



TCFD Report

2022

*Task Force on Climate-Related
Financial Disclosures*



Executive summary

Capital Dynamics has been a supporter of the Task Force on Climate-Related Financial Disclosures (“TCFD”) since 2020. The assessment and measurement of financially material climate-related risks represents a cornerstone for our robust Responsible Investment approach designed to enhance long-term risk-adjusted returns for our clients.

Climate change can manifest in financially material risks and opportunities we face as an asset manager. Our own greenhouse gas emissions are relatively low and the main climate-related transition and physical risks we face stem from the portfolio companies we invest in and lend to, as well as the climate risks to which our Clean Energy assets and portfolio companies’ assets are exposed. Therefore, we assess the transition and physical risks of our underlying exposures by sector and assess how climate-related risks impact our investment portfolio over the short-, medium- and longer term. The main channels through which climate-related risks and opportunities translate into financial impacts on our revenues and costs are:

1

Credit default

Borrower companies exposed to high transition and physical climate risks may face difficulties in repaying debt, e.g. when climate risks cause the borrower company to default

2

Equity valuations

Portfolio companies that are exposed to high transition and physical risks and failing to implement mitigation measures could experience lower profitability and thereby impact equity valuations

3

Asset impairment & higher costs

Physical climate risks could cause damage to our real assets in Clean Energy, leading to higher maintenance and insurance costs and representing a risk of early asset retirement

On the flipside, climate-related risks can also represent attractive financially material opportunities. For example, renewable energy has a critical role to play to achieve the transition towards a low-carbon economy. Climate legislation and the pressure on companies to reduce their carbon footprint is expected to increase the demand for renewable energy sources, thereby having a positive impact on profitability for renewable energy producers, i.e. the climate transition risks faced by high emitting sectors translates into a financially material climate opportunity for the renewable energy sector. In our Capital Dynamics Clean Energy investment strategy, these assumptions represent a substantial investment opportunity for our clients. Overall, our analysis of climate-related risks and opportunities yields three key results that impact our resilience in the transition towards a lower carbon economy:

1

Our funds are exposed to *moderate - moderately low* transition risks based on the sector exposure

2

Physical climate risks in our funds on average are *moderate* for the climate hazards tropical cyclones, water stress, wildfire, flooding and extreme heat, although we do have geographic exposure to locations that are scoring high risks to one or more of these climate hazards

3

Our Clean Energy business faces the lowest transition risks and represents a highly attractive *financial opportunity* in the transition scenarios towards a net zero economy

We are delighted to share with you over the next pages how we arrived at the conclusions, the processes we have in place to oversee climate matters, our climate strategy and risk management, as well as our Key Performance Indicators (“KPIs”) we disclose in relation to climate risks and opportunities. We hope you enjoy reading our 2022 TCFD report.

RECOMMENDED DISCLOSURES

CAPITAL DYNAMICS' APPROACH (Summary)

TOOLS / RESOURCES

	RECOMMENDED DISCLOSURES	CAPITAL DYNAMICS' APPROACH (Summary)	TOOLS / RESOURCES
GOVERNANCE	<ul style="list-style-type: none"> a) Describe the board's oversight of climate-related risks and opportunities b) Describe management's role in assessing and managing climate-related risks and opportunities 	<p>Capital Dynamics' Executive Committee consists of senior leadership of all business functions and firm ownership and has the oversight over climate-related risks and opportunities. The Co-Chairs of Responsible Investment assess and manage climate-related matters and present these to the Executive Committee as part of quarterly presentations, followed by a Q&A.</p>	<ul style="list-style-type: none"> • Quarterly presentations to Executive Committee
STRATEGY	<ul style="list-style-type: none"> a) Describe the climate-related risks and opportunities the organization has identified over the short, medium, and long term b) Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning c) Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario 	<p>We assess climate-related risks and opportunities across three climate scenarios developed by the Network for Greening the Financial System ("NGFS") over the short-, medium-, and long-term. We identify financially material climate risks and opportunities arising from transition risks and physical climate hazards and incorporate our findings into business strategy and financial planning and assessing the resilience of our strategy, taking into account the result of our scenario analysis.</p>	<ul style="list-style-type: none"> • NGFS orderly transition, disorderly transition and hot house world scenarios • Climate Narrative Tool • Transition risks heatmap • ThinkHazard • Aqueduct Water Risk Atlas • Climate Impact Explorer • World Bank Carbon Pricing Dashboard database
RISK MANAGEMENT	<ul style="list-style-type: none"> a) Describe the organization's processes for identifying and assessing climate-related risks b) Describe the organization's processes for managing climate-related risks c) Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organization's overall risk management 	<p>We identify climate-related risks as part of our due diligence process as well as assess the long-term compatibility of our investments with a transition to a lower carbon economy. Our management of climate-related risks is done primarily through engagement with portfolio companies, industry peers, industry bodies and policy-makers. Our overall risk management framework incorporates the climate-related risks that are assessed and identified.</p>	<ul style="list-style-type: none"> • R-Eye™ due diligence and monitoring • RepRisk • RIC • Scenario analysis (tools under "Strategy") • Capital Dynamics' risk assessment framework • Industry engagements on climate
METRICS & TARGETS	<ul style="list-style-type: none"> a) Disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process b) Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks c) Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets 	<p>We measure our exposure to climate-related risks and opportunities with a number of indicators, such as sector exposure to high emitting industries. Scope 1, 2, and 3 GHG emissions are disclosed for our investments and own operations, and we set GHG reduction targets for our new Clean Energy funds, aimed at decarbonizing project lifecycle emissions and neutralizing unavoidable emissions through carbon offsets (e.g. construction-related emissions).</p>	<ul style="list-style-type: none"> • GHG Protocol • Partnership for Carbon Accounting Financials ("PCAF")

Authors

To obtain additional information or to share your views, please contact the authors of this report or visit our website www.capdyn.com.



Bryn Gostin

Bryn Gostin
Senior Managing Director
*Chief Product & Strategy Officer and
Co-Chair Responsible Investment*



Verena Rossolatos

Verena Rossolatos
Senior Vice President
Co-Chair Responsible Investment



Table of Contents

1

Governance

p. 6

2

Strategy

p. 13

3

Risk Management

p. 71

4

Metrics & Targets

p. 89

1

Governance



Our governance around climate-related risks and opportunities

At Capital Dynamics, our governance around climate-related risks and opportunities encompass both the governance we implement for our firm, as well as the governance for our funds and portfolio companies and Clean Energy assets in relation to Responsible Investment (“RI”). Our processes ensure that climate-related considerations are regularly communicated to our Executive Committee and our top level executives are ultimately responsible for climate-related considerations and decision-making to enact change.

Board’s oversight of climate-related risks and opportunities

Capital Dynamics’ Executive Committee (“EC”) represents our firm’s board and is responsible for setting and overseeing the overall strategic direction of the firm. Bryn Gostin, Chief Product & Strategy Officer and Co-Chair Responsible Investment, is a member of Capital Dynamics’ Executive Committee. The EC’s responsibility for considering RI-related risks and opportunities includes those pertaining to climate-related matters. The EC reviews the climate matters as part of reviewing the firm’s strategy, risk management, business plans and annual financial planning. Further, the EC oversees targets related to climate-related risks and opportunities and monitors progress against these on at least an annual basis. Such targets and objectives include, among others, performance-related objectives, for example incentive schemes that link carried interest to climate impact targets in our Clean Energy business. The EC monitors the implementation and performance of the firm’s climate targets and oversees capital expenditures, acquisitions and divestitures.

The EC delegates the responsibility for assessing and managing climate-related risks and opportunities to the Responsible Investment Committee (“RIC”) Co-Chairs who work in close cooperation with the RIC members.

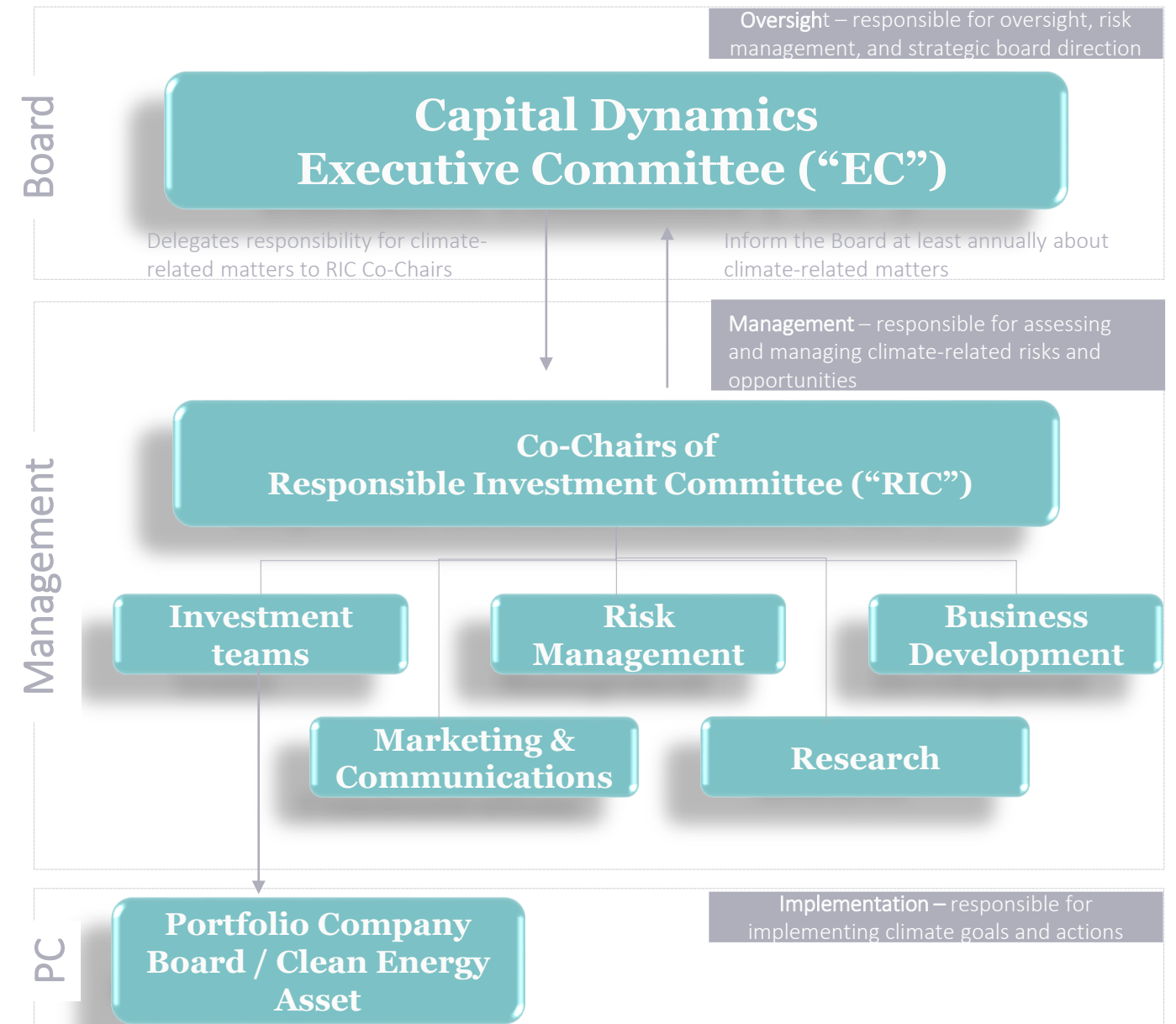


Figure 1: Capital Dynamics’ Governance structure for climate-related risks and opportunities

Management’s role in assessing climate-related risks and opportunities

Verena Rossolatos, Senior Vice President and Co-Chair of the Responsible Investment Committee, reports into Bryn Gostin. Together, Bryn and Verena assess the climate-related risks and opportunities across functions in our firm and investment funds at least annually, and report climate-related issues and progress on targets to the EC as part of the quarterly Responsible Investment presentation. The presentation is followed by a Q&A from the EC, which includes representation from Investment Management leadership, firm management and firm ownership. The EC monitors and oversees progress against the Responsible Investment goals, including climate-related targets through the quarterly update by the RIC Co-Chairs. As a dedicated resource to Responsible Investment and climate-related matters, Verena is also responsible for firm-wide climate initiatives. Senior representatives from our Co-Investments team are responsible for managing climate-related risks and opportunities at the portfolio company level, where we may hold board seats and meaningful influence to effect change. This includes the identification of improvement targets for the operational improvement plan, utilizing the firm’s proprietary R-Eye™ rating system in the due diligence and monitoring process. Such targets may include the introduction of energy efficiency measures and onsite installation of renewable energy production units. Similarly, our Co-Heads in our Clean Energy strategy oversee and manage the climate-related risks and opportunities pertaining to our renewable energy assets in the EU and in the UK. The firm’s Responsible Investment Committee is comprised of EC members and senior leadership representing all Capital Dynamics business lines. The RIC meets monthly and on an ad-hoc basis to set the firm’s agenda for RI and climate-related matters and monitors financially material climate risks and opportunities. In particular, the RIC is responsible for reviewing RI-related alerts, in line with the RI alert process. The RI Alert protocol is designed to assess and manage climate-related risks and opportunities, broader environmental risks, as well as social and governance risks pertaining to our investments. Our Capital Dynamics RI Alert protocol involves the close cooperation between the RIC, Risk Management and the Investment teams, whereby the RIC representative refers identified RI issues to the RIC. Typically, such issues are identified in the due diligence phase pre-investment, utilizing the R-Eye™ rating system, or through our monitoring process involving annual RI questionnaires sent to General Partners as well as deploying RepRisk, an artificial intelligence platform which screens over 500,000 documents daily in the media for RI matters and allows us to create watch lists to

monitor RI risks. The Risk Management team has created watch lists for funds to monitor third parties and their supply chain. Each week, Verena Rossolatos and Philippe Jost, the firm’s Head of Risk, review RI alerts received and flag material RI risks to the Investment teams for further evaluation. The alerts are compiled in a weekly summary and sent to the respective Investment Management teams or to the Operations teams for alerts related to Capital Dynamics’ supply chain providers. Capital Dynamics Investment Management memos contain a summary of the major metrics followed by a brief summary of the incidents with high or very high risk. Further, the RIC Co-chairs have observer rights on all Investment Committees to facilitate a swift RI risk response protocol. High risk and very high risk incidents are reviewed by the full RIC, which makes a recommendation for appropriate action, but does not make investment decisions. In severe instances, Bryn Gostin escalates firm-wide RI issues to the EC for further evaluation and consideration.















Figure 2: Capital Dynamics’ RI Alert Process

Our Responsible Investment Committee

The Capital Dynamics RI Committee members: (i) are signatories to the Firm's RI policy; (ii) review all CD investments; and (iii) set the Firm's agenda for RI training, community involvement, and thought leadership

Responsible Investment Committee

	 Bryn Gostin Senior Managing Director Chief Product & Strategy Officer and Co-Chair Responsible Investment	 Verena Rossolatos Senior Vice President Co-Chair Responsible Investment							
Marketing & Communications	 Carolin Hirschbiel Senior Managing Director	Private Credit	 Jens Ernberg Senior Managing Director	Co-Investment	 David Smith Senior Managing Director	Secondaries	 Mauro Pfister Managing Director	Research	 Kairat Perembetov Principal
Clean Energy United Kingdom	 Barney Coles Managing Director	Clean Energy Europe	 Dario Bertagna Managing Director	Business Development	 Carolyn Skuce Senior Managing Director	 Klaus Gierling Senior Managing Director	Solutions & Risk	 Philippe Jost Senior Director	

We are honored to have co-led the IIGCC Net Zero Investment Framework for Private Equity

A core component of our Governance around climate-related risks and opportunities is our active involvement in industry-wide initiatives, aimed at raising awareness of the financial materiality of climate change.

Over the course of the past two years, Capital Dynamics has co-led the IIGCC working group to steer the Net Zero Investment Framework (“NZIF”) component for Private Equity. The guidance aims to create synergies in the market among LPs and GPs to collectively drive the decarbonization of portfolio companies, and builds upon a pragmatic, science-aligned approach the private equity industry can support.

The NZIF PE guidance takes into account how GPs and LPs interact already today, therefore not introducing more complexities. For example, the recommendations for aligning a PE portfolio with net zero take into consideration the fund cycle and the varying degrees in which GPs and LPs can exert influence over portfolio companies, such as in a fund-of-funds, Secondaries and continuation funds context.

