



PANTHEON

Pantheon Infrastructure

Our approach to climate
change analysis in investing

December 2022



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Introduction

At Pantheon, we have been providing ESG reporting to clients since 2012, undertaking our own fund manager ESG analysis since 2015, and incorporating climate change risk questions into our investment due diligence for primary fund investments since 2018.

As part of our commitment to the 'E' of ESG, we believe that investors need clear and comprehensive information on the potential effects of climate change on investments. This includes understanding the implications of rising temperatures and climate-related policy.

In order to improve and increase reporting on climate-related financial information, the Financial Stability Board (FSB) – an international body formed by the G20 that monitors and makes recommendations about the global financial system – established the Task Force on Climate-related Financial Disclosures (TCFD). This was driven by concerns that the risks associated with the transition to a low-carbon economy were being mispriced by market participants¹.

Pantheon is supportive of this endeavour and for the past three years has been working with a global sustainability-focused consultancy on climate change risk analysis. This analysis has initially been conducted across Infrastructure and Real Assets portfolios, given the assets' physical nature and particularly long investment horizons.

This assessment has been undertaken at a regional and sector level to highlight key climate-related risks and opportunities across the portfolio. The analysis was not intended to comprehensively assess individual companies within each sector and therefore does not provide an assessment of absolute levels of risk/ opportunity present across Pantheon's portfolio. Each company may be exposed to different levels of risk and opportunity based upon its individual operations, supply chains and market exposures. Similarly, management teams for each company could employ different strategies to mitigate risk and seize opportunities.

What this document provides

1

An easy-to-digest overview of the climate change analysis that has been conducted and the reasoning behind it

2

An overview of:

The risks and opportunities presented by the transition to a low carbon economy

The physical risks associated with global warming of 4°C by 2100

3

Potential implications for investment sectors and geographies and what this could mean for investors

4

An overview of our planned next steps in areas such as greenhouse gas (GHG) emissions analysis, refining our integration of climate risk within due diligence; and Pantheon's plans to publish our TCFD report

Note: an investment's ESG profile and risk is only one of a number of factors Pantheon considers when evaluating managers and investments, and such ESG considerations are not solely determinative of any selection of a manager or investment.

An overview of TCFD

At the heart of the goals of the TCFD is the need for more information to facilitate and promote more informed business and investment decisions. TCFD therefore calls on companies to a) measure, b) respond to, and c) disclose their exposure to climate-related financial risks and opportunities¹.

TCFD launched its recommendations in June 2017, centred around the four pillars of: 1) Governance, 2) Strategy, 3) Risk Management, and 4) Metrics & Targets. The disclosures were voluntary at launch and remain so in many countries¹, but an increasing number of governments are announcing timelines for TCFD-aligned climate-related financial disclosures to become mandatory, with New Zealand the first to take this step in 2020². The UK has also been at the forefront, becoming the first G20 country to make it mandatory for businesses with over 500 employees³ to disclose their climate-related risks and opportunities, which became applicable from April 2022⁴. This

is part of the UK Government's goal to introduce TCFD-aligned disclosures across the whole economy by 2025⁵.

Why it is relevant to Pantheon

We believe the disclosures are a step in the right direction to improve the flow of climate-related financial information. We therefore made the decision to engage global sustainability-focused consultancy ERM in 2019 to better understand climate change-related risks and opportunities. Additionally, we became a signatory of the TCFD.

From a regulatory perspective, in the UK, the Financial Conduct Authority (FCA) has introduced a range of deadlines for different sizes and types of firms to present TCFD-compliant disclosures. For asset managers such as Pantheon, there will be mandatory disclosures for calendar year 2023, due by mid-year 2024.

Climate change analysis

In the first instance, we have conducted the analysis for our Infrastructure and Real Assets portfolios. Our objectives were to:

- 1 Better understand the investment implications of the transition to a low carbon environment and how different sectors are likely to be impacted in the future
- 2 Gain an understanding of the investment risks associated with climate change, including the potential impact of the changing intensity and/or frequency of physical climate events
- 3 Assess how investments across current portfolios are likely to be affected by climate-related risks and the potential implications for future strategy

We believe that Infrastructure and Real Assets is a natural place to start in this process given the physical nature of the assets, the essential role of many of the types of assets typically invested in, such as utilities, and the long-term investment horizons – where assets can have multi-decade expected

life spans. In addition, infrastructure is expected to play a central role in the transition to a low carbon economy. The IEA estimates that the majority (~70%) of clean energy investment will need to come from financiers, rather than government funding⁶, highlighting the key role that private capital has to play.

Understanding the investment risks and opportunities

The transition over time to a low carbon economy presents investors with potential opportunities as capital allocators, but also poses an array of risks.

