

# SECTORAL SUSTAINABILITY GUIDE



2026

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# 1 PURPOSE AND SCOPE

Today, the world is experiencing a multidimensional period of heightened vulnerability, marked by mutually reinforcing transformations across the environmental, economic and governance spheres. The physical impacts of the climate crisis, energy constraints and geopolitical uncertainties are no longer merely theoretical issues; they have become strategic risks with tangible consequences such as increased costs, operational disruptions and reputational loss. For digital and financial infrastructure providers in particular, these risks have systemic implications.

**From Individual Efforts to Collective Transformation:** The scale of these risks demonstrates that it is no longer possible to manage the current situation through individual efforts. As the rules of trade and competition are reshaped, the organizations that will stand out will be those capable of jointly assessing not only the risks to which they are exposed but also the impacts they create through their activities, and of integrating risks and opportunities into their business models. This assessment covers not only the organization's own operations but also the value chain as a whole.

Sustainability provides a holistic perspective that brings together the impacts of organizations' own activities on the environment and society and the implications of external developments for their business models. This approach goes beyond short-term adaptation solutions and makes it possible to reconsider decision-making processes from the perspective of long-term value creation.

**The Sector's Strategic Role and Our Vision:** Payment and electronic money institutions serve as a fundamental infrastructure component of the digital economy. This position gives the sector not only an operational role but also a **sphere of influence that can shape behavior and drive transformation** through data flows, transaction traceability and points of contact with users.

Drawing on concrete data, global analyses show that the payment sector worldwide remains at an early stage of its sustainability transformation, while also pointing to its considerable potential. While existing studies indicate that the relationship between payment systems and sustainability is still evolving, OECD analyses published in 2025 highlight the potential role of digital platforms and payment infrastructure, as consumer touchpoints, in communicating environmental information within the circular economy.



The McKinsey “Global Payments 2024” and Boston Consulting Group “Global Payments 2024” reports, which provide projections regarding the future of the sector, indicate that sustainability is increasingly moving beyond a compliance obligation for payment institutions and becoming a source of strategic differentiation and value creation driven by customer expectations, regulations, and opportunities for developing new products and services. These assessments demonstrate that, when sustainability is structured effectively, the payment and electronic money sector has the potential not only to create new opportunities that enhance its own competitiveness but also to make a meaningful contribution to the global sustainability transformation.

Türkiye’s 2053 Net Zero target, its sustainable development policies and the emphasis placed on the green and digital transitions in the Medium-Term Program (2026-2028) are reshaping the national policy environment. Recommendations issued by the Financial Stability Board, the incorporation of climate- and nature-related risks into central bank supervisory frameworks—particularly by the European Central Bank—and the ongoing work of the Central Bank of the Republic of Türkiye demonstrate that the institutions represented by our Association cannot remain outside this evolving regulatory and policy landscape. Therefore, as TÖDEB, we have deliberately chosen to address and help shape this process at an early stage from a sectoral perspective.

This study reflects TÖDEB’s vision of establishing a common business culture and a set of sectoral standards.

Our objective is to transform sustainability from an abstract concept into an actionable, scalable and sector-specific roadmap for Türkiye’s payment and electronic money sector. Within this scope, the Guide\* has been prepared not only to help member institutions comply with existing and potential regulations, but also to help them adopt a proactive approach to sustainability, positioning it as a shared understanding, a common language and an area of opportunity.



*\* The assessments and recommendations set out in the Guide do not constitute binding rules; rather, they reflect good practices and guiding principles for the sector. These assessments and recommendations should be considered in accordance with each institution’s own structure, risk profile and strategic priorities.*

# 1 How to Read This Guide

This Guide presents the sustainability approach of payment and electronic money institutions through a holistic framework that extends from conceptual understanding to implementation. Its content is structured to provide a logical progression across the sections, moving step by step from why the sector needs to be part of this transformation to which issues are of strategic importance, how these issues can be measured, and how they can be integrated into governance.

The Guide is designed to be read as a whole. However, you may also proceed by selecting the sections below according to your institution's priorities and sustainability maturity level.

## ➤ Understanding the Strategic Framework

For those who wish to assess the scope and sectoral context of sustainability and the rationale behind TÖDEB's preparation of this Guide, the following sections provide a starting point:

- Purpose and Scope (Section 1)
- Conceptual Framework and Global Vision (Section 3)
- Payment and Electronic Money Sector and Sustainability (Section 4)
- The Sector's Sustainability SWOT Analysis (Section 7, Chapter 1)

These sections set out the perspective from which the Guide has been prepared and highlight the distinctive position of the payment and electronic money sector in the sustainability transformation.

## ➤ Examining the ESG Structure and Standard Frameworks

For those who wish to systematically examine the environmental, social and governance dimensions of sustainability and understand which international standards they may be linked to:

- Dimensions of Sustainability: Environmental, Social and Governance (ESG) (Section 6)
- Major National and International Developments in Sustainability (Section 5)
- Key Regulations, Standards and Frameworks (Section 8)

These sections show the standards and frameworks through which sustainability can be addressed and how the existing regulatory environment is shaping the sector.

## ➤ Risk and Governance Perspective

For institutions seeking to relate sustainability issues to corporate risk management and governance structures:

- The Foundation of Sustainability: Ethics and Corporate Governance (Section 6, Chapter 3)
- Key ESG Sub-topics and Metrics for the Sector (Section 6, Chapter 4)
- Sustainability Risks and Opportunities (Section 7, Chapter 2)
- Key Regulations, Standards and Frameworks (Section 8)

These sections describe how sustainability can be integrated into the risk landscape, internal control mechanisms and corporate decision-making processes.

## ➤ Moving to Measurement and Implementation

For institutions seeking to turn sustainability into concrete actions, measurable indicators and corporate processes:

- Key Regulations, Standards and Frameworks (Section 8, particularly Chapter 4: Measurement, Target Setting and Performance Disclosure Frameworks)
- Simplified Sustainability Roadmap for Member Institutions (Section 9)

These sections provide an implementation-oriented framework that institutions can follow progressively, from the initial stage to more advanced levels of maturity.

## ➤ Good Practice Examples

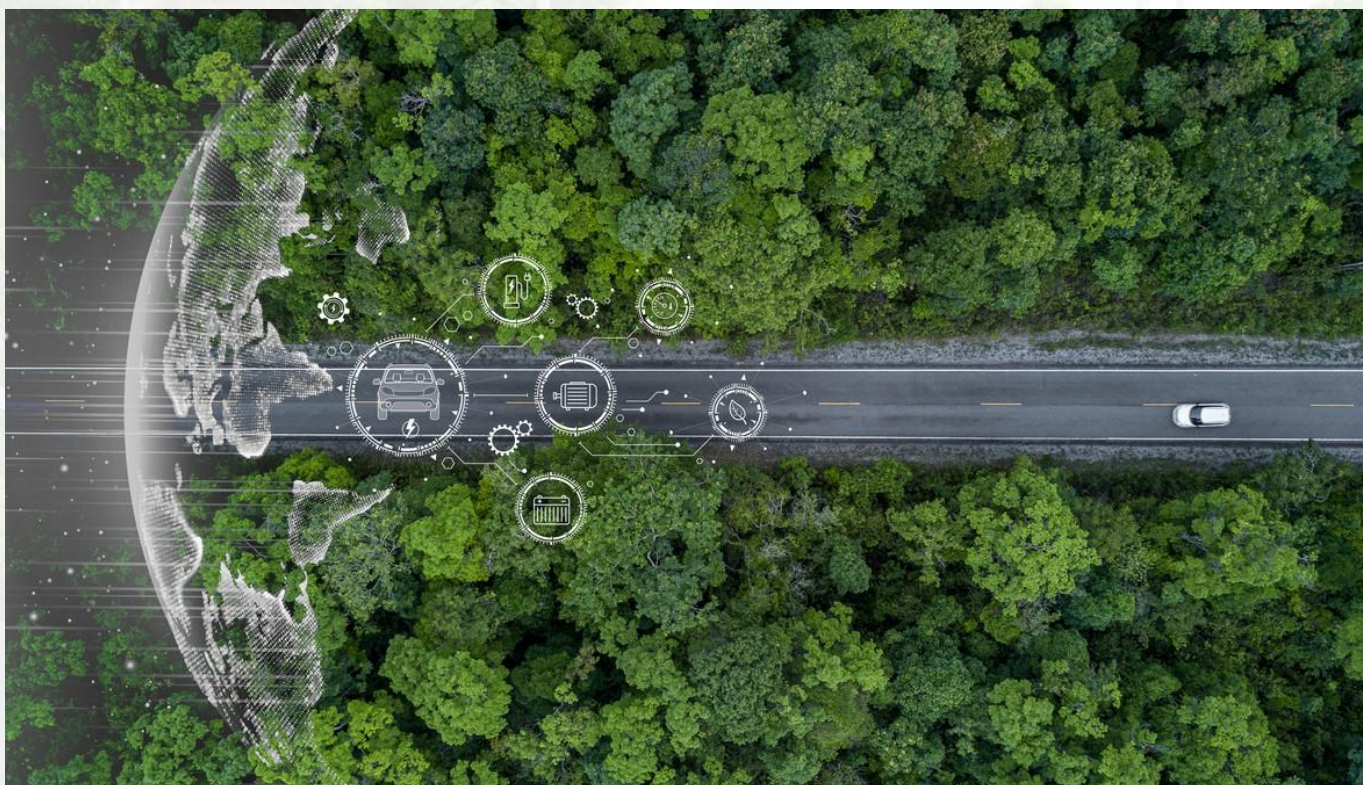
For those seeking concrete examples from the sector and around the world:

Rather than being presented collectively in a separate section, good practice examples are provided within the relevant context under the topic headings to which they relate.

## ➤ Quick Reference to References, Terms and Concepts

For technical terms, abbreviations and conceptual explanations used throughout the Guide, as well as useful references:

- Definitions and Explanations (Section 2)
- Abbreviations (Appendix 1)
- References (Appendix 2)



## DEFINITIONS

**Biodiversity:** The diversity of living organisms at the genetic, species and ecosystem levels. It is critical to ecosystem functioning and the continuity of natural resources.

**Carbon Footprint:** The total greenhouse gas emissions attributable directly or indirectly to an activity, product or institution, expressed in carbon dioxide equivalent (CO<sub>2</sub>e).

- **Digital Carbon Footprint:** The energy consumption and associated emissions resulting from digital services (e.g. data centers, cloud services, network traffic, and device use/production).

**Carbon Neutral:** A claim that CO<sub>2</sub> emissions have been balanced through an equivalent amount of emission reductions or removals. In many applications, carbon neutrality relies partly or largely on offsetting.

**Carbon Offset:** A mechanism used to compensate for a portion of emissions by financing verified emission-reduction or carbon-removal projects elsewhere.

**Circular Economy:** A systemic approach based on keeping products and materials at their highest possible value for as long as possible, through cycles of reuse, repair, refurbishment and recycling.

**Climate:** The long-term (generally 30 years or more) average characteristics of weather in a given region.

**Climate Adaptation:** Planning and measures undertaken to reduce harm and increase resilience in response to the impacts of the climate crisis.

**Climate Change:** Long-term changes in the climate system driven by human-related causes, particularly the accumulation of greenhouse gases.

**Climate Crisis:** A social/political term that emphasizes the urgency and level of risk associated with climate change.

**COP (Conference of the Parties)-Climate:** The international conference process in which the parties to the United Nations (UN) Framework Convention on Climate Change regularly convene for climate negotiations and decision-making.

**Emission:** Releases of gases, particulate matter or energy into the atmosphere from a specific source. In sustainability contexts, the term generally refers to greenhouse gas emissions.

- **Direct Emissions:** Emissions arising from sources owned or under the operational control of an institution.
- **Indirect Emissions:** Emissions arising from sources owned or controlled by another institution, although associated with the institution's activities.
- **Scope 1 Emissions:** Direct greenhouse gas emissions of an institution.
- **Scope 2 Emissions:** Emissions resulting from the generation of purchased energy.
- **Scope 3 Emissions:** All other indirect emissions arising throughout the value chain (e.g. emissions from customer transactions, the POS hardware supply chain, data center use).

**Emissions Trading System (ETS):** A market-based regulatory mechanism that establishes an overall cap on greenhouse gas emissions and allows emission allowances to be allocated and traded within this cap. Its purpose is to achieve emissions reductions in the most economically efficient manner.

**Environmental Footprint:** A general term referring collectively to the overall impact of a product, activity or institution on the environment (e.g. energy, emissions, water, waste, pollution).

**ESG (Environmental, Social and Governance):** A holistic framework used by institutions to measure, manage and disclose their sustainability performance under the environmental, social and governance dimensions.

**Financial Exclusion:** A situation in which individuals or groups are unable to access or use basic financial services such as savings, credit, payments or insurance. This situation generally results from a combination of factors, including physical barriers to access, high costs, lack of suitable products, and demand-side barriers arising from low levels of financial and digital literacy.

**Financial Inclusion:** The ability of individuals and businesses to access financial services fairly, reliably and at an affordable cost, and to use such services effectively.

**Global Warming:** The long-term increase in the Earth's average temperature associated with the accumulation of greenhouse gases.

**Green Transformation:** The transition of the economy towards a low-carbon, resource-efficient and environmentally friendly model.

- **Triple Transformation:** An approach that addresses digital, green and social transformation simultaneously and holistically.
- **Twin Transformation:** The simultaneous pursuit of digital and green transformation in a mutually reinforcing manner.

**Greenhouse Gases (GHG):** Gases that affect the climate system by trapping heat in the atmosphere. Climate policies and emissions reduction targets focus on emissions of these gases (as defined under the Kyoto Protocol: Carbon dioxide - CO<sub>2</sub>, Methane - CH<sub>4</sub>, Nitrous oxide - N<sub>2</sub>O, Hydrofluorocarbons - HFCs, Perfluorocarbons - PFCs, Sulfur hexafluoride - SF<sub>6</sub>, Nitrogen trifluoride - NF<sub>3</sub>).

**Greenwashing:** The use of misleading claims, communications and practices to present environmental performance as better than it actually is.

**Impact Analysis:** The process of systematically assessing the actual or potential positive and negative impacts of an institution's activities, products and business relationships on the environment, society and human rights based on criteria such as scope, severity and likelihood.

**Materiality:** An approach to determining which sustainability issues an institution should focus on.

- **Double Materiality:** An approach that considers an institution's impact on the environment and society in relation to sustainability issues, in addition to financial materiality (financial materiality and impact materiality).
- **Financial Materiality:** An approach to determining how an institution is financially affected by sustainability issues (in terms of financial statements, cash flows and the overall value of the company). The Turkish Sustainability Reporting Standards (TSRS) adopt this approach.

**Metric (Indicator):** A quantitative or qualitative indicator used to make an institution's performance, risk or progress on a specific issue measurable and comparable.

**Net Zero:** A state in which emissions are first substantially reduced at source, with the small amount remaining balanced through permanent removals.

**Renewable Energy:** Energy produced from naturally replenished sources, such as solar and wind.

**Stakeholder/Beneficiary:** Natural persons and legal entities that are affected by an institution's activities or that can affect the institution.

**Supply Chain:** The set of processes extending from the procurement of inputs to the delivery of products and services to the end user, as well as players involved; it forms part of the value chain.

**Taxonomy:** A classification system.

- **Green Taxonomy:** A classification system that defines which economic activities are considered environmentally sustainable.

**Value Chain:** The entirety of activities extending from the ideation and design of a product or service through procurement, development, delivery, distribution, use and post-use stages, as well as relevant parties.

**Waste Management:** The set of processes for preventing and reducing waste generation, separating waste at source, recovering/recycling and disposing of waste.

**Waste:** Any physical, electronic or digital material, equipment or data that is no longer in use or has been discarded.

## SUSTAINABILITY: CONCEPTUAL FRAMEWORK AND GLOBAL VISION

### 3.1. Conceptualizing Sustainability

The term “sustainability” originates from the Latin “sustinere”, which conveys the ideas of maintaining, continuing, supporting and upholding. Although the term is often used interchangeably with continuity in everyday language, sustainability, in essence, denotes humanity’s ability to safeguard human life and the natural systems that sustain it over the long term.

Although commonly associated with environmental concerns, sustainability has never been limited to the environmental sphere alone. Sustainability requires a holistic consideration of the interrelationships among people (society), the environment, the economy and governance systems. Seen in this light, sustainability goes beyond the conservation of natural resources; it is also about shaping social welfare, economic stability and decision-making processes in a way that promotes long-term “well-being”.

This holistic perspective has gained particular prominence since the latter half of the 20th century, amid accelerating industrialization, population growth and resource consumption. As environmental pressures have intensified worldwide, their social and economic repercussions have become increasingly evident, bringing to the fore the interconnected nature of environmental degradation, governance challenges and inequality.

These developments have underscored the need to approach such challenges not as separate issues, but as interconnected developments that unfold simultaneously. Sustainability has consequently moved to the center of the agendas of both countries and organizations. For financial infrastructure providers in particular, this holistic perspective highlights the fact that even decisions of a technical nature may have significant social and environmental consequences over the long term.

### 3.2. Sustainable Development

Sustainable development provides the fundamental framework for understanding how sustainability relates to development policies and prevailing approaches to economic growth. A major milestone in the evolution of this concept was the publication of the Brundtland Report (Our Common Future) in 1987. The report defines sustainable development as follows:

*“Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs.”*

This definition moves beyond viewing development solely in terms of economic growth indicators. Instead, it frames development as a balancing process in which economic progress, social welfare and environmental limits are considered together.

Rather than placing the environment and development in opposition to one another, the Brundtland Report presents them as interdependent processes that must be addressed in tandem. This approach offers a broader basis for assessing the success of development, taking into account not only the value generated, but also how that value is generated, how it is shared among different groups, and its implications for the future.

Today, sustainable development is widely regarded as the overarching framework through which sustainability can be turned into concrete targets and actions across a wide range of fields, from public policies to corporate strategies.

## PAYMENT AND ELECTRONIC MONEY SECTOR AND SUSTAINABILITY

### 4.1. Global Megatrends and Transformation of Financial Services

The global financial sector is moving beyond its traditional role as an economic intermediary and emerging as a systemic infrastructure actor whose development is shaped by environmental, social and governance risks, opportunities and impacts. This transformation is being driven by several major megatrends:

- **Climate crisis and resource management:** Global risks such as climate-induced extreme weather events, pollution and the resulting acceleration of biodiversity loss have placed carbon management, energy efficiency and circular economy approaches among the key considerations shaping financial decisions and capital flows.
- **Digitalization and data:** The rapid growth in data volumes and the rise of fintech-driven business models are fundamentally reshaping how financial services are designed, delivered and operated.
- **Trust, ethics and governance:** Transparency, corporate ethics, the responsible use of technology in this context, and public trust have become central determinants of the financial system's long-term sustainability.
- **Regulation and standardization:** Regulations and frameworks such as the TSRS (Turkish Sustainability Reporting Standards), Türkiye's Climate Law and subsequent regulations, the ESRS (European Sustainability Reporting Standards), and the CSDDD (European Union Corporate Sustainability Due Diligence Directive), together with taxonomies and growing expectations around the verification of sustainability data, are gradually shifting sustainability from a voluntary area of action to a matter of compliance and governance.
- **Social expectations:** Expectations surrounding financial inclusion, equality and data rights are making the social responsibilities of financial institutions, alongside their economic responsibilities, increasingly visible.

As a result of these developments, sustainability has become a fundamental prerequisite for financial institutions in terms of competitiveness, trust and access to resources.

### 4.2. Sector's Position and Need for Sustainability

Sustainability in the payment and electronic money sector represents a strategic framework for addressing climate and environmental impacts alongside, and to an even greater extent, financial inclusion, ethical technology, sound governance and public trust. Payment and electronic money institutions occupy a critical position as infrastructure players that function much like the "nervous system" of the economy, accelerating digitalization, supporting the formal economy and broadening access to financial services. By its very nature, the sector's operating model places operational continuity, security, transparency and governance high on the agenda. Against this backdrop, sustainability should be approached as an area of transformation that builds on the sector's existing risk management and compliance capabilities and is embedded in business models and strategies.

The business models of sector participants, their agility and their operation within a regulated market give them a significant advantage in integrating sustainability more rapidly than many other sectors.



The OECD's Digital Economy Outlook 2024 report emphasizes that digitalization does not automatically turn into outcomes aligned with environmental sustainability goals; digital technologies have an environmental footprint of their own, and realizing their potential to advance environmental sustainability requires digital transformation to be deliberately integrated with the green transformation.

### 4.3. Why Sustainability Matters for the Payment and Electronic Money Sector

#### 4.3.a. Strategic Alignment and Global Competitiveness

Sustainability provides a strategic framework that strengthens the positioning of payment and electronic money institutions at both the national and international levels.

- **Guidance for Regulatory Compliance:** As national and international regulations concerning ESG (Environmental, Social and Governance) continue to evolve rapidly, a sustainability approach helps institutions navigate this changing landscape and mitigate compliance risks.
- **International Competitive Advantage:** Global investors and business partners are increasingly giving preference to companies with strong sustainability performance. Institutions operating in alignment with these frameworks are therefore better positioned to improve their access to international investors, funding sources and business partnerships.
- **Raising Sector Standards:** The adoption of common sustainability practices strengthens a culture of safe, transparent and responsible business across the payments ecosystem, thereby raising the standards of the sector as a whole.

