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Closing the gender gap: effective policies to deliver on Sustainable Development Goals in the Economic Commission for Europe region

Gender dimensions of just transitions in the Economic Commission for Europe region

Note by the United Nations Environment Programme (UNEP) in cooperation with the Economic Commission for Europe (ECE)*

Summary

As countries transition towards low carbon economies, the concept of “just transition” has gained traction. Global frameworks on climate change such as the Paris Agreement and the Sustainable Development Goals, and the European Green Deal recognise the transformative potential of gender equality and women’s empowerment in low-carbon transition policies. Despite this recognition, gender equality considerations are often left out from energy transition initiatives, and by doing so, these initiatives are likely to perpetuate or even deepen gender injustice.

This document explores the potential of a gender-just transition in the ECE region. It examines the various trends in the ECE region including good practices and persistent challenges and offers concrete recommendations for gender-transformative climate policies.

As the countries move forward with their ambitious transition plans, women can play a transformative role. Catalysing this role calls for removing structural and systemic barriers and closing persistent gender gaps and the combined and complementary action by multiple partners and stakeholders.

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I. Introduction

1. A transition to low carbon economies together with growing demand for energy, water and food, increasing urbanization and growing mobility is transforming the world. In this context, the concept of “just transition” has gained traction in connection to climate goals, the adoption of 2030 Agenda and the Sustainable Development Goals (SDGs) and the Paris Agreement. Just Transitions, as embedded within the Paris Agreement, refers to the greening of economies in a way that is fair and inclusive to everyone concerned, creating decent work opportunities and leaving no one behind. Just transition is seen as an integrated approach to sustainable development that brings together social progress, workers’ protection, environmental consciousness, and economic success into a framework of democratic governance and institutional support.

2. Climate change and its environmental, social and economic consequences have disparate impacts on men and women, which is linked to socially constructed gender roles and underlying power dynamics between men and women. At the same time, men and women contribute differently to environmental pressures, including to carbon emissions. For example, gender roles influence how girls and boys make career choices, their ability to invest in low-carbon solutions, including mobility, and energy consumption patterns. Studies have shown that men cause higher CO₂ emissions mostly due to higher fuel and meat consumption, even where men and women spend similar amounts of money.¹

3. Whether it is investments and subsidies in green transport, carbon taxes, or job creation in the renewable energy sector, the technologies, and instruments to mitigate climate change are likely to have different impacts on men and women. The global frameworks on climate change such as the Paris Agreement and the Sustainable Development Goals, and the European Green Deal recognise the centrality of gender equality for climate action to be truly transformative. Despite this recognition, gender equality considerations are often left out from climate and energy transition initiatives, and by doing so, they are likely to perpetuate or even deepen gender injustice. As such, women are most susceptible to climate impacts and most at risk of being left out of the process and benefits of a just transition.

4. At this point, the ECE region, like the rest of the world, is unlikely to meet the SDG targets by 2030. The data available for the 117 targets (out of 169 targets) for which progress for the ECE region can be measured shows that if the current path is followed, the region will achieve only 20 targets (17 per cent of measurable targets) by 2030.² On gender equality (SDG 5), the ECE countries acknowledge the importance of women’s economic participation, nonetheless, progress has been slow on policy and legal frameworks that combat discrimination. While the share of women participating in political and economic life and the proportion of elected seats held by women in parliaments and local governments has been increasing, these would still be short of parity by 2030. In technology, the universal mobile phone ownership is well on track to be achieved. On Climate action (SDG 13), it is unlikely that the region can get on track with cutting greenhouse gas emissions. On SDG 7, the access to electricity is universal, and nearly all people in the region use clean fuels for cooking, heating and lighting.

5. The countries in ECE region are a major source of greenhouse gas (GHG) emissions. In fact, 10 of the 20 most GHG emissions intensive economies in the world are in this region, and around three-quarters of those emissions come from energy production and use – especially natural gas and coal.³ All countries in region have committed to decarbonize their economies, including replacing fossil fuels with renewables and adopting energy efficiency and improved production methods in industry. Governments have set targets for emission reductions and renewable energy capacity as part of their commitments under the Paris Agreement. They have also begun the development of plans, laws and other instruments to accelerate their energy transitions.

¹ Friedrich-Ebert-Stiftung, “[A Feminist European Green Deal: A feminist European green deal, Towards an Ecological and Gender Just Transition](#)” (2021).

² United Nations Economic Commission for Europe (UNECE) Statistical Division, [Progress in the UNECE region](#) (2024).

³ World Bank (undated), “[Climate Change in Europe and Central Asia](#)”.

6. This transition offers a great opportunity for the region, as they can gain from efficiency improvements and innovation, create a diverse workforce and, at the same time, address energy security and environmental challenges. Women can potentially play a leading role in the transition to low-carbon economies. However, they face barriers to entering energy-related careers and remain underrepresented in climate negotiations and policy- and corporate decision-making around the transition. Unless the transition factors in gender issues, there is a real risk of further reinforcing existing gender stereotypes.

7. In view of the above, this is the right time to acknowledge the gender-based opportunities and challenges in transition. This document explores the potential of a gender-just transition in the ECE region. It examines the various trends in the ECE region including good practices and persistent challenges and offers concrete recommendations for gender-transformative climate policies.

II. The case for a gender just transition: opportunities and challenges

A gender-responsive just transition is founded on the centrality of gender equality and care in policies and programmes towards an economy that works for all people and the planet while upholding rights and the principle of leaving no one behind, inclusive of people facing multiple and intersecting forms of discrimination on the basis of sex, income, age, race, ethnicity, gender identity and sexual orientation, among others.

Source: [policy-brief-a-gender-responsive-just-transition-for-people-and-planet-en.pdf \(unwomen.org\)](#)

8. Clean energy transition policies present an opportunity to correct historical gender inequalities present in our societies such as gender gaps in the energy labour market. Additionally, taking the needs of women into consideration and ensuring their engagement as decision makers helps create clean energy transition plans that are sustainable and inclusive.

