



cardano

Statement on principle adverse
impacts of investment decisions and
of investment advice on sustainability
factors

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

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	12
4. Engagement policies	15
5. References to international standards	16
6. Historical comparison	17
7. Description of the principal adverse impacts of investment advice on sustainability factors	18

1. Summary



Cardano Asset Management N.V. (LEI: 724500WRBHAIP5DV7I77) (“**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 of the funds managed by Cardano and of its asset management activities.

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.

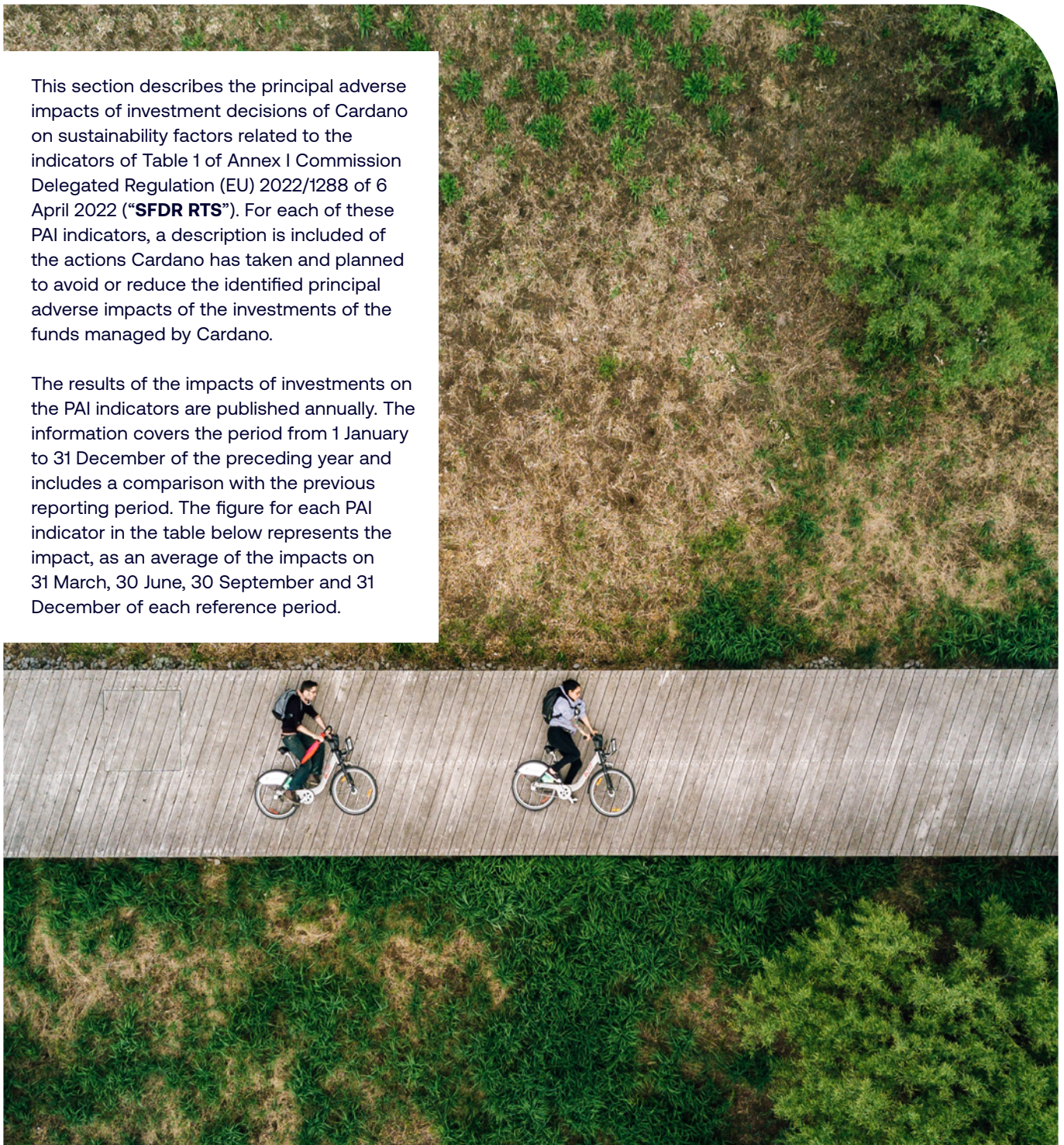
Cardano measures the principal adverse impacts on sustainability factors using a multitude of indicators, including the indicators for principal adverse impacts (“**PAI**”) as set out in the SFDR and further outlined in Chapter 2. Sufficient information is not yet available for every indicator, but Cardano 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.