#### 4.3.b. Operational Resilience and Trust Management

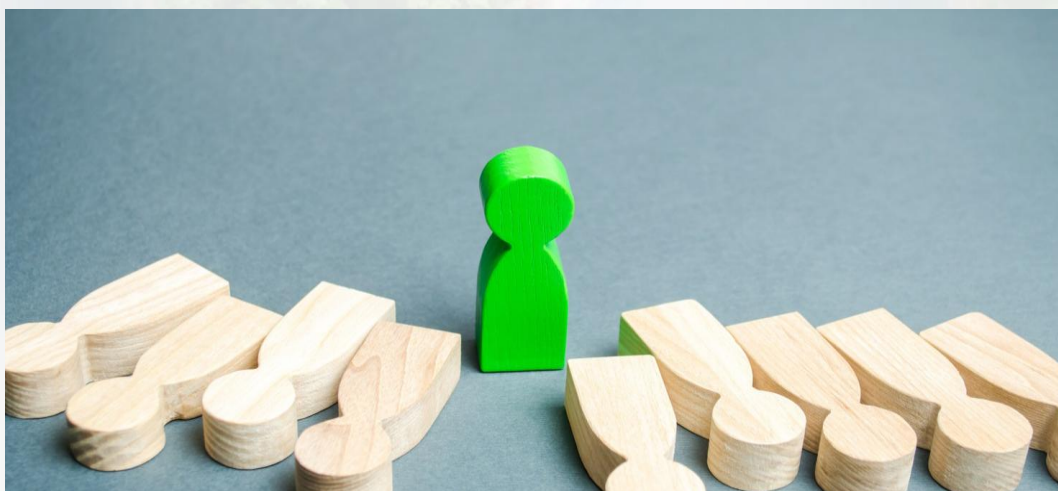
Sustainability helps payment and electronic money institutions build business models that are resilient to both today's risks and those that may emerge in the future.

- **Integrated Risk Management:** Sustainability-related risk areas, ranging from climate-related risks to social and governance risks, have become an integral part of institutions' core risk management frameworks. Addressing these risks systematically is fundamental to maintaining operational continuity.
- **Sustainable Supply Chains and Ecosystem Impact:** The responsibility of payment and electronic money institutions extends well beyond their own operations. The sustainability performance of all business partners—from card manufacturers to POS and terminal suppliers, from cloud service providers to software companies—has a direct bearing on an institution's risk profile. This interconnectedness also creates a powerful lever for transformation: the standards adopted by the sector can generate a positive domino effect across the entire value chain.
- **Reputation and Stakeholder Trust:** At a time when social and environmental impacts are subject to closer scrutiny, institutions that manage their sustainability performance transparently and consistently can prevent operational risks from turning into reputational loss and, ultimately, financial losses, while establishing a strong foundation of trust.



#### Klarna – Environmental Footprint of Shopping

The Swedish payments company Klarna gives users a different perspective on their shopping experience: after each transaction, an estimate of the environmental impact associated with the purchase appears on screen. The system generates this information by analyzing the journey of more than 150 million products, from production through to delivery. Klarna goes a step further by allowing users who wish to offset this impact to make donations through initiatives such as “Give One” and the “Climate Transformation Fund.” In this way, each purchase becomes not only an opportunity to inform, but also a moment of choice.



### 4.3.c. Innovation, Digital Transformation and Payment Systems of the Future

Sustainability encourages the sector to look beyond improving existing processes and to rethink how the payment systems of the future should be designed.

- **Sustainability-Driven Innovation:** Low-carbon data architectures, payment instruments made from recycled materials or designed in line with circular economy principles, and energy-efficient technologies are among the areas of innovation being driven by the sustainability agenda.
- **Digitalization and Efficiency:** Technological optimization can reduce energy consumption and operating costs, turning sustainability into tangible economic value.
- **Growth Through Social Inclusion:** By making financial services more accessible, digital payment solutions extend the value of sustainability beyond environmental impact and into the social sphere. This approach moves the sector toward a model of growth that is not merely digital, but also smarter and more responsible.

### 4.3.d. Social Impact, Inclusion and Human Capital

The fintech sector plays an important role in expanding financial inclusion and contributing to social welfare.

- **Products Designed Around Financial Well-Being:** Warning mechanisms and transparent information practices developed as part of a responsible product design approach help users protect and maintain their financial well-being.
- **Features Supporting Sustainable Behaviour:** Feedback provided to users based on transaction data, together with features designed to encourage more sustainable choices, can both raise sustainability awareness and contribute to the development of a green economy.
- **Financial Literacy and Inclusion:** Secure digital payment solutions and educational initiatives help strengthen financial awareness across society. They also support the inclusion of people who remain outside the financial system or have only limited access to it.
- **Talent Management and Diversity:** A sustainability-oriented vision can be a strong factor of preference, particularly among younger generations. Increasing female employment, ensuring equal pay and fostering inclusive workplaces strengthen both employee engagement and an institution's ability to attract talent.

### 4.3.e. Shared Culture and Collective Value Creation

- **Sector-Wide Sustainability Culture:** Knowledge sharing, good practice examples and joint initiatives carried out under TÖDEB's umbrella can move beyond individual efforts and enable lasting value to be created across the sector.

The transition toward a more sustainable payments sector can be achieved through coordinated efforts involving a range of stakeholders, including financial institutions, technology and cloud service providers, merchants and consumers. This collective approach can also help strengthen the sector's reputation and reinforce the confidence of regulatory authorities.



#### Deposit Management System – Turning Recycling into an Incentive

Türkiye's Deposit Management System links the return of plastic bottles and other packaging to a financial incentive. When consumers return a beverage can or bottle at a reverse vending machine, the deposit amount is credited to their digital wallet immediately. In this context, the e-wallet serves not merely as a payment instrument, but as a strategic tool for encouraging behavioral change. Through end-to-end traceability, the system also records data on how packaging makes its way back into the recycling cycle and makes this information available to inform future policy decisions.

A homegrown application that uses digital payment infrastructure as a driver of environmentally responsible behavioral change.

## 4.4. Sector's Sustainability Value Chain and Stakeholders

The value chain of payment and electronic money institutions is more than a sequence of technical or operational processes; it represents a multi-layered ecosystem in which value creation, risks and impacts emerge simultaneously. It encompasses an integrated flow extending from ideas and inputs through the development of products and services, from customer touchpoints through operational processes and, ultimately, outputs. This structure takes shape through the interaction of a broad range of stakeholders, including technology providers, business partners, customers and regulatory authorities.

Every point along the value chain presents an opportunity to examine how the business can be operated more efficiently and profitably; from a sustainability perspective, however, each should also be regarded as a point where risks and opportunities may emerge. While product development and innovation processes can foster financial inclusion and new solutions, they may also introduce risks relating to data privacy, ethical design and cybersecurity. Similarly, operational infrastructure can improve energy and resource efficiency, while climate-related physical risks and system outages may put operational resilience to the test. Customer touchpoints offer opportunities to build trust and satisfaction, but can also become areas of social risk where principles of transparency and fair treatment are not upheld. Sustainability should therefore not be treated as a standalone compliance topic for payment and electronic money institutions, but as an integrated management approach spanning product design and customer experience, cybersecurity and data privacy, infrastructure investments and business continuity.

When sustainability is approached in this way, it becomes a shared area of responsibility encompassing the institution's entire way of doing business. The standards and practices adopted by institutions can create a cascading effect across the wider ecosystem throughout the wider ecosystem, extending from suppliers to business partners. Taking a holistic view of risks and opportunities across the value chain is therefore critical both to strengthening operational resilience and to creating long-term value for payment and electronic money institutions.

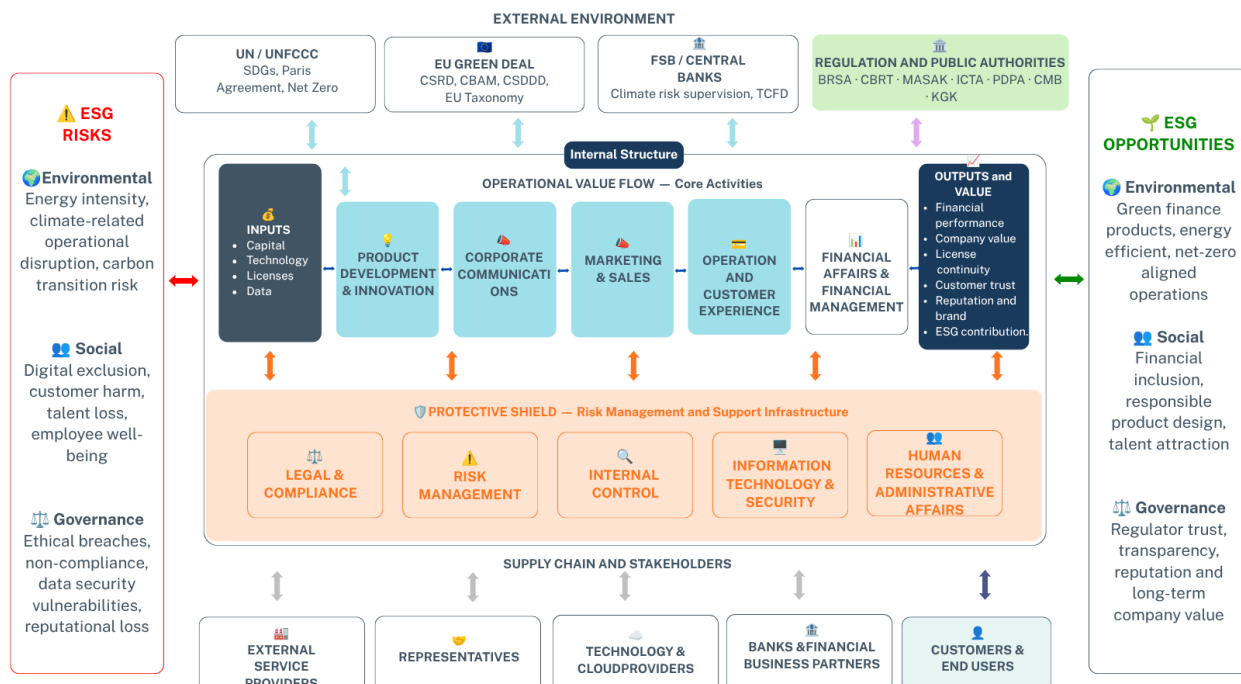


The OECD (2025) Leveraging Digital Business Models, Tools and Technologies for Reliable Environmental Information and Consumer Engagement in the Circular Economy report notes that digital business models and technologies can make environmental information more transparent and accessible to consumers. At the same time, it emphasizes that ensuring the reliability of such information requires data to be shared among players across the value chain and the systems involved to operate in an interoperable manner.

### SUSTAINABILITY VALUE CHAIN OF PAYMENT AND ELECTRONIC MONEY INSTITUTIONS

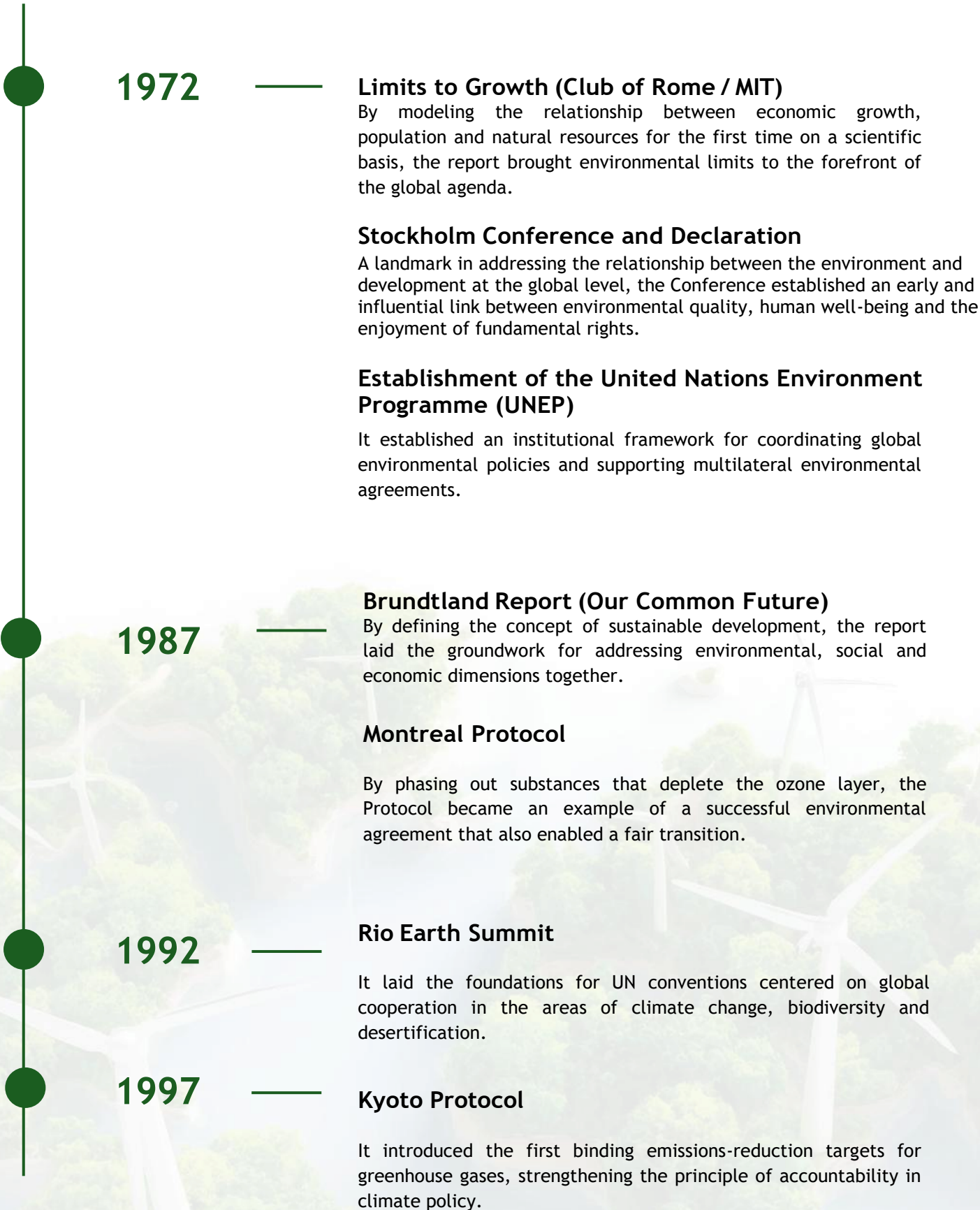
Every touchpoint presents ESG risks and opportunities — see Section 6 for details of the risks and opportunities

↔ Operational flow   ↗ Support / control relationship   ↘ Supply chain relationship   ↕ Customer relationship   ↖ Regulatory influence   ↗ Global / macro-level impact   ↔ ESG risk interaction   ↔ ESG opportunity interaction



# KEY NATIONAL AND INTERNATIONAL DEVELOPMENTS IN SUSTAINABILITY

## 5.1. Milestones



2000

**Millennium Development Goals**

By establishing global development priorities, they helped pave the way for greater public-private sector cooperation in pursuing these goals.

**UN Global Compact**

It called on the business community to uphold universal principles relating to human rights, the environment, labor standards and the fight against corruption.

2015

**Sustainable Development Goals (SDGs)**

They set out a global roadmap for advancing sustainability through 2030.

**Paris Agreement**

It became the first comprehensive climate agreement to place responsibility on all countries through nationally determined contributions, with the goal of limiting global warming.

2019

**EU Green Deal**

It provided a comprehensive framework that brought climate policy together with economic transformation and competitiveness strategies.



## 5.2. Key International Developments:

Three major developments that now serve as key points of reference for sustainability, particularly in the context of climate, warrant a more detailed examination here. This is because the ultimate objectives of institutions' sustainability efforts are shaped by these developments, while commitments are made with a view to achieving those objectives.

### 5.2.a. UN Sustainable Development Goals



The UN Sustainable Development Goals (SDGs) were adopted in 2015 to broaden the scope of the Millennium Development Goals and address environmental considerations, inequalities and the role of the private sector in a more integrated manner.

With the 2030 Agenda for Sustainable Development, the SDGs provide a global framework that brings together environmental, social, governance and economic dimensions and places shared responsibility not only on governments but on all stakeholders. The Goals are interconnected rather than independent of one another, and the interaction among them forms the basis for lasting progress.

Comprising 17 goals and 169 targets, this framework serves as a common point of reference not only for public policies but also for institutions' business models, strategic decision-making processes and long-term value creation.

In this respect, the SDGs provide institutions with a strong framework for:

- identifying and prioritizing their areas of impact;
- setting strategic direction;
- structuring measurement, monitoring and reporting processes;
- identifying products and areas of activity that can strengthen their contribution to the goals as opportunities; and
- systematically managing long-term value creation.

By using the UN SDGs as an implementation framework, the sector can align its financial services, operational risks and product designs with global sustainability criteria, turning its activities into measurable and reportable strategic value.

More specifically, the sector can use the SDGs as a practical tool to rethink payment technologies as more than software solutions, as a measurable instrument for advancing women's participation in the economy (SDG 5) or curbing the informal economy (SDG 8). Sustainability communications can be shaped around the same approach.

### How Can Institutions Integrate the SDGs into Their Business Processes?

For institutions, SDG integration should be embedded into core business strategy and operations.

#### 1. Defining Areas of Impact

- Identify which SDGs the institution influences through its value chain (its business model, products, services and stakeholders).

#### 2. Prioritization (Materiality)

- Rather than attempting to address all 17 SDGs, focus on those on which the institution has a direct or indirect but significant impact.

#### 3. Integration into Business Processes

- Link human resources, product design, procurement, technology, compliance, risk management and governance processes to the relevant SDGs.

#### 4. Measurement and Reporting

Track the SDGs and relevant targets through the institution's key performance indicators (KPIs), as well as policy and process indicators.



