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Integrated Policy Strategies and Regional Policy Coordination for Resilient, Green and Transformative Development: Supporting Selected Asian BRI Partner Countries to Achieve 2030 Sustainable Development Agenda

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Özge İzdeş Terkoğlu
Department of Foreign Trade
İstanbul University-Cerrahpaşa
ozge.izdes@iuc.edu.tr

Gender Equality and Green Transformation in Türkiye

Abstract

Achieving green transformation entails greening of all sectors, and production systems, and restructuring of cities and daily lives and hence requires a comprehensive and balanced approach. Such a transformation will inevitably bring social and economic changes, necessitating the navigation of the complexities of Türkiye's pre-existing developmental challenges and social inequalities. Unless designed with an inclusive perspective transformation will not secure equal adaptation of all and will risk creating new inequalities and worsening of the existing ones, particularly gender inequality. This paper explores the potential impacts of the green transformation agenda on the Turkish labor market, considering current gender disparities and historical gender patterns in industrialization policies. It assesses key policy documents from a gender perspective and proposes a comprehensive policy framework for equitable transformation.

Contents

KEYWORDS: Green Transition, Gender, Equitable-transformation, Green Jobs, Labor Market

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Introduction

The ongoing degradation of natural resources and the environment has reached levels of concern that highlight the pressing necessity for the development of prompt and effective solutions. To make progress, a paradigm shift that can lead to significant change, both locally and globally is due. Committing to this global agenda, Türkiye ratified the Paris Agreement in 2022 and has announced the roadmap for green transformation, agreeing to achieve the net zero emissions target by 2053.

Greening of all sectors and the transformation of production and our daily lives can only be achieved through a comprehensive and balanced approach, and this necessitates access to green technology, finance, and a leading developmentalist state. However, even with access to appropriate technology and funding, efforts toward green transformation will not automatically ensure the adaptation of all. The assumption that the presence of resources and a commitment to green transformation guarantees a smooth transition for all fails to account for the inherent inequalities within social systems and the specific challenges faced by women (Alston, 2013:352). Inevitably, the green transformation will have social and economic consequences, and this will require navigating the complexities of the transformation in addition to Türkiye's pre-existing developmental challenges and social inequalities.

Achieving an inclusive and egalitarian transformation is only possible with a shift in the framework that defines sustainability in broader terms, one that considers environmental, economic, and social factors in tandem. Gender-aware economics have long contended that the primary objective of an economy should be to support the survival and flourishing of life in all its forms, which requires the design of policies that incorporate both social and environmental dimensions (Ghosh, 2021). For green policies to truly achieve sustainability and not just promote environmentally sound practices, they must incorporate social dimensions such as income equity, job quality, and gender equality. A broad-based transformation in this end can be seen as an opportunity to address long-lasting structural problems and inequalities. However, if not designed with an inclusive and developmentalist vision, such transformations can turn into a potential source of new inequalities and even can further exacerbate gender inequality. In this regard, previous UN Secretary-General Ban Ki-Moon, in the lead-up to the Women's International Forum, underlined the importance of women's inclusion in climate change decision-making[1]. Ensuring inclusion of women aims to both recognize women as agents of change for a more holistic transformation and to ensure that vulnerabilities related to gender roles are adequately addressed.

Transformation, particularly through sectors leading the "decarbonisation" process will create new employment opportunities; and concurrently, a decline is necessitated in polluting sectors. Estimating the net effects of this transformation on employment, facilitating the transition within the social security system, and ensuring a transition that upholds social justice are inevitably at the core of ongoing research and policy debates. Türkiye will have to go through this process in a labor market context with high unemployment and low labor force participation. Low employment creation performance of exporting sectors, the jobless growth phenomena after the 2000s has resulted with dim employment opportunities and deteriorating employment conditions. Labor market is even less promising for women. Türkiye has one of the widest gender gaps (35.4

[1] Ki-Moon B. UN Secretary-General Press Release, 2009. Available at: https://press.un.org/en/2009/sgsm12643.doc.htm

percentage points as of 2023) in the world (global average is 24.3 percentage points) in terms of economic participation[2] (ILO, 2024). Hence a transition as such unless planned with an inclusive and egalitarian perspective is more than likely to reproduce and even perpetuate women's exclusion from the labor market.

With these concerns, this background paper aims to present the green transformation agenda's potential implications in the Turkish labor market from a gender perspective. Firstly, the next section (section 2) presents the dynamics and necessities that drive the green transformation agenda of Türkiye. It discusses the feasibility of the transformation within the context of the macroeconomic policy framework and pre-existing developmental challenges. The third section follows with a historical overview of Türkiye's industrial and trade policies, evaluating the impact of the industrialization strategies on gendered employment patterns and the current status of gender disparities in employment. The section discusses the structural economic factors contributing to the high unemployment rates and underrepresentation of women in the workforce. In the fourth section, the potential gendered implications of green transformation in the labor market are examined based on an overview of a selection of green scenario simulations on Türkiye and the gender-segregated structure of the labor market.

Türkiye is mostly at the stage of setting the agenda for transformation and is rather recently starting to advance this agenda. The equitable and inclusive outcomes of industrialization policies undoubtedly depend on their formulation and implementation with this vision. Section five examines fundamental policy documents with a gender lens and evaluates whether they are gender-aware, gender-blind, gender-responsive, or transformative in design. The conclusion proposes a comprehensive policy framework for an equitable transformation.

[2] According to Global Gender Gap (GGG) Report 2023 by World Economic Forum (WEF), Türkiye ranks as the 133rd out of 146 countries in women's economic participation. And, in the overall GGG index, Türkiye ranks as the lowest in Eurasia and Central Asia region.

2. Climate Change and Green Transition (Structural Transformation) in Türkiye

2.1. Push and Pull Factors for Green Transformation

Direct impacts of climate change have become more frequent and more severe in the last two decades. Floods, droughts, landslides, storms, wildfires, and heatwaves are not only claiming lives and altering livelihoods but are also imposing significant economic costs and affecting a large portion of the global population. However, developing countries, contributing far less to the pollution that drives climate change, are more susceptible to its effects.[3] Geographically but more importantly in terms of adaptation policies, they are at a great disadvantage. Unlike advanced countries, they lack sufficient resilience and protection mechanisms to mitigate the adverse effects of climate change on their populations and economies (UNCTAD, 2021a). Adaptation policies are typically more fragmented and limited, and developed as last minute responses to emerging crises. Hence, disasters cost a significantly greater number of lives and change livelihoods. Particularly, population segments already grappling with poverty, unstable employment, and inadequate social safety nets face heightened risks due to the pre-existing development challenges coupled by climate change (Mukhopadyay, 2021:9). In this regard, development challenges interwoven with gender inequality in employment opportunities, resource allocation, decision making and mobility results with disparities in adaptive capacity and make women even more vulnerable. Furthermore, disasters significantly affect growth performance, further deviate countries from their development path, and contribute significantly to their status as debtor nations (Cantelmo, Melina, and Papageorgiou, 2019).

Türkiye is one of the disproportionately affected developing countries by climate change and is highly vulnerable to its impacts. The World Bank (2022) identifies a climate vulnerability rating based on ten dimensions, including dimensions such as extreme heat days, forcibly displaced population, population exposure- and poor population exposure to climate change impacts. Türkiye has a high vulnerability rating in 9 out of 10 dimensions, whereas the OECD median is 2 out of 10 (WB, 2022:23). In addition to the threats underlined in the climate vulnerability index, global warming is expected to impact daily work life significantly. With global warming, it is expected that temperature increases will make working more difficult and decrease labor productivity. If current trends and policies continue, by 2030, a 1.5-degree increase in temperature will decrease Türkiye's labor productivity by 1.5 points and it is predicted to be one of the countries most affected in Europe and Central Asia region (Climate Impact Explorer, 2024 and Kjellström et al., 2019).

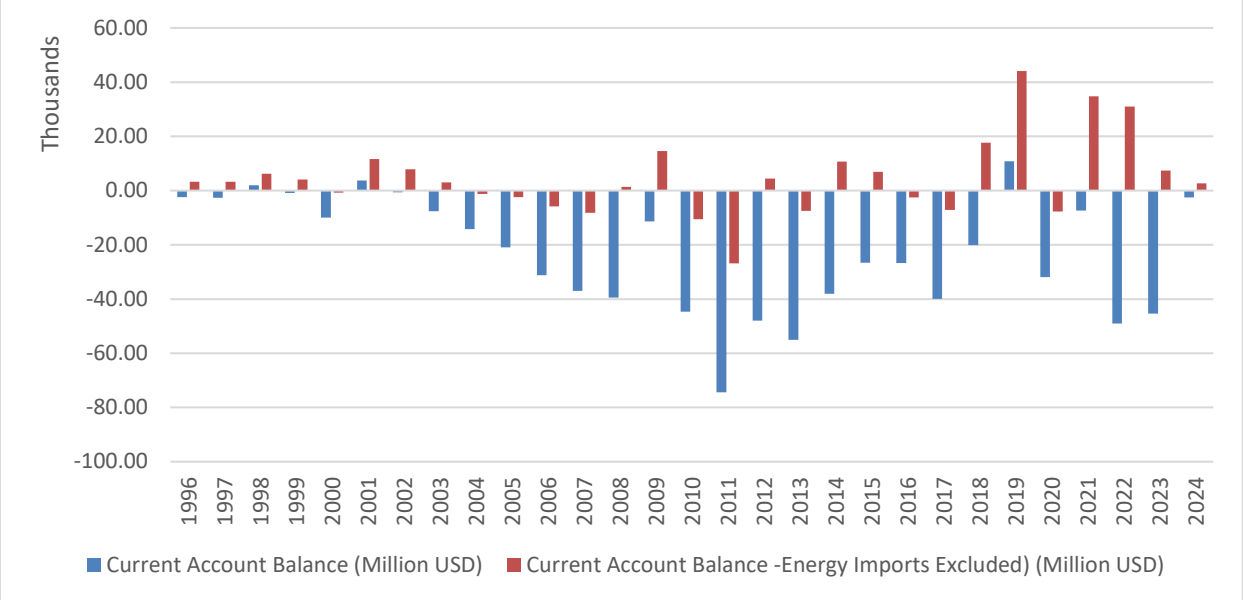
Moreover, as events that are heartbreaking in their consequences, Türkiye is facing escalating natural disasters, including severe droughts, water shortages, reductions in agricultural and biological diversity, as well as frequent forest fires and abrupt, intense rainfall that triggers floods and landslides (TEMA and WWF, 2015). Specifically in 2021, the country witnessed significant environmental events: floods devastated the Western Black Sea region, forest fires swept through the Aegean and Mediterranean regions, and the Sea of Marmara was affected by marine mucilage. Assessments of these disasters' ecological and socio-economic impacts reveal the

[3] Developing countries' vulnerability is the outcome of structural reasons: (i) given smaller size of the economy the scale of the impact is greater, (ii) less diversified production results with greater vulnerability, and (iii) weak state capacities (poorly financed health care systems, lack of infrastructure, insufficient social spending, institutional gaps in capacity, coordination and monitoring) (Banga, Fortunato and Wang, 2022).

severity of their outcomes in terms of human and animal casualties, livelihood loss, increasing poverty and migration, and drastic economic costs (WWF, 2022 and Doruk, 2022).

Currently in Türkiye the GHG and CO_2 emission growth is slower than economic growth (WB 2022, p.23), and per capita emissions are lower than OECD and EU average (OECD,2024). On the other hand, like in many other developing countries, growth comes with higher energy use and greater pollution and emissions growth trend is concerningly steep in the last decades. (Global Carbon Atlas, 2024). While the energy sector is the primary driver of increased emissions, it's important to note that Türkiye is not self-sufficient and is a net importer in this sector, ranking as the 5th in Europe and the 12th in the world among energy-importing countries (IEA, 2024). Net energy imports constitute 73.6% of the total energy supply as of 2022 (International Energy Agency (IEA), 2024), and 99% of the gas and 93% of the oil is imported (WB, 2022). As Figure 1 displays energy imports is a fundamental contributor to Türkiye's current account deficit, which has become a significant problem after 2003 when the energy imports contribution could not be offset by the surplus in services more specifically by tourism within services. The increasing energy need and dependency exposes the economy to instabilities in availability and price fluctuations and hence, Türkiye is constantly in an effort to secure energy and keep the energy bill low. However, this is an unsustainable effort, the heavy dependency on imported energy not only increases the need for external financing but also exacerbates the vulnerability of the economy and poses a significant obstacle to the growth of Türkiye's manufacturing sector (Erkök ve Kütük, 2023).

Figure 1: Impact of Energy Imports on the Current Account Balance (Million USD Dollars)



Source: Central Bank of the Republic of Türkiye (CBRT), 2024.
https://evds2.tcmb.gov.tr/index.php?/evds/serieMarket/collapse_36/5122/DataGroup/turkish/bie_odeayrsunum6/

In this regard, increasing domestic resources of energy with an agenda of investing in renewables is not only critical for green transformation but also is fundamental for easing the current account deficit and overcoming a major barrier to the development of the Turkish economy. A second, yet more pressing economic impetus is derived from the European Union's Carbon Border

Adjustment Mechanism (CBAM). CBAM is a revision in the EU's trade policy that aligns with the EU's ambition to be the first continent to achieve zero carbon emissions. EU represents the lion's share in Turkish foreign trade, hence Türkiye is expected to be one of the most affected countries by this regulation (UNCTAD, 2021b). Currently, CBAM is planned for specific sectors, however, it is expected that these regulations will eventually spread to other production areas. Therefore to mitigate any negative economic effects from this shift, Türkiye must proactively pursue its green transformation initiatives.

BOX.1.Green New Deal and the European Union Cross Border Adjustment Mechanism (CBAM): Implications from a Developing Country Perspective

On December 11, 2019, the European Union announced the European Green Deal (EGD), the target to become the first climate-neutral continent. This agenda is a major shift towards a new growth strategy that redefines the EU's policies around the central axis of climate change mitigation. The European Green Deal, often called the "Green New Deal," (GND) refers to The New Deal policies of Roosevelt in the 1930s to respond to the 1929 Great Depression. It aims to reduce carbon emissions by 55% as of 2030 (compared to 1990 levels) and achieve net-zero emissions by the year 2050.

Within the framework of The GND, the EU has also revised its trade policy to align with its climate goals. EU has been implementing the European Union Carbon Emission Trading System (EU ETS) since 2005 to regulate emissions of energy and carbon-intensive sectors. EU extended this regulation to its trading partners and announced the CBAM which implies a tax fee for imported products with carbon-intensive production. The intention of the CBAM is twofold: (i) to avoid the Unions' efforts from being weakened by trade with countries that have less ambitious emission mitigation policies; (ii) to set a barrier to the carbon leakage which happens when EU-based companies shift their more carbon-intensive production activities to countries with more relaxed regulations and the products from these operations are then imported back into the EU. In this regard, The Union is willing to limit the free-riding attempts of EU-based companies and other countries who do not undertake necessary measures via trade (EC, 2024 and UNCTAD, 2021b:7).

The CBAM is currently under the transitional-piloting phase to acquire data for the development of the final implementation phase. Initially, CBAM will cover six carbon-intensive sectors that are also highly susceptible to carbon leakage (cement, iron and steel, aluminum, fertilizers, electricity, and hydrogen) which constitutes more than 50% of the emissions in sectors under the Emissions Trading System (ETS). Between 2023-2026 importers will only be reporting greenhouse gas emissions (GHG) embedded in their imports (direct emissions that come about in the production process of the good and indirect emissions from the electricity used in the production); starting with the 2026 financial obligations will come into effect for the importers that cannot comply with the requirements (EC, 2024). In Türkiye, preparations aligned with this process are underway. The Public Oversight and Accounting Standards Authority has been authorized to establish the "Türkiye Sustainability Reporting Standards," which are in accordance with international standards for corporate sustainability reports in Türkiye (Official Gazette, June 4, 2022). During this process, to guide companies, and facilitate their access to green financing resources, and thus promote pollution-free production, practices such as awarding a Green Transformation Certificate to manufacturers who are advancing in this direction are being adopted (T.R. Ministry of Commerce,2023).

The sectors selected under the CBAM coincide with those of export interest to developing countries. In terms of exporters to the EU in these selected sectors, Türkiye ranks third after the Russian Federation and China (UNCTAD, 2021:9,10). The EU's share in exports to the world for these sectors is 41.5%, Table 1 details the breakdown of EU exports by product (T.R. Ministry of Commerce, 2023: 13). When compared to other competing exporters, the iron and steel sectors are particularly problematic due to their higher emissions intensity, while the aluminum sector performs slightly better in terms of emissions intensity (WB, 2022:57). The potential impact of the CBAM sectors in terms of exports can hurt production and employment in these sectors. Given low representation of women in these sectors, women are less likely to be primarily affected by the regulation, and the instant employment impact is more likely to be on male workers who predominantly constitute the workforce.

Table 1 Exports of Türkiye for the Products under CBAM, 2022

PRODUCTS	Exports to the EU (thousand USD)	Exports to the World (thousand USD)	Share of Exports to the EU (%)
İron and Steel*	8,110,929	22,070,677	36.7
Aluminum	3,999,941	6,447,932	62.0
Fertilizers	502,567	1,053,577	47.7
Cement	244,688	1,663,042	14.7
Electiricty	225,653	293,267	76.9
TOTAL	13,083,778	31,528,495	41.5

Source: T.R. Ministry of Commerce (2023)-Yeşil Mutabakat Çalışma Grubu, 2022 Activity Report: 13, based on Turkish Statistical Institute (TurkStat) data.

Simulations considering Türkiye's production structure project the costs of CBAM payments (please see Yeldan E., Acar, S. and Aşıcı, A.A. (2020), WB (2022) and Long et al. (2023) as example studies). A transition period adaptation plan includes establishing an Emissions Trading System (ETS) in Türkiye (T.R. Ministry of Commerce,2023: 16). Instead of paying taxes to the EU, Türkiye could retain this amount by setting up its own ETS system and use direct resources generated for green transformation investments. Establishing an effective ETS system would require setting pricing benchmarks to align carbon costs with the EU (Aşıcı, 2021:10). While developing countries creating their own ETS systems could result in potential CBAM revenue loss for the EU, it could yield more effective outcomes in terms of financing for green transformation where finance is needed the most.

