Chapter 4

# Transition From Traditional Finance to Sustainable and Ecological Finance

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**Abstract**

In this study, the concept of sustainable finance, sustainable finance elements, sustainable finance instruments and information on the development of sustainable finance in the world and in Turkey are presented to the readers. In the study, the emergence of the concept of sustainability and its applications in the finance world are mentioned. In this context, information is provided on green bonds, social bonds, sustainability bonds, green loans, blue bonds and green sukuk, which are increasingly important sustainable finance instruments in the world and Turkey. In addition, in the last part of the study, the international development of sustainable finance is presented chronologically in the following order: 1987 Brunthland Report, 1992 Rio Summit, 1997 Global Reporting Initiative Institute determining the principles and procedures of sustainable reporting, 1999 global Dow Jones Sustainability Index, 2002 Global Reporting Initiative Institute's first sustainability guide on sustainable reporting, 2008 global financial crisis, 2012 Rio+20 summit, 2015 Addis Ababa Action Plan, 2018 Sustainable Action Plan, 2021 Glasgow COP26 climate summit held between October 31 and November 2. It is noteworthy that especially at the Glosgow COP26 climate summit, the issue of financial institutions acting more sensitively to the climate crisis was put on the agenda for the first time. The development of sustainable finance in Turkey, again chronologically, is as follows: "Sustainable Financing Framework Plan" published by the Treasury in 2021, 'Sustainable Banking Strategic Plan' published by the Banking Regulation and Supervision Agency in the same year, 'Sustainable Working Group' established within the Banks Association of Turkey in 2022, establishment of

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https://doi.org/10.58830/ozgur.pub565.c2524

a 'Green Asset Ratio Working Group' as a financial performance indicator by the Banking Regulation and Supervision Agency and the Banks Association of Turkey in 2022, publication of a green bond guide for Turkey in 2022 and publication of a 'Green Sukuk Study Report' in May 2022.

## 1. WHAT IS SUSTAINABILITY AND SUSTAINABLE FINANCE?

The concept of sustainability, one of the trendy concepts of recent years, is used in many areas of life and started to gain importance after 1960. The concept of sustainable, derived from the Latin word "Sustienere", means "to continue, to provide, to support, to exist, to protect" (Tıraş, 2012: 59). It can also be defined as the ability of any system, society or phenomenon to continue without interruption, without stopping, without deterioration or without overloading the main resources of the system, without exhausting itself through overuse (Coşkun et al., 2017: 392). The concept of sustainability can be explained as meeting our needs without destroying the resources in question by using the vital resources that the next generations will benefit from effectively and efficiently. Individuals have a negative impact on the natural balance by disrupting global warming, environmental pollution and biological balance while carrying out their activities. In this context, sustainability is indispensable for minimizing the negative impact and for a healthy world. Therefore, since businesses are the biggest actor using resources, the phenomenon of sustainability is the basis for businesses to achieve success in the long term (ISO, 2024).

The concept of sustainable finance is defined as taking into account the economic, environmental and social impacts as well as making profits in financial decisions (Scholtens, 2006). This approach enables businesses to act in a way that will benefit long-term sustainability and society instead of short-term profitability. In addition, the financial sector should not only prioritize returns, but also take into account environmental and social impacts (Zioło et al., 2019: 23). In this context, sustainable finance is defined as the field of economics that contributes to strong, balanced and inclusive development, including tools and approaches in line with the sustainable goal by taking into account environmental and social factors in the financial ecosystem (Sommer, 2020: 6).

In recent years, it has been observed that sustainable finance has led to a shift in thinking about traditional finance. Financial and non-financial businesses have traditionally adopted the shareholder model where profit maximization is the main goal, but with the sustainable finance approach, the focus has shifted from short-term profit to long-term value creation. In a

2018 study by Schoenmaker, the evolution of sustainable finance was defined in three phases. In the first phase (Sustainable Finance 1.0), the contribution to environmental and social values is low and economic performance is at the forefront. In the second phase (Sustainable Finance 2.0), businesses try to balance social and environmental issues and economic values. At this stage, financial returns compatible with society and the environment are targeted and economic performance is seen as a medium-term priority. The third phase (Sustainable Finance 3.0) focuses on the long-term environmental and social impact. The evolutionary development of sustainable finance is summarized in the table below (Schoenmaker, 2018: 8-9).