The guidance incentivizes science-aligned decarbonization across industries and suggests four complementary types of net zero targets GPs and LPs may set to promote the adoption of net zero:

	DESCRIPTION	RATIONALE
Portfolio Coverage Target	A % of invested capital or financed emissions to be managed in alignment with net zero by 2030, and an increased % by 2040 to achieve 100% net zero by 2050. GPs can set this target for each fund	Applicable to GPs and LPs and designed to influence the decarbonization of portfolio companies towards a low-carbon economy
Engagement Threshold Target	Complete the specified engagement actions for 100% of applicable PE investments	Engagement is the cornerstone for driving the uptake of net zero commitments within the PE industry
Allocation to Climate Solutions Target	Increase investment in climate solutions (<i>optional</i>)	Optional target for GPs to support the investments into climate solutions that enable the transition to a low-carbon economy
Decarbonization Reference Target	Commitment to a time-relevant emissions reduction target (absolute or intensity target), aligned with a relevant fair share of global and regional decarbonization pathways (<i>optional</i>)	Reference target for overall emissions reduction for PE investments should include scope 1 and scope 2 emissions, with scope 3 reported separately in line with phase-in

For the Portfolio Coverage Targets and Engagement Targets (see p. 10), the NZIF guidance for Private Equity recognizes the varying levels of influence available to GPs and LPs to encourage underlying portfolio companies to decarbonize. For example, a GP with majority voting seats on a portfolio company’s board can exert significantly more influence over the underlying firm to drive action compared to a GP fund-of-funds that is removed by an additional step from the underlying company. That is why the guidance introduces influence bands to account for the different levels of influence. The bands are designed to support ambitious uptake of net zero targets within the LPs’ and GPs’ means of influence and feed into the proportions set by the GP and LP as part of their portfolio coverage and engagement target setting. For instance, a GP exerting strong influence over its portfolio companies with >50% votes is recommended to target 80% of invested capital to be managed in alignment with net zero by 2030 and achieving 100% net zero alignment by 2040. By contrast, investments made through the Secondaries market will have limited influence levels with the GP and therefore the recommended proportion of invested capital to be managed in alignment with net zero accounts for 10% by 2030, 80% by 2040 and 100% by 2050.

The guidance further provides tangible engagement action recommendations that GPs and LPs with moderate and limited influence bands can take to drive the uptake of net zero commitments within the Private Equity industry. Finally, the guidance recommends transparent annual reporting of the proportions of invested capital and financed emissions that achieve the net zero alignment criteria and milestones to facilitate progress tracking.

In conclusion, the NZIF Private Equity guide is a set of pragmatic recommendations that are flexible enough for LPs and GPs to adopt meaningful action to decarbonize portfolio companies in the real economy.

To find out more about the NZIF Private Equity component, please click [here](#).

Influence bands

	Band	Criteria	Influence level	2030	2040	2050
GP buyout GP growth GP continuation	1a	>50% votes	Strong	80%	100%	100%
	1b	≤50% votes	Moderate	30%	80%	100%
	1c	No board votes	Limited	20%	80%	100%
LP investments LP co-investment GP fund of funds Secondaries	2a	Big ticket investor for fund	Strong	30%	100%	100%
	2b	Investment made during fundraise; co-investment	Moderate	20%	90%	100%
	2c	Investment made through Secondaries market	Limited	10%	80%	100%

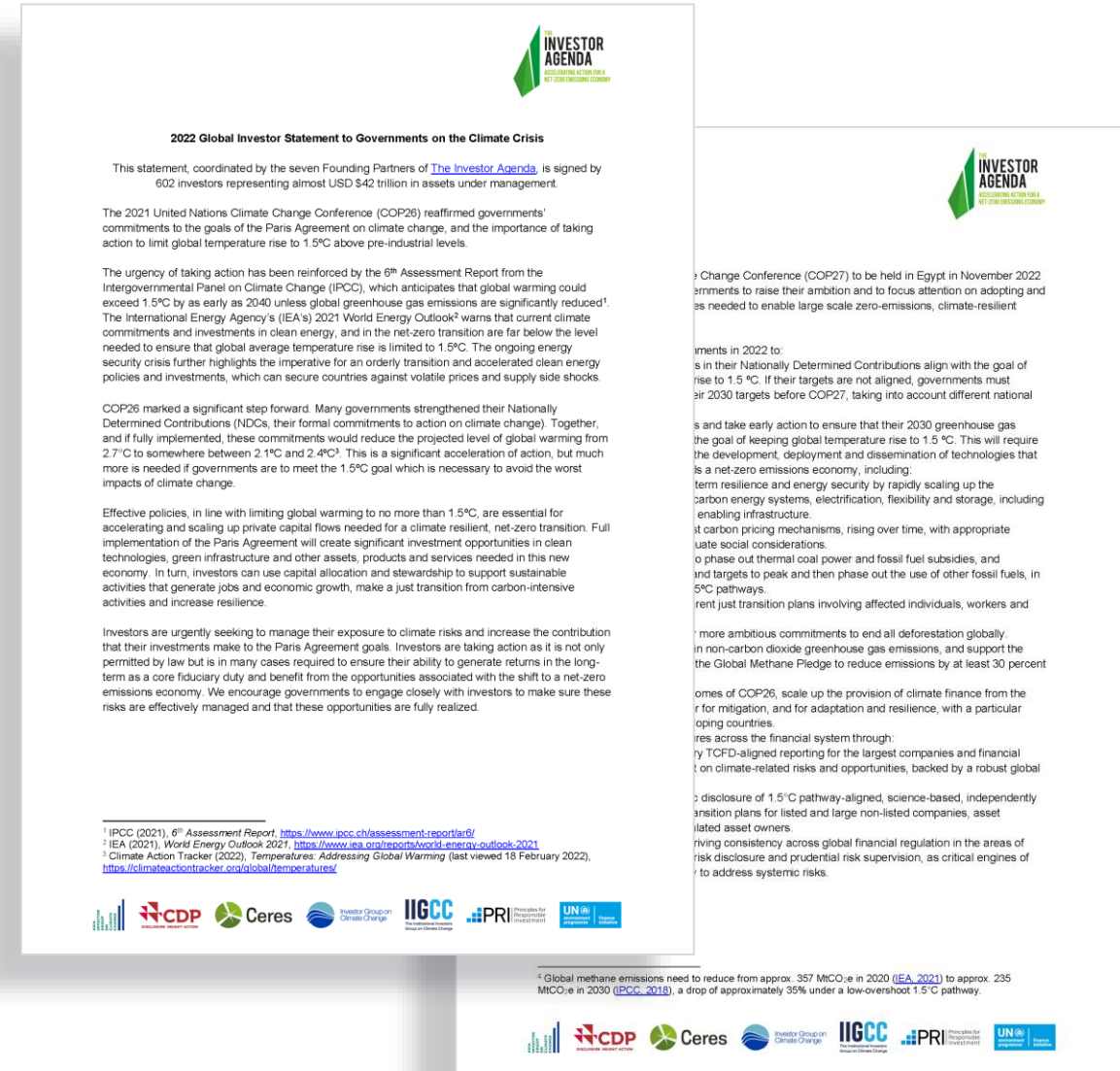
Portfolio Coverage & Engagement Targets - proportions

Capital Dynamics signs Global Investor Statement to Governments on Climate Change

Following our belief that strong policy action is needed to address financial risks associated with climate change, Capital Dynamics, alongside a worldwide group of investors collectively managing nearly USD 39 trillion in AUM, has signed an open letter calling on governments to radically raise their climate ambition ahead of and beyond COP27. This Global Investor Statement urges governments to implement domestic policies and take early action to ensure that their 2030 greenhouse gas emissions are aligned with the goal of keeping global temperature rise to 1.5°C.

The statement outlines key climate policies and actions governments must undertake to support green investment and reduce carbon risk, including:

- Guaranteeing long-term resilience and energy security by rapidly scaling up the deployment of low-carbon energy systems, electrification, flexibility, and storage, including the development of enabling infrastructure;
- Implementing robust carbon pricing mechanisms, rising over time, with appropriate coverage and adequate social considerations;
- Setting a deadline to phase out thermal coal power and fossil fuel subsidies and establishing plans and targets to peak and then phase out the use of other fossil fuels, in line with credible 1.5°C pathways;
- Developing transparent just transition plans involving affected individuals, workers, and communities; and
- Establishing new or more ambitious commitments to end all deforestation globally.



The full statement is available [here](#).

2



Strategy



Three pillars of our climate strategy

1 Assess

We assess climate-related risks and opportunities in our investments and across our own operations. We consider climate scenario analysis a valuable tool for assessing climate matters in a range of possible future states and disclose the results in our annual TCFD reports

2 Integrate

The impact of climate-related risks and opportunities is integrated in our Responsible Investment approach across our strategies, and forms part of our firm's financial planning and business strategy and assessment of Capital Dynamics' resilience to climate factors

3 Engage

We use the results of our analysis to engage with our portfolio companies on sustainability improvements. We also promote best-in-class RI practices among our GPs, regularly engage with policy-makers on sustainable finance regulations and play an active part in advancing net zero considerations in private markets

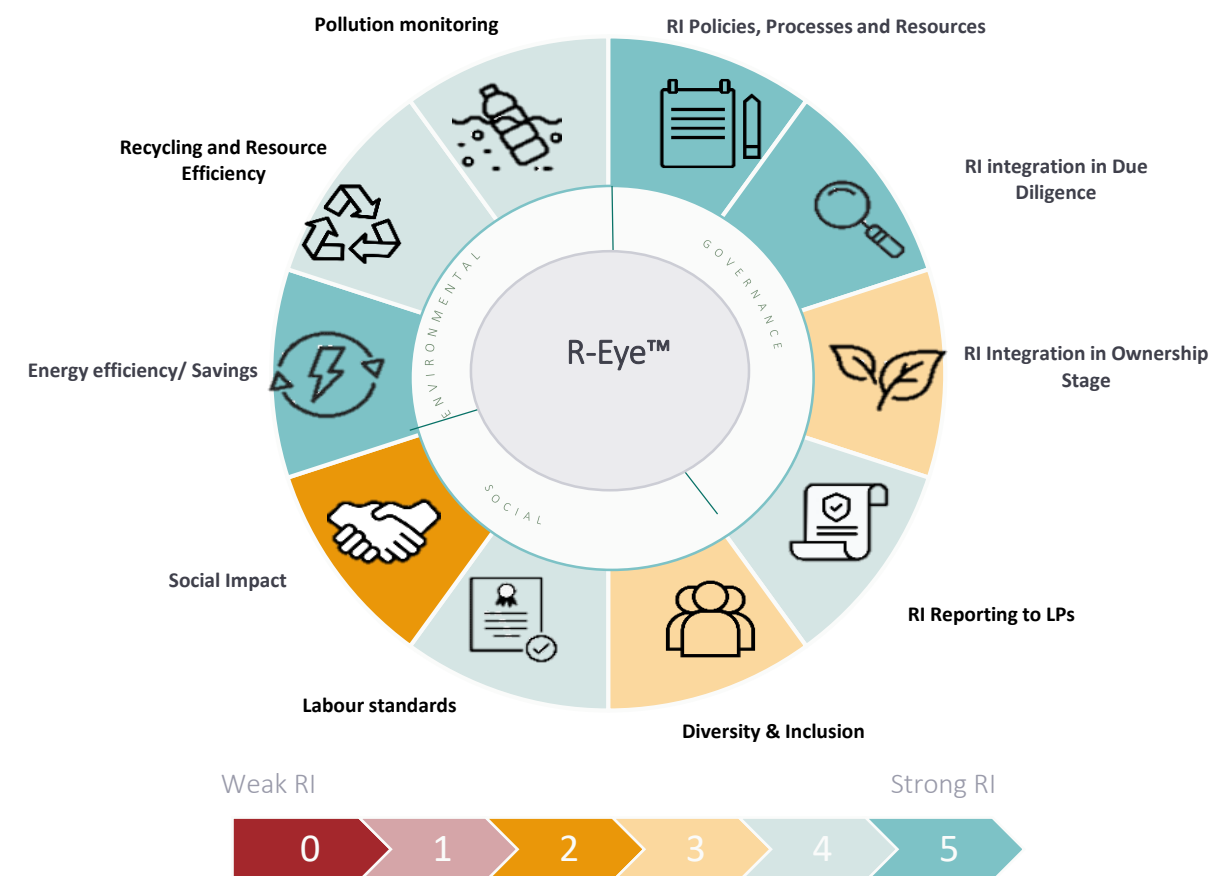
Our climate strategy enhances risk-adjusted returns for our clients

As an asset manager in private markets, our core lever to effect positive change is through our engagement actions. The way we engage depends on the type of investment strategy (direct or indirect) and the level of influence through our ownership (majority or minority). This informs the level of control we have over the underlying asset which we seek to influence in regards to sustainability. Stakeholders we engage with include our portfolio and borrower companies, our General Partners in our indirect fund-of-fund strategies, as well as industry bodies, policy-makers and industry peer groups. Our ability to transition towards a lower carbon economy depends on the actions taken by these groups, which is why we holistically integrate sustainability, including climate matters, in our investment processes.

Climate-related risks we face in our investment portfolio stem from our sector and geography exposures. Capital Dynamics does not invest in the most carbon-intensive sectors, such as fossil fuel exploration and applies a diversified investment approach in terms of location and industry exposure. We have a high exposure to sustainable companies, or companies that we can improve in terms of sustainability, which we believe can lead to higher exit multiples. Further, our Clean Energy investments actively support the scaling of renewable energy in Europe and allow our clients to achieve sustainable returns in the transition to a lower carbon economy.

We take RI factors holistically into account in our end-to-end investment processes, starting from due diligence of target companies and supply chains to active monitoring and exit. Integrating sustainability risks in the investment process has the potential to meaningfully enhance long-term financial returns. That is why we have implemented our proprietary screening tool, R-Eye™, which evaluates all investments from a sustainability risk point of view across all our business lines. We use the insights from our R-Eye™ methodology to identify improvement areas that could be financially material for our investments, e.g. energy efficiency measures that result in cost savings and reducing carbon emissions. Such engagement with our investee companies and GPs is the cornerstone for addressing financially material climate-related risks and opportunities that, if managed appropriately, could have a positive impact on long-term risk-adjusted returns.

Trademarked R-Eye™ Rating System



Assessment of climate-related risks and opportunities

Climate change represents both financially material risks and opportunities. As an asset manager, we play a central role by mobilizing and allocating funds towards sustainable companies and play a critical role in encouraging the transition towards a lower carbon economy. Our operational GHG emissions (scope 1, scope 2 and scope 3 excluding investments) are relatively low (refer to [Metrics and Targets](#)). The main climate-related risks therefore stem from our borrower and portfolio companies and the assets we manage. The nature of the transition risks depend on the sectors of our portfolio and borrower companies, as different sectors have a varying degree of sensitivity towards transition risks. As such, we identify climate-related transition risks and opportunities through the analysis of our underlying sector exposure, and use a [transition risks heatmap](#) to help identify the sector's sensitivities towards transition risks in relation to pricing. For the assessment of climate-related risks and opportunities in our fund of funds business, we analyze not only the underlying sector exposure, but additionally perform analysis on the GP's processes in regards to Responsible Investment as part of our R-Eye™ processes. This is because we are an additional step removed from the underlying portfolio companies that are subject to the financial materiality of climate change and rely on the GPs to integrate climate considerations in the due diligence and ongoing engagements, to ensure these risks are managed appropriately.

Physical climate risks stem from our exposures to geographies subject to climate hazards. We therefore identify the location exposures of our investments and the geographic footprint of our own operations for five climate hazards: tropical cyclones, water stress, wildfires, flooding and extreme heat. For our wind power assets, we also assess the chronic climate risk of decreasing wind speed, which could have a financial impact on our Clean Energy business. In our analysis of climate-related risks and opportunities, we use climate scenario analysis to help us better understand a range of possible future states. We analyze the impact of climate hazards across three NGFS scenarios: Net Zero by 2050 (orderly transition), Delayed transition (disorderly transition) and Current Policies (hot house world). Under these three scenarios we then identify the transition risks and physical climate risks impacting our investment funds and own operations. Please refer to the section "scenario analysis" to learn more about our approach.



What are transition risks?

Transition risks refer to financially material risks that can arise due to the adjustment process towards a lower carbon economy. Such risks arise because a transition to net zero requires adjustments in behavior (for example consumer demand towards green products), technology (for instance substituting existing products for more sustainable options) and policy (for example carbon pricing schemes). Further, the transition can represent reputational challenges for firms operating in high emitting sectors, or companies that lack the ambition to work towards decarbonization. Many of the drivers of transition risks are global, however, some drivers vary in national contexts, such as the implementation of environmental legislation.

The realization of transition risks could result in financially material impacts, including stranded assets, financial penalties, increased costs, reduced return on investment and loss of market share. On the flipside, active management of transition risks can yield attractive opportunities for outperformance compared to peers lagging the required action to adjust in support of a lower carbon economy. Exposures to the transition risks are primarily driven by the underlying assets' sector and geography. The below overview summarizes the transition risks categories (policy & litigation, technology, markets and reputation) and their respective risk drivers.

Policy & Litigation

Policy actions to lower adverse impacts of climate change and advance climate solutions

- Carbon pricing policies / increased pricing of GHG emissions (scope 1, 2 and 3 GHG emissions)
- Increased reporting obligations on GHG emissions
- Regulation of existing high emitting products and services
- Increased exposure to litigation / penalties

Technology

Innovation to support the transition towards a low-carbon economy

- Increased operating costs from high emitting technologies
- Sunk costs to transition to low emitting technologies
- Stranding new investments and / or unsuccessful investment in new technologies
- Substitution of existing products and services with lower emitting options

Markets

Shifts in supply and demand as a result of the increased consideration of climate-related risks and opportunities

- Changing consumer behavior in favor of sustainable products
- Shift in consumer preferences for green products / local produce/ low emitting options
- Increased costs of raw materials
- Shifts in financial and balance sheet asset valuations
- Failure to capture new market opportunities to invest in clean technologies

Reputation

Heightened reputational risks for businesses failing to address changing client demands

- Stigmatization of high emitting sectors
- Increased consumer concern about environmental practices
- Shifts in consumer preferences

What are physical climate risks?