Cardano can provide investment advice to its clients in the context of implementing these clients' ESG investment policies. In the screening of investments for potential exclusion in line with that ESG policy, the PAI are also considered.

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**”). For each of these PAI indicators, a description is included of the actions Cardano has taken and planned to avoid or reduce the identified principal adverse impacts of the investments of the funds managed by Cardano.

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.



Adverse Sustainability indicator	Metric	Impact 2023	Impact 2022	Explanation	Actions taken, and actions planned and targets set for the next reference period
----------------------------------	--------	-------------	-------------	-------------	--

Indicators applicable to investments in investee companies

Climate and other environment related indicators

Greenhouse gas emissions	1. Greenhouse gas emissions (ton co2e)	1.1 Scope 1 GHG emissions	900,426	557,772	Greenhouse gas emissions increased in 2023. This is due to an increase in assets under management and the increased availability of scope 3 data. Data are available for 94% of the investments. Scope 1 and 2 data are mainly based on reported data. Scope 3 data are mostly estimated by the data provider to ensure data consistency.	<p>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.</p> <p>Cardano has formulated a climate strategy which details the steps being taken to reach these targets. The strategy aligns with the IPCC 1.50C trajectory with limited overshoot.</p> <p>Cardano's climate strategy is built on the following mitigation measures:</p> <ul style="list-style-type: none"> i. Reduce greenhouse gas emissions of the companies and institutions through active stewardship; ii. Invest 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 iii. Divest from emitters that do not adapt to the transition required for a net-zero economy. <p>Active stewardship</p> <p>Through engagement and proxy voting, Cardano encourages investee companies and institutions to set climate targets and formulate time-bound decarbonisation strategies. The climate strategy outlines priority sectors and how progress is monitored. Through the Dutch Climate Coalition, oil and gas Cardano urges companies to align their activities with the Paris Climate Agreement. In addition, Cardano leads an engagement as part of the Climate Action 100+ program and is involved in several other collaborative investor initiatives focusing on the low-carbon transition, such as the ShareAction program engaging the chemicals sector.</p>
		1.2 Scope 2 GHG emissions	278,618	183,079		
		1.3 Scope 3 GHG emissions	9,753,862	4,362,997		
		1.4 Total GHG emissions scope 1 & 2	1,179,044	740,851		
		1.5 Total GHG emissions scope 1, 2 & 3	10,932,905	5,103,848		
	2. Carbon footprint (ton CO2e/m€)	2.1 Carbon footprint - Total emissions	46	51	The carbon footprint measures of greenhouse gas emissions, scaled to company size. The scope 1 and 2 footprint has decreased, while the scope 3 footprint has increased. Data are available for 94% of the investments. Scope 1 and 2 data are mainly based on reported data. Scope 3 data are mostly estimated by the data provider to ensure data consistency.	
		2.2 Carbon footprint - Total emissions scope 1, 2 & 3	418	335		
	3. GHG intensity of investee companies (ton CO2e/m€)	3.1 GHG intensity of investee companies - scope 1 & 2	90	119	This measure shows greenhouse gas emissions, scaled to company revenues. The GHG 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 94% of the investments. Scope 1 and 2 data are mainly based on reported data. Scope 3 data are mostly estimated by the data provider to ensure data consistency.	
		3.2 GHG intensity of investee companies - scope 1, 2 & 3	862	798		
	4. Exposure to companies active in the fossil fuel sector (%)	Share of investments in companies active in the fossil fuel sector	5%	5%	Exposure to the fossil fuel sector remained the same in 2023. The impact was determined based on reported data (96% 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 (%)	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	59%	66%	The share of non-renewable energy consumption (5.1) decreased in 2023, showing progress in the energy transition. This is partly due to increased availability and lower costs of renewable energy.	<p>Cardano expects investee companies and institutions to take responsibility for their impact on climate change. If they fail to demonstrate that they are implementing transition strategies in line with the Paris Agreement, the board may be held accountable by voting against relevant board elections.</p> <p>Investment in solutions</p> <p>In its active funds, Cardano continuously seeks for companies and institutions 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 the green-to-brown ratio of its investments and its investments in EU Taxonomy aligned activities.</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>
		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	20%	20%	The share of non-renewable energy production (5.2) remained stable in 2023. The impact was determined based on reported data (66% and 29% respectively in 2023).	
Greenhouse gas emissions	6. Energy consumption intensity per high impact climate sector (GWh/m€)	6.1 Energy Consumption Intensity:	1.8	5.8	This indicator shows the energy consumption in gigawatt hours (GWh) per million euros of revenue for the various high impact sectors. The impact was determined based on reported data. Although investee companies are increasingly reporting about this metric, the data coverage is too low to compare the reference periods.	
		6.2 Energy Consumption Intensity: Construction	0.1	0.1		
		6.3 Energy Consumption Intensity: Electricity, Gas, Steam & Air Conditioning Supply	3.6	16.1		
		6.4 Energy Consumption Intensity: Manufacturing	0.4	0.9		
		6.5 Energy Consumption Intensity: Mining & Quarrying	1.1	26.4		
		6.6 Energy Consumption Intensity: Real Estate Activities	0.5	0.8		
		6.7 Energy Consumption Intensity: Transportation & Storage	1.1	1.8		

