cardano

Cardano's Annual Sustainability Report 2021

Sustainability:
It's the right thing to do

December
2021

We are sustainable investors and advisors because it is the right thing to do. It has always been at the core of our culture and how we run our business.

We believe that sustainable investing can contribute to more sustainable capital markets – and a more sustainable world. We focus our resources where we are passionate, knowledgeable and can have an impact.

Contents

Introduction

At Cardano, we are extremely proud of the progress we have made integrating ESG risks and opportunities, and real-world sustainability impact, into our investment processes, our advice and DC. We recognise there is a long road ahead, but we are positive that the foundations we have laid will aid in making a real-world difference. This report provides an overview of what we have implemented and why we are doing it; ultimately because sustainability is the right thing to do.

Firstly, the report looks at net zero. To transition the world economy to net zero by 2050, greenhouse gas emissions need to start declining immediately and steadily every year. Alongside COP26, we disclosed our approach as part of the Net Zero Asset Managers Initiative[1]. We were one of the first 43 investors to do so.

Net zero commits investors (companies and governments) to net zero greenhouse gas emissions by 2050 or sooner, so as to limit global warming to 1.5°C. It is shorthand for the Paris Climate Agreement. It provides a framework through which we will decarbonise our portfolios, and as part of that, we set a 2030 emissions reduction target of 50% based on 2019 emissions. This year, we also measured – and offset – our own firm's emissions.

Next, the report provides an overview of our advisory services. Over 2021 we provided specialist sustainability advice to more than 10% of our client base. We expect this to increase through 2022. To maximise our impact, we work with a range of clients including defined benefit pension schemes, corporates and private equity.

"But net zero portfolios are not the same as net zero economies."

In the articles that follow, we take a look at some of the investment activities that help us reposition our portfolios to be in line with our sustainability commitments. We share our approach to innovative climate change baskets and why we invest in green bonds. We are also pleased to be working closely our colleagues at NOW: Pensions, and Joanne Segars, Chair of Trustees, explains why climate change is at the top of NOW: Pensions' agenda.

But net zero portfolios are not the same as net zero economies. It is clear to us that investment stewardship and engagement is the key lever for creating real-world influence. Earlier in the year we were delighted to be accepted as a signatory to the UK stewardship code by the Financial Reporting Council (FRC). Part of our response was featured in the FRC's report on effective stewardship. Throughout the year, we have conducted many more engagement activities which are also covered in this report.

Another important element is how we work with clients to implement the Taskforce on Climate-related Financial Disclosures (TCFD) reporting, and for our EU clients, Sustainable Finance Disclosure Regulation (SFDR) reporting, ensuring clients are both informed and prepared when it comes to sustainability-related regulatory commitments and disclosures.

Finally, we recently announced an exciting next step for Cardano; the acquisition of ACTIAM (subject to regulatory approval). We delve a little bit deeper into what this means for Cardano but most importantly how this will benefit our clients.

As you will read, we have had an extremely busy and fruitful 2021, and are committed to reaching our sustainability objectives for 2022.

Will Martindale
Group Head of Sustainability
w.martindale@cardano.com
+44 (0)7833 298 736

I am responsible for working across the Cardano Group to accelerate our sustainability objectives.

This includes our stewardship activities as well as our pledge to reach net zero greenhouse gas emissions in our investments by 2050, with a 50% emissions reduction by 2030.

I hope this report provides some insight into our work. If you have comments or questions, please don't hesitate to get in touch.

1 https://www.netzeroassetmanagers.org/net-zero-asset-managers-initiative-signatories-disclose-interim-targets-with-over-a-third-of-assets-managed-in-line-with-net-zero

Targeting Net Zero

To transition the world economy to net zero by 2050, greenhouse gas emissions need to start declining immediately and steadily every year.

Climate change is at the forefront of sustainable investing. This year, the focus has been net zero. We start our report by setting out our approach to net zero.

COP26 took place in Glasgow in November. Pressure was on governments, policy makers and investors to make tangible progress over the year. Although the agreements represent substantial progress, we believe this is still not enough.

What does net zero mean for Cardano and our pension fund clients?

Our commitments are:

- We support the Paris Climate Agreement of limiting global warming to 1.5°C versus preindustrial levels. We are committed to decarbonising our investment portfolios reaching net zero carbon emissions by 2050
- We support global emissions reduction of 50% by 2030, with baseline year 2019. This informs our asset-class decarbonisation targets
- We support the concept of 'fair share' decarbonisation targets. In other words, countries with historically higher emissions (which tend to be developed markets) should decarbonise more rapidly than countries with historically lower emissions (which tend to be emerging markets)
- This is our default position – in our fiduciary management portfolios and in the investment advice we provide

In support of these objectives we signed up as signatories of the recently launched Net Zero Asset Manager's Initiative in early 2021.

"It is very clear that investment stewardship and engagement is the key lever for creating real-world influence."

What does this mean in practice for our investment portfolios?

This is an exciting time to be investing sustainably because the field is developing rapidly. While there are some good frameworks in place, for example the IIGCC's net zero investment framework which we follow, there is still lots to be done. This year we have built firm foundations in terms of clarity of thought for the future and contributed to industry thought leadership in many of these areas.

Our commitment is to invest our client portfolios to support a 'just transition' in the real economy to net zero carbon emissions by 2050. The degree of economic change that we are likely to face will be incredibly disruptive (hence the emphasis on a just transition).

We have two simultaneous objectives and responsibilities:

1) **Financial risk and return**
   Markets are not currently pricing in the 1.5°C scenario world. We believe that there will be an inevitable policy response[2] that will place some of the assets in market indices increasingly "at risk" and in many cases companies will fail to adapt. It is our responsibility to ensure our clients have limited exposure to such risks. The nature of these risks is likely to evolve over time and our portfolios will need to adapt. To do this in equity and credit asset classes we have been researching different ESG tilt indices or ESG methodologies that reduce carbon exposure (as a basic measure of climate policy risk embedded in the index, used in conjunction with more sophisticated forward-looking approaches when weighting individual companies) and these are being added to portfolios incrementally, replacing some of our existing index exposure. In other cases, there may be opportunities to benefit from companies that do well from the transition. Hence the introduction of investments like our climate change baskets into our Beta portfolios. In other asset classes, the relationship between financial risks and return and climate change is less clear cut.

