



cardano

Statement on principle adverse
impacts of investment decisions on
sustainability factors

Article 4 of Regulation (EU) 2019/2088 (SFDR)

Cardano Risk Management B.V.

Legal Entity Identifier (LEI):

724500M76LX58E3PW491

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Contents

1. Summary	03
2. Description of the principal adverse impacts on sustainability factors	04
3. Description of policies to identify and prioritise principal adverse impacts on sustainability factors	11
4. Engagement policies	15
5. References to international standards	16
6. Historical comparison	17
7. No consideration of adverse impacts of investment advice on sustainability factors	18

1. Summary



Cardano Risk Management B.V. (LEI: 724500M76LX58E3PW491) (“**Cardano**”) considers principal adverse impacts of its investment decisions on sustainability factors. The present statement is the consolidated statement on principal adverse impacts on sustainability factors of Cardano.

This statement on principal adverse impacts on sustainability factors covers the reference period from 1 January to 31 December 2023.

Cardano's investment policy is aimed at the transition to a sustainable society (the “**Cardano Sustainable Investment Policy**”). Based on a detailed sustainability framework, investments are selected, monitored, and sustainability risks, opportunities, and impacts are identified and mitigated.

This statement reports on the principal adverse impacts on sustainability factors of the investments made by Cardano in the context of its asset management activities on behalf of its clients. Cardano does not invest for its own account.

These impacts are categorised by the Sustainable Finance Disclosure Regulation (“**SFDR**”) into indicators that provide insight into adverse impacts on sustainability factors, including environmental, social, and employee matters, respect for human rights, anti-corruption and anti-bribery matters.

Cardano measures the principal adverse impacts on sustainability factors using a multitude of indicators, including the indicators for principal adverse impacts (“**PAI**”) as set out in the SFDR and further outlined in Chapter 2. Sufficient information is not yet available for every indicator, but Cardano observes an increase in the available data. The impacts are also compared with the previous reference period to track their development, and Cardano indicates what measures it has taken or intends to take to avoid or reduce the impacts.

Based on the sustainability preferences indicated by clients, Cardano does not consider PAI's when providing investment advice.

2. Description of the principal adverse impacts on sustainability factors

This section describes the principal adverse impacts of investment decisions of Cardano on sustainability factors related to the indicators of Table 1 of Annex I Commission Delegated Regulation (EU) 2022/1288 of 6 April 2022 (“**SFDR RTS**”). Where relevant, for each of these PAI indicators, a description is included of the actions taken and actions planned by Cardano to avoid or reduce the principal adverse impacts identified.

The results of the impacts of investments on the PAI indicators are published annually. The information covers the period from 1 January to 31 December of the preceding year and includes a comparison with the previous reporting period. The figure for each PAI indicator in the table below represents the impact, as an average of the impacts on 31 March, 30 June, 30 September and 31 December of each reference period.



Indicators applicable to investments in investee companies

Adverse Sustainability indicator	Metric	Impact 2023	Impact 2022	Explanation	Actions taken, and actions planned and targets set for the next reference period
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Indicators applicable to investments in investee companies

Climate and other environment related indicators

Climate and other environment related indicators						
Greenhouse gas emissions	1. Greenhouse gas emissions (ton co2e)	1.1 Scope 1 GHG emissions	2,494	3,333	Scope 1 and 2 greenhouse gas emissions decreased in 2023, primarily due to an increase in invested capital in green bonds. The increase in scope 3 emissions is mainly due to the increased availability of data. Data are available for 79% of the investments. Scope 1 and 2 data are primarily based on reported data, while scope 3 data are mostly estimated by the data provider to ensure consistency.	Cardano has set the target to achieve net-zero greenhouse gas emissions through its investments by 2050 at the latest, with an intermediate target of a 50% reduction in greenhouse gas emissions by 2030 and 75% by 2040 compared to 31 December 2019. This target was approved by SBTi in 2022.
		1.2 Scope 2 GHG emissions	297	490		
		1.3 Scope 3 GHG emissions	17,030	15,774		
		1.4 Total GHG emissions scope 1 & 2	2,791	3,823		
		1.5 Total GHG emissions scope 1, 2 & 3	19,821	19,596		
	2. Carbon footprint (ton CO2e/m€)	2.1 Carbon footprint - Total emissions	6	9	The carbon footprint measures greenhouse gas emissions, scaled to the company size. These slightly decreased in 2023. Data are available for 79% of the investments. Scope 1 and 2 data are primarily based on reported data, while scope 3 data are mostly estimated by the data provider to ensure consistency.	The climate strategy is based on the following measures relevant to Cardano: i. Invest via ESG bonds in solutions that reduce greenhouse gas emissions, increase low-carbon energy supply, or that reduce, avoid or capture and store greenhouse gas emissions, preferably through nature-based solutions; and ii. Divest from emitters that do not adapt to the transition required for a net-zero economy.
		2.2 Carbon footprint - Total emissions scope 1, 2 & 3	44	46		
	3. GHG intensity of investee companies (ton CO2e/m€)	3.1 GHG intensity of investee companies - scope 1 & 2	3	9	The intensity measures greenhouse gas emissions, scaled to the revenues of companies. The intensity for scope 1 and 2 emissions has decreased. It has increased for scope 3 emissions, primarily due to an increase in data availability. Data are available for 79% of the investments. Scope 1 and 2 data are primarily based on reported data, while scope 3 data are mostly estimated by the data provider to ensure consistency.	Investment in solutions In its LDI mandates, Cardano continuously seeks for (government related) issuers providing solutions that prevent climate change. These may be technological solutions that reduce or reverse greenhouse gas emissions from existing processes, or the development of new, climate-friendly or climate-positive products. To this end, Cardano monitors its investments in EU Taxonomy aligned activities.
		3.2 GHG intensity of investee companies - scope 1, 2 & 3	2,182	2,075		
	4. Exposure to companies active in the fossil fuel sector (%)	Share of investments in companies active in the fossil fuel sector	0%	NA	In 2023, no investments were made in companies active in the fossil fuel sector. This was determined based on reported data (75% in 2023).	