Physical climate risks refer to financially material physical impacts of climate change and the adverse effects of global warming. Physical risks can be acute (i.e. event-driven risks, such as increased severity and frequency of extreme weather events) or chronic (i.e. the longer-term shifts in climate patterns, such as rising global temperatures that cause chronic heat waves and rising sea levels). Once realized, physical climate risks can cause early asset impairment, damages to facilities and infrastructure, force migration, increase raw material prices and cause operational disruptions (for instance through the disruption in supply chains).

The effects of physical climate risks bear a number of severe economic, environmental and social impacts, for instance through the steep rise in annual damage caused by floods and cyclones, increased competition for water in water-stressed regions and a steep decline in labor productivity due to extreme heat. Below is a summary of acute and chronic climate hazards, along with the risk indicators used for measurement and secondary effects that can have a financially material impact. We use the Climate Impact Explorer tool to measure our exposure to key climate hazards over time under three climate scenarios (please refer to appendix).

	ACUTE		CHRONIC			
	Cyclones	Floods	Sea level rise	Precipitation stress	Drought	Heat stress
Indicator	Cumulative wind speed	Floods frequency & severity; rainfall intensity	Coastal flood frequency / exposure	Baseline water stress Future water demand and supply	Drought days	Extreme heat days
Secondary effects	Storm surges and life-threatening waves in coastal regions	Disruption to services, health impacts (famine / disease), increased landslides	Coastal erosion, storm floods, contamination of freshwater reserves	Severe damage to infrastructure and life-threatening impacts of flooding	Severe economic, environmental and social impacts due to increased droughts	Health impacts on human beings

Our climate scenario analysis

Capital Dynamics utilizes climate scenario analysis as a tool to identify financially material climate risks and opportunities and to analyze our firm’s and investment strategies’ resilience to climate matters under different climate scenarios over time. This process allows us to determine where our investment strategies are exposed to financially material climate risks and opportunities and what response actions are appropriate in our strategies. Further, climate scenario analysis helps influence our firm’s climate strategy and enables us to monitor climate-related risks and opportunities in our investment portfolio over time.

Climate modelling approach and tools

In our climate modelling approach, we map our portfolio sector exposure to pre-modelled projected sectoral Gross Value Added data, which analyze the effects of climate change on GDP attributed and scaled to a particular sector in which we are invested in. We utilize the Climate Narrative Tool by the Climate Financial Risk Forum (“CFRF”) to run three selected climate scenarios based on the Network for Greening the Financial System scenarios framework. Further, we utilize ThinkHazard to identify the severity of climate hazards in each region and utilize the Climate Impact Explorer tool and Aqueduct Water Risk Atlas to run our physical climate risk exposure across three NGFS scenarios under different time horizons.

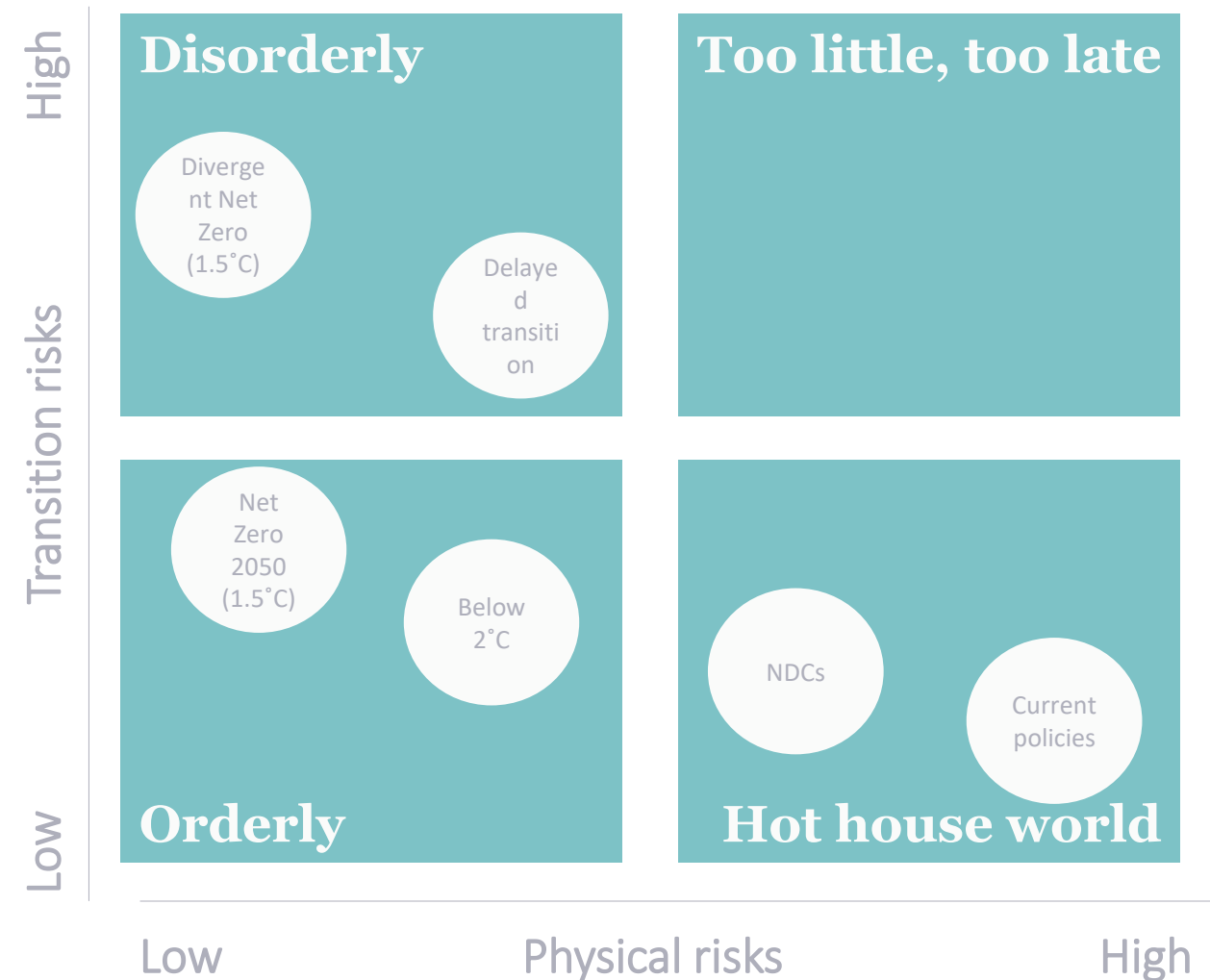
Climate scenario selection

To inform our analysis of financially material climate risks and opportunities, we select three scenarios from the NGFS in line with the FCA’s ESG sourcebook requirements:

1. Orderly transition scenario
2. Disorderly transition scenario
3. Hot house world scenario

The choice of the different scenarios allows us to account for the effects of transition risks and physical climate risks. Each scenario is explained in detail on the following pages.

NGFS scenarios Framework



Positioning of scenarios is approximate, based on an assessment of physical and transition risks out to 2100.¹

¹ Source: NGFS Scenarios for central banks and supervisors (2022). Available at: https://www.ngfs.net/sites/default/files/medias/documents/ngfs_climate_scenarios_for_central_banks_and_supervisors_.pdf

Impact of climate risks and opportunities on our investment strategies

In “orderly transition” scenarios, a change in climate regulation and laws, as well as changing consumer behaviors and green technology advancements are key drivers in support of the transition to a low-carbon economy. Companies operating in carbon intensive sectors or firms that have limited ability to pass on price increases (through the rise in carbon prices) are most vulnerable to such transition risks and therefore our lending and investment activities into such companies could be more highly exposed. In regards to the physical climate risk dimension, the orderly transition scenarios cover a 1.5°C warming, as well as a below 2°C warming scenario.

In “disorderly transition” scenarios, the increase in carbon pricing policies and other transition risks become more severe after 2030, because the scenario assumes inaction until 2030, followed by drastic intervention afterwards to compensate for preceding inaction. Such disruption could affect financial asset valuations significantly, with sizable differences across regions. In the private credit context, the effects of climate change could impact the assessment of the creditworthiness of borrowers by investors and rating agencies, resulting in changes to the credit ratings and credit spreads. Overall, the transition risks are higher in the disorderly transition risk scenarios compared to the orderly transition. In regards to the physical climate risk dimension, the disorderly transition scenarios also cover a 1.5°C warming, as well as a below 2°C warming scenario.

In a “hot house world” scenario, the physical risk dimension covers the full implementation of Nationally Determined Contributions (“NDCs”), which correspond to approximately 2.5°C warming, and the current policies scenario, which corresponds to a warming of 3°C+ above pre-industrial levels. In these scenarios, the physical effects of climate change are most severe with chronic changes in living conditions affecting health, labor productivity, agriculture, ecosystems, and sea-level rise, as well as the frequency and severity of severe weather events. These effects would have a substantial impact on financial asset valuations and could cause early asset retirement of our Clean Energy assets. In our well-diversified investment platform, climate change could manifest itself financially in different ways in our investment strategies as follows:

Private Credit

Climate transition and physical risks could impact the borrower company’s ability to repay its debt. Climate risk could then manifest itself financially by way of default, or by way of a change in credit quality. The latter could result in an increase in credit provisioning and therefore capital.

Private Equity

Climate-related risks could impact the assessment of portfolio companies’ prospective profitability and could lead to changes in equity valuations. This effect becomes more severe for companies with a business model incompatible with a low-carbon economy, which could suffer declines in revenues from the shift in product demand by climate-conscious customers and higher operating costs due to carbon pricing schemes. The risk is also more severe for companies exposed to the physical climate risks, which may lead to damaged production facilities and stranded assets.

Clean Energy

As an investor into renewable energy assets (solar and wind power), we capture attractive climate-related opportunities as economies scale up the transition towards lower-carbon energy supply. Nonetheless, our real assets are also exposed to physical climate risks, which could cause damage to the modules and equipment, leading to higher repair and insurance costs, as well as risk of early asset retirement. We also face transition risks, such as those arising from increasing policies aimed at enhancing GHG emissions reporting, but overall the level of transition risks remains low compared to other sectors.

The underlying assumptions of each climate scenario are detailed on the following pages.

Orderly transition scenarios

In the orderly transition scenarios, a transition towards a low-carbon economy would be achieved through a gradual reduction in GHG emissions and an increase in carbon prices. The global average air temperatures would increase by 1.5°C - 1.8°C above pre-industrial levels. In the orderly transition scenario, annual investments in energy efficiency and green technologies would increase to up to USD 3 trillion by 2030. Climate change would impact living conditions in terms of reduced labor productivity (due to the hot climate conditions), health impacts, agriculture, ecosystems and the rise in sea levels. Acute physical climate hazards, including droughts and heatwaves, wildfires, cyclones and flooding would increase in frequency and severity.

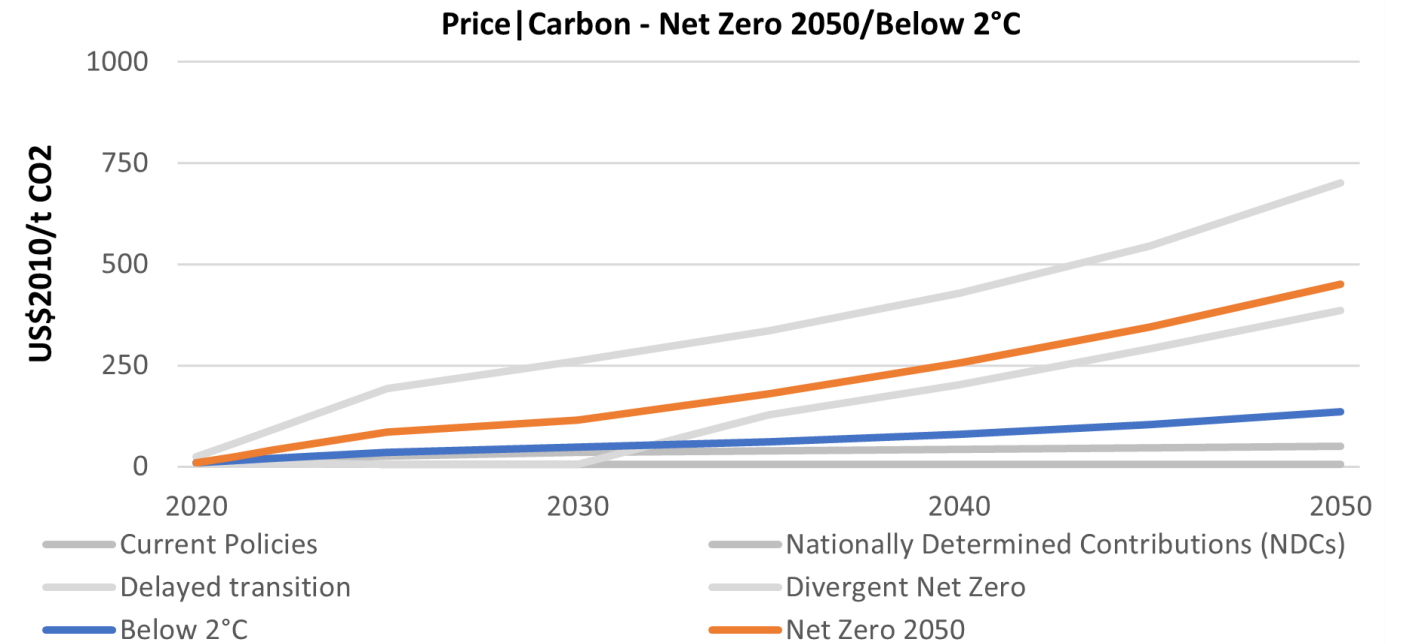
The total cumulative GDP impact from physical and transition climate risks relative to a baseline with no climate risks is projected to be ca. -3% by 2050.

The NGFS defines two orderly transition scenarios:

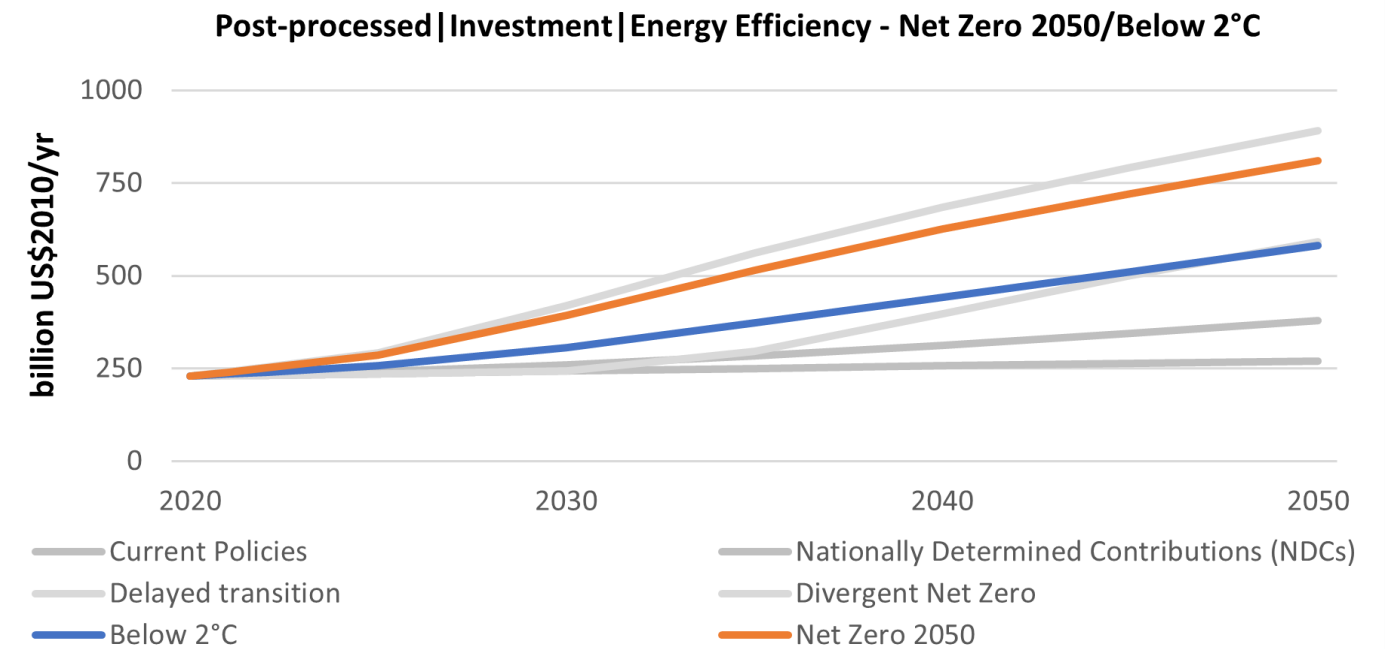
1. **Net Zero 2050** limits global warming to 1.5°C through stringent climate policies and innovation, reaching global net zero CO2 emissions around 2050. Some jurisdictions such as the U.S., EU, UK, Canada, Australia and Japan reach Net Zero for all greenhouse gases
2. **Below 2°C** gradually increases the stringency of climate policies, giving a 67% chance of limiting global warming to below 2°C

Scenario assumptions and parameters

The orderly transition scenarios project a gradual reduction in CO2 emissions through immediate policy action aimed at decarbonizing the energy sector, accelerating the switch to low-carbon fuels in industry, transport and buildings, and increasing carbon removals, such as through the deployment of bioenergy with carbon capture and storage and enhancing afforestation.