Moreover, CBAM has been criticized for issues such as scope, double taxation, measurement problems, and carbon leakage when it is applied in a limited manner.[1] More importantly, the emissions reduction achieved by CBAM is expected to be minimal, and yet this policy could reduce trade between the EU and its developing country partners, consequently decreasing the income of these developing countries. According to UNCTAD (2021), the negative trade impact of CBAM will widen the income gap between countries and further strain the already limited resources available for green transformation in these countries. Instead of CBAM, incentive-based measures such as "Zero Tariffs on Plastic Substitutes" could foster green transformation while increasing export income, thereby creating more employment opportunities and supporting economic growth in countries where income inequality and unemployment are significant issues (Banga, Fortunato, and Wang, 2022:14).

The move towards a green economy aims to secure a more sustainable and resilient future, while also recognizing the long-term economic benefits of embracing green policies. The European Green Deal (EGD) is a comprehensive agenda built around the commitment to reduce greenhouse gas emissions, targeting climate neutrality. To achieve this central objective, it aims for the provision of clean, accessible, and reliable energy and achieving zero pollution. It also focuses on protecting ecosystems and biodiversity, while implementing the "farm to fork" strategy to cultivate a fair, healthy, and environmentally friendly food system. The EGD promotes sustainable and smart transportation solutions as well as efficient building practices in terms of energy and resource usage. Furthermore, it seeks to mobilize the industry towards a clean and circular economy. With an inclusive approach, EGD supports the most affected individuals and communities with a transition program, adhering to the “just transition” strategy. In this regard, it adopts a policy framework that is integrated with the United Nations Sustainable Development Goals (European Commission (EC), 2019). This transformative agenda requires financing and hence creation of the finance resources and dynamics is also an admissible part.

The CBAM calendar (See Box …on CBAM) is the main drive of the green transformation regulations; and Türkiye closely follows the EU framework in EGD. Upon the EU’s announcement of EGD in 2019, with the joint efforts of relevant Ministries and parties under the coordination of the Ministry of Trade, Türkiye developed its own Green Deal Action Plan (GDAP) in 2021. Türkiye ratified the Paris Agreement[4] in October 2021 and announced a net zero emissions target for 2053[5]. The GDAP, following Green Deal Working Group reports as well as other policy documents are reflecting the objective of adaptation of the EU perspective of a wholistic and balanced transformation. However, while Türkiye is developing comprehensive policy documents in alignment with the EU perspective, it is still at the initial stages of this transformative process. Türkiye is listed as the 69th in 76 countries, in the “climate abstainers” category of the Green Future Index 2023, which ranks economies on their progress and commitment toward building a low-carbon future. (MIT, 2023)

To progress from meticulously crafted policy documents to their effective implementation, a developmental state must engage in proactive governance, adopting policies and regulations aimed at structural transformation. This involves substantial public investment and financial support for the green industrial transition. The executing government must possess both the necessary resources and a resolute commitment to enforce regulations and support systems effectively. These efforts are crucial in altering the well-established fossil fuel interests and establishing a robust framework for green investments. Simultaneously, to achieve long-term balanced growth such a transformation should also target to reduce inequality and support the rural economy. Hence, the anticipated outcome of this green transformation is a comprehensive adaptation process, challenging to achieve given limited fiscal capacity and pre-existing developmental hurdles. These challenges reproduced with the implementation of similar policy frameworks are mostly rooted in the industrialization policies—or the absence thereof—aligned with the policy philosophy of the Washington Consensus (TDR, 2021: ix).

Türkiye, like many other developing countries, has been integrated into the global economic system relying on its export performance and the primary strategy to increase competitiveness has been wage repression. The re-distribution of income, exacerbated by diminishing public and

[4] The 2015 Paris Agreement, adopted by 196 Parties, is a global agreement aimed at combating climate change and its adverse impacts. The primary goal of the Paris Accord is twofold: firstly, to limit global warming to a maximum of 2 degrees Celsius above pre-industrial levels, and secondly, to achieve a "climate neutral" status by the year 2050.

[5] Each participating country to the Agreement sets its own targets and formulates its strategies for emissions reduction through Intended Nationally Determined Commitments (INDCs). These commitments are based on the respective capabilities of each country and after its submission to United Nations Framework Convention on Climate Change (UNFCCC) NDCs are subject to a review every five years.

social spending, has undermined domestic demand. Constraining domestic demand was not a concern due to the emphasis placed on foreign demand and the misplaced belief that the export sector would drive growth and prosperity across all societal segments. However, prevailing trends in the global trading system indicate that these expectations have been, and continue to be, unrealistic. Over the past five decades, developing countries have increased their trade participation, yet their share in global value-added has not proportionately risen, and their integration into the global trade system has not significantly advanced their development processes (Davies, et al. 2021: 9).

The export performance of Türkiye was neither sufficient to be a net exporter nor to generate a development and industrialization path. Türkiye is still dependent on foreign inputs and technology as well as energy, facing a structural current account deficit problem, and is in constant need of foreign exchange. The trade liberalization strategy's limited success in generating a development path independently, combined with the constrained role of the public sector that limits state intervention for transformative policies, has led to premature deindustrialization. Türkiye could not diversify its production structure to reach the next level of industrialization and has been stuck in middle income trap. The inability to maintain sufficient foreign demand in export sectors, coupled with weakened domestic demand, has stifled motivation for new investments. Moreover, financial liberalization and high interest rates aimed at attracting foreign capital, along with a series of financial crises, have created a much more fragile economic structure in terms of both investment and income distribution.

Recently, Türkiye has been grappling with high inflation, elevated exchange rates, high unemployment, and worsening income distribution. The proposed solution is once again centered on austerity measures, placing additional pressure on labor market flexibility and labor income share. The existing policy framework generates a challenging cycle that impedes progress toward a resilient future, as it hampers resource mobilization, exacerbates income disparities, and diminishes state capacities. Türkiye requires a new framework that balances the roles of the state, paid and unpaid sectors, and environmental considerations.
The next section examines the consequences of Türkiye’s industrialization strategies, particularly focusing on the labor market and gender inequality implications.

3. Türkiye’s Industrialisation Strategies and Gendered Implications

There exists a substantial body of literature examining the gendered outcomes of development strategies, particularly within the context of developing countries. This literature elucidates how women's disproportionate responsibilities in unpaid domestic labor, influenced by traditional gender roles, are reflected in the labor market (Boserup, 1970; Elson and Çağatay 2000; Elson, 1995). Empirical analyses of developing countries revealed how women’s labor has been a source of comparative advantage in exporting sectors (Seguino 2000a; Busse and Spielmann, 2006). Furthermore, gender-aware analyses of development strategies also question what participation in income-generating work signifies for women and how it contributes to alleviating the burden of unpaid domestic labor and addressing gender inequality.

The objective of this section is to present the intersection of Türkiye’s trade and industrial policies, gendered employment structure, high unemployment, and limited labor force participation of women. The historical overview of gendered implications of industrialization strategies clarifies

the structural bottlenecks in the current status of gender disparities in the Turkish labor market, hence providing insights on engendering the green transformation agenda.

3.1. Before Economic Liberalization

3.1.1.Policy Framework

In the post-World War II period, extending through the late 1970s, developing countries' focus was industrialization. From the inception of the Republic, Türkiye adhered to this aspiration, embracing the vision of forging an independent economy that was both industrially robust and agriculturally self-sufficient. The phases of economic developments in Türkiye before economic liberalization are typically categorized as follows: 1923-1930, the foundational years; 1930-1950, the state-controlled era; the 1950s, an era marked by attempts at liberalization; and 1960-1980, a period characterized by import substitution industrialization (ISI) under the planned economy framework (Boratav, 2003).

State-led industrialization objectives since the beginning of the 1920s achieved substantial momentum in the 1960s with economic planning and the ISI strategy. The plans entailed a significant transformation in the taxation system, land reform, a new customs policy, and protection of targeted industries for a defined period. These policies served to create an industrial base and the objective was to further deepen industrialization by diversification of manufactured goods for a long-term sustainable development path. Plans were based on a careful assessment of the consistency and feasibility of targets. However plans were not effectively followed due to short-sighted political and economic interests; short-term high growth rates and profits were preferred over longer-term development and industrialization targets (Keyder, 1990; Erder et al., 2003; Boratav, 2003). The private sector, prioritizing short-term high profits did not move beyond producing consumer goods for the domestic market, and continued to rely on foreign intermediate goods and technology for production. Furthermore, income generated was not directed to new investments as much as foreseen in the plans, and the overall investment levels remained lower than targeted levels (Kepenek and Yentürk, 2000). Consequently, Türkiye could not step up in the industrialization attempt as far as to become self-sufficient and continued to be dependent on foreign resources for both investment and production.

However, despite the limited implementation of the plans (1962-1976), during the ISI, Türkiye achieved high and sustained economic growth (6.8% on average) which was primarily driven by industrial growth vis a vis agriculture (Boratav, 2003). The industrialization performance of the 1960s and early 1970s began to be curtailed in the late 1970s by balance of payments difficulties. Sub-categorization of the period reveals that the industrial growth performance for 1960-1980 was as high as 10.2% per year during 1960-1973, and decreased to %8.3 for 1973-1976 to 2.1% between 1976-1979 (Keyder, 1990). The exports' income (primarily based on agricultural exports) was far from offsetting the import bill of import-dependent production and the widening gap led to a debt-led growth in the late 1970s. However, with the outbreak of the oil crisis, the need for borrowing increased, yet the era of easy access to loans came to an end, making it impossible to sustain external financing (Boratav, 2003).

3.1.2. Labor Market Implications of State-led Industrialization and Gendered Patterns

In the 1950s, Türkiye was predominantly an agricultural society, with both men and women participating in the workforce within an economy dominated by rural structures, and 85% of employment was in the agricultural sector. By 1955, 92% of men and 72% of women were part of

the workforce, and 95.6% of women and 63.5% of men were employed in agriculture. Unlike men, nearly all of women (91%) employed in agriculture worked as unpaid family workers (Makal, 2001:127). Alongside state-led industrialization, similar to many other developing countries, labor market indicators from 1950 to 1980 reflect the trends of urbanization in the Turkish economy. As part of the industrialization policy and accompanying urbanization, the share of agriculture in employment decreased, while the shares of the industrial and services sectors in total employment increased (Table 2).

Table 2 Labour Market Indicators: 1950-1988 Selected Years

Years	LFPR (%)	Unemp. Rate (%)	Emp. Rate (%)	Emp. in Agriculture (%)	Emp. in Industry (%)	Emp. in Services (%)	Government Employ. in Non-Agricultural Emp. (%)
1950	69.9	1.4	68.85	84.8	8.4	6.8	14.4
1960	72	3.1	69.83	74.8	11.5	13.7	10.6
1970	67.9	6.3	63.68	64.2	16.3	19.5	10
1980	63.3	8.1	58.24	54.2	20	25.8	18.4
1988	57.8	8.4	52.94	47.4	21.9	30.8	17.2

Source: Calculations based on Bulutay, 1995, pp.189&191.

With the transformation of the agricultural economy, both the labor force participation rate and the employment rates have decreased. The figures indicate that not all employed in the rural economy have been able to integrate into the urban labor market and there occurred a significant increase in unemployment. In 1955 women's labor force participation was as high as 72% (Tansel, 2000:118). As presented in Table 3, during the ISI, between 1960 and 1980, although there was also a decrease in men's participation in the labor force, the significant decline in women's participation was the main factor driving down the rates.

The literature on gender and development in developing countries provides ample evidence of the marginalization of women during the ISI period (Boserup, 1970, 1990; Pearson, 1992). In the early stages of import-substitution industrialization, which primarily targets basic consumer goods, women are not preferred for manufacturing jobs due to their relatively lower levels of skill; in the later stages, their exclusion persists because sectors producing durable goods have historically been dominated by male employment (Boserup, 1970).

During the ISI period in Türkiye, male labor was integrated into the workforce of the urban labor market, yet women remained largely excluded. While the share of agriculture in male employment decreased, the share of industry increased. However, women's employment in the industrial sector remained marginal and a relative increase in services sector employment is observed (Table 3).

In the industrial sector, particularly in industries focusing on import substitution production, nearly the total demand for labor was met by men. A contributing factor to this was the relative lack of education and skills among women, especially those migrating from rural to urban areas (Makal, 201:122). During this period, women's participation in the manufacturing industry was limited to a

mere 8.06%. The sectors where women's employment was relatively more sizeable were those involved in export-oriented production, such as tobacco, textiles, and the food industry (Makal, 2001:148). These sectors are labor-intensive and compete in exports through low wages and low prices. Women's wages in these sectors were even lower than that of men's; ranging from half to two-thirds of men's wages. Conversely, the majority of men in manufacturing were employed in protected, import-substituting heavy industries, benefiting from policies of high prices and consequently higher wages. Within the ISI strategy, wages were seen as a source of domestic demand, and thus, were kept high to maintain purchasing power. The high wages earned by men employed in import-substituting industries allowed households to sustain themselves on a single income, thereby maintaining the traditional division of labor without being driven to change by economic necessity. Family wages in ISI sectors contributed to preserve the patriarchal family structure. Women who migrated from rural to urban, fell out of the labor force, and rapid urbanization led to a mass "housewifization" of women (Özbay, 1990; Toksöz, 2011:224).

Table 3 Women's and Men's Labor Force Participation and Employment by Sector 1960-1980

		Labor Force Participation	Employment by Sector			
			Agriculture	Industry	Services	Other
1960	Men	93.6	61.2	14.5	16	8.3
	Women	65.4	95	2.7	1.9	0.4
1970	Men	79.5	49.4	17.8	31.3	1.3
	Women	50.3	88.7	5.1	5.7	0.3
1980	Men	79.8	40	21.9	32.1	0.5
	Women	45.8	84.6	4.6	7.3	0.8

Source: Labor Force Participation Statistics: Census of Population, TurkStat. Tansel (2000):118.
Employment Statistics: Sağlık, 2021: 268 based on TurkStat

During the Import Substitution Industrialization (ISI) period, alongside the women who migrated from rural areas to urban centers and mostly transitioned into housewives, there was also a minority of educated women (predominantly university graduates) employed in professional occupations, mainly within the public sector. As part of the Republic's modernization project, which recognized women's political and economic rights, daughters of urban, upper-income families received education and pursued careers in specialized professions (Toksöz, 2011:229). In this context, Türkiye made notable progress even when compared to European countries of the same period, with a significant number of women engaging in professions that required extensive and high-level education and specialization, such as academia, law, and medicine. Nonetheless, a discernible trend in occupational preferences among educated women within the broader services sector was evident. Rather than technical areas, women gravitated towards fields such as banking and teaching, which are typically associated with lower wages (Makal, 2001:141).

Public sector employment had a significant share in the labor market. This can be attributed to two main factors. Firstly, the large and capital-intensive state-owned enterprises were crucial to Türkiye's economic development. Secondly, public employment acted as a form of social unemployment insurance. In terms of women's employment, public sector jobs were of critical importance. As public sector employment increased, so did the proportion of women within it,

rising from 16.2% in 1963 to 25.3% in 1977 (Sağlık, 1979:270). Women in the public sector predominantly worked in professions such as teaching, nursing, banking, and clerical positions. Although the gender pay gap in the public sector was narrower than in the private sector, it remained noticeable. In sectors with high female employment, such as food and tobacco, women could earn about two-thirds of what men earned (Makal, 2001:139, 141 and 148).

The ISI period was marked by significant increases in wages and improvements in income distribution, driven by welfare state policies and the impact of unionization. During this time, social security and retirement rights were enhanced, and the share of social expenditures in the budget increased (Keyder, 1990: 318). Changes in industrial relations and more libertarian laws allowed for greater worker organization. However, unionization and worker organization primarily involved male workers. Women were largely excluded from this unionization process, which significantly contributed to the gender wage gap (Makal, 2001:151). Additionally, the exclusion of women from collective action and organizational efforts hindered their ability to achieve other gains that could have facilitated their integration into the labor market.

3.2. Liberalisation and Export Oriented Industrialization

3.2.1.Policy Framework

The crisis that emerged in the late 1970s evolved into a debt crisis for developing countries, and the prescribed solution was their integration into the world economy through the implementation of liberalization policies. This integration of developing countries into the new order was facilitated by a policy framework known as the Washington Consensus, which was implemented through Structural Adjustment Programs (SAPs) under the guidance of the World Bank (WB) and the International Monetary Fund (IMF) in exchange for loans. In Türkiye, until the program was accepted, the country was unable to reschedule its debt payments or receive new international resources.

The short-term goal of the SAP initiated in Türkiye was to stabilize the economy. The long-term objectives were shaped around liberalization and export orientation in industrialization. The foundational elements of the export orientation strategy included liberalization of trade (significant reductions in import tariffs) and finance, exchange rate policy, and wage suppression to reduce the production costs as well as to increase the competitiveness of the tradables, and reduction in the size of the public sector. Additionally, export incentive mechanisms, in conjunction with exchange rate policy, played a crucial role in reallocating resources to tradable sectors. These incentives encompassed export tax rebates, below-market export credits, allocations of foreign exchange, preferential interest rates, and corporate tax reductions. Additionally, significant tax rebates were provided to major enterprises that exceeded specific export thresholds, granting them the status of Foreign Trade Companies (FTCs) (Milanovic, 1986).

During the period when ISI policies were implemented, Türkiye failed to progress to the second phase of industrialization. Thus, it initiated its transition to Export-Oriented Industrialization (EOI) as an exporter of basic consumer goods and largely maintained this status. According to the composition of exported goods, Türkiye fits the profile of a country that produces low-cost, labor-intensive exports within the international division of labor, despite its mild efforts to ascend the production value chain towards intermediate and investment goods (Köse and Öncü, 2000). Hence, the production of its exported goods is heavily dependent on the imported intermediate goods. The initial years of the reforms were marked by a significant increase in exports, which grew by an average of 10%. In the early 1980s, Türkiye achieved an average economic growth rate of 4.9%. However, its reliance on imported inputs increased the rate of imports from 11.2%

(1977-1980) to 15.9% of GNP (1983-188), leading to a rise in the current account deficit and escalating debt (Boratav and Yeldan, 2006).

The restructuring of the economy has not led to an investment dynamic that could lead to sustained growth, industrialization, and employment generation. The initial success was during the first phase of economic liberalization and was achieved by the exploitation of the existing excess capacities rather than an expansion of the productive capacities. The decline in public investments and employment generated by the State Economic Enterprises (SEEs) (Türel et al.1993:224), in the economy could not be compensated by the private sector investments (Table 4). The share of manufacturing sector investments even during the export boom in the early 1980s was on average 10% less than the ISI period average (Table 4).

