joint MDB methodology for tracking climate finance or the European Union (EU) taxonomy for sustainable finance.

We encourage users of this guide to select a credible Paris alignment approach and climate finance definition which can then be overlaid with the 2X criteria to reveal the intersection of gender and climate finance. 2X is an industry standard aiming to mobilise investments in businesses that contribute to gender equality and women’s economic empowerment.

### When should I use this sector note?

This sector note supports development finance institutions (DFIs), MDBs, fund managers, and other financial institutions to pursue gender-responsive climate investments in line with the 2X criteria, and respective climate eligibility frameworks, as well as other specific impact frameworks (such as environmental social and governance (ESG) development impact and transition impact).

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## 1. Why? Applying a gender-smart climate lens to investments through the sustainable transport sector

**Gender-smart climate actions lead to better business outcomes**

Through their roles as employees, leaders, entrepreneurs and consumers, women can speed up the transition towards a profitable, zero carbon and climate-resilient transport sector. Investors, transport designers and operators can opt for gender-smart climate solutions that address current gender gaps, while adapting to and mitigating against climate change.

Gendered differences are often seen in the nature of journeys taken by women and men: women often shoulder both work and home care responsibilities, and therefore make multiple stops with higher associated fares; they may be more likely to engage in non-work related travel while men are more likely to travel for paid work activities; women have lower spending power, they may be more reliant on affordable public transport than men; and heightened risk of physical assault and safety concerns while using public transport further reduces female ridership.

The type of transport women take may differ too. Public transport and non-motorised transport options are the most commonly used by women in low- and middle-income countries and women are less likely to own private vehicles. In an informal settlement in Delhi, a study found that 52 per cent of women walked to work, compared with 26 per cent of men.

Research suggests that if men would travel as women already do today, emissions would be reduced by **18%**.

This divide becomes even more stark for women in rural areas, where women can spend up to four times more time travelling than men. Around the world, women and girls also experience heightened risk of gender-based violence on transport services: 84 per cent of Bangladeshi women surveyed said they have experienced insults or sexual comments while travelling.

Failing to consider the different needs and concerns of women and girls, compared to men and boys in any specific context, risks the commercial viability of a transport investment and can also represent a missed opportunity for emissions savings. Transitioning to sustainable transport models requires putting users first, and providing more affordable, accessible, safer and cleaner transport options, particularly given the importance of driving a modal shift to a zero-carbon transport system.
Improved representation of women in the transport industry can bring better business outcomes. In 2018, women made up less than 20 per cent of the global transport workforce. Increasing women’s representation in the transport industry can enhance transport operators’ institutional capacity, decision-making, planning processes, as well as stakeholder consultations to better serve different social groups. Employing more women can also help better identify and meet women passengers’ needs and further enhance the use of low-carbon mobility options (public transport) and cut carbon emissions (see further below).

**Business Case**

- **Increase the customer base, customer satisfaction and profitability for low-carbon public transport solutions:** Considering women’s travel schedules, their travel patterns and their safety and security concerns are all critical to increase the number of female passengers and overall customer satisfaction. This can be done by planning routes, stops, fare policies and schedules in line with women’s travel needs, and enhance various security measures on and around platforms. In the UK, the design of railway stations in a gender-responsive and inclusive way resulted in a return on investment of 2.4:1.

- **Enhance business and supply chain performance:** A greater number of higher-skilled jobs for women in the transport sector can also result in a wide range of commercial benefits and increased retention rates, as well as improved decision-making, creativity and innovation; a more congenial workplace environment; and increased employee satisfaction, all of which result in greater productivity and financial performance. Greater diversity in supply chains is also key. Evidence shows that companies that prioritise supplier diversity have a 133 per cent greater return on procurement investments, and spend 20 per cent more on buying operations.

- **Increase green innovation:** Transition to net zero transport systems requires very considerable investments in Research and Development (R&D) and adoption of innovative solutions, both of which can be accelerated by including women’s perspectives. For example, smart mobility services enable a connected and automated transport network, but often neglect the women’s standpoint. One such service, the platform Wher, was able to improve the utility of its service by providing information about safety on routes. Evidence shows that more women involved with technological innovation offers greater productivity and better results, and that women tend to adopt innovations that have proven to be efficient.