These are split into two categories:



TRANSITION OPPORTUNITIES AND RISKS

- ▶ The potential positive and negative investment implications resulting from the transition to a lower carbon economy driven, for example, by shifting consumer demands or new climate change regulations



PHYSICAL RISKS

- ▶ Risks due to more frequent and/or intense physical climate events, both chronic (e.g. rising sea levels) or acute (e.g. cyclone activity), assuming GHG emissions continue on their current trajectory

Transition opportunities and risks

The analysis considers factors which categorize the effect of the shift to a low carbon economy. These notably include:

- ▶ New regulations which may fundamentally impact industries, such as transport which accounts for 31.5% of UK emissions⁷ and the UK government's ban on the sale of new petrol and diesel cars beyond 2030⁸
- ▶ Changing consumer demand, such as the shift to electric vehicles⁹, and
- ▶ Changes in carbon pricing and the scope of its mechanisms, which could see greater cost parity between fossil fuels and more expensive renewable fuel types¹⁰.

Scenarios and assumptions

When looking at the possible scenarios that may evolve from action on climate change, the transition analysis makes a set of assumptions based around the shift from the "base case" to a "low carbon" scenario. These assumptions are mostly derived from the International Energy Agency's World Energy Outlook, which is widely recognized. The assumptions are outlined below:

1. "Base case" scenario assumptions¹¹:

- ▶ Approximate global warming of 2.6 °C by 2100, relative to pre-industrial levels
- ▶ Does not meet the aims of the Paris Agreement to limit temperature rises to 2°C and ideally to 1.5 °C¹²
- ▶ Policy commitments do not pursue decarbonisation beyond those already enacted

2. "Low carbon" scenario assumptions¹³:

- ▶ This is the "well below 2 °C" of global warming by 2100 compared to pre-industrial levels scenario
- ▶ Achieves the aims of the Paris agreement
- ▶ Markets favour low carbon goods and services
- ▶ Policies develop further to constrain fossil fuel demand

By working with two scenarios, we measure how various factors could be impacted under each set of circumstances. We can then calculate the difference between datapoints in each scenario to understand how key variables may be affected by the transition in the future. This is central to the analysis and understanding the likely investment implications.

Time periods and regions

Three time periods are covered to assess the short, medium and long term climate-related potential risks and opportunities, in alignment with the TCFD recommendations. The periods are 2025, 2030 and 2040 for transition opportunities and risks, with the latter two time frames applicable for physical risks, given their longer-term nature. The analysis is conducted across three different regions to understand how sectors may be impacted differently around the world. The geographies covered are North America, the European Union and Australia & New Zealand.

There are three key stages to the analysis:

STEP 1 | Selecting the most appropriate key variables for infrastructure and real assets



Key variables selected:

Digital	Waste	Fossil /commodity	Carbon	Transport	Renewables
Number of connected devices	Plastic recycling rates	Natural gas demand	CO2 emissions per capita	Passenger and freight rail	Bioenergy generation
		Petrochemical feedstock demand	CO2 price	Shipping fuel emissions	Wind/solar generation
		Exotic metals demand	Building CO2 intensity	Passenger road Km travelled	Hydro generation
		Healthcare sector emissions	Aviation emissions	Geothermal capacity addition	
			Road freight tonne km	Battery cost	
			Oil share of transport demand	Energy intensity of GDP	
			Electricity share of total consumption		

The International Energy Agency has produced a list of 36 variables that are key to the transition to a low-carbon path. From this list, we have selected the variables that we deem most relevant to infrastructure and real assets, which total 22.

Sectors covered:

Sector Groupings	Sectors							
Transportation	Airports	Rail	Ports	Roads	Aviation	Parking	Bus networks	Logistics
Renewable energy	Biomass	Energy storage (sustainable)	Hydropower	Energy from waste	Geothermal	EV charging stations		
Utilities	Transmission & distribution	Gas	Energy efficiency	Water	Utilities services	District heating and cooling		
Communications	Towers	Fiber	Datacenters	Submarine cables	Telecomm services			
Healthcare	Care homes	Healthcare services	Hospitals					
Power	Natural gas	Solar	Wind					
Energy	Midstream energy	Upstream energy						
Oil & gas	Midstream gas	Midstream oil						
Logistics/leasing	Cold storage							
Education services	Schools							
Waste	Waste management							
Real Estate	Student accommodation							
Natural resources	Timber							

For each of the 40 sectors analysed, the indicators are given a weighting in accordance with their relevance to each sector. This is based on their potential to drive potential risk and opportunity specific to each different sector.

These weightings range from -1.00 (potential risk) to 1.00 (potential opportunity). The 40 sectors, which are grouped under 13 broader sector groupings, are shown on the left.

STEP 2



Measuring how the key variables could be impacted by the transition

To understand how the risk and opportunity set for each sector may evolve through the transition, we measure how each key variable is likely to be impacted.

Using a range of climate change scenario datasets, the difference in the value of each key variable between the two different scenarios (low carbon vs. base case) is calculated. This is repeated for each of the three future time periods (2025, 2030 and 2040).