***Table 1. Sustainable Finance Framework***

| | **Value Created** | **Sustainability Factors Ranking** | **Impact Duration** |
|---|---|---|---|
| **Sustainable Finance 1.0** | Shareholde Value | F big S and E | Short Term Impact |
| **Sustainable Finance 2.0** | StakeholderValue | T = F + S + E | Medium Term Impact |
| **Sustainable Finance 3.0** | Common Good Value | S and E big F | Long Term Impact |

**Note:** ***F=Financial Value; S=Social Impact; E=Environmental Impact***

In the financial world, trust in the financial sector has started to decline due to reasons such as bribery, corruption and financial scandals after the global mortgage crisis of 2008. It is thought that the sustainable finance approach will be effective in transforming this negative situation into a positive one and regaining the lost trust (Uzsoki, 2020: 2).

## 2. KEY ELEMENTS OF SUSTAINABLE FINANCE

Sustainable finance is to incorporate environmental, social and governance principles (ESG) into decision-making processes for those who supply funds, those who demand funds and investors in a financial market. Businesses will provide protection by integrating ESG criteria into their business models and reducing financial risks (Canikli, 2022: 31). Sustainable finance or ESG elements are three-dimensional and each dimension has certain sub-issues. The first element, the environmental dimension, consists of environmental practices such as the introduction of environmental management systems, reducing environmental pollution, in other words, measures to reduce carbon emissions. The second element of sustainable finance, the social dimension, consists of regulations and policies on human rights and the existence of labor safety standards. The last element, governance, aims to interact with stakeholders, transparency and accountability (Clark & Viehs, 2014:3).

## 3. SUSTAINABLE FINANCE INSTRUMENTS

Sustainable finance instruments or green finance instruments, which started to be traded in financial markets in the 2000s, include financial products that will eliminate the negative effects of the environment or protect the environment. Environmentally friendly financial products and services of financial institutions have started to be used all over the world with the understanding of sustainable finance (Kuloğlu & Öncel, 2015: 6). Sustainable finance instruments will be explained below under subheadings.

### 3.1. Green Bonds

A green bond is a debt instrument that commits to use the funds generated by the issued bond only for environmental projects. The funds generated by the bonds are used to finance projects in renewable energy sources, energy efficiency, sustainable agricultural practices, biodiversity conservation, water management and environmental protection (Jun et al., 2016).

For the first time in the world, the European Investment Bank issued a green bond under the name "Climate Awareness Bond" in 2007. In Turkey, the first green bond with a 5-year.maturity was issued by the Industrial Development Bank of Turkey in 2016 (Dumlu & Keleş, 2023: 263).

There are four types of green transactions in today's financial markets (ICMA, 2021);

- Standard Green Theme Bonds: bonds that have similar characteristics to conventional bonds but are issued to finance green projects.
- Green Revenue Bond: A type of bond in which the issuer is not repaid, the risks are tied to mortgaged cash flows and the proceeds are used for environmentally friendly projects.
- Green Project Bond: A type of bond in which investors invest directly in one or more environmentally friendly projects. In other words, investors directly bear the project risk.
- Green Asset-Backed Securities and Mortgage Covered Bonds: Like asset-backed securities, these are bonds that are collateralized by green projects and whose repayment depends on the cash flows from these projects.