	Adverse Sustainability indicator	Metric	Impact 2023	Impact 2022	Explanation	Actions taken, and actions planned and targets set for the next reference period
Climate and other environment related indicators						
	5. Share of non-renewable energy consumption and production (%)	<p>5.1 Share of non-renewable energy consumption of investee companies from non-renewable energy sources compared to renewable energy sources, expressed as a percentage of total energy consumption</p> <p>5.2 Share of non-renewable energy production of investee companies from non-renewable energy sources compared to renewable energy sources, expressed as a percentage of total energy production</p>	<p>20%</p> <p>0%</p>	<p>NA</p> <p>NA</p>	<p>The impact was determined based on reported data (20% and 1% respectively in 2023).</p> <p>In 2023, no investments were made in companies that generate energy from non-renewable energy sources.</p>	<p>Divestments</p> <p>Cardano carefully screens if and how companies and institutions are preparing for the transition to a low-carbon economy. Cardano's Sustainable Investment Policy outlines which high-carbon activities are not accepted, such as thermal coal, coal-fired power plants, as well as unconventional exploration such as shale oil and gas, tar sands, and deep sea and Arctic drilling. On top of this, for the greenhouse gas intensive activities, Cardano assesses companies' and institutions' exposure to risks related to the transition towards a low-carbon economy and their capacity to manage these risks. Laggards that demonstrate insufficient capacity to make the transition in time, will also be excluded from investment.</p>
	Greenhouse gas emissions	6. Energy consumption intensity per high impact climate sector (GWh/m€)	<p>6.1 Energy Consumption Intensity:</p> <p>6.2 Energy Consumption Intensity: Construction</p> <p>6.3 Energy Consumption Intensity: Electricity, Gas, Steam & Air Conditioning Supply</p> <p>6.4 Energy Consumption Intensity: Manufacturing</p> <p>6.5 Energy Consumption Intensity: Mining & Quarrying</p> <p>6.6 Energy Consumption Intensity: Real Estate Activities</p> <p>6.7 Energy Consumption Intensity: Transportation & Storage</p>	<p>0</p> <p>0</p> <p>0</p> <p>0</p> <p>0</p> <p>0</p>	<p>NA</p> <p>NA</p> <p>NA</p> <p>NA</p> <p>NA</p> <p>NA</p>	<p>This indicator measures energy use in gigawatt hours (GWh) per million Euro revenue for various high-impact sectors. In 2023, there was minimal investment in high-impact sectors, resulting in scarce data points for this metric.</p>

	Adverse Sustainability indicator	Metric	Impact 2023	Impact 2022	Explanation	Actions taken, and actions planned and targets set for the next reference period
Climate and other environment related indicators						
		6.8 Energy Consumption Intensity: Water Supply, Sewerage, Waste Management & Remediation Activities	0	NA		
		6.9 Energy Consumption Intensity: Wholesale & Retail Trade & Repair of Motor Vehicles & Motorcycles	0	NA		
Biodiversity	7. Activities negatively affecting biodiversity-sensitive areas (%)	Share of investments in investee companies with sites/ operations located in or near to biodiversity-sensitive areas where activities of those investee companies negatively affect those areas	0	NA	In 2023, no investments were made in companies with activities in biodiversity-sensitive areas. The impact was determined based on reported data (75% in 2023).	
Water	8. Emissions to water (tonnes of emissions/m€)	Tonnes of emissions to water generated by investee companies per million EUR invested, expressed as a weighted average	NA	NA	Although investee companies are increasingly reporting on their water emissions, the data coverage is too low to compare the reference periods.	
Waste	9. Hazardous waste and radioactive waste ratio (tonnes of hazardous waste/m€)	Tonnes of hazardous waste and radioactive waste generated by investee companies per million EUR invested, expressed as a weighted average	0	NA	This indicator identifies companies which cause principal adverse impacts via hazardous or radioactive waste. In 2023, no investments were made in companies involved in harmful waste. The impact was determined based on reported data (72% in 2023).	