# Priority SDGs for the Payment and Electronic Money Sector

| SDG Visual                                                                                                                                          | SDG Number and Title                             | Sector-Specific Explanation                                                                                                                                                                                                                                                                                                                                                               | Related Targets                                                                                                                                                                                                | Sectoral Contribution and Implementation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|-----------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <div>4</div> <div>QUALITY EDUCATION</div>                          | SDG 4<br>Quality Education                       | Payment and electronic money institutions serve as key partners in a broad education ecosystem, supporting financial literacy programs, professional development for employees, and the enhancement of digital skills across society. This role positions the sector as a contributor to a sustainable knowledge ecosystem.                                                               | <div>4.4</div> <div>Digital and vocational skills development</div> <div>4.6</div> <div>Adult financial and digital literacy</div> <div>4.a</div> <div>Development of inclusive education infrastructure</div> | <ul style="list-style-type: none"> <li>• <b>Financial and Digital Literacy:</b> Supporting individuals' informed participation in the digital economy through digital literacy programs and awareness campaigns for customers</li> <li>• <b>Internal Professional Development:</b> Strengthening the pool of qualified digital finance professionals through certification and skills development programs for employees</li> <li>• <b>SME and Merchant Capacity Building:</b> Enabling businesses to participate effectively in the digital transformation through training and technical support on the use of digital payment systems</li> </ul> |
| <div>5</div> <div>GENDER EQUALITY</div>                          | SDG 5<br>Gender Equality                         | Digital payment systems, through their technological capabilities and inclusive nature, are transforming the role of women in the economy. This transformation supports holistic progress both by making financial services more accessible and by strengthening the representation of women within the sector.                                                                           | <div>5.1</div> <div>Ending discrimination</div> <div>5.5</div> <div>Participation in decision-making</div> <div>5.b</div> <div>Increasing access to technology</div>                                           | <ul style="list-style-type: none"> <li>• <b>Accessibility:</b> Integrating women in disadvantaged regions into the financial system</li> <li>• <b>Representation:</b> Promoting women's employment within the organization and gender equality across management levels</li> <li>• <b>Inclusive Design:</b> Developing discrimination-free, user-friendly digital processes</li> </ul>                                                                                                                                                                                                                                                              |
| <div>8</div> <div>DECENT WORK AND ECONOMIC GROWTH</div>          | SDG 8<br>Decent Work and Economic Growth         | Digital financial infrastructures are a key lever in combating the informal economy and supporting quality digital employment. This technological foundation helps extend economic growth to broader segments of society and fosters the development of a sustainable ecosystem. In this respect, the sector serves as an infrastructure enabler of secure growth in the digital economy. | <div>8.2</div> <div>Productivity- and technology-driven growth</div> <div>8.3</div> <div>Supporting SMEs and entrepreneurship</div> <div>8.8</div> <div>Safe and healthy working environments</div>            | <ul style="list-style-type: none"> <li>• <b>Formalization of Economic Activity:</b> Reducing informal economic activity and broadening the tax base through transparent payment services</li> <li>• <b>SME Support:</b> Integrating small businesses into digital markets through secure payment infrastructure provided to merchants</li> <li>• <b>Ecosystem Development:</b> Creating new-generation business models and quality employment opportunities within the digital economy</li> </ul>                                                                                                                                                   |
| <div>9</div> <div>INDUSTRY, INNOVATION AND INFRASTRUCTURE</div>  | SDG 9<br>Industry, Innovation and Infrastructure | The continuity of the digital economy depends on financial data and value transfers taking place through standards-based infrastructure. By managing the technical infrastructure that enables businesses and individuals to integrate into the digital world, payment and electronic money institutions serve as a driving force for technological development.                          | <div>9.1</div> <div>Reliable and sustainable infrastructure</div> <div>9.4</div> <div>Resource-efficient technologies</div> <div>9.c</div> <div>Increasing digital access</div>                                | <ul style="list-style-type: none"> <li>• <b>System Continuity:</b> Establishing scalable payment architectures that operate without interruption, even under high transaction volumes</li> <li>• <b>Financial Integration:</b> Enabling businesses to incorporate financial services into their own processes through open banking and API ecosystems</li> <li>• <b>Access and Modernization:</b> Expanding access to financial services through digital channels and transitioning economic activity to modern infrastructure</li> </ul>                                                                                                           |



The OECD's "Digital Economy Outlook 2024" report highlights the role of digital payment infrastructures in reducing the informal economy and broadening the tax base, presenting them as a critical data source for sustainable economic growth (SDG 8).

| SDG Visual                                                                          | SDG Number and Title                           | Sector-Specific Explanation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Related Targets                                                                                                        | Sectoral Contribution and Implementation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|-------------------------------------------------------------------------------------|------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|    | SDG 10: Reduced Inequalities                   | Access to financial services is a fundamental condition for social and economic mobility. Without compromising regulatory compliance or transaction security, payment and electronic money institutions make financial services accessible to broader segments of society through digital channels. Leveraging its technological capabilities, the sector helps integrate people who have previously had limited or no access to the formal financial system into the economy, thereby supporting equal opportunities. | 10.2 Social and economic inclusion<br><br>10.3 Equal opportunities<br><br>10.c Reducing the cost of financial services | <ul style="list-style-type: none"> <li>• <b>Accessible Financial Services:</b> Making financial services accessible regardless of geographical or operational constraints through secure technologies such as remote customer onboarding and digital identity verification</li> <li>• <b>Segment-Focused Solutions:</b> Providing user-friendly and secure financial tools for young people, groups with developing digital literacy, and those outside the traditional financial network</li> <li>• <b>Transaction Cost Optimization:</b> Leveraging the efficiency gains offered by financial technologies to reduce service costs and ease the economic burden associated with micro-payments and small-scale transfers</li> </ul> |
|  | SDG 12: Responsible Production and Consumption | Digital financial services minimize paper-based processes, directly contributing to resource efficiency. Through spending data analytics solutions, the sector provides technological tools that help users improve their financial awareness and manage their resources more consciously. In this respect, the sector plays an enabling role by supporting sustainable consumption through data-driven digital tools rather than leaving it solely to individual choices.                                             | 12.2 Resource efficiency<br><br>12.6 Sustainable corporate practices<br><br>12.8 Awareness of responsible consumption  | <ul style="list-style-type: none"> <li>• <b>Digital Process Management:</b> Reducing physical resource consumption and waste through paperless approvals, digital receipts and e-receipts</li> <li>• <b>Consumer Awareness:</b> Enabling users to track their own financial resources through spending analysis and reporting tools</li> <li>• <b>Transparent Resource Management:</b> Increasing the transparency of financial flows within the formal economy and supporting data-driven management</li> <li>• <b>Low-Carbon Services:</b> Adopting a business model that minimizes environmental impact through end-to-end digital operations without the need for a physical branch network</li> </ul>                            |
|  | SDG 13: Climate Action                         | Digital payment infrastructures help manage the sector's carbon footprint by reducing the need for physical operations and logistics associated with traditional financial processes. With its technological capabilities, the sector has the potential to contribute to data-driven climate policies and user awareness in the future.                                                                                                                                                                                | 13.2 Integration of climate policies<br><br>13.3 Awareness and capacity building                                       | <ul style="list-style-type: none"> <li>• <b>Operational Resource Efficiency:</b> Contributing to indirect emissions reductions by digitizing physical processes such as cash logistics and paper-based documentation</li> <li>• <b>Potential for Developing Awareness Tools:</b> As technical standards and data processing models mature, providing users with tools that can raise awareness of the environmental impact of their spending habits</li> <li>• <b>Data-Driven Decision Support Vision:</b> Once the relevant legal and technical infrastructure is in place, considering anonymized financial data as a complementary dataset for national decarbonization strategies</li> </ul>                                      |



**TreeCard – A Sapling with Every Purchase**

TreeCard is a fintech venture founded in London in 2020. The company stands out for its card made from certified wood rather than conventional plastic, but its real distinction lies in its revenue model: it directs 80% of the revenue generated from card spending directly to tree-planting projects. Through its partnership with Ecosia, the world's largest tree-planting search engine, an average purchase of \$60 results in a new sapling being planted somewhere in the world. In this model, sustainability is not an abstract concept but a measurable outcome of every transaction.

An example of a model that places environmental commitment at the heart of its business and makes profit and nature restoration work together.



**The Card That Stops You from Spending**

The Swedish fintech company Doconomy has developed a product that uses a scientific calculation method to turn the environmental impact of card spending into a monetary value. Operating on the Mastercard infrastructure, the DO Card takes this concept a step further: once the user reaches a predefined environmental impact limit, the card automatically stops processing transactions. This is a highly unusual approach in the fintech world—one of the rare examples of a product that makes limiting consumption a built-in feature.

| SDG Visual                                                                          | SDG Number and Title                           | Sector-Specific Explanation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Related Targets                                                                                               | Sectoral Contribution and Implementation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|-------------------------------------------------------------------------------------|------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|    | SDG 16: Peace, Justice and Strong Institutions | Trust in the digital financial ecosystem can only be maintained through effective oversight and a consistent commitment to compliance. For payment and electronic money institutions, this means continuously strengthening their institutional safeguards against evolving financial crime risks and maintaining full adherence to the transparent governance standards required by law. Strong governance structures play a critical role in sustaining trust across the sector and maintaining a balance between regulatory requirements, market dynamics and user interests. | 16.3<br>Rule of law<br><br>16.5<br>Combating corruption<br><br>16.6<br>Effective and transparent institutions | <ul style="list-style-type: none"> <li>• <b>Regulatory Compliance and Risk Management:</b> Operating monitoring and control processes aimed at preventing financial crime with institutional discipline, in line with the regulations issued by the Central Bank of the Republic of Türkiye (CBRT) and the Financial Crimes Investigation Board (MASAK)</li> <li>• <b>Auditability and Transparency:</b> Establishing sustainable corporate governance practices through transparent reporting channels and independent audit processes</li> <li>• <b>Secure Financial Ecosystem:</b> Protecting stakeholder rights by strengthening technological infrastructure and ethical business practices against fraud and abuse risks</li> </ul> |
|  | SDG 17 Partnerships for the Goals              | The digital financial ecosystem is built on the integration of regulators, financial institutions and technology providers. By coordinating this multi-stakeholder structure, the sector creates an inclusive platform for collaboration that supports the wider adoption of financial services.                                                                                                                                                                                                                                                                                 | 17.16<br>Multi-stakeholder partnerships<br><br>17.17<br>Public-private partnerships                           | <ul style="list-style-type: none"> <li>• <b>Strategic Ecosystem Partnerships:</b> Developing end-to-end, accessible financial solutions through integrations with banks and financial technology companies</li> <li>• <b>Sectoral Representation and Collective Impact:</b> Contributing to the development of sector standards and ethical principles through regular dialogue with public authorities facilitated by umbrella institutions such as TÖDEB</li> <li>• <b>Technology and Regulatory Alignment:</b> Strengthening the resilience of the financial system through joint projects based on technological knowledge sharing and aligned with international standards</li> </ul>                                                |



**OECD – Digital Tools and Environmental Transparency**

The OECD report highlights how digital business models and technologies can make environmental information more transparent and accessible to consumers. However, for this information to be reliable, data sharing across the value chain and interoperability between systems are essential. (OECD: Leveraging Digital Business Models, Tools and Technologies for Reliable Environmental Information and Consumer Engagement in the Circular Economy).



**Environmental Donations with Reward Points**

A bank's electronic money subsidiary in Türkiye allows customers to donate the loyalty points they have accumulated to environmental projects. With just a few taps through mobile or online banking, customers can transfer their points to non-governmental organizations such as TEMA. Customers can also link their choice of digital statements to sustainability: opting for digital statements instead of paper statements automatically turns into a contribution that supports tree planting. It is a simple yet functional model that connects an existing infrastructure with environmental impact.

## 5.2.b. Paris Agreement

- What is it?

The Paris Agreement (the “Agreement”) is an international treaty adopted in 2015 under the UNFCCC (United Nations Framework Convention on Climate Change) that established the foundation of the global climate regime for the period after 2020. It aims to keep the rise in global temperatures well below 2°C above pre-industrial levels while pursuing efforts to limit the increase to 1.5°C.

What sets the Agreement apart is that it approaches climate action as more than an emissions-reduction effort, addressing adaptation, finance and economic transformation as integral dimensions of the response.

Its core architecture is built around NDCs (Nationally Determined Contributions) set by individual countries according to their national circumstances, their renewal every five years, and the tracking of progress through measurement, reporting and global assessment mechanisms. This makes the Agreement more than a one-off commitment: it is a dynamic framework built around progressively more ambitious climate action. Given that the current NDCs of countries that have signed the Agreement are not aligned with the 1.5°C goal, the coming period is expected to bring stronger targets and increasing expectations for adaptation.

- Türkiye Perspective: General Framework

Türkiye signed the Agreement in 2016 and became a Party in 2021 following its ratification by the Grand National Assembly of Türkiye. Türkiye’s contribution is structured around three time-bound targets:

**2030:** 41% reduction in emissions against the reference scenario,

**2035:** An interim phase marked by a further slowdown in the rate of emissions growth (the year of peak emissions),

**2053:** Net zero target.

- How Should the Agreement Be Viewed by Companies in the Payment and Electronic Money Sector?

For institutions in our sector, the Paris Agreement and Türkiye’s related commitments should be viewed not as a direct numerical emissions target, but as a policy framework that shapes the direction of regulation, incentive mechanisms, access to finance and reporting expectations. The Agreement is reshaping the economic and financial environment in which businesses operate. For the payment and electronic money sector, this transformation creates two complementary roles:

### (1) Adapting to a Changing Financial Ecosystem (Affected)

- **Regulatory Transformation:** The gradual integration of environmental risk analyses focused on transparency, data-driven governance and business continuity into organizational processes, in line with global climate policies.
- **Sustainability in Finance:** Green finance criteria and sustainability reporting expectations will increasingly shape the sector’s future access to finance and the models through which it forms business partnerships.

### (2) Leveraging the Transition to a Green Economy (Affecting)

- **Traceability Infrastructure:** The digital payments ecosystem has the potential to provide a verifiable technical infrastructure for future incentive and carbon-pricing mechanisms by making financial flows more transparent.
- **Data-Driven Decision Support:** Subject to regulatory and anonymization standards, transaction data can serve as a useful input for assessing the economic impacts of sustainability policies.
- **Enabling the Green Economy:** Campaigns and digital solutions that facilitate users’ access to sustainable products and services can help accelerate the adoption of low-carbon consumption patterns by providing technological support.

### 5.2.c. EU Green Deal

- What is it?

The EU Green Deal is a new-generation economic development strategy built around the European Union's ambition to become the world's first "climate-neutral" continent by 2050, bringing the climate crisis, resource scarcity and global competitiveness into a single strategic framework. Announced by the European Commission in 2019, the initiative represents a far-reaching transformation in which economic growth is decoupled from resource use, while social welfare is underpinned by environmental sustainability.

The Green Deal goes well beyond a simple guide to "green transformation". It represents a growth model that is reshaping entire value chains—from industry and trade to food, energy, transport and finance—around three interconnected dimensions of transformation: "decarbonization", "digitalization" and "society" (triple transformation). Under this strategy, the European economy is being reshaped around advanced technology, resource efficiency and the alignment of financial flows with sustainability criteria.

- Key Objectives and Policy Areas

The Green Deal is being implemented through a concrete roadmap with binding legislation and defined timelines.

**2030 (Fit for 55):** 55% reduction in emissions

**2040 Target:** 90% reduction in net emissions

**2050 (Climate Neutrality):** Full climate neutrality – an EU economy with net zero greenhouse gas emissions

The Green Deal brings complementary strategic areas—including the energy transformation, low-carbon industry, the circular economy and sustainable products—together within a single transformation architecture. Its scope extends beyond industrial change to far-reaching transformations in areas such as agriculture, food security, a just transition, biodiversity protection and zero pollution. These changes, in turn, require the financial system to prioritize investment and expenditure in line with "green criteria".

- Why Does the EU Green Deal Directly Matter to Türkiye?

Türkiye is directly affected by the regulations introduced under the Green Deal because of its Customs Union relationship with the EU and its substantial volume of foreign trade. The EU is increasingly making climate and sustainability criteria conditions for market access and trade.

For payment and electronic money institutions, the most critical areas are finance and trade. Financial flows are increasingly expected to be managed with a level of transparency aligned with these objectives. For Türkiye, therefore, the Green Deal represents a transformation with not only environmental implications but also significant commercial and financial consequences.



## • Key Regulations Enacted under the EU Green Deal and Their Sectoral Implications

Some of the regulations that have entered into force in the EU under the Green Deal and are particularly relevant to companies in Türkiye include:

- ✓ **CBAM (Carbon Border Adjustment Mechanism):** Reporting and pricing the carbon content of certain products exported to the EU.
- ✓ **CSRD (Corporate Sustainability Reporting Directive):** A reporting directive establishing requirements for sustainability information to be reported in a standardized and comparable manner.
- ✓ **CSDDD (Corporate Sustainability Due Diligence Directive):** A directive establishing corporate due diligence obligations concerning adverse human rights and environmental impacts across value chains.
- ✓ **EU Green Taxonomy:** A classification and reporting system defining which economic activities qualify as environmentally sustainable.
- ✓ **EU Digital Finance Strategy:** The financial dimension of the Green Deal is supported by the “EU Digital Finance Strategy”. The strategy identifies the digitalization of financial services as a “key enabler” of the green transformation. Payment and electronic money institutions, through the digital infrastructure they provide, are part of the technological delivery layer of this transformation.

### • Preparing for the Future

Two technical developments are likely to play a defining role in the sector’s medium- and long-term strategies:

- ✓ **ISO 20022 Standard:** ISO 20022 may support traceability by enabling richer transaction data to be transmitted through standardized payment messages. Combined with reliable external verification, this may help communicate environmentally relevant information.
- ✓ **ESPR (Ecodesign for Sustainable Products Regulation) - DPP (Digital Product Passport):** The DPP enables the environmental footprint of products to be tracked. As such information is expected to become a requirement for placing products on the EU market in the near future, integrating this data with payment systems could create significant potential for new business models such as “carbon-based loyalty programs” and “green spending incentives” built around verified data.



#### EU Sustainability Regulations Are Evolving

The EU is revising sustainability reporting regulations such as the CSRD and CSDDD as part of the Omnibus package. While these revisions preserve the core of the regulations, they reshape their scope and requirements. It is important to keep track of the latest developments regularly through official EU sources.



#### Digitalization and the Push for Transparency in Türkiye

Institutions in Türkiye are facing growing expectations around digitalization and transparency. Against this backdrop, the sector has an increasingly important role to play in strengthening transaction traceability, supporting the formal economy, and serving as a trusted partner in the digital management of financial data.



#### Digital Product Passport (DPP) — E-Commerce and Retail

Ecommerce Europe notes that the Digital Product Passport (DPP) is expected to function as a data repository and a channel for information across the e-commerce and retail supply chain, with retailers responsible for making this information available to consumers. OECD reports likewise anticipate that digital tools such as the DPP will collect and share product data, enabling consumers to access information on the sustainability characteristics of products.

- Türkiye's Green Deal Alignment Process and National Measures

Türkiye is taking strategic steps to align with the new generation of trade rules introduced by the EU, its largest trading partner, while maintaining its global competitiveness. A cornerstone of this process is the Green Deal Action Plan, published in 2021. Prepared under the coordination of the Ministry of Trade of the Republic of Türkiye, the Plan sets out a roadmap for the transition to a low-carbon economy across a broad range of areas, from industry to finance.

**Key Areas of the Action Plan for the Payment and Electronic Money Sector:**

- ✓ **Carbon Border Adjustment and Carbon Pricing:** Preparations for a National Emissions Trading System (ETS) aligned with the EU's CBAM system while preserving Türkiye's own capacity to impose carbon-related charges (a process supported by the Climate Law).
- ✓ **Green and Circular Economy:** Integrating resource-efficient sustainable production models and waste management policies into industry to improve resource efficiency.
- ✓ **Development of Green Finance:** Building a financial infrastructure aligned with the EU standards to support a transparent, measurable and low-carbon economy. This includes work on a "National Green Taxonomy" to channel investment toward environmentally sustainable projects, as well as diversifying and promoting sustainable financial instruments and facilitating access to international funding.
- ✓ **Digitalization and Traceability:** Strengthening technological infrastructure for tracking and reporting carbon footprints through the digitalization of trade.

- **Strategic Role of Payment and Electronic Money Institutions**

The "Sustainable Finance" objectives set out under Türkiye's Green Deal Action Plan present significant potential for the sector. Payment and electronic money institutions can support transaction traceability and facilitate the exchange of verified financial data within this transformation:

- ✓ **Digital Traceability and Secure Settlement:** The financial settlement of transactions carried out in carbon markets such as the ETS (National Emissions Trading System) can be supported by the "time-stamped" and "registered" digital instruments offered by payment and electronic money institutions. While providing transparency in transactions, this infrastructure can also offer a supporting layer for transaction traceability and the exchange of verified financial data through escrow account arrangements and API integrations.
- ✓ **SMEs' Access to Finance:** For SMEs applying for grants and incentives for the green transformation, the most critical need is verified financial data. The sector's digital payment, collection, wallet and reporting solutions have the potential to serve as a data bridge that makes SMEs' financial processes more transparent and facilitates their access to green funding.
- ✓ **Regulatory and Taxonomy Alignment:** Aligning payment schemes and loyalty programs with the local criteria set out under Türkiye's "Green Taxonomy" would strengthen both the legal legitimacy and reporting quality of the "green" services offered.
- ✓ **CSDDD (Corporate Sustainability Due Diligence Directive):** For sector institutions whose customers operate in the EU, it is important to monitor the scope of this Directive, particularly where those customers are part of relevant supply chains.

### 5.3. Developments in Türkiye

#### 5.3.a. Global Commitments and National Targets

- 2021** : Paris Agreement entered into force in Türkiye.
- 2023** : NDC (Updated Nationally Determined Contribution): 41% reduction target by 2030 compared with the reference scenario
- 2025** : NDC 3.0 (Second Nationally Determined Contribution) – 2035 horizon, implementation tools and monitoring approach

**What does this mean?**

Climate targets are no longer merely intentions; they are becoming a framework supported by measurement, reporting and policy instruments.

#### 5.3.b. Establishment of the Legal Framework and Action Plans

- 2021** : Türkiye’s Green Deal Action Plan was published.
- 2024** : Climate Change Mitigation and Adaptation Strategies and Action Plans were published.
- 2023** : National Water Efficiency Strategy and Action Plan (2023-2033) was published.
- 2024** : TSRS (Türkiye Sustainability Reporting Standards) entered into force.
- 2024** : Energy Efficiency 2030 Strategy Document and National Energy Efficiency Action Plan were announced.
- 2025** : Climate Law was adopted.
- 2025** : National Circular Economy Strategy and Action Plan (2025-2028) entered into force.
- 2025** : Work on secondary legislation concerning the ETS and carbon markets was initiated (at the draft stage).
- 2026** : National Water Plan (2026-2035) was announced.

**What does this mean?**

With the adoption of the Climate Law, climate and sustainability have moved beyond the level of voluntary practices and policy documents to become part of a binding and institutional framework. The Green Deal Action Plan, national mitigation and adaptation strategies, TSRS, energy efficiency documents and similar developments have together established a comprehensive structure that defines not only the direction of climate targets but also their implementation and monitoring mechanisms. In Türkiye, climate policy is no longer merely a “strategy document”; it is part of the legal infrastructure of the economic system.

Within this framework, although the implementation details of the ETS and carbon markets are still at the secondary legislation stage, their legal basis has been established by the Climate Law. For payment and electronic money institutions, these developments signify increasing compliance expectations rather than direct obligations, particularly through data traceability, reporting processes, business partners and customer relationships.

#### 5.3.c. Financial System and Implementation

- 2020** : The Capital Markets Board (CMB) published the Sustainability Principles Compliance Framework.
- 2021** : The Central Bank of the Republic of Türkiye (CBRT) began addressing climate risks under the heading of financial stability.
- 2024** : The draft Türkiye Green Taxonomy Regulation was published.
- 2025** : The Banking Regulation and Supervision Agency (BRSA) published its guidance on climate-related financial risks.
- 2025** : The communiqué on the Green Asset Ratio of Banks was published.
- 2025** : The Capital Markets Board (CMB) strengthened disclosure standards through its sustainability and ESG guidance.