9. The climate crisis affects women disproportionately and low carbon technological options can help them cope better. Climate change and environmental degradation disproportionately affect women and girls. Compared to men, women have greater dependence on their immediate natural resource environment – e.g., land, water and forests. As a result, land degradation, deforestation, droughts, and now rising food and energy prices due to the geopolitical conflicts, are pushing families to the brink of survival, women’s workload is intensifying, and they face increasing risks of poverty. These impacts are further exacerbated since women have less access to services, such as energy, transport, credit, decision-making bodies, technology and training. For women, low carbon technologies such as decentralized renewable energy technologies can be a game-changer. Clean cooking solutions can free up time of women and girls, improve indoor air quality and their health, and avoid deforestation. Agriculture, a sector engaging a large number of women, is one of the most affected by climate change. In the region, the female share of agricultural employment is more than half, however, fewer women participate in decision-making on farms and are in seasonal, unskilled and informal jobs. Women farmers tend to own smaller plot sizes as compared to men, and even though they make up almost half of the agricultural labour force, their production is limited by limited access to finance, inputs, and extension services, as well as land rights.⁴ Central Asia, a region highly vulnerable to natural disasters such as droughts, floods, and earthquakes, is affected deeply by climate change, disproportionately affecting women. According to the World Bank, natural disasters cost Central Asia \$10 billion a year, affecting 3 million people every year.⁵

⁴ World Bank (2023), Video on “Empowering Women Farmers in Central Asia”.

⁵ UN Women (2022), “Central Asian governments discuss the integration of gender equality into climate change policies | UN Women – Europe and Central Asia”, published on [15 February 2022](#).

10. As countries phase out or limit the use of coal, women are likely to be affected deeply. Green transition will directly affect coal-related industries, workers and the dependent communities. Even though women account for a small share of the formal coal mining workforce, they are more concentrated in informal, artisanal, and small-scale mining sectors. They are generally poorly paid and typically engaged in low-level, informal, or daily-wage labour and vastly underrepresented in mining management positions and technical roles.⁶ Many face discrimination, harassment, and a lack of support for work-life balance.⁷ Unless planned well, mine closures are likely to have a significant impact on women and girls. Wage disparities, personal and safety issues, limited access to health care and social services are examples of negative gender impacts on girls from a badly conducted transition.⁸ Since women tend to be overrepresented in the informal economy, they do not have access to the same social protection programmes provided to formal workers.

11. Deeply ingrained cultural and social norms prevent women from participating fully and equitably in many sectors of the economy. In most countries, women undertake most household and unpaid care duties, leaving them with less time to pursue careers. Further, cultural norms define which professions are considered suitable for men and women and technical professions are viewed as jobs for men. Further, pre-existing gender inequalities and unequal access to productive resources such as finance, markets, technology and energy, jeopardize women's career choices. As a result, nearly 60 per cent of women's employment is in the informal economy which means limited access to social protection systems, gender pay gaps, and occupational segregation, resulting in women lagging behind men.⁹ Only one-third of women in Central Asia are entrepreneurs, while their remuneration rate is 30% less than their male peers.¹⁰ While the ECE countries have made constitutional provisions for gender equality, pervasive societal practices continue. In Uzbekistan, Kyrgyzstan and Turkmenistan, women have little recourse to property rights post-divorce or in inheritance. In some cases (Tajikistan), marital property rights are often not respected in inheritance and in post-divorce negotiations. Just transition measures will have to address these gender gaps and occupational segregation to level the playing field.

12. A just energy transition holds promise in bridging the persistent gendered gaps within energy sector employment and leadership. However, massive efforts are required for skilling women and removing barriers to their engagement. As countries pursue a decarbonization agenda, the number of jobs in the renewable energy sector could triple from 12.7 million to 38 million jobs by 2030.¹¹ In the central Asian countries of Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan, meeting the current renewable energy commitments is likely to result in the creation of more than 51,090 jobs in the renewable energy sector. And if the countries try to achieve 75 per cent renewable generation capacity by 2050, the renewable energy sector will employ more than 91,000 jobs.¹² This provides a unique job opportunity for women. Between 2015 and 2021, the European Union saw a twofold increase in labour shortages related to the transition to low carbon economy.¹³ The solar energy industry is likely to require over 500,000 employees by 2030. However, more than 80 per cent of the new jobs will be in sectors currently dominated by men¹⁴. Only 20 per cent of these new jobs will be created in sectors where women are the majority.

⁶ World Bank, *Just Transition for All: A Feminist Approach for the Coal Sector* (2022).

⁷ Craig Guthrie, *Women in mining: A snapshot in 2023* (2023).

⁸ UNECE, "UNECE examines the gender dimensions of a just transition out of coal mining" (2022).

⁹ UN Women, *A gender-responsive just transition for people and planet* (2023).

¹⁰ Ready4Trade Central Asia, "Crossing borders, breaking barriers: Gender-responsive trade facilitation for women in Central Asia".

¹¹ IRENA and ILO, "Renewable energy and jobs: Annual review 2022" (2022).

¹² OSCE, *Advancing a Just Energy Transition in Central Asia: Women's Key Role in the Energy Sector* (2024).

¹³ Schmela, Michael (2022), "EU Market Outlook for Solar Power 2022-2026", December 2022, pp.75, accessed 23 June 2024.

¹⁴ Saget, C., Vogt-Schilb, A. and Luu, T., *Jobs in a Net-Zero Emissions Future in Latin America and the Caribbean*, Interamerican Development Bank and International Labour Organization. Washington, D.C. and Geneva (2020).

13. As a general trend, women have historically been underrepresented in the technological sectors. Globally, there were only 62 women for every 100 men considered green talent in 2021 — a number stagnant since 2015. Men are transitioning into greener jobs faster than women: in 2015–2021, 66 per cent of transitions into green jobs and 63 per cent of transitions into greening jobs were made by men.¹⁵ Within the region, women constitute between 20 to 30 per cent of the workforce in green jobs and fewer women make it to the senior management.¹⁶ In European Union, women occupied less than 20 per cent of the jobs created in the renewable market in 2020.¹⁷ A study conducted in collaboration with the Naturgy Foundation, the Spanish Just Transition Institute (ITJ) estimates that the energy transition in Spain has created over 152 000 jobs over the past seven years (2015–2022). But importantly, the study points out that women represented just 18.2 per cent of the sector’s workforce in 2021.¹⁸

14. Despite these trends, there is strong evidence that companies with a diverse workforce outperform companies with less diverse workforce and likely to better navigate the low-carbon energy transition. A 2020 McKinsey study covering more than 1,000 companies in 15 countries found that companies in the top quartile for gender diversity were 25 per cent more likely to have higher profitability than companies in the bottom quartile¹⁹. Despite this, in 2019, out of the 11.5 million jobs in the renewable energy sector, women accounted for 32 per cent of the jobs. Further, in the energy sector as a whole, women are concentrated in low-paying and administrative jobs and make up under 14 per cent of senior managers and only 5 per cent of top posts such as board chairs, CEOs and presidents.²⁰ 45 percent of women working in the renewable energy sector hold administrative jobs, and only 28 percent perform roles in science, technology, engineering and mathematics (STEM).²¹

15. Whilst the proportion of women in renewable energy jobs has increased in the last decade by 10 percentage points up to 32 per cent, women still face many challenges that hinder them to equally lead, contribute to and benefit from the energy transition²². Young women face difficulties in attaining high-quality jobs in the low-carbon economies due to gender stereotypes and limited access to STEM education. The combined impact of women’s underrepresentation in STEM fields and their reduced access to training, knowledge and networks leads to unequal access to opportunities. Even when women join the sector, technical careers often require frequent travel and/or relocation to remote areas where power plants or factories may be located, with few facilities. For women with care burdens, spending long periods away from home and family is difficult. In addition, safety concerns arise where women spend time in remote locations.