	Adverse Sustainability indicator	Metric	Impact 2023	Impact 2022	Explanation	Actions taken, and actions planned and targets set for the next reference period
Indicators for social and employee, respect for human rights, anti-corruption and anti-bribery matters						
Social and employee matters	10. Violations of UN Global Compact principles and Organisation for Economic Cooperation and Development (OECD) Guidelines for Multinational Enterprises (%)	Share of investments in investee companies that have been involved in violations of the UNGC principles or OECD Guidelines for Multinational Enterprises	0%	NA	According to the available data, none of the invested companies were involved in violations of the relevant international agreements in 2023. The impact was determined based on reported data (75% in 2023).	As described in the Cardano Sustainable Investment Policy, Cardano acts in accordance with the United Nations Global Compact (UNGC) principles, the UN Guiding Principles on Business & Human Rights, the OECD Guidelines for Multinational Enterprises and the standards of the International Labor Organization (ILO). Cardano investigates whether investee companies act in accordance with these international agreements to prevent Cardano from being exposed to controversies related to human rights, labor rights, and severe controversies. For those that are not compliant, it can be first investigated whether the violations can be mitigated through engagement. Every year, the Cardano Group evaluates several ongoing UNGC-related engagements, after which it is decided whether the progress is sufficient or if the companies should be excluded from investment.
	11. Lack of processes and compliance mechanisms to monitor compliance with UN Global Compact principles and OECD Guidelines for Multinational Enterprises (%)	Share of investments in investee companies without policies to monitor compliance with the UNGC principles or OECD Guidelines for Multinational Enterprises or grievance / complaints handling mechanisms to address violations of the UNGC principles or OECD Guidelines for Multinational Enterprises	27%	NA	The impact was determined based on reported data (75% in 2023).	
	12. Unadjusted gender pay gap (%)	Average unadjusted gender pay gap of investee companies	29%	NA	Although investee companies are increasingly reporting about this metric, there is still limited data available. In 2023, data were available for only 3% of the companies.	In the view of Cardano, 'good governance' means that investee companies pay attention to employee well-being, social justice and gender equality. The Cardano Group continues to be part of engagement programs that focus on gender and pay equality.
	13. Board gender diversity (% female)	Average ratio of female to male board members in investee companies, expressed as a percentage of all board members	44%	NA	The impact was determined based on reported data (16% in 2023).	
	14. Exposure to controversial weapons (anti-personnel mines, cluster munitions, chemical weapons and biological weapons) (%)	Share of investments in investee companies involved in the manufacture or selling of controversial weapons	0%	NA	According to the available data, no investee companies have been involved in controversial weapons. The impact was determined based on reported data (5% in 2023).	As described in the Cardano Sustainable Investment Policy, Cardano does not invest in companies involved in the production, development, sale, or distribution of controversial weapons or related services or specialised components. Companies and institutions that are involved in such activities will be excluded.

	Adverse Sustainability indicator	Metric	Impact 2023	Impact 2022	Explanation	Actions taken, and actions planned and targets set for the next reference period
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Indicators applicable to investments in sovereigns and supranationals

Environmental	15. GHG intensity (ton CO₂e/m€)	GHG intensity of investee countries	208	147,3	The GHG intensity of investee countries increased in 2023. This was mainly caused by a change in the method used to measure the greenhouse gas intensity of countries. The impact was determined based on estimated data for GHG emissions of invested countries and supranationals.	As part of the due diligence of sovereigns and supranationals, Cardano carefully considers how these entities deal with the environmental and social challenges they are confronted with. Sovereigns that violate international treaties on human rights, violate principles of good governance, or do not sufficiently well manage their natural resources may be excluded from investment. Through consultations governments and multilateral organisations efforts are made to influence the development of laws and regulations.
Social	16. Investee countries subject to social violations	Number of investee countries subject to social violations (absolute number and relative number divided by all investee countries), as referred to in international treaties and conventions, United Nations principles and, where applicable, national law	0	0	In 2023, no investments were made in countries with violations of social rights. The impact was determined based on reported data (89% in 2023).	