2) **Simultaneously maximising our influence on the real economy**
   The ability to create real-economy influence varies dramatically from one investment to another: In a private equity investment an investor has direct control and influence, in public equity markets investors can exert influence through company engagement and voting, while using derivatives gives economic exposure but confers very limited real-economy influence.

   Since it is not very clear how most investors will achieve influence on the real economy, we have developed a "Theory of Change" model which ranks different investment approaches to help us think through this objective.

   We have also developed a Private Income and Impact Programme. This will be making direct investment to Private Equity and Credit investments which will directly contribute to achieving net zero objectives whether that be through financing new renewable and energy infrastructure or energy efficiency initiatives alongside social impact objectives. Furthermore, this programme will look to directly measure its impact over time. We expect to make our first climate related investments under this programme early in 2022.

2 https://www.unpri.org/inevitable-policy-response/what-is-the-inevitable-policy-response/4787.article

It is very clear that investment stewardship and engagement is the key lever for creating real-world influence. This is a key focus in our manager selection process, ensuring that the third-party managers we appoint are exercising their duty to a sufficiently high level with our net zero objectives in mind. We have frameworks in place and are active in engaging with these managers to continue to drive up their ambitions and standards further, and are pleased to be able to report good progress in this respect. Where possible we are increasingly using physical investments rather than derivatives in order to maximise our real-economy influence.

We are very proud to have been amongst the very few Fiduciary Managers to be recognised as an asset manager signatory of the UK Stewardship Code, a recognition of the strong stewardship and engagement practices we have put into place. Where we have direct exposures (for example to government bonds) we take our duties to engage with issuers very seriously and where indirect we focus our engagement on the asset manager.

We are big believers in collaborative action. For example, we are signatories of, and we are encouraging managers we work with to sign up to, the Climate Action 100+ Initiative[3]. We are also active and contributing to the Institutional Investors Group on Climate Change[4] (IIGCC) as they develop their framework to include Hedge Funds and Derivatives, both areas where we have expertise. We are members of and contributing to several working streams of the Investment Consultants Sustainability Working Group (ICSWG). We have contributed actively to the debate at the Portfolio Carbon Accounting Financials (PCAF) effort around how government bonds should be treated and measured.

How does this tie in to Trustee reporting and objectives?

We hope that clients will join us in our commitment to net zero and the journey path we are on. For fiduciary clients this is the direction we are travelling in, and for advisory and LDI clients we encourage them to align to net zero as a default.

We don't think that setting decarbonisation targets for pension funds is by any means a simple task. In fact, we worry that the industry will have an unhealthy focus on headline carbon footprint numbers to the detriment of achieving real-economy transition. Targeting net zero on a portfolio metric simply for the sake of a portfolio metric does not facilitate real world transformation.

The easiest way to make a portfolio headline "carbon neutral" is to disinvest from carbon intensive regions or businesses. This is not to defend owning such assets which might represent a financial risk, but rather emphasising that we need to be able to find meaningful forward looking approaches to capital allocation that can support more sustainable businesses in these sectors and countries.

We are spending a lot of time developing realistic "decarbonisation pathways" and portfolio frameworks that support setting appropriate portfolio level targets. These need to be set relative to the opportunity set our client is targeting, across asset classes and geographies. To make it even more complex, many defined benefit pension schemes will be changing their asset mix on their journey path as they de-risk over the coming decade if they are successful in closing their funding gaps or – for Dutch pension funds – move to the new pension contract.

To truly make the real-economy change, the focus should be on transitioning over ambitious but realistic timescales based on the nature of the underlying business or country and tracking and holding management and governments accountable to those plans. In 2022, we will finalise how we will measure this alignment across portfolios and a primary focus on ensuring increased alignment over time.

In conclusion

We are excited by what we have achieved in 2021 and Cardano's ability to contribute to this great challenge. We expect change to continue at a rapid pace in the coming years with beta data provision, an improved ability to measure progress and continued developments of our frameworks and industry thought leadership.

Keith Guthrie
Deputy CIO

3 https://www.climateaction100.org/
4 https://www.iigcc.org/

Advisory

Cardano Advisory provides advice and support to trustees and corporate clients looking to understand the interplay between corporate financial strength, sustainability and defined benefit scheme liabilities. Whilst risks to a scheme's investments and liabilities can be mitigated to some extent through diversification, in the UK the employer covenant is generally the largest 'asset' that a scheme has, concentrated in one exposure that cannot be diversified away. It has always been our view that a sustainable company in the long term is a stronger sponsor for all stakeholders.

In this section, we highlight why climate risk is often overlooked even though climate change is going to have a fundamental impact on companies. We also describe how the scenario-focused solution we have developed addresses these risks.

Sustainability advisory services

Making a real-world impact is core to our sustainability efforts at Cardano Advisory. We are proud to have helped clients understand climate risks and, crucially, make plans to avoid them and maximise their opportunities.

Climate risk is often overlooked or oversimplified

Climate change, and the world's response to it, will have a fundamental impact across economies. Most (if not all) companies will likely be exposed to climate-related risk and opportunity in some form.

Despite the imminent risks, the impact of climate change on individual companies is often overlooked by trustees and other stakeholders, alike. This might be due to:

- the complexity of the issue
- a lack of accessible information
- prioritisation of other immediate challenges