STEP 3



Averaging scores for each sector

Once the scores for each variable are calculated for the three time periods, the future risk/opportunity score is produced. Scores for the variables relevant to each sector are averaged to give an overall transition risk and opportunity rating for the 40 different sectors for the three time periods.

This is calculated as: *relevance weighting x difference in key variable's future value*

Sector examples

AIRPORTS

An important variable for the Airport sector is the CO2 price. We are likely to see continued growth in CO2 pricing, which could add significant cost to air travel where alternative fuels are not utilised. This represents an increased long-term risk and results in a sizeable difference between the value of the CO2 price variable in the base case vs. the low carbon scenario in a future time period. The higher the difference in the value between the two scenarios, the more the key variable is likely to be impacted by the transition, which feeds through to the sector's future scores. In terms of market dynamics, while we are seeing strong demand currently, consumers' appetite for air travel could decrease in the medium to long term as awareness of sustainability increases and carbon pricing drives up the cost of travel.



EV CHARGING STATIONS

There is potential for the electric vehicle charging station sector to have strong opportunities associated with certain key variables, such as a decrease in oil's share of transport demand from the replacement of petrol and diesel cars with electric vehicles⁹. However, there are risks associated with the sector, such as the possibility of greater price volatility of exotic metals used in production which may result if demand continues to rise. Overall, the sector's transition opportunity/risk rating is weighted significantly towards opportunities.



Physical risks

The second part of the analysis focuses on understanding the **physical risks** associated with global warming of 4°C by 2100. This covers both the risk to a sector's operations and the overall risk to the market in which it operates. The time periods considered are 2030 (medium term) and 2040 (long term).

It incorporates "acute" factors such as the frequency and severity of extreme weather events and "chronic" changes such as rising sea levels. Physical risks include the impact on a sector's operational assets, supply chain, and the influence on market demand for the sector.

Methodology overview:

STEP 1 | Projected change in risk for operations



An exposure weighting between 0 and 1 is assigned to each sector, considering the inherent vulnerability of its operations and supply chain, for each of the event types below.

Climate event types

Drought and water stress	Cyclones	Storms	Extreme heat	Extreme cold	Flooding	Coastal and sea level rise	Wildfires
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Climate data is used that best represents the presence and severity of each climate event under current and future conditions to understand the changing level of risk¹⁴.

This is then combined with the exposure weightings (0 to 1) to provide an overall risk score, depending on if the climate trend suggests the event frequency and/or whether the intensity is increasing or decreasing.

STEP 2 | Projected occurrence of risk and opportunities for the market



The existing market risks and opportunities are first assessed based on whether they are relevant to the sector. This is considered in the context of each sector's market, and whether physical climate events potentially create market risk or opportunity. It does not estimate the level of said risks/opportunities or differentiate between time horizons.

Sector examples

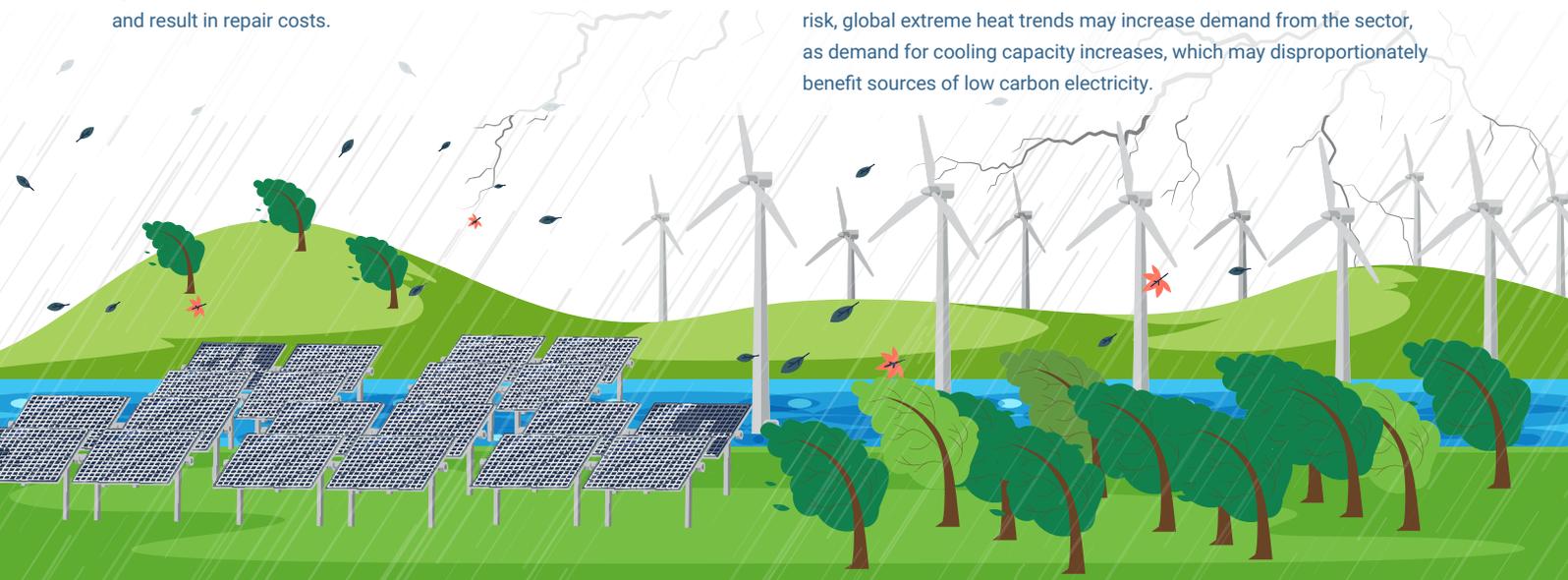
Given the physical nature of infrastructure assets, most sectors are exposed to some degree of physical risk, which emerges either by 2030 or, in some cases, by 2040. It is not as clear cut as some sectors being at high risk and some not, as a sector's physical risk associated with its operations may differ significantly to the physical risk to the market. Location also plays a prominent role in physical risk level.