Source: [IIASA NGFS Scenario Explorer. REMIND-MAgPIE 3.0-4.4](#). Carbon prices are weighted global averages.



Source: [IIASA NGFS Scenario Explorer. REMIND-MAgPIE 3.0-4.4](#)

Disorderly transition scenarios

In the disorderly transition scenarios, a transition towards a low-carbon economy would be achieved through the introduction of policy change, however this would be delayed or divergent across different countries and sectors. The global average air temperatures would increase by 1.6°C - 1.8°C above pre-industrial levels. In the disorderly transition scenario, annual investments in low-carbon technologies would increase to up to USD 3 trillion by 2050 and investments into energy efficiency would rise.

Climate change would impact living conditions in terms of reduced labor productivity (due to the hot climate conditions), health impacts, agriculture, ecosystems and the rise in sea levels. Acute physical climate hazards, including droughts and heatwaves, wildfires, cyclones and flooding would increase in frequency and severity.

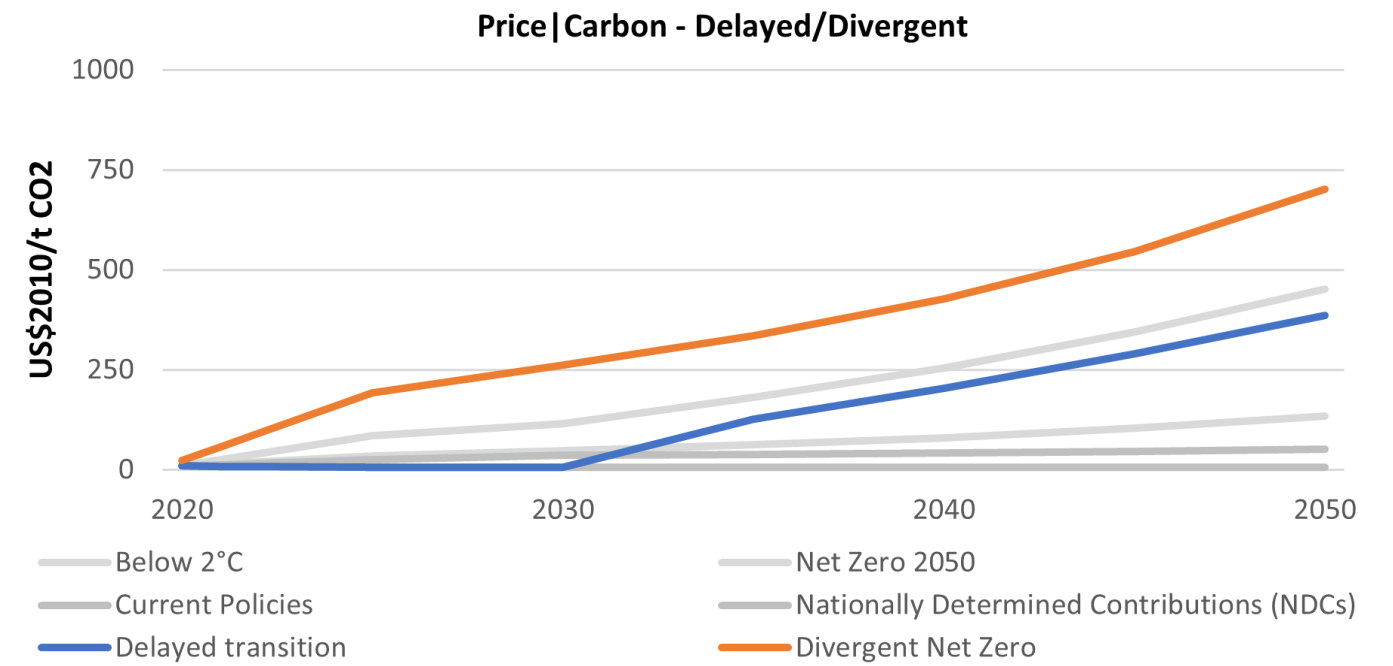
The total cumulative GDP impact from physical and transition climate risks relative to a baseline with no climate risks is projected to be between ca. -4.6% and -4.7% by 2050.

The NGFS defines two disorderly transition scenarios:

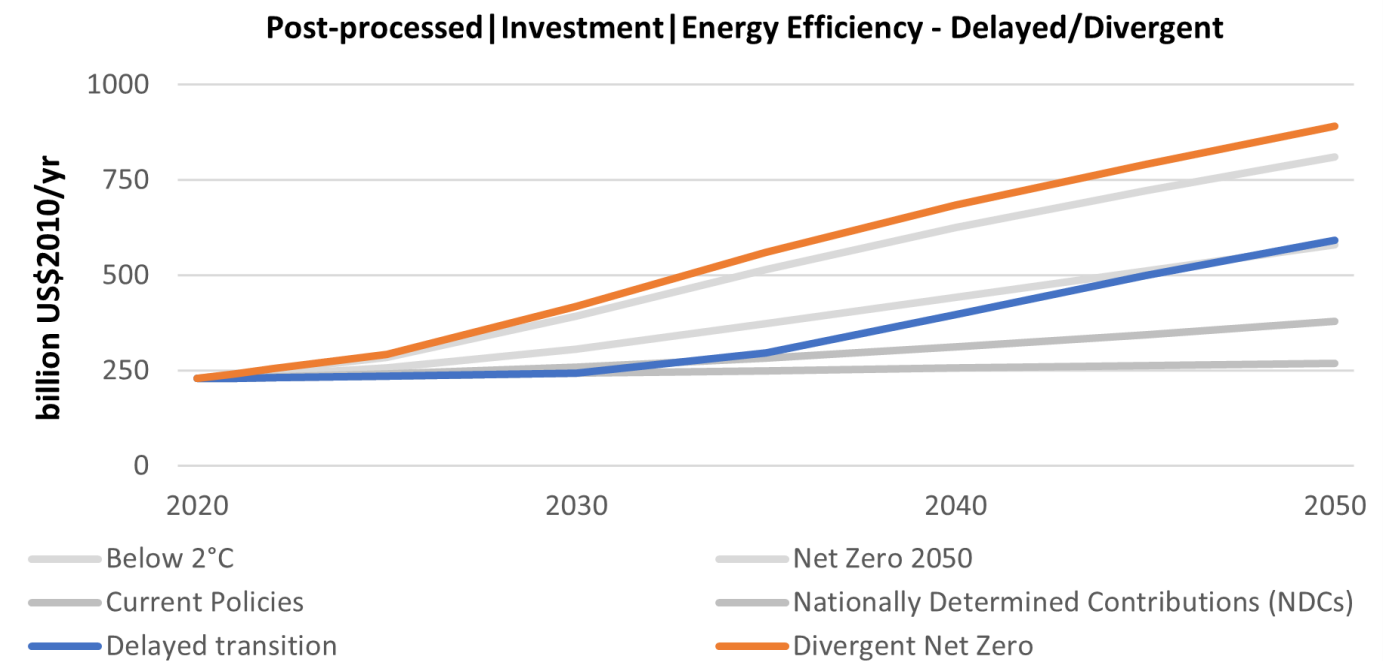
1. **Divergent Net Zero transition:** reaches net zero globally around 2050 but with higher costs due to divergent policies introduced across sectors leading to a quicker phase out of oil use
2. **Delayed transition:** assumes annual emissions do not decrease until 2030. Strong policies are needed to limit warming to below 2°C. Negative emissions are limited

Scenario assumptions and parameters

The disorderly transition scenarios project a late policy action, which results in rising GHG emissions until 2030. The climate policies induce a sharp decrease in CO2 emissions thereafter to compensate for the delayed action. The reduction in CO2 emissions occurs earlier and hence more gradual in the 'divergent net zero scenario'.



Source: [IIASA NGFS Scenario Explorer. REMIND-MAgPIE 3.0-4.4.](#) Carbon prices are weighted global averages.



Source: [IIASA NGFS Scenario Explorer. REMIND-MAgPIE 3.0-4.4.](#)

Hot house world scenarios

In the hot house world scenarios, CO2 emissions do not decrease and carbon prices are not high enough to prevent significant mean air temperature rise (between 2.4°C - 3°C above pre-industrial levels), resulting in high physical climate risks. Climate change would significantly impact living conditions in terms of reduced labor productivity (due to the hot climate conditions), health impacts, agriculture, ecosystems and the rise in sea levels. Acute physical climate hazards, including droughts and heatwaves, wildfires, cyclones and flooding would increase in frequency and severity.

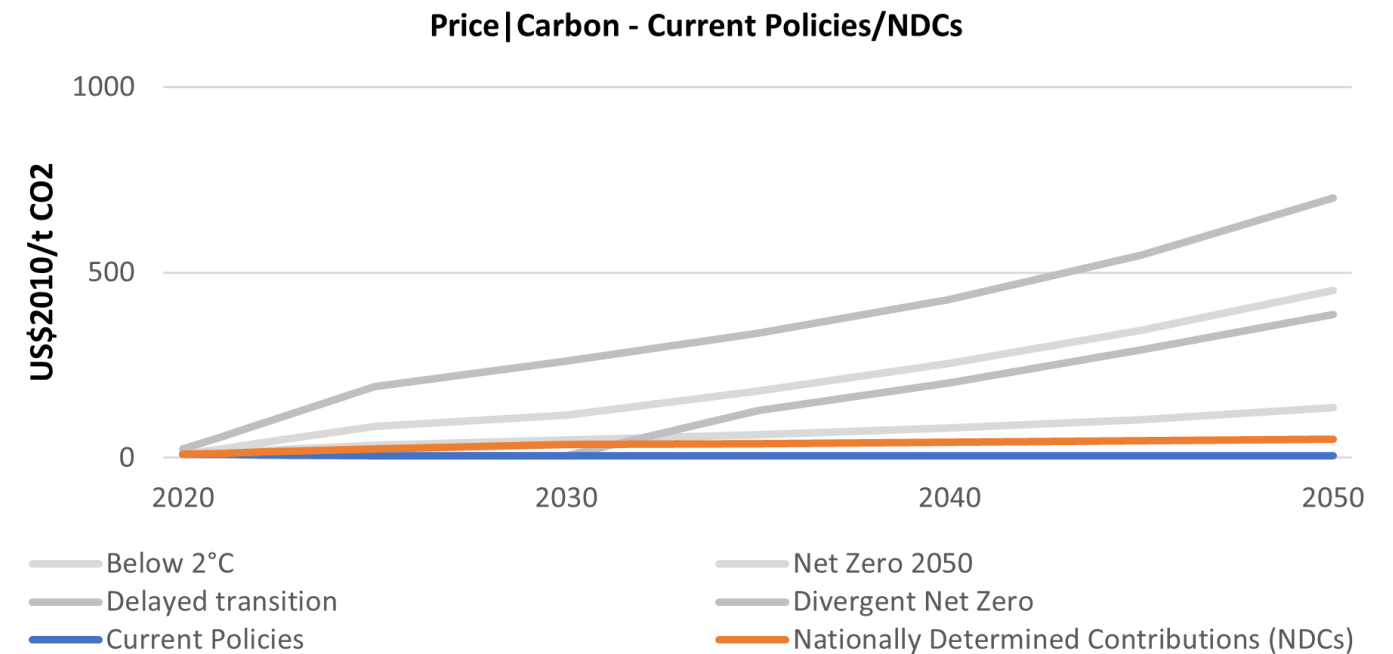
The total cumulative GDP impact from climate change is projected to be between ca. -5.7% and -6% by 2050.

The NGFS defines two hot house world scenarios:

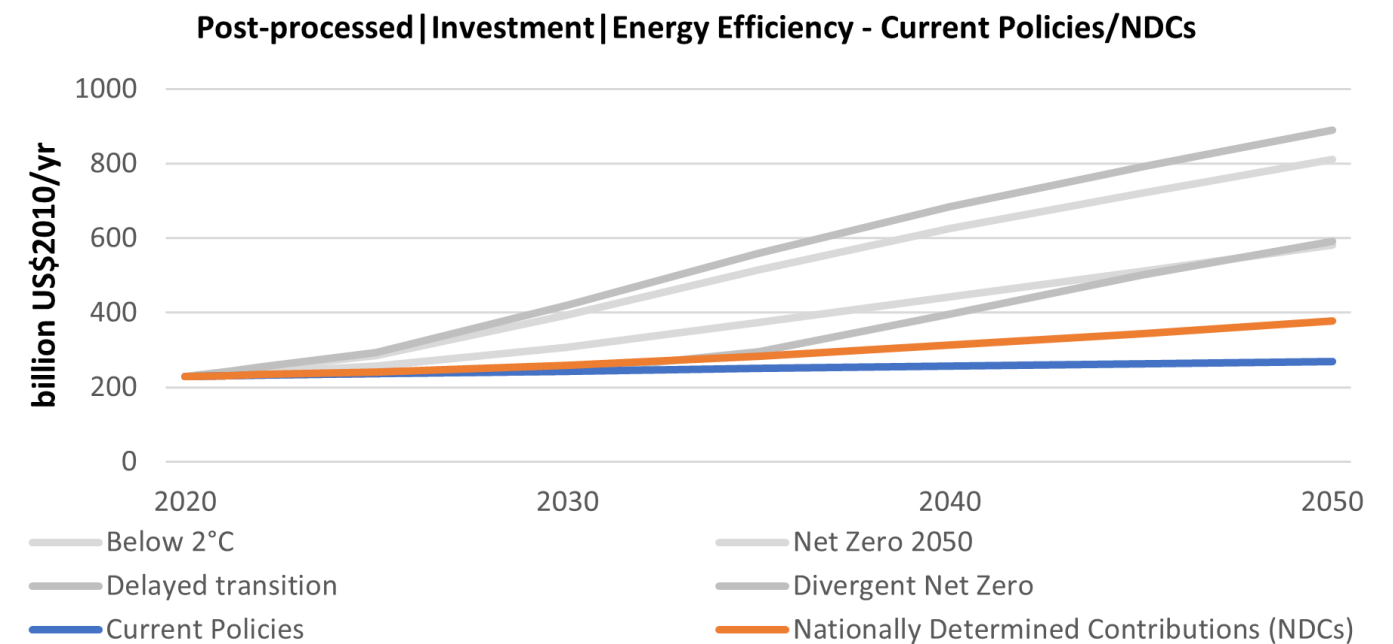
1. **Nationally Determined Contributions (NDCs)** includes all pledged targets even if not yet backed up by implemented effective policies
2. **Current Policies** assumes that only currently implemented policies are preserved, leading to high physical risks

Scenario assumptions and parameters

The disorderly transition scenarios project that CO2 emissions do not decrease sufficiently to prevent significant increases in global mean air temperatures, which results in high physical climate risks.



Source: [IIASA NGFS Scenario Explorer. REMIND-MAgPIE 3.0-4.4](#). Carbon prices are weighted global averages.



Source: [IIASA NGFS Scenario Explorer. REMIND-MAgPIE 3.0-4.4](#)

Limitations

There are several limitations associated with the climate scenario tool applied, as such scenarios are not a forecast of the likely outcomes, but rather an illustration of possible future events. The NGFS scenarios are underpinned by numerous subsets of models (e.g. REMIND, GCAM and MESSAGE) which make certain assumptions about long-term technology pathways and carbon pricing. The “Orderly Below 2°C” scenario assumes a common carbon price for the global energy and transportation sectors and does not account for geographic variation, whereas the “Net Zero 2050” scenario accounts for differences in carbon prices across jurisdictions. The “Divergent Net Zero” scenario also accounts for carbon price variations across sectors and geographies.

Nonetheless, the Climate Narrative Tool by the CFRF is a useful tool for climate-related risk assessments and reporting.

A further limitation to point out is the absence of geographic distinction on the physical climate hazards. Further, each sector contains a large number of sub-sectors, which tend to have varying degrees of average sector emissions (and therefore a different sensitivity towards carbon pricing). Moreover, the Climate Narrative Tool does not account for the size of the investee companies and as such there are varying degrees to which environmental legislation applies to the portfolio companies. To partially overcome these limitations, we make use of additional layers of analysis, which include:

- Accounting for individual sectors’ sensitivities around transition risks, utilizing a [Transition Risks Heat Map](#)
- Accounting for geographic exposure to carbon pricing schemes, utilizing the [World Bank Carbon Pricing Dashboard](#) database
- Analyzing physical climate risks and their severity across regions, utilizing the climate hazard tool [ThinkHazard](#) and the [Aqueduct Water Risk Atlas](#)
- Analyzing the physical climate hazards that could pose a financially material impact to our investments and own operations across different time horizons and the three NGFS scenarios (“Net Zero by 2050”, “Delayed Transition” and “Current Policies” scenarios), utilizing the [Climate Impact Explorer](#)



Time horizon

Climate-related risks are oftentimes expected to materialize in the future, which could mean that they only crystalize after the hold period. As such, Capital Dynamics considers climate-related risks and opportunities over the short-, medium- and longer term with the following time horizons:

Short-term: 3-7 years (asset hold period) S

Climate-related risks and opportunities that materialize during the ownership / lending period are likely to require an immediate action that may differ from the business plan established beforehand. The short-term time horizon therefore accounts for our asset hold period.