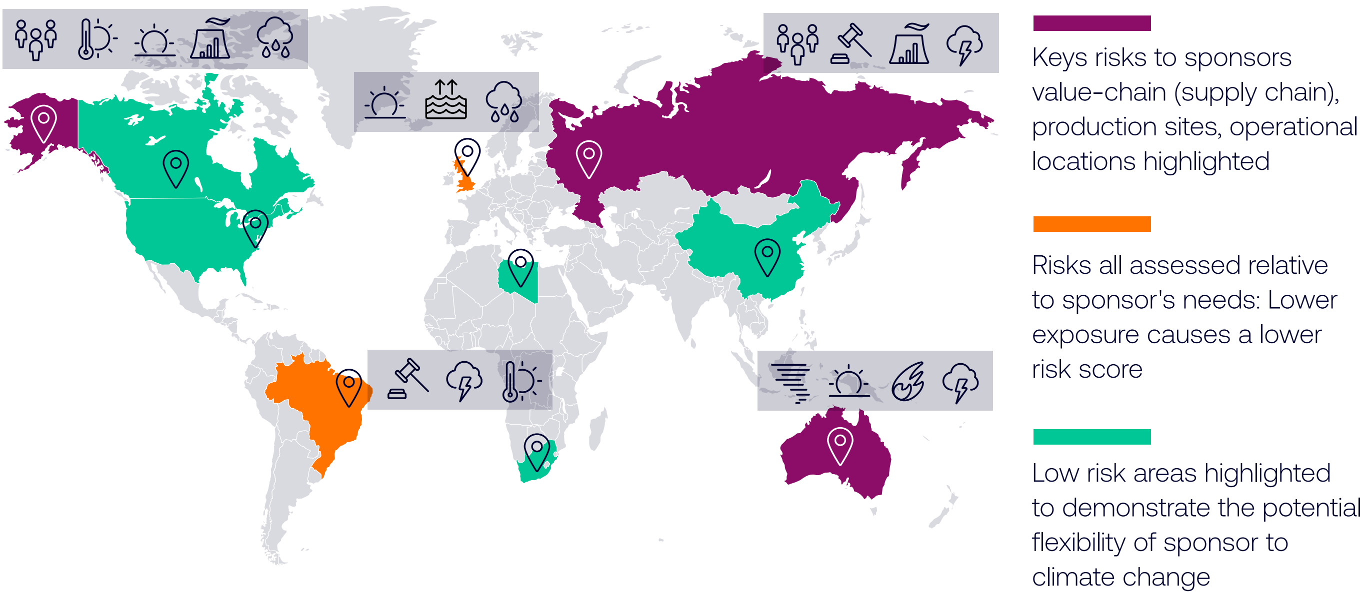
Broad sustainability offering for clients

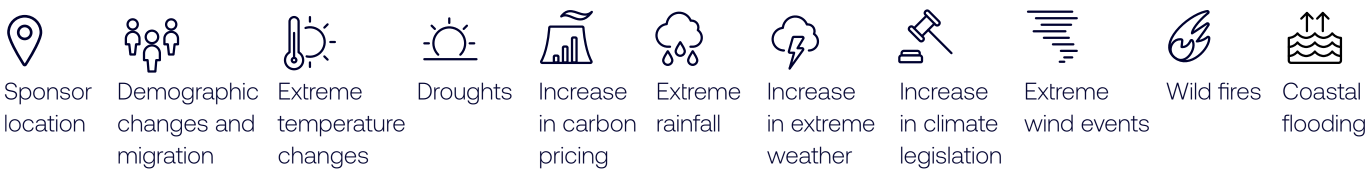
We have worked with leading academics to develop a framework for simplifying and codifying risks to help tackle the key questions:

- What risks could materialise?
- In what climate change scenario are these risks most prominent?
- How will these risks impact on all aspects of the company's value chain?
- When are risks likely to start impacting the company?
- What actions can be taken to mitigate risks and maximise opportunities?

Our award-winning MACCI (Methodology for Analysis Climate Covenant Impact) tool supports our advice with a scenario-focused approach that breaks down the complexity of climate change by drawing on extensive academic literature and leading climate change thinking.

MACCI's analysis can be scaled up or scaled down as required, depending on the level of climate risk exposure or circumstances of the client. Its standard output is a global (or UK-based) heat map, which provides a clear demonstration of transition and physical risks to the value-chain (from supply chain to end customers) by geography and possible impact.





Who this benefits

To maximise our impact we work with a range of clients:

Defined benefit schemes
Identifying risks and opportunities so trustees can plan, report and monitor effectively, influencing the approach of their sponsor directly as they do so

Corporates
Providing sustainability advice to drive strategic decision making around business direction and capital investment, together with support on disclosures

Private equity
Factoring sustainability into the investment process; supporting the ongoing assessment, monitoring and tracking of a portfolio's sustainability over time; and supporting reporting

Over 2021 we provided specialist sustainability advice to more than 10% of our client base, with particularly strong uptake from schemes seeking to report under DWP's TCFD climate reporting framework or where companies operate in highly exposed / carbon intensive industries. As new reporting rules come into place for companies from April 2022 and DWP requirements filter down to smaller schemes, we anticipate sustainability advice will be needed by more than half of our existing clients and many more outside them.

As we support existing and new clients in 2022 with market leading advice (such as our newly developed EARTH model which broadens the Environmental analysis undertaken by MACCI to include Social and Governance risks), we look forward to driving forward the sustainability agenda and real-world impact.

Michael Bushnell
Managing Director,
Cardano Advisory

Ben Wilmot
Director,
Cardano Advisory

Lara Rutty
Associate Director,
Cardano Advisory

Investments: Fiduciary

Sustainable investment is now a widely established and socialised concept within financial markets – both as a financial risk, for example transition and climate-related risks, and an investment imperative, because the way in which we direct capital will support (or hinder) sustainability targets.

In this section, we highlight what, from a fiduciary management perspective we are doing to ensure sustainability is implemented across investment portfolios. We focus on two topics, our climate change baskets and our approach to green, social and sustainable bonds. At Cardano, we have an economically balanced investment philosophy. What this means is that we allocate risk in our portfolio so as to ensure that we hold enough assets not only to benefit from the "good times" but also to protect against poor economic environments (like high inflation, recession or financial crisis). We incorporate sustainability in our approach both from a risk return perspective and real-world sustainability impact.

Climate change baskets

Since the climate transition is a financial risk and an investable opportunity, we identified catalysts earlier this year which allowed us to allocate to this increasingly critical theme.

Our expectation

We expect the already announced levels of fiscal stimulus to only be the start in addressing the climate transition, with far reaching consequences across markets. We wanted an investment that would be a recipient of this stimulus and the substantial subsidies that will be needed to decarbonise the economy. We also think that the preferred status that many of these companies may enjoy relative to companies that are less central to this theme, may result in relative outperformance.

We identified European equities linked to the transition as offering better relative value than the US. Although arguably, the change in policy direction is higher in the US, that view became quickly priced in by markets when Biden won the election. In contrast, we thought that European valuations weren't fully pricing in the EU green deal, especially when it could be justification for sustained fiscal stimulus.

"Avoiding too much concentration in renewables has been an effective strategy in a year where traditional energy has outperformed"

What have we done?