**What does this mean?**

Expectations regarding data, transparency and risk management are increasing across the financial system. These expectations, in turn, have indirect implications for the payment and electronic money sector.

## DIMENSIONS OF SUSTAINABILITY: ENVIRONMENTAL, SOCIAL AND GOVERNANCE (ESG)

### 6.1. Relationship Between Corporate Sustainability and ESG (Environmental, Social and Governance)

Corporate Sustainability is a broad conceptual framework aimed at creating long-term value while taking environmental limits and societal expectations into account. At the global level, this approach is guided by widely recognized common goals such as the SDGs (Sustainable Development Goals). The framework that sets out how these areas of impact are addressed through companies' activities is the Environmental, Social and Governance (ESG) approach.

In this respect, ESG is not a concept that replaces sustainability; rather, it serves as a common analytical and classification language that connects global goals and principles with the operational realities of companies. International standards and regulatory approaches use ESG dimensions as a key reference framework for systematically assessing risks and opportunities, as well as environmental, social and governance impacts. For payment and electronic money institutions, this framework provides a reference point for addressing critical areas such as regulatory compliance, operational resilience, data security and user trust in an integrated manner.

### 6.2. Dimensions of Sustainability: Environmental, Social and Governance (ESG)

As a holistic approach aimed at enabling companies to conduct their activities in alignment with environmental limits and societal expectations, Corporate Sustainability is addressed in practice across three core dimensions: environmental, social and governance.

#### 6.2.a. Environmental Dimension

The environmental dimension covers the direct and indirect impacts of companies' activities on the natural environment. This dimension is particularly associated with climate change, as well as the conservation of natural resources and the sustainability of ecosystems.

The main topics addressed under the environmental dimension include:

- **Climate change:** Climate risks and mitigation and adaptation approaches
- **Carbon footprint:** Measurement and management of direct and indirect greenhouse gas emissions; decarbonization
- **Energy use:** Energy consumption, energy efficiency and the use of renewable energy
- **Water footprint:** Water use, water efficiency and water circularity
- **Other natural resources:** Raw material consumption and resource efficiency
- **Biodiversity and ecosystems:** The impacts of activities on the natural environment. Genetic, species and ecosystem diversity.
- **Waste and pollution:** Waste management (starting with waste reduction at source); recycling; emissions resulting from waste; and other forms of environmental pollution
- **Circular economy:** Efficient use of resources throughout their life cycle. Approaches to waste reduction, reuse and recovery, with the ultimate aim of minimizing (and preferably eliminating) the use of virgin resources and regenerating ecosystems.



#### From Spare Change to Trees

Revolut's "Round Up" feature turns everyday spending into an effortless contribution to environmental causes: each card payment is rounded up to the nearest whole number, and the small difference is automatically donated. Through partnerships with international institutions such as WWF and the Rainforest Alliance, these micro-donations are directed toward tree planting, forest conservation and climate projects. Users can transparently track their contributions through the app, and those who wish can multiply the amount they contribute. Small amounts gain scale when combined across millions of users.

The topics prioritized by companies based on their business models provide a broad perspective that considers environmental impacts not only in relation to direct operations but across the entire value chain.

For payment and electronic money institutions, this approach generally places greater emphasis on managing indirect impacts arising from the energy intensity of digital infrastructure, data centers, supplier selection, the prevention of technological waste and energy efficiency, rather than on direct impacts.

### 6.2.b. Social Dimension

The social dimension represents the areas of impact that companies have on their employees, customers, business partners and society as a whole. This approach focuses on the human rights- and universal values-based dimension of economic activities, as well as companies' long-term contributions to social welfare. Social impacts are not limited to internal practices but take shape across the entire value chain through different stakeholder groups.

The main topics addressed under the social dimension include:

- **Employee rights and working conditions:**

Fair remuneration, working hours, freedom of association, prevention of discrimination and the provision of working environments that uphold human dignity

- **Occupational health and safety:**

Measures to prevent physical and psychosocial risks, establish safe working environments, and reduce occupational accidents and occupational diseases

- **Equality, diversity and inclusion:**

Promoting equal opportunities and developing an inclusive corporate culture regardless of gender, age, disability, ethnicity or other differences

- **Education, competency and human capital development:**

Developing employees' knowledge and skills, providing opportunities for continuous learning, professional development and talent management practices.

- **Customer rights, product and service safety:**

Transparent information, fair and understandable contractual terms, data privacy, the reliability of products and services, and effective management of customer complaints. For payment and electronic money institutions, this topic also covers financial inclusion, digital and financial literacy, and the protection of vulnerable user groups.

- **Supply chain management:**

Transparent supplier criteria and human rights throughout the supply chain

- **Social impact and stakeholder relations:**

The impacts of companies' activities on local communities and society, open and inclusive communication with stakeholders, and areas of contribution to society

These topics demonstrate that the social dimension encompasses a broad area of impact extending from customers and business partners to society and other stakeholders. The social dimension forms the foundation for sustainable ways of doing business shaped around the principles of trust, fairness and inclusion.

## 6.2.c. Governance Dimension

The governance dimension addresses how a company is managed in the context of its vision, mission and strategy, how decision-making processes are structured, and how responsibilities are defined. Rather than focusing on what companies aim to achieve, this dimension makes visible the decision-making mechanisms, control structures and principles through which those objectives are pursued. In this respect, governance forms a fundamental building block supporting the consistency and reliability of sustainability at the corporate level.

The main topics addressed under governance include:

- **Corporate governance structures and allocation of authority:**

Board and senior management roles; clear definition of powers and responsibilities; decision-making processes conducted through established corporate structures, particularly by taking into account the views of stakeholders affected by sustainability issues; and equal representation of women on the board

- **Risk management and internal control systems:**

Identification of strategic, operational, financial and compliance risks that incorporate sustainability issues; establishment of internal control and risk management mechanisms to monitor and manage these risks

- **Ethical principles and business conduct:**

Formalization of ethical values, their integration into corporate culture, management of conflicts of interest, and establishment of safe mechanisms for reporting and addressing ethical violations

- **Transparency, accountability and reporting:**

The accurate, consistent, comparable and timely disclosure of information on companies' activities, including their sustainability performance and risks; ensuring accountability to stakeholders

- **Regulatory compliance and audit mechanisms:**

Ensuring compliance with national and international regulations; monitoring and continuously improving the level of compliance through internal and external audit processes

These topics demonstrate that governance is more than a legal requirement; it is an enabling framework that allows companies to fulfill their commitments in the economic, environmental and social spheres. Strong governance structures support the consistent, traceable and reliable implementation of sustainability practices across the organization.



### Widespread Digital Payments and Imperative of Security

According to the OECD data from 2024, more than 90% of adults in member countries use digital payment instruments. However, reports emphasize that for this widespread adoption to be sustainable, digital consumer protection and cyber resilience need to be integrated into business models as governance standards.

The subtopics within each ESG dimension interact not only with one another but also across the other dimensions.

For example, protecting customer data begins with cybersecurity investments and oversight decisions under the Governance (G) dimension. When this structure is properly established, customers’ personal rights are protected and their trust in the organization increases, thereby contributing to the Social (S) dimension.

Similarly, for payment and electronic money institutions, issues such as data security, fraud prevention, and business continuity are not merely technical or operational matters; they are areas where governance decisions directly generate environmental and social consequences.

| Example Scenarios     | Environmental (E) Dimension                                           | Social (S) Dimension                                   | Governance (G) Dimension                                                               | Interaction Summary                                                                                           |
|-----------------------|-----------------------------------------------------------------------|--------------------------------------------------------|----------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|
| Mining Accident       | Environmental damage caused by leakage and landslides                 | Loss of life and livelihoods of local communities      | Inadequate oversight and risk analysis driven by a focus on costs                      | Weak governance triggered both environmental damage and social harm.                                          |
| Emissions Scandal     | Release of toxic gases into the air above legal limits                | Consumer deception and public health risks             | Unethical decisions that allowed data manipulation                                     | Unethical management practices caused environmental damage and a loss of trust that was difficult to restore. |
| Faulty WPP Investment | Bird migration routes damaged despite a reduction in carbon emissions | Public opposition and conflicts with local communities | Shortcomings in strategic planning and Environmental Impact Assessment (EIA) processes | Narrow planning turned an environmentally oriented initiative into a social and ecological crisis.            |



6.3. Foundation of Sustainability: Ethics and Corporate Governance

- What is the right decision for an organization?  
The faster one or the safer one?  
The one that delivers short-term gains or the one that can create long-term value?

In the payment and electronic money sector, these are not theoretical questions. They arise constantly in day-to-day operations, product design and customer interactions. In this context, ethics is not merely an abstract set of principles but a guiding framework that comes into play at the point of decision-making. Ethics is the character of a business model. This invisible factor, which shapes the hundreds of decisions an organization makes every day, provides the true foundation for sustainability.

6.3.a. Conceptual Perspective: Foundational Role of Ethics

Ethics, understood as distinguishing right from wrong or choosing to do what is right, is not merely a “moral compass”; it is a management discipline that safeguards the long-term health of the organization, society and the ecosystem. At the corporate level, ethics helps distinguish which decisions support the organization’s long-term viability and which ones accumulate risk over time.

**Strategic Link:** Sustainability is the capacity to create value consistently; ethics provides the foundation of trust on which that value is built.

**Guidance in Grey Areas:** Corporate ethics comes into play not only when things are going well, but also at difficult moments when a choice must be made between short-term gains and long-term trust. At such moments, ethical principles set boundaries for and guide the decision-making process.

6.3.b. “Systemic Impact” in the Payment and Electronic Money Sector

The foundation of our sector is not money alone, but trust. An ethical weakness in this area does not remain confined to an individual organization; it can shake the entire ecosystem. This is because every decision made by payment and electronic money institutions affects not only their own balance sheets but also user behavior, market perceptions and regulatory confidence.

**Operational Risks:** Preventing money laundering and fraud is not merely a technical or compliance process; it is fundamentally a matter of ethical conduct. Where the ethical culture is weak, internal systems and compliance processes remain merely “formalities”.

**Data as an Entrusted Asset:** Customer data is not a commercial asset but something entrusted to the organization and therefore requiring ethical protection. This approach forms the foundation of operational resilience.

**Systemic Trust:** An ethical violation at one organization can undermine collective trust and increase regulatory pressure on the entire sector. Proactive ethics turns compliance from an obligation into a Natural reflex.

6.3.c. Implementation: From Document to Corporate Reflex

Three critical pillars stand out in turning ethical principles into a living mechanism:

| Stakeholder Group | Area of Focus                                                                                          |
|-------------------|--------------------------------------------------------------------------------------------------------|
| Employees         | Ensuring that whistleblowing mechanisms operate safely and that ethical boundaries are clearly defined |
| Customers         | Full transparency, honesty and disclosure, from remuneration to data use                               |
| Suppliers         | Considering not only cost but also ethical and sustainability scores in selection processes            |

This structure takes ethics beyond being merely a document and makes it part of the organization’s everyday reflexes.

### 6.3.d. Board-Level Commitment to Ethics

An ethical culture takes shape from the top of the organization downward. A clear commitment from the Board of Directors prevents ethical principles from remaining merely on paper and ensures that they are integrated into all processes.

**Transparent Leadership:** Ethical principles communicated publicly represent a clear commitment to all stakeholders.

**Accountability:** Embedding fairness and transparency into decision-making processes creates a foundation for proactive risk management.

## 6.4. Key ESG Subtopics and Metrics for the Sector

The monitoring areas and metrics presented in this section can be expanded or narrowed according to the scale and business model of each institution. The aim is not to produce one-off statements, but to make ESG issues regularly measurable and monitorable through a limited number of consistent indicators.

### 6.4.a. Key Environmental Subtopics:

The environmental impact of payment and electronic money institutions is shaped largely by energy use, digital infrastructure and resource efficiency, and is predominantly indirect. Given the sector's operating model, the primary objective of the environmental dimension can be considered not simply to measure absolute environmental impact, but to monitor operational efficiency, energy intensity and areas for improvement in resource use.

| Monitoring Area                                          | Why It Matters in the Sector                                                                                                                                                                             | Examples of Basic Metrics                                                                                                                                                                                           |
|----------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Electricity Consumption and Energy Efficiency            | As digital services scale, energy consumption may increase. Energy costs and efficiency are directly linked to operational resilience and cost management.                                               | <ul style="list-style-type: none"> <li>Total electricity consumption (kWh);</li> <li>Energy intensity per transaction (kWh/transaction);</li> <li>Consumption per employee (kWh/employee)</li> </ul>                |
| Indirect Impacts from IT Infrastructure / Cloud Services | A significant portion of the impact is managed through third-party data center and cloud service choices (making supplier selection and contractual terms critical).                                     | <ul style="list-style-type: none"> <li>Number of suppliers using cloud/data center services;</li> <li>Percentage of critical suppliers with a "green energy/energy efficiency" commitment (%)</li> </ul>            |
| Scope 1-2-3 Emissions Data                               | Scope 1 is limited in the sector; Scope 2 (energy) is more visible, while Scope 3 should be included in monitoring due to reliance on suppliers.                                                         | <ul style="list-style-type: none"> <li>Scope 2 emissions (tCO<sub>2</sub>e);</li> <li>Percentage of critical suppliers from which Scope 3 data is requested (%)</li> </ul>                                          |
| Office Resource Use (Paper, Consumables)                 | Although the absolute impact may appear limited, this is an area where improvements can be made quickly and where corporate discipline can be established; it is also directly linked to digitalization. | <ul style="list-style-type: none"> <li>Paper consumption per employee;</li> <li>Digital contract ratio (%);</li> <li>e-document/e-receipt usage ratio (%)</li> </ul>                                                |
| Waste and E-Waste Management (Equipment Life Cycle)      | POS terminals, computers and similar equipment require secure disposal and life-cycle management; e-waste is also connected to data security.                                                            | <ul style="list-style-type: none"> <li>Number of devices taken out of service;</li> <li>Percentage of refurbished/reused devices (%);</li> <li>Percentage securely disposed of/recorded for disposal (%)</li> </ul> |

### 6.4.b. Key Social Subtopics

The social dimension in the sector is primarily assessed through human capital, supplier management, customer relationships, and the safe and inclusive delivery of services. Accordingly, it is important to monitor processes relating to employees, suppliers and customers alike.

| Monitoring area                                                     | Why It Matters in the Sector                                                                                                                                                                                                                                                                                     | Examples of Basic Metrics                                                                                                                                                                                           |
|---------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Human Capital and Competency (particularly IT/cybersecurity)</b> | The business model relies on technology and security; continuity and training in critical roles are decisive for service quality and operational resilience.                                                                                                                                                     | <ul style="list-style-type: none"> <li>• Annual training hours per employee;</li> <li>• Turnover rate in critical roles (%);</li> <li>• Time to fill open positions (days)</li> </ul>                               |
| <b>Equality, Diversity and Inclusion</b>                            | These are fundamental indicators that are easy to measure even at SME scale and make organizational culture visible; they are also linked to talent attraction and employee engagement.                                                                                                                          | <ul style="list-style-type: none"> <li>• Percentage of female employees (%);</li> <li>• Percentage of women in management (%);</li> <li>• Pay equity indicators</li> </ul>                                          |
| <b>Customer Rights and Consumer Protection</b>                      | Transparency around fees/commissions, effective handling of disputes and complaints, and fair, plain-language contracts are key components of trust in the sector. It is also important to design structures that improve user experience while giving due consideration to ethical principles in AI algorithms. | <ul style="list-style-type: none"> <li>• Total number of customer complaints;</li> <li>• Average resolution time;</li> <li>• Dispute/refund completion time</li> </ul>                                              |
| <b>Financial Inclusion and Accessibility</b>                        | This is one of the areas where the sector's role as an "enabler" is most tangible; it creates a direct impact through product design and customer experience.                                                                                                                                                    | <ul style="list-style-type: none"> <li>• Number of inclusive products/services;</li> <li>• Number of users of these products;</li> <li>• Number of channels with accessibility improvements</li> </ul>              |
| <b>Stakeholder Communication and Feedback Channels</b>              | Feedback from customers, employees and business partners helps identify risks at an early stage and is also directly linked to security and ethical considerations.                                                                                                                                              | <ul style="list-style-type: none"> <li>• Stakeholder engagement: yes/no;</li> <li>• Feedback channel: yes/no;</li> <li>• Number of feedback submissions;</li> <li>• Feedback closure rate (%)</li> </ul>            |
| <b>Supplier and Third-Party Management (Social Dimension)</b>       | Cloud services, software providers and outsourced operations are critical to the sector; suppliers' working conditions, data security and ethical practices can create indirect social risks and reputational impacts.                                                                                           | <ul style="list-style-type: none"> <li>• Percentage of supplier contracts containing ESG/ethics provisions (%);</li> <li>• Number of critical suppliers;</li> <li>• Percentage of suppliers assessed (%)</li> </ul> |

### 6.4.c. Key Governance Subtopics

The governance dimension is the most critical ESG area for the payment and electronic money sector. Regulatory compliance, data security, anti-money laundering, ethics, and internal control mechanisms form the foundation of this dimension. These indicators demonstrate an institution's capacity for reliability, accountability, and risk management.

| Monitoring Area                                                                           | Why It Matters in the Sector                                                                                                                                                                                | Simple Example Metrics                                                                                                                                                                                                                                       |
|-------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Board of Directors (BoD) / Senior Management Oversight</b>                             | Ownership is essential for sustainability topics to become part of the "business agenda"; otherwise, they remain at the policy level.                                                                       | <ul style="list-style-type: none"> <li>Number of ESG topics on the BoD/Senior Management agenda (per year);</li> <li>Responsible role/committee in place: yes/no;</li> <li>ESG topics incorporated into Key Performance Indicators (KPIs): yes/no</li> </ul> |
| <b>Risk Management, Internal Control and Compliance</b>                                   | Given the licensed structure of the sector and regulatory oversight, this is a minimum mandatory requirement; weaknesses increase reputational and regulatory sanction risks.                               | <ul style="list-style-type: none"> <li>Number of compliance breaches;</li> <li>Number of internal control findings;</li> <li>Time taken to close findings</li> </ul>                                                                                         |
| <b>Anti-Money Laundering / Countering the Financing of Terrorism (AML/CFT) Governance</b> | It demonstrates not only the effectiveness of technical controls but also the maturity of organizational culture and processes; it is fundamental to sector-wide trust.                                     | <ul style="list-style-type: none"> <li>AML training participation rate (%);</li> <li>Number of Suspicious Transaction Reports / Suspicious Activity Reports (for record-keeping purposes);</li> <li>Number of audit findings</li> </ul>                      |
| <b>Information Security and Cyber Risk</b>                                                | It is central to service continuity and customer trust and should therefore be monitored alongside operational resilience.                                                                                  | <ul style="list-style-type: none"> <li>Number of cybersecurity incidents (by classification);</li> <li>Critical incident response time;</li> <li>Frequency of business continuity testing</li> </ul>                                                         |
| <b>Third-Party Governance / Supplier Management</b>                                       | Risks associated with critical services such as cloud computing, software and call centers extend beyond organizational boundaries; contractual arrangements and monitoring capabilities are therefore key. | <ul style="list-style-type: none"> <li>Number of critical suppliers;</li> <li>Percentage of suppliers assessed annually (%);</li> <li>Percentage of third parties with security/business continuity requirements in their contracts (%)</li> </ul>           |
| <b>Ethics and Conflict of Interest Mechanisms</b>                                         | In trust-based sectors, ethical weaknesses can have an impact beyond the individual organization and across the wider ecosystem; they also serve as an early-warning mechanism.                             | <ul style="list-style-type: none"> <li>Code of Ethics in place: yes/no;</li> <li>Whistleblowing channel in place: yes/no;</li> <li>Time taken to close whistleblowing reports</li> </ul>                                                                     |



#### Data Breach Costs in the Financial Sector

The cost of a data breach in the financial services sector is approximately 40% higher than in other sectors (IBM Security, 2024). In Türkiye, payment and electronic money institutions are subject to oversight by the CBRT and MASAK. As a result, a potential breach may be compounded by reputational loss and licensing risks, increasing the potential for costs to exceed the global average.