Indicators applicable to investments in real estate assets

Fossil fuels	17. Exposure to fossil fuels through real estate assets	Share of investments in real estate assets involved in the extraction, storage, transport or manufacture of fossil fuels	NA	NA	NA	Not applicable given the investment universe.
Energy efficiency	18. Exposure to energy-inefficient real estate assets	Share of investments in energy-inefficient real estate assets	NA	NA	NA	Not applicable given the investment universe.

	Adverse Sustainability indicator	Metric	Impact 2023	Impact 2022	Explanation	Actions taken, and actions planned and targets set for the next reference period
Other indicators for principal adverse impacts on sustainability factors						
Emissions	Table 2 – Indicator 4. Investments in companies without carbon emission reduction initiatives	Share of investments in investee companies without carbon emission reduction initiatives aimed at aligning with the Paris Agreement	39%	67,1%	The percentage of companies without carbon emission reduction initiatives decreased in 2023. The impact was determined based on reported data (75% in 2023).	See the answers with PAI indicators 1 to 6 above.
Social and employee matters	Table 3 - Indicator 8. Excessive CEO pay ratio	Average ratio within investee companies of the annual total compensation for the highest compensated individual to the median annual total compensation for all employees (excluding the highest-compensated individual)	14,6	9,9	The average ratio between the highest-paid individual and the median compensation increased in 2023 for the investee companies. The impact was determined based on reported data (64% in 2023).	See the answers with PAI indicators 12 and 13 above.

Notes:

1. PAI indicators 1 to 3 and 15 are based on data reported by MSCI regarding carbon scope 1, 2 and 3 emissions, enterprise value, and sales revenues. The other PAI indicators are based on data from Sustainalytics. More about the data sources used can be found in Chapter 3.
2. The PAI indicators that pertain to a share of the portfolio, an intensity, or a footprint only take into account the companies and institutions for which data is available. For example, the carbon footprint (indicators 2.1 and 2.2) is calculated by summing the greenhouse gas emissions per unit of enterprise value for all companies and institutions and multiplying by the investments in these companies or institutions, and then dividing by the value of the investments in companies and institutions for which emissions data is available. If this were divided by the total assets under management, including companies and institutions for which no emissions data is available, it would underestimate the actual carbon footprint.
3. FX contracts (futures, forwards), interest rate derivatives, and cash have been excluded from the calculations. Such instruments are used for risk hedging and/or efficient portfolio management and not for the implementation of the Cardano Sustainable Investment Policy. No adverse impacts can be attributed to these instruments.

3. Description of policies to identify and prioritise principal adverse impacts on sustainability factors

The Cardano Sustainable Investment Policy from May 2019 has been revised as of 1 January 2024, and has been approved by the management board. The Cardano Sustainable Investment Policy has a dual objective: to achieve financial returns for its clients in line with the risks taken, while simultaneously contributing to the transition to a sustainable society. With its policy, Cardano encourages companies and institutions to grow while operating within planetary boundaries and with respect for the social foundations of society.

The Cardano Sustainable Investment Policy provides a holistic view on the role of investors in guiding the transition to a sustainable society. Cardano has developed a transparent framework to select or exclude companies and institutions for Cardano’s investment propositions based on strict and carefully chosen criteria (the “**Cardano Sustainable Investment Framework**”). The application of this framework determines which companies and institutions can be invested in and to what extent the investments contribute to formulated sustainability goals.

As part of the Cardano Sustainable Investment Framework, Cardano assesses each company and institution for both the potential sustainability risks they pose to investment returns and the extent to which they have adverse impacts on sustainability factors. These assessments are an integral part of investment decisions.

Cardano uses several instruments to identify sustainability risks and opportunities and avoid or mitigate adverse impacts on sustainability factors within investment universe, including screening and ESG integration.

Screening

The Cardano Sustainable Investment Framework distinguishes the following two steps:

In the first step, Cardano assesses whether the company and/or institution violates internationally accepted norms and standards. The PAI indicators 10, 11, 14, and 16, as mentioned in Chapter 2, form the basis for this assessment. Additionally, it is examined whether the company or institution is involved in activities deemed too harmful to society (public health, animal welfare, and conventional weapons).

If a company or institution is classified as 'violating international standards' or 'harmful', it is excluded from the investment universe.

Companies and institutions that pass step 1 are subjected in step 2 to a materiality test for allocation to one of the five other categories of the Cardano Sustainable Investment Framework: 'positive impact', 'sustainable', 'adapting', 'at risk', or 'non-adapting'. For this classification, Cardano uses a large number of indicators for the sustainability themes that are material to the respective company or institution, including the PAI indicators as included in the SFDR, which provide insight into the exposure to sustainability risks, the possible adverse impacts of investment decisions on sustainability factors, and their management by the company or institution.