As part of our investment toolkit we can invest in thematic equity baskets through our counterparties. Based on our research, the view was that broadening out the theme from direct renewables exposure to a wider sectoral exposure provided the best risk-adjusted opportunity.

The baskets capture the broad thematic opportunities that will arise from the green deal and the energy transition including: clean energy, sustainable transport, green infrastructure and circular economy. We screened the baskets through our internal ESG tools, which highlighted the higher weights to companies which will capture climate opportunities. Over time, the percentage of revenues that these companies generate that will come from renewables will increase, with the subsidies supporting the substantial capex requirements that this will require – ultimately with the expectation that this will lead to higher returns for investors through earnings upgrades.

Has it worked?

To date the baskets have performed to our expectations and have weathered different macro environments. Avoiding too much concentration in renewables has been an effective strategy in a year where traditional energy has outperformed. We think the medium-term thesis of policy support remains very much intact.

Tom Rivers
Head of Investment Strategy and Portfolio Management

Ross Barr
Portfolio Manager

Green Bonds

For many pension funds across Europe, efforts to invest sustainably have typically started with equity portfolios. This is changing; investors are integrating sustainability in their fixed income portfolios, harnessing the benefits of green, social and sustainable bonds. Due to the sheer size of these portfolios, pension funds must not miss out.

What is a green or sustainable bond?

Sustainable bonds are the same as conventional bonds in terms of financial characteristics: they have a fixed term, fixed notional and a fixed coupon. They are 'pari passu' with other debt, which means that they are not preferred or disadvantaged in an insolvency. The main difference is that the proceeds of sustainable bonds are used for green, social or sustainable purposes, such as a renewable energy project or social housing. The market typically reserves the term "sustainable" for bonds that have both a social and environmental goal.

Do sustainable bonds trade at a premium?

Yes, sustainable bonds can trade at a premium compared to their conventional counterpart. This is caused by the fact that the demand for sustainable bonds is growing faster than the supply. This leads to pressure on price. In the case of green bonds, this premium is referred to as a 'greenium': the difference in yield between a green and a comparable conventional bond.

Increasingly we are comfortable with the premium. First, we consider it a factor in the overall qualitative assessment of the investment. Second, while the supply is growing, demand is growing more quickly, often leading to a widening premium – which benefits an active strategy. A lower greenium is attractive for us as an investor (ceteris paribus), and as such we are allocating capital to investments where demand is not growing as fast relative to supply.

Why should a pension fund invest in sustainable bonds?

Sustainable bonds provide an efficient solution for pension funds looking to hedge interest rate risk across liabilities while investing sustainably. Investing in green bonds (at least those with robust frameworks) ensures that capital is supporting progress towards climate change targets. This is particularly relevant for UK pension funds considering their approach to TCFD target setting. In the EU it is relevant for pension funds that wish to obtain an SFDR article 8 or 9 disclosure.

However, investing in sustainable bonds is not a free ride. Investors must assess and be comfortable with the premium, particularly for investors that hold to maturity. Accessibility and liquidity remains relatively low for buyers and there is no doubt that the sustainable bond market, at least for now, remains a sellers' market. Pension funds should be on the front foot in screening and due diligence to avoid greenwashing.

What next?

Besides investing in sustainable bonds we are continuously trying to engage with borrowers and lenders. We recorded a podcast on green bonds together with development bank and sustainable bond issuer FMO, where we explain the relevance of sustainable bonds[4]. We are also expanding our reporting on sustainability to our clients, increasing transparency often leads to a conversation on sustainability goals. Also, on the borrowing-side we engage with issuers. We are challenging reporting efforts and issuing plans of sustainable issuers. Most recently we have had a discussion with the Dutch State Treasury Agency on their plans and commitment to issue more green bonds.

At Cardano, we have invested in sustainable bonds for some time. We currently have several portfolios that have adopted a guideline where a minimum of sustainable bonds are compulsory. We have a number of investments in GBP and EUR-denominated sustainable bonds, where we like both the investment rationale and the environmental benefits. And there is room for our allocations to grow.

Karin Pasha
Head of Sustainability
NL

Rik Klerkx
Head of LDI
NL

4 https://www.pensions-expert.com/Special-Features/Videos-Podcasts/Understanding-green-and-sustainable-bonds

Investments: DC

NOW: Pensions is the defined contributions arm of the Cardano Group. It is an award-winning UK workplace pension provider committed to sustainable investing. As of the end of 2021, over half of NOW: Pensions investments are in sustainable assets; overall, there were increased allocations to green and social bonds, as well as replacing direct commodity exposure to fossil fuels with base metals.

In this section, we highlight how and why NOW: Pensions are committed to the Paris Climate Agreement and what is being done to reach those objectives and show that investing sustainably can make a difference in the real world.

Climate change is squarely at the top of the agenda

The climate crisis has profound implications for UK savers. Left unchecked, runaway climate change will lead to substantial financial, environmental and social consequences. This is clearly not in our members' best interests – which is why climate change is squarely at the top of our agenda.

Sustainable investment makes sense for savers

We think there are compelling investment reasons to be a sustainability leader. The evidence suggests ESG integration leads to better investment returns (when you adjust for risk) and helps identify new investment opportunities. In other words, investing sustainably makes financial sense for long-term savers.

There's also growing evidence to suggest savers want more sustainable pensions. This year, the pensions minister has introduced climate reporting requirements for pension funds like our NOW: Pensions Trust – which, of course, we welcome.

We also think there are opportunities to show that investing sustainably can make a difference in the real world.

Typically, pension funds understand climate change-related risks and opportunities in three ways.

- First, **weather-related risks** – including rising sea levels, increased flooding, droughts, winds and wildfires. This applies to the companies we invest in and their supply chains.
- Second, **change-related risks** – including changing regulations and policies, along with changes to energy systems, transport, the ways we use cement and steel, and agriculture.
- Finally, **environmental opportunities** – including new technologies, restoring biodiversity and protecting and enhancing natural ecosystems.

We aim do this across all our investments. We've been investing in green, social and sustainable bonds since 2017. In recent months we've significantly increased our holdings of green or low carbon investments – for example, in lower-carbon companies. Our bonds finance a range of environmental projects, from solar and wind energy production to low-carbon transport and residential buildings.