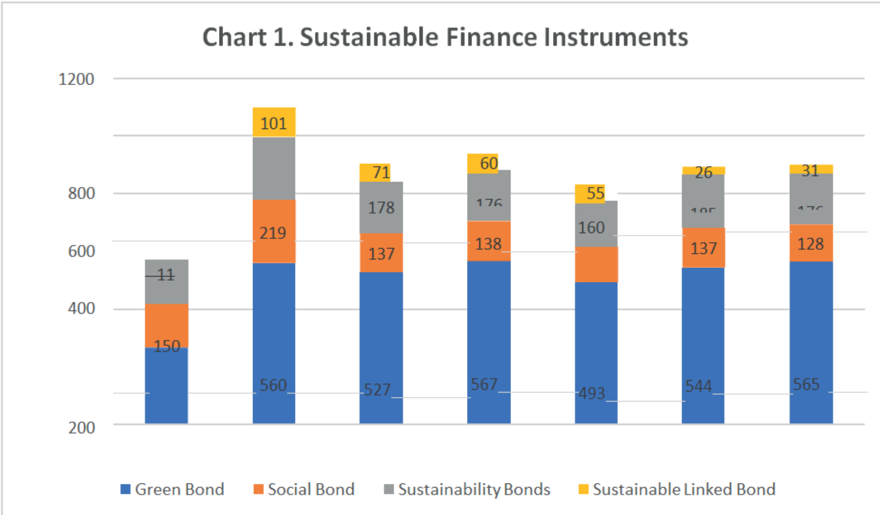
### 3.2. Social Bonds

Investors in these bonds, also called social impact bonds, are not only interested in the financial returns that the bond will provide, but also in its social impact. Social bonds are arranged between four parties: the investor, the intermediary, the public authority and the service provider (Davies, 2014). Social bonds enable governments, organizations, investors, communities and individuals to make meaningful contributions to the betterment of communities and individuals by channeling capital directly into projects and initiatives targeting social problems. Social bonds are contracts between a social service organization, an investor and a government to provide social benefits. Unlike traditional investments, repayments to investors are not made from program revenues. This is because social programs generally do not make money. In this case, repayments come from government savings generated by an intervention. In fact, the reason why a social impact bond is not considered a bond in its own right is that repayment and return on investment (ROI) depend on the desired social outcomes. If the desired results are not achieved, investors do not receive either returns or principal repayments (Konak & Demir, 2023:18).

### 3.3. Sustainability Bonds

Sustainability bonds are defined as any type of bonds whose financial and/or structural characteristics may change depending on whether the issuer achieves predefined Sustainability/ESG targets. In this sense, issuers explicitly commit to future improvements based on sustainability results within a predefined timeline. Sustainable-linked bonds are a forward-looking performance-based instrument. Sustainability Bonds can be defined as bonds where the fund is used to finance or refinance both Green and Social Projects. It is understood that some Social Projects may also provide environmental benefits, and some Green Projects may have social co-benefits. The classification of bonds as Green Bonds, Social Bonds or Sustainability Bonds is determined by the issuer based on the underlying project objectives (ICMA, 2021).

The issuance amounts of green bonds, social bonds, sustainability bonds and sustainable linked bonds, which are among the sustainable finance instruments in the world, are presented below.




***Source: (UniCredit, 2024)***

***Note: For 2023 and 2024, data for 10-month periods are presented for comparison.***

## 3.4. Green Loans

These are long-term loans with special privileges to finance the investments of projects prepared to reduce or stop negative environmental and social impacts. Financial institutions offer green loans on issues such as energy renewability and efficiency (Sakınç, 2020: 3). Banks' green loan practices are classified as green vehicle loans, green commercial construction loans, and green home and equipment loans (UNEP FI, 2007).

- -Green Home and Equipment Loans: This is a type of loan that allows borrowing at low interest rates for individual customers who want to purchase energy-efficient homes or improve their existing homes with energy-efficient appliances and installations.
- -Green Commercial Building Loans: Today, green commercial buildings characterized by low energy consumption, reduced waste and less pollution than conventional buildings are becoming more common. These buildings reduce project costs and increase net operating income, leading loan appraisers to offer favorable lending opportunities to businesses for buildings with lower operating costs, better performance and longer life spans.
- -Green Vehicle Loans: This type of loan, which aims to increase the use of green vehicles with features such as low greenhouse gas

emissions and high fuel efficiency, is a type of loan that offers below-market interest rates. Green vehicle loans are divided into green auto loans for individual car users and green fleet loans for small trucking companies.