Medium-term: 7-15 years (post hold period) M

Climate-related risks and opportunities may materialize after exit, and such medium-term climate scenario analysis helps us identify potential impacts on valuations at the time of exit. Further, the risk identification over the medium-term may also inform the best time for divestment.

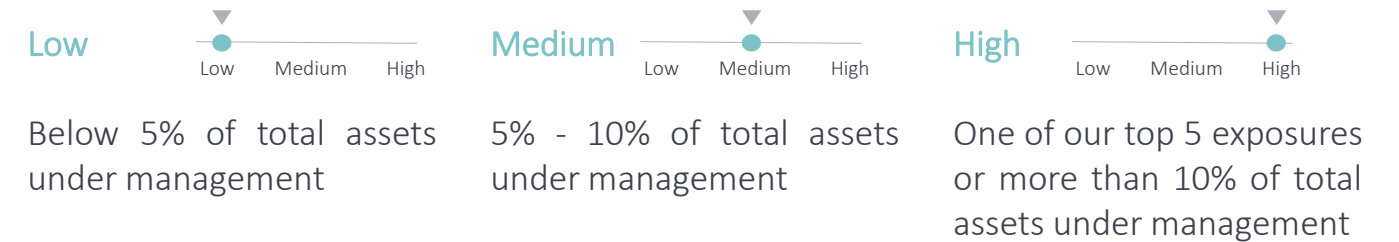
Longer term: 2050 time horizon L

Considering the longer term implications of climate-related risks and opportunities becomes increasingly important as regulators, companies and financial market participants increasingly pledge for net zero targets by 2050. As such, we use scenario analysis over the longer time horizon, which helps us understand what impacts our investment strategies have on the environment and the global ambition to transition towards a low-carbon economy. Further, becoming aware of longer-term climate risks associated with our investments may also impact the valuation and exit multiple of a portfolio company in the short and medium term.

For our physical climate risk scenario analysis (see [appendix](#)) we report on the climate hazard values in the baseline year 2020, and disclose how the climate hazards are expected to evolve under the three NGFS scenarios over the time horizons 2025 (short-term), 2030 (medium-term), 2050 and 2100 (long-term). The long-term view is of particular relevance to physical climate risks, as the severity of climate hazards is expected to increase over time.

Determination of climate risks and opportunities with a material financial impact on Capital Dynamics

Utilizing the Climate narrative tool by NGFS, we determine the materiality of climate-related risks and opportunities for our asset class and sector exposures as follows:



Financially material climate-related risks by sector

As an asset manager, our own greenhouse gas emissions are relatively low and the main climate-related transition and physical risks we face stem from the portfolio companies we invest in and lend to, as well as the climate risks to which our Clean Energy assets are exposed. Therefore, we assess the transition and physical risks of our underlying exposures by sector and assess how climate-related risks impact our investment portfolio over the short-, medium- and longer term. The following sectors are in scope of our analysis:

- Consumer products
- Manufacturing
- Utilities (renewable energy)
- Telecommunication
- Transport

Further, we also assess the climate risks and opportunities we face in our own operations. The following pages provide a summary of transition and physical climate risks per sector based on the outputs provided by the Climate Narrative Tool. The corresponding results of the scenario analysis for each sector are available in the appendix.

Consumer products

The consumer products sector comprises companies operating in retail trade, selling commodities for personal and household use and rendering services related to the sale of goods. These include, among others, physical stores, such as consumer cooperatives and shops and non-physical stores, for instance mail-order houses and vending machines. The sector also comprises purchasing and selling merchandise, secondary processing of products (not included in manufacturing sector) and operating warehouses (non-exhaustive list).

Transition risks

The consumer products sector is an intermediary between the manufacturing sector and the end consumers. In the orderly transition scenarios, the consumer products sector is impacted by the effect of increased regulations faced by the suppliers of products (e.g. carbon pricing policy aimed at reducing GHG emissions, which could result in higher purchasing prices as suppliers look to pass on price increases), as well as the changes in customer behaviors who shift their demand towards sustainable products. Further, portfolio companies operating in the consumer products sector could face transition risks on account of the carbon intensity of their own practices, if these need changing. This includes product offerings, energy consumption, property, distribution and product packaging. Changes to the inherent practices might be required due to regulation (for instance a ban on single-use plastics), shifts in consumer demand, supply chain pressures and strategic business choices. Energy efficiency is likely to play an important role in the consumer products sector, since national energy strategies, carbon pricing regulation and changing energy consumption pattern and societal demands could have a long-term and substantial impact on retail, upstream manufacturers and consumers, putting pressure on profitability of companies operating in the consumer products sector.

Physical risks

Companies operating in the consumer products sector are highly exposed to physical climate risks, which include chronic risks (e.g. rising sea levels and rising air temperatures) and acute risks arising from the increased frequency and intensity of severe weather events (e.g. droughts, wildfires, heatwaves, cyclones and flooding). The acute physical climate risks could lead to increasing disruption in the supply chains and own operations, which could affect costs and revenues and thereby lower profitability for the companies. In particular upstream manufacturers located in jurisdictions highly exposed to severe weather events (such as flash flooding) pose a risk to supply chain disruption,

which directly impacts retailers in these geographies. Notably, physical climate risks could cause substantial disruption in crop yields and therefore to the food supply chains. The adverse effects of physical climate risks are projected to cause a substantial reduction in GDP, which in turn could affect the demand for consumer products.

Manufacturing

The manufacturing sector comprises companies involved in the transformation of mainly raw materials or substances into new products through mechanical, physical or chemical processes. The sector also includes manufactured products that are derived from the assembly of component parts. Companies operating in the sector tend to use power-driven machinery or handling equipment. Examples of manufacturing firms include pharmaceutical and medicine manufacturing, chemical products, plastics, cement, clay, glass, rubber manufacturing, beverage and tobacco manufacturing, textile, computer and electronic product manufacturing, transportation equipment, and engine, turbine and power transmission equipment manufacturing (non-exhaustive list).

Transition risks

The manufacturing sector to date largely still depends on fossil fuels, yet the sector is increasingly supporting the transition to a low-carbon economy, partially driven by environmental regulations in certain jurisdictions and the increasing availability of climate finance and by the economic rationale to consider abatement. Shifting consumer demands towards sustainable products impact the manufacturing sector (e.g. the increased usage of sustainable materials in apparel manufacturing to meet consumer demand). The manufacturing sector could be compatible with a low-carbon economy and substantially reduce its carbon footprint through using clean energy sources in the manufacturing process, increasing materials efficiency in support of a circular economy and utilizing carbon capture and storage (“CCS”). The potential risks associated with the measures include a sharp disruption to production (with potential asset damage) and operating challenges, which increase costs and volatility in the commodity markets. Companies operating in the sector, in particular carbon intensive manufacturing firms, may significantly lose market value and face the risk of stranded assets due to climate legislation and green technologies innovation that would lead to high investment adjustment costs.

Physical risks

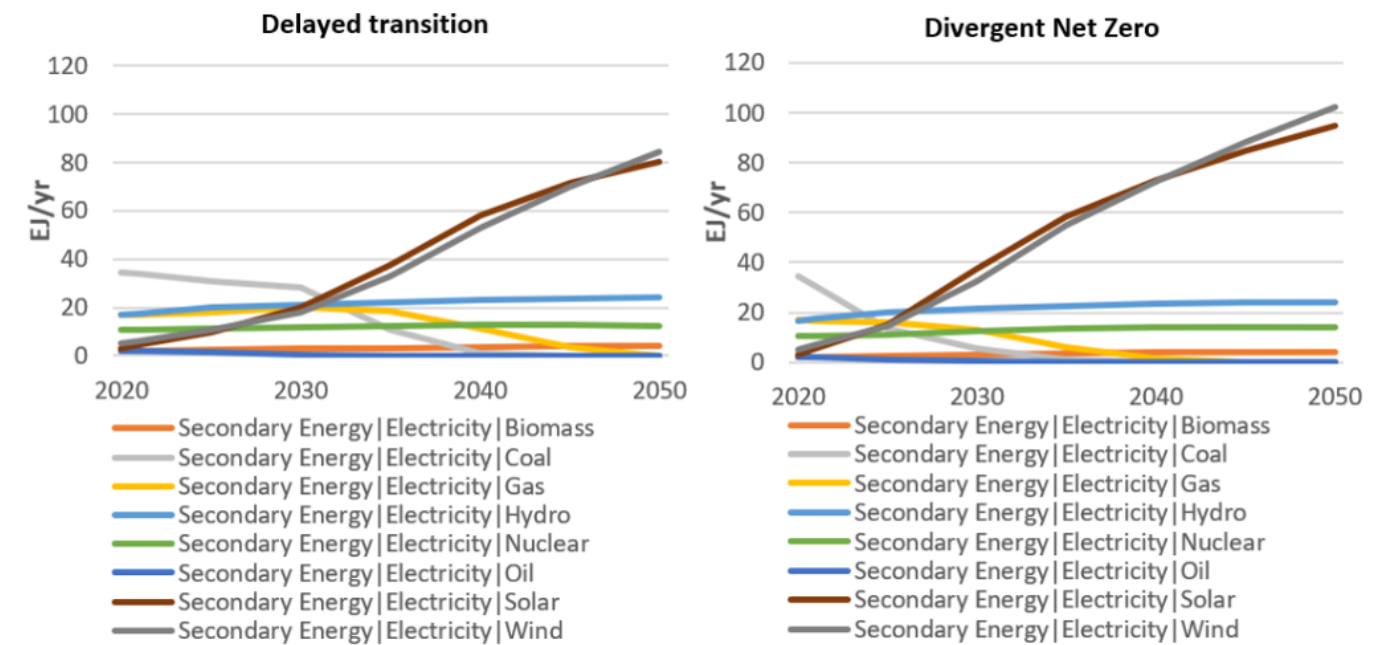
Companies operating in the manufacturing sector are vulnerable to physical climate risks because of their reliance on raw materials and the dependence on global supply chains. Acute climate risks (e.g. droughts, wildfires, heatwaves, cyclones and flooding) can substantially disrupt the availability of raw materials (for example crops). Labor productivity is also projected to fall as global average air temperatures rise. Portfolio companies in the manufacturing sector could therefore face increased costs and lower revenues, thereby affecting profitability. Investments into resilient physical infrastructure and diversifying supply chains across geographies would likely increase costs for the companies, whilst helping to absorb physical shocks from the adverse impacts of climate change.

Utilities (renewable energy)

The utilities sector consists of companies that provide basic amenities such as water, sewage services, gas and electricity. This includes the generation and distribution of renewable energy, which is the focus of our climate risk and opportunities analysis due to the nature of our Clean Energy business that makes direct equity investments into solar and wind projects.

Transition risks

Renewable energy has a critical role to play to achieve the transition towards a low-carbon economy. The decarbonization of global energy and the electrification of energy consumption in carbon intensive industrial and transportation sectors are key drivers impacting the utilities sector as a whole. Climate legislation and the pressure on companies to reduce their carbon footprint is expected to increase the demand for renewable energy sources, thereby having a positive impact on profitability for renewable energy producers, i.e. the climate transition risks faced by high emitting sectors translate into a financially material climate opportunity for the renewable energy sector. Changes in carbon pricing, electricity demand and the national energy mix and energy prices are likely to dominate the positive financial impacts for renewable energy producers. In the orderly and disorderly transition scenarios, electricity generation from solar and wind experience the largest absolute and relative increases in valuation (see graphs on next page for a representation of projected earnings per year of different electricity sources in the delayed and divergent net zero scenarios). In our Clean Energy investment strategy, these assumptions represent a substantial investment opportunity for our clients.



Source: [IIASA NGFS Climate Scenarios Database. REMIND-MAgPIE 3.0-4.4 model.](#)

Physical risks

Chronic physical climate risks, such as rising sea levels and increased global mean temperature, as well as acute risks (e.g. wildfires, cyclones and flooding) could have an impact on the wind and solar modules, potentially causing physical damage and early retirement of the equipment, as well as more frequent repair needs, disruption in operations and an increase in insurance costs. The physical risks would be particularly high in project sites located in geographies most exposed to the adverse effects of climate change and would be most visible in a longer time horizon. In fact, oftentimes wind and solar projects are indeed located in geographies that are exposed to high physical risks (for instance close to the seaside, jurisdictions exposed to severe storms and extreme heat, etc.). Other effects on profitability and valuations include the increase in average air temperatures, which could reduce the demand for energy used for heating (and could increase the demand for energy used for cooling). Moreover, in a hot house world scenario, the transitional risk and opportunity effects for renewable energy would generally reverse compared to the orderly and disorderly transition scenarios. This would mean renewable energy producers could face valuation impairments compared to current market prices, whilst high emitting energy sources would see an uplift in valuations.

Telecommunications

The telecommunications sector consists of companies that provide telecommunications and supporting services and firms that provide access to facilities for the transmission of voice, data, text, sound, and video. Among others, it also comprises companies specialized in satellite tracking, communications telemetry, radar station operation and other telecommunications services.

Transition risks

The Telecommunications sector could be exposed to transition risks in the orderly and disorderly transition scenarios due to the changing patterns in energy generation and national energy strategies, changes in carbon legislation and societal changes. These factors could have significant and long-term financial impacts on portfolio companies operating in this sector, affecting the profitability of telecommunications firms through the increase in costs (for example through carbon pricing policies) and impacts on revenue due to changing consumer preferences.

Physical risks

Chronic physical risks (e.g. rising sea levels) and acute physical risks (e.g. flooding, storms, wildfire and extreme temperatures) could cause substantial network damage and affect related telecommunications services in a hot house world scenario. The increasing frequency and severity of severe weather events could cause disruption to productivity and infrastructure, leading to higher operational costs and impacting the profitability of portfolio companies operating in this sector. Further, physical climate risks could impact employment and the ability to operate and meet customer demand, which will likely affect revenues.

Transport

Companies operating in the transport sector typically comprise firms providing services to move people or goods, whether by air, rail, water, road or pipeline, and related transportation infrastructure. The sector also consists of companies providing transport support services, such as packing, crating, warehousing and storage. Portfolio companies operating in the transport sector may be involved in one or more of the following

activities: trucking, shipping, airline operation, logistics, scenic and sightseeing transport, and transport equipment maintenance.

Transition risks

The projected changes in energy generation patterns in the orderly and disorderly transition scenarios are likely to affect the profitability of portfolio companies operating in the transport sector, if these are carbon-intensive firms that need to adjust their business model towards low-carbon fuel consumption. Consumer preferences could change such that environmentally sustainable practices are expected and if not met, the demand for the products and services of companies operating in the transport sector could decline. Further, in the disorderly transition scenarios, a limited relative reduction in GDP growth is assumed, which could affect the rate of demand growth for passenger and goods transport.

Physical risks

Portfolio companies operating in the transport sector could also be exposed to high physical risks. Chronic climate risks (e.g. rising sea levels and increased average air temperatures) and acute risks (e.g. the increased frequency and severity of severe weather events, such as heatwaves, flooding, cyclones and wildfires) could affect vehicle performance, damage infrastructure and disrupt operations (such as through frequent re-routings and temporary route closures). These adverse effects could increase costs and reduce revenues, thereby affecting the profitability of companies operating in the transport sector. Lastly, in a hot house world scenario, the physical climate risks are projected to lead to substantial GDP losses, which in turn could affect the demand for transport.

On the following pages we discuss the climate-related risks we face as an asset manager resulting from our exposure to the above-mentioned sectors, as well as the climate risks we face in our own operations. Please refer to the appendix for the [sector-level climate risks and opportunities analysis](#), as well as the [physical climate risk scenario analysis](#) for climate hazards over time under three NGFS scenarios.