16. Further, in several countries, there are sectors where women are not encouraged to work. According to *Women, Business and the Law 2021*, sixteen countries restrict women from working in transportation, while twenty-six countries prevent them from working the same night hours as men. Seventy-four countries restrict women’s employment in certain industries and fifty-six prohibit women from working in jobs deemed dangerous.²³

17. For women to take up the opportunities likely to come up, schooling, skilling, reskilling and professional training must engage them more successfully than in the past. Moving forward, skills will be needed in diverse areas including electricians and engineers, energy efficiency retrofitting, energy auditing, renewable-energy installation design and installation. Addressing these skills gaps is clearly a significant challenge, but it also presents a major opportunity to create a diverse workforce.

¹⁵ LinkedIn (2022), [LinkedIn Economic graph. Global Green Skills Report](#).

¹⁶ UNICEF Europe and Central Asia Regional Office (2023), *A Gender mapping of the Green Economic Transition in Europe and Central Asia*, November 2023.

¹⁷ IRENA (2023), [Renewable energy and jobs: Annual review 2023](#).

¹⁸ Ibid

¹⁹ Mekala Krishnan et al. (2020), [Ten facts about gender equality | McKinsey](#), 21 September 2020.

²⁰ UN Women and UNIDO (2023), [Gender Equality in the Sustainable Energy Transition](#).

²¹ IRENA, [Renewable Energy A Gender Perspective](#) (2019).

²² Ibid.

²³ World Bank, [Women, Business and the Law 2021](#) (2021).

18. Energy and climate policies have started recognising gender, but we still have a long way to go. The implementation of the Paris Agreement, and its Gender Action Plan for all parties, provides an opportunity to integrate gender into policies and strategies within the commitments to the transition to clean sustainable energy. The Nationally Determined Contributions (NDCs) submitted by many countries included efforts to increase energy access for implementation of the Paris Agreement. The share of countries referring to gender in the new or updated NDCs compared with previous submissions has increased. Gender is referenced in 85 per cent of updated NDCs compared to 29 per cent of previous submissions; and gender and women's empowerment is recognized as a crosscutting issue in 22 per cent of updated NDCs. In Eastern Europe, Caucasus and Central Asia, 15 countries have submitted a revised NDC, 11 of which now incorporate gender.²⁴ However, the countries that do mention women, do so together with "vulnerable groups" and discuss the impact of climate change on women and girls. The participation of women in energy decision-making and in sustainable energy programmes and training are not considered.

19. Investments in gender-transformative interventions need to be stepped up significantly. International development finance for energy projects with gender equality objectives has increased over the last decade but continues to remain a small share of total finance, representing only 2-11 per cent of total official development assistance (ODA). A report by Sustainable Energy for All (SEforALL) tracked 2018 energy finance commitments in 20 high-impact countries with the largest energy access deficits. It found that finance for projects with a gender equality objective were concentrated among a few donors: 93 per cent of total reported finance was from only 10 government agencies.²⁵

III. Gender integration in climate and transition policies in the ECE region: existing status

A. Commitments to gender equality and women's empowerment in climate and transition policies in the region

20. All countries in the ECE region have committed to a transition to a low carbon economy, through participation in the United Nations (UN) 2030 Agenda for Sustainable Development and the Paris Agreement, which includes targets for improvement on gender equality as well as for clean and sustainable futures. The countries have also developed or are developing legislation related to shift to a low-carbon economy. At the same time, efforts around gender equality are strengthened by ratification of the Convention on the Elimination of All Forms of Discrimination Against Women and the Beijing Platform for Action and more recently, the Sustainable Development Goals and Agenda 2030. The Sustainable Development Goals provide an opportunity to measure, monitor and hold governments accountable on both gender equality and on transition to low-carbon economies.

21. At the same time, national governments recognise the importance of mainstreaming a gender perspective into energy sector policies. At the first Energy Ministers' Dialogue in 2019, the Energy Ministers of the countries in the Central Asia Regional Economic Cooperation Program (CAREC) emphasized the need for a diverse, inclusive and balanced talent pool in the energy sector, and committed to achieving gender equality by 2030.²⁶ Several countries including Georgia, North Macedonia, the Republic of Moldova, the Kyrgyz Republic, Tajikistan and Turkmenistan have emphasized gender in their updated NDCs. Tajikistan mentions consultations with the Committee on Women's Affairs and Family to enhance the domestic response. The government plans to develop gender-sensitive indicators for climate-change and disaster risk management.²⁷ Georgia's NDC mentions the need to incorporate the needs of women into climate adaptation measures and empowering them as agents of change through incorporation in decision-making processes. To date, 15 countries

²⁴ UNDP (undated), [Where We Work | Climate Promise](#).

²⁵ SE4ALL, "[Energizing Finance: Understanding the Landscape 2020](#)" Sustainable Energy for All (2020).

²⁶ Central Asia Regional Economic Cooperation (CAREC), [Energy Ministers Dialogue](#) (2019).

²⁷ UNICEF Europe and Central Asia Regional Office [A Gender Mapping of the Green Economic Transition in Europe and Central Asia](#) (2023).

in the region have submitted a revised NDC, 11 of which now incorporate gender.²⁸ However others have scant mentions of women. Even if gender is mentioned, it is together with “vulnerable groups” and ignore the need to build women’s capacities to participate in the energy transition.