# SUSTAINABILITY ASSESSMENT OF THE SECTOR

## 7.1. Sustainability SWOT Analysis of the Sector

| STRENGTHS                                                                                                                                                                                                                                                                                                                                                | WEAKNESSES                                                                                                                                                                                                                                                                                      |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><b>Digital-First Business Model</b></p> <p>A low reliance on physical branches, paper and logistics provides a natural advantage in terms of streamlining processes and improving resource efficiency. Even small operational improvements can deliver results quickly.</p>                                                                           | <p><b>Dependence on Energy and IT Infrastructure</b></p> <p>A significant share of the sector’s environmental impact stems from data centers, cloud services and digital infrastructure. Energy prices and the energy mix directly affect operational performance and the carbon footprint.</p> |
| <p><b>Data and Transaction Traceability Capabilities</b></p> <p>Transaction data enables measurement and analysis in areas such as product usage, customer behavior, fraud detection and financial inclusion.</p>                                                                                                                                        | <p><b>Data Localization and Cloud Restrictions</b></p> <p>Restrictions on the use of cloud solutions hosted abroad may increase data storage costs and limit infrastructure flexibility, while dependence on domestic data center capacity may introduce new operational risks.</p>             |
| <p><b>Trust Reinforced by Regulation</b></p> <p>CBRT licensing requirements, obligations to safeguard customer funds, and internal control and compliance standards contribute to institutional trust and credibility across the sector.</p>                                                                                                             | <p><b>Relatively High Compliance Costs</b></p> <p>AML/KYC, the PDPL, data protection, and IT controls may create significant capacity and budget pressures, particularly for small and medium-sized institutions.</p>                                                                           |
| <p><b>Agility in Product and Process Development</b></p> <p>Payment and electronic money institutions have the flexibility to update their products and processes rapidly. This capacity enables social and governance gains such as improved accessibility, customer protection and transparent pricing to be implemented within a short timeframe.</p> | <p><b>Outsourcing and Supplier Dependence</b></p> <p>Reliance on third parties for critical functions such as cloud infrastructure, software platforms and call centers may complicate compliance with sustainability standards and the management of cybersecurity risks.</p>                  |
| <p><b>Potential for Ecosystem Development</b></p> <p>Open banking infrastructure and data-sharing services aligned with the CBRT’s direction can support innovation and collaborative value creation when underpinned by sound governance.</p>                                                                                                           | <p><b>Data Privacy and Internal Breach Risk</b></p> <p>Breaches of the PDPL arising from organizational processes, system vulnerabilities or human error may result not only in administrative sanctions but also in lasting damage to customer trust.</p>                                      |

| OPPORTUNITIES                                                                                                                                                                                                                                                                                                                                                                                              | THREATS                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Creating Sustainability Impact Through Digital Infrastructure</b><br><br>Payment and electronic money institutions can create a direct sustainability impact through digital payment infrastructure in areas such as e-commerce, mobility, energy efficiency and public payments. Small improvements in product design and the purposeful use of transaction data can gradually strengthen this impact. | <b>Cyberattacks and Service Disruptions</b><br><br>Ransomware, DDoS attacks and targeted cyber threats may undermine operational resilience, increase the risk of regulatory sanctions and cause lasting damage to customer trust that may be difficult to restore.                                                                                                                                                                                |
| <b>Green and Transparent Product Features</b><br><br>Features such as e-receipts, digital receipts, paperless processes and carbon information provided at the transaction level can be integrated into existing products without requiring major investments, while also creating opportunities for differentiation.                                                                                      | <b>Increasingly Stringent AML/CFT Requirements</b><br><br>Ongoing changes to FATF recommendations and MASAK regulations continue to expand compliance requirements externally. Delayed adaptation to these changes may lead to operational restrictions and loss of trust in the eyes of regulatory authorities.                                                                                                                                   |
| <b>Financial Inclusion and Accessibility</b><br><br>Simple interfaces, low-cost solutions and inclusive product design can enable institutions to reach new customer segments, including individuals and SMEs with limited access to banking services.                                                                                                                                                     | <b>Intense and Asymmetric Competitive Pressure</b><br><br>Banks, major technology companies and global fintechs entering or preparing to enter the Turkish market continue to intensify competition on pricing and user experience.                                                                                                                                                                                                                |
| <b>ISO 20022 and Data-Driven Differentiation</b><br><br>The rich data-carrying capacity of the new-generation global financial messaging standard can turn payment transactions into traceable, high-quality datasets, providing a competitive advantage for corporate customers.                                                                                                                          | <b>Risk of Changes in Data Protection Regulations</b><br><br>External regulatory developments, such as updates to the PDPL, increased pressure to comply with the EU GDPR, or new data localization requirements, may require operational restructuring and result in significant additional compliance costs.                                                                                                                                     |
| <b>Differentiation Through Voluntary Sustainability Reporting</b><br><br>Even where not yet subject to mandatory reporting requirements, limited and focused data tracking can serve as a strong signal of trust and transparency to corporate customers, banks and international business partners.                                                                                                       | <b>Energy Price and Carbon Cost Shocks</b><br><br>External price shocks in global energy markets, together with carbon costs arising from Türkiye's preparations for its own ETS, may lead to unpredictable increases in data center and infrastructure costs.                                                                                                                                                                                     |
| <b>Risk Reduction and Value Chain Impact Through Supplier Management</b><br><br>Including ESG, information security and business continuity criteria in supplier contracts can strengthen governance quality while encouraging the wider ecosystem to contribute to the sustainability transformation.                                                                                                     | <b>Greenwashing Risk and Green Claims Regulations</b><br><br>Green product or service claims made without adequate measurement infrastructure and reliable supporting evidence pose a direct risk to reputation and customer trust. This risk is becoming increasingly tangible as a result of the indirect impact of the EU Green Claims Directive and CSRD on Türkiye's international business partnerships and regulatory compliance processes. |
| <b>Business Model Expansion Through New Regulations</b><br><br>Open banking legislation, the regulatory transformation driven by PSD3/PSR developments, and payment infrastructure frameworks developed by the CBRT are creating opportunities for the sector to establish new partnerships with banks and other financial institutions and offer customers a broader range of services.                   | <b>Foreign Exchange Volatility and Macroeconomic Vulnerability</b><br><br>High inflation and depreciation of the Turkish lira may increase the cost of overseas infrastructure, software licenses and cloud services, while also adversely affecting license-related capital adequacy calculations and international partnership models.                                                                                                           |

## 7.2. Sustainability Risks and Opportunities in the Sector

Sustainability risks and opportunities arise across the sector's value chain.

In the payment and electronic money sector, risks refer to adverse circumstances that may result in licensing issues, loss of customer trust and financial losses. While compliance and control activities represent a minimum requirement, opportunities extend beyond this framework to encompass trust-based differentiation, access to new markets and long-term value creation.

While an institution identifies the environmental, social and governance risks and opportunities that may affect its business objectives (outside-in), it should also consider the adverse impacts of its activities on the natural environment and society (inside-out). This approach is discussed below under the headings of risk, compliance and control, and opportunities.

### 7.2.a. Environment and Climate

#### Key Risks

- ✓ **Transition risks:** The impact of rising energy prices on data centers, cloud infrastructure and operating costs, together with the indirect effects of climate regulations (demands arising from the customer portfolio, business partners and group companies)
- ✓ **Operational continuity (Physical risks):** The impact of extreme weather events on data centers and critical service providers
- ✓ **Risk of contributing to emissions:** Scope 1 - very limited for the sector; Scope 2 - energy consumption (significant) - (indirect, through energy suppliers); Scope 3 - a critical area that requires close monitoring in the sector (indirect emissions through cloud services, suppliers and business partners)

#### Strategy and Business Model Impact

- ✓ Potential inherent positive impact arising from the business model (reducing cash use and lowering emissions intensity per transaction – as a measurable impact, rather than a claim)
- ✓ Potential to provide data-driven support for the implementation of climate policies

#### Compliance and Control Activities

- ✓ Energy efficiency and the use of renewable energy
- ✓ Efforts to develop low-carbon digital payment solutions
- ✓ Supplier management (including service providers and cloud infrastructure)
- ✓ Identifying key environmental sustainability data and enabling its digital monitoring

#### Opportunities

- ✓ Positioning as a low-carbon digital payment infrastructure provider
- ✓ Cost advantages through energy efficiency
- ✓ Becoming a preferred company among customers and investors through a measurable and transparent environmental impact narrative
- ✓ Building a resilient supplier base and contributing indirectly to the sustainability transformation of the supply chain through supplier selection criteria



#### Stripe – Channeling Payment Volume into Climate Finance

Stripe enables businesses, through its “Stripe Climate” model, to direct a small share of the revenue generated from each sale toward permanent carbon removal technologies. To scale this vision further, the company co-founded Frontier with Alphabet, Shopify, Meta and McKinsey. The initiative has committed to directing more than one billion dollars toward these technologies by 2030. Stripe users can direct a portion of their revenue to this fund through the platform without the need for any additional technical development.

A scalable model that transforms payment infrastructure into a financing channel for climate technologies.



#### Carbon Points for Tree Planting

A bank in Türkiye rewards customers in tangible ways for environmentally friendly behaviors. Actions such as digital payments, contactless transactions or certain physical activities are reflected in the app as “carbon points”. Once the accumulated points reach a certain threshold, the bank plants a sapling on the user's behalf through partnerships with non-governmental organizations. The system makes the environmental impact of users' everyday habits visible to them.

## Example of How Climate and Environmental Risks May Be Reflected in the Risk Profile of Sector Institutions

The table below, adapted from the section of the Dutch Central Bank's 2023 Guide on Managing Climate and Environmental Risks concerning electronic money and payment institutions, provides examples of how climate and environmental risk factors may affect existing financial and non-financial risk areas. The same risk factor may affect multiple risk areas simultaneously. The table serves as a starting point for a materiality analysis. The ultimate impact depends on the scale and distribution of physical and transition risks and on the institution's business model; the significance of these risks should therefore be determined through the institution's own materiality analysis.

| Risk Channel | Subtype                                 | Operational Risk                                                                                                                                                                                                                                                                                  |
|--------------|-----------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Physical     | Acute or Chronic                        | Severe climate and environmental events may damage, inter alia, the premises, data centers and operations of an electronic money or payment institution.                                                                                                                                          |
| Transition   | Policy, Technology and Market Sentiment | New climate- and environment-related policies and technologies, as well as changing market sentiment, may put pressure on the reputation of an electronic money or payment institution, for example in relation to meeting climate targets aimed at achieving climate-neutral operations by 2050. |



## 7.2.b. Governance and Business Ethics

### Key Risks

- ✓ **Ethics and compliance risks:** Legal sanctions arising from ethical violations, conflicts of interest, money-laundering, corruption and fraud risks, including weaknesses in AML controls, as well as the failure to design AI algorithms in accordance with ethical principles
- ✓ **Reputational and trust loss:** Erosion of trust among regulators and stakeholders due to weak internal control and oversight mechanisms

### Strategy and Business Model Impact

- ✓ **Transparency-focused model:** An operating model that places transparency and accountability at the center of management and recognizes trust as the most fundamental strategic asset of the financial system
- ✓ **Digital traceability:** Designing all financial flows within an auditable and transparent framework through digital infrastructure that supports the formal economy

### Compliance and Control Activities

- ✓ Effective ethics rules and policies applied from senior management down to the lowest organizational level
- ✓ Establishing and effectively operating sound internal control, compliance and audit mechanisms
- ✓ Sustainability and ethics oversight processes at board level

### Opportunities

- ✓ Positioning as a trusted institution in the eyes of regulators
- ✓ Establishing a low-risk, transparent and preferred stakeholder profile for local and international business partners and investors
- ✓ Strengthening long-term corporate reputation and investor confidence, while sustainably enhancing brand value



Cyber Resilience Investments  
Help Reduce Financial and  
Operational Risk  
According to IBM Security  
(2025), Investments in cyber  
resilience may contribute to a  
lower cost of capital in the  
financial services sector. (Cost  
of a Data Breach  
Report, Statista analysis).



### 7.2.c. Data Security and Customer Privacy

Data is a core value for the payment sector (customer information, transaction data, card, wallet and identity information).

#### Key Risks

- ✓ **Data breaches and cyber risks:** Cyberattacks, personal data breaches (PDPL) and fraud cases
- ✓ **Operational risks:** Service disruptions and interruptions to business continuity caused by system failures or cyber incidents
- ✓ **Legal sanctions:** Significant administrative fines and compensation liabilities that may arise from data breaches

#### Strategy and Business Model Impact

- ✓ **Cyber resilience-focused design:** A model that positions cybersecurity not merely as a technical detail, but as a core product feature and a commitment to uninterrupted service
- ✓ **Trust-based service:** An approach that regards customer data privacy as a prerequisite for the sustainability of the business model

#### Compliance and Control Activities:

- ✓ Robust data governance and infrastructure compliant with the PDPL and all relevant legislation
- ✓ Technical security measures, penetration testing, encryption technologies and incident response plans
- ✓ Cyber risk insurance and cybersecurity awareness training for employees

#### Opportunities:

- ✓ Strategic differentiation from competitors by positioning the company as “the most secure payment infrastructure” provider
- ✓ Becoming a preferred platform for corporate customers and ecosystem stakeholders, while building long-term, trust-based customer relationships
- ✓ Reducing the cost of capital and risk premiums through investments in cyber resilience



#### OECD – Reliability Risk of Environmental Information

The OECD (2025) recognizes the significant potential of digital tools to make environmental information accessible to consumers. However, it also emphasizes that poor or inadequate design may undermine the reliability of these tools and negatively affect consumer trust (OECD Digital Economy Papers, No. 377, OECD Publishing, Paris).



## 7.2.d. Financial Inclusion and Product Responsibility

The sector has a direct impact on the inclusiveness of the financial system.

### Key Risks

- ✓ **Digital exclusion:** Individuals with low levels of digital literacy or micro-enterprises with limited access to technology may be left outside the financial system
- ✓ **Complex processes:** Users may choose not to use a service because of non-transparent pricing, hidden or unexpected charges, unclear refund and dispute processes, automatic renewals, dormant account fees or similar practices

### Strategy and Business Model Impact

- ✓ **Inclusive business model:** A model that facilitates access to financial services and enables SMEs and individuals to participate in the digital economy.
- ✓ **Social impact-oriented products:** Integrating features into products that enable users to track their financial well-being and environmental impact

### Compliance and Control Activities

- ✓ Clear and easy-to-use interfaces, transparent and simple pricing, and user-friendly dispute and refund processes
- ✓ Incorporating social impact and broader ESG assessment criteria into product development and developing products with a focus on social impact
- ✓ Activities that support the formal economy and financial literacy initiatives

### Opportunities

- ✓ Expanding market share by reaching new customer segments that have not yet gained access to the financial system
- ✓ Creating new growth opportunities through tailored solutions for SMEs and micro-enterprises
- ✓ Building brand loyalty by positioning the company as a “customer-friendly and responsible payment provider”
- ✓ Establishing long-term customer relationships and brand trust
- ✓ Becoming a preferred platform for corporate customers and international business partners



**Mastercard Carbon Calculator**  
– Seeing the Impact of Your Purchases

Mastercard's Carbon Calculator allows cardholders to see the estimated environmental impact of each purchase directly through their digital wallets. The system analyzes purchase data to calculate its carbon impact, enabling users to track this information over time and compare it with national averages. The tool also allows users to donate to global reforestation projects. Through an open application programming interface (API), different banks and fintech companies can integrate this feature into their own applications.



## 7.2.e. Human Capital and Competency

The sustainability of a technology-driven business model depends on retaining and developing qualified human capital.

### Key Risks

- ✓ **Talent loss:** High employee turnover and a shortage of expertise in critical technological capabilities (IT, cybersecurity, audit and product design)
- ✓ **Employee well-being:** The risk of burnout and declining performance resulting from the pace of the sector and heavy workloads

### Strategy and Business Model Impact

- ✓ **Intellectual capital-focused model:** An approach that regards human capital not as a cost item, but as the most fundamental strategic capital driving innovation and technological advantage
- ✓ **Culture of continuous development:** A structure that makes keeping technological competencies up-to-date part of the business model in order to strengthen operational resilience

### Compliance and Control Activities

- ✓ Transparent compensation, performance management and career planning policies
- ✓ Human resources policies that prioritize employees' physical and mental well-being (psychosocial health)
- ✓ Occupational health and safety (OHS) monitoring that takes into account psychosocial health and ergonomics appropriate to the needs of the service sector
- ✓ Strengthening operational resilience through continuous training and development programs

### Opportunities

- ✓ Achieving high operational agility and innovation capacity through skilled and engaged teams preserving institutional knowledge and increasing efficiency through low employee turnover
- ✓ Attracting top talent by building a brand reputation as a “best place to work” in the sector



## 7.2.f. Supply Chain and Third-Party Risks

### Key Risks

- ✓ **Service disruption:** Service outages caused by the cascading effects of technical failures originating from third parties
- ✓ **Indirect compliance risks:** Risks arising from suppliers with data security vulnerabilities or weak ESG performance

### Strategy and Business Model Impact

- ✓ **Ecosystem management:** A responsible supplier management strategy that regards suppliers not as external sources, but as part of operational integrity and quality standards

### Compliance and Control Activities

- ✓ Defining ESG criteria for supplier selection and incorporating data security and compliance provisions into contracts
- ✓ Regular audits and risk assessments of critical service providers
- ✓ Supplier management processes aligned with international standards (e.g. relevant international standards, including applicable ISO standards)

### Opportunities

- ✓ Minimizing operational risks and ensuring service continuity through a resilient, reliable and auditable supply chain
- ✓ Establishing a business partner profile fully aligned with global standards
- ✓ Contributing to the sustainability transformation of the entire ecosystem through responsible supplier management



## Example of an ADAPTED SASB (IFRS S1, S2)-Aligned Risk Matrix for Payment and Electronic Money Institutions

### Methodology Note

Payment and electronic money institutions do not have a separate industry standard under the SASB (Sustainability Accounting Standards Board) industry classification. SASB allows institutions of this nature to develop tailored templates by drawing on multiple relevant industries.

The table below presents the material risk areas that TÖDEB members may select and use as a starting point in their sustainability reporting. The metric codes have been derived from the Commercial Banks (FN-CB), Consumer Finance (FN-CF), and Transaction and Payment Processing (FN-TP) standards and adapted with consideration of the Turkish regulatory framework (CBRT, MASAK, PDPL). Each institution should independently assess which metrics are material to its own business model.

| Risk Area                            | Risk Definition (Sector-Specific and Regulatory)                                                              | SASB Sustainability Dimension | SASB Disclosure Topic                        | SASB Metric Code      | SASB Official Disclosure Type                                                                            | Potential Financial Impact in the Turkish Context                   |
|--------------------------------------|---------------------------------------------------------------------------------------------------------------|-------------------------------|----------------------------------------------|-----------------------|----------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------|
| Data Security & Cyber Risk           | Cyberattacks, data breaches, system failures                                                                  | Social Capital                | Customer Privacy and Data Security           | FN-TP-230a.3          | Quantitative: Number of data breaches, percentage of personal data breaches and number of users affected | PDPL administrative fines, compensation, customer loss              |
|                                      |                                                                                                               |                               |                                              | FN-TP-230b.1          | Qualitative: Description of the approach to identifying and managing data security risks                 | Increase in cybersecurity investment                                |
| Fraud and Financial Crime Risk       | Fraudulent transactions, identity abuse, AML/CFT violations                                                   | Social Capital                | Fraud and Financial Crime Management         | FN-TP-410a.1          | Quantitative: Total amount and rate of fraud-related losses                                              | Increase in chargebacks, MASAK sanctions                            |
|                                      |                                                                                                               |                               |                                              | FN-TP-410b.1          | Qualitative: Description of control systems designed to reduce fraud risk                                | Decline in transaction volume                                       |
| Systemic Operational Risk            | Disruption of payment infrastructure                                                                          | Leadership and Governance     | Systemic Risk Management                     | FN-TP-550a.1          | Quantitative: Number and duration of operational disruptions                                             | Loss of transaction volume, SLA (Service Level Agreement) penalties |
|                                      |                                                                                                               |                               |                                              | FN-TP-550b.1          | Qualitative: Description of the business continuity and systemic risk management framework               | Reputational loss                                                   |
| Regulatory Compliance Risk           | Non-compliance with the CBRT, MASAK and PDPL requirements                                                     | Leadership and Governance     | Business Ethics and Competitive Behavior     | FN-TP-510a.1          | Quantitative: Monetary losses arising from legal proceedings related to financial regulations            | Administrative fines, licensing risk                                |
|                                      |                                                                                                               |                               |                                              | FN-TP-510b.1          | Qualitative: Description of the compliance program and internal control mechanisms                       | Audit costs                                                         |
| Financial Inclusion Risk             | Exclusion from the system of groups with limited access to banking services or low levels of digital literacy | Social Capital                | Financial Inclusion and Capacity Building    | FN-TP-240a.1 / 240a.2 | Quantitative: Indicators relating to underserved customer groups served                                  | Market contraction                                                  |
|                                      |                                                                                                               |                               |                                              | FN-TP-240b.1          | Qualitative: Description of strategies and practices aimed at increasing financial access                | Lost growth opportunities                                           |
| Human Capital and IT Competency Risk | Loss of critical technical personnel, shortage of cybersecurity expertise                                     | Human Capital                 | Employee Engagement, Diversity and Inclusion | FN-TP-330a.1          | Quantitative: Employee turnover rate and demographic indicators                                          | Operational vulnerability                                           |
|                                      |                                                                                                               |                               |                                              | FN-TP-330b.1          | Qualitative: Description of the human capital management approach                                        | Increased security risk                                             |

## IMPORTANT REGULATIONS, STANDARDS AND FRAMEWORKS

The ESG topics and value chain analyses discussed in the previous section identified **which topics are material** for payment and electronic money institutions and the areas in which risks and opportunities are concentrated. However, these findings alone are not sufficient, as the same risk or impact area may be interpreted and addressed differently by different institutions. Therefore, sustainability efforts need to be linked to **commonly recognized regulations, standards and frameworks**.