Table 4 Manufacturing Sector Capacity Utilization Rate and Investment Share (%) 1980-2000

	weighted capacity utilization rates			share in gross fixed investment		
years	public	private	total	public	private	total
1980	59.6	54.3	55.2	26.3	30	31.2
1990	74.1	75.7	75.2	4.5	26.2	19
2000	79.8	74.4	75.9	2.9	26.5	19

Source: State Planning Organization (SPO) Economic and Social Indicators, http://www.dpt.gov.tr

Furthermore, despite the great emphasis on FDI as a source of capital and technology transfer under the EOI strategy. The FDI performance between 1980 and 1989 was not very stable and has remained low. After 1988, with the completion of financial liberalization in 1989, Türkiye tried to attract foreign capital with a high-interest rate policy, and additional incentive regulations. However, FDIs continued to remain limited and shifted from manufacturing to services, flowing to mostly banking and tourism sectors. The policies implemented failed to attract the foreign direct investment (FDI) needed to bridge the investment gap, but attracted short-term capital investments motivated by high interest returns. As in many other countries, this led to speculative growth and a vulnerable structure prone to crises in Türkiye.

3.2.2. Labor Market Implications of Liberalisation and Gendered Patterns

Labor market adjustment to the new trade and industrialization regime lies at the heart of the export orientation process in Türkiye. To motivate production for exports and to control the inflation rate by contracting the domestic demand, the wage suppression strategy was given significant weight in the new policy framework. The implementation of the new strategy followed the 1980 military coup after which unions and unionization lost significant legal ground and resources.[6]

In addition to policies directly addressing labor market, other stabilization and adjustment policies such as cutbacks in agriculture subsidies and social security as well as shrinking public employment had significant implications for the labor market. Reductions in agriculture further accelerated the urbanization trend, and the decline in public employment not only reduced

[6] Labor-capital relations, which were suspended due to the coup, underwent significant changes with the implementation of the new Labor Law of 1983. The Unions Law (Law No. 2821), passed in 1983, along with the Collective Bargaining Law (Law No. 2822) and the Strike and Lockout Law, were instrumental in establishing an anti-union system and shifting the balance of power in labor-capital relations.

employment opportunities but also decreased the availability of decent jobs, leading to increased insecurity in the labor market. Both policies contributed to an increase in surplus labor within the urban economy. The Export-Oriented Industrialization (EOI) strategy is often promoted as a way to generate employment, especially in developing countries, based on the assumption that exports will primarily be labor-intensive. However, in Türkiye, the export-oriented approach did not adequately absorb the surplus labor in the urban economy.

The investment and capacity utilization rates, discussed earlier, indicate that rather than spurring new investments, the availability of low-cost labor only encouraged investors to make use of existing excess capacities during the economic boom from 1980 to 1989. Furthermore following financial liberalization in 1989, there was a notable shift of domestic savings from fixed capital to speculative financial instruments. While production and productivity increased in the first decade of the EOI, workers' income share remained stagnant. High unemployment rates and the growing demand from employers for more flexible types of employment contributed to the rise of informal employment in the urban economy, further increasing labor market insecurity.

The impact of EOI implemented in the developing world on labor patterns, the shift towards more labor-intensive production and also more female-intensive workforce, often referred to as the feminization of labor is well documented in the literature (to name a few, Standing, 1989; Cagatay and Berik, 1991; Seguino, 2000). Gender-based wage disparities have positioned women as a preferred workforce to achieve price competitiveness. However, unlike Asian or Latin American feminization of export-oriented production, due to the low employment creation performance of the EOI strategy implemented, Türkiye presents a rather peculiar case in terms of feminization trend.

The empirical research conducted across different phases of the EOI strategy reveals that women predominantly occupy low-skilled, poorly-paid positions, primarily within manufacturing sectors that require minimal capital investment and in small-scale facilities focused on exports (Cagatay and Berik, 1990; Onaran and Baslevent, 2004; Kasnakoglu and Dikbayir, 2002). Gender segregation has remained unchanged with the shift in industrialization strategies and continues to maintain the same structure today. Women continued to be employed in the textiles and food industry which constituted 60% of women's employment in the manufacturing sector (İzdeş, 2010). The share of industrial employment in women's employment was 4.6% in 1980 and has increased to 17% by 2007 (Toksöz,2011:229). Although there is consensus regarding the role of export orientation as one of the determinants of female employment in those sectors, studies are rather careful in connecting this segregation with the "feminization of employment" phenomenon as the extent of this impact in terms of generating difference in women's employment is limited.

Table 5 presents the urban labor market trends, and clearly shows that the capacity of urban employment has not been strong enough to offset the ongoing negative trend in total employment and labor participation due to the rural-urban shift and decreasing public employment. In the urban sector female employment and labor force participation are in a relative increase vis a vis men, yet exporting sectors can not become a significant drive in inclusion of women in the labor market and women's total labor force participation continues to decrease after the 1980s. The limited increase in the urban labor force participation and employment of women is due to deteriorating labor market conditions, decreasing wages, and loss of income of the households. As a household survival strategy, women enter the labor market as added workers and take on jobs that are far less promising in terms of pay and employment security.

The negative trend in labor market trends has been further exacerbated by the developments following financial liberalization. After financial liberalization, the optimistic expectations of financial deepening and increasing investments did not materialize and financial liberalization resulted in short-term 'hot money' flows, limited the role of the Central Bank, and led to increased financial instability (Elhan, 1997). After financial liberalization, Türkiye experienced a series of crises, each imposing significant costs on the workforce, particularly on women who are already at a disadvantage. Economic fluctuations led to a more pronounced decrease in female employment during contraction periods, and a slower recovery compared to the overall employment rate. This exacerbated the already low integration of women into the labor market (İzdeş, 2012). Despite economic growth in the years following the 2001 crisis, high unemployment persisted, and a phenomenon often referred to as "jobless growth" became a structural characteristic of the economy. The structural unemployment problem is more accurately captured in the broadly defined unemployment trends, which include individuals who are willing and ready to work but have ceased searching due to dim job prospects. The widening disparity between the standard unemployment rates and these broader unemployment indicators post-2002 highlights the discouraging trends in the labor market (See table 5).

In sum, the failure of the export-oriented strategy to generate sustained growth with consequently weak labour demand, and further exacerbated employment insecurity due to jobless growth coupled with frequent crises limited women's integration of women in the labor market and left the male breadwinner norms unchallenged. The limited participation of women could not generate enough effort to advance work-life policies and regulations (İlkkaracan, 2010). Furthermore, during the process of opening up to the global market, there was a lack of policy vision for integrating women into the new industrialization strategy (Toksöz, 2011:225). Instead, labor market and social policies that perpetuate traditional roles have persisted, hindering the industrialization strategy from being transformative in terms of gender equality.

Table 5 GNP Growth and Labor Market Indicators 1988-2005 (Urban) (Total and Women)

Years	GNP Growth (1987 prices)	Urban LFP Total (%)	Urban Unemp. Total (%)	Urban LFP Women (%)	Urban LFP Women (%)	Urban Unemp. Women (%)	Urban Emp. Women (%)	Urban Broad Unemp. Women (%)
1988	1,5	48,30	13,10	42,00	17,7	28,30	12,70	38,28
1989	1,6	47,60	13,10	41,30	17,8	26,20	13,10	29,78
1990	9,4	47,20	12,00	41,50	17	23,40	13,10	26,41
1991	0,3	46,30	12,70	40,40	15,6	22,60	12,10	26,65
1992	6,4	46,80	12,60	40,90	17	20,90	13,40	24,68
1993	8,1	45,20	12,60	39,50	15,7	22,80	12,10	26,19
1994	-6,1	46,20	12,40	40,50	17,4	20,40	13,80	24,72
1995	8,0	45,20	10,80	40,30	16,8	18,30	13,70	21,51
1996	7,1	44,50	9,90	40,10	16	15,40	13,50	19,24
1997	8,3	44,80	10,00	40,30	16,9	17,50	13,90	21,78
1998	3,9	44,70	10,50	40,00	16,8	16,50	14,00	21,72
1999	-6,1	44,90	11,40	39,80	17,8	17,40	14,70	23,63
2000	6,3	44,10	8,80	40,20	17,2	13,00	15,00	17,69
2001	-9,5	44,00	11,60	38,90	17,4	16,60	14,50	19,36
2002	7,9	44,40	14,20	38,10	19,1	18,70	15,50	21,18
2003	5,9	43,80	13,80	37,70	18,5	18,30	15,10	20,30
2004	9,9	44,50	13,60	38,40	18,3	17,90	15,00	27,41
2005	7,6	45,50	12,70	39,70	19,3	17,00	16,00	30,09

Source: İzdeş, 2010

*Broad unemployment rates include unemployed actively searching for a job and also discouraged workers who are ready to work if a job is available to them but have stopped actively searching for a job due to the discouragement they have developed to find a job due to low employment prospects.

4. Green transition and labor market implications: Gendered threats or potentials

4.1. Green Jobs

With the green transformation in production and daily life, it is inevitable that some new jobs will be created, some jobs will be replaced, some will disappear, and others will be redefined. For example, new employment opportunities will arise with the integration of pollution control devices into production systems. Jobs in the fossil fuel sector will be replaced by those in the renewable

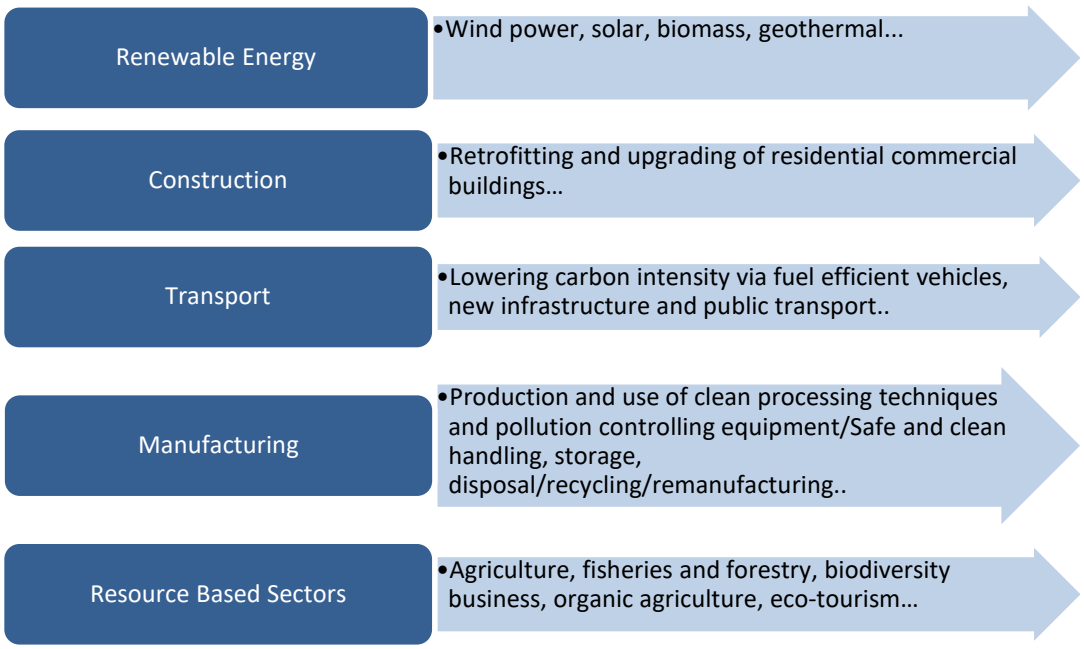
energy sector due to the transition in energy. The cessation of plastic packaging production will lead to job losses in that sector, and many job descriptions will evolve.

The employment opportunities created through this process are referred to as green jobs. Green jobs are broadly defined as those that reduce energy and raw material consumption, limit greenhouse gas emissions, minimize waste and pollution, and restore and protect ecosystems and biodiversity (UNEP et al., 2008:3). In this context, green jobs encompass various shades of green employment, reflecting the outcomes of the transformation process. The green transformation results in new jobs directly within green industries, indirectly in all industries supplying goods and services to green industries, and induced jobs created in the broader economy through income generated by green policies.

Simulations analyzing the employment impacts highlight the transformation in key sectors illustrated in Figure 2. In addition to the manual green jobs in the primary sector (the resource-based sector, agriculture, fisheries, and forestry) and the secondary sector (manufacturing and construction) jobs, the transformation is also expected to generate a range of tertiary jobs such as engineering services, financial and business services, eco-tourism and administrative services (Stevens, 2009:7).

Green jobs, as a concept defining a new employment process, are seen as an opportunity to promote more equitable employment relationships and the spread of decent employment as they do not carry the baggage of existing industrial relations. The characteristics of new job opportunities and who will benefit from them will determine the outcomes of the process in terms of inclusivity and equality.

Figure 2 Green Jobs-Focal Sectors



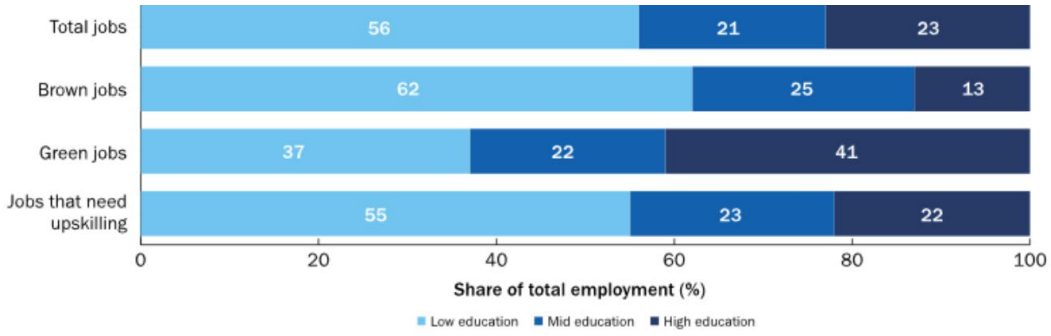
Source: Stevens (2009):5

Theoretically, all green jobs created in the primary, secondary, or tertiary sectors can also be women's jobs. However, the current global labor market is gender-segregated, with primary and secondary jobs, especially those involving heavy manual labor are traditionally dominated by men. On the other hand, new technologies and increasing automation in these sectors are reducing the need for physical strength. Additionally, the greening of these sectors will create various administrative and service roles, which can serve as relatively easier entry positions for women into the sector. Consequently, sectors currently dominated by male labor can offer more gender-balanced employment opportunities as they transition to green sectors. Gender segregation is also a concern in the tertiary sector, where women are underrepresented in engineering services, financial and business services, and eco-tourism. Most of the sectors expected to undergo significant changes during the green transformation carry the dynamics to remain male-dominant unless their gender-segregated structures are addressed (Stevens, 2009). The next section explores the potential green transformation carries for the Turkish labor market in terms of employment creation and an egalitarian transformation from a gender lens.

4.2. Employment Implications and Gender Equality of Green Transformation in Türkiye

The brighter aspect of the green transition is the creation of new jobs, especially in sectors leading the decarbonization process, like renewable energy. As Türkiye moves away from traditional, pollution-heavy industries, such as those dependent on coal and plastic, the economy will naturally evolve, creating demand for new skills and job roles. On the other hand, the flip side is the decline in labor demand in industries that are heavily reliant on fossil fuels and non-renewable resources. It's crucial to manage this transition carefully to minimize negative impacts on those employed in these industries. As the job market changes, social policies need to adapt to support workers during this transition, ensuring that they are retrained, and reskilled and that their social safety nets are robust enough to handle these changes. Figure 3 provides insights in terms of the extent of the need for upskilling in Türkiye, it presents the current distribution of jobs in terms of “green jobs”, “brown jobs” and “jobs that need upskilling” by the education level of workers. Unfortunately, upgrading the skills of the workforce is likely to become a major challenge in Türkiye’s transition. Compared to the countries with similar development levels in Europe and Central Asia, Türkiye has a lower proportion of green jobs and a higher proportion of brown jobs, with a significant need for upskilling, especially since 62% of brown job workers and 55% of jobs requiring upskilling are currently held by individuals, mostly men, with no more than lower secondary education (WB, 2022: 68).

Figure 3 Distribution of Worker Education Levels-Total Jobs, Brown Jobs, Green Jobs.



Source: WB, 2022:68

Understanding what the overall impact of the green transformation will be on employment is complex, yet this calculation is essential for planning and implementing effective transition strategies. This section aims to understand the implications of green transformation in the labor market by reflecting upon pre-existing labor market challenges and gender disparities in the labor market; and by assessing the review of simulations on the Turkish labor market and gendered potentials and risks ahead.

Pre-existing challenges in the Turkish labor market requires additional concern to achieve a just and equitable transformation. Low employment prospects of the labor market are reflected in the labor force participation and unemployment rates. Nearly half of the population is out of the labor force (46.9%) and one fifth of the population who are willing to work remain jobless (21.4 %) (See Table 6).[7]

Furthermore, the Turkish labor market has long been characterized by structural gender inequalities, which persist due to the low employment creation of the economy, the phenomenon of jobless growth, and the relatively higher vulnerability of women's labor to recurrent economic crises (See section 3 for detailed discussion). The industrialization strategies pursued have not succeeded in effectively integrating women into the workforce. Weak demand for women's labor and the underdeveloped care infrastructure have contributed to a path dependency, further entrenching gender inequalities in the labor market (İlkkaracan, 2010: 24, 25).

Gender inequality in employment is so substantive that, it creates a gap between Türkiye and other countries with comparable development rankings. Despite being among the countries with very high Human Development Index (HDI) scores as of 2019, Türkiye remains one of the countries with the largest HDI gender disparity. Significant progress has been made in women's access to education since the 2000s, yet this has not translated into income equality due to employment disparity (Kızılırmak, Memiş, and Toksöz, 2022). In countries with high and very high HDI, more than half of women participate in the labor force, whereas in Türkiye, women's labor force participation remains at 35.1%, which is significantly lower than the world average (47.3%), and the averages of G20 and EU27 countries (47.5% and 51.8% respectively, ILOSTAT). Despite a very low participation rate, women who participate are more likely to remain unemployed compared to men (13.4% vs. 8.9%), and the composite measure of labor underutilization reflects the discouraging employment prospects for women (28.4%). Hence unless tackled with a comprehensive egalitarian policy framework the pre-existing trends are not promising in terms of women becoming beneficiaries and active participants in green transformation.