SOLAR

Solar is a good example. The sector is expected to be less at risk from extreme heat or drought and water stress. However, it is exposed to cyclones, storms and wildfires, which can cause damage to the assets and result in repair costs.

WIND

The most significant physical risk for the wind power generation sector is expected to be from cyclones and storms, given their potential to damage assets and affect site personnel working outdoors. In terms of market risk, global extreme heat trends may increase demand from the sector, as demand for cooling capacity increases, which may disproportionately benefit sources of low carbon electricity.



Climate Portfolio Screen Results

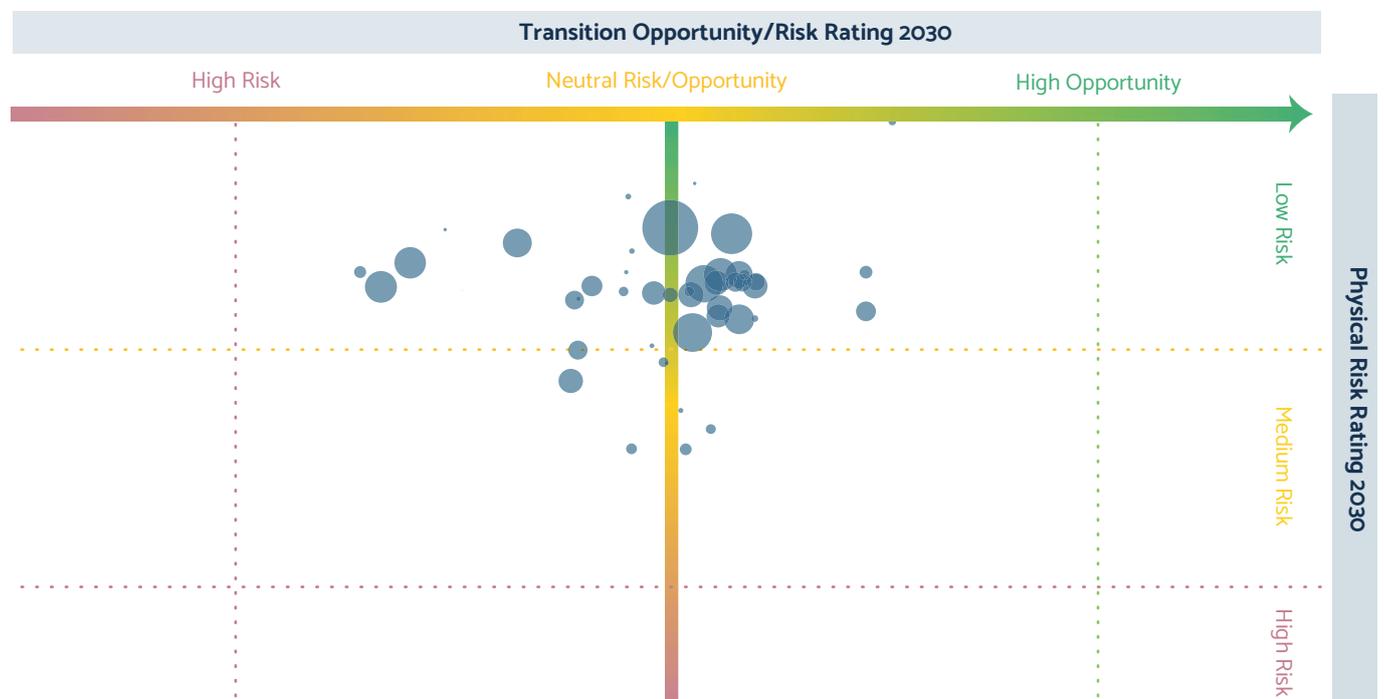
The results of the two types of analysis (transition opportunities & risks and physical risk) are shown in heat maps to visually present sectors' exposures over the different time periods.