"There is growing evidence to suggest savers want more sustainable pensions."

This doesn't mean we don't invest in energy companies, companies with high carbon footprints, or companies exposed to social issues. We do, but on the basis that we expect their business models can change to be low carbon. As investors we, and our fund investment manager (who acts on our behalf), engage with these companies with the aim of supporting them to transition to a lower-carbon business model. This is called stewardship and is an important part of our strategy.

Finally, a note on collaboration. Collaboration is efficient and effective. It allows us to benefit from external expertise and to contribute our expertise where it is useful and appropriate.

Joanne Segars
Chair of Trustees
NOW: Pensions Trustees Limited

Stewardship

Our stewardship engagement activity is a critical component of our sustainability objectives.

In this section, we outline what we have done with regards to stewardship this year. We start by explaining our approach to manager research. We also engage our counterparties to ensure ESG issues remain at the forefront of their investment decision-making. Finally, we share our approach to public policy engagement.

Manager Research

We help our clients invest in more than 160 managers across most major markets, asset classes (public and private) and geographies. Our approach, therefore, is flexible – to account for different strategies – without compromising on focus, which we believe drives the best outcomes.

We comprehensively assess and integrate ESG issues at every investment stage. And through granular data and regular dialogue with our partners we learn and adapt; striving to constantly improve.

We expect our managers to:

1. **Be aware** of financially material ESG issues associated with an investment
2. **Take ESG issues into account** where they have the potential to materially affect the financial risk and / or return
3. **Engage strategically on ESG issues,** where possible within the portfolio and externally. We expect all managers to exercise voting rights where possible.
4. **Weight substance over form** – we look for genuine integration of ESG issues

Stewardship approach

Our approach to stewardship starts with data. Granular data drives higher quality discussions. Our framework is deliberately detailed and assesses fund managers across four areas: People and policies, investment integration, stewardship and engagement, and reporting.

Engagement

We are passionate about active engagement. We treat managers as partners, feeding back ESG ratings and using these to set specific, time-based milestones for managers to make progress. From there, we are able to engage with managers further to ensure ESG issues remain at the forefront of their investment decision-making. We regularly discuss ESG related topics as part of our ongoing monitoring throughout the year.

ESG Equity

We conducted research into passive managed ESG funds, reviewing:

- all the leading ESG data providers used in ESG index construction
- the spectrum of ESG index solutions available; with a preference for approaches that were broad (addressed E, S, and G issues), and that had strong climate credentials.
- passive index managers' ESG capabilities – conducting multiple deep dives into managers' stewardship abilities paying particular attention to voting behaviours

The completion of this research led to us replacing non-ESG equity index exposure with equity exposure that is now ESG-integrated, and has a 50% lower carbon footprint than before and with higher levels of stewardship and engagement.

Aligning to industry best practice

Principles for Responsible Investment (UN PRI)
We believe that a critical part of improving ESG practices requires improved clarity and standardisation (around terminology but also metrics and reporting).

This is why, this year, we have aligned our strategy specific ESG questionnaires – detailed sets of questions we send to all our managers annually – with the UN PRI's reporting framework. The framework is recognised as the best-in-class industry standard.

We hope this will encourage managers to align to a single, standardised means of reporting, as well as to become UNPRI signatories themselves.

Investment Consultants Sustainability Working Group (ICSWG)
We are an active participants in the ICSWG – a body made up of 17 investment consultant firms to UK asset owners.

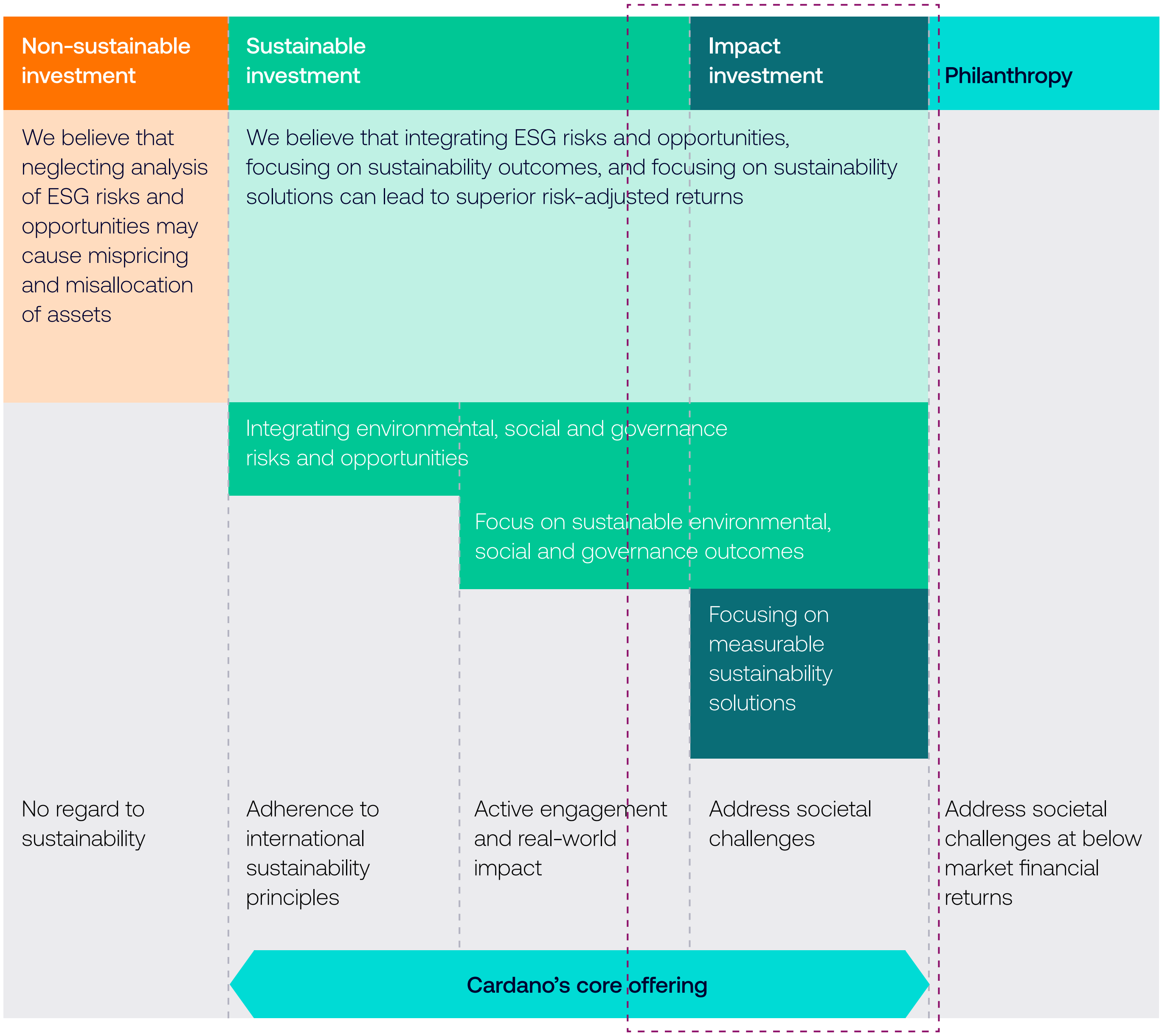
The group published in November 2021 guidance designed to improve the engagement reporting by managers:

- The ESG Metrics for Asset Managers
- The ICSWG Engagement Reporting Guide

Bringing impact to pensions

We incorporate sustainability into every aspect of our investment platform but this year we decided to go even further and bring impact strategies to client's private portfolios.

We have identified private markets as a key area to focus on given our strong track record in allocating to private market strategies for clients and our belief that the increased ability to control investments and the increased duration in these strategies offers one of the best model to drive maximum impact (see chart 1).



What do we mean by impact?

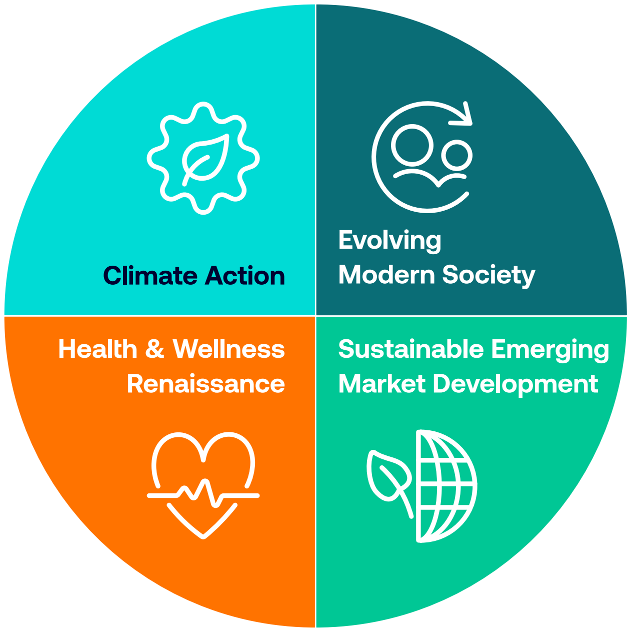
Investing in strategies that:

- Intentionally strive to have positive real-world impact in investment themes;
- Generate a market rate of return; and
- Measure the impact generated

What are Cardano's investment themes?

We have identified certain areas that are important to us a business and our clients – our Sustainability Focus Areas – where we will focus our highest impact investments (see chart 2).

Investment Areas



How we assess impact

We have worked with our Group foundation, Cardano Development (an impact fund incubator), to develop an impact framework that aligns with best practice including the incorporation of the UN Sustainable Development Goals and the Five Dimensions of Impact from the Impact Management Project (an industry framework to assess impact).

Pensions for purpose

We want to ensure that Cardano and our clients remain at the forefront of thinking on sustainability issues. As such, we have this year become a member of **Pensions for Purpose** and endorse the **Impact Investing Principles for Pensions**; namely:

- To set impactful objectives
- Appoint managers with impact integrity
- Manage and review our impact; and
- Use our voice to make change.

Ben Cooper
Manager Research Team

Geordie Cox
Manager Research Team

Tatiana Von Petersdorff
Manager Research Team

Counterparty ESG engagement

To understand a counterparty's ESG risk exposure, the Cardano Dealer Committee (CDC) has developed a framework that screens counterparties for material ESG issues using data provided by different ESG rating agencies.

The CDC monitors the creditworthiness of counterparties and determines an internal rating. A view on counterparties' ESG risk exposure forms an important part of that decision-making process.

Counterparties that score below a threshold on various tests under the framework are subject to further investigation. All other counterparties are deemed to pass the ESG assessment.

Where a counterparty is subject to further investigation, the framework applies a more granular screening process, where the ESG issues under consideration are closely linked to Cardano's sustainability and investment beliefs. Companies that fail this screening process are then subject to an in-depth ESG review.

In-depth ESG review and engagement

The in-depth assessment primarily consists of a detailed review of MSCI ESG reports, together with broader research on the counterparty. Counterparties that remain a concern after this investigation process are placed under 'investigate' status and will enter into active engagement with the CDC.

Where a counterparty that is subject to active engagement is not demonstrating signs of engagement or a willingness to address Cardano's ESG concerns, after a reasonable period of time the counterparty ESG assessment will be deemed to be Poor on the ESG assessment. A poor rating will typically result in a downgrade to the Overall CDC rating by one-notch (green to amber, and amber to red).

In practice

We really take this seriously and have the expectation that our counterparties do too. Through the framework, the CDC has identified and engaged with at least one counterparty to date to address our specific ESG concerns.

Membership Groups

We see collaboration as part of the way we can contribute to a more sustainable financial system. By coalescing around common themes and methodologies, we benefit from external expertise as well as sharing our own expertise too.

This year, we are members of, and have contributed to, a number of sustainability initiatives including:

- Climate Action 100+
- Institutional Investors Group on Climate Change (IIGCC). We participate in the Derivatives and Hedge Funds Working Group (co-chaired by Cardano) and Policy Working Group (co-chaired by Cardano)
- Investment Consultants Sustainability Working Group (ICSWG). We participate in the Steering Committee, Stewardship Working Group, Policy Working Group
- Net Zero Asset Managers Initiative
- Partnership for Carbon Accounting Financials (PCAF).