22. Women’s unpaid care work contributes significantly to the economy but remains invisible and unvalued, despite supporting all forms of paid productive work. In Switzerland in 2020, households accounted for 41.4 per cent of gross value added in the extended total economy of the country. Domestic work accounted for 73.4 per cent, care activities 18.9 per cent and voluntary work 7.7 per cent of the total value of unpaid work. The contribution of women in the total value of unpaid work was 59.6 per cent.²⁹ In Serbia, the value of unpaid care work accounts for 20 per cent of total GDP.³⁰ In Ukraine, the value of women’s time spent on childcare is estimated around 72.5 billion USD.³¹ Development of comprehensive policies and programmes at all levels to recognize, reduce, redistribute, represent and reward paid and unpaid care and domestic work can contribute significantly to social and economic development of the countries in the region. Rewarding and representing paid care workers by ensuring decent work and social protection, will ensure improving of current care jobs and creating new quality, decent care jobs.

23. Uzbekistan has recently adopted a roadmap for the implementation of the energy ministry’s national equality strategy, which aims to change the personnel policy and corporate culture in energy companies. One of the first initiatives – Tech4Impact –raises awareness among girls for STEM subjects in order to increase the still very limited number of female academics.³²

24. In addition, countries have committed to regional policies to foster foundational skills and integrate digital technologies to empower women. Across the region, 10 countries are part of the Organisation for Economic Cooperation and Development (OECD)’s Green Action Task Force. In Central Asia, Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan have developed, in partnership with Deutsche Gesellschaft Fur Internationale Zusammenarbeit (GIZ), a regional climate action plan known as the Green Central Asia Initiative.³³

25. As far as Europe is concerned, the European Union submitted a joint NDC in place of individual member states which mentions gender responsive planning among all its members. The EU NDC is prepared in the context of the EU’s commitment to gender equality articulated in the European Pact on Gender Equality and its support for adoption of the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP); integrating the dimensions of human rights and gender equality by member States into their national plans and strategies under the EU Energy Union Governance Regulation. 34 Similarly, the European Green Deal, which addresses climate related legislation and aims to, develop climate resilient societies and recover Europe’s biodiversity, among other targets, incorporates gender considerations. Through the policy, the EU encourages member States to “integrate dimensions of human rights and gender equality” in their national action plans and strategies and align new policies for greening sectors such as energy and transport to align with EU policies in gender and LBGTIQ equality. 35 However, according to a study conducted by Friedrich Ebert Stiftung, the strategies and laws under the Green New Deal are largely gender blind or lack sufficient gender analysis.

²⁸ UNDP (undated), [Where We Work | Climate Promise](#).

²⁹ Federal Statistical office of Switzerland, www.bfs.admin.ch/bfs/en/home/statistics/work-income/employment-working-hours/balancing-unpaid-work/household-production-satellite-account.html (accessed on 23 June 2024).

³⁰ Ibid.

³¹ World Bank, *Ukraine: Third Rapid Damage and Needs Assessment (RDNA3)*, February 2022-December 2023, p.77.

³² Deutsche Energie-Agentur, dena *The Role of Women in Energy- Female Empowerment in Eastern Europe and Central Asia* (2021).

³³ UNICEF Europe and Central Asia Regional Office (2023), [A Gender Mapping of the Green Economic Transition in Europe and Central Asia](#) (unicef.org), November 2023.

³⁴ EU (2020), [Update of the NDC of the European Union and its Member States](#).

³⁵ UNICEF Europe and Central Asia Regional Office (2023), [A Gender Mapping of the Green Economic Transition in Europe and Central Asia](#), November 2023.

B. Status of women in ECE region: Gender dimensions in education, skill development, STEM and labour force

26. With a 2024 score of 69 per cent Central Asia ranks fifth out of eight regions on overall Gender Gap Index.³⁶ The seven economies included in Central Asia have achieved a level of parity equal to or higher than 67 per cent, and the three best-performing countries all register gender parity scores of 71 per cent or higher: Armenia (72.1 per cent, 64th), Georgia (71.6 per cent, 69th) and Kazakhstan (71 per cent, 76th). Europe ranks first on the 2024 regional rankings, having closed three-quarters of its gender gap (75 per cent).³⁷ While considerable progress is being made and the ECE countries are committed to gender equality mandates, the situation on the ground remains mixed.

Girls in education³⁸

27. The Central Asia region maintains near-parity in educational attainment and primary and secondary school enrolment and completion rates are high, higher among girls than boys. Female secondary completion rates in Central Asia vary between 44 per cent in Turkmenistan to 97 per cent in Tajikistan. The same can be said for tertiary education. However, despite girls having high levels of primary, secondary and tertiary education, they have more likelihood of not being in education, employment or training (NEET) or unemployment and exhibit lower labour force participation rates. Barriers to girls' education include limitations to accessing the job market, socio-economic barriers as well as societal pressure to enter marriage at a young age. This tends to be particularly true for women in rural areas, specifically highlighted in Uzbekistan.

Girls pursuing STEM education³⁹

28. For girls who attend school, societal norms play a driving role in students' topics of study along a gendered line. Despite there being more women enrolled in tertiary education, few women opt for STEM subjects. The share of female students in energy-related university programmes is 25 per cent in Kazakhstan, 17 per cent in Kyrgyzstan, and 15 per cent in Uzbekistan. Jobs related to STEM fields are generally considered male jobs and hence women prefer to opt for fields related to education, the social or health sectors. The same holds true for students participating in vocational education. In 2022, just 9.8 per cent of students enrolled in energy education in Kazakhstan's vocational schools were women. As a result, the pool of qualified women available to fill positions on emerging sectors in transition is small.

Gender gaps in labour force

29. Across the Central Asian countries, common working sectors include agriculture, energy, forestry and other land use. Among these, majority, except for health care and agriculture, are dominated by men. The agriculture sector, previously the main employer in most of the central Asian countries, currently employs between 13 per cent (Kazakhstan) and 60 per cent (Tajikistan) of women out of the total labor force. The women in renewable energy sector of Kazakhstan made up just 30 per cent of sector jobs in 2021, while women in Uzbekistan make up roughly 44 per cent of their industrial sector.⁴⁰

³⁶ The Global Gender Gap Index was first introduced by the World Economic Forum in 2006 to benchmark progress towards gender parity across four dimensions: economic opportunities, education, health and political leadership.

³⁷ World Economic forum, (2024), "Global Gender Gap Report 2024" [Benchmarking gender gaps, 2024 - Global Gender Gap Report 2024](#).

³⁸ UNICEF Europe and Central Asia Regional Office (2023). [A Gender Mapping of the Green Economic Transition in Europe and Central Asia](#), November 2023.

³⁹ Ibid.

⁴⁰ Marina Kovaleva, Walter Leal Filho, Christian Borgemeister and Julia Komagaev (2023), [Central Asia: Exploring Insights on Gender Considerations in Climate Change](#).