Below, we share the findings from a sample infrastructure portfolio¹⁵, which is generally similar to the results from other Pantheon-managed infrastructure portfolios.

The heat map charts can be interpreted as follows:

- ▶ Transition opportunities/risks are plotted on the X axis, with overall physical risk ratings on the y axis.
- ▶ Each bubble represents a sector, with the size of the bubble corresponding to the level of NAV within a sample portfolio.

Sample portfolio heatmap: 2030



Source: Pantheon

Results

Transition risk / opportunity

In the medium term, most sectors are assessed to have a neutral exposure to transition risks / opportunities. However, select sectors are expected to start observing low or moderate risks or opportunities. As shown on the next page, sectors with the potential to be exposed to medium-term transition risks include Ports, Airports, Aviation, and Midstream Oil, while Solar and Energy Efficiency are expected to be the first to take advantage of transition opportunities¹⁶.

Physical risk / opportunity

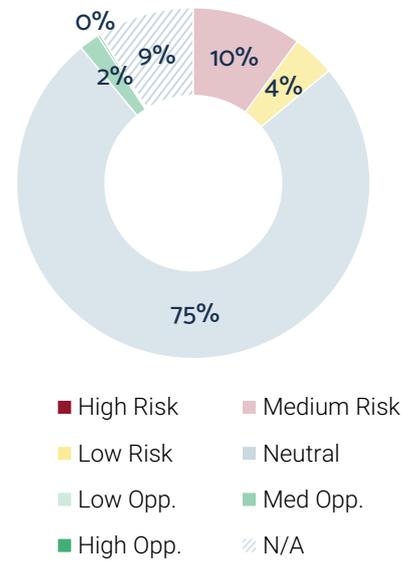
In the medium term, physical risk is expected to remain low for most sectors. However, there are select sectors which may see medium levels of physical risk by 2030, including some Utilities (Water, Energy from Waste), Renewables (Hydro), and Student Accommodation. While it is expected that the overall level of physical risk remains low for most sectors, there are certain physical risks that may present higher risks to a large share of assets by 2030, namely storms / cyclones.

Sector Level Risk Exposure in 2030

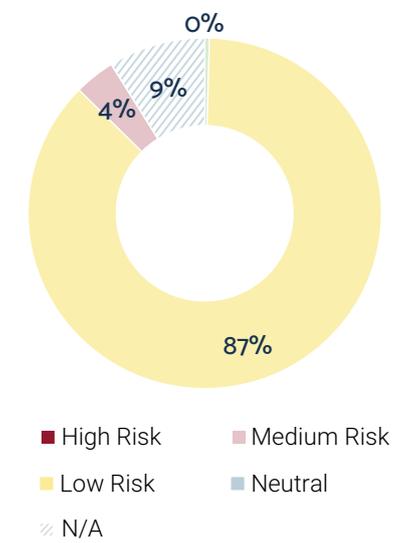
Infrastructure Sector	Transition	Physical	NAV (USDm)	Exposure (%)
Fiber	Neutral	Low Risk	412.9	20%
Rail	Neutral	Low Risk	141.9	7%
Datacenters	Neutral	Low Risk	135.8	7%
Utilities Services	Neutral	Low Risk	132.2	6%
Airports	Med Risk	Low Risk	117.7	6%
Transmission & Distribution	Neutral	Low Risk	105.5	5%
Telecommunication Services	Neutral	Low Risk	93	4%
Midstream Oil	Med Risk	Low Risk	98.3	4%
Ports	Low Risk	Low Risk	80.9	4%
Wind	Neutral	Low Risk	69.3	3%
Electricity (Natural Gas)	Neutral	Low Risk	56.1	3%
Energy From Waste	Neutral	Medium Risk	53.2	3%
Waste Management	Neutral	Low Risk	52.8	3%
Gas	Neutral	Low Risk	50.1	2%
Bus Network	Neutral	Low Risk	48	2%
Biomass	Neutral	Low Risk	47	2%
District Heating And Cooling	Neutral	Low Risk	46.8	2%
Towers	Neutral	Low Risk	43.5	2%
Solar	Low Opp.	Low Risk	38.5	2%
Midstream Gas	Neutral	Low Risk	32.8	2%
Student Accommodation	Neutral	Medium Risk	11.8	1%
Water	Neutral	Medium Risk	9.9	0%
Energy Efficiency	Med Opp.	Neutral	4.9	0%
Parking	Neutral	Neutral	3	0%
Submarine Cables	Neutral	Low Risk	2.6	0%
Hydro	Neutral	Medium Risk	2.2	0%
Healthcare Services	Neutral	Low Risk	2	0%
Aviation	Med Risk	Low Risk	1.1	0%
Energy Storage	Neutral	Neutral	1.1	0%
Roads	Neutral	Low Risk	0.2	0%
Not Covered	N/A	N/A	183.3	9%
Portfolio's overall NAV Weighted Transition Risk Rating 2030	Neutral			