[7] The official labor market indicators should be read with the caution that Türkiye hosts world's largest refugee population and this greatly contributes to the informal employment relations which can not be fully captured.

Table 6 Labour Market Indicators by Gender (15+ population) (2022)

		Total	Women	Men
Labor Force Participation Rate(%)		53.1	35.1	71.4
Unemployment Rate (%)/ Composite measure of Labor Underutilization		10.4/21.4	13.4/28.4	8.9/17.3
Employment Rate (%)		47.5	30.4	65
Vulnerable Employment (%)			27.5	23.8
Informal Employment (%) Total	Total (%)	26.8	33.8	23.4
	Agriculture (%)	80.0	90.1	72.6
	Non-agriculture (%)	16.8	19.2	15.7
Part-Time Employment Rate* (%)				
Employment rate of persons aged 25-49 with a child under age 3 living in the household (%) *		58.9	26.1	89.1
Employment rate of persons aged 25-49 with no children living in the household(%) *		65.9	52.3	74.9
Population not in the Labor Force (Thousand)		30,345	21,200	9,144
Reasons of not being in labour force				
Discouraged workers & available to work but not seeking work (%)		9	8	12
Household chores (%)		33	47	0
Education (%)		16	12	24
Retired(%)		17	6	41

Source: *TURKSTAT, Women in Statistics (2021)

Green Policy Simulations on Türkiye presented in Table 7 are a selection of relatively more recent studies with labor market implications included. They are based on different assumptions regarding the possible green transformation policies and, hence have varying conclusions regarding labor market related implications. Bauzaher, Şahin, and Yeldan (2015) investigate the potential impacts of the imposition of environmental taxes in the first simulation and further elaborate the simulations by investing in green transformation with environmental tax income. The simulation results show that not only taxing but also investing in green information results in an additional increase in GDP growth (2.4%) and an additional employment of 3.5% compared to the BAU, alongside decreasing emissions. Acar, Voyvoda, and Yeldan (2018) similarly simulate the impact of carbon tax but as a part of a policy mix that entails energy efficiency policies, elimination of coal subsidies renewable energy funds. The study distinguishes regions based on income levels, and forecasts that in lower-income regions both the positive growth and the employment impacts are much more significant. The most recently published simulation (Acar et al., 2023) provides a comprehensive assessment of the social and economic impacts of a transformation that requires the double of the BAU (current trend) level of the power investment and carbon tax (the study also takes into account the increase in electricity demand in BAU scenario). Findings show that transformation has multidimensional impacts in terms of climate change, better human health, energy security, trade balance, industrial development, and a net increase in jobs.

The Country Development Report by the World Bank (2022), takes into account the fastly growing energy demand and conducts a whole economy approach to identify a resilient net zero pathway (RNZP) to achieve the net zero target by 2053. The report underlines potential challenges and strategies sector by sector and forecasts the investment required to achieve the target. The labor market implications of restructuring and the reallocation of labor across sectors are assessed with the concern on to what extent “Türkiye is equipped to facilitate green jobs and skills in the context

of significant poverty, a large population of refugees and low labor participation of women and youth" (WB, 2022:67). The report does not provide detailed gendered labor market conclusions yet addresses the gender differences in terms of share of brown jobs and jobs that need upskilling and the greater need for male workers retraining. On the other hand, the report emphasizes that advancing the green transition without addressing women's lower participation in sectors needing transformation, such as extractive industries, could further exclude women and widen the gender pay gap (WB, 2022:65)

The UNDP and ILO (2022) simulation provides more detailed assessment results by gender, skill level, and formality status. The alternative policies compared are investing in coal (BAU scenario) and investing in renewables which is less costly, leaving resources also for investing in energy security measures such as grid stability and energy efficiency of buildings (green development scenario). The results show that green development alternative have a higher impact in the long term compared to BAU, it not only decreases carbon emissions by 8% but also generates 300 thousand extra jobs. (p.8 and 28). Most of the jobs lost, as expected, are in the fossil fuel-based electricity industry and mining and quarrying. In the short run during the investment phase, the demand for highly skilled labor is lower compared to the implementation phase, in the long run, the trained labor is expected to support the transition to a high-income economy.
Female employment in high-skill and professional jobs (formal and informally employed) is expected to face losses in the short term yet this loss is recovered in the longer term. However, the increase expected to occur in high-skilled and professional labor demand for male labor is significantly higher due to the scant labor demand for female labor in skilled jobs. The simulation clearly shows that if the labor demand preferences of employers and the gender segregation in the labor market are not altered male employment is expected to increase significantly more in all categories (by skill level, formality, and short and long run) compared to women and the most significant difference will be in medium-skilled jobs where men constitute the majority of the manufacturing industry (UNDP and ILO, 2022).

Table 7 Selected Green Policy Simulations on Türkiye

Author and Year	Title	Method	Research Question	Green Policy Simulation Results Compared to BAU Scenario				
				Economic Growth	Emissions	Employment	Employment by gender	Other Results
UNDP and ILO, 2022	Social and Employment Impacts of Climate Change and Green Economy Policies in Türkiye Application of the Green Jobs Assessment Model for Türkiye	Macroeconomic structural simulation model-Green development scenario compared to a BAU	Forecasting the increasing energy demand until 2030, and difference in implications: two simulations of the same amount of investment in (ı) new coal power plants, (ıı) renewable energy (wind and solar) and with remaining resources investing in energy efficiency	additional 10-45 billion TRY (in 2019 constant prices) in annual GDP	Reduced environmental risks and GHG emissions. Decrease of 60,000 Mt CO2-eq, that is, 8% lower than in the reference scenario.	-Over 300,000 extra jobs. -In the SR- lower skilled and informal workers have higher emp. Opportunities -In the LR: professional, medium, and high-skilled worker demand increases	Given current segregation : In the SR and the LR more jobs for men vis a vis women. Yet in the LR number of new jobs for women is higher compared to the SR.	By 2030, in the green scenario, outcomes are positive in terms of trade balance.
Acar, S. et al. (2023).	Transforming Türkiye's power system: An assessment of economic, social, and external impacts of an energy	The study analyses BAU versus the Transformation scenarios. By soft linking a power system model to CGE model anticipates outcomes of the	BAU versus Transformation case social implications by 2030? Transformation: 55 % of energy S will come from renewables and carbon tax (decreases demand by 10%)	Net modest increase in GDP	Ending the power sector's CO 2 emissions growth. GHG emissions 9% lower compared to BAU. The emission intensity of electricity	Net employment gains, 43.382 jobs by 2030.		improvement in –trade balance; energy trade balance; wage income; human health and Climate-related

	transition by 2030.	transformation case.			generation is improved.			externalities ; industrial transformation
Acar, Voyvoda and Yeldan (2018)	Macroeconomics of Climate Change in a Dualistic Economy: A Regional General Equilibrium Analysis.	CGE-Emphasis on regional diversification, fragmented labor markets-economy is not treated as a unified unit	Green Development Policy Package entails: -elimination of coal subsidies -carbon tax -renewable energy fund -energy efficiency pol. By 2040, compared to BAU scenario	Economic Growth: -GDP catches BAU by 2025 and is greater by 7.2% by 2040.	-CO2 emission decrease by 19% and GHG emission by 13.1% In electric production: -renewable energy share from 4% to 55% -Share of petroleum from 44% to 28%, and coal 28% to 10%.	-Formal employment in low-income regions is expected to increase by 8.2%, and 4.9% in high-income regions -In total employment increase is expected to be 5.4% -The total in unemployment in high-income regions is 3.3%; and 4.7% in low-income regions, resulting with a 3.6% decrease in total		-Greater value added in low-income regions -Greater employment impact in low-income regions -reduction in foreign debt and deficit.

Author and Year	**Title**	**Method**	**Research Question**	**Green Policy Simulation Results Compared to BAU Scenario**				
				Economic Growth	Emissions	Employment	Employment by gender	Other Results
Bouzaher, Şahin & Yeldan (2015)	How to Go Green: A General Equilibrium Investigation of Environmen	-appropriate policy? And the policy instruments to maximize greening at least cost	Sc. 1: Environmental taxes (for CO_2, PM10 and waste) for the urban industry and hh	GDP growth annual in BAU is 5%, 4.4% in Sc1;	- Pollution intensity decreases in both scenarios; 30% decrease	3.5% additional employment compared to BAU by 2030.		

	tal Policies for Sustained Growth with an Application to Türkiye's Economy.	-	Sc 2: Sc1+ use of tax income in investing in green innovation and generation of green jobs	increase s by 2.4% in Sc. 2;	in PM10, 25% in CO_2			
World Bank Group 2022	Türkiye Country Climate and Developme nt Report.	Whole economy approach targeting Resilient and Net Zero Pathway (RNZP) by 2053	BAU versus RNZP which combines adaptation and resilience actions, mainstreaming in macro fiscal policies. Counting in the doubling of the energy demand.	Growth: In SR (2022 to 2030) +15 billion $ gain In LR (2030 to 2040) +146 billion $ gain		230 thousand additional jobs 2030; positive employment difference compared to the BAU is expected to be erased by the slowdown by 2035		

Even though simulation studies do not all provide gendered results the sectoral expectations and gender segregation in sectors can provide valuable insights. Simulations Summary Table below (Table 8) presents the commonalities in terms of employment implications projections of the simulations on green transformation policies (presented in Table 7) as well as the highly gender-segregated employment structure across economic activities. Sectors in red are the sectors that are expected to face net employment loss and the sectors in green are the ones with net employment gains. In this regard, different shades of green (from darker to lighter) reflect the difference across sectors with higher potential for green jobs to relatively lower ones.

Table 8 Simulations Summary Table- Shades of Green Employment in Türkiye and Gender Segregation by Economic Activity, 2022.

Sector	Economic Activity (NACE Rev.2)	Total	Total (%)	Men (%)	Women (%)	Women Employment Share (%)
Agriculture	Agriculture, forestry and fishing	4 866	15.8%	13.6%	20.6%	42%
Industry	Total	6 663	21.7%	23.9%	17.1%	25.4%
	Mining and quarrying	157	0.5%	0.7%	0.1%	6.4%
	Manufacturing	6 158	20.0%	21.6%	16.6%	26.8%
	Electricity, gas, steam, water supply, sewerage etc.	348	1.1%	1.5%	0.3%	9.5%
Construction	Construction	1 846	6.0%	8.4%	0.9%	4.9%
Services	Total	17 378	56.5%	54.1%	61.5%	35.1%
	Wholesale and retail trade	4 363	14.2%	15.4%	11.6%	26.5%
	Transportation and storage	1 493	4.9%	6.4%	1.6%	10.7%
	Accommodation and food service activities	1 699	5.5%	5.7%	5.1%	29.8%
	Information and communication	282	0.9%	1.0%	0.7%	23.4%
	Financial and insurance activities	315	1.0%	0.9%	1.4%	43.8%
	Real estate activities	329	1.1%	1.3%	0.7%	20.7%
	Professional, scientific and technical activities	939	3.1%	2.6%	4.0%	42.3%
	Administrative and support service activities	1 103	3.6%	3.2%	4.4%	39.8%
	Public administration and defence	2 022	6.6%	7.8%	4.1%	20.2%
	Education	1 893	6.2%	3.8%	11.1%	58.5%
	Human health and social work activities	1 836	6.0%	2.6%	12.9%	70.0%
	Arts, entertainment and recreation	153	0.5%	0.5%	0.5%	29.4%
	Other social, community and personal service activities	951	3.1%	3.0%	3.3%	34.8%

Source: Calculated based on TURKSTAT, Labour Force Statistics, (2022)

The coloring of economic activities is based on review of simulations on Türkiye presented in Table 7.
Red: Economic Activities predicted to face net job losses,
Green: Economic activities predicted to face net job gains

In accordance with the global simulations, “energy”, “agriculture, forestry and fishing” and “construction” are expected to play a key role in green transformation. In addition to these, services sector jobs and highly qualified professional, scientific, and technological activities are expected to offer new green jobs. The green transition process is also expected to generate care sector jobs (education, human health, and social work activities) which is a critical sector for increasing employment opportunities for women as well as its potential to free women from care responsibilities and increase women’s economic participation.

BOX 2. “CARE” A Key Sector to Invest in for Green and Gender Equitable Transformation

- ***Invest in Care as a Green Sector, and furthermore for a broader understanding of sustainability.***

Simulations on Türkiye's green transformation indicate that the care sector is likely to experience increased employment capacity as part of this shift (see Table 8). The care sector, which encompasses education, health, and care services, is one of the least polluting industries (see Figure 4). Therefore, investing in this labor-intensive sector can significantly contribute to green development by enhancing job opportunities. Moreover, sustainability should not be reduced to environmental sustainability. Investing in care means investing in social infrastructure and social sustainability.

- ***There exists a disparity between growing care demand care supply***

Despite the growing need for childcare and elderly care services, the lack of services especially affordable services is a growing problem leading to a care crisis in Türkiye. According to the ILO targets, enrollment rates should be 50% for children aged 0-3 years and 100% for children aged 3-5 years. However, Türkiye's enrollment rates are considerably lower: 0.3% for ages 0-3, 10.7% for age 3, 39.5% for age 4, and 69% for age 5. To meet international standards, Türkiye needs to provide early childcare and education services to an additional 5.8 million children and address a shortage of 303,000 personnel in health and long-term care services (Gültekin-Karakaş et al., 2021).

- ***Investing in care creates new jobs for women.***

The care sector is predominantly occupied by women. Women constitute 58.5% of the workforce in education and 70% in human health and social work activities (see Table 8). According to calculations addressing the care gap, there is potential

to create 1.74 million new jobs in the education and health sectors and an additional 1.1 million jobs in related supporting sectors. Based on the current gender distribution, it is projected that women could fill 63% of these new positions (Gültekin-Karakaş et al., 2021).

For equitable transition overcome the greatest barrier to women's economic participation in Türkiye.

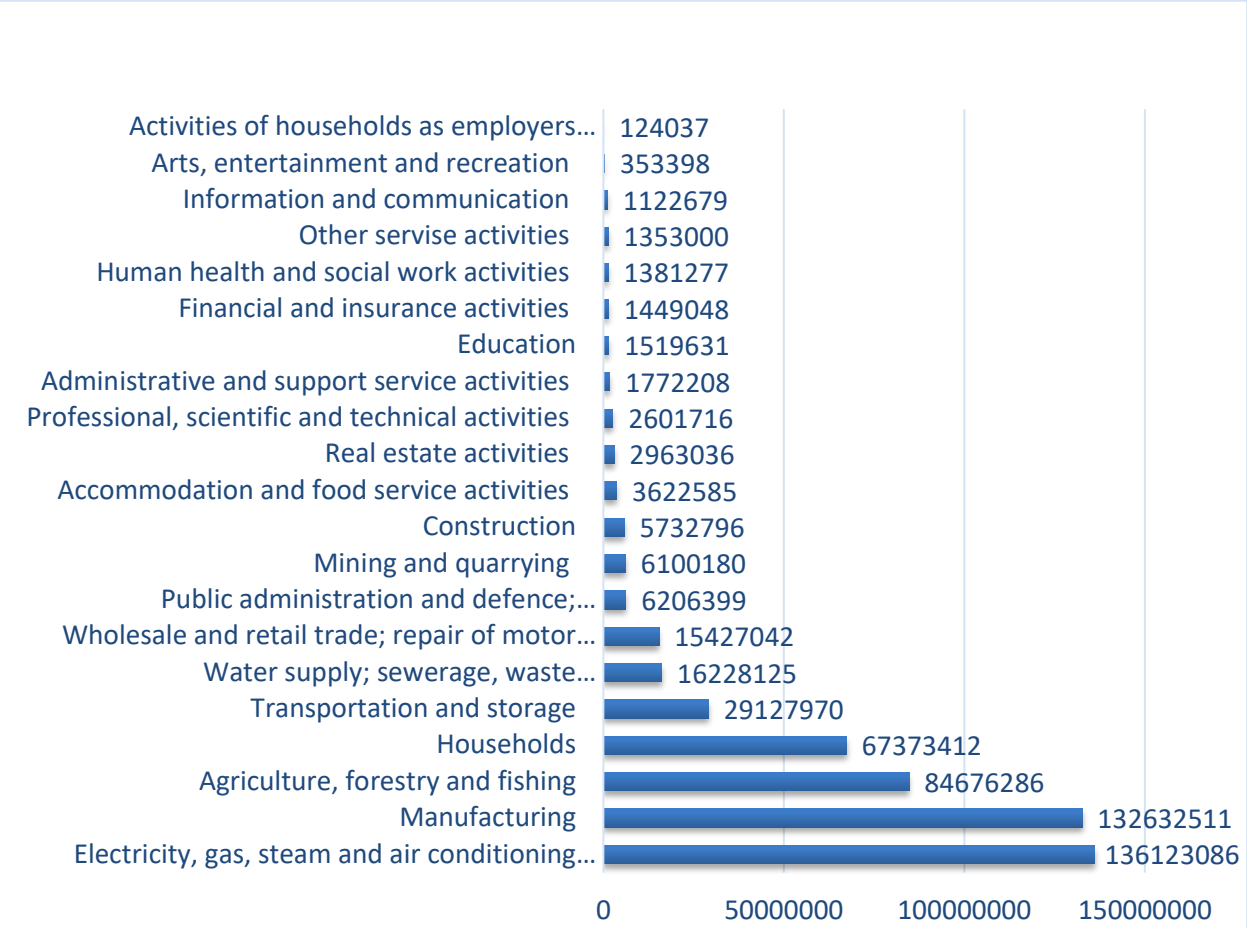
The uneven distribution of care responsibilities within households is the primary reason for women's exclusion from the labor market. Women's employment rates decrease by half when they have children (Table 6). Additionally, an aging population brings the responsibility of caring for elderly parents, creating a dual care burden. This dual burden not only affects women's participation in employment but also influences their working hours and the types of jobs they can undertake (İzdeş and Memiş, 2022).