Table 1
Central Asia countries' characteristics

Countries	Share of women	Labour force participation rate,	Share of seats in	Gender Gap Index
	population	women out of the total employed population	parliament held by women	
	(Per cent)	(Per cent)	(Per cent)	Ranking out of 146 countries, 2022*
Kazakhstan	51.4 (2021)	55.2	27.4 (Mazhilis) (2021)	65
Kyrgyzstan	50.4 (2022)	38.0	17 (2021)	86
Tajikistan	50.8 2021)	46.1	23.8 (2021)	114
Turkmanistan	50.8 (2021)	45	25 (2019)	
Uzbekistan	49.7 (2022)	41.3	32 (Oliy Majilis) 25 (Senate) (2019)	

Source: Authors compilation based on data from the World Bank, UNDP, national official websites, and statistical offices.

*Note: Turkmenistan and Uzbekistan were not included in the ranking.

30. Gender gaps persist in labour force participation: the labour force participation rate in the region for men is 66 per cent, compared to 50.6 per cent for women.⁴¹ Primary constraints faced by women include lack of affordable and quality childcare, the double burden of domestic and professional work, access to safe transport, and pressure to conform to gender roles. In the Kyrgyz Republic, women earn 75 per cent of a man's salary. The gap in Kazakhstan is 21.7 per cent, 60 per cent in Tajikistan as of 2018, while in Uzbekistan the wage gap is estimate at between 50 and 60 per cent.

31. Further there are some sectors where women's employment is not supported by the law. The transport sector is one such, where women make up only 23 percent of employees in the transport, storage, and communication sector across the ECE region—with many engaged in low-paying jobs, often among administration, sales, catering, and cleaning, while men dominate engineering, driving and managerial roles.⁴²

32. One of the main contributors to the persistent gender gaps in the labour force is the gender roles that allocate unpaid domestic and childcare work to women. Women in Kyrgyzstan spend 6.5 more time on domestic work than men. In Kazakhstan, women spend roughly 17.1 per cent of their time on unpaid care work, in addition to their regular paid jobs. Men on the other hand spend just 7.1 per cent of time on unpaid care work.⁴³

Women in green jobs and in the energy sector⁴⁴

33. The share of women in green jobs varies across the region, women constituting between 20 to 30 per cent of the workforce. In Ukraine, female employment in the energy sector for 2017 was at 27 per cent, while in Kazakhstan, women make up a quarter of energy sector employees, averaging around 24 per cent. As in rest of the world, fewer women make it to the senior management. At the same time, energy sector patent applications are less likely to include female authors. For patents related to energy technologies – combustion equipment, engines, pumps, etc. – women are listed on approximately 10 per cent of patent applications. This percentage rises to 15 per cent for climate-change mitigation technologies. A lack of training opportunities to allow for re-training or “upskilling,” keeps them from transitioning into higher skilled jobs within the green economy.

⁴¹ World Bank (2022), [Gender Equality in Europe and Central Asia](#).

⁴² ILOSTAT (2023), [Statistics on employment](#).

⁴³ UNICEF Europe and Central Asia Regional Office (2023). [A Gender Mapping of the Green Economic Transition in Europe and Central Asia](#), November 2023.

⁴⁴ Ibid.

34. IRENA conducted a survey of women in renewable energy jobs in 2019. Of the 40 per cent of women in Kazakhstan working in the solar energy sector and the 21 per cent working in wind energy, 65 per cent respondents noted substantial gender barriers within their industries. These include conditioning of children to gender stereotypes, a lack of female role models and networks, an absence of training opportunities, and unsupportive workplace environments including unequal pay, care burden, a lack of fair parental and leave policies. Girls at a young age are conditioned by gender stereotypes to believe their role is that of domestic and child carers and that certain career paths belong only to men. Women in the energy sector in Uzbekistan highlight “antiquated working cultures and corporate structures dominated by men”.

35. A survey on the participation of women in the renewable energy sector in Central Asia conducted by the OSCE, the Global Women’s Network for the Energy Transition (GWNET) and IRENA, covered 22 renewable energy companies and organizations. The data showed that women account for approximately 20 per cent of the workforce in the renewable energy sector in the region. The Kazakhstan Ministry of Energy reports that in 2022, its 130 renewable energy facilities, with a total capacity of 2,388 MW, generated 1,615 jobs of which 16 per cent were held by women. Company-level data reveal a similar story. Uzbek hydroenergo, which operates 51 renewable energy projects in Uzbekistan, has a total workforce of 4,423 people of whom 14 per cent are women, and Uzbekenergo employs 17 per cent women.⁴⁵

Box 1. Women in Spain’s energy transition⁴⁶

According to a first full assessment of the Spanish labour market, women had four out of 10 of the new jobs linked to the energy transition in the period 2015-2021. While female employment has been on the rise, they remain under-represented in technical fields related to the energy transition. Of all university graduates in 2020, only 11 per cent were women majoring in STEM fields, compared with 36 per cent of men graduating in these fields. The gap is more pronounced in vocational training, where 7.9 per cent of women are engaged. Additional analysis shows that the gender wage gap in the energy transition sector is comparatively less pronounced than in the overall economy, with women earning 6 per cent less than men, as opposed to a 14 per cent national wage gap.

Women in transport sector

36. The transport sector contributes a growing share of the world’s greenhouse gas emissions. Between 2010 to 2019, transport was responsible for 30 per cent of global final energy demand and for 23 per cent of global direct CO₂ emissions from the energy sector.⁴⁷ At the present moment, the involvement of women in the sector in the Eastern Europe, Caucasus and Central Asia countries is lacklustre: women make up only **23 per cent** of employees in the transport, storage, and communication sector—with many engaged in low-paying jobs, often among administration, sales, catering, and cleaning, while men dominate engineering, driving and managerial roles. Women also face more difficulties getting jobs and climbing the career ladder. Currently transport services remain heavily male-dominated, so women’s voices as transport users are not always heard, and there is little incentive for transport services to respond to needs of women users. In addition to technical knowhow, there are systemic barriers that prevent women from engaging in the sector.

Gender in access to information, digitalization/digital technologies

37. The 2030 Agenda for Sustainable Development highlights the potential of digital technologies to contribute to sustainable development and to acceleration of human progress. However, according to the European Commission’s Women in Digital Scoreboard 2021, women represent only 41 per cent of STEM graduates and 19 per cent of ICT specialists.

⁴⁵ OSCE, *Advancing a Just Energy Transition in Central Asia* (2024).

⁴⁶ IRENA, *Renewable energy and jobs: Annual review 2023* (2023).