Source: Pantheon

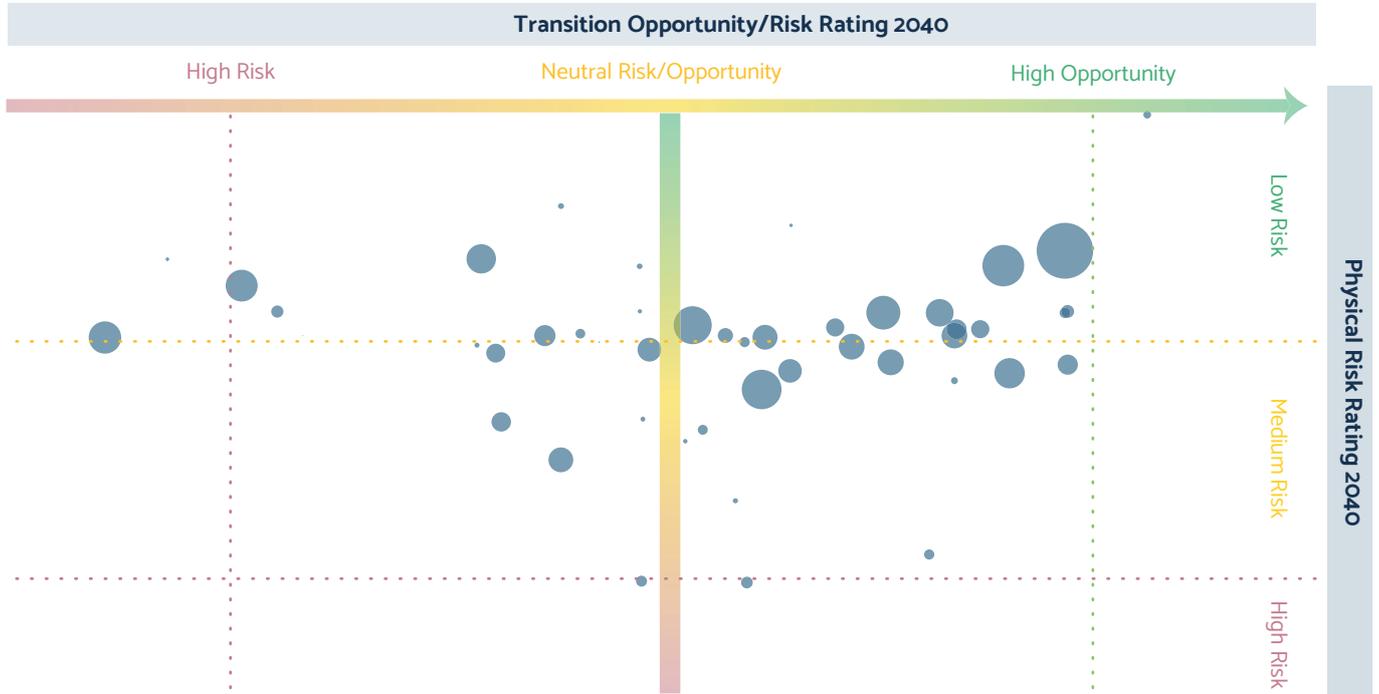
Transition Risk



Physical Risk



Sample portfolio heatmap: 2040



Source: Pantheon

Results

Transition risk / opportunity

In the long term, infrastructure portfolios can expect to see a much wider distribution of transition risk / opportunities. Sectors that saw earlier risks, such as Aviation, are generally expected to see those risk levels continue to rise, while sectors that saw early opportunities (e.g. Energy Efficiency) may see a further increase in opportunity. Some sectors that were previously neutral are expected to tilt towards low risk (such as Gas Utilities) or low / medium opportunities (mainly Renewable and Digital Infrastructure sectors).

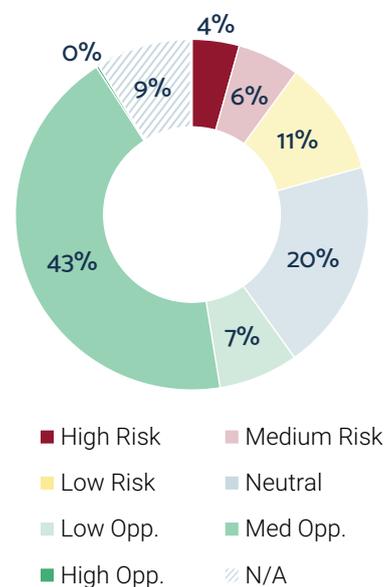
Physical risk / opportunity

In the long term, a greater share of sectors may become exposed to a medium level of physical risk, albeit the majority of sectors are expected to remain in the low-risk category. Sectors shifting into the medium risk segment includes those with net transition risks, such as Energy from Waste, but also those with net transition opportunities, such as Datacenters.