	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	0.7	0.7		
		6.9 Energy Consumption Intensity: Wholesale & Retail Trade & Repair of Motor Vehicles & Motorcycles	0.1	0.9		
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	5%	7%	The share of investments with adverse impacts on biodiversity sensitive areas slightly reduced in 2023. The impact was determined based on reported data (96% in 2023).	Cardano aims not to be involved in deforestation by 2030 at the latest, and would like to reverse the trend of biodiversity loss. To achieve this, Cardano has formulated a specific biodiversity strategy and set up and participates in several stewardship programs that urge companies to reduce their direct and indirect impact on biodiversity and to encourage authorities to better protect biodiversity. Particular attention is given to issues related to deforestation, plastic pollution, chemical pollution, and the use of plant protection measures. In addition, Cardano may exclude companies and institutions with severe impacts on biodiversity and that lack the targets and strategies to reduce this impact.
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	0.0	0.3	Although investee companies are increasingly reporting on their water emissions, the data coverage is too low to compare the reference periods.	Cardano has formulated a strategy to become water-neutral by 2030 at the latest. To achieve this, Cardano carefully considers which companies and institutions are active in water scarce areas, contribute to water pollution, or are trying to reduce the impact of their activities. To reach this target, companies and institutions in the priority sectors are encouraged through active stewardship to set targets and formulate water management strategies. In addition, companies and institutions may be excluded if they lack proper water management strategies. In 2024, Cardano will increase its efforts to identify companies and institutions that are highly exposed to water scarcity and water pollution and to measure progress towards Cardano's water targets.

	Adverse Sustainability indicator	Metric	Impact 2023	Impact 2022	Explanation	Actions taken, and actions planned and targets set for the next reference period
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	2	29	This indicator identifies companies which cause principal adverse impacts via hazardous or radioactive waste. In 2023, less hazardous and radioactive waste was generated compared to 2022. This is the result of a divestment of a company active in the metal mining sector with high hazardous and radioactive waste from its activities. The impact was determined based on reported data (91% in 2023).	Cardano aims to move towards a situation with zero waste generation associated with its investments by 2050. In 2024, special attention will be given to engaging with chemical, plastic, and packaging companies to reduce their plastic waste and usage, as well as to decrease the use of hazardous chemicals. In addition, companies and institutions are screened on their waste management strategies. Those causing severe risks for the portfolios due to lagging waste management practices may be excluded from investment.