The table below provides an overview of the indicators used. This screening shows whether an investment in a company or institution promotes sustainability without significantly harming any of the sustainability goals, and whether this investment makes a positive or negative contribution to formulated sustainability goals.

Sustainability theme	Principal adverse indicators as included in the SFDR RTS	Additional indicators used for Cardano screening
Fossil fuel use	1) Greenhouse gas emissions, 2) carbon footprint, 3) GHG intensity of investee companies, 4) exposure to companies active in the fossil fuel sector, 5) share of non-renewable energy consumption and production, 6) energy consumption intensity per high impact climate sector, 15) GHG intensity of sovereigns and supranationals, 17) exposure to fossil fuels through real estate assets, 18) exposure to energy-inefficient real estate assets are not considered in the screening; and 4) companies without carbon emission reduction initiatives.	Indicators showing expansion plans of coal-fired power plants, carbon footprint, energy intensity and energy use, (science based) GHG reduction targets, exposure to fossil fuel activities. Alignment with the Paris agreement, quality of GHG reduction strategies.
Water use	8) Emissions to water.	Indicators showing water use and reuse, wastewater emissions, water targets, water use in water scarce areas, quality of water policy.
Land use	7) Activities negatively affecting biodiversity-sensitive areas.	Indicators showing contributions to biodiversity loss, land degradation, deforestation, activities in areas with high biodiversity risk or protected areas, unsustainable ocean or sea activities, quality of biodiversity, land use and maritime policies focusing both on own activities as well as activities in the supply chain.
Chemicals and waste management	9) Hazardous waste and radioactive waste ratio.	Indicators showing emissions of hazardous chemicals, phase -out plans of chemicals of concern, targets to reduce and recycle (hazardous) waste, use of alternative packaging solutions, chemical safety and quality of chemicals and waste management policies.
Social capital management		Qualitative indicators showing how companies manage product safety, privacy & data security, health & safety, procurement, accessibility and affordability of basic services, and relationships with local communities.
Human capital management		Qualitative indicators showing how companies manage labour, safety and their personnel, both in the own company as in the supply chain.
Organisational behaviour and integrity	12) Unadjusted gender pay gap, 13) Board gender diversity; and 8) excessive CEO pay ratio.	Qualitative indicators showing how companies manage board quality, board diversity, (gender & racial) diversity, implementation of ILO conventions, payment, taxes and business ethics (fraud & corruption, whistleblowing, human rights policies, grievance & remedy).

The PAI indicators included in Chapter 2 primarily provide insight into the realized adverse impacts of companies and institutions on sustainability factors. The additional indicators used for the Cardano screening, as included in the table above, are applied in the screening to also get an understanding of the steps companies and institutions are taking to better manage or reduce these adverse impacts. This often involves the presence and quality of strategies, objectives, risk assessments, and programs at companies and institutions for sustainability themes that are material to them. This information helps assess whether the likelihood of adverse impacts occurring in the future is increasing or decreasing. This is often qualitative information from ESG data providers. For companies and institutions that would be categorised as 'non-adapting' or 'at risk' according to the Cardano Sustainable Investment Framework, a qualitative analysis will be conducted to assess whether the qualitative indicators used are reliable. Appendix "[Appendix A Cardano Sustainable Investment Framework](#)" of the Cardano Sustainable Investment Policy discusses in detail which indicators are considered and why.

Counterparties derivatives

Cardano acts on behalf of and at the risk of its clients in derivatives with financial institutions. The Cardano dealer committee monitors the creditworthiness and ESG exposure of the derivatives counterparties and assigns an internal rating to each counterparty. To understand a counterparty's ESG risk exposure, Cardano's dealer committee has developed a framework that screens derivatives counterparties for material ESG issues.

Counterparties that score below a certain threshold within the framework are subject to further investigation. All other counterparties are deemed to have passed the ESG assessment.

The screening utilises ESG data from various ESG rating agencies, supplemented with information from Cardano's own questionnaire. The responses are used as part of the review process. In the rating methodology that Cardano applies for monitoring counterparties, social and governance factors are taken into account. In the case of a low score on these factors, Cardano will actively express its concerns and engage with the management of these counterparties to strive for improvements. When a counterparty undergoes further investigation, a more detailed screening process is applied based on the framework, with the identified ESG issues closely aligning with Cardano's sustainability beliefs. Counterparties that do not pass this screening process are subsequently subject to a more detailed ESG review. The review mainly consists of a detailed review of MSCI ESG reports along with a broader investigation of the counterparty.

When a counterparty shows no signs of willingness to address the ESG risks identified by Cardano, the counterparty's ESG rating will eventually be assessed as "poor." A poor rating will generally result in the exclusion of the counterparty from the list of counterparties with whom Cardano may conduct new business, or potentially, if there are also credit issues, existing positions with the counterparty may be terminated.