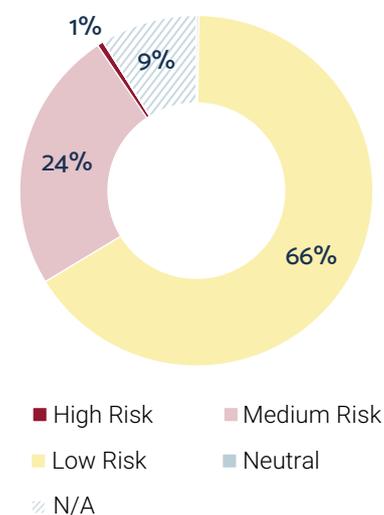
Sector Level Risk Exposure in 2040

Infrastructure Sector	Transition	Physical	NAV (USDm)	Exposure (%)
Fiber	Med Opp.	Low Risk	412.9	20%
Rail	Neutral	Low Risk	141.9	7%
Datacenters	Med Opp.	Medium Risk	135.8	7%
Utilities Services	Neutral	Medium Risk	132.2	6%
Airports	Med Risk	Low Risk	117.7	6%
Transmission & Distribution	Med Opp.	Low Risk	105.5	5%
Telecommunication Services	Med Opp.	Low Risk	93	4%
Midstream Oil	High Risk	Low Risk	98.3	4%
Ports	Low Risk	Low Risk	80.9	4%
Wind	Med Opp.	Low Risk	69.3	3%
Electricity (Natural Gas)	Low Opp.	Low Risk	56.1	3%
Energy From Waste	Low Risk	Medium Risk	53.2	3%
Waste Management	Neutral	Low Risk	52.8	3%
Gas	Low Risk	Low Risk	50.1	2%
Bus Network	Neutral	Medium Risk	48	2%
Biomass	Low Opp.	Medium Risk	47	2%
District Heating And Cooling	Low Opp.	Low Risk	46.8	2%
Towers	Med Opp.	Low Risk	43.5	2%
Solar	Med Opp.	Medium Risk	38.5	2%
Midstream Gas	Low Risk	Medium Risk	32.8	2%
Student Accommodation	Neutral	High Risk	11.8	1%
Water	Neutral	Medium Risk	9.9	0%
Energy Efficiency	High Opp.	Neutral	4.9	0%
Parking	Low Risk	Low Risk	3	0%
Submarine Cables	Neutral	Low Risk	2.6	0%
Hydro	Neutral	Medium Risk	2.2	0%
Healthcare Services	Neutral	Medium Risk	2	0%
Aviation	High Risk	Low Risk	1.1	0%
Energy Storage	Low Opp.	Low Risk	1.1	0%
Roads	Neutral	Low Risk	0.2	0%
Not Covered	N/A	N/A	183.3	9%
Portfolio's overall NAV Weighted Transition Risk Rating 2040	Low Opp.			

Transition Risk



Physical Risk



Source: Pantheon

Incorporating the topic into our ESG due diligence procedures

In order to incorporate our work on climate risk and other ESG considerations into our due diligence process, we have revised our procedures for deal teams to utilize the results of our work with ERM in the diligence process and investment memos. Deal teams assess the “climate risk outlook” of each investment, where they note the physical and transition risk / opportunity profile of the target sector and geography. To the extent that the assets face material physical and/or transition risks (particularly in the near-term), we incorporate this into our other ESG diligence considerations. We also use the Sustainable Accounting Standards Board (SASB) guidelines for each sector to identify which potential ESG risks to prioritize in diligence and to then discuss with the GP. If an item

presents material ESG risk, we devote further analysis to it in collaboration with the GP and summarize our findings through additional materials in the final investment memo.

For multi-asset / multi-fund investments, we assess the climate risk outlook for the largest assets in the portfolio, seeking to cover at least 70% of the total portfolio by NAV.

We are in the process of incorporating these procedures into an ESG screening and due diligence “scorecard”, which will also provide climate risk ratings for investment opportunities utilising various data sources such as ThinkHazard, Climate Change Performance Index and the World Bank Carbon Pricing Dashboard.

Looking forward

A focus on greenhouse gas (GHG) emissions

We have engaged an external consultant to support us to estimate and analyze GHG emissions within Pantheon’s infrastructure portfolio. As Pantheon generally does not invest directly into assets, we have relied on information provided by the managers in our portfolio. We requested each manager to send us scope 1, 2 and 3 GHG emissions (as per The GHG Protocol) for each individual asset.

There has been substantial progress in this area across the industry, something we expect to continue to improve. The number of managers that calculated GHG emissions in 2022 is up significantly from 2021 and we have actual Scope 1 and 2 emissions data which covers 66% of the NAV of the portfolio. We have used estimated data to complement this to provide a more complete coverage. This should help us to (i) identify the relatively higher emitting assets, funds and GPs (ii) prioritize our engagement with these managers to better understand the likely drivers of such emissions, and (iii) identify trends by comparing the 2022 results with the 2021 results. We are focused on working with our GPs to increase the coverage of assets with reported emissions, therefore reducing the number of estimates required, in order to create as accurate a picture for the portfolio as possible.