**Impact Case**

- **Increasing access to public transport to reduce emissions:** In many developing countries, women are dissuaded from some travel options due to safety concerns, lack of service quality, accessibility and overcrowding, resulting in an excessive use of minibuses and cars. Improving public transport systems – and offering services that meet women’s needs – can be more sustainable and beneficial for all. A recent analysis showed that, if women’s views were taken into consideration when designing and operating transportation systems, the use of energy and emissions from passenger transport would decrease by 29 per cent.

- **Gender-smart design interventions may also support a modal shift:** Gender-smart design features, those taking into account the needs of women, could promote modal shift for both genders. Features such as wider pavements, pedestrian-friendly traffic lights, special lanes for rickshaws and bicycles, women-only rail (depending on the cultural context) and design of buses to ensure enough space for prams, are just the start.

- **Increase the resilience of transport systems:** Increasing resilience of transport systems to extreme weather events and climate change impacts requires strengthening existing networks and investing in new infrastructure that is resilient by design. This needs to be done in the overall context of a transport plan that takes into account the needs of both women and men. If this is not done, there is a risk of perpetuating current social and economic inequalities that lead to women being more vulnerable to the impacts of climate change.

- **Enhance women’s economic empowerment:** Empowering women to participate equally in the global economy could add $28 trillion in GDP growth by 2025. The ILO has, however, identified lack of transport as a barrier to female labour force participation in developing countries, leading to women’s reduced labour force participation by an estimated 16.5 per cent. Low carbon gender-responsive transport solutions could help meet this challenge.

- **Increase time savings for women and girls:** Reducing the time women spend in transport, particularly in rural areas, can increase their time for productive and income-generating activities, as well as allow more time for rest, leisure and social interaction.
2. How to invest with a gender-smart climate lens: sustainable transport

A gender-smart climate finance investment can be defined as Paris aligned and meeting climate finance and 2X criteria. This section maps potential investments in the sustainable transport sector and explains how to interpret the 2X criteria.

Climate finance eligibility

Women’s empowerment, gender equality and zero carbon and climate-resilient transport can be catalysed through gender-smart and climate finance investments, for example in:

- **Urban transport modal change**
  - Low-carbon urban mass transit and sustainable mobility systems, including promoting non-motorised transport (bicycles and pedestrian mobility).
  - Transition to low and zero emission fleets, notably electric vehicles and investments in electric charging infrastructure.
  - Mobility-as-a-service systems, including automated revenue collection, real-time user information, journey planners and fleet management systems for improved service quality, and increased use of sustainable mobility modes.

- **Transport-oriented urban development**
  - Integration of transport and urban development planning (for example, dense development, multiple land use, walking communities and transit connectivity) leading to increased use of public transport and active mobility.

- **Interurban transport**
  - Railway transport promoting a modal shift of freight and passenger transport from road to rail.
  - Waterway transport promoting a modal shift of freight and passenger transport from road to waterways (improvement of existing infrastructure or construction of new infrastructure, improved logistics efficiency and modal shifts away from airports).
  - Climate change risk identification and adaptation planning.

- **Adaptation finance**
  - Commitments dedicated to improving the resilience of transport systems to location-specific, acute and chronic physical climate risks.

2X eligibility

To qualify as a 2X investment, investments must meet or commit to targets under at least ONE of the 2X’s criteria — women’s entrepreneurship, leadership, employment, consumption, or financial intermediaries. More details on how to invest and apply the 2X criteria can be found in the 2X Challenge Working Group’s ‘Guide to the 2X Criteria’.