The absence of affordable care services exacerbates socio-economic disparities in women's participation in the labor market. Economically disadvantaged groups have lower access to private childcare services. This difference manifests in the relationship between women's education levels, the wages they can earn, and their ability to access public and private care services. Despite economic factors, state-provided care options are quite limited and their costs are nearly equivalent to the income of mothers with primary education or less. In contrast, private care services, which are more accessible in terms of availability, are affordable only for mothers with high school or university degrees who earn sufficient wages (WB, 2015).

A just transition to a low-carbon economy presents an opportunity to enhance social protection and transform gender norms by recognizing, reducing, and redistributing care work.

In this context, investing in the care sector provides multifaceted advantages.

Figure 4 GHG Emissions (Tonnes) by Economic Activity (2020)



Source: TURKSTAT, Environment Statistics, https://data.tuik.gov.tr/Kategori/GetKategori?p=Cevre-ve-Enerji-103

The transformation in agriculture, forestry, and fishing activities is expected to be substantive and critical for sustainability. Greening of these activities means moving towards ecologically sound agricultural practices, reforestation, and sustainable forest and fisheries management. Green jobs in agriculture encompass a wide range of employment opportunities arising from sustainable practices such as climate-smart agriculture, agroforestry, and organic farming, including roles from unskilled field labor to skilled researchers and entrepreneurs (UN Women and AfDB, 2021). The European Green Deal addresses green transformation in agriculture with the “From Farm to Fork” strategy, and Türkiye exporting 29.7% of its agricultural exports to the EU closely follows the European framework in adaptation strategies (Ataseven, 2023: 19). In Türkiye, forestry, and fishery are male dominated. On the other hand, women’s share (42% in 2023) is nearly in parity with that of men in agriculture. However, in Türkiye, agriculture is characterized by small-scale production and family farming (Görmüş, 2023), with 75.2% of women participating as unpaid family workers (TurkStat, 2023) in these subsistence-oriented operations. As presented in Table 6 above, 80% of informal employment is in agriculture and informal employment is more common for women vis-à-vis men. Greening of the sector is expected to bring in decent employment

opportunities and formal jobs. In this regard the agriculture sector where women employment is high in the current gender segregation structure carries an important potential to offer better jobs for women in a relatively shorter term and contribute significantly to women's empowerment in the rural. To ensure that they can benefit from the sector's transformation, training, and skills development in sustainable agriculture practices are essential.

In the green transition, the "energy" and "construction" sectors, which are among the sectors expected to transform first, show a noticeable gender disparity in employment. As the transition from fossil fuel-based energy production to renewable energy alternatives occurs, fossil fuel-based energy production dominated by male workers is expected to face significant job losses. Currently, women's employment in mining and quarrying activities is marginal, constituting only 6.4% of the workforce and similarly, women's employment share in "electricity, gas, steam, water supply, sewerage etc. is less than 10% (See Table 8). On the other hand, the transition to renewables carries the potential of increasing the share of women in the energy sector. The middle-skill jobs expected to be generated are mainly for installers, technicians, plant managers, and quality engineers; and the sector will have high-skill labor demand for engineers and system designers, etc. (ILO, 2019:30). Based on the recent investments in the sector, IRENA and ILO estimates that the wind energy sector could employ up to 25,000 people and the solar PV industry 21,000 (IRENA and ILO, 2022:47). Additionally, 2020 Stantec survey found that 16 solar panel production companies in Türkiye employed over 3,300 people, 31% of whom were women (the share of women employed range from 6% to 60% among companies in the sector) (Stantec, 2020:12).

Similarly construction sector, also a male-dominated sector, is expected to go through a substantive transformation, and a significant share of green employment opportunities is expected to emerge in this sector. The middle-skill workforce needed are; carpenters, plumbers, electricians, heating engineers, roofers, painters and decorators, plasterers, building services technicians; and high-skill occupations expected to be in demand are facilities managers, architects, engineers, energy auditors, and energy consultants (ILO, 2019). In this sector worldwide men hold skilled building positions (Stevens, 2009:8). Currently women's share in this sector in Türkiye is marginal (4.9%) and are mostly employed in administrative and secretarial positions, yet there is no reason for women not to be trained to work as professionals designing green buildings, monitoring and assessing the energy efficiency of buildings and take part in the greening of the construction sector. The energy sector and even more so the construction sector as traditionally male sectors, especially middle-skill occupations are not easy wins for increasing women's employment yet targeted policies and the development of relevant skills can alter the dynamics in these sectors. A relatively easier gender equitable agenda would be enhancing women's potential to be employed in high-skilled green jobs, which are also more promising in terms of offering decent employment conditions.

The manufacturing sector is expected to go through a substantive transformation as well. Yet the forecasts on subsectors make it rather difficult to have a conclusive idea on the direction of the total impact. Among the subsectors of manufacturing that are expected to undergo a substantive transformation, the textile sector is particularly relevant for women's employment. Women are under-represented in twenty-four manufacturing sub-sectors except for textiles and wearing apparel. They play a significant role in the textiles sector both as consumers and producers constituting nearly half of the working

population in the sector. Currently, the textiles sector is one of the lowest paying, least secure sectors within the manufacturing industry, and women's relative position in the sector is more precarious. Women face higher turnover and significant pay gaps and a sizable portion of women in this sector work without social security under informal employment (İzdeş and Yücel, 2020:190). The green transformation of the textiles sector carries the potential to transform jobs into decent green jobs for women and is an important sector to focus on. The green practices and good examples in the sector are promising in this respect, small to large businesses are becoming leading examples in the Mediterranean region (Box 3)

BOX 3. Examples Of Good Practices Towards Greening Of Textiles in Türkiye

Kilim Denim has developed a Sustainable Green Line which reduced water and chemical usage in denim production, cutting water consumption by 77.1% and chemical use by 96.6%. Improvements in yarn manufacturing, weaving machines, and dyeing processes have decreased electricity, steam, fuel, and water consumption by substantial percentages, and have decreased operational costs. The company also emphasizes recycling, the Re-create collection uses recycled materials and contributes to increasing demand for recycled materials in the sector.

ORTA is a leading denim manufacturer, initially founded as a spinning and weaving company in 1953. It produces more than 60 million meters of denim employing more than 1500 workers in Türkiye. Since 2000, the company started to incorporate sustainable practices into its production processes by using organic cotton and started to use recycled fibers since 2010. ORTA has developed a Life Cycle Assessment (LCA) tool to identify the environmental footprint of the company to better address those areas for a more sustainable and circular value chain. Recently the company took a step toward designing for sustainability by creating a smartphone app for consumers to design their denim.

Deniz Tekstil collects the textile waste in the sector and converts it to regenerated fiber, the conversion rate is on average 70%. The company employs 180 people in Uşak and diverts approximately 36,000 tons of waste from landfills annually. By selling their waste to Deniz Tekstil producers save significant disposal costs while generating additional income. Recycling reduces the need for virgin materials, and environmental impacts associated with using and processing virgin materials.

Source: SCP/RAC and BCSD – Türkiye (2020)

The projections presented above for Türkiye, similar to global projections, predict the creation of green jobs however, most of these new jobs are conditional on training. Most of the job creation and reallocation is concentrated on mid-skill male-dominated occupations, hence reskilling and upskilling are essential to benefit from new job opportunities (Table 9). The need for reskilling and upskilling is a significant concern especially in the Turkish context (WB, 2022:68). The pressing need for reskilling and upskilling can either result in persisting gender stereotypes or can be seen as an opportunity to break gender segregation. If measures are taken for women to train in relevant skills, they can also have a greater share in potentially created jobs.

Table 9 Changes in Skills by Skill Level of Occupations

SKILL LEVEL	NATURE OF CHANGE	TYPICAL SKILLS RESPONSE	EXAMPLE OCCUPATIONS
Low-skilled occupations	Occupations change in a generic way, e.g. requiring increased environmental awareness or simple adaptations to work procedures	On-the-job learning or short reskilling and upskilling programmes	Refuse/waste collectors, dumpers
Medium-skilled occupations	Some new green occupations Significant changes to some existing occupations in terms of technical skills and knowledge	Short to longer upskilling and reskilling programmes; TVET courses	*New occupations:* wind turbine operators; solar panel installers *Changing occupations:* roofers; technicians in heating, ventilation and air conditioning; plumbers
High-skilled occupations	Locus of most new green occupations Significant changes to some existing occupations in terms of technical skills and knowledge	University degree; longer upskilling programmes	*New occupations:* agricultural meteorologists, climate change scientists; energy auditors, energy consultants; carbon trading analysts *Changing occupations:* building facilities managers; architects; engineers

Source: ILO, 2019:29.

Furthermore, the twin transformation of digital and green transformation is resulting in a skill bias in the labor market is reducing the share of mid-skill jobs. Developing countries have a relatively more significant gap in terms of the lack of professionals in high-skilled occupations requiring training in science, technology, engineering, and mathematics (STEM) skills. Hence, the wide range of highly skilled green jobs expected to be created can be a window of opportunity for women to step up, train, and take a significant share of those decent employment opportunities.

In addition to increasing women's representation, overcoming gender segregation in STEM is as critical in the Turkish context. Women in Türkiye could find a place in engineering as early as 1927-1928 thanks to the Republican reforms supporting girls to be enrolled in engineering schools for the first time. Women's share in professional, scientific, and technical activities is 42% as of 2022 (See table 8). However, girls are reluctant in choosing engineering and when they do they choose certain fields such as chemical engineering and architecture whereas they are significantly under-represented electrical, mechanical and computer engineering and marginal in mining and petroleum engineering (Bayrakçeken-Tüzel and Pehlivanlı-Kadayıfçı, 2018:31) Hence, efforts towards tackling the gender-segregated structure in STEM is of critical importance (See Box 4 for examples of good practices advancing gender equality in STEM below).

Box 4. Challenging Gender Segregation-Good Practices in STEM

Gender Equality Movement in Technology and Innovation-Arçelik

In collaboration with the UN Women's Generation Equality Forum, Koç Holding initiated a gender equality movement in technology and innovation in 2022. As part of this effort, Arçelik, a Koç Group company, joined the Action Coalition platform and committed to six objectives to advance the empowerment of women and girls in technology and innovation by 2026. These goals include providing technology training to 100,000 girls in Türkiye through the Digital Wings Project, expanding the WE-inTech program for women engineers to Romania, Pakistan, and South Africa, and increasing number of women entrepreneurs by increasing the percentage of women Beko dealers from 4.8% to 25%. Additionally, Arçelik aims to support 2,500 women entrepreneurs globally, raise the employment ratio of women in STEM fields at Arçelik from 16% to 35%, and increase the number of women technicians in its services from 6.7% to 14%.

In 2022, significant progress was made toward these commitments. For the Digital Wings Project, 241 teachers were trained to instruct 20,000 girls annually. The WE-inTech program was attended by 44 students from multiple countries. The Beko 100 Women Dealers Project saw the percentage of women dealers rise to 9%, with 92 women operating 99 stores. Arçelik facilitated the transfer of USD 8 million in funds to 359 women entrepreneurs, doubling its initial funding goal. The percentage of women in STEM roles at Arçelik increased to 19.4%, meeting the 2022 target, and the 500 Women Technicians Project trained 111 women, raising their overall percentage to 8%. These efforts reflect Arçelik's commitment to fostering gender equality and empowering women in technology and innovation.

Source: Arçelik (2022), Arçelik 2022 Sustainability Report
https://www.arcelikglobal.com/media/7381/arcelik_22_sustainability_report.pdf

The Engineer Girls of Türkiye Project

The EGT Project, launched by the Limak Foundation in 2015 and gaining significant traction in 2016, operates in collaboration with the Republic of Türkiye Ministry of Family, Labour and Social Services, Ministry of National Education and the United Nations Development Programme (UNDP) Türkiye. The initiative adopts a comprehensive approach, engaging multiple stakeholders such as academic institutions, civil society, high school students, parents, professional associations, and employers. The "Career Choice and Education: High School Programme," focuses on dispelling the myth that engineering is exclusively a male profession. This program encompasses awareness campaigns, educational training, and train-the-trainer activities, targeting students, educators, school leaders, and parents.

Beyond the high school initiative, the EGT Project provides substantial support to female university students pursuing degrees in engineering fields. This support includes scholarships, mentorship from experienced female engineers, internship opportunities, job placements, and online English language courses. Additionally, participants can join the 'Social Engineering Certification Programme' in partnership with Boğaziçi University Lifelong Learning Centre (BUYEM), which enhances their job prospects. The project also strives to implement gender-sensitive institutional models, with the Limak Group spearheading efforts by incorporating gender equality into its corporate responsibility practices and encouraging other companies to do the same.

Source: Bayrakçeken Tüzel , Gökçe and Pehlivanlı Kadayıfçı, Ezgi (2018). Engineer Girls of Türkiye, UNDP , https://www.turkiyeninmuhendiskizlari.com/eng/tmk-hakkinda.php.

5. GenderLens: Assessing Gender Inclusivity in Policies

Ample evidence in gender and development literature as well as Türkiye's experience in prior industrialization strategies implemented present that unless specifically targeted, no form of industrialization or transition promises more equitable outcomes. Industrial development driven left to market forces do not have transformative mechanisms to address gender biases. It is governments to commit to gender equality and incorporate gender considerations into their industrialization strategies to ensure inclusive outcomes. In this regard, to turn green transformation into an opportunity to achieve more sustainable, just and egalitarian transformation the government's role in enacting policies, regulations, and incentives to bridge existing gender gaps is essential.

The objective of this section is to present an assessment of climate policies from a genderlens by evaluating relevant policy documents in terms of their approaches to promote positive gender equality outcomes as well as green transformation of the economy. A ranking system and assessment criteria is designed to assess the integration of gender inclusivity within key policy documents.

5.1. Methodology

GenderLens : Assessing Gender Inclusivity in Policies criteria is an adapted version of policy quality criteria and policy evaluation method (Feminist Critical Policy Analysis, Feminist Policy Analysis Criteria and Research Questions-Assessment I) used in United Nations Industrial Development Organization (UNIDO) (2021) [8], with additional evaluation qualities incorporated based on the "Checklist to incorporate gender equality and women's empowerment in NDC updates, new climate policies or relevant sectoral strategies" by UNDP (2021:5)[9].

UNIDO's assessment carries a specific emphasis on entrepreneurship and leadership of women. On the other hand, the UNDP (2021) assessment checklist aims to pinpoint key gender elements to be integrated into Nationally Determined Contributions (NDCs) of

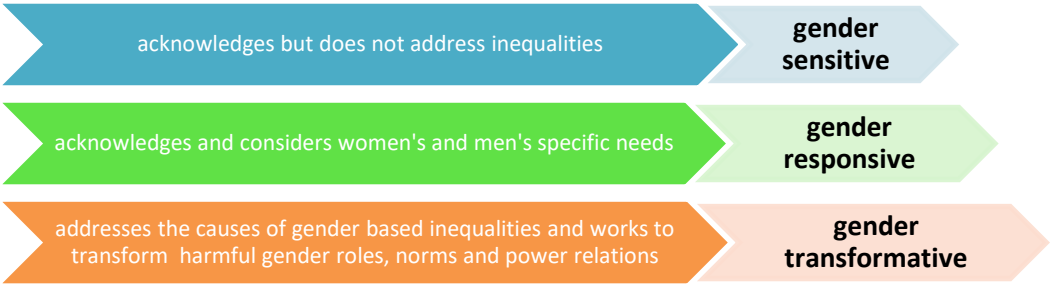
[8] UNIDO (2021), *Policy Assessment for the Economic Empowerment of Women in Green Industry* report is one of the outputs of a joint programme, "Economic Empowerment of Women in Green Industry" (EEWiGI). In the programme UNIDO and UN Women collaborate to promote gender-responsive green industry policies in four countries (Cambodia, Peru, Senegal, and South Africa). "Feminist Critical Policy Analysis, Feminist Policy Analysis Criteria and Research Questions-Assessment I" methodology, partially adapted here, is part of the report to assess the quality of policy documents of the countries with regards to green industrialization.

[9] UNDP (2021) *Key elements to include gender equality and women's empowerment in climate policies and Nationally Determined Contributions (NDCs)* This tool evaluates the following aspects:1. Principles, vision, and mission, 2. Governance and inclusion, 3. Implementation capacities and budgets, 4. Data and situation analysis, 5. Intervention areas, 6. Sector-specific targets and indicators *https://climatepromise.undp.org/sites/default/files/research_report_document/undp-ndcsp-gender-checklist-english-2021.pdf*

countries to ensure alignment in gender and climate change mandates. In this regard, it aims to establish specific targets and indicators to engender countries' NDC plans and strategies. Addressing NDC plans and sectoral policies brings in a relatively more macro framework of climate change policies. The GenderLens criteria are developed by giving greater weight to some of the UNIDO (2021) criteria complemented with additional-revised criteria from the UNDP (2021) checklist. In this regard, the GenderLens includes (i) additional criteria and hence gives greater weight to the inclusion of women's perspective in policy making;, (ii) capacity building and resources as an additional dimension that addresses the importance of capacity building to ensure continuation of gender perspective integration to policies, and also a key aspect gender budgeting to devote and monitor availability of resources that will enable policies, (iii) criteria to strengthen gender responsiveness of policies by recognition of gender differentiated vulnerabilities to climate change and gender differentiated impacts of sectoral actions and (iv) a greater emphasis on gender-disaggregated assessment and data availability on gender specific impacts and vulnerabilities.

The GenderLens criteria categories assesses gender inclusivity of policies/policy documents relevant for climate change and green transformation based on eight criteria categories: (i) *Gendering of the Policy* addresses how central gender equality is to the policy, questioning whether it is included as an objective at all, or whether gender mainstreaming is well integrated; (ii) *Structural understanding of gender equality* evaluates how much the policy makers have addressed structural/contextual factors that impact gender equality; (iii) *intersectionality* criteria category focuses on incorporation of intersectionality perspective; (iv) *empowerment of women* entails questions regarding the objective of women's empowerment and women's, women's civil society groups' and gender experts inclusion to policy making, implementation and monitoring processes; (v) the fifth category is on availability of human and financial resources, it entails questions on *capacity building and resources* (gender budgeting); (vi) *incremental transformation* asks whether current policies build up on previous equality achievements; (vii) gender responsiveness as explained above aims to assess gender differentiated impacts; and finally (viii) regional and international contextualization questions if the policy comply with any international and regional conventions, policies, laws, and commitments to safeguard women's rights and which ones are they. These eight criteria encompass 22 sub-criteria, which are used to evaluate whether policies are gender-sensitive, gender-responsive, gender-transformative, or gender-blind.[10].