⁴⁷ SLOCAT, *Tracking Trends in a Time of Change: The Need for Radical Action Towards Sustainable Transport Decarbonisation, Transport and Climate Change. Global Status Report* (2021),

38. In the ECE region, 87 per cent of the women own a mobile⁴⁸ and 79 per cent own a smartphone. The remaining women who do not own a mobile phone are particularly challenging to reach and typically the most underserved, including those who have low literacy levels, are older than 55, are unemployed, have low incomes, live in a rural area or have a disability. For those that are not using mobile phones, the top barriers preventing men and women from adopting and using mobile internet are mobile internet awareness, handset affordability, literacy and digital skills and safety and security concerns. Access to a device and a connection alone are not sufficient to meaningfully transform the lives of women and girls. Ensuring women are aware of the range of possibilities for working, earning, and learning through technology is crucial to progress. In spite of the high level of usage however, girls are underrepresented in ICT education across Central Asia. Women are less than 32 per cent of ICT tertiary students in Kazakhstan, and only 17.8 per cent of ICT tertiary graduates in Uzbekistan⁴⁹. Access to ICTs at an early age will help girls to overcome the confidence barrier and allow them to become economically more independent and self-reliant in the future.

Gender in climate decision making and leadership

39. It is well recognised that excluding women from decision-making processes and governance in the energy sector prevents them from contributing their viewpoints, their know-how and needs in shaping energy policies. Nonetheless, the World Economic Forum reports that the energy sector is one of the worst industries for women in leadership, with less than one-in-five leadership roles held by women and wages 19 percent lower than for men, in general.⁵⁰

40. Most governments have introduced a national legislated quota system that regulates a minimal share of women candidates to be included in political party lists and as members of parliaments, the current quota at 30 per cent. In the present scenario, women are underrepresented at all levels of decision-making, occupying between 17 per cent and 32 per cent of the seats in national parliaments. While women's representation in parliaments has been rising over the last 25 years and is close to the world's average (24.9 per cent), it is still low at an average of 24.6 per cent⁵¹. Kazakhstan stands out where women have consistently made up over 56 percent of public administrators since 2015.⁵² The lowest female representation was found in the upper and lower houses of the Uzbekistan parliament (17 and 16 per cent, respectively) and the upper house of Kazakhstan (10 per cent). Women aspiring to political careers face discrimination, lack of funding, and prejudice against women in politics, media and society. In addition, violence against women politicians is on the rise, compounded by vicious gender-based cyber violence.

41. Women's limited participation in public life is also reflected in their engagement in climate change discussions. At the international level, women participate at UNFCCC meetings, where their share in national Party delegations has varied between 0 and 100 per cent across different years and across the Central Asian countries. Global data shows that women are not participating equally in climate change negotiations – In 2008, they accounted for 31 per cent of Party delegates (with only 15 per cent Heads of Delegations) rising to just 35 per cent in 2022 at COP27 and 34 per cent at COP28, despite the evidence that climate change exacerbates existing gender discriminations.⁵³ For ECE region the average representation of women in national and global climate negotiating bodies is less than 30 per cent.⁵⁴

⁴⁸ GSMA (2024), [GSMA – The Mobile Gender Gap Report 2024](#).

⁴⁹ UNDP (2021), [Embracing Equality in a Digital Era in Central Asia](#).

⁵⁰ Sartori, Silvia (2024), [Gender in a just and urban transition](#).

⁵¹ UNDP (2020), [More women are entering politics in Europe and Central Asia, but political parity remains a distant goal](#).

⁵² Marina Kovaleva, Walter Leal Filho, Christian Borgemeister and Julia Komagaev (2023), [Central Asia: Exploring Insights on Gender Considerations in Climate Change](#).

⁵³ WGC FP (2024), [Gender justice must be centered in COP29 outcomes](#).

⁵⁴ UN Women (2022), [Central Asian governments discuss the integration of gender equality into climate change policies, published on 15 February 2022](#).

C. Good practices in engaging girls and women in the transition to low-carbon economies⁵⁵

42. Across Central Asia, private sector, government, local and international NGOs are working to better engage women and girls within the low-carbon transition and open new job pathways. In all countries, there has been an increase in climate-related educational programmes. The Organization for Security and Cooperation in Europe (OSCE), a regional stakeholder, has been implementing programmes that equip girls and women in the region with skills, knowledge and the confidence necessary for technical roles through internships, scholarships and mentorship. The European Bank for Reconstruction and Development (EBRD), as well as the European Centre for Development of Vocational Training (CEDEFOP) also work to aid in a gender inclusive transition to a low-carbon economy. Some of the key regional initiatives on empowering women to play a transformative role in the transition are as follows:

Skilling girls for green jobs in ECE region

43. A number of programmes are focusing on enhancement of the vocational education system particularly focusing on digital skills development and acquisition.

44. UNICEF is a pioneer, offering skills programming into STEM education; digital learning and skill development to solve environmental challenges and improve teacher's competency in using digital tools; and building transferable skills in formal, non-formal and TVET education streams, in order to develop skills for lifelong learning.

45. STEM4GIRLS, a UNICEF programme, targets girls from poor families and arranges internships with private sector companies on digital literacy, STEM, child rights, gender equality and leadership skills. The Girls Go Circular Project, organised by the European Institute of Innovation and Technology,⁵⁶ supports schoolgirls, and more broadly, any student, to develop digital and leadership skills and circular economy. It adopts a learning-by-doing approach which engages students in activities such as online research, role-plays or challenge-based exercises. The Girls Go Circular learning platform, managed by the European Institute of Innovation & Technology, is working with schools to provide training on digital and entrepreneurial skills relevant to the circular economy to tens of thousands of girls between the ages of 14 and 19.

46. At the same time, industry leaders such as Mastercard, Microsoft, and Deloitte, have also started equipping women and girls with necessary technical skills to actively participate in sectors such as STEM and ICT. Mastercard's Girls4Tech programme is specifically designed to inspire girls aged eight to 16 to explore and consider careers in STEM and uses hands-on training and interactive workshops. Girls4Tech is a global programme and has impacted millions of girls across 64 countries and territories.⁵⁷

Integrating gender in companies

47. Private companies are also working to encourage the participation of women and girls. Roughly one third of companies in Kazakhstan now have a gender strategy and implement measures to promote women's engagement in technical sectors. As part of its Women in Technology Programme, Wien Energie offers apprenticeships with strict 50/50 gender quotas, so that girls do not need to be concerned that they will be the only one.⁵⁸

Networking initiatives

48. Women often lack access to career information due to difficulty accessing professional networks. Several regional initiatives are focusing on helping women to network and connect with peers, female role models and employers, and gain the skills and confidence

⁵⁵ UNICEF Europe and Central Asia Regional Office (2023). [A Gender Mapping of the Green Economic Transition in Europe and Central Asia](#). November 2023.