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	0,0%	0,3%	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 (96% 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, several ongoing UNGC-related engagements are evaluated, 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	47%	64%	The data show that an increasing number of companies have policies to monitor compliance with the UN Global Compact principles and the OECD Guidelines for Multinational Enterprises. Despite the growing number of companies, only half of them have adequate policies in place. The impact was determined based on reported data (94% in 2023).	
	12. Unadjusted gender pay gap (%)	Average unadjusted gender pay gap of investee companies	20%	21%	Although investee companies are increasingly reporting about this metric, the data coverage is too low to make compare the reference periods.	
	13. Board gender diversity (% female)	Average ratio of female to male board members in investee companies, expressed as a percentage of all board members	34%	33%	The impact was determined based on reported data (91% 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						
	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	0,0%	0,1%	According to the available data, no investee companies have been involved in controversial weapons. The impact was determined based on reported data (96% 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
Indicators applicable to investments in sovereigns and supranationals						
Environmental	15. GHG intensity (ton CO2e/m€)	GHG intensity of investee countries	204,9	197,3 ⁺	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	0,3% 2	0,2% ⁺ 1 ⁺	According to the data provider, two investee countries have reported social violations, namely Ukraine and Ecuador. However, both countries meet the criteria of the Cardano Sustainable Investment Policy and therefore remain investable for Cardano's investment propositions.	
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	29%	44%	The percentage of companies without carbon emission reduction initiatives decreased in 2023. The impact was determined based on reported data (96% 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)	676	297	The reported ratio is relatively high due to outliers in certain industries, such as automotive, and emerging markets. The impact was determined based on reported data (53% in 2023).	See the answers with PAI indicators 12 and 13 above.

Notes

- 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.
- 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.
- For the 2022 impacts marked with a +, data was available for less than half of the companies and institutions. For most of these PAI indicators, it was not possible to provide estimates. Coverage has increased as more companies now report according to Directive (EU) 2022/2464 as regards corporate sustainability reporting (CSRD).
- 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. Based on this vision, Cardano has set a number of long-term sustainability goals for the investment funds it manages in areas such as environment, society, and governance. 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, ESG integration, voting, and engagement. Through these means, Cardano encourages companies and institutions to set sustainability goals and formulate strategies.

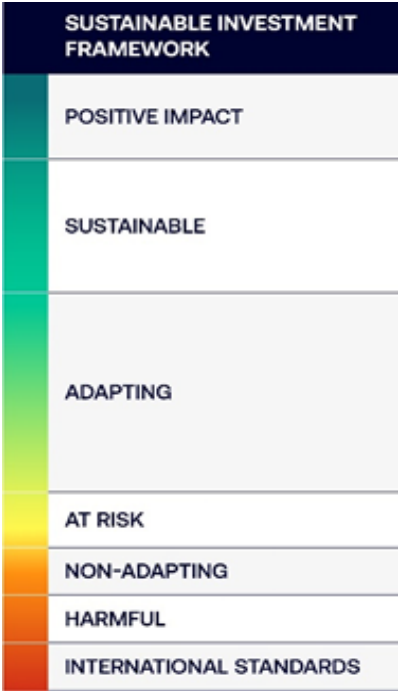
Screening

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.

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.

Voting

Regarding equity investments, a shareholder can vote at shareholder meetings on proposals from the board or other shareholders. As a shareholder, Cardano generally votes at all shareholder meetings. For exercising voting rights, Cardano has developed a policy based on the Cardano Sustainable Investment Policy.

In general, board proposals voted on include:

- proposals regarding reporting and profit allocation;
- proposals regarding the composition of governing bodies;
- proposals regarding the remuneration policy of governing bodies;
- auditors and related proposals;
- capital-related proposals; and
- other significant proposals.

In addition to board proposals, shareholder proposals are also discussed at shareholder meetings when applicable. Shareholder proposals more often address risks, impact, or policies related to sustainability than board proposals. Cardano has also developed a policy for shareholder proposals based on the Cardano Sustainable Investment Policy, which encourages companies to contribute to formulated sustainability goals. Cardano may independently submit proposals or collaborate with others (co-filing) if it benefits the outcome. To implement the voting policy, Cardano utilizes the services of Glass Lewis Europe Limited.

More information about the [voting policy](#) can be found on Cardano’s website.

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.



