

Ways to Gender-Smart Climate Finance: Climate Change Mitigation

A gender-smart climate finance investment can be defined as Paris aligned and meeting climate finance and [2X](#) criteria.

The climate emergency is the greatest challenge for our generation. In the landmark 2015 Paris Agreement, 196 countries signed a treaty to limit global warming to below 2°C (compared to pre-industrial levels) and to pursue efforts to restrict the average global temperature rise to 1.5°C.¹ The Paris Agreement emphasises that climate action needs to respect, promote and consider a range of human rights, including gender equality. Also, the United Nations Framework Convention on Climate Change (UNFCCC) Gender Action Plan invites public and private entities to increase the gender-responsiveness of climate finance. Meeting the temperature limits of the Paris Agreement requires reducing greenhouse gas (GHG) emissions and removing carbon dioxide (CO₂) from the atmosphere, referred to as mitigation, so that global net CO₂ emissions can be reduced to zero by around 2050.²

All sectors of the economy – from energy to agriculture – must adopt climate mitigation strategies to drive the rapid economic transformation required to reach net zero emissions by mid-century. Pathways such as the ‘Net zero by 2050’ roadmap published by the International Energy Agency (IEA) describe possible transition scenarios, with milestones such as phasing out sales of new internal combustion engine cars by 2035, and no new oil and gas fields beyond those already approved. While huge technical innovation is needed, transformation of this scale and speed cannot be achieved without the support and participation of citizens, particularly women. Women’s unique experience, knowledge and skillset can – and do – strengthen climate mitigation efforts.

The risks of a disorderly or delayed transition are severe for society and nature, but climate change also represents a significant risk to the financial sector. This risk arises from the impact to investments from the physical effects of climate change on business operations, on infrastructure and on supply chains, and from the transition risk of policy, legal, technology or market changes required for the transition to net zero economies. Transition risks mean some high carbon parts of the economy could face higher costs or shifts in asset values.³ High carbon energy and hard to abate sectors such as ‘heavy industry’ are particularly exposed.

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 thematic note aims to support 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 their specific impact frameworks (such as environmental social and governance (ESG) considerations, development impact and transition impact).

Click on each section to access relevant thematic information:

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An inclusive transition is essential if we are to cut CO₂ emissions at the rate needed



1. Why? Applying a gender-smart lens to climate change mitigation

Women are agents of change and spearhead innovation in various parts of the global economy. Therefore, an inclusive transition is essential if we are to cut CO₂ emissions at the rate needed.⁴

Achieving global net zero emissions by 2050 requires inclusive transformation in every sector of the economy. This includes transitioning from fossil fuels wherever they are used in favour of renewable energy; the electrification of demand and energy efficiency; ending deforestation and increasing reforestation/afforestation; and shifting to a sustainable food, agricultural and land use system. While the transformations needed are considerable, they also bring significant benefits. The IEA roadmap for a net zero global energy sector by 2050 would result in millions of new jobs, as well as achieving universal access to electricity and clean cooking.⁵

Gender-smart investing is not just good business: it also benefits the environment by mitigating greenhouse gas emissions. We know companies that perform well on sustainability and gender diversity return greater profit.^{6,7} Evidence is also emerging that companies with greater gender diversity in their boardrooms show better performance on developing policies and methods to address climate change risks.^{8,9}

Empowering women to participate equally in the transformation of the global economy could add \$28 trillion in gross domestic product (GDP) growth by 2025.¹⁰ Ensuring mitigation investments include a gender-smart lens will open up entrepreneurship and employment opportunities for women as well as men across all economic sectors. For example, access to modern energy services not only frees up women’s time, but also brings diversification of opportunity through mechanisation, with women carrying out tasks that previously relied on physical strength. Additionally, the agriculture, land and forestry sector presents opportunities for mitigating GHGs through changing practices that reduce emissions and increase sinks for carbon, including through better forest management and preservation of ecosystems. If managed well, such changes will introduce new employment opportunities that will be accessible to women.



Business Case



- **Reach new market segments:** Mitigation options such as solar lighting and clean cookstoves often have a widely distributed, low-income customer base (last-mile markets) which can be hard to access using conventional business models. Frontier Markets in India, a clean-energy-products company, found that engaging women entrepreneurs and developing marketing strategies that particularly target the needs of women helped open up last-mile markets and grow their sales by 30 per cent, while improving access to clean energy for all.¹¹
- **Mitigate financial and operational risk:** Climate change brings financial risks. Recommendations from the Task Force on Climate-Related Financial Disclosure (TCFD)¹² help the private sector to make informed decisions about those risks. Investing in sectors that have low exposure to transition risk by reducing, avoiding or removing GHGs from the atmosphere with resilient assets can reduce financial risk. However, ignoring gender aspects in those investments can bring in a wider range of market risk, operating risk or even reputational risk, emphasising the importance of taking a combined gender-smart and climate-smart approach.
- **Drive the transition to a green economy:** The shift to a green economy is estimated to require around \$1 trillion of investments per year¹³ and could yield direct economic gains of \$26 trillion by 2030.¹⁴
- **Increase workforce diversity:** The same analysis shows the transition to net zero and resilient economies could generate more than 65 million new green jobs globally.¹⁵ The green transition provides opportunities to tackle gender discrimination and reap the benefits of a more diverse workforce.¹⁶ For example, the current share of women employees across all renewable energy sectors stands at 32 per cent, while the share of women in the wind energy industry stands at 21 per cent.¹⁷ Women entrepreneurs are more likely to start businesses with a sustainability focus, but currently lack the access to credit that would allow them to scale up their businesses and take advantage of vast business opportunities.¹⁸