Looking forward, we expect to enhance our climate-related diligence and monitoring processes. We expect these activities will further enhance the efficacy of our engagement with GPs and ultimately drive real world action by decreasing the carbon footprint of our portfolio.

Future plans for climate risk assessment and due diligence integration

We plan to continue refining our climate risk / opportunity assessment capabilities. A potential next step will be to extend our current sector/geography-level climate risk assessment capabilities down to the asset level. We also continue to refine our integration of climate risk and other ESG considerations into our due diligence process. Eimear Palmer, Partner and Global Head of ESG, has begun a review of our current ESG and climate DD procedures following her joining Pantheon in August 2022. This includes developing more comprehensive and standardized questions for GPs and management teams around their own ESG analysis and procedures to enable earlier identification of potential ESG and climate risks and opportunities, along with a deeper consideration of how those climate-related risks will be mitigated during the investment period.

We are also refining our ESG exclusion thresholds around high-risk sectors such as coal and oil to provide more clarity to investors with regards to our current investment beliefs and practices. We have been actively avoiding co-investments or single-asset secondary investments in companies whose primary business is in coal or oil transportation, storage, or power generation since 2020.

Publishing our TCFD report

At a corporate level, there will be mandatory disclosures for asset managers such as Pantheon for calendar year 2023. However, we will release our first report by the middle of 2023 covering calendar year 2022. Our Global Head of ESG has

been heavily involved in drafting a guide for the private markets through her role at the Initiative Climat International (iCI) working in collaboration with KPMG and the BVCA. This guide is available here.

Endnotes

- ¹ Task Force on Climate-related Financial Disclosures website, <https://www.fsb-tcfd.org/about/>
- ² Responsible Investor, 'New Zealand becomes world's first country to introduce mandatory TCFD disclosure', <https://www.responsible-investor.com/new-zealand-becomes-world-s-first-country-to-introduce-mandatory-tcfd-disclosure/>
- ³ Department for Business, Energy & Industrial Strategy, 'Mandatory climate-related financial disclosures by publicly quoted companies, large private companies and LLPs', https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1056085/mandatory-climate-related-financial-disclosures-publicly-quoted-private-cos-llps.pdf, Page 7
- ⁴ Department for Business, Energy & Industrial Strategy, 'UK to enshrine mandatory climate disclosures for largest companies in law' <https://www.gov.uk/government/news/uk-to-enshrine-mandatory-climate-disclosures-for-largest-companies-in-law>
- ⁵ HM Government, 'Greening Finance: A roadmap to Sustainable Investing', https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1031805/CCS0821102722-006_Green_Finance_Paper_2021_v6_Web_Accessible.pdf
- ⁶ International Energy Agency, 'World Energy Outlook 2021 - Mobilising investment and finance', <https://www.iea.org/reports/world-energy-outlook-2021/mobilising-investment-and-finance>
- ⁷ Department for Business, Energy & Industrial Strategy, '2021 UK Greenhouse Gas Emissions, Provisional Figures', https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1064923/2021-provisional-emissions-statistics-report.pdf
- ⁸ UK Government website, 'Government takes historic step towards net-zero with end of sale of new petrol and diesel cars by 2030', <https://www.gov.uk/government/news/government-takes-historic-step-towards-net-zero-with-end-of-sale-of-new-petrol-and-diesel-cars-by-2030>
- ⁹ International Energy Agency, 'Global EV Outlook 2022', <https://iea.blob.core.windows.net/assets/ad8fb04c-4f75-42fc-973a-6e54c8a4449a/GlobalElectricVehicleOutlook2022.pdf>
- ¹⁰ World Economic Forum, 'How Cheap Can Renewable Energy Get', <https://www.weforum.org/agenda/2021/10/how-cheap-can-renewable-energy-get/>
- ¹¹ Note: this is the IEA's Stated Policies Scenario (STEPS), further details of which can be found here: <https://www.iea.org/reports/world-energy-model/stated-policies-scenario-steps>
- ¹² United Nations Climate Change, 'Key aspect of the Paris Agreement', <https://unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement/key-aspects-of-the-paris-agreement>
- ¹³ Note: this is the IEA's Sustainable Development Scenario (SDS), further details of which can be found here: <https://www.iea.org/reports/world-energy-model/sustainable-development-scenario-sds>
- ¹⁴ Scenario data is derived from Intergovernmental Panel on Climate Change (IPCC), widely recognized in the market and by policy makers as a source of climate scenario data.
- ¹⁵ Covers 91% of NAV and 95% of portfolio companies from this portfolio.
- ¹⁶ Note: the methodology is assessing incremental risk/opportunity compared to baseline conditions and therefore there may already be risk/opportunity in the sector which is not characterized in this analysis. The working assumption is that any risk/opportunity in the baseline is already apparent to management.

IMPORTANT DISCLOSURE

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