4. Engagement policies

In applying the Cardano Sustainable Investment Policy, Cardano assesses not only the current policies and behavior of companies and institutions but also their capacity and willingness to change. Cardano is an active shareholder striving for change in the real economy and encouraging companies and institutions to operate within planetary boundaries, i.e., to move up to a higher category in the Cardano Sustainable Investment Framework. As an active shareholder, Cardano generally votes at all shareholder meetings and engages with companies and institutions, policymakers, NGOs, and investor working groups.

Engagement is a means to enter into 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.

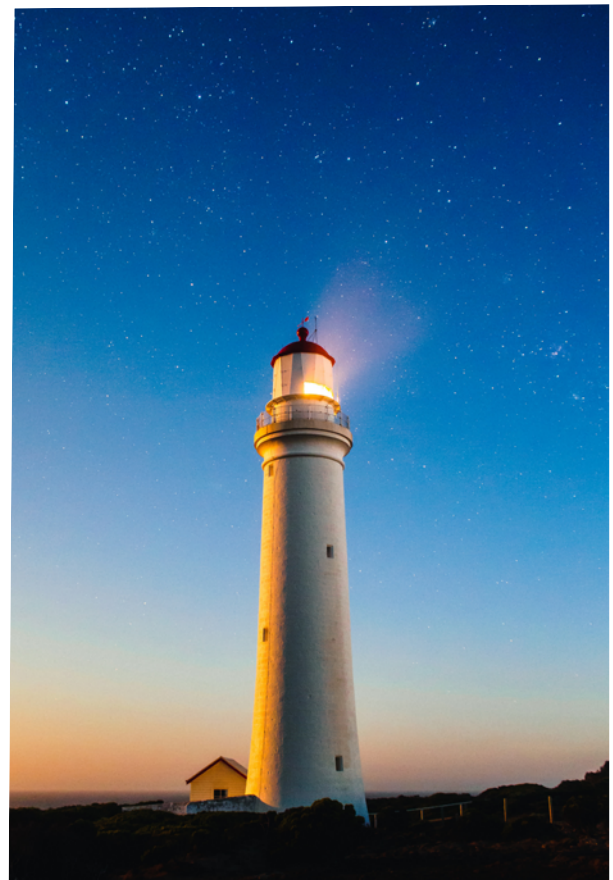
During an engagement process, clear goals are set and milestones formulated to monitor the change regarding the related behavioral drivers. For prioritising the companies and institutions with which to start an engagement process and for determining engagement goals, the indicators mentioned in Chapters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

Engagements encourage companies and institutions to seize sustainability opportunities and better manage sustainability risks. They can involve creating innovation opportunities, developing circular production processes, or taking a leadership role in sustainability. Engagements that lead to insufficient improvement after two years generally, where companies and institutions still significantly contribute to adverse sustainability impacts, can result in exclusion.

In addition to direct involvement with invested companies and institutions, Cardano actively collaborates with a large number of organisations to implement its investment beliefs and achieve its sustainability objectives. An overview of [partner organisations](#) is available on Cardano's website.

In executing the engagement policy, Cardano may use the services of Sustainalytics Holding B.V. Cardano monitors the engagement process as carried out by Sustainalytics Holding B.V..

More information about the [engagement policy](#) can be found 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, sustainability goals have been formulated for the investment funds managed by Cardano, 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.