We participate in the Sovereign Bonds Working Group
- Pensions for Purpose. We joined in November 2021
- Principles for Responsible Investment (UN PRI). We participate in the SDGs Advisory Group, the Legal Framework for Impact Reference Group and the Global Policy Reference Group
- The Diversity Project
- The Green Bond Principles
- UN Global Compact
- Workforce Disclosure Initiative (ShareAction). We joined in November 2021

Paras Shah
Head of Liability
Driven Investment

Ben Wilmot
Director,
Cardano Advisory

Policy

This year, we have responded to 8 public policy consultations, in the UK, EU and US, covering a range of sustainability topics including social risks and opportunities, climate change and stewardship.

We see policy engagement as a natural extension of our sustainability commitments. We recognise the need to improve the sustainability of the market as-a-whole and that there are clear benefits to us and our clients through well-designed and implemented sustainable investment policy reform.

In general, we welcome the direction of policy makers on sustainability topics. Highlights include:

The Department for Work and Pensions (DWP) call for evidence on the consideration of social risks and opportunities.

- In our experience, it is not common practice for pension schemes to have a standalone policy on social issues. This is, perhaps in part, because social risks and opportunities are more difficult to quantify, there is less political urgency; nor is there the same consensus on the problems we're trying to solve.
- This, however, doesn't lessen their importance. We believe the DWP should clarify governance requirements on social risks and opportunities, set out key metrics on social issues, base regulatory requirements on international frameworks, such as the UN Guiding Principles, and for Trustees of DB pension schemes, understand the potential impact of social risks on the employer covenant.

The Financial Conduct Authority (FCA) consultation on enhancing climate-related disclosures by asset managers.

- We believe that the largest asset managers should publish their TCFD report by mid-2022 – as is the case for the largest UK pension funds; there should be a degree of standardisation in metrics and scenarios, to allow for comparability; metrics should be accompanied by narrative-based disclosures (to, for example, provide context to allocations to high carbon assets, where the asset manager is engaging in support of transition plans).

We also responded to industry consultations, for example, PCAF's consultation on how to measure the carbon footprint of sovereigns. We favour weighted average emissions per capita rather than issued debt. Debt levels vary between countries, whereas a ton of carbon dioxide (or other greenhouse gases) affects everyone on the globe, regardless of its origin.

We will continue to respond to public policy consultations relevant to sustainable investment in the UK, Netherlands and Europe, and we will offer our expertise and experience where it is appropriate to do so.

Karin Pasha
Head of Sustainability
NL

Will Martindale
Group Head
of Sustainability

Reporting

In this section, we describe our approach to two regulatory reporting frameworks and how we support clients in their disclosures, whether that is in the Netherlands (SFDR) or the UK (TCFD).

Sustainable Finance Disclosure Regulation in the EU

Green mandates are top of mind

In March 2021 the Sustainable Finance Disclosure Regulation (SFDR) came into force. This imposes mandatory ESG disclosure obligations for our client portfolios. As such, all financial products must be classified as compliant for:

- Article 6: integrate ESG issues (for risk management purposes) in the investment process
- Article 8: promote, among other characteristics, environmental and/or social characteristics
- Article 9: having a sustainable objective

Article 8 is the most suitable option for our EU clients given that the main objective of an LDI mandate is to hedge liabilities (and not sustainable objectives).

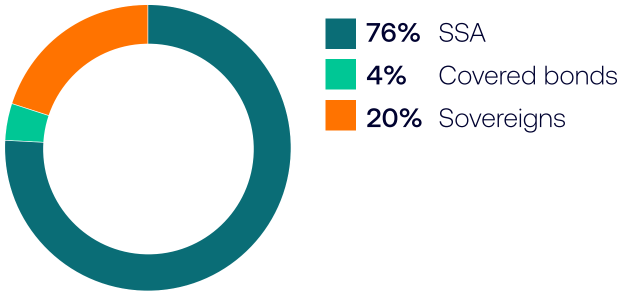
Article 8 - LDI

We are working really closely with our clients to ensure they achieve an article 8 classification. This can be done in many ways, but the way we approach this is:

- Minimum and/or target allocation to green, social and sustainable bonds, and/or
- Declare that in case the risk/return characteristics are comparable, the client prefers a green, social or sustainable bond over a 'neutral' bond.

If clients choose not to have a minimum allocation, we require them to add bonds issued by Supranational institutions, Sub-Sovereign institutions and government Agencies (SSA) to the allowed instruments. This category is the main issuer of sustainable bonds (approx. 75%, see chart 3). In this way a target allocation to sustainable bonds is achievable and most importantly, meaningful. If a client does not comply with these requirements, the portfolio will fall under the article 6 classification. In that case, the reporting on sustainability of the portfolio is not needed.

Chart 3 - Outstanding sustainable bonds by issuer type - suitable for Liability driven investments



What needs to be done for a mandate to be article 8 compliant?

- We include the promoting elements in the mandate guidelines
- We include the required SFDR disclosure annex to the mandate
- We will start SFDR reporting well before the implementation deadline

As of the end of November, we invested 7% of our LDI assets in green, social and sustainable bonds. A quarter of our mandates is either already meeting article 8 or in the process of moving towards it.

Karin Pasha
Head of Sustainability
NL

Gijs Vereijken
Portfolio Manager

Taskforce on Climate-related Financial Disclosures

We have been working on the building blocks of Taskforce on Climate-related Financial Disclosures (TCFD) reporting to ensure all our clients are both informed of their regulatory commitments and well-prepared to submit their TCFD report.

What were the milestones?

ESG Data Provider

In 2020, we employed the services of MSCI to become our ESG data provider. Their tool allows us to input a client's portfolio and produce analysis on a large array of ESG metrics, including all those relevant to TCFD reporting.

Portfolio Data Collection

MSCI's tool requires portfolios to be uploaded at the constituent level, listing the weights and holdings within each investment. This triggered a large project internally and over the course of 2021, we went through an exercise of collecting all the underlying data for the client portfolios we manage. We engaged with managers to gather their portfolio holdings and created a tool which allows us to input all weights and constituents for a chosen portfolio.

Scenario Analysis

It is a regulatory requirement of TCFD reporting to include at least two scenarios for carbon equivalent analysis. Cardano agreed on three scenarios:

- Paris-aligned transition (1.5 °C) – Main goal
- Late transition (2.0 °C) – this is a forecast of what Cardano think will happen
- Hot-house scenario (3.0 °C) – what we need to prepare for; we are currently on track for this according to the UN

TCFD report

We have helped our clients understand what is necessary for a TCFD report, including all the "must haves" and "should haves" set out by The Pensions Regulator.