RISK	MATERIALITY	FINANCIAL IMPACT	TIMEFRAME	ORDERLY TRANSITION	DISORDERLY TRANSITION	HOT HOUSE WORLD
------	-------------	------------------	-----------	--------------------	-----------------------	-----------------

Policy & Regulation



- Lower AUM
- Decreased revenue



Concentration of investment universe on carbon-intensive businesses or firms with limited ability to pass on price increases to the end customer represent the highest risk exposure

Concentration of investment universe on carbon-intensive businesses or firms with limited ability to pass on price increases to the end customer represent the highest risk exposure

N/A for hot house world scenario, as no transition to lower carbon economy is assumed

Carbon-intensive businesses are most vulnerable to carbon pricing policies and increased environmental litigation. Investments made into high emitting firms and / or companies operating in geographies most at risk of stringent carbon pricing policies are therefore most exposed to equity valuation adjustments and higher credit risks

Technology



- Lower AUM
- Decreased revenue












Concentration of investment universe on carbon-intensive businesses or firms with limited ability to adapt business model in support of a low-carbon economy represent highest risk exposure, e.g. firms failing to mitigate climate risks and implement appropriate adaptation measures are exposed to highest losses and possibly counterparty claims

Concentration of investment universe on carbon-intensive businesses or firms with limited ability to adapt business model in support of a low-carbon economy represent highest risk exposure, e.g. firms failing to mitigate climate risks are exposed to highest losses and possibly counterparty claims







N/A for hot house world scenario, as no transition to lower carbon economy is assumed



Carbon-intensive businesses are most vulnerable to risks arising from technology (i.e. innovation to support the transition towards a low-carbon economy could replace existing technology, leading to high capital expenditure). These investee companies are most exposed to equity valuation adjustments and higher credit risk









RISK	MATERIALITY	FINANCIAL IMPACT	TIMEFRAME	ORDERLY TRANSITION	DISORDERLY TRANSITION	HOT HOUSE WORLD
<p>Reputation</p>  <p>Businesses failing to address changing client demands in support of a lower carbon economy are most exposed to reputational risks leading to equity valuation adjustments and higher credit risk</p>		<ul style="list-style-type: none"> Lower AUM Decreased revenue 		<p>Concentration of investment universe on firms failing to take adaptation measures in support of a low-carbon economy represent the highest risk exposure</p>	<p>Concentration of investment universe on firms failing to take adaptation measures in support of a low-carbon economy represent the highest risk exposure</p>	<p>N/A for hot house world scenario, as no transition to lower carbon economy is assumed</p>
<p>Technology</p>  <p>Rapid technological change, such as the widespread of electric vehicles, affect the value of financial assets, e.g. in the automotive industry</p>		<ul style="list-style-type: none"> Lower AUM Decreased revenue 		<p>Concentration of investment universe on firms that have not started the transition to lower their carbon output yet represent the highest risk exposure</p>	<p>Concentration of investment universe on firms that have not started the transition to lower their carbon output yet represent the highest risk exposure</p>	<p>N/A for hot house world scenario, as no transition to lower carbon economy is assumed</p>
<p>Market</p>  <p>Companies with a narrow product range that could be phased out in the transition to a low-carbon economy (for example a manufacturing firm whose sole customer base is a high emitting sector, such as thermal coal) are most affected by equity valuation adjustments and higher credit risk</p>		<ul style="list-style-type: none"> Lower AUM Decreased revenue 		<p>Concentration of investment universe on firms failing to adapt business model and diversify product ranges to meet climate-conscious consumer demand represent the highest risk exposure</p>	<p>Concentration of investment universe on firms failing to adapt business model and diversify product ranges to meet climate-conscious consumer demand represent the highest risk exposure</p>	<p>N/A for hot house world scenario, as no transition to lower carbon economy is assumed</p>



RISK	MATERIALITY	FINANCIAL IMPACT	TIMEFRAME	ORDERLY TRANSITION	DISORDERLY TRANSITION	HOT HOUSE WORLD
<p>Market</p>  <p>Companies failing to mitigate market risks that emerge from the shifts in demand and supply in support of a transition towards a low-carbon economy and businesses failing to adapt are most affected by equity valuation adjustments and higher credit risk</p>		<ul style="list-style-type: none"> Lower AUM Decreased revenue 		<p>Concentration of investment universe on firms failing to take adaptation measures in support of a low-carbon economy represent the highest risk exposure</p>	<p>Concentration of investment universe on firms failing to take adaptation measures in support of a low-carbon economy represent the highest risk exposure</p>	<p>N/A for hot house world scenario, as no transition to lower carbon economy is assumed</p>
<p>Cyclones, storms (acute)</p>  <p>The increased frequency and severity of cyclones and storms affect a multitude of businesses located in geographies most exposed to the climate hazard. The extreme weather events could cause physical damage to operations of portfolio and borrower companies and cause disruption to supply chains, affecting equity valuations and increasing credit risk</p>		<ul style="list-style-type: none"> Lower AUM Decreased revenue 		<p>Concentration of investment universe on firms located in geographies most affected by increasing extreme weather events represent high risk exposure</p>	<p>Concentration of investment universe on firms located in geographies most affected by increasing extreme weather events represent high risk exposure</p>	<p>Concentration of investment universe on firms located in geographies most affected by increasing extreme weather events represent severely high risk exposure</p>

RISK	MATERIALITY	FINANCIAL IMPACT	TIMEFRAME	ORDERLY TRANSITION	DISORDERLY TRANSITION	HOT HOUSE WORLD
<p>Coastal and river flooding (acute)</p> <p>The increasingly rising sea levels and changes in precipitation patterns could pose flooding risks to companies and assets located in geographies most exposed to risks of flooding</p>	 <p>Low Medium High</p>	<ul style="list-style-type: none"> Lower AUM Decreased revenue 	<p>L</p>	<p>Concentration of investment universe on firms located in geographies most affected by increasing extreme weather events represent high risk exposure</p>	<p>Concentration of investment universe on firms located in geographies most affected by increasing extreme weather events represent high risk exposure</p>	<p>Concentration of investment universe on firms located in geographies most affected by increasing extreme weather events represent severely high risk exposure</p>
<p>Drought (chronic)</p> <p>Drought could lead to greater competition for water resources. It could also likely lead to an expectation of increased environmental regulation focusing on protecting water supply and quality, which would lead to steep increases in additional costs for water-intensive industries</p>	 <p>Low Medium High</p>	<ul style="list-style-type: none"> Lower AUM Decreased revenue 	<p>L</p>	<p>Concentration of investment universe on water-intensive firms located in geographies most affected by increasing drought represent high risk exposure</p>	<p>Concentration of investment universe on water-intensive firms located in geographies most affected by increasing drought represent high risk exposure</p>	<p>Concentration of investment universe on water-intensive firms located in geographies most affected by increasing drought represent severely high risk exposure</p>



RISK	MATERIALITY	FINANCIAL IMPACT	TIMEFRAME	ORDERLY TRANSITION	DISORDERLY TRANSITION	HOT HOUSE WORLD
<p>Mean air temperature rise (chronic)</p>  <p>The rise in average air temperature in some jurisdictions could be substantial, affecting agriculture and availability of raw materials, transport, and medical care. It also affects the labor productivity of companies. These effects have an impact on equity valuation and credit risk of underlying companies</p>		<ul style="list-style-type: none"> Lower AUM Decreased revenue 		<p>Concentration of investment universe on firms located in geographies most affected by increasing air temperatures, or companies with supply chains being located in such jurisdictions represent high risk exposure</p>	<p>Concentration of investment universe on firms located in geographies most affected by increasing air temperatures, or companies with supply chains being located in such jurisdictions represent high risk exposure</p>	<p>Concentration of investment universe on firms located in geographies most affected by increasing air temperatures, or companies with supply chains being located in such jurisdictions represent severely high risk exposure</p>
<p>Rising sea levels, temperature rise, drought, extreme weather events (chronic / acute)</p>  <p>The increasing frequency and severity of climate hazards (chronic and acute) could lead to some companies and assets most exposed to the risks becoming uninsurable, impacting equity valuations and increasing credit risks</p>		<ul style="list-style-type: none"> Lower AUM Decreased revenue 		<p>Concentration of investment universe on firms and assets most exposed to acute and chronic climate hazards represent high risk exposure</p>	<p>Concentration of investment universe on firms and assets most exposed to acute and chronic climate hazards represent high risk exposure</p>	<p>Concentration of investment universe on firms and assets most exposed to acute and chronic climate hazards represent severely high risk exposure</p>









Climate-related risks: Capital Dynamics (operations)

Timeframe

S Short-term (3-7 years)

M Medium-term (7-15 years)

L Long-term (2050)

RISK	MATERIALITY	FINANCIAL IMPACT	TIMEFRAME	ORDERLY TRANSITION	DISORDERLY TRANSITION	HOT HOUSE WORLD
<p>Policy & Regulation</p> <p>Enhanced regulatory disclosure obligations increase costs for data collection of climate-related KPIs and reporting efforts</p>		<ul style="list-style-type: none"> Higher costs 		<p>Increasing regulatory requirements (for example SFDR, EU Taxonomy and UK SDR) in support of financing the transition towards a lower carbon economy represent high regulatory risk and severely high costs associated with rising reporting obligations</p>	<p>Increasing regulatory requirements (for example SFDR, EU Taxonomy and UK SDR) in support of financing the transition towards a lower carbon economy represent high regulatory risk and severely high costs associated with rising reporting obligations</p>	<p>Increasing regulatory requirements on climate risk exposure still applicable in hot house world scenario, as regulations / consultations on upcoming regulatory reporting regimes are already put in place</p>
<p>Policy & Regulation</p> <p>Increased carbon pricing policies could lead to higher costs for our own operational carbon emissions</p>		<ul style="list-style-type: none"> Higher costs 		<p>Office locations in jurisdictions most exposed to increasing carbon pricing policies represent could be exposed to higher costs</p>	<p>Office locations in jurisdictions most exposed to increasing carbon pricing policies represent could be exposed to higher costs</p>	<p>N/A for hot house world scenario, as no transition to lower carbon economy is assumed</p>
<p>Technology</p> <p>Upgrades to technology in support of a transition to a low-carbon economy could become necessary for certain office locations (for example making electric vehicle charging points available)</p>		<ul style="list-style-type: none"> Higher costs 		<p>Office locations with no / limited low-carbon technology facilities are most exposed to higher costs</p>	<p>Office locations with no/ limited low-carbon technology facilities are most exposed to higher costs</p>	<p>N/A for hot house world scenario, as no transition to lower carbon economy is assumed</p>

Materiality



<5% of total AUM



5-10% of total AUM



One of top 5 exposures or >10% of total AUM

RISK	MATERIALITY	FINANCIAL IMPACT	TIMEFRAME	ORDERLY TRANSITION	DISORDERLY TRANSITION	HOT HOUSE WORLD
<p>Policy & Regulation, Reputation</p> <p>Perception of not having appropriately engaged with policy makers in support of a lower carbon economy and / or portfolio / borrower companies to address climate risks increases reputational risk and represents a missed opportunity to mitigate climate risks</p>		<ul style="list-style-type: none"> Decreased revenue 		<p>Failing to meet increasing expectations to be an active voice in the transition towards a low-carbon economy could lead to substantial revenue losses</p>	<p>Failing to meet increasing expectations to be an active voice in the transition towards a low-carbon economy could lead to substantial revenue losses</p>	<p>Increasing expectations to be an active voice in climate-related matters also applicable in hot house world scenario, as stakeholder expectations are already present</p>
<p>Market, Reputation</p> <p>Increased shift in client preference towards sustainable investments reduces revenue from financial products with lower Responsible Investment ambitions</p>		<ul style="list-style-type: none"> Decreased revenue 		<p>Financial products failing to address climate-related risks and opportunities represent highest risk exposure of a decreased social license to operate and increased reputational risks</p>	<p>Financial products failing to address climate-related risks and opportunities represent highest risk exposure of a decreased social license to operate and increased reputational risks</p>	<p>N/A for hot house world scenario, as no transition to a lower carbon economy is assumed</p>
<p>Reputation</p> <p>Increased stakeholder demand for climate-related impact disclosures increases costs for carbon accounting measures and tools and enhanced climate-related reporting offerings</p>		<ul style="list-style-type: none"> Higher costs 		<p>Increasing reporting expectations and obligations increase costs associated with Responsible Investment reporting capabilities</p>	<p>Increasing reporting expectations and obligations increase costs associated with Responsible Investment reporting capabilities</p>	<p>Increasing reporting expectations on climate-related risks still applicable in hot house world scenario, as stakeholder expectations are already present</p>



RISK	MATERIALITY	FINANCIAL IMPACT	TIMEFRAME	ORDERLY TRANSITION	DISORDERLY TRANSITION	HOT HOUSE WORLD
<p>Mean air temperature Rise (chronic)</p> <p>The global rise in average air temperature could cause employee productivity to decline, in particular in regions most affected by chronic heat</p>		<ul style="list-style-type: none"> Higher costs Decreased revenue 		<p>Labor productivity is assumed to be reduced even in the transition to a lower carbon economy scenario and could increase labor costs and reduce revenue</p>	<p>Labor productivity is assumed to be reduced even in the transition to a lower carbon economy scenario and could increase labor costs and reduce revenue</p>	<p>Labor productivity is assumed to be severely reduced in the hot house world scenario and would increase labor costs and reduce revenue substantially</p>
<p>Cyclones, storms, flooding, wildfires (acute)</p> <p>The increased severity and frequency of extreme weather events could cause disruption to operations (for example due to physical damage to data centers and office buildings, and difficulties for staff to reach office locations)</p>		<ul style="list-style-type: none"> Higher costs Decreased revenue 		<p>Disruption to operations is high in locations exposed to increasing severity and frequency of extreme weather events</p>	<p>Disruption to operations is high in locations exposed to increasing severity and frequency of extreme weather events</p>	<p>Disruption to operations is severely high in locations exposed to increasing severity and frequency of extreme weather events</p>
<p>Chronic and acute climate hazards (chronic / acute)</p> <p>Climate hazards can affect the choice of office locations away from jurisdictions most exposed to climate risks and increase insurance costs</p>		<ul style="list-style-type: none"> Higher costs 		<p>Relocation needs are high in locations most exposed to chronic (rising sea levels, drought, increasing temperatures) and acute (extreme weather events) climate risks</p>	<p>Relocation needs are high in locations most exposed to chronic (rising sea levels, drought, increasing temperatures) and acute (extreme weather events) climate risks</p>	<p>Relocation needs are high in locations most exposed to chronic (rising sea levels, drought, increasing temperatures) and acute (extreme weather events) climate risks</p>








Climate-related opportunities



Financially material climate-related opportunities by sector

As an asset manager, our financially material climate opportunities arise from investing into clean energy projects (the renewable energy market, in particular solar and wind technologies, are projected to rise steeply in the transition scenarios). Further, climate opportunities emerge from investing into companies that reduce their GHG emissions across the value chain in line with the goals of the Paris Agreement. Such companies are less exposed to transition risks and therefore represent attractive investment opportunities. Similar to the analysis on financially material climate risks, we identify and assess climate-related opportunities through our underlying sector exposures over the short-, medium-, and long-term time horizons, across the orderly, disorderly and hot house world scenarios. We also assess the financially material climate opportunities we face in our own operations.

Please refer to our analysis of climate-related opportunities by sector in the [appendix](#).



The transition towards a lower carbon economy represents an attractive financial opportunity resulting from climate change mitigation and climate change adaptation proceedings, known as “climate opportunities”. Sources of financially material climate opportunities include the following:

-  **Resource efficiency:** direct cost savings from sustainable efficiency measures
-  **Energy source:** transition to clean energy sources, such as wind and solar PV electricity generation
-  **Products and services:** increased demand for green products and services, for example green financial products
-  **Markets:** increased diversification through access into new markets and financing new clean energy infrastructure projects
-  **Resilience:** ability to respond to climate-related risks, improve efficiency, build resilience across supply chains and develop new products

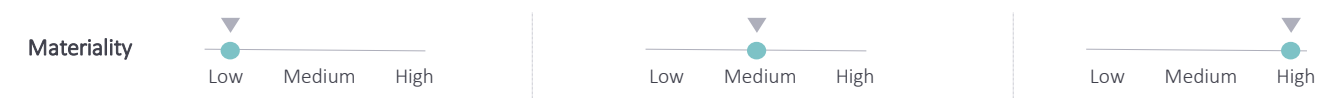
OPPORTUNITY	MATERIALITY	FINANCIAL IMPACT	TIMEFRAME	ORDERLY TRANSITION	DISORDERLY TRANSITION	HOT HOUSE WORLD
<p>Products and services</p>  <p>Increasing demand for sustainable financial products offers opportunities for increased market share and the development of deeper alignment with our clients</p>		<ul style="list-style-type: none"> Increased revenue 	S	Increasingly offering financial products with a clear sustainability focus (e.g. Clean Energy funds and funds classified as Art. 8, Art. 8+ and Art.9 under SFDR and assessing EU Taxonomy alignment) helps meet increasing client demands for green financial products	Increasingly offering financial products with a clear sustainability focus (e.g. Clean Energy funds and funds classified as Art. 8, Art. 8+ and Art.9 under SFDR and assessing EU Taxonomy alignment) helps meet increasing client demands for green financial products	Opportunity to meet increasing client demand for green products also applicable in hot house world scenario, as demand has already shifted (largely driven by European LPs and sustainable finance regulation)
<p>Markets</p>  <p>Increasing demand for investments into our clean energy funds</p>		<ul style="list-style-type: none"> Increased revenue 	S	Clients increasingly value asset managers with a deep understanding of local clean energy markets. In the transition scenarios, wind and solar projects generate the highest returns among renewable energy, which is our expertise at Capital Dynamics	Clients increasingly value asset managers with a deep understanding of local clean energy markets. In the transition scenarios, wind and solar projects generate the highest returns among renewable energy, which is our expertise at Capital Dynamics	Opportunity to invest in Clean Energy projects still remains, however in the hot house world scenario, limited scaling of renewable energy sources is assumed
<p>Energy source</p>  <p>Increasing demand for clean energy as companies in the real economy are increasingly seeking to source clean energy to help decarbonize operations</p>		<ul style="list-style-type: none"> Increased revenue 	S	With the steep increase in climate commitments, the demand for clean energy, in particular wind and solar, is projected to spike	With the steep increase in climate commitments, the demand for clean energy, in particular wind and solar, is projected to spike	Spike in demand for renewables is already happening, although in the hot house world scenario is assumed to scale on a limited basis