**In rural areas, women can spend up to four times more time travelling than men**
Examples of potential climate finance investments that align with the 2X criteria in the sustainable transport sector:

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<th>Women Entrepreneurs</th>
<th>Women Consumers</th>
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| Investment in a women-founded or women-owned (51 per cent) company operating low or zero-carbon transport, or dedicated finance to that company for increasing climate resilience.  
**Example:** A women-founded bus or rapid transport company switching to an electric vehicles fleet. | Investment in low or zero carbon transport or dedicated finance for increasing climate resilience in transport companies that improve women’s access to – and benefit from – the transport solution provided, or enhances their safety and security beyond compliance and industry standards.  
**Example:** A metro company that has reduced its energy consumption by 50 per cent (by optimising the length of the lead nose, reducing weight and using efficient electronics) and taken women’s unique travel needs into account when planning routes, stops, fare policies and schedules and enhanced various security measures on and around platforms to prevent incidents of sexual harassment on and off-train. |

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<th>Women Leaders</th>
<th>Impact via Financial Intermediaries</th>
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| Investment in low or zero carbon transport or dedicated finance for increasing climate resilience in transport companies in which the share of women in senior management stands at 20 per cent or the share of women on the board or investment committee is at least 20 per cent.  
**Example:** Finance to support the decarbonisation of a freight logistics company committed to a Paris aligned trajectory resulting in substantial net GHG reductions, whose leadership is composed of 40 per cent women. | Investments in on-lending facilities where 30 per cent of the investor/financial institution (FI) loan proceeds or 30 per cent of the FI’s portfolio or percentage of companies supported by the fund are climate finance qualifying transport companies that meet direct 2X criteria.  
**Example:** A fund investee meets the indirect criteria by investing 35 per cent of their portfolio in low or zero carbon transport companies, which is 2X aligned based on the employment criteria, given the share of female employment in these transport companies stands at 30-40 per cent. |

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| Investment in low or zero carbon transport or dedicated finance for increasing climate resilience in transport companies in which the share of women in the workforce stands at 30 per cent and there is one ‘quality’ indicator beyond compliance (for example, mentoring, equal pay, skills development, employee resource network).  
**Example:** A dedicated loan to support a railway investee to upgrade its tracks to build climate resilience to increased heat stress that employs 40 per cent women workers and has a clear gender lens in hiring and retaining staff (targets for gender diversity in recruitment, gender-balanced interview panels and trainings for recruiters on unconscious gender bias and women-friendly work environments). |  |

**In 2018, women made up less than 20% of the global transport workforce**
3. What? Gender-smart climate finance in practice

The following investments by 2X members provide an overview of what a gender-smart climate investment can look like in the sustainable transport sector.

How EIB and ADB bring together climate mitigation and gender equality in Pune and Bangalore metro systems

Setting the scene: The new metro lines in Pune and Bangalore aim to improve economic activity by enabling millions of sustainable passenger journeys every year. The lines are estimated to save 29 million hours in travel time, while reducing GHG emissions and improving air quality in both cities. These time savings are critical for women juggling both work life and unpaid care work.

Approach and impact: To make the Bangalore Metro a workplace that is more inclusive, diverse and attractive to women, 33 per cent of its positions as drivers and station controllers will be filled by women. Crèche facilities are provided for employees, and women drivers have a separate recreational facility. Women drivers are scheduled to work at stations close to where they live and, if not able to perform night shifts, they take up morning or evening shifts.

Security measures for women travellers include: dedicated coaches for women; night-time patrols of platforms by security personnel (including women security guards). Also, closed-circuit television (CCTV) camera coverage at parking and entrance areas are standard safety features of EIB investments. Going beyond this, to improve security but also accessibility of Pune Metro, solar-powered electric vehicles will be provided to transport passengers between stops and final destinations. This will make the ‘last mile’ of journeys not only more secure but also more accessible by all. It is also an innovative climate-smart feature that further enhances women's mobility.

Watch EIB's video: Girl Power on the Bangalore Metro.

How ADB, AfD and AIIB ensured the Karachi Bus Rapid Transit (BRT) Red Line meets women’s needs

Setting the scene: The Karachi Bus Rapid Transit (BRT) system produces biogas from cattle waste and uses zero-GHG emission biomethane-hybrid buses. The BRT infrastructure has been adapted to climate change and aims to improve air quality. It includes cycle lanes, a bike sharing system, last-mile connectivity with e-pedicabs, and improved pedestrian facilities.