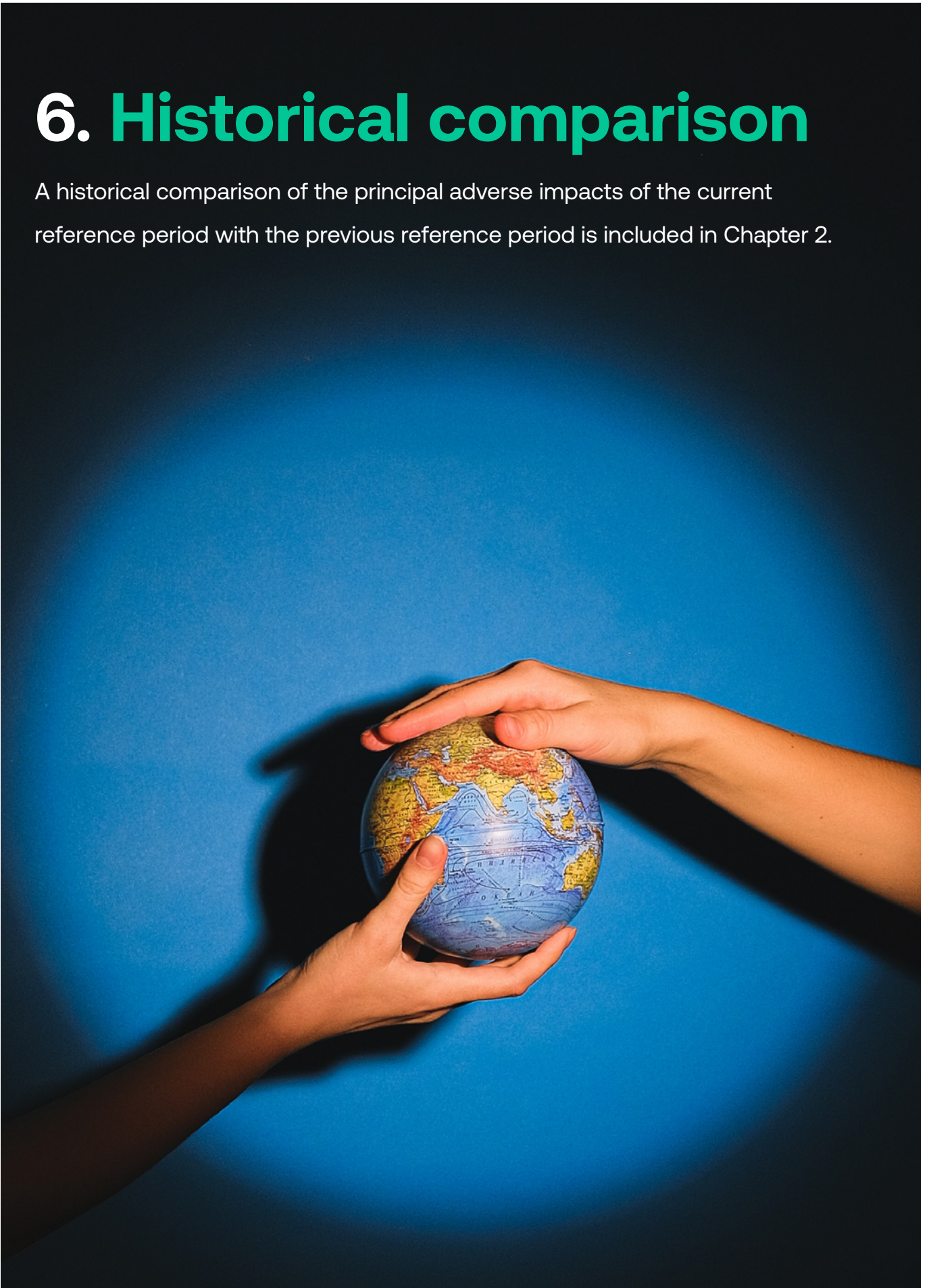
Cardano applies the guidelines and recommendations of the Taskforce on Climate-related Financial Disclosures (TCFD) when developing climate reports. It aims to achieve net-zero greenhouse gas emissions by 2050 for all directly managed assets of the investment funds managed by Cardano, in line with the 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.