OPPORTUNITY	MATERIALITY	FINANCIAL IMPACT	TIMEFRAME	ORDERLY TRANSITION	DISORDERLY TRANSITION	HOT HOUSE WORLD
-------------	-------------	------------------	-----------	--------------------	-----------------------	-----------------



<p>Energy source</p>  <p>Increasing demand for clean energy due to spike in policies supporting the energy transition (e.g. U.S. Inflation Reduction Act, EU Green Deal Industrial Act, etc.)</p>		<ul style="list-style-type: none"> Increased revenue 	<p>S</p>	<p>Energy transition policies accelerate the coal phase-out and incentivize higher demand for renewable alternatives. They also provide an attractive and active market for investors into which Capital Dynamics can sell operational assets to maximize value on exit. In the transition scenarios, wind and solar and projected to increase the most among renewable energy technologies</p>	<p>Energy transition policies accelerate the coal phase-out and incentivize higher demand for renewable alternatives. They also provide an attractive and active market for investors into which Capital Dynamics can sell operational assets to maximize value on exit. In the transition scenarios, wind and solar and projected to increase the most among renewable energy technologies</p>	<p>Opportunity to invest in Clean Energy projects still remains, however in the hot house world scenario, limited scaling of renewable energy sources is assumed</p>
---	---	---	----------	---	---	--

<p>Resource efficiency</p>  <p>Enhancing our portfolio companies' resource efficiency strengthens value creation during the holding period and exhibits superior returns at exit</p>		<ul style="list-style-type: none"> Increased revenue 	<p>M</p>	<p>In the transition scenarios, portfolio companies need to rapidly decarbonize to remain viable in the transition to a low-carbon economy. In our investment approach, we utilize our influence to enhance portfolio companies' sustainability profile and resource efficiency, building resilient companies</p>	<p>In the transition scenarios, portfolio companies need to rapidly decarbonize to remain viable in the transition to a low-carbon economy. In our investment approach, we utilize our influence to enhance portfolio companies' sustainability profile and resource efficiency, building resilient companies</p>	<p>N/A for hot house world scenario, as no transition to lower carbon economy is assumed</p>
--	---	---	----------	---	---	--



OPPORTUNITY	MATERIALITY	FINANCIAL IMPACT	TIMEFRAME	ORDERLY TRANSITION	DISORDERLY TRANSITION	HOT HOUSE WORLD
-------------	-------------	------------------	-----------	--------------------	-----------------------	-----------------

<p>Resilience</p>  <p>Increasing demand for investments into assets resilient to GDP fluctuations, such as clean energy</p>		<ul style="list-style-type: none"> Increased revenue 	<p>S</p>	<p>The COVID-19 pandemic has shown renewable energy assets are highly uncorrelated to GDP fluctuations and exhibit stable returns. Our clean energy platform, for example, did not suffer performance degradation during the pandemic unlike more traditional types of infrastructure investments such as transportation. In the transition scenarios, demand for wind and solar are projected to increase the most among renewable energy technologies</p>	<p>The COVID-19 pandemic has shown renewable energy assets are highly uncorrelated to GDP fluctuations and exhibit stable returns. Our clean energy platform, for example, did not suffer performance degradation during the pandemic unlike more traditional types of infrastructure investments such as transportation. In the transition scenarios, demand for wind and solar are projected to increase the most among renewable energy technologies</p>	<p>Opportunity to invest in Clean Energy projects still remains, however in the hot house world scenario, limited scaling of renewable energy sources is assumed</p>
---	---	---	----------	---	---	--

<p>Markets</p>  <p>Increasing demand for investments with fund managers that support companies in their transition to a low-carbon economy that builds resilient and resource-efficient firms</p>		<ul style="list-style-type: none"> Increased revenue 	<p>M</p>	<p>The demand for financial products supporting the shift is expected to rise steadily</p>	<p>The demand for financial products supporting the shift is expected to rise steeply</p>	<p>Increasing demand to invest with fund managers supporting the transition to a low-carbon economy is already in place, but projected to be limited in hot house world</p>
---	---	---	----------	--	---	---



OPPORTUNITY

MATERIALITY

FINANCIAL IMPACT

TIMEFRAME

ORDERLY TRANSITION

DISORDERLY TRANSITION

HOT HOUSE WORLD

Resilience



- Increased revenue



Asset managers are instrumental to engaging with portfolio companies as well as policy makers on the transition to a low-carbon economy. Engaging with industry bodies and policy makers on setting industry standards for net zero and supporting policies aimed at greater disclosure about climate-related risks and opportunities allows asset managers to individually and collectively influence the ‘rules of the game’

Increasingly offering financial products with a clear sustainability focus (e.g. Clean Energy funds and funds classified as Art. 8, Art. 8+ and Art.9 under SFDR and assessing EU Taxonomy alignment) helps meet increasing client demand for green financial products. Engagement with policy makers and industry bodies further shapes product offerings in support of net zero

Increasingly offering financial products with a clear sustainability focus (e.g. Clean Energy funds and funds classified as Art. 8, Art. 8+ and Art.9 under SFDR and assessing EU Taxonomy alignment) helps meet increasing client demand for green financial products. Engagement with policy makers and industry bodies further shapes product offerings in support of net zero

Opportunity to meet increasing client demand for green products and engaging with policy-makers and industry bodies also applicable in a hot house world scenario, as demand has already shifted (largely driven by European LPs and sustainable finance regulation)

Resilience



- Increased revenue



Increasing mandatory disclosure regimes from sustainable finance regulations and increasing uptake of Net Zero commitments by asset managers enhance data availability for measuring climate-risk resilience in our portfolio

Increasing adoption of sustainable finance regimes across jurisdictions should ultimately increase the availability of data with respect to the climate-related resilience of investment portfolios. This allows managers to better mitigate climate-related risks in funds and capture attractive climate opportunities

Increasing adoption of sustainable finance regimes across jurisdictions should ultimately increase the availability of data with respect to the climate-related resilience of investment portfolios. This allows managers to better mitigate climate-related risks in funds and capture attractive climate opportunities

Opportunity to enhance measurement of climate-related risks and opportunities also applicable in hot house world scenario, as demand for better disclosure has already shifted (largely driven by European LPs and sustainable finance regulation)



OPPORTUNITY

MATERIALITY

FINANCIAL IMPACT

TIMEFRAME

ORDERLY TRANSITION

DISORDERLY TRANSITION

HOT HOUSE WORLD

Resource efficiency



- Lower costs

M

Reducing our own operational carbon footprint allows us to reduce costs from future carbon pricing policies, and from spiking energy costs

In the transition scenarios, carbon pricing policies play an instrumental role in incentivizing companies to reduce emissions. Whilst our carbon footprint is relatively low, reducing our GHG emissions in our operations would allow us to reduce costs from carbon pricing schemes that otherwise would occur

In the transition scenarios, carbon pricing policies play an instrumental role in incentivizing companies to reduce emissions. Whilst our carbon footprint is relatively low, reducing our GHG emissions in our operations would allow us to reduce costs from carbon pricing schemes that otherwise would occur

N/A for hot house world scenario, as no transition to lower carbon economy is assumed

Energy source



- Higher costs (short-term)
- Lower costs (long-term)

M

Procurring renewable energy in our office locations reduces our operational carbon footprint and mitigates possible price spikes for high emitting energy sources in the transition scenarios

In the transition scenarios, procuring high emitting energy sources could increase costs substantially due to carbon pricing policies and price increases on fossil fuels compared to prices of renewable energy that are projected to continuously fall and therefore lead to cost savings in the long-run

In the transition scenarios, procuring high emitting energy sources could increase costs substantially due to carbon pricing policies and price increases on fossil fuels compared to prices of renewable energy that are projected to continuously fall and therefore lead to cost savings in the long-run

N/A for hot house world scenario, as no transition to lower carbon economy is assumed



OPPORTUNITY

MATERIALITY

FINANCIAL IMPACT

TIMEFRAME

ORDERLY TRANSITION

DISORDERLY TRANSITION

HOT HOUSE WORLD

Resource efficiency



- Lower costs



Cost reductions in our own operations are achieved by our internal Sustainability measures. This includes waste reduction, offsetting emissions and reducing non-essential business travel

Implementing efficiency measures throughout our own operations results in direct cost savings and reduced emissions. In a transition scenario, costs on carbon emissions are increasing, therefore lowering our own carbon footprint would result in long-term cost savings

Implementing efficiency measures throughout our own operations results in direct cost savings and reduced emissions. In a transition scenario, costs on carbon emissions are increasing, therefore lowering our own carbon footprint would result in long-term cost savings

N/A for hot house world scenario, as no transition to a lower carbon economy is assumed

Resilience



- Lower costs



Working from home schemes allow our firm to remain resilient to unpredicted interruptions due to acute physical climate risks (e.g. extreme weather events). The schemes also achieve a reduction of carbon emissions associated with employee commuting (scope 3), resulting in a lower carbon footprint for Capital Dynamics

Implementing adaptation measures in our own operations as part of business continuity planning allows us to build resilience against climate-related risks and lower costs otherwise incurred

Implementing adaptation measures in our own operations as part of business continuity planning allows us to build resilience against climate-related risks and lower costs otherwise incurred

Strong cost savings from adaptation measures assumed in hot house world scenario, as frequency and severity of extreme weather events are substantial



OPPORTUNITY

MATERIALITY

FINANCIAL IMPACT

TIMEFRAME

ORDERLY TRANSITION

DISORDERLY TRANSITION

HOT HOUSE WORLD

Resilience



- Lower costs



Strong focus on sustainability in our firm's core values and beliefs enhances employees' motivation and commitment to the firm

Our strong RI ethos is reflected in the way we work and communicate with each other, which allows the firm to attract and retain best talent who are motivated to go the extra mile in delivering value to the firm and our clients. In the transition towards a lower carbon economy, having the right skillset and strong commitment to climate matters will be a vital component of our competitiveness as a firm

Our strong RI ethos is reflected in the way we work and communicate with each other, which allows the firm to attract and retain best talent who are motivated to go the extra mile in delivering value to the firm and our clients. In the transition towards a lower carbon economy, having the right skillset and strong commitment to climate matters will be a vital component of our competitiveness as a firm

Opportunity to increase our resilience and competitiveness through our firm's strong commitment to sustainability also applies in the hot house world scenario, as employees and clients are already today expecting strong core values in a firm



Transition risk heatmap

To partially overcome some of the [limitations](#) associated with the scenario analysis and to take into account the varying degrees of carbon pricing sensitivities among different sub-sectors to which we are most exposed, Capital Dynamics additionally uses a transition risk heatmap² developed by the UNEP Finance Initiative (see next page). The heatmap demonstrates the size ranges of the projected exposure to costs associated with carbon pricing policies, the additional capital expenditure assumed for the sector in support of the transition to a low-carbon economy, and the incremental impact on sector revenue in the transition scenarios.

The risk factor pathways per sector are designed to be an indication of financial impacts on a given sector and are evaluated as per below scales:

Direct incremental emissions costs

Change in carbon price times scope 1 GHG emissions relative to baseline

Evaluation scale (based on carbon intensity of production):

- High: Segment has higher GHG emissions per unit of production relative to others in the sector
- Moderate: Segment has moderate GHG emissions per unit of production relative to other segments in the sector
- Low: Segment has lower GHG emissions per unit of production relative to others in the sector

Indirect incremental emissions costs

Change in the cost of energy and non-energy production inputs relative to baseline

Evaluation scale (based on input-output database analysis, e.g. World Input Output Database)

- High: Segment is highly reliant on carbon intensive inputs (e.g. oil, cement, steel, coal) relative to others in the sector
- Moderate: Segment is moderately reliant on carbon intensive inputs relative to others in the sector
- Low: Segment is less reliant on carbon intensive inputs relative to others in the sector

Incremental low-carbon capex

Additional capital expenditure borne by the sector to transition to a low-carbon economy

Evaluation scale (based on marginal abatement cost curves)

- High: Segment requires higher investment in low-carbon capital required to compete relative to others in the sector
- Moderate: Segment requires moderate investment in low-carbon capital to compete relative to others in the sector
- Low: Segment requires lower investments in low-carbon capital to compete relative to others in the sector

Incremental revenue

Incremental price times demand in the transition to a low-carbon economy scenario relative to baseline

Evaluation scale (based on industry price elasticity of demand and industry price cross-elasticity of demand relative to high-carbon producers)

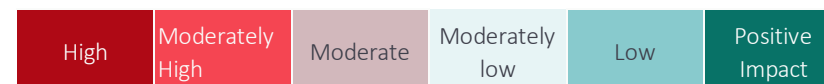
- High: Segment experiences highly adverse demand responses relative to others in sector
- Moderate: Segment experiences moderately adverse demand responses relative to others in sector
- Low or positive impact: Segment experiences limited adverse impacts, or demand increases relative to others in sector

Fund-level climate-related risks and opportunities

On the following pages (p. 47 - 62) we provide transparency around the aggregated transition risks based on the transition risk heatmap (see next page) for our funds and disclose the physical climate risk exposure in the relevant geographies, along with their severity ratings. Please refer to the appendix to view the climate scenario analysis for the climate hazards relevant to each fund and our own operations.

Transition risk heatmap (all in-scope sectors)

	Sector	Direct emissions costs	Indirect emissions costs	Low-carbon CapEx	Revenue	Overall
Clean energy	Power generation (Renewables)- wind and solar	Low	Moderately low	Moderately low	Positive Impact	Low
	Batteries / storage (Renewables)	Low	Moderate	Moderate	Positive Impact	Moderately low
Industrials	Petrochemicals	High	High	Moderately High	Moderate	High
	Cement or concrete manufacture	High	High	Moderately High	Moderate	High
	Renewables manufacture	Moderate	Moderate	Moderate	Positive Impact	Low
	Electronics manufacture	Moderately High	Moderate	Moderate	Low	Moderately low
	Clothing manufacture	Moderately High	Moderately High	Moderate	Moderate	Moderately High
	Consumer durables manufacturing	Moderately High	Moderately High	Moderately High	Moderately low	Moderately High
	Other consumer goods manufacturing	Moderate	Moderate	Moderate	Moderate	Moderate
Transportation	Sea-based shipping	Moderately High	Moderately low	Moderately High	Moderately low	Moderate
	Tankers	Moderately High	Moderately low	Moderately High	Moderately High	Moderately High
	Passenger ships	Moderately High	Moderately low	Moderately High	Moderate	Moderate
	Airlines- commercial	High	Moderate	High	Moderately High	Moderately High
	Airlines- cargo	High	Moderate	High	Moderately low	Moderately High
	Autos high-carbon (few EVs, many SUVs)	Moderately High	Moderate	Moderately High	Moderately High	Moderately High
	Autos low-carbon (many EVs, few SUVs)	Moderate	Moderate	Moderately High	Positive Impact	Low
	Land-based shipping high-carbon (trucks)	Moderately High	Moderately High	Moderate	Moderately High	Moderately High
	Land-based shipping low-carbon (rail)	Moderately low	Moderately low	Moderately low	Positive Impact	Low
	Transit systems	Moderate	Moderately low	Moderate	Low	Moderately low
Services & Technology	Financial services	Low	Moderately low	Moderately low	Moderate	Moderately low
	Health care	Low	Moderate	Moderately low	Low	Low
	Entertainment & leisure	Moderately low	Moderate	Moderate	Moderate	Moderate
	Technology	Moderately low	Moderate	Moderate	Moderately low	Moderately low



Climate risks and opportunities Clean Energy (Europe)

Transition risks score (aggregated): Low

Direct emissions costs	Indirect emissions costs	Low-carbon CapEx	Revenue	Overall
Low	Moderately low	Moderately low	Positive Impact	Low

Current physical climate risk drivers (aggregated): Medium

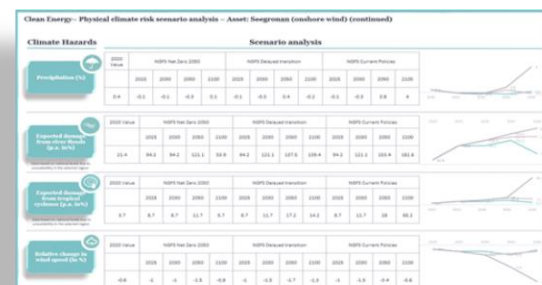
 Tropical cyclones Limited data
  Water stress Medium
  Wildfire High
  Flooding Medium
  Extreme heat Medium

Financial impacts of physical climate risks include:

Reduced revenue and higher costs from labor productivity loss	Increased operating costs and insurance premiums or unavailability of insurance	Reduced revenue from decreased production capacity and from lower sales and output	Write-offs and early asset retirement
---	---	--	---------------------------------------

Click on the image to view the physical climate risk assessment across the time horizons 2020, 2025, 2030, 2050 and 2100 for the NGFS scenarios (Net zero 2050, Delayed transition, Current Policies) for the following climate hazards:

- Mean air temperature
- Labor productivity loss due to heat stress
- Land fraction exposed to wildfires
- Precipitation
- Expected damage from river floods
- Expected damage from tropical cyclones
- Decreased wind speed (wind assets only)