Figure 5 Terminology in Policy Evaluation from Gender Perspective.



[10] Please see the Appendix for detailed information on the set of quality criteria, research questions and the evaluation methodology.

Source: Miatello, J. et al., 2022:8

5.2. Policy Documents

Having ratified the Paris Agreement relatively recently, following the EU Green Deal, Türkiye has been more effectively developing its green transformation agenda in the past few years. The Green Deal Action Plan, published in July 2021 presents the roadmap of the transition process and targets. Hence, the first document to be analyzed as a policy document with a gender lens is the Action Plan, coordinated by the Ministry of Commerce.

The Action Plan is implemented with the contribution of Green Deal Action Plan Specialization Working Groups with a specific focus on different aspects of the transition process, and each Working Group is led by related Ministries. The second document analyzed is the Annual Report of the Green Deal Working Group, which reflects the evaluation of the policies and implementation of the targets.

The just transition framework of the EU is referred to in documents, yet, the just transition official approach which is expected to most significantly reflect the agenda's inclusivity and gender equality perspective is with delay. The "Just Transition Specialized Working Group" was established under the coordination of the Ministry of Labour and Social Security (ÇSGB), and the recently formed Green and Social Economy Transition Department within the Ministry is primarily conducting the Specialized Working Group (SWG) activities. The SWG has not published any official documents yet, but has conducted activities and gathered recommendations from relevant stakeholders, academicians, and civil society to establish a policy framework. The Climate Council was held on 21-25 February 2022 and the Climate Summit Report was published as the outcome document. It reflects recommendations that are expected to form the official just transition policy framework. Hence the third document selected to be analyzed is the Climate Summit Report.

In addition to these three green transition policy documents; the most recent national development plan, the 12th National Development Plan, and the 2024-2026 Mid-Term Plan which reflect the most recent macro policy framework that is expected to be in accordance with the green transformation agenda are selected to be analyzed from a gender equality perspective.

5.3. Assessment

Table 10 summarizes the results of the policy document reviews conducted in accordance with GenderLens criteria. Document-specific observations related to the review summarized in the table are presented subsequently, and the policy evaluation section concludes with collective observations on all the reviewed policies.

Table 10 Policy Assessment

Quality Criteria Categories	Green Deal Action Plan of Türkiye, 2021	Green Deal Working Group Annual Report, 2022	12th National Development Plan	Climate Summit	Mid-Term Plan 2024-2026
1. Gendering of the Policy	0	0	3.5	3	3
2. Structural understanding of gender equality	0	0	0.5	0	0
3. Intersectionality	0	0	0.5	0	0
4. Empowerment of Women	0	0	4.5	4.5	0
5.Capacity building and resources	0	0	1	1	0
6. Incremental transformation	0	0	0	0	0.5
7. Gender-responsiveness	0	0.5	3.5	2.5	1
8. Regional and international contextualisation	0.5	0.5	0.5	0.5	0
Total	0.5	1	14	11.5	4.5

1. Green Deal Action Plan of Türkiye, 2021

Green Deal Action Plan has no mention of gender equality as part of the policy agenda. The initial roadmap does not address inclusive transition, just transition, and is gender-blind. In terms of International Contextualization, The Action Plan refers to the UN 2030 Sustainable Development Agenda as the relevant framework.

2. Green Deal Working Group Annual Report, 2022

The report exhibits a predominantly gender-neutral perspective, making limited references to the international just transition framework and offering scant coverage of specific sectoral developments.
The international framework that underlines the concept of a just transition is referenced, and it is mentioned that upcoming documents, such as the Mid-Term Plan and the National Employment Strategy, will include sections related to just transition. However, there is no specific reference to gender equality within the context of just transition. The initial mention only highlights that gender equality is a topic of international concern.
The document addresses criteria 7.1-gender-differentiated vulnerability to climate change and gender-differentiated impacts and contributions to emissions reductions by

stating that “Gender Action Plan for Land Degradation Neutrality (ATD) has been initiated”.

The document emphasizes the importance of promoting sustainability and circularity in the textile industry by outlining concrete steps to reduce negative environmental impacts and ensure production does not harm social rights. While the report does not set specific gender-related objectives, its focus on social rights is particularly valuable in a sector dominated by women (pp. 16 and 21).

3. 12th National Development Plan

The plan explicitly articulates the goals of gender equality and women's empowerment. It demonstrates a gender perspective by addressing the gender-specific impacts of climate change on women, aiming to prevent their exclusion from green and digital transformations. To achieve these goals, the plan outlines necessary policies, emphasizes the inclusion of women in decision-making processes, and advocates for a comprehensive approach that reflects women's needs and perspectives in policymaking. Additionally, it calls for the application of gender budgeting to allocate resources effectively. Although not entirely systematic, the plan includes widespread use of gender-disaggregated data and targets, also aiming for further progress in data collection.

In this context, the plan is a gender-responsive document that prioritizes addressing gender-specific needs and includes policies aimed at some of the root causes of gender inequality, thereby it possesses transformative aspects. However, it falls short of targeting structural causes of inequality beyond areas like caregiving and education. Issues such as gender discrimination and employment and income opportunities limited by traditional gender roles, are not addressed in depth. Instead of building upon previous achievements grounded in a gender equality perspective, the plan tends to focus on policies related to women within the family context and reflects an approach that preserves traditional gender roles. It proposes flexibility policies for female employment as a solution for balancing work and family life. This framework is highly criticized by women's organizations and feminist activists, who argue that it entails the risk of confining women to roles that do not extend beyond earning supplementary incomefor the family. Another short-coming of the Plan is its silence in terms of engendering sectoral policies. Overall, the Plan values to include women’s inclusion in the transition process.

4. Climate Summit 2022-Commission Recommendation Decisions

The policy document suggests integrating gender equality as a twin target to green transformation targets, plans, programs, and strategies. In the policies suggested, a just and inclusive transition framework is adopted, and the document specifically underlines addressing gender differences in risks, needs, and vulnerabilities with a rights-based approach. Especially targeted policies to ensure inclusivity in green employment opportunities are underlined. Overall, the policy framework values women’s agency, vision, and participation in policy-making and implementation, and women’s leadership in the process is emphasized. The resources/investments required for just and inclusive transformation and gender budgeting are also addressed. The policy document refers to the just transition framework of the UN and the Paris Climate Agreement.

5. Medium Term Program 2024-2026

The Program is designed for the immediate future of Türkiye. Aligned with the National Plan, it also emphasizes green and digital transformation efforts, and along with these longer-term targets it also prioritizes employment generation and inclusivity as key objectives. However, the immediate policy priorities of the Program are stabilization and inflation reduction through contractionary fiscal measures and stringent monetary policies. This approach results in a reduction of fiscal resources, thereby limiting fiscal space to invest in green transformation.

The program aims to investigate to target various potential impacts of green transformation in different regions and professional groups to ensure a just transition process (p.20). It entails special programs to ensure full and equal participation of women in the labor market during the green and digital transformation processes. In this regard, accessible daytime care centers, entrepreneurship, financial literacy, cooperatives (p.20), and programs on skills and competencies (p.33 and 60) are stated as programs to support women's inclusion. Employment incentives targeting employers' labor preference to motivate employment of women and the young population are planned to be revised, to be re-designed to increase their effectiveness (p.29).

In addition to these, The Program also underlines the importance of flexible work arrangements as a remedy for work-life balance, and for continued participation in social security. However, it is important to note that both arguments declared here have serious drawbacks, and are strongly opposed by gender equality-focused NGOs and academicians as flexible employment confines women into low-income and low-security positions. The Program also states this will respond to employers' demand for increasing flexibility. Yet this flexibility demand of employers, in the Turkish context is hardly promising flexible employment options with adequate pay and working conditions that could enable women to gain economic independence and career prospects with decent retirement prospects.

Overall, the short-term macroeconomic program of Türkiye, designed around the pressure of decreasing the inflation rate with typical contractionary policies has a very limited fiscal policy space. Women's empowerment, gender budgeting, intersectionality, sector-specific gender-aware measures, and policies to challenge structural reasons behind gender equality are neglected in the program. The program includes measures for women's inclusion in the labor market and also has an emphasis on flexibility policies. The Program does not reflect a perspective that alters gender norms and structural causes of gender inequality, hence reflects a vision that has a limited transformative potential.

5.4. Overall conclusions on assessment of the policies

As presented above, the most relevant and recent policy documents have been critically reviewed with a genderlens. The assessment reveals that there exists a significant disparity between policies developed before 2022 and the more recent ones regarding the integration of a just transition framework and a gendered perspective. This analysis highlights the evolving approach in policy-making, with a marked improvement in acknowledging gender issues in the latest documents. Detailed assessment reports for each policy/policy document are provided in Annex 1.

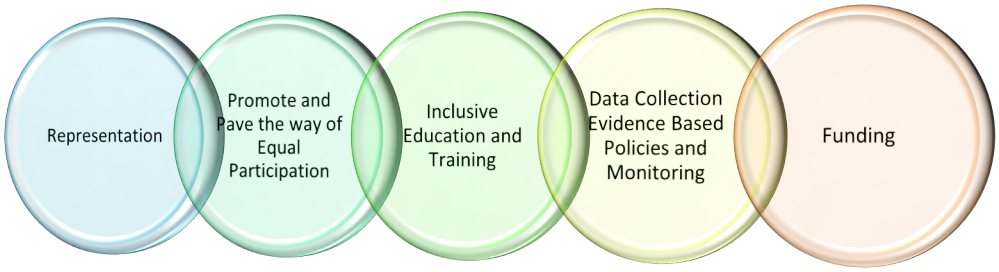
The Green Deal Action Plan and the Green Deal Working Group Annual Report are almost entirely gender-blind, with a lack of consideration for gender equality in their frameworks. In contrast, more recent documents such as the Climate Summit 2022 Commission Recommendation Decisions, the 12th National Development Plan (2024-2028), and the Mid-Term Plan (2024-2026) explicitly address the goal of achieving equal participation of women. Especially the 12th National Development Plan signifies a growing recognition of the importance of gender equality in achieving sustainable development goals.

Although the European Commission's narrative on just transition adopted in policy documents emphasizes gender equality, gender equality objectives are not fully integrated into actionable plans. The policies lack concrete measures, targets, action plans, monitoring mechanisms, and identified resources necessary to effectively address gender equality. This gap between policy rhetoric and implementation highlights the need for more robust and actionable strategies.

Furthermore, it is important to note that flexibility is frequently presented as a solution for ensuring women's continued participation in the labor market. This concept of linking flexibility with women's employment has been a topic of discussion even before the green transition policies were introduced. The flexibilization of employment is often seen by employers as a fundamental tool for reducing production costs. The focus on flexibility in the context of women's employment aligns with a family-oriented policy perspective that accepts the existing domestic division of labor as given and offers flexible employment options to co-sustain paid and unpaid work. Unless flexible work arrangements are coupled with secure and well-paying jobs, they are likely to provide only supplementary income to households without contributing significantly to the desired outcomes for women's employment and overall gender equality. Flexible working conditions that do not offer adequate security and remuneration may fail to support women’s equal participation in the labor market and broader societal equality. Effective policies must go beyond mere flexibility to include robust measures that ensure secure employment, fair wages, and equitable sharing of domestic responsibilities.

6. Policy Framework for Gender-Equitable Green Transition

The gender equitable green transformation policy making suggested rests upon complementary building blocs, starting with objectives and equal representation to ensuring resources and funding.



I. Representation

***Declare "gender equality" as an integral policy objective*:** To prevent the green transition from perpetuating or exacerbating gender inequalities in the labor market—and ideally, to transform them—a just transformation must adopt an inclusive and equitable approach. Leaving such a transformation to the dynamics of the labor market alone, given the pre-existing challenges of the Turkish labor market, poses significant risks both in terms of overall social costs and the exclusion of women from this transition. Hence policymakers should deliberately announce and integrate gender equality and enhancing women's economic empowerment as integral policy objectives.
Explicitly mandate gender equality conditions in all policies, and introduce a compulsory assessment of gender impacts for every review of existing policies and measures.

Engage women, women-led organizations, gender-equality specialists in the policymaking/implementation and monitoring process: To ensure the development of gender-aware policies that respond to the needs of women, overcome gendered barriers and structural causes of gender equality, the policymakers must ensure representation of women in the policy-making, during the implementation process and monitoring of policies. The inclusion of gender experts is critical to build upon priorly accumulated egalitarian knowledge and experience and policy proposals.
In this regard establishing and promoting gender-balanced representation in all negotiations and decision-making processes would institutionalize equal representation, particularly in critical climate-related sectors. This can be achieved by setting specific quotas and targets for both public and private decision-making bodies (Heffernan et al. 2021:22).

- ***Declare "gender equality" as an integral policy objective***
- **Explicitly mandate gender equality conditions**
- ***Engage women, women-led organizations, gender-equality specialists in the policymaking/implementation and monitoring process***

II. Promote and pave the way of equal participation

Green transformation is expected to bring in a substantive transformation in the labor market, generating green jobs that are also aspired to be decent. To make green jobs also accessible for women and to ensure that they also have an equal representation in better-paying high-end jobs policymakers need to target both sector-specific barriers and barriers that permeate across all sectors.

Sector-specific barriers entail social norms that deem certain sectors as inappropriate for women leading to gender segregation in education, discrimination in hiring and appointing practices, and laws either ineffective in terms of preventing this type of discrimination or laws limiting women's access to certain tasks/jobs, all of which result with gender segregation. In sectors with high female representation, such as textiles, agriculture, tourism and the care sector women's access to new green jobs may be relatively easier; those sectors enable relatively quick wins. Hence giving weight to these sectors and ensuring decent work generation in those sectors can significantly contribute to the gender balance in green jobs. On the other hand, sectors that are traditionally male-dominant, such as energy, construction, and transportation are going to be slow wins and will require longer-term strategies to remove gendered barriers and change social norms (UN Women and AfDB, 2021:13).

Addressing gender segregation requires a multifaceted effort. Changing perceptions about what jobs are suitable for women is a long-term effort, it entails ***Promoting educational and awareness campaigns*** for the all population and specifically for girls and women to encourage them to pursue careers in green industries. ***The presence and visibility of role models*** can be particularly guiding for young people, while ***mentoring programs*** are invaluable for sharing experiences and providing support. Furthermore to challenge gender segregation in the workplace, hiring and appointment practices must be addressed. ***Employment services should adopt non-discriminatory practices during the matching process*** to ensure fairness. ***Advancing the legal framework*** is crucial, necessitating the implementation of deterrent measures to address discriminatory practices effectively, and the enforcement of sexual harassment laws, especially in male-dominated sectors is very important. Governments can also impose conditionalities of affirmative action to contractors to public agencies. Green stimulus spending can require employers to recruit women for non-traditional green jobs (Stevens, 2009:13).

Addressing the most vulnerable forms of employment and transforming them to more decent employment practices is especially critical in developing countries. Women predominate informal employment, and this type of employment is particularly vulnerable to economic and climate shocks and is not covered by safety nets available to formal employment. Hence, ***addressing informality, and ensuring progressive formalization of micro and small enterprises*** is of critical importance for just transition (Anderson and Fischer, 2022:29).

In addition to sectoral gender segregation and women's accumulation in only certain types of sectors and occupations, the policies also need to target structural inequalities resulting from social norms that impose the majority of unpaid care work on women. Unless unpaid work within the private sphere is recognized and measures to reduce and redistribute the care are taken up, women's disadvantage in the workforce cannot be adequately addressed (Ferdman, 2023, p.15). Hence ***work-family life policies and services*** must be envisioned with an egalitarian perspective. Increasing ***affordable care services***, ***investing in care*** has multiple wins ranging from enabling women's economic participation, to generating green jobs. Furthermore, it is important to note that investing in care is investing in social infrastructure an essential dimension for a broader understanding of sustainability.

In all policies towards an egalitarian green transformation ***addressing intersectionality*** is crucial to fully understand and tackle the multifaceted nature of inequalities. And ***building upon prior gender equality achievements*** and advancing relevant policies are necessary to sustain progress. Furthermore, it is essential to ***co-integrate these policies with international conventions and policies*** to ensure a comprehensive and cohesive approach to promoting gender equality and inclusivity.

- ***Promote educational and awareness campaign to encourage women pursue careers in green industries***
- ***Promote equal employment opportunities and treatment:***
- ***Target both vertical and horizontal equality-challenge gender segregation***
- ***Provide employment services with non-discriminatory practices in matching process***
- ***Advance legal framework***
- ***Targeted industrial and sector policies to create jobs for women***
- ***Progressive formalization of micro and small enterprises***
- ***Address care responsibility-invest in care***
- ***Work-family life policies and services***
- ***Address intersectionality***
- ***Advance prior*** **gender equality achievements and build upon relevant policies**
- ***Co-integrate policies with international conventions, policies.***

III. Inclusive Education and Training

The green transformation will generate new green jobs, necessitating significant investments in reskilling within the context of Türkiye. The imperative for training to develop skills aligned with new requirements and to prevent skill mismatches presents an opportunity to address gender segregation in the labor market. Overcoming gender gaps and developing forward-looking skills strategies, with a focus on training young people, particularly young women, must be underlined as objectives of the training agenda for the green transformation.

Government-funded training and apprenticeship programs as well as government employment programs can be used to address the under-representation of women in green industries. Turkish Employment Agency (İŞKUR) has various courses that can be deemed to be green, including plumbing, natural gas installation and welding, refrigeration and air conditioning technology, seedling cultivation, forestry work, landscaping, horticulture, greenhouse technology, and soil management. Additionally, the Community Benefit Programs employ green-collar workers in areas such as environmental cleaning, public infrastructure renewal, school maintenance, restoration and preservation of cultural heritage, afforestation, park arrangements, valley and stream rehabilitation, and erosion prevention, contributing indirectly to environmental sustainability (Ünver, 2017). The Agency can significantly contribute to the skills development of women by offering these programs with a gender-aware perspective.

To ensure equal representation of women in highly-qualified green jobs, policy makers and private sector need to ***develop targeted programs to equalize women's participation in STEM***. In this regard offering ***special programs*** for girls and women and ***providing scholarships*** can help to close the gender gap.

Training of policy makers in green transformation and gender equality is essential to have the ***institutional capacity for development of gender egalitarian and inclusive policies***. In this regard, policy making institutions' awareness of the need for self-development and getting support from gender specialists is the way to build up an egalitarian capacity development within institutions.