Data Sources

For the screening, various data and benchmarking sources are used for analysis and reporting. The main data sources and their applications are:

- **MSCI data:** screening of companies and institutions for their compliance with the Cardano Sustainable Investment Policy;
- **Sustainalytics data:** tracking engagements and reporting on the SFDR PAI indicators and Taxonomy alignment;
- **Data from Urgewald:** monitoring the expansion plans for coal-fired power plants;
- **Access to Medicines Foundation benchmark data:** tracking the progress of engagements at pharmaceutical companies;
- **Equileap data:** analysing gender equality issues;
- **CDP data (Carbon Disclosure Project):** source for carbon, water and land data;
- **Satelligence data:** to monitor biodiversity loss and deforestation by companies and institutions;
- **Data from the "Transition Pathway Initiative":** to monitor the extent to which a company or institution operates in line with the Paris Agreement; and
- **TRACE data:** is used to monitor raw material supply chains and potential deforestation risks.

To ensure the quality and accuracy of the screening, the various data sources are compared, and regular discussions are held with the data providers about how they handle quality control procedures and missing information, and how additional insights can be integrated into their assessments. If there is insufficient information available to adequately assess a company or institution, additional information is sought through the websites of the companies and institutions, news media, or NGOs. Where the data provider does not have reported data for PAI indicators, no independent analyses or data received from companies and institutions are added to guarantee the coherence of the methods used.

The ESG models and ESG database of Cardano are validated internally. Decisions to exclude a company or institution are never based solely on quantitative data sources but are always combined with a fundamental analysis to monitor the reliability of data usage.

ESG integration

Investments are assigned an internal ESG score, which Cardano determines systematically based on the interpretation of externally obtained information. This ESG score can range between 0 and 100, with the maximum ESG score of an investment being 100. The better the companies and institutions perform in terms of transitioning to a sustainable way of operating, the higher the score. In determining the ESG score, not only the sustainability level of the companies and institutions but also the sustainability level of the underlying financial projects or project objectives play a role.

Responsibilities

Within the management board of Cardano Holding Limited (the parent company of the Cardano Group), the CEO Cardano Investment is responsible for sustainability. Various departments and committees are responsible for formulating and implementing the Cardano Sustainable Investment Policy.

The Cardano Sustainability Group' team ("**CSG**") is responsible, together with the investment teams, for the development, implementation, and monitoring of the Cardano Sustainable Investment Policy. The CSG team conducts periodic sustainability screenings of companies and institutions, provides the necessary information for ESG integration to the portfolio managers, carries out 'active ownership' activities related to engagement and the exercise of voting rights. Additionally, CSG develops new policies to ensure that the approach remains in line with applicable regulations and integrates sustainability risks and opportunities into the policy.

The screening under the Cardano Sustainable Investment Framework results in an investment universe that includes companies and institutions from the relevant benchmark that meet the minimum sustainability criteria set within the Cardano Sustainable Investment Policy. This universe forms the basis for the investments made by the investment teams.

Cardano has three committees to ensure the proper execution of the sustainability policy.

The Sustainability Policy Committee ("**SPC**") determines the overall sustainability strategy for the Cardano Group and the Cardano Sustainable Investment Policy, including the Cardano Sustainable Investment Framework and other policy components. The policy is implemented after being approved by the Cardano management board. The following roles are represented in this committee: the CEO Cardano Investment, the Head of CSG, the Head of Sustainability UK, the Chief Sustainability Officer, the Head of Policy & Strategy, the CIO Public Markets, the CIO Private Markets, the CCO Cardano NL, and the Group CCO. The board of directors of Cardano Holding Limited oversees the SPC.

The Sustainability Categorisation Committee ("**SCC**") decides on the classification of issuing companies and institutions within the Cardano Sustainable Investment Framework. This committee is responsible for the detailed methodologies for determining ESG scores and categorisation. The following roles are represented in this committee: from CSG, the Head of Policy & Strategy, the Head of Stewardship, and the Head of Research & Data, and from other group companies, the Heads of Equities, Credits, and Product Development. The SPC oversees the SCC. Proposals are submitted to the SPC when there is no consensus within the SCC.

Finally, the Sustainability Investment Committee ("**ICS**"), part of the Cardano Group Investment Committee (IC), is responsible for implementing the Cardano Sustainable Investment Policy and related frameworks into investment strategies and decision-making. The following roles are represented in this committee: the CIO Public Markets and the Head of Sustainability UK as co-chairs, the Head of CSG, the Group CIO, and IC members, including the heads of investment teams. The IC and SPC oversee the ICS.

Derivatives can be traded on behalf of clients with counterparties that are on a specially compiled list. Additions or exclusions of counterparties are managed by the Cardano dealer committee.