Private markets

Many asset classes are a challenge for TCFD reporting and there is limited guidance on how each should be treated. For private markets, we have opted to use a proxy where the data does not yet exist, to ensure we are capturing the most realistic estimates in an area where data can be scarce.

Chart 4 - Core elements of recommended climate-related financial disclosures. Source TCFD

Governance
The organisation's governance around climate-related risks and opportunities

Strategy
The actual and potential impacts of climate-related risks and opportunities on the organisation's businesses, strategy and financial planning

Risk management
The processes used by the organisation to identify, assess and manage climate-related risks

Metrics and targets
The metrics and targets used to assess and manage relevant climate-related risks and opportunities

Helen Prior
Client Director

Georgia Harsham
Client Solutions Analyst

Looking ahead

A lot done, more to do

“A lot done, more to do” is an over-used phrase, but it’s probably the fairest way to characterise our sustainability efforts at Cardano.

On the one hand, we’re proud of the progress we’ve made this year, and I would like to take a moment to congratulate the more than 30 sustainability champions across Cardano that have contributed to our sustainability programme.

On the other hand, emissions are still rising, and markets are still financing new fossil fuels and more deforestation. While that’s the case, 1.5°C is not possible. The climate crisis is the biggest challenge the global economy faces. And so, there’s much more to do.

Our acquisition of ACTIAM

To achieve the necessary scale and specialisation, in October 2021 we announced that we’re acquiring ACTIAM, the pioneering Dutch sustainable and impact investor, managing more than €21 billion. ACTIAM has long prioritised real-world sustainability impact and has a long – award winning – track record in global sustainable and impact investing as well as ESG services.

ACTIAM measures and reports different sustainability and impact KPI’s, including carbon and water footprint as well as the exposure to the Sustainable Development Goals (SDGs).

Furthermore, it has most recently won the ‘ESG Engagement Initiative of the Year’ award for its satellite image-based engagement programme in the fight against deforestation (Innovation award for ACTIAM’s engagement programme against deforestation – ACTIAM).

The acquisition will enhance Cardano’s sustainability and impact investment offering and broaden our ESG advisory capabilities.

Sustainability is more than climate change

Although climate change is front and centre for most investors, as we look ahead to 2022, we need to keep in mind that sustainability is a much broader area.

We will continue our involvement in the IIGCC derivates and hedge fund working group, further develop our sustainability theory of change, roll-out our Cardano Advisory EARTH risk model, continue our public policy engagement through the IIGCC policy advisory group and the PRI global policy group. We will continue to learn from – and contribute to – the Net Zero Asset Managers initiative, Pensions for Purpose, the Partnership for Carbon Accounting Financials and the Partnership for Biodiversity Accounting Financials.

We are also in the process of appointing a stewardship and engagement provider.

"We are sustainable investors because it is the right thing to do."

In conclusion

Our sustainability efforts will continue apace, because, as the title of this report indicates, it is the right thing to do.

We started Cardano because we believe that people deserved better pensions. Sustainable investment is central to our investment offer; it is right for our business, our society and our world. We are sustainable investors because it is the right thing to do.

Further reading:
Sustainable investment beliefs
Sustainable investment policy
UK stewardship code submission
Climate crisis action plan
Inequality
COP26 briefing
Our ESG partnership with Pensions Expert

Kerrin Rosenberg
CEO, Cardano Investment

Appendix

What we have achieved this year

January

- Joined the IIGCC
- Published our ESG expectations for managers and aligned our manager research ESG questionnaire with the PRI reporting framework
- Committed to net zero
- Commented on US SEC ESG disclosure
- Published our sustainable investment policy
- Submitted our annual reporting to the UN PRI reporting and assessment framework
- Agreed green bond framework and counterparty ESG framework
- Used MACCI to advise exposed industries

March

April

- Invested in climate change baskets in derivative form
- Responded to UK and EU policy consultations
- Invested in physical ESG focus low carbon screened index
- Committed to global emissions reduction target of 50% by 2030

June

July

- Supported UK clients with TCFD preparations and Dutch clients in their Article 8 disclosures
- MACCI won innovation award at Pensions Age awards
- Wrote to all counterparties on our sustainability expectations
- Successfully signed the UK Stewardship code
- Signed the Net Zero Investment Consultants Initiative
- Allocated to green, social and sustainable bonds including green gilt

September

October

- Hosted COP26 briefing event
- Attended COP26
- Increased our allocation in sustainable low carbon equity
- Co-chairs of a number of IIGCC's working groups, PRI working groups and have joined Workforce Disclosure Initiative and Pensions for Purpose
- Extended our climate change advisory to life insurers to support buyout process. And also extended to include broader environmental and social risks

December

External experts

We have been very fortunate to have had a number of external speakers join us throughout the year to share their expertise on a variety of sustainability topics:

Celebration of Black History Month
by **Mike Wariebi**, Lazard Asset Management

Climate Metrics and Targets
by **Daisy Streatfeild**, IIGCC

COP26
by **Meryam Omi**, COP Champions, and **Nathan Fabian**, PRI

Human Rights
by **Alison Biscoe**, Centre for Sport and Human Rights

Impact measurement and BIX Capital
by **Jeroen Blüm**, Cardano Development

Overview of Social Issues
by **Simon Rawson**, ShareAction

Sustainable Energy Transition Investing
by **Sebastiaan Masselink**, ACTIAM

The Climate Crisis
by **Dr Robin Lamboll**, Grantham Institute

The Importance of Pride, Role Models and Allies
by **Matt Cameron**, LGBT Great

The Truth About Modern Slavery
by **Emily Kenway**

The Value of Nature
by **Gemma James**, PRI

UN Guiding Principles on Business and Human Rights
by **Nikolaj Halkjaer Pedersen**, PRI

Why Diversity Matters
by **Dr. Funke Abimbola**

We would like to thank all our guests for sharing their knowledge.

Karin Pasha

cardano

Cardano
9th Floor
6 Bevis Marks
London
EC3A 7BA

T: +44 (0)20 3170 5910
E: enquiries@cardanoadvisory.co.uk