- ***Ensure educational institutitons and companies provide equal access to green skill and training***
- ***Targeted programs to equalize women's representation in STEM***
- ***Special programs and scholarships to close the gender gap***
- ***Capacity building in green transformation and gender***

IV. Data collection and evidence based policies and monitoring

Collecting gender disaggregated data enables identifying needs and gender gaps, particularly in the context of climate change. This type of data collection helps to uncover specific vulnerabilities that men and women face differently due to environmental changes. Disaggregated data enables the development of more nuanced and effective strategies to mitigate these impacts, ensuring that both men and women are adequately supported.

While gathering gender-disaggregated data, ensuring to **include an intersectional perspective** that considers various overlapping identities, must be an integral part of **evidence based interventions** in the green transformation process across all policy areas. Concrete data will enable a comprehensive understanding of how different groups are affected by policies and how to make them more inclusive. **Conduct sector-specific analyses** to identify both positive and negative impacts of transformation policies to develop sector specific inclusive interventions.

Including gender aware experts in the data collection and monitoring process ensures that the data is accurate and comprehensive. **Continuous monitoring of concrete progress** allows for adjustments and improvements in policies to better address gender-specific needs. Evidence based approach not only promotes gender equality but also strengthens overall resilience to climate change by ensuring that all community members are considered and supported in adaptation and mitigation strategies.

- Collect gender disaggregated data to identify needs and gender gaps
- Identify gender differences in vulnerabilities to climate change
- Use this data for evidence-based policies and targets
- Include gender experts in data collection and monitoring
- Conduct sector-specific analysis to identify positive and negative aspects of transformation policies by gender
- Monitor concrete progress

V. Funding:

Financing equitable green transformation has two dimensions. Firstly, securing adequate finance and secondly ensuring gender equitable use of resources. ***Enabling an inclusive and just transition requires sustained spending*** not only to transitioning sectors' and infrastructure but also to employment generation, building saftey nets and investing in care. Hence it ***necessiates the policy space*** to mobilize domestic resources, including more active Central Banks (TDR, 2021) and dedicated public banks, as well as effective and targeted fiscal policies. However given the scale of transformation, achieving such a transformation with domestic resources and technology is difficult for developing countries. Having a greater responsibility on the climate change and the need for a green transformation, ***advanced economies should contribute to the financing of the transformation and also should enable access to green technology***. Given the "shared responsibility", the national policy space should be supported with adequate regional and global finance (Davies et al. 2021: 12, 22).

To ensure equal footing of women in the transformation process, development of a ***Global Fund for Women***; would universally declare gender equality as a goal with global funding; would create a predictable and sustainable source of adequate finance and could de-link source of funding from donor-country politics, hence secure long-term programs and policies (Erten and Çağatay, 2017).

Gender equitable use of resources can be achieved via **gender budgeting**. For egalitarian outcomes to be realized, climate finance should be directed in a gender responsive distribution. Governments should integrate gender budgeting to their green policies and monitor spending within the framework of gender-budgeting. Furthermore, this financing must consider women in their diversity and integrate intersectionality perspective in identifying needs and neceassary means.

- **An inclusive and just transition requires strong and sustained spending**
- **Access to green technology**
- **Global Finance for Green Transition -Regional Finance Resources**
- **Global Fund for Women**
- **Gender Budgeting**

7. Conclusion

The green transformation in Türkiye presents significant opportunities and challenges, particularly in addressing gender disparities in the labor market. Türkiye's commitment to achieving net zero emissions by 2053, following its ratification of the Paris Agreement in 2022, marks a critical step toward sustainable development. However, this transformation requires a comprehensive approach that works through pre-existing development challenges and integrates gender considerations to ensure equitable outcomes. The anticipated transformation in the labor market will occur within the context of both labor market challenges and specific gender inequality challenges. Women's low representation in and fragile integration into the labor market, historical exclusion from

key industrial sectors, and concentration in low-paid, insecure jobs underscore the need for targeted policies that promote gender equality.

A holistic policy perspective composed of interconnected elements is essential, the building blocks of which must start with the adoption of gender equality and women's equal participation as explicit goals and extend to the definition of financing sources and monitoring achievements for an inclusive approach. For successful outcomes, informed decisions in policy design are critical. Policymakers must consider the gender-segregated structure of the labor market and the potential employment changes brought by the green transformation. The developed strategy should include short-term, easily achievable goals in sectors and jobs with relatively higher female representation, as well as longer-term objectives that require significant transformation to address gender segregation and ensure tangible gender-equal results. Inclusive policies developed with a transformative perspective, involving the participation of women, women's organizations, and gender equality experts, will have greater potential to address existing structural inequalities. Adopting a comprehensive inclusive approach like this will not only enhance the success of the green transformation but also promote broader sustainability, including social sustainability.

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Annex 1

GenderLens: Assessing Gender Inclusivity in Policies-Methodology

Quality Criteria Categories	Research Questions	Score
1. Gendering of the Policy	1.1. Does the policy aim for gender equality? 1.2. Does the policy include sex-disaggregated data consistently? 1.3. Does the policy consider gender differences to create more equality? 1.4. Are gender stereotypes challenged? 1.5. Is gender mainstreamed throughout the document (as opposed to being regulated to a separate section)?	1.1: 1.2: 1.3: 1.4: 1.5: Subtotal:
2. Structural understanding of gender equality	2.1 Does the policy consider the structural factors (beyond the individual level) that impact gender equality? Examples include historical, legal, socio-cultural, economic, and political factors.	Subtotal:
3. Intersectionality	3.1. Does the policy incorporate the concept of "intersectionality"?	Subtotal:
4. Empowerment of Women	4.1 Does the word "empowerment" appear in the policy associated with women? 4.2 Does the policy refer to women's economic empowerment? 4.3 Does the policy refer to women's empowerment in terms of increasing women's agency, resources, and/or achievements? 4.4 Does the policy mention consulting women, or women's civil society groups and associations during its development? 4.5 Does the policy recognise and implement the importance of equal participation of women in the policymaking and implementation process? 4.6 Does the policy propose the inclusion of gender experts in the design, implementation, and monitoring of actions/policies?	4.1: 4.2: 4.3: 4.4: 4.5: 4.6: Subtotal:
5.Capacity building and resources	5.1. Does the policy entail capacity-building in the field of gender and green transformation? 5.2. Does the policy use/suggest using gender budgeting?	5.1: 5.2: Subtotal:
6. Incremental transformation	6.1. Does the policy build on national previous gender-equality achievements/policies?	Subtotal:

7. Gender-responsiveness	7.1. Does the policy recognise gender-differentiated vulnerability to climate change and gender-differentiated impacts and contributions to emissions reductions? 7.2. Does the policy recognise the positive and negative effects of sectoral actions? 7.3. Does the policy address the specific needs and interests of women entrepreneurs/ women working in the green industry? 7.4. Does the policy consider ways to overcome gender norms and social traditions that impair women's involvement in green industry? 7.5. Does the policy address steps necessary to increase women's leadership roles in the green industry?	7.1: 7.2: 7.3: 7.4: 7.5: Subtotal:
8. Regional and international contextualisation	8.1. Does the policy comply with international and regional conventions, policies, laws, and commitments to safeguard women's rights?"	Subtotal:

Evaluation of each of the 8 criteria's subtotal is the summation of the scores for the questions each criterion entails. For each question the score ranges between 0 and 1, the score is; (i) 1 if the sub-criteria is met; (ii) 0.5 if the sub-criteria is somewhat met, there exists some consideration even if the sub-criteria is not fully met, and (iii) 0 is the sub-criteria is not met or the policy document is poor in terms of meeting this sub-criteria. There exist 8 criteria and a total of 22 sub-criteria, if a policy/policy document is equal to or above 11/22 score is considered as a purple one. A purple policy document goes beyond being gender sensitive; however, deciding whether it is gender-responsive or gender-transformative requires evaluation based on the composition of the criteria met.

The gender assessment of relevant policy documents to guide the green transformation process in Türkiye.

1. Green Deal Action Plan of Türkiye[11]

Quality Criteria Categories	Research Questions	Score
1. Gendering of the Policy	1.1. Does the policy aim for gender equality? 1.2. Does the policy include sex-disaggregated data consistently? 1.3. Does the policy consider gender differences to create more equality? 1.4. Are gender stereotypes challenged?	1.1:0 1.2:0 1.3:0 1.4:0 1.5:0 Subtotal:0

[11] Yeşil Mutabakat Eylem Planı

	1.5. Is gender mainstreamed throughout the document (as opposed to being regulated to a separate section)?	
2. Structural understanding of gender equality	2.1 Does the policy consider the structural factors (beyond the individual level) that impact gender equality? Examples include historical, legal, socio-cultural, economic, and political factors.	Subtotal:0
3. Intersectionality	3.1. Does the policy incorporate the concept of "intersectionality"?	Subtotal:0
4. Empowerment of Women	4.1 Does the word "empowerment" appear in the policy associated with women? 4.2 Does the policy refer to women's economic empowerment? 4.3 Does the policy refer to women's empowerment in terms of increasing women's agency, resources, and/or achievements? 4.4 Does the policy mention consulting women, or women's civil society groups and associations during its development? 4.5 Does the policy recognise and implement the importance of equal participation of women in the policymaking and implementation process? 4.6 Does the policy propose the inclusion of gender experts in the design, implementation, and monitoring of actions/policies?	4.1:0 4.2:0 4.3:0 4.4:0 4.5:0 4.6:0 Subtotal:0
5.Capacity building and resources	5.1. Does the policy entail capacity-building in the field of gender and green transformation? 5.2. Does the policy use/suggest using gender budgeting?	5.1:0 5.2:0 Subtotal:0
6. Incremental transformation	6.1. Does the policy build on national previous gender-equality achievements/policies?	Subtotal:0
7. Gender-responsiveness	7.1. Does the policy recognise gender-differentiated vulnerability to climate change and gender-differentiated impacts and contributions to emissions reductions? 7.2. Does the policy recognise the positive and negative effects of sectoral actions? 7.3. Does the policy address the specific needs and interests of women entrepreneurs/ women working in the green industry?	7.1:0 7.2:0 7.3:0 7.4:0 7.5:0 Subtotal:0

	7.4. Does the policy consider ways to overcome gender norms and social traditions that impair women's involvement in green industry? 7.5. Does the policy address steps necessary to increase women's leadership roles in the green industry?	
8. Regional and international contextualisation	8.1. Does the policy comply with international and regional conventions, policies, laws, and commitments to safeguard women's rights?"	Subtotal:0.5
TOTAL		0.5

2. Green Deal Working Group Annual Report, 2022[12]

Quality Criteria Categories	Research Questions	Score
1. Gendering of the Policy	1.1. Does the policy aim for gender equality? 1.2. Does the policy include sex-disaggregated data consistently? 1.3. Does the policy consider gender differences to create more equality? 1.4. Are gender stereotypes challenged? 1.5. Is gender mainstreamed throughout the document (as opposed to being regulated to a separate section)?	1.1:0 1.2:0 1.3:0 1.4:0 1.5:0 Subtotal:0
2. Structural understanding of gender equality	2.1 Does the policy consider the structural factors (beyond the individual level) that impact gender equality? Examples include historical, legal, socio-cultural, economic, and political factors.	Subtotal:0
3. Intersectionality	3.1. Does the policy incorporate the concept of "intersectionality"?	Subtotal:0
4. Empowerment of Women	4.1 Does the word "empowerment" appear in the policy associated with women? 4.2 Does the policy refer to women's economic empowerment? 4.3 Does the policy refer to women's empowerment in terms of increasing women's agency, resources, and/or achievements?	4.1:0 4.2:0 4.3:0 4.4:0 4.5:0 4.6:0 Subtotal:0

[12] Yeşil Mutabakat Çalışma Grubu Yıllık Faaliyet Raporu 2022, Ministry of Trade. Green Deal Working Group (GDWG) established under the Green Deal Action Plan and coordinated by the Ministry of Trade.

	4.4 Does the policy mention consulting women, or women's civil society groups and associations during its development? 4.5 Does the policy recognise and implement the importance of equal participation of women in the policymaking and implementation process? 4.6 Does the policy propose the inclusion of gender experts in the design, implementation, and monitoring of actions/policies?	
5.Capacity building and resources	5.1. Does the policy entail capacity-building in the field of gender and green transformation? 5.2. Does the policy use/suggest using gender budgeting?	5.1:0 5.2:0 Subtotal:0
6. Incremental transformation	6.1. Does the policy build on national previous gender-equality achievements/policies?	Subtotal:0
7. Gender-responsiveness	7.1. Does the policy recognise gender-differentiated vulnerability to climate change and gender-differentiated impacts and contributions to emissions reductions? 7.2. Does the policy recognise the positive and negative effects of sectoral actions? 7.3. Does the policy address the specific needs and interests of women entrepreneurs/ women working in the green industry? 7.4. Does the policy consider ways to overcome gender norms and social traditions that impair women's involvement in green industry? 7.5. Does the policy address steps necessary to increase women's leadership roles in the green industry?	7.1:0.5 7.2:0 7.3:0 7.4:0 7.5:0 Subtotal:0.5
8. Regional and international contextualisation	8.1. Does the policy comply with international and regional conventions, policies, laws, and commitments to safeguard women's rights?"	Subtotal:0.5
TOTAL		1

Relevant Aspects Regarding Evaluation Criteria:

The policy document:

Refers to inclusive green transformation, and cooperation with relevant stakeholders for inclusive transformation (p.9);

Addresses concern for consistency between just transition policies and assessment of social impacts of Carbon Trading System (p.16).

Underlines the importance of promoting sustainability and circularity in the textile industry and setting concrete steps to reduce negative environmental impacts and to produce without damaging social rights. Here no gender-specific objective is declared, yet caring for social rights in a female-dominated sector is a valuable aspect. (p.16 and 21).

Refers to relevant documents that address social impacts, just transition, and decent work aspects as topics of international concern (European Commission's, "Corporate Sustainability Due Diligence" and Communication from the Commission on decent work worldwide for a global just transition and a sustainable recovery") (p.77) and also refers to The Mid-Term Plan includes measures to ensure a just transition for the labor market in the context of the green transformation.

The National Employment Strategy to come is planned to integrate a just transition framework (p.79)

Refers to WIDERA (Widening Participation and Strengthening the European Research Area) framework, which has a specific emphasis on gender equality in calls related to the Green Deal (p.76)

Mentions that there will be sections related to a just transition, but there is no specific reference to gender equality. The initial mention merely highlights that this is a topic of international concern.

Addresses gender-specific impacts: "Socio-economic analyses and a Gender Action Plan for Land Degradation Neutrality (ATD) have been initiated". This marks a step towards integrating gender considerations into environmental policies. The document also addresses the importance of ensuring the participation of public institutions, local governments, the private sector, labor and employer unions, civil society organizations, and the groups most affected by the transformation concerning international documents. (p.76)

3. 12th Development Plan 2024-2028

Quality Criteria Categories	Research Questions	Score
1. Gendering of the Policy	1.1. Does the policy aim for gender equality? 1.2. Does the policy include sex-disaggregated data consistently? 1.3. Does the policy consider gender differences to create more equality? 1.4. Are gender stereotypes challenged? 1.5. Is gender mainstreamed throughout the document (as opposed to being regulated to a separate section)?	1.1:1 1.2:1 1.3:1 1.4:0 1.5:0.5 Subtotal:3.5

2. Structural understanding of gender equality	2.1 Does the policy consider the structural factors (beyond the individual level) that impact gender equality? Examples include historical, legal, socio-cultural, economic, and political factors.	Subtotal:0.5
3. Intersectionality	3.1. Does the policy incorporate the concept of "intersectionality"?	Subtotal:0.5
4. Empowerment of Women	4.1 Does the word "empowerment" appear in the policy associated with women? 4.2 Does the policy refer to women's economic empowerment? 4.3 Does the policy refer to women's empowerment in terms of increasing women's agency, resources, and/or achievements? 4.4 Does the policy mention consulting women, or women's civil society groups and associations during its development? 4.5 Does the policy recognise and implement the importance of equal participation of women in the policymaking and implementation process? 4.6 Does the policy propose the inclusion of gender experts in the design, implementation, and monitoring of actions/policies?	4.1:1 4.2:1 4.3:1 4.4:1 4.5:0.5 4.6:0 Subtotal:4.5
5.Capacity building and resources	5.1. Does the policy entail capacity-building in the field of gender and green transformation? 5.2. Does the policy use/suggest using gender budgeting?	5.1:0 5.2:1 Subtotal:1
6. Incremental transformation	6.1. Does the policy build on national previous gender-equality achievements/policies?	Subtotal:0
7. Gender-responsiveness	7.1. Does the policy recognise gender-differentiated vulnerability to climate change and gender-differentiated impacts and contributions to emissions reductions? 7.2. Does the policy recognise the positive and negative effects of sectoral actions? 7.3. Does the policy address the specific needs and interests of women entrepreneurs/ women working in the green industry? 7.4. Does the policy consider ways to overcome gender norms and social traditions that impair women's involvement in green industry?	7.1:1 7.2:0.5 7.3:1 7.4:0 7.5:1 Subtotal:3.5

	7.5. Does the policy address steps necessary to increase women's leadership roles in the green industry?	
8. Regional and international contextualisation	8.1. Does the policy comply with international and regional conventions, policies, laws, and commitments to safeguard women's rights?"	Subtotal:0.5
TOTAL		14

Relevant Aspects Regarding Evaluation Criteria:

1. Inclusive and Just Transition Emphasis: The document describes digital and green transformation as twin targets. Those twin targets are to be accomplished with a just and inclusive framework, with an awareness on the labor market implications (i.e. green and digital jobs) (pp, 2, 11).

Achieving gender equality as a target is emphasized **(1.1):**

- Increasing labor force participation of women (following up on prior targets) (p.22).
- Increasing women's employment, gender equality in higher education (p.38), and equal opportunity are specifically addressed, albeit within the context of family dynamics (p.39).

The Plan includes gender disaggregated data and values gender disaggregated data collection **(1.2)**:

- Employment indicators (p.32)
- Employment targets (p.76)
- Targets for women's labor market indicators (p.169)
- Schooling by gender (p.178)
- Political participation by gender (p.178)
- Under the information and communication technology section, the rates and targets for internet usage among women and men are presented separately (p.136).
- Disaggregated data collection is emphasized: Institutions will ensure that data collected is categorized by attributes such as gender, age, migration status, disability, and geographic location. Analyses based on this data will be conducted (p.177).