### 3.5. Blue Bonds

Blue bonds are a debt instrument issued by national governments, development banks and corporations to provide financing for marine and ocean-based projects with long-term sustainability goals and benefits. Blue bonds work like traditional bonds, where an investor lends capital to the issuer and repays the initial investment plus an interest rate each year until the bond matures. The proceeds from blue bonds are allocated to finance or refinance water and ocean-related projects that have an impact on achieving sustainable goals. There is currently no generally accepted global definition of green, social or sustainability bonds. Market specific standards for these bonds are set by the International Capital Market Association (ICMA). All bonds are regulated instruments subject to the same capital market and financial regulation as other listed fixed income securities. The majority of these bonds issued are bonds whose proceeds are used for a specific purpose (IDB & UN, 2021: 8).

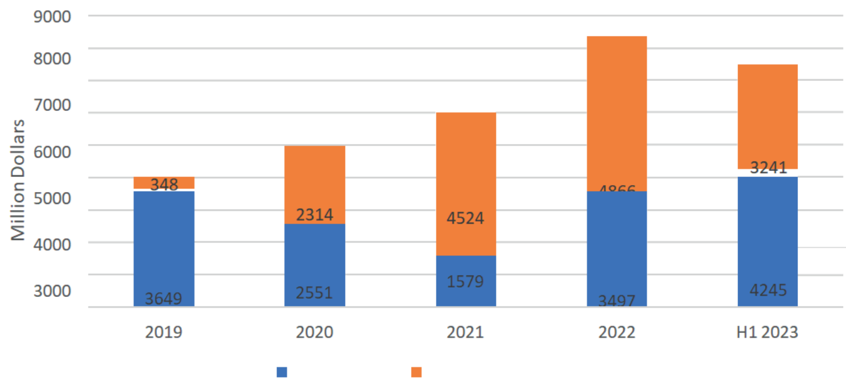
### 3.6. Green Sukuk

Green sukuk is defined as a green bond-like financial product developed within the framework of participation banking instruments. Interest-free funds obtained from sukuk issuance are used to finance environmentally friendly projects that comply with Islamic criteria. Green sukuk issuance was first realized in Malaysia in 2017 in the amount of USD 60 million with a maturity of 2-16 years (Azhgaliyeva, 2021: 1).

The definition of Sukuk in interest-free finance standards are certificates issued at par value, representing undivided shares of an organization's existing assets (goods, benefits or services), the assets of a specific project or a private investment activity. Green sukuk is an innovative type of sukuk issued in accordance with the green bond principles1 used in green bond issuance. Green bond principles are completely independent from the structure of the underlying asset and impose additional obligations on the fund user in green sukuk issuance, such as preparing a framework document, obtaining a second party opinion, and creating a fund utilization and impact report. Green sukuk, like green bonds, are issued in compliance with ICMA's four fundamental principles. The main difference between green sukuk and green bonds, as between sukuk and bonds, comes from the underlying asset structure in sukuk. In this sense, it is obvious that green sukuk will play a major role in closing the gap between conventional finance and Islamic finance (Karabulut, 2024: 8).

The graph showing the value of exports over the years is presented below:

**Chart 2. Green Sukuk Issuances by Years**




***Source: (Refinitiv, 2023).***

***Note: Data for 2023 is calculated for the first six months.***

When the graph is analyzed by years, it is observed that the highest amount of green sukuk issuance in terms of issuance amount was in the first six months of 2023.

## 4. DEVELOPMENT OF SUSTAINABLE FINANCE IN THE WORLD AND TURKEY

Some events regarding the development of sustainable finance in the world are listed chronologically as follows (Ada, 2022: 42-44; Bozlağan, 2010):

- In 1987, with the "Brunthland Report" (Our Common Future Report) published by the United Nations, the issue of sustainability was brought to the social agenda. In 1989, the concept of green economy emerged as an economic approach within the issue of sustainability.
- In 1992, the Rio conference, organized by the United Nations with the participation of 178 countries, determined the actions to be taken

in areas such as economy-finance, environment, urbanization and governance in order to achieve sustainable development.