The regulations, standards and frameworks presented in this section provide an objective, measurable and auditable basis for conducting sustainability efforts. The topics covered represent different perspectives that a payment and electronic money institution may need when structuring its sustainability strategy:

**Principle-Based Commitments** help align an institution's corporate vision with global principles.

**Global Reporting Standards** provide a common data language through which this vision can be reflected externally (including for investors, banks and regulators).

**Management System Standards (ISO)** help transform committed and reported processes into operational discipline and ensure their continuity.

**Measurement and Target-Setting Frameworks** provide the technical calculation methods and scientific data infrastructure required by the overall framework.

Each of these frameworks serves as a complementary reference. Institutions can select the tools appropriate to their size and sustainability maturity and shape their own roadmaps accordingly.

### 8.1. Principle- and Value-Based Commitment Frameworks

#### 8.1.a. UN Global Compact

The UN Global Compact is a voluntary global initiative that calls on businesses to align with universally recognized principles in the areas of human rights, labor standards, the environment and anti-corruption. It has been adopted by thousands of institutions from the public and private sectors since 2000.

The UN Global Compact expects companies to integrate these principles into their corporate policies and processes and to transparently communicate their progress. The framework provides companies with a minimum ethical foundation. It establishes a common language and direction on respect for human rights, fair working conditions, environmental responsibility and the fight against corruption, regardless of sector, size or geography.

#### Relevance to the Payment and Electronic Money Sector

Although payment and electronic money institutions do not engage in direct production, they are at the center of economic activity and financial flows. This position gives the sector not only an operational but also a behavioral and transformative sphere of influence. The UN Global Compact provides the payment and electronic money sector with the following fundamental principles:

**Trust and transparency:** Strong governance and anti-corruption principles form the foundation of trust in digital financial services.

**Inclusion:** A non-discrimination approach and respect for human rights support broader access to financial services.

**Indirect environmental impact:** Digital payment infrastructure can contribute to resource efficiency and low-carbon business models by reducing physical processes.

**Value chain impact:** It can facilitate the adoption of responsible business practices through business partners, suppliers and platform users.

In this respect, the UN Global Compact provides payment and electronic money institutions with an answer to the question, **“What kind of corporate stance should I adopt?”**. It establishes a common ethical foundation for the sector, trust-based relationships with stakeholders and a strong starting point for the sustainability journey.

### 8.1.b. G20/OECD Principles of Corporate Governance

The G20/OECD Principles of Corporate Governance constitute a globally recognized governance framework aimed at ensuring that companies are managed in a fair, transparent, accountable and responsible manner. The Principles were first published in 1999 and, following updates in 2004 and 2015, were endorsed by the G20 in 2023 and revised to reflect today's financial markets, risk environment and sustainability expectations.

With the 2023 update, the Principles identify climate change, environmental and social risks, and long-term value creation as governance matters that directly affect corporate performance and market confidence. This approach moves sustainability beyond a separate policy area and integrates it with strategy, risk management, corporate disclosure and board responsibilities.

#### Relevance to the Payment and Electronic Money Sector

Payment and electronic money institutions operate under conditions characterized by high transaction volumes, intensive data use, technological dependence, speed and stringent regulatory expectations. This structure makes trust, operational continuity and stakeholder relations in the sector directly dependent on the quality of corporate governance.

While the G20/OECD Principles of Corporate Governance serve as a global governance reference addressing the question, "How should an organization be governed?", the CMB Corporate Governance Principles provide the corresponding regulatory framework in Türkiye. The Principles do not limit sustainability to environmental and social issues; rather, they define it as an integrated area of corporate governance encompassing strategy, risk management, board responsibility and transparency.

This approach makes it possible to assess the regulatory, technological and reputational risks faced by payment and electronic money institutions not as isolated operational issues, but in terms of institutional capacity and governance maturity. Accordingly, the Principles should be viewed not merely as a checklist for the sector, but as a framework explaining why strong governance is critical to growth, scalability and long-term resilience.

### 8.1.c. UN Principles for Responsible Digital Payments

Developed under the leadership of the UN Global Compact and the Better Than Cash Alliance, with the participation of the United Nations Development Programme (UNDP) and other UN entities, this framework defines digital payment services not merely as a technical tool but as infrastructure that generates direct social and economic impact. It aims to ensure user safety and system sustainability throughout the design, delivery and management of digital financial services.

The Principles are based on standards concerning user rights, data privacy, operational transparency and accessibility for payment and electronic money institutions. This approach envisages making consumer protection and financial inclusion criteria an integral part of commercial activities throughout product development processes.

Although the set of Principles does not constitute a legal obligation for institutions, it provides a concrete implementation framework for players in the digital payments ecosystem to establish an ethical and accountable governance model. The fundamental objective is to build a sector structure that establishes user trust through data security, transparent pricing and inclusive service models without slowing the pace of technological innovation.

The UN Principles for Responsible Digital Payments are broadly consistent with the CBRT's transparency and consumer protection regulations under the Law No. 6493, as well as MASAK's principles concerning customer identification (KYC) and risk management. The Principles strengthen institutions' compliance with local regulations while supporting the provision of services in line with international standards in areas such as data security and user rights.

### 8.1.d. UN Women's Empowerment Principles (UN WEPs)

The UN Women's Empowerment Principles (UN WEPs) are a voluntary framework that aims to move gender equality in the business world beyond the realm of social responsibility and make it an integral part of corporate governance, human resources and business practices. The Principles were developed through a collaboration between UN Women and the UN Global Compact.

The Principles enable companies to systematically identify areas where risks and inequalities may arise in relation to women's participation in the workforce, career development, access to decision-making processes, and work-life balance. In this respect, the framework can be viewed not merely as a statement of good intentions, but as a checklist for identifying where internal policies, processes and practices need to be strengthened.

**The WEPs help institutions identify at an early stage where policy, process or implementation gaps exist in relation to gender equality.**

#### Relevance to the Payment and Electronic Money Sector

For payment and electronic money institutions, the UN Women's Empowerment Principles serve as a reference for raising early awareness of issues such as rapidly growing organizational structures, gender representation in technology and product teams, the inclusiveness of customer interfaces, and diversity in decision-making processes. Although the framework does not impose a legal obligation, it provides guidance for preventing equality-related risks from developing into compliance, reputational and talent management issues in the future.



## 8.2. Global Reporting Standards

Sustainability reports, through which companies voluntarily disclose their environmental and social impacts, initially emerged as a means of differentiation. However, as the direct effects of sustainability risks—particularly the climate crisis—on financial performance and company value have become increasingly visible, sustainability reporting has evolved from a voluntary disclosure into an extension of financial reporting. Today, these reports are expected to be prepared using a common language, present comparable data, and be subject to assurance, much like financial statements.

Today, global sustainability reporting standards are broadly structured around three main groups according to the “materiality” approaches they adopt:

- **IFRS (S1 and S2) and TSRS (S1 and S2):** Focus on the effects of sustainability matters on a company’s financial position, cash flows, and value (**Financial Materiality**).
- **GRI:** Focuses on the impacts of a company’s activities on the economy, the environment, and people (**Impact Materiality**).
- **ESRS:** Adopts a comprehensive approach that considers both financial impacts and impacts on the environment and society (**Double Materiality**).

While these approaches were previously viewed as separate tracks, these standards have increasingly evolved from mutually exclusive frameworks into complementary frameworks that contribute to a common data language. Through global harmonization efforts, the aim is to enable standards with different areas of focus to complement and reinforce one another and to establish greater consistency in sustainability reporting worldwide. The latest guidance, implementation guidelines, and technical details relating to these standards are available on the official websites of the respective reporting frameworks.

Integrated Reporting should also be addressed in this context. Regarded as the most comprehensive stage of the modern reporting ecosystem, Integrated Reporting is a holistic approach that establishes the connection between an organization’s strategy, governance and financial performance and its social and environmental impacts. Sometimes described in the literature as a ‘one report’ approach, this model brings together financial reporting (FR) and sustainability reporting (SR) to present the organization’s overall value creation story (White 2010).

This approach evaluates an organization’s performance not solely on the basis of financial results, but also through the management of six key forms of capital: financial, manufactured, intellectual, human, social and relationship, and natural capital.

Today, new-generation standards such as IFRS (ISSB) and ESRS incorporate the management of these forms of capital and their links to financial statements into reporting requirements, turning the concept of value creation into concrete datasets. As the most advanced stage of corporate reporting, Integrated Reporting is included in this Guide through its core principles and presented as a strategic reference to clarify the common logic underlying these standards and the concept of corporate value.

For payment and electronic money institutions, these standards are not merely “report-writing guidelines”; rather, they are strategic reference frameworks that show how sustainability matters can be addressed systematically around key topics. Sustainability data requested in relationships with banks, international funds, and global business partners (e.g. Visa and Mastercard) are increasingly discussed and assessed through these global standards. Using these standards as a reference enables institutions to develop a consistent, future-ready sustainability framework suited to their own operations, rather than repeatedly producing the same information in different formats.

### 8.2.a. IFRS S1 and S2 (IFRS Sustainability Disclosure Standards)

Developed by the International Sustainability Standards Board (ISSB), which operates under the IFRS Foundation, IFRS S1 and IFRS S2 establish a global baseline for sustainability-related financial disclosures.

- **Target Audience:** These standards are primarily intended for investors, creditors (banks) and other providers of finance. Their main objective is to provide these stakeholders with the sustainability-related financial information they need when making investment, lending and other resource-allocation decisions.
- **Content:**
  - o IFRS S1: Sets out general requirements for addressing material information about an entity's sustainability-related risks and opportunities that could reasonably be expected to affect its prospects, with a focus on governance and strategy.
  - o IFRS S2: Further develops this framework specifically in relation to climate change, focusing on the impact of climate-related risks on the company's financial position.
- **Mandatory Status:** The IFRS Standards become binding to the extent that they are adopted by national authorities. At the global level, many capital markets and regulatory bodies are gradually making these standards mandatory in order to promote consistency in sustainability-related financial reporting.

### 8.2.b. TSRS S1 and S2 (Türkiye Sustainability Reporting Standards)

Through the Public Oversight, Accounting and Auditing Standards Authority (KGK), Türkiye has integrated the IFRS S1 and S2 standards into its domestic legislation, assuming a leading role in the global sustainability reporting ecosystem. TSRS S1 and TSRS S2 are fully aligned with the IFRS Sustainability Disclosure Standards.

- **Digitalization and Reporting:** Pilot studies are ongoing under the KGK for the submission of sustainability reports through a digital platform, with the aim of increasing the transparency and efficiency of reporting processes. This initiative seeks to transform data from merely a document into an analyzable digital asset.
- **Mandatory Status and Scope:** The thresholds used to determine which companies fall within the scope of TSRS (e.g. total assets, revenue and number of employees), as well as the current implementation timetable, should be closely monitored through announcements and decisions published on the KGK's official website.
- **Ecosystem Impact:** Although payment and electronic money institutions are not yet directly within the mandatory scope, banks in credit processes, investors in capital markets and corporate business partners have begun requesting data sets aligned with these standards in order to fulfill their own reporting obligations. Although TSRS is not yet mandatory for the sector, it remains an important means of aligning with the wider financial ecosystem.

### 8.2.c. ESRS (European Sustainability Reporting Standards)

The ESRS were developed under the Corporate Sustainability Reporting Directive (CSRD) adopted by the European Union. These standards constitute a binding reporting framework for companies falling within the scope of the CSRD, including certain non-EU undertakings that meet the applicable EU thresholds.

The distinguishing feature of the ESRS is their adoption of the Double Materiality approach. Under this approach, a topic is included within the reporting scope if it is material from at least one of the following two perspectives:

- **Financial Materiality (Outside-In Impact):** The effects of sustainability matters on the company's financial position, cash flows, performance, and capacity to access capital over the short, medium or long term
- **Impact Materiality (Inside-Out Impact):** The actual or potential impacts of the company's activities on people and the environment, both positive and negative

Although payment and electronic money institutions in Türkiye do not fall directly within the scope of the ESRS, business relationships involving the EU may cause the impact of these standards to be felt in practice. The ESRS cover a very broad range of areas, from energy and emissions data to data security and customer rights, and from supply chain transparency to governance structures. Therefore, the ESRS is one of the strongest references for understanding which sustainability information has become the "expected standard" within the EU ecosystem.

### 8.2.d. GRI (Global Reporting Initiative)

GRI is the most widely used voluntary sustainability reporting framework worldwide and has been in use since the late 1990s. It focuses on companies' impacts on the economy, the environment and people beyond their direct financial performance and is based on determining the materiality of these impacts (impact materiality).

- **Impact-Focused Measurement Standards:** GRI seeks to answer the question, "What impacts does the institution have on the economy, the environment and people?" In this respect, its extensive set of indicators covering economic, environmental and social topics makes it not merely a reporting tool, but also a globally recognized measurement standard.
- **Modular Standards Structure:** The GRI system consists of Universal Standards, which apply to all institutions; Sector Standards, which address specific sectors; and Topic Standards, which cover specific topics. The Topic Standards include economic (GRI 200 series), environmental (GRI 300 series) and social (GRI 400 series) topics. Institutions can select the appropriate standards from this modular structure according to their areas of activity and priority impact topics and report accordingly.
- **Global Alignment:** GRI works closely with the IFRS Foundation and EFRAG to improve interoperability among the GRI Standards, IFRS Sustainability Disclosure Standards and ESRS. Through this "alignment," data collected in accordance with the GRI Standards can also provide a strong basis for supporting other financially focused reporting frameworks.

### 8.3. Management System Standards (ISO Framework)

Ensuring that sustainability commitments do not remain merely statements of intent but are turned into tangible outcomes is possible through the corporate governance and control structures that support these objectives. Management system standards are international frameworks that define how institutions should manage specific areas such as the environment, energy, information security or risk in a systematic, consistent manner and in accordance with the principle of continual improvement (PDCA - Plan, Do, Check, Act).

By integrating complex sustainability criteria into an organization's day-to-day operational processes, these standards make measurement meaningful through well-defined processes and responsibilities. For our sector, these standards can be considered under two main headings:

#### 8.3.a. Operational Assurance and Governance (Sector-Specific Standards)

Given the nature of payment and electronic money institutions, these standards directly support the governance dimension of sustainability and largely address areas already covered by sector practices:

**ISO 27001 - Information Security Management System:** Provides a framework for systematically managing processes aimed at maintaining customer trust and protecting data privacy. It structures the identification of risks, implementation of controls and continual improvement.

**ISO 27701 - Privacy Information Management System:** By systematizing processes for the protection of personal data, it supports the management of compliance with both domestic legislation (PDPL) and global regulations (GDPR), as well as trust-based stakeholder relationships.

**ISO 22301 - Business Continuity Management System:** Defines the plans, testing processes and control mechanisms required to manage the continuity of financial services during potential crises, establishing a management infrastructure that supports economic stability.

**ISO 31000 - Risk Management:** ISO 31000 is a standard that serves as guidance rather than certification; it enables institutions to benchmark and further develop their risk management practices against an internationally recognized reference. It provides principles and guidance on how sustainability risks (e.g. reputational risks, legal changes and climate risks) can be integrated into enterprise risk management.

**ISO 37301 - Compliance Management:** Provides a governance framework defining the organizational structures and processes required to systematically manage compliance with continually evolving financial regulations and ethical rules.

#### 8.3.b. Environmental and Social Transformation (Complementary Standards)

These are guiding frameworks for institutions seeking to advance their sustainability performance and report on their social and environmental impacts:

**ISO 14001 - Environmental Management System:** Provides a management framework for systematically monitoring and improving the environmental impacts of office operations and data centers (e.g. waste management and natural resource use).

**ISO 50001 - Energy Management System:** Enables the structured monitoring and improvement of energy use across technology infrastructure, contributing to reductions in both carbon emissions and operational costs.

**ISO 45001 - Occupational Health and Safety Management System:** Defines the processes and responsibilities required to manage a safe working environment that protects employees' physical and mental health, thereby strengthening the "Social" (S) dimension of sustainability.

## 8.4. Measurement, Target-Setting and Performance Disclosure Frameworks

Progress in the field of sustainability is not limited to defining which issues are important; how these priorities are measured, the targets against which they are addressed, and how performance is communicated are also integral parts of the process.

For this reason, this section should be read by first asking “What do I need?” rather than “Which measurement and target-setting tool should I use?”.

The frameworks presented in this section explain the structures that enable institutions to organize their environmental, social and governance activities around measurable indicators and targets and to communicate this information in a comparable and consistent manner.

The sustainability journeys of payment and electronic money institutions vary depending on their scale, business model and level of organizational maturity. Therefore, measurement and target-setting frameworks are presented not as a one-size-fits-all set of practices, but as reference structures that institutions can turn to in line with their maturity and needs.



The standards and frameworks presented in this section are regularly updated in line with global regulatory developments, scientific findings and implementation experience. The information provided in this Guide is valid as of the date of publication; before implementation, it is recommended that the latest versions be verified through the official websites of the relevant national authorities.



- Carbon- and Climate-Focused

| Carbon- and Climate-Focused Framework/ Standard | Role                                   | Core Function                                                                                                                                                                                                                                                                                                  | What Need Does it Address?                                                                                                                                       |
|-------------------------------------------------|----------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| GHG Protocol                                    | Accounting and Reporting Standard      | Defines the accounting principles to be used to measure, classify and report emissions on a Scope 1, 2 and 3 basis.                                                                                                                                                                                            | When there is a need to systematically measure the environmental footprint, clarify its classification and establish a reportable inventory.                     |
| PCAF                                            | Financed Emissions Measurement         | Provides a standardized methodology for measuring and disclosing emissions arising from financial institutions' investments, lending and financial intermediation activities (financed emissions).                                                                                                             | When there is a need to measure the climate impact of the institution's financial portfolio beyond its own operations.                                           |
| ISO 14064-1 / 14064-3                           | Technical Measurement and Verification | ISO 14064-1: Defines the principles and requirements for the quantification, reporting and verification of greenhouse gas emissions and removals at the organizational level. ISO 14064-3: Sets out the requirements for the verification of inventory data by independent verifiers and validation processes. | When there is a need for organization-level reporting, to ensure the reliability of reported data and establish a third-party-verified inventory.                |
| ISO 14067                                       | Product-Level Measurement              | Defines the principles and requirements for quantifying and communicating greenhouse gas emissions generated by a service (e.g. use of a digital wallet) or a physical product (e.g. a POS device) throughout its life cycle.                                                                                  | When there is a need to compare the carbon footprint of products/services at the product or service level and verify green product claims.                       |
| SBTi                                            | Target Development and Validation      | Develops standards, tools and guidance for assessing the alignment of emissions reduction targets with the goal of limiting global warming to 1.5°C. The institution sets its target in accordance with these standards; SBTi Services validates the target against science-based criteria.                    | When there is a need to ensure that emissions reduction targets are aligned with scientific criteria and document this alignment through independent validation. |
| CDP                                             | Environmental Disclosure and Scoring   | Enables the structured reporting and scoring of environmental performance globally in the areas of climate change, water security and deforestation. It serves as a data collection and guidance platform for investors and supply chain stakeholders.                                                         | When there is a need to make transparent, structured and comparable environmental disclosures to investors and international stakeholders and obtain a score.    |

These frameworks do not need to be implemented all at once; institutions can start with one of these frameworks based on their current level of maturity and priorities and expand their scope over time.

- Water-Focused

| Water-Focused Framework/ Standard | Role                                          | Core Function                                                                                                                                                                                                                                                                                                                                                                                 | What Need Does It Address?                                                                                                                                                                  |
|-----------------------------------|-----------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| GRI 303: Water and Waste Water    | Reporting Standard and Operational Dataset    | Defines the requirements for reporting water withdrawal, consumption and discharge, with particular emphasis on areas of high water stress and local impacts. It also covers management approaches, impacts across the value chain (including suppliers), and disclosures related to water quality.                                                                                           | When there is a need to transparently monitor and report the impacts of the institution's water use across its operational and value chain boundaries.                                      |
| ISO 14046: Water Footprint        | Technical Assessment Methodology              | Establishes the principles and requirements for assessing the environmental impacts of products, processes and institutions on water (including water quality) based on life cycle assessment (LCA). The results may be expressed as a single value or as a multidimensional impact indicator profile.                                                                                        | When there is a need to analyze water risks not only in terms of volume but also using technical and scientific methods based on environmental impact categories throughout the life cycle. |
| CDP - Water Security              | Disclosure, Scoring and Benchmarking Platform | Discloses water scarcity, the quality of water management, governance practices and the financial impacts of water-related risks through a structured questionnaire and scoring methodology; enables companies to improve their water management and benchmark their performance against best practices. It serves as a data collection platform for investors and supply chain stakeholders. | When there is a need to report the impact of water risks and the quality of water management on operational sustainability and investor decisions in a comparable and scored manner.        |

These frameworks do not need to be implemented all at once; institutions can start with one of these frameworks based on their current level of maturity and priorities and expand their scope over time.