Approach and impact: A ‘safe BRT travel programme’ campaign to address all forms of violence against women passengers will be rolled out. Measures at stations will include separate queuing spaces for women and men separate restrooms and diaper-changing facilities, CCTV and staffed help desks. The BRT fleet will have space for prams, dedicated seats for women, CCTV and clearly-exhibited posters discouraging all forms of harassment against women. The share of female passengers on the BRT is expected to increase from 10 to 20 per cent, which is in line with the 2X threshold, given the very challenging country context. About 10 per cent of BRT operations employees and TransKarachi staff are women.
How the EBRD helps cities develop and adopt gender-responsive Green Cities Action Plans (GCAPs)

Setting the scene: Under its Green Cities programme, the European Bank for Reconstruction and Development (EBRD) is working to accelerate the transition to low-carbon cities while promoting women and men's equal opportunities in the infrastructure sector. A notable set of such investments is taking place in Tbilisi, Georgia. In 2016, the EBRD collaborated with the Tbilisi Transport Company (TTC) to finance the purchase of low-emissions buses, with a project extension granted in 2019. In 2020, EBRD signed a new project with the Green Climate Fund (GCF) to invest in the modernisation of the Tbilisi metro system, consisting of a €75 million sovereign loan, with €65 million provided by the EBRD and €10 million by GCF.

Approach and impact: In 2016, TTC employed 5,789 people, with almost half in jobs related to public bus transport. Of these only 22 per cent were women. The gender gap was the highest in managerial, technical and operational divisions, such as drivers' positions where the share of women is particularly low. Out of 1,441 staff employed as bus and metro train drivers, there was only one woman bus driver. Among its 83 managers, only 13.2 per cent were women. As well as tackling environmental challenges through low-carbon transport, EBRD sought to address these gender gaps through a set of specific initiatives as part of its investments. With the first bus project, EBRD focused on supporting TTC to improve gender-inclusivity in its human resources (HR) policies and practices. As a result of a tailored equal opportunities action plan, the number of women employed by TTC increased, as did the recruitment and retention of women employees, and awareness of the importance of gender equality across the whole company. TTC subsequently hired a further 22 qualified women bus drivers. The commitment of TTC to championing gender equality was made clear in November 2019, when it signed up to the UN Women Empowerment Principles to mark the successful implementation of the assignment. More recent projects demonstrate an even deeper commitment to gender equality. An inclusive transport strategy for the city of Tbilisi will be developed, metro safety will be enhanced through the better data collection of incidents, and metro users will be provided with a more comfortable and environmentally-friendly means of transport, promoting the use of public transport and reducing air pollution.

For more information:
- EBRD finances modernisation of Tbilisi metro
- Tbilisi Bus extension project
- Tbilisi Bus Project
- EBRD: Effective Policy Instruments for Green Cities
The following resources provide guidance on gender-climate impact measurement for this sector:

- **IFC, Integrating Gender in Transport Operations**
- **ADB, Gender toolkit: Transport - Maximizing the benefits of improved mobility for all**
- **World Bank/UNWomen, Gender Equality in Transportation (Self-Paced) Online Course**
- **ITF, Women’s Safety and Security**
- **ITF, The Gender Dimension of the Transport Workforce**
- **ITF, Transport Connectivity. A Gender Perspective**

**SDGs IMPACT**

Investing with a gender and climate lens in this sector can help enhance your contribution to the following SDGs:

- **Achieve gender equality and empower all women and girls**
- **Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all**
- **Build resilient infrastructure, promote inclusive and sustainable industrialisation and foster innovation**
- **Reduce inequality within and among countries**
- **Make cities and human settlements inclusive, safe, resilient and sustainable**
- **Take urgent action to combat climate change and its impacts**

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This publication is a product of the 2X Collaborative. Its authors are Marialena Vyzaki, Lead Consultant; Ann Gardiner, Climate Consultant; Eva Bernard, Gender & Green Principal Adviser, EBRD; Ellen Brookes, Climate Change Executive, CDC; Tania Colantone, Social Development Specialist, EIB; Elias Habbar-Baylac, Gender & Diversity Finance Specialist, CDC; Carmen Niethammer, Sr. Gender Specialist, EIB; and Moa Westman, Gender Specialist, EIB. We would like to thank all CDC, EBRD, EIB and 2X teams for their continued feedback and review and Marijn Wiersma, Gender Lead, CDC, for leading the 2X Climate Finance Taskforce across 2020-21.

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Editor: Kevin Dowling
Design: Steve Green – Definite.design