- Established in 1997, the Global Reporting Initiative (GRI) sets out principles and procedures for sustainability reporting by institutions and organizations. Reporting standards determined as GRI standards are among the globally widely used standards.
- In 1999, the Dow Jones Sustainability Index, the first sustainability index, was introduced. Thanks to the index, which was the first of its kind on a global scale, sustainability performance was evaluated.
- In 2002, guidance on sustainability was published by the Global Reporting Initiative
- As a result of the 2008 global financial crisis, sustainable finance approaches started to take a more active place in the finance world in addition to traditional finance concepts.
- The "Natural Capital Declaration" was signed by financial institutions participating in the Rio+ 20 summit held at the United Nations Conference on Sustainable Development on 20-22 June 2012. With this declaration, it was committed to be complied with by financial institutions until 2020.
- At the 2015 Addis Ababa Conference, new initiatives to provide the necessary financing for sustainable development were introduced, and issues such as increasing capacity and technology in the field of finance and the involvement of the private sector in development processes were discussed. In addition, the 2015 conference was instrumental in the organization of the "Conference on Sustainable Development" in New York in September of the same year and the "Paris Climate Conference" in December of the same year.
- The action plan was published with the "Sustainable Finance Action Plan Framework" published by the European Union in 2018.
- At the Glasgow COP26 summit in 2021, one of the main agenda items was sustainable finance. At the conference, it was decided that financial institutions should pay more attention to the climate crisis and financing issues.

The regulations implemented in Turkey to support the development of sustainable finance and strengthen the ecosystem of green finance instruments can be listed as follows (ISO, 2024):

- On November 12, 2021, the Ministry of Treasury and Finance published the "Sustainable Financing Framework Document" to be used by the Ministry of Finance in borrowing transactions with instruments such as green bonds, social bonds or lease certificates in the international ESG borrowing market.
- The Banking Regulation and Supervision Agency (BRSA) published the "Sustainable Banking Strategic Plan" on December 27, 2021, aiming to develop and expand sustainable finance practices in the banking sector.
- In early 2022, a "Sustainability Working Group" was established within the Banks Association of Turkey (TBB) to adopt an environmental and social approach in banks' loan disbursements and other services.
- In parallel with the initiatives of the European Union's (EU) European Banking Authority to calculate the "green asset ratio" as a key performance indicator in the banking sector on March 1, 2021, a "Green Asset Ratio Working Group" was established in early 2022 in cooperation with the BRSA and the BAT.
- The Capital Markets Board published the "Green Debt Instrument, Sustainable Debt Instrument, Green Lease Certificate, Sustainable Lease Certificate Guideline" (Green Bond Guideline) on 24.02.2022 to ensure compliance with international standards. The said guideline aims to increase transparency and standardization in the selection of projects eligible for green financing, use, management and reporting of bond proceeds.
- In May 2022, the Presidential Finance Office published the Green Sukuk Study Report, which includes findings and solution proposals regarding sukuk/green lease certificate issuances in Turkey.

## 5. CONCLUSION

One of the most debated concepts of recent years, "sustainability", "sustainable development" or "sustainable development" is defined as meeting the needs of humankind without compromising the ability of future generations to meet their needs. Sustainability consists of three dimensions: environment, social and governance. Effective and balanced management of these dimensions is a necessity.

Sustainable finance, which constitutes the main theme of the study, is defined as a concept that serves to encourage investments that prioritize environmental, social and governance issues in the allocation of capital. In other words, it is defined as instruments and approaches in the financial ecosystem in line with the sustainable goal, taking into account environmental and social factors. Traditional finance focuses on financial returns and sees the financial sector as separate from the society and environment of which it is a part. In contrast, sustainable finance considers financial, social and environmental variables together. Sustainable finance instruments or green finance instruments, which started to be traded in financial markets in the 2000s, are financial products that will eliminate the negative effects of the environment or protect the environment. It can be said that sustainable financial instruments are one of the most important factors in Turkey's sustainable development, in reducing our energy dependency and indirectly in reducing our current account deficit.

As a result, sustainable finance should contribute to sustainability in Turkey by creating synergy among stakeholders such as financial institutions, investors and regulatory bodies in a coordinated manner. It should be ensured that the legal regulations in Turkey regarding sustainable finance practices are determined in parallel with international regulations and that the regulations are in a way to encourage the use of sustainable finance instruments.

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