- Biodiversity- and Nature-Focused

| Biodiversity- and Nature-Focused Framework/ Standard     | Role                                                | Core Function                                                                                                                                                                                                                                                                                                                                                                      | What Need Does It Address?                                                                                                                                                                                                        |
|----------------------------------------------------------|-----------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| GRI 101 (2024)                                           | Impact Definition and Disclosure                    | Replaces GRI 304 (effective as of January 1, 2026). It requires location-specific reporting of the direct drivers of biodiversity loss (e.g. climate change, pollution, invasive species), including protected areas, ecosystems and land use. Unlike GRI 304, it requires disclosure of impacts throughout the supply chain and also covers how biodiversity impacts are managed. | When there is a need to report the impacts of operations and the value chain on nature transparently and comparably, including supplier-related impacts.                                                                          |
| SBTN (Science Based Targets Network)                     | Target Setting                                      | Enables companies to set science-based nature targets focused on terrestrial and freshwater systems and submit them for independent validation. It operates in parallel with SBTi but is independent of it.                                                                                                                                                                        | When there is a need to establish a measurable, science-based and independently validated roadmap for reducing the company's impact on nature.                                                                                    |
| TNFD (Taskforce on Nature-related Financial Disclosures) | Risk, Opportunity and Disclosure Framework          | Provides a structured framework for assessing, managing and reporting nature- and biodiversity-related dependencies, impacts, financial risks and opportunities. Through the LEAP approach (Locate, Evaluate, Assess, Prepare), it enables companies to systematically analyze their interfaces with nature and integrate the findings into strategic decision-making.             | When there is a need to integrate nature-related risks into strategy and risk management and provide structured and comparable disclosures for investors and stakeholders.                                                        |
| ENCORE                                                   | Natural Capital Screening Tool (Data Platform)      | A free, web-based data tool that visualizes sector-ecosystem service relationships. It identifies the ecosystem services on which 167 economic sectors depend and whether these dependencies may pose potential risks. It is particularly used by financial institutions to screen nature-related risks at the portfolio level.                                                    | When there is a need to rapidly screen and prioritize nature-related dependencies and exposures across the value chain and portfolio on a sector-specific basis.                                                                  |
| Natural Capital Protocol                                 | Natural Capital Analysis (Methodological Framework) | A structured methodological framework for integrating Naturel capital into decision-making processes. Going beyond the sectoral screening provided by ENCORE, it offers a comprehensive analytical process extending to the quantification and monetary valuation of impacts and dependencies.                                                                                     | When there is a need to conduct an in-depth analysis of nature-related dependencies and impacts across the value chain and integrate a Naturel capital perspective into business decisions in a concrete, valuation-based manner. |

These frameworks do not need to be implemented all at once; institutions can start with one of these frameworks based on their current level of maturity and priorities and expand their scope over time.

• Waste/Resource Use- and Circularity-Focused

| Waste/Resource Use- and Circularity-Focused Framework/ Standard | Role                                                 | Core Function                                                                                                                                                                                                                                                                                                                                                                                           | What Need Does It Address?                                                                                                                                                                                                                        |
|-----------------------------------------------------------------|------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| GRI 306: Waste (2020)                                           | Circular Economy Measurement and Reporting Standard  | Defines the requirements for reporting waste generation, waste types and recovery processes, covering not only the company’s own operations but also upstream and downstream activities across the value chain. It encourages waste prevention at source and the development of circular business practices.                                                                                            | When there is a need to report waste management transparently and through a circular approach across operations and the value chain, including e-waste (POS devices, servers) and office waste.                                                   |
| ISO 14001                                                       | Management System Standard                           | Provides for the systematic management and continual improvement of environmental impacts, including waste, energy, water, emissions and biodiversity.                                                                                                                                                                                                                                                  | When there is a need to establish waste management as an embedded system and policy across the organization rather than as a one-time reporting exercise.                                                                                         |
| ISO 14040 / 14044                                               | Life Cycle Assessment (LCA) Methodological Framework | While ISO 14040 defines the principles and framework of LCA, ISO 14044 sets out the requirements and guidelines for conducting life cycle inventory analysis, impact assessment and critical review. Together, they establish how the environmental impacts of a product (e.g. a payment card or POS device) are to be assessed throughout its entire life cycle, from raw materials to final disposal. | When there is a need to scientifically assess the carbon and waste footprint at the product/service level, support green product claims and make environmental comparisons across products (e.g. POS devices, plastic cards and digital wallets). |

These frameworks do not need to be implemented all at once; institutions can start with one of these frameworks based on their current level of maturity and priorities and expand their scope over time.



| Social and Governance Framework/ Standard | Role                           | Core Function                                                                                                                                                                                        | What Need Does It Address?                                                                                   | Relevant ISO Management System                               |
|-------------------------------------------|--------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------|
| GRI 2 (2021): General Disclosures         | Corporate Context              | Defines disclosures on the institution's activities, employees and other workers, governance structure, strategy, policies and practices, and stakeholder engagement.                                | When there is a need to clarify the institutional structure within which ESG data is generated.              | ISO 37301 (Compliance), ISO 31000 (Risk Management)          |
| GRI 401: Employment                       | Social Measurement             | Reports recruitment, employee turnover and attrition rates, benefits and support provided to employees.                                                                                              | When there is a need to monitor human capital stability, competency risks and employment conditions.         | ISO 30414:2025 (Human Capital Reporting)                     |
| GRI 403: Occupational Health and Safety   | Social Risk Management         | Reports physical and psychosocial risks, preventive practices, occupational accidents and health promotion programs; covers not only employees but also all workers under the institution's control. | When there is a need to make employee well-being and operational continuity risks visible.                   | ISO 45001 (Occupational Health and Safety Management System) |
| GRI 404: Training and Education           | Capacity Management            | Covers indicators on access to training hours, skills development programs and career development assessments.                                                                                       | When there is a need to measure the continuity of critical competencies and human capital resilience.        | ISO 30414:2025                                               |
| GRI 405: Diversity                        | Equal Opportunity              | Monitors gender and other diversity indicators at both the governance body and all employee-category levels.                                                                                         | When there is a need to track progress in inclusion and fair representation across all workforce categories. | ISO 30415:2021 (Diversity and Inclusion – Guidance Standard) |
| GRI 205: Anti-Corruption                  | Ethics and Governance          | Reports corruption risk assessments, communication and training indicators, and confirmed incidents.                                                                                                 | When there is a need to manage ethics-related risks arising from reputational and regulatory factors.        | ISO 37001 (Anti-Bribery Management System)                   |
| GRI 206: Anti-Competitive Behavior        | Market Ethics                  | Reports legal proceedings and outcomes related to anti-competitive behavior.                                                                                                                         | When there is a need to monitor competition law compliance and regulator confidence (CBRT/MASAK, etc.).      | ISO 37301 (Compliance Management System)                     |
| GRI 418: Customer Privacy                 | Data- and Trust-Focused Impact | Monitors data breaches and privacy practices.                                                                                                                                                        | When there is a need to substantiate PDPL/GDPR compliance and a “secure payments” position.                  | ISO 27001 and ISO 27701                                      |

These frameworks do not need to be implemented all at once; institutions can start with one of these frameworks based on their current level of maturity and priorities and expand their scope over time.

## SIMPLIFIED SUSTAINABILITY ROADMAP FOR PAYMENT AND ELECTRONIC MONEY INSTITUTIONS

### 9.1. ESTABLISHING SUSTAINABILITY GOVERNANCE

Establishing complex organizational structures is not a prerequisite for achieving sustainability objectives. Depending on the organization's size and operational dynamics, existing roles can be expanded to include sustainability responsibilities. What is critical is to clearly define responsibilities and design monitoring mechanisms as a natural extension of existing governance processes.

Considering the structures and human capital capacities of institutions across the sector, integrating sustainability into the existing management cycle, rather than establishing a separate department, may often be the most practical and resource-efficient approach. The ultimate objective is for sustainability criteria to be embraced by all employees and become an integral part of the way business is conducted—part of the organization's "DNA".

The stakeholders recommended for inclusion in this structure and their key responsibilities are set out below. To ensure the success of the system, it is recommended that sustainability objectives be incorporated into the relevant parties' key performance indicators (KPIs).

#### 1. Strategic Ownership: Board of Directors / Senior Management

Ownership of the process at the highest level ensures that sustainability is directly linked to the company's strategy, risk appetite and access to long-term financing. Strategic decisions should be considered not only in light of investor expectations, but also from the perspectives of regulatory compliance, reputation management and operational continuity.

##### Key Duties:

- Approval of the sustainability strategy and roadmap,
- Integration of ESG risks into the corporate risk appetite,
- Setting corporate emissions reduction and social impact targets,
- Periodic review of management reports submitted by the Sustainability Officer.

#### 2. Coordination and Reporting: Sustainability Officer

Given the structure of the sector and economies of scale, it is not necessary to create a full-time position for this role. An experienced employee working in risk, compliance or strategy functions can assume this responsibility alongside their existing role.

The Sustainability Officer is the primary coordinator of the company's internal sustainability agenda and the central point for reporting.

##### Key Responsibilities:

- **Management Reporting:** Consolidates data received from the cross-functional working group and prepares periodic performance reports for the Senior Management and the Board of Directors.
- **Data Coordination:** Manages interdepartmental data flows and oversees the accuracy and consistency of data.
- **External Stakeholder Communication:** Prepares information to be provided to external stakeholders such as investors, auditors and public authorities.
- **Performance Monitoring:** Tracks the performance of defined KPIs (e.g. emissions, waste, gender equality).

### 3. Implementation: Cross-Functional Working Group

This structure makes sustainability an integral part of the organizational culture rather than the responsibility of a standalone function and gives concrete form to collective ownership. The participation of representatives from key departments such as risk, compliance, IT, operations, human resources and product development is critical to effective implementation.

#### Key Functions:

- Full integration of ESG criteria into daily business processes and decision-making mechanisms,
- Data Provision: Communicating the sustainability data generated or maintained by the relevant department (e.g. energy consumption, employee demographics, product ethics processes) to the Sustainability Officer
- Incorporating sustainability-related risks (e.g. regulatory changes, physical risks) into the corporate risk matrix.

#### Working Discipline:

The working group meets monthly or every two months to monitor progress under the ESG action plan and review current developments.



9.2. INTEGRATING SUSTAINABILITY INTO STRATEGY

Sustainability can be integrated into the company’s existing strategy through the following steps:

Identification of Key Topics

Identify the sustainability topics that are relevant to your company’s structure, business model and value chain. To do so, you should monitor local and global sustainability issues affecting your value chain, follow global reports and trends relevant to your sector, and take into account the expectations of internal and external stakeholders. For example:

- Digital infrastructure – energy use, IT continuity
- Customer data – data security, ethical use
- Financial access – inclusion, fair product design
- Regulation – governance, compliance capacity

Materiality Assessment

Topics that have a significant positive or negative impact on the company’s cash flows, cost structure, risk profile, operational continuity, customer trust, or capacity for growth and continuity are considered strategic, that is, material.

Integrating Sustainability Priorities into the Existing Strategy

The identified material topics are integrated by mapping them against the company’s existing strategic objectives. The table below provides an example of this mapping:

| Strategic target        | Relevant Sustainability Dimension                                                  |
|-------------------------|------------------------------------------------------------------------------------|
| Digital customer growth | Financial inclusion, fair treatment of customers, etc.                             |
| Operational efficiency  | Energy, resource use, etc.                                                         |
| Regulatory compliance   | Governance, ethics, internal controls, etc.                                        |
| New product development | Data ethics, transparency, responsible product design (financial well-being), etc. |



Measurable Savings with Recycled Cards

A payment services institution in Türkiye is reporting its progress in plastic card production and digitalization through concrete environmental data. Between 2022 and 2026, 1.37 million recycled cards were produced, preventing approximately 59 tons of carbon emissions. At the same time, with 1.17 million users switching from physical cards to digital cards, an additional saving of nearly 270 tons is projected for the 2023-2026 period. This example demonstrates how existing operational transformations can be turned into measurable environmental contributions.

### 9.3. IDENTIFYING SUSTAINABILITY RISKS, OPPORTUNITIES AND METRICS

Identify the risks and opportunities associated with the topics that you have determined to be material to your institution and decide which measurement criteria to use for each (see the Sustainability Risks and Opportunities section).

Stakeholder surveys, peer benchmarking or sectoral analyses can be used in this process.

When identifying risks and opportunities, cause-and-effect relationships should be established, while the time horizon and likelihood of occurrence should also be taken into account.

Example: Rising energy costs (cause) – pressure on operational profitability (effect) – priority: investment in energy efficiency (action)

### 9.4. DEVELOPING A DATA INVENTORY FOR THE IDENTIFIED TOPICS

The objective is not merely to collect data, but to establish a measurable and auditable management system. To ensure reliability, each dataset should be assigned to a responsible party. For example, employee data can be monitored by human resources teams, while energy data can be monitored by operations or IT teams.

#### Example Data Sources:

- o **People:** HR data (training, diversity, workforce indicators)
- o **Operations:** Transaction volumes, complaint/resolution times, financial inclusion data
- o **IT:** Data center/cloud energy consumption, device life cycle
- o **Procurement:** Supplier ESG commitments and risk scores

When establishing a sustainability data repository, it is critical to define the data, identify its source (API, ERP, manual, etc.) and assign data ownership. At the initial stage, even a simple, regularly updated Excel spreadsheet can provide an adequate monitoring infrastructure. AI and analytics tools can be introduced gradually at later stages in line with the institution’s size and technical capacity; these tools can help minimize human error in the reporting process. It is important to periodically verify the accuracy of the data. This verification can be carried out by existing risk, compliance or audit functions within the organization.



#### Environmental Transparency in the Supply Chain

The Dutch payment technology company Adyen does not limit its sustainability commitment to its own operations; it also makes its suppliers part of this process. To measure the environmental impact of its POS terminals, the company requests product-level life cycle and carbon data from its suppliers. This data makes it possible to track the devices’ energy consumption by model and create a verifiable emissions table. The result is an environmental performance management system that is documented and auditable, rather than merely a statement of good intentions.

This represents a pioneering approach for the fintech sector in systematically institutionalizing supply chain transparency.



## 9.5. CURRENT-STATE ASSESSMENT AND DEFINITION OF PERFORMANCE INDICATORS BASED ON THE INVENTORIED DATA

Sustainability performance indicators should be developed gradually, taking into account the company's existing data and resource capacity. For payment and electronic money institutions, a realistic and sustainable approach is to start with structural and operational indicators at the initial stage, establish links with the business model at the intermediate stage, and move to financial impact and scenario analysis at the advanced stage.

The most critical step in the sustainability transformation process is to transparently assess your current state in the priority areas you have identified. You need to define, using measurable data, the gap between your current position and where you want to be. For example, if you determine that your current corporate carbon footprint is X metric tons and aim to reduce it to Y metric tons, you should develop a strategic roadmap showing the concrete steps through which you will achieve this target.

Measurement tools may be needed to determine the current state and track progress (see Measurement, Target-Setting and Performance Disclosure Frameworks). This assessment will also help determine where to begin prioritizing efforts.

Example: Reducing electricity consumption per employee from X to Y kWh/person – Z% improvement in electricity costs + A% reduction in Scope 2 emissions.

The examples below are not intended to constitute a binding list; they are reference indicators that institutions can adapt according to their own priorities. When setting quantitative targets, the resources required to achieve the target and the impact generated by the target should also be clearly defined.

**a. For the initial stage: At this stage, the objective is to define manageable and trackable indicators using limited data.**

- **KPI:** Annual electricity consumption per employee (kWh/person)  
Target: Reduce from X kWh/person to Y kWh/person  
Timeframe: Within 1 year
- **KPI:** Percentage of women on the Board of Directors (%)  
Target: Increase the percentage of women on the Board of Directors from X% to Y%  
Timeframe: Within 3 years  
Control Question: Have sustainability topics been included in the risk inventory? (Y/N)
- **KPI:** Percentage of supplier contracts containing ESG clauses (%)  
Target: Add ESG clauses to at least 80% of supplier contracts by 2028 (assuming none currently contain such clauses)
- **KPI:** Average response time to customer complaints  
Target: Reduce the average response time from X hours to Y hours  
Timeframe: Within 1 year
- **KPI:** Employee turnover rate  
Target: Keep below X%  
Timeframe: Continuous monitoring  
Control Question: Does the company have Ethical Principles? (Y/N)
- **KPI:** Percentage of employees who have received training on the Ethical Principles (%) Target: 100%  
Timeframe: Continuous annual monitoring
- **KPI:** Time taken to assess reports of ethical violations (days) Target: X business days  
Timeframe: Within 1 year
- **Control Question:** Is there a Supplier Code of Ethics? (Y/N)
- **Control Question:** Is there a Digital Product ESG checklist? (Y/N)
- **KPI:** Percentage of company employees who have completed Ethics and Compliance training (%)

**b. Intermediate Level (Product and Operations Integration):** At this stage, sustainability indicators are more directly linked to the business model and operational processes.

- **KPI:** Electricity consumption per 1,000 transactions (kWh / 1,000 transactions)  
Target: Reduce energy intensity by X% while transaction volume increases  
Timeframe: Within 2 years
- **KPI:** Percentage of digital products that have undergone an ESG assessment (%)  
Target: Conduct an ESG impact assessment for at least Y% of newly developed products  
Timeframe: Within 2 years
- **KPI:** Percentage of critical suppliers with ESG commitments (%)  
Target: Ensure that Z% of critical suppliers have ethical, environmental and social commitments  
Timeframe: Within 3 years
- **KPI:** Are digital channels compliant with accessibility requirements for persons with disabilities? (TS EN 301 549) (Y/N)
- **KPI:** Percentage of transaction volume generated by products focused on financial inclusion (%)  
Target: Increase the share of inclusive products in total transaction volume from X% to Y%  
Timeframe: Within 3 years
- **KPI:** Percentage of hardware (computers, POS terminals, etc.) subject to life-cycle tracking covering procurement, use, reuse and secure disposal (%)  
Target: 50%  
Timeframe: Within 3 years



Measurable metrics are necessary to manage sustainability targets effectively.

**c. Advanced Level (Financial Impact, Scenario and Analytics Focus):** This stage represents a level of maturity at which sustainability topics directly inform strategic decision-making processes.

- **KPI:** Estimated carbon intensity per transaction (gCO<sub>2e</sub> / transaction)  
Target: Reduce carbon intensity per transaction by X% compared with the base year  
Timeframe: Within 3-5 years
- **KPI:** Impact of the energy cost increase scenario on operational profitability (%)  
Target: Keep the impact of an X% increase in energy prices on profitability below Y  
Timeframe: Continuous monitoring
- **KPI:** Percentage of sustainability risks prioritized according to their likelihood of occurrence (%)  
Target: Assess 100% of identified sustainability risks through scenario and impact analysis  
Timeframe: Within 2 years
- **KPI:** Percentage of hardware (computers, POS terminals, etc.) subject to life-cycle tracking covering procurement, use, reuse and secure disposal (%)  
Target: 100% (increasing the previous period's 50% target to 100%)  
Timeframe: Within 2 years

## 9.6. UPDATING INTERNAL POLICIES AND PROCEDURES TO INCORPORATE ESG CONSIDERATIONS

To ensure that sustainability targets do not remain merely on paper, it is important to incorporate them into the company's existing core policies and procedures. At the initial stage, the following steps can be small but effective:

- **Supplier Selection and Procurement:** When procuring a new service (e.g. a cloud system, hardware), energy efficiency or social and ethical commitments can be added as a selection criterion alongside price and quality. For example, a provider with an energy certification can be prioritized when selecting a data center.
- **Employee Rights and Human Resources:** The emphasis on equal opportunity should be strengthened through accessible documents such as HR policies, procedures and the employee handbook; a clear and functioning reporting mechanism (e.g. e-mail, anonymous hotline, committee) should be established through which employees can safely report unethical situations (e.g. misconduct, workplace bullying and harassment).
- **Product Design Process:** When designing a new digital product or interface, accessibility (disability-friendly interface) and transparent pricing provisions can be added to the design checklist as approval steps.
- **Risk and Compliance Policy:** Data ethics, climate-related operational disruptions and evolving sustainability-related regulations and standards should be included as individual risk items in the company's annual risk assessment. Linking these risks to the existing risk appetite and control mechanisms will facilitate ownership of sustainability across the organization.
- **Ethical Principles:** Commitments to combating bribery and corruption should be updated, and the sustainability vision should become an integral part of employees' onboarding training.

It is not necessary to revise all policies at once. You can begin by listing your existing policies and selecting as a starting point the area where the sustainability dimension is entirely absent.

## 9.7. ESTABLISHING THE MANAGEMENT CYCLE: MONITORING, REPORTING AND CONTINUAL IMPROVEMENT

Sustainability is not a standalone activity but part of the company's core performance criteria. To make this process permanent, the flow of information among the Sustainability Officer, the Committee and the Board of Directors should be maintained through the following cycle:

### a. Data-Driven Monitoring and Reporting

Sustainability indicators should be monitored regularly, just like the company's overall performance indicators (KPIs).

- **Reporting Flow:** The Sustainability Officer periodically presents the data collected to the Committee and the Board of Directors. Rather than being presented in a separate report, this data should be incorporated as a section of the existing Board of Directors reports, making it a natural part of the process.
- **Early Warning Signals:** Negative trends in sustainability KPI performance (e.g. an increase in customer complaints or a rise in employee turnover) should be interpreted as indicators that provide an opportunity to intervene before any financial loss occurs.