4. Engagement policies

Cardano does not invest directly in shares. Cardano does invest in bonds issued by government-related institutions and, to a lesser extent, in corporate bonds. Given these investments, Cardano's involvement in promoting sustainability within companies is very limited. Cardano is not an active shareholder and does not exercise voting rights.

Bonds

At the level of Cardano Group, engagements are conducted. Engagement is a means to engage in dialogue with a company or institution to positively influence its behavior. This can be in response to a specific incident with a negative impact on sustainability. Cardano conducts individual engagement dialogues with companies and institutions or through collaborative engagement with other asset owners.

During an engagement process, clear goals are set, and milestones are formulated to monitor the change related to the behavioral drivers. For prioritising companies and institutions with which an engagement process is initiated and for determining engagement goals, the indicators mentioned in Chapters 2 and 3 are used. Depending on the engagement theme, the most relevant indicators are selected. This prioritisation mainly considers which companies and institutions have the greatest impact and which companies and institutions have the capacity to reduce their adverse effects.

Engagements encourage companies and institutions to seize sustainability opportunities and better manage sustainability risks. They may involve creating innovation opportunities, developing circular production processes, or taking on a leadership role in sustainability.

Derivatives

In the context of derivatives that Cardano trades on behalf of and at the risk of its clients, it assesses counterparties on specific ESG factors according to its internal rating methodology. If a counterparty scores low on these factors, Cardano will actively express its concerns and engage with the counterparty's management to strive for improvements. If the counterparty shows no improvement and no willingness to do so, the counterparty's ESG rating will eventually be assessed as "poor." Consequently, it may be decided not to enter into any new positions with this counterparty, and if there are also credit issues, existing positions with this counterparty may be terminated.

Wider Market Engagement

The Cardano Group plays an active role in promoting good governance and stewardship of activities (both internal and external) that may impact Cardano's clients:

- It actively participates in ESG forums and conferences, listening and contributing to industry initiatives with the aim of encouraging better practices and policies in the broader financial market;
- It actively responds to consultations that may affect the assets and liabilities of Cardano's clients, striving to ensure that changes in markets and regulations positively influence the future financial stability of pension fund clients and the proper functioning of the markets; and
- It actively collaborates with a wide range of organizations to put Cardano's investment beliefs into practice and achieve its sustainability objectives. An overview of [partner organisations](#) is available on Cardano's website.



5. References to international standards

The Cardano Sustainable Investment Policy outlines the ethical, social, and environmental principles that are fundamental to good citizenship and good corporate governance. These principles are based on a broad range of international treaties, conventions, and best practice guidelines, including the UN Global Compact, the UN Guiding Principles on Business & Human Rights, and the OECD Guidelines for Multinational Enterprises. The Cardano Sustainable Investment Framework includes an extensive list of the international agreements monitored during screening. These international guidelines particularly refer to PAI indicators 10, 11, 14, and 16 as mentioned in Chapter 2, which are considered universal. Cardano considers violations of these international norms and standards unacceptable. Companies and institutions that do not comply are not eligible for investment.

In line with the Kunming-Montreal Global Biodiversity Framework, Cardano aims to reverse the trend of biodiversity loss and work towards a biodiversity-positive situation: towards the restoration and regeneration of ecosystems, instead of their decline and degradation. To achieve this ambition, the Cardano sustainability goals have been formulated, namely: net-zero greenhouse gas emissions by 2050 (see above), no net contribution to deforestation by 2030, water neutrality by 2030, and waste neutrality by 2050. Biodiversity-related indicators primarily refer to PAI indicators 7, 8, and 9 as mentioned in Chapter 2, and additional indicators from the table in Chapter 3 related to 'water use', 'land use', and 'management of chemicals and waste'.

Cardano is a signatory of the Principles for Responsible Investment (PRI) and, as a signatory, adheres to all requirements and expectations.