Impact Case



- **Improve quality of decision making:** In countries where more women participate in public and political life, governments establish clearer, more effective Energy Transition Plans in comparison with those that have fewer women participating.¹⁹ Moreover, countries with higher female representation in government are more prone to ratify environmental treaties and adopt policies that combat climate change as compared to those with lower female representation.^{20,21}
- **Increase resource efficiency:** Companies with more women on their board of directors are more likely to be proactive in improving energy efficiency and to invest in renewable power generation.²² Analysis of a range of environmental metrics also reveals that companies with improved gender diversity on boards are 60 per cent, 39 per cent, and 46 per cent more likely than those without this diversity to reduce the intensity of energy consumption, GHG emissions, and water use, respectively.²³ Yet, only 16 per cent of board positions among 200 top utility companies are held by women and only 37 per cent of representatives at the UNFCCC climate negotiations are women.²⁴
- **Improve the health of women and girls by investing in clean energy:** The transition to an energy system compatible with the Paris Agreement can help avoid more than 100 million premature deaths from air pollution over the 21st century,²⁵ predominantly among women and children. For example, 2.9 billion people don't have access to clean cooking fuels and an estimated 3.8 million people die every year from using cooking stoves that emit pollutants. Some 60 per cent of all premature deaths from household air pollution globally are among women and children.²⁶

Companies with improved gender diversity on boards are more likely to reduce:



Energy consumption by 60%



GHG emissions by 39%



Water use by 46%



BOX 1: Gender Responsive ODA

To date, gender equality objectives have been integrated in adaptation finance more than mitigation finance. As a share of total official development assistance (ODA) from Development Assistance Committee (DAC) members (2015-2016), 21 per cent was climate-related and 30 per cent was gender-related. Meanwhile 58 per cent of total ODA was not marked for climate change adaptation, mitigation or gender equality, pointing to a missed opportunity to deliver on the two goals. In 2014, bilateral climate ODA that also supported gender equality goals stood at 31 per cent – a total of \$8 billion – of which just 3 per cent had gender equality as a principal objective.²⁷ Further, only 8 per cent of bilateral climate-related aid to the energy sector addressed gender inequalities.

BOX 2: An intersectional approach

According to the Organisation for Economic Co-operation and Development (OECD) most of the climate-related private finance mobilised (81 per cent) between 2012 and 2015 was allocated to mitigation actions (in the energy, industry, mining, construction and transport sectors). However, gender equality objectives have been traditionally integrated to a greater extent in adaptation finance, therefore missing an opportunity to achieve gender-smart outcomes through the largest amounts of finance mobilised.

This calls for a reorientation of climate finance to address both climate and gender-smart goals. An intersectional approach that looks at the nexus of gender equality and climate change can ensure effective use of climate finance in times of limited financial resources. It can also scale-up private sector-led climate finance by reaching more than one objective at once. The identification of interlinkages across the SDG goals and targets and potential synergies can lead to alternative paths to the SDGs. Consequently, the application of both gender-smart and climate lenses can catalyse the transition to a sustainable and inclusive global economy.

2. How to invest with a gender-smart climate lens: climate change mitigation

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 climate change mitigation sector and explains how to interpret the 2X criteria.

Climate finance eligibility

Women’s empowerment, gender equality and climate change mitigation can be catalysed through gender-smart and climate finance investments, for example in:

- Renewable energy:** Including solar power and solar water heating, wind power, geothermal power and thermal applications of geothermal, hydropower, biomass, ocean power and measures to integrate renewable energy into grids.²⁸ Investments in off-grid solutions can have positive impacts on women’s lives – for example by providing economic opportunities in the renewable energy supply chain. Electrification of female-headed households and gender-responsive payments and tariff schemes can increase economic opportunities for women.
- Energy efficiency:** Including in industry, buildings, agriculture, aquaculture, utility sector and public services, and vehicles. Investing in energy-efficient technologies in women-led enterprises can deliver emissions reductions, decrease costs and encourage the growth of those enterprises.
- Agriculture, aquaculture, forestry and land use:** Including preserving existing carbon pools, reducing non-CO₂ GHG emissions (for example from paddy fields and fertiliser use), afforestation, reforestation and biosphere conservation, and resource efficiency in agriculture and aquaculture. For example, investments in forest product industries can increase opportunities for women’s improved tenure security as well as livelihoods impacts, enhanced participation in local resource governance (forest committees) and new income-generating activities.²⁹ Currently, 1.2 billion people depend on agro-forestry farming and forest resources for their livelihoods, of which at least 50 per cent are women, a number that is on the rise due to male out-migration.³⁰



- **Transport:** Climate finance eligibility includes intercity, urban and rural transport, or low or zero carbon transport infrastructure, and can prompt a modal shift and travel demand measures that substantially reduce emissions.
- **Waste:** Treatment of waste water (if substantial net reductions can be demonstrated), waste management to capture or combust methane, convert waste to energy, and projects that recover and reuse waste materials (if net emission reductions can be demonstrated). Specific knowledge on natural resources held by women makes them more amenable to adopting greener practices (such as the circular economy, waste reduction, reuse and recycle)³¹ and gives opportunities for new women-led small and medium-sized enterprises.