### b. Strategic Assessment and Resource Management

The reported data should inform concrete decisions and resource allocation at the Board of Directors level:

- **Strategic Update:** Business strategies are reviewed in light of the data. For example, if digital accessibility scores fall short of the target, this can lead to prioritizing accessibility in the next software development cycle.
- **Smart Resource Allocation:** Sustainability performance guides where the investment budget and human capital should be focused. This positions sustainability as a strategic tool for improving efficiency.



The FCA's Consumer Duty requires firms within its scope, including payment and electronic money institutions, to deliver good outcomes for their customers. Under this framework, models such as "reward-based payment products" and "buy now, pay later" are subject to requirements including transparent presentation of costs, warnings designed to prevent excessive borrowing, and making it easy for customers to exit products. The regulation is based on the principles of transparency and preventing harm throughout processes ranging from digital product design to customer support.

### c. Organizational Feedback and Corporate Culture

Communication between the Committee and the relevant departments ensures that these objectives are embraced by all employees:

**Department-Based Sharing:** Performance results should be shared with the relevant teams that directly generate the data. This enables each department to see how its own work contributes to the company’s overall sustainability objective.

**Continual Improvement:** When targets are not met, this should not be treated as a matter for punishment, but as an opportunity for improvement by asking, “How can we improve the process?” Successes, meanwhile, should be communicated internally as examples of good practice.

An effective sustainability approach requires a management cycle that enables regular monitoring, meaningful reporting and feedback into decision-making processes. For payment and electronic money institutions, this cycle transforms sustainability from a reporting obligation into a strategic management tool that safeguards the company’s future.

## 9.8. TURNING SUSTAINABILITY INTO EMPLOYEE PERFORMANCE INDICATORS (KPIs)

To put sustainability targets into practice, the most effective approach is to reflect these topics in the individual performance scorecards of the relevant managers and teams. This enables a shift from voluntary engagement to clear accountability. In this way, sustainability and its targets become established as performance criteria not only for the company but also for individual employees.

At the initial stage, these KPIs can be assigned a relatively low weighting (e.g. 5-10% of total performance).

Examples of employee KPIs include:

- **Product Manager:** “Ensuring that X% of newly developed products are fully compliant with accessibility standards (WCAG)”
- **HR Manager:** “Increasing the employee engagement score by Y% and achieving 100% completion of ethics training”
- **IT / Infrastructure Manager:** “Tracking emissions data from data center/cloud providers and conducting optimization efforts”
- **Compliance Manager:** “Including sustainability/ethical clauses in Z% of supplier contracts”
- **All employees:** “Completion of annual sustainability awareness training”

## ABBREVIATIONS

| Abbreviation                       | Description                                                   |
|------------------------------------|---------------------------------------------------------------|
| AML                                | Anti-Money Laundering                                         |
| AML/CFT                            | Anti-Money Laundering / Countering the Financing of Terrorism |
| API                                | Application Programming Interface                             |
| BoD                                | Board of Directors                                            |
| BRSA                               | Banking Regulation and Supervision Agency                     |
| CBAM                               | Carbon Border Adjustment Mechanism                            |
| CBRT                               | Central Bank of the Republic of Türkiye                       |
| CDP                                | Carbon Disclosure Project                                     |
| CFT                                | Countering the Financing of Terrorism                         |
| CMB                                | Capital Markets Board                                         |
| CO <sub>2</sub> / CO <sub>2e</sub> | Carbon Dioxide / Carbon Dioxide Equivalent                    |
| CoP                                | Communication on Progress (UN Global Compact)                 |
| COP                                | Conference of the Parties                                     |

| Abbreviation | Description                                                 |
|--------------|-------------------------------------------------------------|
| CSDDD        | Corporate Sustainability Due Diligence Directive            |
| CSRD         | Corporate Sustainability Reporting Directive                |
| DPP          | Digital Product Passport                                    |
| EIA          | Environmental Impact Assessment                             |
| ENCORE       | Exploring Natural Capital Opportunities, Risks and Exposure |
| ERP          | Enterprise Resource Planning                                |
| ESG          | Environmental, Social and Governance                        |
| ESPR         | Ecodesign for Sustainable Products Regulation               |
| ESRS         | European Sustainability Reporting Standards                 |
| ETS          | Emissions Trading System                                    |
| EU           | European Union                                              |
| FCA          | Financial Conduct Authority                                 |
| FSB          | Financial Stability Board                                   |

| Abbreviation | Description                                                    |
|--------------|----------------------------------------------------------------|
| GDPR         | General Data Protection Regulation (EU)                        |
| GHG          | Greenhouse Gas                                                 |
| GRI          | Global Reporting Initiative                                    |
| IFRS         | International Financial Reporting Standards                    |
| ISO          | International Organization for Standardization                 |
| ISSB         | International Sustainability Standards Board                   |
| IT           | Information Technology                                         |
| KGK          | Public Oversight, Accounting and Auditing Standards Authority  |
| KPI          | Key Performance Indicator                                      |
| KYC          | Know Your Customer (Customer identification and due diligence) |
| LCA          | Life Cycle Assessment                                          |
| MASAK        | Financial Crimes Investigation Board                           |
| MIT          | Massachusetts Institute of Technology                          |
| NDC          | Nationally Determined Contribution                             |
| OECD         | Organization for Economic Co-operation and Development         |

| Abbreviation | Description                                                                                                           |
|--------------|-----------------------------------------------------------------------------------------------------------------------|
| OHS          | Occupational Health and Safety                                                                                        |
| PCAF         | Partnership for Carbon Accounting Financials                                                                          |
| PCF          | Product Carbon Footprint                                                                                              |
| PDCA         | Plan - Do - Check - Act (ISO management cycle)                                                                        |
| PDPL         | Law on the Protection of Personal Data (Law No. 6698)                                                                 |
| POS          | Point of Sale                                                                                                         |
| PSD2 / PSD3  | Payment Services Directive (EU) (Key EU regulations governing open banking and security standards in payment systems) |
| SASB         | Sustainability Accounting Standards Board                                                                             |
| SBTi         | Science Based Targets initiative                                                                                      |
| SBTN         | Science Based Targets Network                                                                                         |
| SDG          | Sustainable Development Goals                                                                                         |
| SLA          | Service Level Agreement                                                                                               |
| SM           | Senior Management                                                                                                     |
| SME          | Small and Medium Sized Enterprises                                                                                    |
| SR           | Sustainability Reporting                                                                                              |

| Abbreviation | Description                                                                                                               |
|--------------|---------------------------------------------------------------------------------------------------------------------------|
| SWOT         | Strengths - Weaknesses - Opportunities - Threats                                                                          |
| TCFD         | Task Force on Climate-related Financial Disclosures                                                                       |
| TEMA         | The Turkish Foundation for Combating Soil Erosion, Reforestation and the Protection of Natural Habitats (TEMA Foundation) |
| TNFD         | Taskforce on Nature-related Financial Disclosures                                                                         |
| TÖDEB        | The Payment and Electronic Money Institutions Association of Türkiye                                                      |
| TSRS         | Türkiye Sustainability Reporting Standards                                                                                |
| UN           | United Nations                                                                                                            |
| UN WEPs      | UN Women's Empowerment Principles                                                                                         |
| UNDP         | United Nations Development Programme                                                                                      |
| UNEP         | United Nations Environment Programme                                                                                      |
| UNFCCC       | United Nations Framework Convention on Climate Change                                                                     |
| WCAG         | Web Content Accessibility Guidelines                                                                                      |
| WWF          | World Wide Fund for Nature                                                                                                |

## REFERENCES

The references compiled in this section are intended to support further exploration of the topics covered in the Guide, help readers keep abreast of current developments, and provide practical information for implementation. Each entry includes a direct link to the relevant source.

### 1. International Frameworks and Commitment Mechanisms

#### Foundations of Sustainable Development

- › [Brundtland Report – “Our Common Future” \(UN, 1987\)](#) – The landmark report that introduced the definition of sustainable development and remains a key reference to this day
- › [UN Sustainable Development Goals \(SDGs\) – Official Platform](#) – The primary source for tracking the 17 goals and 169 targets
- › [UNDP – Sustainable Development Goals](#) – Resources from the United Nations Development Programme on implementing the SDGs at the country level
- › [UNEP – Environmental and Social Sustainability Framework](#) – The United Nations Environment Programme’s framework for corporate sustainability

#### Climate Agreements and Commitments

- › [Paris Agreement – Official UNFCCC Page](#) – The full text of the Agreement, information on the NDC mechanism, and details on the Parties
- › [Türkiye’s Status as a Party to the Paris Agreement \(UNFCCC\)](#) – Türkiye’s official record with the depositary
- › [UNEP – Emissions Gap Report](#) – An annual report highlighting the gap between current NDC commitments and the 1.5°C target
- › [Kyoto Protocol](#) – Türkiye’s Status as a Party (Climate Change Directorate) – The official page outlining Türkiye’s accession to the Kyoto Protocol in 2009 and the scope of its commitments.

#### Corporate Commitment Frameworks

- › [UN Global Compact – United Nations Global Compact](#) – Universal principles covering human rights, the environment, labor standards and anti-corruption, together with information on participation and Communication on Progress (CoP) reporting
- › [Women’s Empowerment Principles – UN WEPs](#) – The WEPs framework and implementation tools for integrating gender equality into corporate policies
- › [Better Than Cash Alliance – Responsible Digital Payments Guidelines](#) – Principles addressing user security, transparency and financial inclusion in digital payment services
- › [G20/OECD Principles of Corporate Governance \(2023\)](#) – Updated principles incorporating sustainability and climate risks into corporate governance
- › [UNDP – Impact Investing \(Turkish\)](#) – Investment approaches focused on social and environmental impact

### 2. European Union Regulations and Policies

#### Green Deal Framework

- › [European \(EU\) Green Deal – European Commission](#) – The overarching framework covering all policy areas in pursuit of the 2050 climate neutrality objective
- › [European Climate Law](#) – The legislation establishing binding targets for 2030 and 2050
- › [EU Climate Action](#) – Current information on the Emissions Trading System, the energy transformation and carbon-pricing mechanisms
- › [EU Sustainable Finance](#) – A central resource on the Green Taxonomy, CSRD, CSDDD and sustainable finance legislation

## Reporting and Due Diligence Directives

- › [Omnibus Package – ESRS Updates \(Deloitte Analysis\)](#) – An up-to-date analysis of the revisions to CSRD and ESRS
- › [EBA – Greenwashing Monitoring Report](#) – The supervisory approach to misleading environmental claims in the financial sector

## Digital Products and E-Commerce

- › [Ecommerce Europe – Digital Product Passport \(DPP\) Position Paper](#) – An industry assessment of the implications of the DPP for e-commerce and payment systems

## Türkiye's EU Alignment Process

- › [Ministry of Trade of the Republic of Türkiye – Green Deal](#) – The national coordination page for Türkiye's alignment with the EU Green Deal
- › [Directorate for European Union Affairs of the Republic of Türkiye – Green Deal](#) – An assessment of the EU Green Deal in the context of Türkiye

# 3. Türkiye: Legal Framework and National Strategies

## Legal Framework

- › [Climate Law – Grand National Assembly of Türkiye \(TBMM\)](#) – The legislation adopted in 2025 establishing the legal basis for the ETS, carbon markets and the 2053 Net Zero target
- › [Climate Change Directorate – Paris Agreement](#) – An overview of Türkiye's Paris Agreement process and national climate policy

## Nationally Determined Contributions (NDCs)

- › [Updated First Nationally Determined Contribution \(NDC, 2023\)](#) – The update incorporating a 41% emissions reduction target for 2030
- › [Second Nationally Determined Contribution \(NDC 3.0, 2025\)](#) – Updated emissions reduction targets and a monitoring approach extending to 2035

## Action Plans and Strategies

- › [Green Deal Action Plan \(2021\)](#) – A sectoral roadmap for the green transformation, spanning industry through the financial system
- › [Green Deal Action Plan \(YMEP\) Activity Report \(2022\)](#) – A progress report on the implementation of the Green Deal Action Plan
- › [Green Deal Working Group – Annual Activity Reports](#) – Current annual progress reports
- › [Climate Change Mitigation Strategy and Action Plan \(2024-2030\)](#) – Sector-specific emissions reduction targets and measures
- › [Climate Change Adaptation Strategy and Action Plan \(2024-2030\)](#) – An institutional and sectoral adaptation framework addressing physical climate risks
- › [Draft Regulation on Carbon Crediting and Offsetting \(2025\)](#) – A draft piece of secondary legislation concerning carbon markets under the ETS
- › [Energy Efficiency 2030 Strategy and the Second National Energy Efficiency Action Plan](#) – A key reference for energy efficiency targets relating to digital infrastructure
- › [NEEAP – National Energy Efficiency Action Plan Information Page](#) – Information on energy efficiency incentive mechanisms and implementation support

## Financial System Regulations

- › KGK Board Decision on the Adoption of the TSRS – The decision bringing TSRS (S1 and S2) into force, together with the full text of the standards
- › KGK Board Decision on the Scope of TSRS Implementation – The institutions subject to TSRS and the implementation timeline
- › KGK – Sustainability Publications – TSRS guidance, announcements and up-to-date implementation guidelines
- › BRSA – Guidance on the Management of Climate-Related Financial Risks – The climate risk management framework for the banking sector, with indirect implications for payment institutions
- › BRSA – Communiqué on the Green Asset Ratio of Banks – The measurement and monitoring framework for green finance within the banking system
- › CMB – Sustainability Page – The regulatory framework, ESG guidance and disclosure standards
- › CBRT – Emphasis on Sustainable Finance (Press Release, 2021) – The Central Bank’s first statement bringing climate risks into the financial stability agenda

## 4. Reporting Standards and Measurement Frameworks

### International Sustainability Reporting Standards

- › IFRS Sustainability Disclosure Standards (S1 and S2) – ISSB – The full texts and implementation guidance for the international standards underpinning TSRS
- › GRI – Global Reporting Initiative – The world’s most widely used voluntary sustainability reporting framework focused on impact materiality, including standards, sector guidance and tools
- › Integrated Reporting – Türkiye Platform – The integrated reporting framework that brings together financial and sustainability reporting, along with its application in Türkiye

### Emissions Measurement and Target Setting

- › GHG Protocol – Greenhouse Gas Emissions Calculation Methodology – The internationally recognized reference methodology for calculating Scope 1, 2 and 3 emissions
- › PCAF – Partnership for Carbon Accounting Financials – A standardized methodology for financial institutions to measure financed emissions
- › SBTi – Science Based Targets Initiative – Framework and independent validation process for setting science-based emissions reduction targets
- › CDP – Carbon Disclosure Project – A global platform for transparently disclosing and scoring environmental performance
- › SASB – Sustainability Accounting Standards Board – Sector-specific material sustainability topics and metrics, aligned with IFRS S1

### Nature and Biodiversity

- › TNFD – Taskforce on Nature-related Financial Disclosures – A framework for disclosing financial risks and opportunities related to nature and biodiversity
- › ENCORE – Exploring Natural Capital Opportunities, Risks and Exposure – A data and analytics platform that visualizes sectors’ dependencies on ecosystem services and their exposure to related risks
- › Natural Capital Protocol – Natural Capital Methodology Framework – A structured methodology for integrating natural capital considerations into decision-making processes

## 5. Sectoral Reports and Research

### Payment Sector – Global Outlook and Competitive Dynamics

- › McKinsey – Global Payments 2024: Simpler Interfaces, Complex Reality – Projections and strategic analysis covering instant payments, digital infrastructure, cross-border payments and the sector’s outlook for the next five years

- › BCG – Global Payments Report 2024: Fortune Favors the Bold – BCG’s 22nd annual industry report, focusing on profitability pressures, technology modernization, GenAI and instant payments

## Payments and Environmental Impact

- › Oxford Economics / EDPIA – Environmental Impact of Digital and Cash Payments (2024) – The first comprehensive scientific study comparing the life-cycle carbon footprints of cash and digital payments in Europe (Germany, Italy and Finland); it finds that digital payments have a lower environmental impact than cash across 17 of 18 environmental categories
- › Worldline – Decarbonizing Payments: The 1 g CO<sub>2</sub> per Transaction Target – A leading technical report analyzing the carbon footprint of the payments ecosystem through life-cycle assessments
- › The Payments Association – Carbon Emissions Framework for Digital Payments (2024) – A practical framework offering a progressive maturity model for payment institutions to measure and report their Scope 1-3 emissions
- › J.P. Morgan – The Payments Sector and the Net Zero Target – An industry assessment examining the environmental impacts of data centers, card production and A2A payments, as well as sustainability opportunities for the payments sector

## Financial Stability and Systemic Risks

- › FSB – Roadmap for Addressing Climate-Related Financial Risks (2025 Update) – The Financial Stability Board’s global roadmap for integrating climate-related risks into the financial system
- › NGFS – Climate Scenarios and Central Bank Guidance – Approaches adopted by central banks to incorporate climate-related risks into supervisory frameworks
- › IMF – Climate and Financial Stability Study (2024) – The IMF’s assessment of climate-risk exposure in the financial sector
- › De Nederlandsche Bank (DNB) – Guide to Climate and Environmental Risks for Payment Institutions (2023) – Guidance on climate and environmental risk management specifically for electronic money and payment institutions; the primary source for the risk matrix presented in the Guide

## Digital Economy and Sustainability

- › OECD – Digital Business Models for Trusted Environmental Information in the Circular Economy (2025) – An examination of the potential of digital payment infrastructure to communicate environmental information to consumers within the circular economy
- › OECD – Digital Economy Outlook 2024 (Volume 2) – An analysis highlighting that digitalization does not automatically align with environmental sustainability objectives and that deliberate integration is therefore required

## Sectoral Guides for Türkiye

- › Borsa İstanbul – Sustainanet-zero alignedbility Guide – A comprehensive sustainability reporting guide prepared for companies in Türkiye
- › TSB – Sustainability Guidelines for the Insurance Sector – An example of sector-specific sustainability guidance for the financial sector
- › BCSD Türkiye – Sustainable Business Guide – A guide developed by the Business Council for Sustainable Development Türkiye for companies in Türkiye

## Consumer Protection and Product Responsibility

- › FCA – Consumer Duty Policy Statement (2022) – Requirements for payment and financial service providers to deliver good outcomes for customers, including standards for product design and transparency
- › UN Secretary-General’s Special Advocate for Inclusive Finance for Development (UNSGSA) – Digital Financial Inclusion and the SDGs (2023) – A comprehensive report documenting the contribution of digital payments to financial inclusion and the SDGs across 13 goals

## 6. Sectoral Reports and Research

- › [IBM Security – Cost of a Data Breach Report](#) – Sector-specific data breach costs, including the average cost per breach in financial services and the impact of investments in cyber resilience
- › [Net Zero Climate – Reference Resource](#) – A resource for tracking progress toward net zero targets by country and sector

## 7. Academic Studies

### FinTech, ESG and Sustainability

- › [Trotta, Rania and Strano – The Link Between FinTech and ESG: A Bibliometric Analysis \(Research in International Business and Finance, 2023\)](#) – A comprehensive bibliometric study bringing together the FinTech and ESG literature and identifying five major research clusters. Its overarching finding is that FinTech serves both as an enabler and an accelerator of the sustainability transformation
- › [Galeone, Rinaldo and Fusco – ESG and FinTech: Are They Connected? \(Research in International Business and Finance, 2024\)](#) – A study examining, through the case of BNP Paribas, how collaboration with FinTech companies can accelerate banks' progress toward their sustainability objectives
- › [Offiong et al. – FinTech Innovations for Sustainable Development: A Comprehensive Literature Review \(Sustainable Development, Wiley, 2025\)](#) – A recent review examining the contribution of blockchain, artificial intelligence and big data analytics to sustainable growth

### Digital Payments, Financial Inclusion and SDGs

- › [Digital Financial Inclusion: A Gateway to Sustainable Development \(Heliyon, 2022\)](#) – A systematic review examining the relationship between digital financial inclusion and the 2030 SDG targets across countries, with particular emphasis on urban-rural and gender gaps in financial access
- › [Karahan and Yildirim – E-Money and Payment Systems in Türkiye and Sustainability \(DergiPark, 2021\)](#) – A Turkish-language academic study examining payment system regulations in Türkiye from a sustainability perspective

### Digital Payments and Carbon Impact

- › [The Contribution of Mobile Payment Innovation to Low-Carbon Growth: Evidence from China \(Cities, 2024\)](#) – Can mobile payment innovation contribute to low-carbon sustainable economic development? Spatial econometric analysis based on Chinese city-level data

### EU Green Deal

- › [Özcelik, Rey-García and Mato-Santiso – EU Green Deal: Enabling and Hindering Factors \(Sustainable Production and Consumption, 2025\)](#) – A systematic review of the implementation of the EU Green Deal, together with a proposed analytical framework

*These references are valid as of the publication date of the Guide. Standards and regulations may change over time; users are advised to verify the latest versions on the official websites of the relevant institutions before implementation.*



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