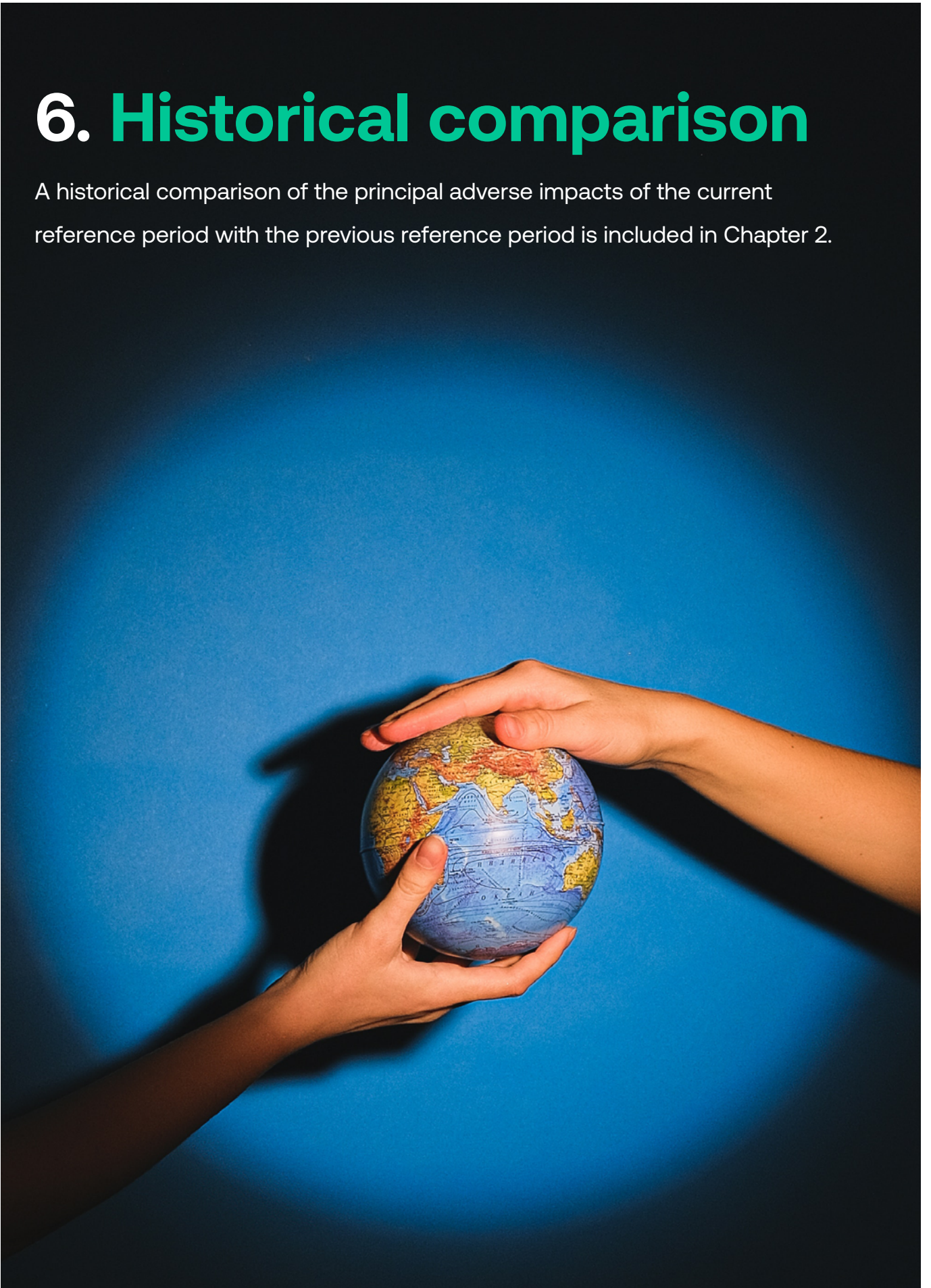
Cardano applies the guidelines and recommendations of the Taskforce on Climate-related Financial Disclosures (TCFD) when developing climate reports. It aims to achieve net-zero greenhouse gas emissions for all directly managed assets by 2050, in line with the Paris Agreement. Interim targets include a reduction in emission intensity of 50% by 2030, 75% by 2040 compared to 31 December 2019, and an average of 7% per year in line with the path outlined by the Intergovernmental Panel on Climate Change (IPCC) for limiting global warming to a maximum of 1.5 degrees. These targets are approved by the Science-Based Targets initiative (SBTi). TCFD-related indicators primarily pertain to PAI indicators 1 to 6 and 15 as mentioned in Chapter 2, as well as additional indicators from the table in Chapter 3 related to 'fossil fuel use'.

Periodic scenario analyses are conducted to assess the potential impact of climate change on investments. Data from various climate scenarios provided by MSCI are used for this purpose. The analyses distinguish between transition risks, physical climate risks, and technological opportunities driven by stricter climate policies for three climate scenarios leading to warming of 1.5, 2, and 3 degrees compared to the average pre-industrial global temperature, and several scenarios as prescribed by the Network on Greening the Financial System (NGFS). The results of these scenario analyses are used to determine which sectors require additional attention during screening and engagement.



6. Historical comparison

A historical comparison of the principal adverse impacts of the current reference period with the previous reference period is included in Chapter 2.



7. No consideration of adverse impacts of investment advice on sustainability factors

In the questionnaire regarding clients' sustainability preferences, they indicated that Cardano does not need to consider adverse impacts on sustainability factors in its investment advice.



Statement on principle adverse impacts of investment decisions on sustainability factors



cardano

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