



GREEN TRANSFORMATION

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Today, environmental problems such as global climate change, loss of biological diversity, air and water pollution, and waste issues pose serious threats to humanity. These problems arise from the unsustainable use of natural resources and economic activities such as agricultural and industrial production and consumption that are not compatible with environmental goals.

Green transformation means adopting environmentally friendly technologies, prioritizing sustainability goals, and developing policies and practices to protect natural resources. Essentially, this concept, developed for climate change and efficient use of resources, encompasses both economic and environmental sustainability.

The concept of green transformation requires the design of all economic activities with environmental goals in mind, especially responsible production and consumption. It encompasses a wide framework that includes all of the following practices:

- Increased use of renewable energy sources and improved energy efficiency,
- Development and production of more sustainable and green products,
- Resource efficiency in production (eco-efficiency),
- Reduction of waste production and recycling of waste,
- Transition to a circular economy/production,
- Development of greener and more sustainable transportation systems,
- Development of fair, healthy, and environmentally friendly food systems from field to table,
- Conservation of natural resources; and
- Sustainable use of natural habitats.

The Objectives of Green Transformation

Achieving green transformation serves the following objectives:

- **Protecting the Environment:** Green transformation is important for reducing environmental pollution and preserving natural resources. Depletion of natural resources, damage to ecosystems, and environmental pollution harm both human health and the economy. Green transformation enables more efficient use of natural resources and improves waste management.
- **Combating Climate Change:** Climate change leads to many problems worldwide, such as increasing temperatures, rising sea levels, and more natural disasters. Green transformation supports the fight against climate change by helping to reduce greenhouse gas emissions.
- **Human Health:** Green transformation is important for protecting human health. Problems such as environmental pollution, air and water pollution, depletion of natural resources, and climate change harm human health. Green transformation helps to reduce these problems and protect human health.
- **Economy:** Green transformation also contributes to the economy. Sustainable products and services developed in energy, agriculture, transportation areas towards achieving net-zero targets and investments create new job opportunities and support economic growth. At the same time, more efficient use of natural resources, waste management, and recycling practices also contribute to the economy.

- **Protection of Future Generations:** Green transformation contributes to the protection of the right to life of future generations with steps such as efficient use of natural resources, recycling of waste, and environmental protection.
- **Sustainability of Social Life:** Green transformation ensures the sustainability of social life by increasing people's quality of life and contributing to leaving a more livable world for future generations.
- **Risk Management:** Systematic risk assessment is crucial for global supply chains and situation analysis in green growth. Evaluating risks and opportunities through cost-benefit analysis contributes to the development of sustainability strategies in the long term.

Green Transformation Roadmap

To achieve the green transformation, the following important steps can be taken:

- **Increasing Public Awareness:** The first step in achieving the green transformation is to raise awareness among the public about environmental issues. Awareness campaigns can be conducted to draw more attention to environmental protection issues, increase public sensitivity towards environmental problems, and encourage public participation in the green transformation. This will help people become more conscious and sensitive about environmental issues.
- **Utilizing Renewable Energy Sources:** As the use of fossil fuels is environmentally harmful, transitioning to renewable energy sources is crucial for achieving the green transformation. Renewable energy sources such as solar energy, wind energy, hydroelectric power, biomass, and geothermal energy provide clean and sustainable energy.
- **Developing More Sustainable and Green Products:** Another important step in the green transformation is the development of more sustainable and green products. The design and production of products should aim for more efficient use of natural resources and reduction of waste generation.
- **Recycling Waste:** Recycling waste is a significant component of green transformation. By developing waste management systems, it is possible to enable the recycling and reuse of waste materials.
- **Developing Sustainable Transportation Systems:** The transportation sector can cause significant harm to the environment. To achieve the green transformation, it is necessary to develop more sustainable and eco-friendly transportation systems. Bike lanes, public transportation vehicles, electric vehicles, and hybrid vehicles can be utilized as environmentally friendly transportation options.
- **Political Support:** It is crucial for politicians and decision-makers to support environmentally friendly policies for the realization of the green transformation. These policies should be designed to protect the environment and achieve sustainability goals. While many companies are inclined to carry out environmentally friendly activities, there is still a long way to go in institutionalizing and making them sustainable. Therefore, it is necessary to address the existing gaps in the legal infrastructure related to green transformation.
- **Technological Advancement:** The green transformation relies on environmentally friendly technologies such as renewable energy sources, recycling technologies, sustainable transportation systems, and eco-friendly production techniques. Therefore, it is important to foster technological advancement and promote the widespread adoption of these technologies.
- **Responsible Production and Consumption:** The green transformation also involves transitioning towards a sustainable economy. Therefore, companies and consumers need to prioritize responsible production and consumption practices. These practices will change consumption habits, reduce waste generation, promote energy efficiency, and support environmentally friendly products.

- **Collaboration:** Collaboration between society and businesses is essential for the realization of the green transformation. Companies, communities, and decision-makers embracing environmentally friendly practices can collaborate with each other to achieve the green transformation.
- **Financing:** The green transformation is not possible without sufficient sources of financing. The financial sector and capital markets play a crucial role in the transition to a low-carbon economy. It is important to diversify financing channels through non-credit financial instruments such as green bonds and sukuk, as well as provide green transformation credit mechanisms for small and medium-sized enterprises (SMEs).
- **Employment:** The transformation in production processes requires changes in the structure of the workforce in this field. It is important to reassess job training programs or vocational education curricula to align with the skills required for new production processes. This will ensure that the workforce is prepared for the jobs that will emerge alongside the new production processes.
- **Technology:** Digital transformation, which is often emphasized as an integral part of the green transformation, and the establishment of an eco-innovation environment within the scope of circular economy practices are crucial. Facilitating eco-innovation and enabling the realization of digital transformation are essential aspects of the green transformation.
- **Incentives:** Incentives can play a potential role in accelerating the green transformation process. Various forms of support implemented by the government, such as insurance premiums and production incentives, can contribute to expediting this process.

Türkiye's Green Transformation Initiatives

The growth roadmap announced by the European Union (EU) in 2019, known as the European Green Deal, outlines strategies targeted based on scientific facts previously stated in international climate conferences. The EU aims to achieve carbon neutrality by 2050 and seeks to turn risks into opportunities through inclusive strategies.

In this context, the Ministry of Trade prepared an "**Action Plan for the Green Deal**" to align with the transformation policies occurring in the EU and global economy. This plan was adopted through a directive published in the Official Gazette on July 16, 2021, with the goal of achieving compatibility. The action plan includes 81 actions under 9 main targets.

In addition, the Medium-Term Program (OVP) for 2022-2024, which covers the 3-year strategies of the Turkish economy, includes seven policies and measures related to green transformation in its macroeconomic targets. The measures highlight the significant role of the financial sector in achieving a carbon-neutral economy. The measures emphasize the support for necessary technological developments for green transformation, the promotion of green Industrial Zones (OSBs), and the widespread implementation of zero waste practices.

Türkiye's steps towards green transformation can be summarized as follows:

- A target of preventing 500 million tons of emissions by 2030 has been set.
- The pilot implementation of the National Emissions Trading System will begin in 2024.

In the upcoming transition period, we need comprehensive strategies designed with a multidimensional perspective. It is important to develop integrated approaches to industrial, agricultural, energy, employment, and education policies for the successful realization of this transformation. In addition, instead of a centralized perspective targeting only specific actors, the green transformation should be based on a decentralized and grassroots model. Taking regional dynamics into account in the policy-making process is also crucial to prevent regional inequalities from deepening.