The plan considers gender differences to enhance equality **(1.3):**

- Ineffective employment incentives will be discontinued, and the focus will shift towards enhancing incentives for women, youth, and individuals with disabilities (p.76).
- The plan addresses specific measures to increase women's inclusion in the labor market: To include women in the workforce, flexibilization and enhancing their relevant skills are emphasized (53, 56).
- Provision of care services for children is targeted to enable women's labor force participation (p.57, 167, 177).
- Not only care services for children but also for elderly and disabled are to be enhanced in terms of quality and quantity. (176)
- Work-Family reconciliation policies will be advanced. (176)

- Flexible employment for women as a solution to work-family life balance is stated. This policy framework is highly criticized by women's organizations and feminist activists because it risks confining women to a status that does not extend beyond providing supplementary income. “To harmonize work and family life, increase women's employment, and maintain a dynamic population structure, secondary legislation will be developed in collaboration with public institutions and private sector entities. This will include working hours and alternative working methods.” (p.176)
- Microcredit projects are mentioned as a support mechanism to increase women’s employment (167).
- Equal pay for equal work of women is emphasized (p.177).
- “Programs aimed at increasing women's participation in the workforce, such as those focused on entrepreneurship, financial and digital literacy, and cooperatives, will be expanded and disseminated more broadly.” (p.177)
- The plan underlines the relevance of support mechanisms for groups needing special policies, without specifically addressing gender (pp.33, 45): “The enhancement of workforce skills in areas demanded by the market, particularly digital skills, the expansion and increased effectiveness of active labor market programs, the broader utilization of flexible working arrangements, and the increased labor force and employment participation of groups requiring special policies remain important priorities” (p.33).

2-2.1.: The plan targets and overall transformation addressing structural challenges that impedes women’s inclusion.

- Announces above 60 per cent labor force participation target to be achieved with a comprehensive transformation that facilitates women’s inclusion. (p.46)

3. Intersectionality: The plan addresses “young women living in rural areas” as a group to focus specifically (p.186).

4. Empowerment of women in the process is an explicit objective, and the policy document state that strategies will be developed with the inclusion and inputs of relevant stakeholders.

- 4.1. “Ensuring gender equality and empowering women will be prioritized and integrated into all planning, programming, policy development, and implementation processes.” (p.177)
- 4.2. The document does not stress economic empowerment explicitly but within the context of women’s empowerment, economic dimensions are included.
- 4.3. The Plan states measures to increase women’s agency: “Temporary special measures, such as quotas and additional support, will be defined and implemented to increase women's participation and representation in education, employment, and decision-making mechanisms.” (p.177)
- 4.4. As part of the twin transformation process, a just transition strategy will be developed with the participation of all relevant stakeholders (p.167).

- 4.5. Increasing women's participation in decision-making and management is underlined; The mechanisms for the participation of women, youth, the elderly, and the disabled in representation and decision-making processes within local governments are targeted; and implementation of practices to achieve SDGs with a participatory approach is underlined in The Plan (p.177, 241,250).

5-5.2. Gender budgeting is targeted in The Plan: "Gender-responsive budgeting efforts will be expanded and integrated into the budgeting processes." (p.176)

7. Gender Responsiveness: Gender differentiated impact considerations and policies with regards to actions towards climate change:

- 7.1. Even though earthquakes are not caused by climate change, they can become disasters due to settlements and structures that do not align with natural dynamics. The plan addresses the gendered impacts of the earthquake disasters in Hatay and Kahraman Maraş and discusses gender-sensitive policies in the recovery process. (p.177)
- 7.1. The resilience against disasters and environmental challenges (p.190) and disaster management (including shelter design); urbanization by prioritizing the climate change and disasters is planned to be gender aware and based on the needs of specific groups. (pp.190, 211)
- The necessary transformation for all sectors is thoroughly addressed in alignment with global trends, with a focus on projections regarding the employment structure and the transformation and education of the workforce, without addressing gender differences. Sectors such as manufacturing, energy, and even textiles are discussed without emphasizing gender dimension (pp.80-155).
- 7.2. Needs analysis on the basis of gender is not specified yet the section in general underlines targeting needs of social groups with specific policies "To facilitate the implementation of a just transition process, a needs analysis will be conducted for those employed in regions and occupational groups that may be affected by the green transformation." (p.167)
- 7.3. Under agriculture there is a gender specific prioritization "Support will be provided to cooperatives operating in priority sectors, particularly agricultural sales cooperatives, women's cooperatives, and social cooperatives."(p.127) "Efforts will be undertaken to enhance female entrepreneurship and technology literacy in rural areas, create social spaces for women, provide quality, affordable, and accessible care services, and ensure that women working as agricultural laborers are paid and formally registered". (p.177)
- 7.3. Even though gender differences are not addressed for each sector, in the section "qualified labor, powerful family and healthy society" it is stated that the dual transformation is expected to increase employment capacity and participation of women, youth, and individuals with disabilities in the labor market will be supported (p.155).
- 7.3. Women specific measures to ensure their inclusion in the twin transition process: To ensure the full, equal, secure, and effective participation of women in the labor market transformed by the twin transition, programs will be developed to equip women with the new skills and abilities required (p.177).

- 7.3. The plan also underlines the importance of overcoming gender segregation in education and employment “Efforts will be made to transform the public and private sectors based on equality and inclusivity to increase women's education and employment in fields where their representation is low, such as mathematics, science, technology, and engineering.” (p.177)
- 7.3. Within the framework of sustainable development a just distribution of wealth, policies that consider needs of all segments of the society (women, youth, elderly...) are highlighted as priorities of the plan (p.155).
- 7.3. and 7.5. Addresses specific needs of women to succeed in the green sectors; also underlines the necessity of taking concrete steps to increase women’s inclusion in decision-making processes. “Accelerating Turkey's sustainable development requires prioritizing the empowerment of women and girls with the knowledge and skills necessary for digital and green transformations. Ensuring their inclusion at all levels of education to meet contemporary demands, supporting their continuity in education, and enhancing social services to improve their well-being are fundamental priorities. Additionally, it is crucial to take concrete steps to ensure the full and effective participation of women in employment, their greater inclusion in decision-making processes in both the public and private sectors as well as in politics, and the establishment of a balance between work and life (p.156).

8-8.1. The plan underlines strengthening efforts towards achieving the Sustainable Development Goals (SDGs) in an integrated manner, encompassing economic, social, and environmental dimensions (p.25).

4. Climate Summit 2022-Commission Recommendation Decisions

Quality Criteria Categories	Research Questions	Score
1. Gendering of the Policy	1.1. Does the policy aim for gender equality? 1.2. Does the policy include sex-disaggregated data consistently? 1.3. Does the policy consider gender differences to create more equality? 1.4. Are gender stereotypes challenged? 1.5. Is gender mainstreamed throughout the document (as opposed to being regulated to a separate section)?	1.1:1 1.2:0.5 1.3:1 1.4:0 1.5:0.5 Subtotal:3
2. Structural understanding of gender equality	2.1 Does the policy consider the structural factors (beyond the individual level) that impact gender equality? Examples include historical, legal, socio-cultural, economic, and political factors.	Subtotal:0
3. Intersectionality	3.1. Does the policy incorporate the concept of “intersectionality”?	Subtotal:0

4. Empowerment of Women	4.1 Does the word “empowerment” appear in the policy associated with women? 4.2 Does the policy refer to women’s economic empowerment? 4.3 Does the policy refer to women’s empowerment in terms of increasing women’s agency, resources, and/or achievements? 4.4 Does the policy mention consulting women, or women’s civil society groups and associations during its development? 4.5 Does the policy recognise and implement the importance of equal participation of women in the policymaking and implementation process? 4.6 Does the policy propose the inclusion of gender experts in the design, implementation, and monitoring of actions/policies?	4.1:1 4.2:0.5 4.3:1 4.4:1 4.5:1 4.6:0 Subtotal:4.5
5.Capacity building and resources	5.1. Does the policy entail capacity-building in the field of gender and green transformation? 5.2. Does the policy use/suggest using gender budgeting?	5.1:0 5.2:1 Subtotal:1
6. Incremental transformation	6.1. Does the policy build on national previous gender-equality achievements/policies?	Subtotal:0
7. Gender-responsiveness	7.1. Does the policy recognise gender-differentiated vulnerability to climate change and gender-differentiated impacts and contributions to emissions reductions? 7.2. Does the policy recognise the positive and negative effects of sectoral actions? 7.3. Does the policy address the specific needs and interests of women entrepreneurs/ women working in the green industry? 7.4. Does the policy consider ways to overcome gender norms and social traditions that impair women’s involvement in green industry? 7.5. Does the policy address steps necessary to increase women’s leadership roles in the green industry?	7.1:1 7.2:0.5 7.3:1 7.4:0 7.5:0 Subtotal:2.5
8. Regional and international contextualisation	8.1. Does the policy comply with international and regional conventions, policies, laws, and commitments to safeguard women’s rights?”	Subtotal:0.5
TOTAL		11.5

Relevant Aspects Regarding Evaluation Criteria:

1.1, 1.3. and 7: The policy document suggests to integrate gender equality as a twin target to green transformation targets, plans, programs and strategies : “In line with the 2053 net zero emission and green development goals, considerations of gender equality and just transition should be integrated into all plans, programs, and strategies related to climate change, including Turkey's Nationally Determined Contributions under the Paris Climate Agreement”. (p.21)

1.1, 1.2.and 7.1. The policy document targets gender equality along with green transition and aims to develop further assessment of differentiated impacts of climate change: "Academic research on climate migration, climate justice, gender equality, vulnerable groups, and just transition should be increased, and research and development activities should be supported."

1.1, 4.1, 7.1. and 7.3.: The policy document adopts the just and inclusive transition framework and specifically addresses gender differences in risks, needs and vulnerabilities with a rights based approach: “In addressing the social dimensions of combating climate change, a rights-based approach should be adopted, and gender equality should be considered in the development of policies, actions, and legislative regulations. Taking into account global developments and national conditions, restorative justice approaches should be employed to address the potential injustices arising from climate change. In processes related to climate justice and while taking action to address climate change, fundamental rights such as human rights, the right to health, the right to education, and the right to development should be prioritized. The interests of vulnerable individuals, including children, women, the elderly, and people with disabilities, should be safeguarded, with a focus on gender equality, the empowerment of women, and intergenerational justice. National policies aimed at those affected by climate change should consider social determinants.” (p.20)

4.3.,4.4., 4.5 and 7.5. The report values women’s agency, vision and participation in policy making and implementation, women’s leadership in the process is suggested: "Access to information on climate change should be improved, and fair and effective participation opportunities for all segments of society in decision-making and implementation processes should be strengthened. Within this framework, vulnerable groups, especially women and youth, should be given an active role in decision-making and implementation processes related to climate change. Women's leadership should be encouraged." (p.21)

5.2.: The resources/investments required for just and inclusive transformation and gender budgeting are addressed: “To ensure climate justice, mechanisms that could be considered for establishment should develop gender-sensitive budgeting and investment opportunities through a gender lens, and efforts should be made to ensure their integration.” (p.21)

7.1. and 7.3: The policy document recognises gender differentiated impacts and suggested targeted policies: “Efforts should be made to address the adverse effects and risks associated with climate change in rural areas, such as food security issues, reduced production, and the abandonment of agricultural land, due to migration. Vulnerable groups should be empowered, and technical and financial support mechanisms should

be established to support all producers, particularly women agricultural producers" (p.20).

7.3. and 4.4: Just and an inclusive approach framework is suggested to increase vulnerable groups' employment opportunities in green and decent jobs generate. Also social dialogue is underlined as the mechanism to enhance inclusivity of policies: "A just transition is a strategic framework that ensures no one is left behind during the shift to a climate-neutral economy by effectively utilizing social dialogue mechanisms. It evaluates the risks and opportunities of the transformation process together, prioritizes vulnerable groups, and creates decent green job opportunities. Green jobs that provide full social protection and have a positive impact on reducing carbon emissions should be increased. Additionally, programs aimed at equipping the workforce affected by climate change and the transformation process with skills focused on green and digital transformation should be developed in collaboration with social partners." 22

8- The policy document refers to international just transition framework: "In the context of international policy, processes related to climate justice should be considered in line with Turkey's 2053 net zero target and the principle of "common but differentiated responsibilities and respective capabilities," which is clearly and unequivocally accepted in the United Nations Framework Convention on Climate Change and the Paris Climate Agreement. These processes should support global efforts to address climate change." (p.21)

5. Medium Term Program 2024-2026

Quality Criteria Categories	Research Questions	Score
1. Gendering of the Policy	1.1. Does the policy aim for gender equality? 1.2. Does the policy include sex-disaggregated data consistently? 1.3. Does the policy consider gender differences to create more equality? 1.4. Are gender stereotypes challenged? 1.5. Is gender mainstreamed throughout the document (as opposed to being regulated to a separate section)?	1.1:1 1.2:0.5 1.3:1 1.4:0 1.5:0.5 Subtotal:3
2. Structural understanding of gender equality	2.1 Does the policy consider the structural factors (beyond the individual level) that impact gender equality? Examples include historical, legal, socio-cultural, economic, and political factors.	Subtotal:0
3. Intersectionality	3.1. Does the policy incorporate the concept of "intersectionality"?	Subtotal:0
4. Empowerment of Women	4.1 Does the word "empowerment" appear in the policy associated with women? 4.2 Does the policy refer to women's economic empowerment?	4.1:0 4.2:0 4.3:0 4.4:0

	4.3 Does the policy refer to women's empowerment in terms of increasing women's agency, resources, and/or achievements? 4.4 Does the policy mention consulting women, or women's civil society groups and associations during its development? 4.5 Does the policy recognise and implement the importance of equal participation of women in the policymaking and implementation process? 4.6 Does the policy propose the inclusion of gender experts in the design, implementation, and monitoring of actions/policies?	4.5:0 4.6:0 Subtotal:0
Capacity building and resources	5.1. Does the policy entail capacity-building in the field of gender and green transformation? 5.2. Does the policy use/suggest using gender budgeting?	5.1:0 5.2:0 Subtotal:0
6. Incremental transformation	6.1. Does the policy build on national previous gender-equality achievements/policies?	Subtotal:0.5
7. Gender-responsiveness	7.1. Does the policy recognise gender-differentiated vulnerability to climate change and gender-differentiated impacts and contributions to emissions reductions? 7.2. Does the policy recognise the positive and negative effects of sectoral actions? 7.3. Does the policy address the specific needs and interests of women entrepreneurs/ women working in the green industry? 7.4. Does the policy consider ways to overcome gender norms and social traditions that impair women's involvement in green industry? 7.5. Does the policy address steps necessary to increase women's leadership roles in the green industry?	7.1:0 7.2:0.5 7.3:0.5 7.4:0 7.5:0 Subtotal:1
8. Regional and international contextualisation	8.1. Does the policy comply with international and regional conventions, policies, laws, and commitments to safeguard women's rights?"	Subtotal:0
TOTAL		4.5

Relevant Aspects Regarding Evaluation Criteria:

1. The Program for Türkiye's short-term future places a significant emphasis on green and digital transformation, aligning with the objectives outlined in the National Plan. In addition to these focuses, the Program shares the National Plan's commitment to employment generation and inclusivity. However, the immediate policy priorities of the

Program are stabilization and inflation reduction through contractionary fiscal measures and stringent monetary policies, resulting in a reduction of fiscal resources (pp. 9 and 15), hence thereof lack of the fiscal space. In this regard the Program considers stability will pave the way for productive investments to “increase employment, and the technology composition of production and exports will be improved with a focus on green and digital transformation.” (p.15)

1.1: Emphasis on inclusivity: A 4.5% average growth rate is forecasted for the period. To achieve these targets, the policy measures encompass various aspects related to technological advancement, which is a primary focus. Additionally, the measures include the implementation of green solutions and technologies, sustainability, and food security in agriculture. Inclusivity is highlighted in the initial paragraph of the growth targets (pp. 15-18).

1.1 and 7.3: Special programs are planned to ensure full and equal participation of women in the labor market and in the green and digital transformation process: “Special programs will be developed to ensure the full, equal, secure and effective participation of women in the labor market changing with digital and green transformation, and programs in areas such as entrepreneurship, financial literacy, and cooperatives will be expanded to increase women's participation in the labor force.” (p.20, employment policies)

1.2: Gender disaggregated employment statistics (p.8)

1.3: The importance of care provision for women’s economic and social participation is recognized: “The number of accessible daytime care centers will be increased to encourage caregivers to participate in the workforce and to increase their participation in social life.” (p.20)

1.3. Flexible work arrangements are seen as a remedy for work-life balance that also respond to employers’ preferences: “In line with the developments experienced in new generation flexible working models such as remote, part-time, and temporary work and platform work, legislative arrangements will be implemented swiftly and effectively, considering the needs of the business world and the work-private life balance.” (p.20): “In line with increasing the actual and legal scope of the social security system, flexible working styles will be expanded to ensure permanent participation in working life, especially for women, young people and disabled people, and social security legislation and practices will be made more compatible with changing labor market conditions and new generation flexible working styles.” (p.29) Both arguments declared here are strongly opposed by gender equality focused NGOs and academicians as they entail the risk of confining women into low income and low security positions.

1.3. Programs on skills and competencies development to increase participation in employment are underlined (p.60)

1.3. Provision of programs of entrepreneurship, financial literacy and cooperatives for women, also provision of day care centers to increase women’s participation in the workforce are mentioned. (p.61)

6-6.1. In terms of incremental transformation, prior employment incentives are planned to be replaced with more effective policies: “Ineffective employment incentives will be

terminated. A simple and effective incentive structure will be developed by increasing weight of incentives for women, young people and the disabled.” (p.29)

7-7.2 and 7.3: Needs analysis is included to understand effects of green transformation for a just transition: “Needs analysis will be conducted for those employed in regions and professional groups that could be affected by the green transformation in order to realize a just transition process.” (p.20, employment policies)

7.3. Increasing the competency of the workforce is underlined for a just transition: “The effects of the transitioning to a green and circular economy on labor markets will be analyzed, and the competency of the workforce will be increased for the new occupations that will emerge, taking just transition into account.” (p.33)