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 framework can be found on the [2X Challenge Working Group's 'Guide to the 2X Criteria'](#).

Companies with greater gender diversity in their boardrooms show better performance on developing policies and methods to address climate change risks



Examples of climate mitigation investments that align with the 2X criteria:

Women Entrepreneurs

Investments in women-founded or women-owned (51 per cent) companies qualifying as mitigation finance.

Example: An investee that is a women-owned solar energy company.

Women Leaders

Investments in companies or funds qualifying as mitigation finance in which the share of women in senior management stands at 20-30 per cent, or the share of women on the board or investment committee is at least 30 per cent.

Example: A women-led company providing sustainable forest services that manage forests to increase carbon stocks.

Women Employees

Investment in a company that qualifies as mitigation finance, where the share of women in the workforce stands at 30-50 per cent, and there is one 'quality' indicator beyond compliance.

Example: An urban transport company operating electric buses, whose female share of employment is 35 per cent, and has put a programme in place to promote women's career progression.

Women Consumers

Investment in companies that qualify as mitigation finance and deliver products or services that specifically or disproportionately benefit women.

Example: A construction company is financed to construct social housing that is certified to a recognised green building standard and has undertaken a gender assessment to ensure gender-responsive design.

Impact via Financial Intermediaries

Investments in on-lending facilities where 30 per cent of the investor or financial institution (FI) loan proceeds, or where 30 per cent of the FI's portfolio or percentage of companies supported by the fund qualify as mitigation finance and meet one of the direct criteria.

Example: A fund investee meets the indirect criteria by investing 30 per cent of their portfolio in renewable energy businesses that meet one of the direct 2X criteria. Best practice for leadership and employment criteria suggests the investor/FI monitors adherence to the percentage thresholds over time and develops a Gender Action Plan to support additional efforts to support women's career advancement.

3. What? Gender-smart climate mitigation finance in practice

The following investments by 2X members provide an overview of what a gender-smart climate mitigation investment can look like.



- EMPLOYMENT, CONSUMPTION
- CLIMATE MITIGATION

How EBRD Green Cities drive positive climate impact and promote equal opportunities in the urban infrastructure sector

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](#)





- CONSUMPTION
- CLIMATE MITIGATION

How M-KOPA and CDC Group understood and quantified the benefits of owning a refrigerator (and for who) in East Africa³²

Setting the scene: M-KOPA is Africa’s leading off-grid solar technology company and a pioneer of pay-as-you-go, allowing more than 800,000 low-income households across East Africa to own items that are at the heart of the household (connecting lights, charging, radios, televisions and fridges).

Approach and impact: CDC worked with M-KOPA to undertake an impact study to understand the benefits of a new solar fridge product, and how these benefits are experienced within purchasing households. The use of solar power qualifies this as climate mitigation finance, and the study showed notable benefits, many of which disproportionately impact women as primary users of household appliances. Time savings (reduced trips to markets and medical centres, reduced time spent preparing meals), cost savings (reduced trips to town, reduced food waste, reduced cooking fuel use, and bulk buying), income gains (sales of cold drinks, storing dairy products or veterinary medicine, monetisation of time savings on household chores) were generated, which mostly accrued to women. The M-KOPA refrigerator was perceived to save households around \$4.82 per week from fewer trips to the market; reduced spending on cooking fuel, and less food waste due to spoilage.

Women respondents estimated higher savings on all three accounts. Expected time savings equated to roughly two hours a week per household, primarily for women. Female respondents estimated, on average, higher savings across all three of these sources (+6 per cent against male respondents) and lower stress levels were reported, primarily for women.

For more information: [CDC M-KOPA case study: Affordable access to off-grid solar home systems](#)

The following tools provide guidance on gender-climate impact measurement for this sector:

- [World Bank Group. Gender in Agriculture Sourcebook: Gender in Climate-Smart Agriculture \(Module 18\), 2015](#)
- [CDC Group. Investing for impact in the food and agriculture sector in Africa and South Asia Insights from evidence and our experiences investing in the sector, 2020](#)
- [CDC Group. Gender Sector Brief: How to Apply a Gender Lens to the Evaluation of Food and Agriculture Investments, 2020](#)





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**SDGs
IMPACT**



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



Ensure healthy lives and promote well-being for all at all ages



Make cities and human settlements inclusive, safe, resilient and sustainable



Achieve gender equality and empower all women and girls



Ensure sustainable consumption and production patterns



Ensure access to affordable, reliable, sustainable and modern energy for all



Take urgent action to combat climate change and its impacts

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