⁵⁶ Girlsgocircular (undated), [Girls Go Circular. Digital and Entrepreneurial Skills for the Circular Economy](#).

⁵⁷ Girls4tech (undated), ["Inspiring the next generation of problem solvers and creative thinkers"](#).

⁵⁸ Irene Giner-Reichl and Maria van Veldhuizen (2023), [Europe's Energy Transition: Women's Power in Solving the Labour Bottleneck](#).

to build careers in the energy sector. The OSCE project on promoting women's economic empowerment in the energy sector helps young Central Asian women to take up career opportunities in the energy transition. Activities include high-level roundtables, workshops, internships and onsite experiences at renewable energy facilities.⁵⁹ These programmes have benefitted more than 400 women from over 70 countries.

49. The role of women in the energy sector is being actively strengthened with the help of government-initiated women's networks such as the KAZ Women's Energy Club (KAZ WEC) and other networks such as the women's network Women Energy Club of Ukraine (WECU).⁶⁰

Renewable energy entrepreneurship⁶¹

50. Programmes like Global Cleantech Innovation Programme (GCIP) for small and medium-sized enterprises (SMEs) implemented by UNIDO, promote clean energy entrepreneurship in the region. This is done by supporting emerging cleantech start-ups and SMEs, through competition-based business acceleration for innovative cleantech SMEs, linking enterprises to private sector investors and fosters enabling innovation and entrepreneurship ecosystems. GCIP ensures equal opportunity for women and men to lead, participate in and benefit from GCIP interventions. Since 2013, GCIP has demonstrated higher levels of women's participation than other accelerator and incubator programmes, with approximately 25 per cent of the 1,000 alumni being women-led enterprises.

Data and knowledge⁶²

51. Given that there are gender differences relating to participation in clean energy sectors, policymakers need a better understanding of the gender-just energy transition nexus. IEA's Gender-Diversity Initiative works on collecting, analysing and disseminating gender-disaggregated data to support governments in developing policies towards their ambitions to improve gender-diversity in the energy sector. Disaggregated gender and energy data is collected and disseminated on employment, management, innovation and financing to track progress and release periodic updates to decision makers and developing policy recommendations for governments and industry. Within the EU, the European Centre for Development of Vocational Training (CEDEFOP) collects data, investigates the impact of the European Green Deal and other climate change policies in the EU on vocational education and training, and provides forecasts on new skills and education and training policies on these skills.

IV. Persistent challenges

52. Women represent a major source of talent and productivity. According to ILO, if female labor force participation were at the same level as men, it could boost GDP by as much as \$1.1 trillion, or 23 per cent of annual GDP in Eastern Europe, Caucasus and Central Asia countries.⁶³ Yet women remain underrepresented in green business and face several challenges in transitioning to a low-carbon economy.

53. According to World Bank's Women, Business and the Law 2022 report, 17 per cent of economies have implemented at least one reform since October 2020 to improve legal equality for women⁶⁴. However, while the region does well overall compared to other regions, there is still wide variation in gender equality among economies.

⁵⁹ OSCE (2024), [Promoting women's economic empowerment in the energy sector in Central Asia](#).

⁶⁰ Deutsche Energie-Agentur, dena (2021), [The Role of Women in Energy – Female Empowerment in Eastern Europe and Central Asia](#).

⁶¹ GGKP (2023), [Powering a Gender-Just Energy Transition](#).

⁶² Ibid.

⁶³ ILO (2018), [Women in business and management: Gaining momentum in Eastern Europe and Central Asia](#).

⁶⁴ World Bank (2024), [Women, Business and the Law 2024 - Gender Equality, Women Economic Empowerment](#).

54. The region has achieved gender parity in education. Overall, more female students enrol in tertiary education than male students, but enrolment rates for women are lower than men for STEM-related fields and men in STEM professions earn more than women in the same professions. The lack of women participating in STEM or related jobs leaves girls and young women without role models and girls often lack confidence in their math and science related skills. In 2021, a survey of people employed in the private sector across Central and Eastern Europe found 43 per cent of women were not confident in reaching top leadership positions because they felt they lacked the necessary skills for the job.⁶⁵

55. Gender gaps persist in labour force participation and earnings in the region. The major constraints facing women include lack of affordable and quality childcare, the double burden of domestic and professional work, access to safe transport, and pressure to conform to gender roles. Legal constraints also exist on many types of jobs women are permitted to perform. The pay gap between men and women is about 30 per cent.⁶⁶ Barriers to female leadership also persist, preventing women from advancing into top positions such as boards and corporate leadership. As a result, women's potential in new technology employment and leadership remains largely untapped.

56. Financial inclusion is essential to achieving inclusive growth, yet women in ECE region still face barriers in access to, and use of, financial services. Women are 15 per cent less likely than men to have savings, and 28 per cent less likely to have enough savings to start a business.⁶⁷

V. Priority actions for an inclusive and gender just transition

57. The world is starting to harness women's knowledge, capabilities and innovative approaches to push through a gender-responsive just transition in sectors like agroecology and sustainable energy to a limited extent. Creating a transformative role for women in energy transitions, while building on these initial gains, calls for removing structural and systemic barriers and closing persistent gender gaps. As countries transition towards low carbon economies, political will and commitment are essential preconditions to promote gender equality and women's political and economic empowerment. Once these preconditions are in place, varied measures can be adopted to translate this commitment into action.

58. In general, for women to play a transformative role in energy transition, multiple partners and stakeholders need to come together and strengthen the following areas:

59. Adopt gender transformative energy policy and regulation. A gender-responsive regulatory environment is a necessary precondition to support a gender-just energy transition. Energy policies must address gender-differentiated energy needs, and control over and access to energy.⁶⁸ Regulations play a key role, but generally regulators are not familiar with gender issues and how their decisions may have gender impacts. Once national energy policies and plans promote gender mainstreaming are in place, this sets the tone and provides a framework for accountability on gender equality for the sector.

60. Expand gender-responsive climate finance. Dedicated climate finance that targets gender equality considerations are necessary to support countries to shift to low-carbon, climate-resilient and sustainable economies. Public finance should prioritize gender-responsive climate change mitigation and adaptation actions, including that for women's and grassroots organizations, enterprises and cooperatives.