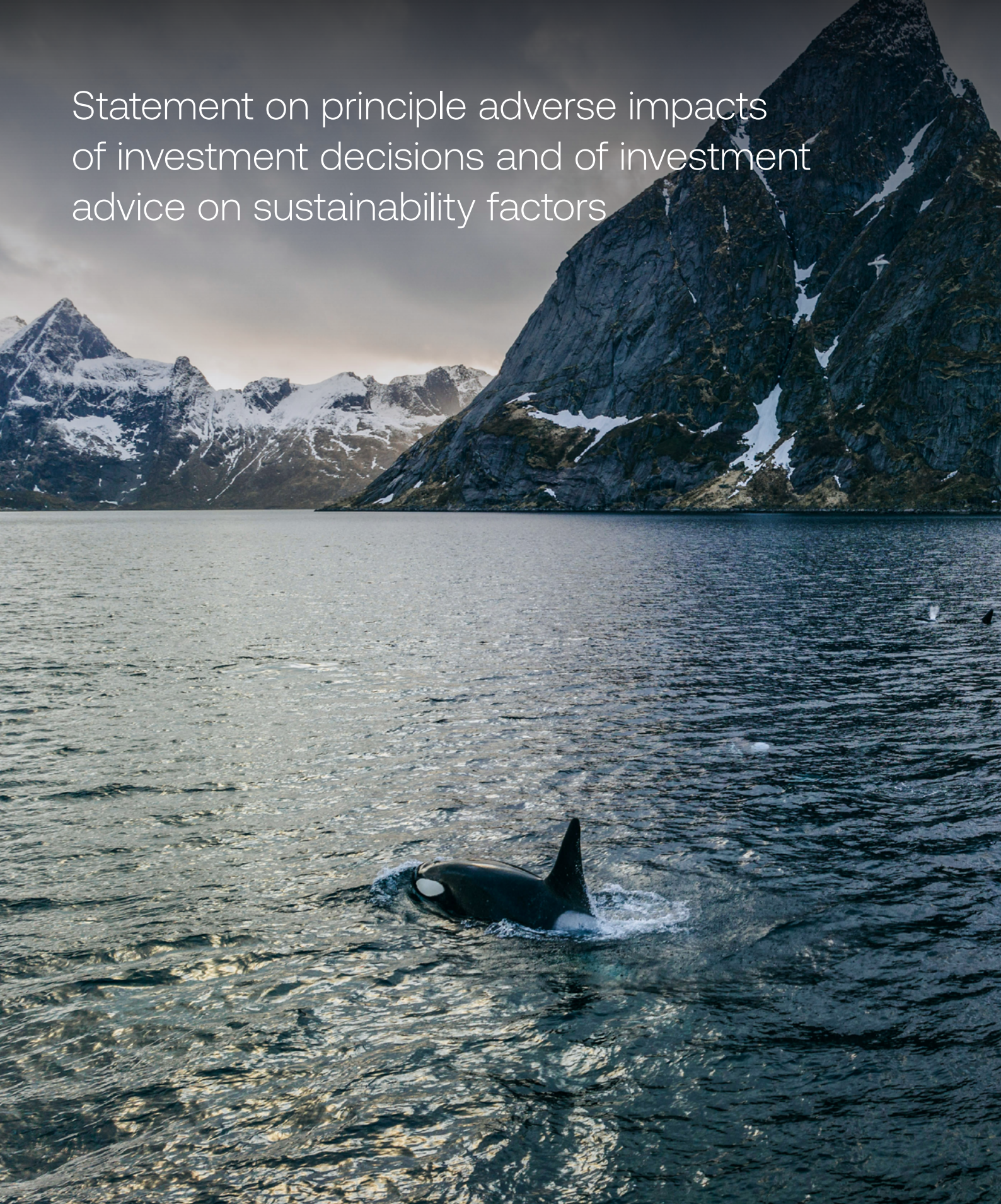


7. Description of the principal adverse impacts of investment advice on sustainability factors

Cardano can provide investment advice to its clients in the context of implementing these clients' ESG investment policies. This advice may involve the exclusion of investments in certain companies or institutions that are not in line with that ESG policy. In this context, information published by financial market participants under the SFDR is not relevant, as the ranking and selection of financial products is not the subject of the investment advice. Advice to exclude a particular company or institution from the investment universe may be based on the screening criteria of the Cardano Sustainable Investment, which includes the PAI, as described in Chapter 3, or on client-specific quantitative indicators.



Statement on principle adverse impacts of investment decisions and of investment advice on sustainability factors



cardano

Cardano | Weena 690, 21st floor, PO Box 19293, 3001 BG Rotterdam The Netherlands
T: +31 (0)10 206 1300 | **E:** info@cardano.com | **W:** [cardano.com](https://www.cardano.com)

Cardano Asset Management N.V. is part of the Cardano Group and statutory seated in Rotterdam
and registered with the Dutch Chamber of Commerce under number 30143634.