61. Invest in care economy for a gender-responsive just transition. Care work remains undervalued and underpaid, restricting women's opportunities. Access to care through maternity leave and childcare facilities, can free women's time and effort to engage in productive work, self-improvement as well as much needed leisure. At the same time, investments in quality care jobs, services and infrastructure help ensure that women are not

⁶⁵ UNICEF Europe and Central Asia Regional Office (2023), [A Gender Mapping of the Green Economic Transition in Europe and Central Asia](#), November 2023.

⁶⁶ World Bank (2022), [Europe and Central Asia Economies Need More Women Entrepreneurs and Business Leaders](#).

⁶⁷ Ibid.

⁶⁸ GGKP (2023), [Powering a Gender-Just Energy Transition](#).

left behind. It is estimated that closing existing gaps in care services and expanding decent work programmes would [create almost 300 million jobs](#) by 2035.⁶⁹

62. Invest in education and training to improve women's access to decent work in emerging low-carbon sectors. In green sectors, women need to transition from low-paid, vulnerable and precarious employment to productive work in conditions of freedom, equity, security, and dignity. Investing in education and training for girls and women is an important first step for this and requires equipping them with the competencies needed in emerging sectors, including, increasing girls' representation in STEM fields, retraining and reskilling for renewable energy sector.

63. Ensure supportive work environments and gender-responsive infrastructure. Work environment plays a crucial role in enabling a wider participation of women. Measures to ensure pay transparency, equal pay for work of equal value, combating sexual harassment, promote flexible working and access to care services can allow both male and female employees to manage family obligations and improve work-life balance. Such measures will also help close the gender pay gaps in pay and at the same time, ease women's work burden, leading to gender equality in the workplace.

64. Strengthen women's rights, leadership and political participation. Globally, on average, women have only 64 per cent of the legal rights enjoyed by men.⁷⁰ Across the region, despite efforts made by the governments and proven abilities of women as leaders, women are still under-represented in decision-making, whether it is in elected office, the civil service, the private sector. Key strategies to promote women's rights in the context of economic empowerment include adoption of laws and policies that support women's economic empowerment and repeal of discriminatory laws and legal frameworks.

65. Generate, analyse and disseminate sex- disaggregated data to inform policy. Addressing data and evidence gaps are essential to support a gender-responsive just transition. While it is well established that climate change has gendered impacts and aggravates preexisting gender inequalities, enhanced gender data collection and analysis and gender statistics are needed, particularly with reference to women's livelihoods; access to resources, goods and services; the care economy, and the differentiated impacts of energy transition on men and women.

66. Ensure accountability for gender-responsive just transition commitments and investments. Gender-just transitions can only be achieved through open and transparent processes, in which governments are held accountable for their actions, including implementation of commitments made in NDCs and other national communications to the UNFCCC.

VI. The way forward: key recommendations

A. Actions for policymakers

67. In order to ensure the inclusion of women and girls in emerging low-carbon sectors, governments need to mainstream gender in legislation, budgeting and commitments, taking into consideration the unique needs of girls and women and intersectional deprivations. Specific actions include:

- Improve gender responsiveness in climate and energy policies, as recognized by the Paris Agreement. This includes Integrating gender equality perspectives and full inclusion of women's perspectives, needs and priorities in just transition plans, policies and programmes, including in the NDCs, NAPs and NBSAPs;
- Enact laws and legislations to mandate an inclusive and diverse workforce. This includes eliminating occupational segregation and gender pay gaps, formalising jobs in the informal economy, supporting social protection for women, investing in the care economy and expand quality public care infrastructure and services;

⁶⁹ UN Women, [Five things to accelerate women's economic empowerment](#) (2024).

⁷⁰ Ibid.

- Support women's and girls' access to education and skill building to benefit from new jobs created in just transitions. As recommended by IEA, skilling in at least five areas is necessary: clean energy skills training, reskilling for coal workers, retraining of workers in the oil and gas sectors, academic and corporate programmes, and targeted skills programmes for young people and women⁷¹. Young people, girls and boys also need to be supported through mentorship;
- Improve the collection, analysis and reporting on gender-disaggregated data and statistics to inform decision-making on just energy transitions planning and financing;
- Make gender equality conditionalities explicit and mandatory for all policies and introduce mandatory gender assessment of existing policies and measures;
- Incorporate gender budgeting in government spending to ensure women and girls are benefitting from climate resiliency programmes;
- Build awareness and capacities of stakeholders and decision makers on the importance and benefits of mainstreaming gender in the low-carbon sectors

B. Actions for the private sector and companies in low-carbon sectors

- Commit to equal opportunities for women and men in recruitment, in-company-training, promotion, salaries, parental leave, etc.;
- Support gender-inclusive work policies such as parental leave, and flexible working arrangements, to encourage female participation, career growth and retainment in low-carbon sectors;
- Design and run corporate programmes for skilling and reskilling women and girls in new sectors through scholarships, mentorship programmes, and targeted training for women and girls;
- Engage employees at all levels in gender capacity trainings to address negative social norms, biases and stereotypes which foster gender discriminatory behaviour that limits female participation, equal pay, career growth and retention;
- Encourage women's networks, mentoring, and career support services for women in order to level the playing field and to provide women and girls with a sense of belonging, a safe space to discuss issues related to their work and a community with which to network for opportunities.

C. Actions for the education sector

- In secondary education, encourage girls to take an interest in STEM, run girls in STEM activities, and invite female STEM experts to career days;
- In higher education, ensure gender balance in promotional materials for STEM and TVET programmes, invite female STEM experts to give guest lectures, and support female students in accessing apprenticeships;

D. Actions for development partners

- Increase access to climate finance for women through direct funding channels. Advocate for gender responsive budgeting of climate change funds;
- Promote women's equal and meaningful participation and leadership in the formulation, implementation and monitoring of just transition initiatives;

⁷¹ Irene Giner-Reichl and Maria van Veldhuizen (2023), [Europe's Energy Transition: Women's Power in Solving the Labour Bottleneck](#).

- Include civil society and gender equality advocates in ensuring accountability for gender-responsive just transition policies and initiatives and their implementation, by holding governments and other stakeholders, such as the private sector, to account;
 - Provide technical assistance, funding, and expertise to support initiatives to engage women in the green skills economy, partnering with private sector;
 - Institutionalise gender-balanced representation in negotiations and decision-making, in climate-relevant sectors such as transport, energy, building and agriculture, e.g., setting quotas and targets for public and private decision-making bodies;
 - Sensitize government and private sector stakeholders on gender equality and gender mainstreaming within their workplace by conducting gender capacity trainings.
-