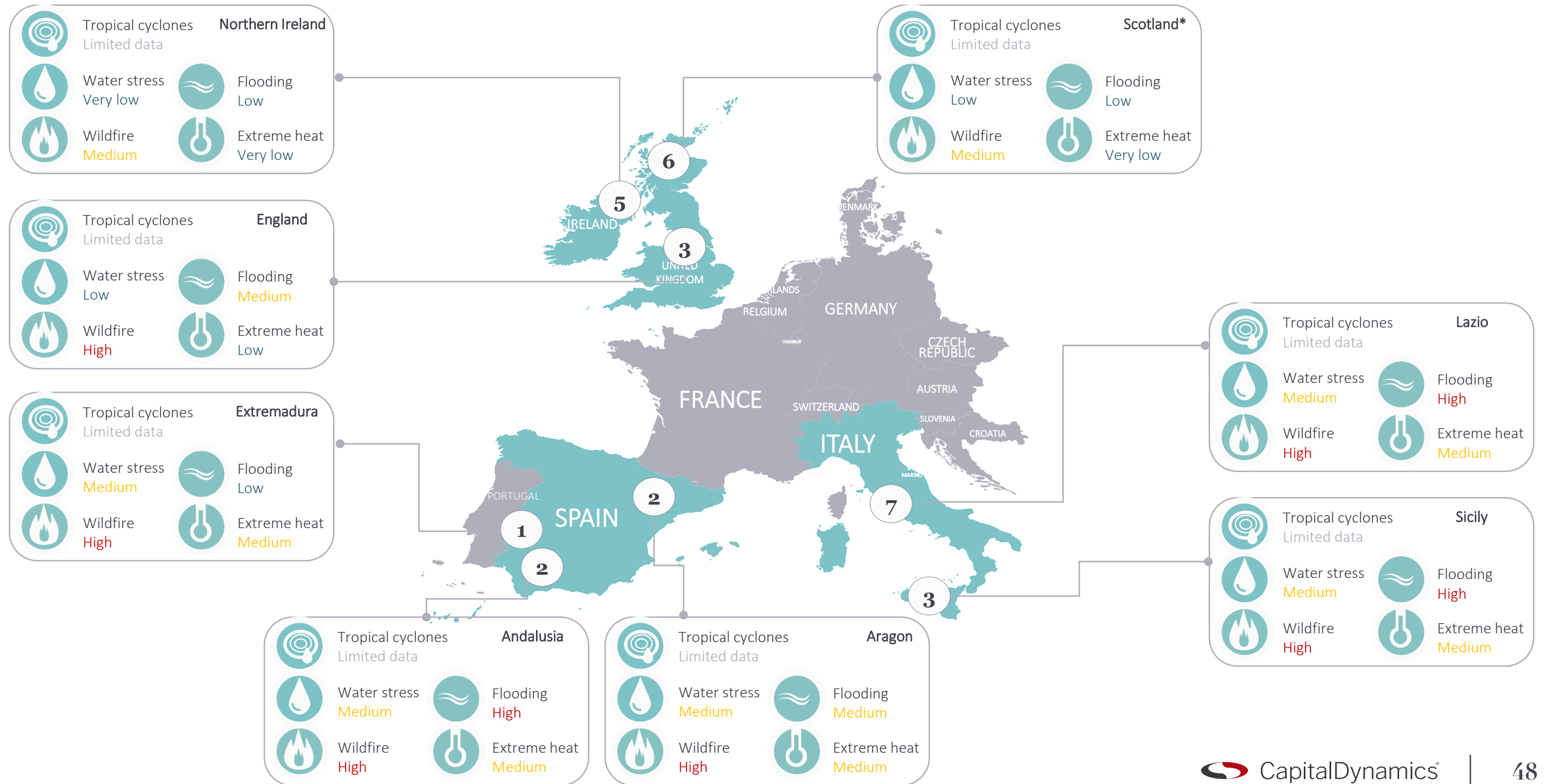
Impact of climate risks and opportunities on Clean Energy

The transition towards a low-carbon economy represents an attractive investment opportunity in solar and wind power assets and exhibits positive impacts on revenue potentials (i.e. strong financially material climate opportunity). Since the operation of renewable energy assets is associated with minimal carbon emissions and water consumption, the overall transition risks score is low. Nonetheless, Clean Energy investments are also exposed to a number of transition risks, such as technology risks (in regards to diversifying investments into other renewable power technologies such as hydrogen, which could result in sunk costs if investments made are unsuccessful), market risks (stemming from increased costs of critical raw materials used in the production of renewable energy modules), and reputational risks associated with stakeholder concern about the environmental impact of the construction phase of renewable energy projects, as well as the impact on labor conditions in the raw materials extraction and processing / modules manufacturing phases.

As investors in real assets, our Clean Energy business is exposed to physical climate risks, which could cause damage to solar PV modules or wind turbines, leading to higher repair costs and insurance premiums in high risk locations. Extreme weather events and chronic physical climate risks (e.g. rising sea levels at coastal regions and chronic decreased wind speed) could represent a risk of early asset retirement.

Overall, our European Clean Energy portfolio is well diversified in terms of geographic exposure to manage physical climate risks and does not operate in areas exposed to high and extreme levels of physical climate risks. Please refer to the next page for a map of physical climate risks relevant for our Clean Energy business in Europe, followed by an overview of the transition risks exposure.

Physical climate risk exposure



#

Number of Clean Energy assets located in area

* Assets Strathroy and Lairg II were acquired in 2023

Transition risk exposure

Exposure to transition risks drivers

Financial impacts of transition risks

Policy & Litigation	<ul style="list-style-type: none"> • Carbon pricing policies / increased pricing of GHG emissions • Increased reporting obligations on GHG emissions 	<ul style="list-style-type: none"> • Increased operating costs / costs associated with the construction phase of our projects and operational phase (e.g. energy used by assets (albeit low) and O&M activities) • Increased operating costs associated with GHG emissions data and reporting
Technology	<ul style="list-style-type: none"> • Stranding new investments and / or unsuccessful investment in new technology (for example investments into renewable energy technology other than wind and solar) 	<ul style="list-style-type: none"> • Sunk costs associated with unsuccessful investment
Market	<ul style="list-style-type: none"> • Increased costs of raw materials (e.g. critical raw materials required for the production of renewable energy modules) • Failure to capture new market opportunities to invest in clean technologies (e.g. investments into renewable energy technology other than wind and solar, such as hydrogen) 	<ul style="list-style-type: none"> • Increased production costs of module manufacturers resulting from change in input prices could be passed on to us as part of procurement • Change in revenue mix and sources, resulting in decreased revenue • Reduced demand for existing services due to change in consumer preferences
Reputation	<ul style="list-style-type: none"> • Increased consumer concern about environmental practices (e.g. impacts on biodiversity, GHG emissions associated with construction phase of renewable energy projects) • Shifts in consumer preferences (e.g. shifts towards renewable energy producers that reduce negative environmental and social impacts associated with the project lifecycle from materials sourcing and production, construction, operation and asset decommissioning) 	<ul style="list-style-type: none"> • Reduced revenue from decreased demand for services • Reduced revenue from decreased production capacity • Reduced revenue from negative impacts on workforce management (for example labor conditions in supply chain) • Reduction in capital availability

Fund-level climate risks and opportunities – MMC I

Transition risks score (aggregated):

Moderate

Direct emissions costs	Indirect emissions costs	Low-carbon CapEx	Revenue	Overall
Moderate	Moderate	Moderate	Moderate	Moderate

Current physical climate risk drivers (aggregated):

Medium

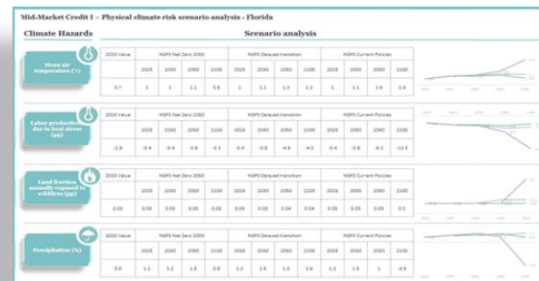
 Tropical cyclones **Medium**
 Water stress **Medium**
 Wildfire **High**
 Flooding **Medium**
 Extreme heat **Medium**

Financial impacts of physical climate risks include:

Reduced revenue and higher costs from labor productivity loss	Increased operating costs and insurance premiums or unavailability of insurance	Reduced revenue from decreased production capacity and from lower sales and output	Write-offs and early asset retirement
---	---	--	---------------------------------------

Click on the image to view the physical climate risk assessment across the time horizons 2020, 2025, 2030, 2050 and 2100 for the NGFS scenarios (Net zero 2050, Delayed transition, Current Policies) for the following climate hazards:

- Mean air temperature
- Labor productivity loss due to heat stress
- Land fraction exposed to wildfires
- Precipitation
- Expected damage from river floods
- Expected damage from tropical cyclones



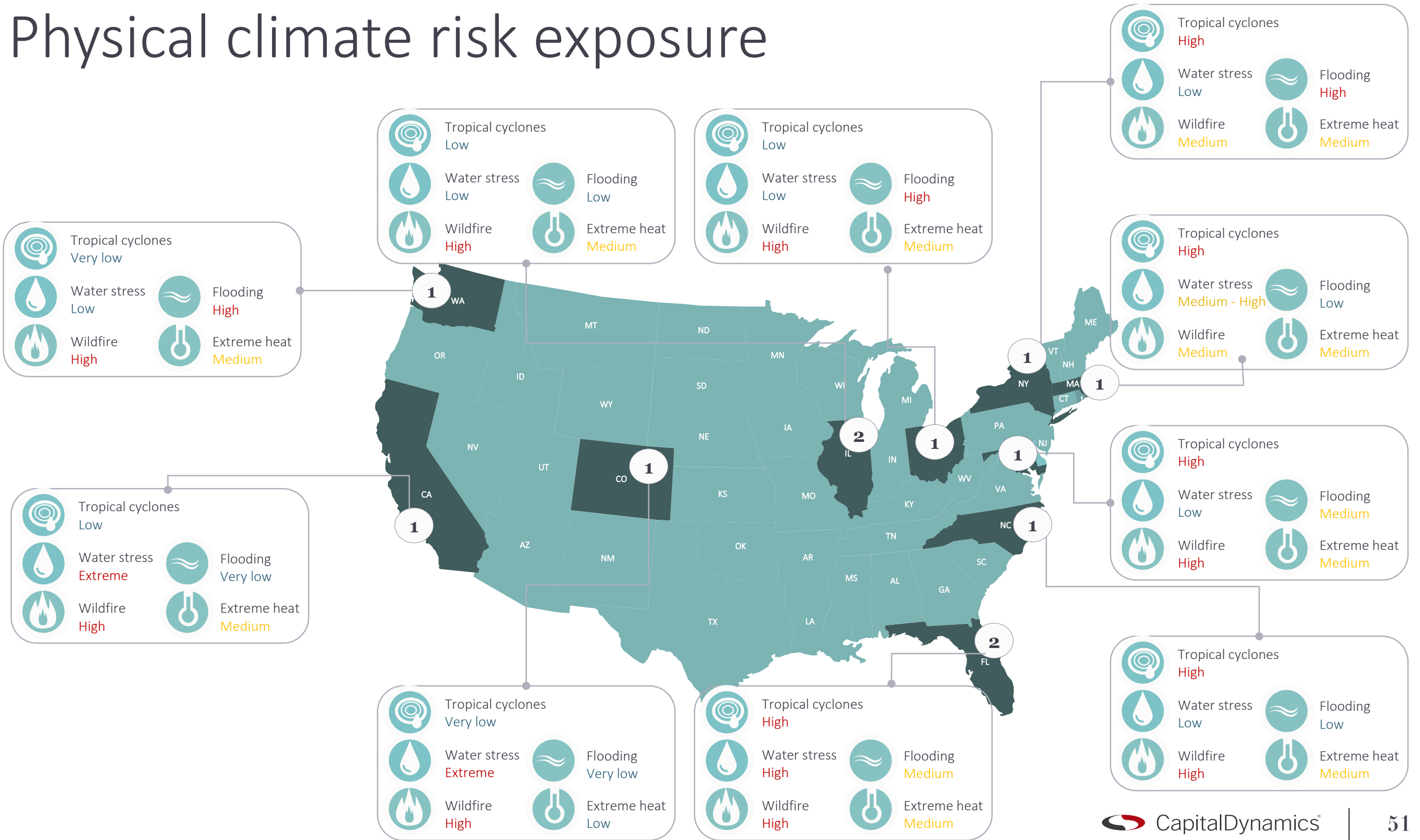
Impact of climate risks and opportunities on MMC

Financially material impacts of climate change occur in regards to sector and geographic exposure, as certain industries, such as high emitting sectors, are faced with a variety of transition risks (e.g. regulation and legislation in jurisdictions with heightened carbon pricing policies and other environmental laws, and shifting consumer demands towards sustainable companies). Geographic location is the primary driver for physical climate risks, as certain locations are more highly exposed to acute and chronic climate risks (e.g. rising sea levels in coastal areas, loss of labor productivity in locations with extreme heat, and disruption to production processes and supply chains in geographies exposed to extreme weather events).

Climate transition and physical risks could impact a borrower company's ability to repay its debt. This is because climate risks can have a financially material impact on the borrower company's costs and revenues. Climate risk could then manifest itself financially by way of default, or by way of a change in credit quality. The latter could result in an increase in credit provisioning and therefore capital. By contrast, borrower companies that capture climate opportunity drivers can benefit from higher revenues and lower costs.

The fund concentrates its lending activities on companies traditionally operating in carbon-light industries in the U.S., which is a location with currently lower transition risks arising from carbon pricing schemes compared to other jurisdictions. Overall, the transition risks score is moderate due to the sector exposure to less carbon-intensive industries, and the aggregated physical climate risk score is medium. Please refer to the next page for a map of physical climate risks relevant for MMC I, followed by an overview of the transition risks exposure.

Physical climate risk exposure



Number of borrower companies located in area

Transition risk exposure

Exposure to transition risks drivers

Financial impacts of transition risks *(impact borrower's ability to repay debt)*

	Exposure to transition risks drivers	Financial impacts of transition risks <i>(impact borrower's ability to repay debt)</i>
Policy & Litigation	<ul style="list-style-type: none"> Increased reporting obligations on GHG emissions (e.g. proposed SEC rules on mandatory climate-related risks disclosures) Regulation of existing high emitting products and services 	<ul style="list-style-type: none"> Increased operating costs
Technology	<ul style="list-style-type: none"> Increased operating costs from high emitting technologies (for example, costs associated with combustion engine vehicles) Sunk costs to transition to low emitting technologies Substitution of existing products and services with lower emitting options 	<ul style="list-style-type: none"> Write-offs and early retirement of existing high emitting assets Research and development ("R&D") expenditures in new and alternative technologies Capital investments in technology development Reduced revenue from decreased demand for high emitting products and services Costs to adopt and / or deploy new practices and processes
Market	<ul style="list-style-type: none"> Changing consumer behavior in favor of sustainable products Shift in consumer preferences for green products/ local produce/ low emitting options Increased costs of raw materials Shifts in financial and balance sheet asset valuations Failure to capture new market opportunities to invest in clean technologies 	<ul style="list-style-type: none"> Reduced demand for goods and services due to shift in consumer preferences Increased production costs due to changing input prices and output requirements Abrupt and unexpected shifts in energy costs Change in revenue mix and sources, resulting in decreased revenues Re-pricing of assets
Reputation	<ul style="list-style-type: none"> Stigmatization of high emitting sectors Increased consumer concern about environmental practices Shifts in consumer preferences 	<ul style="list-style-type: none"> Reduced revenue from decreased demand for goods / services for companies operating in high emitting sectors Reduced revenue from decreased production capacity as a result of stakeholder concerns on environmental performance Reduced revenue from decreased demand for smaller businesses that have less free capital to implement mitigation measures in response to climate risks

Fund-level climate risks and opportunities – MMD V

Transition risks score (aggregated): Moderately low

Direct emissions costs	Indirect emissions costs	Low-carbon CapEx	Revenue	Overall
Moderate	Moderate	Moderate	Moderately low	Moderately low

Current physical climate risk drivers (aggregated): Medium

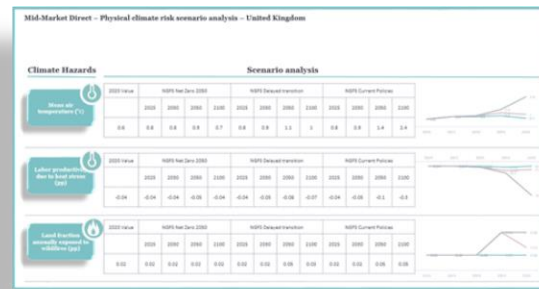
 Tropical cyclones **Low**
 Water stress **Medium**
 Wildfire **High**
 Flooding **High**
 Extreme heat **Medium**

Financial impacts of physical climate risks include:

Reduced revenue and higher costs from labor productivity loss	Increased operating costs and insurance premiums or unavailability of insurance	Reduced revenue from decreased production capacity and from lower sales and output	Write-offs and early asset retirement
---	---	--	---------------------------------------

Click on the image to view the physical climate risk assessment across the time horizons 2020, 2025, 2030, 2050 and 2100 for the NGFS scenarios (Net zero 2050, Delayed transition, Current Policies) for the following climate hazards:

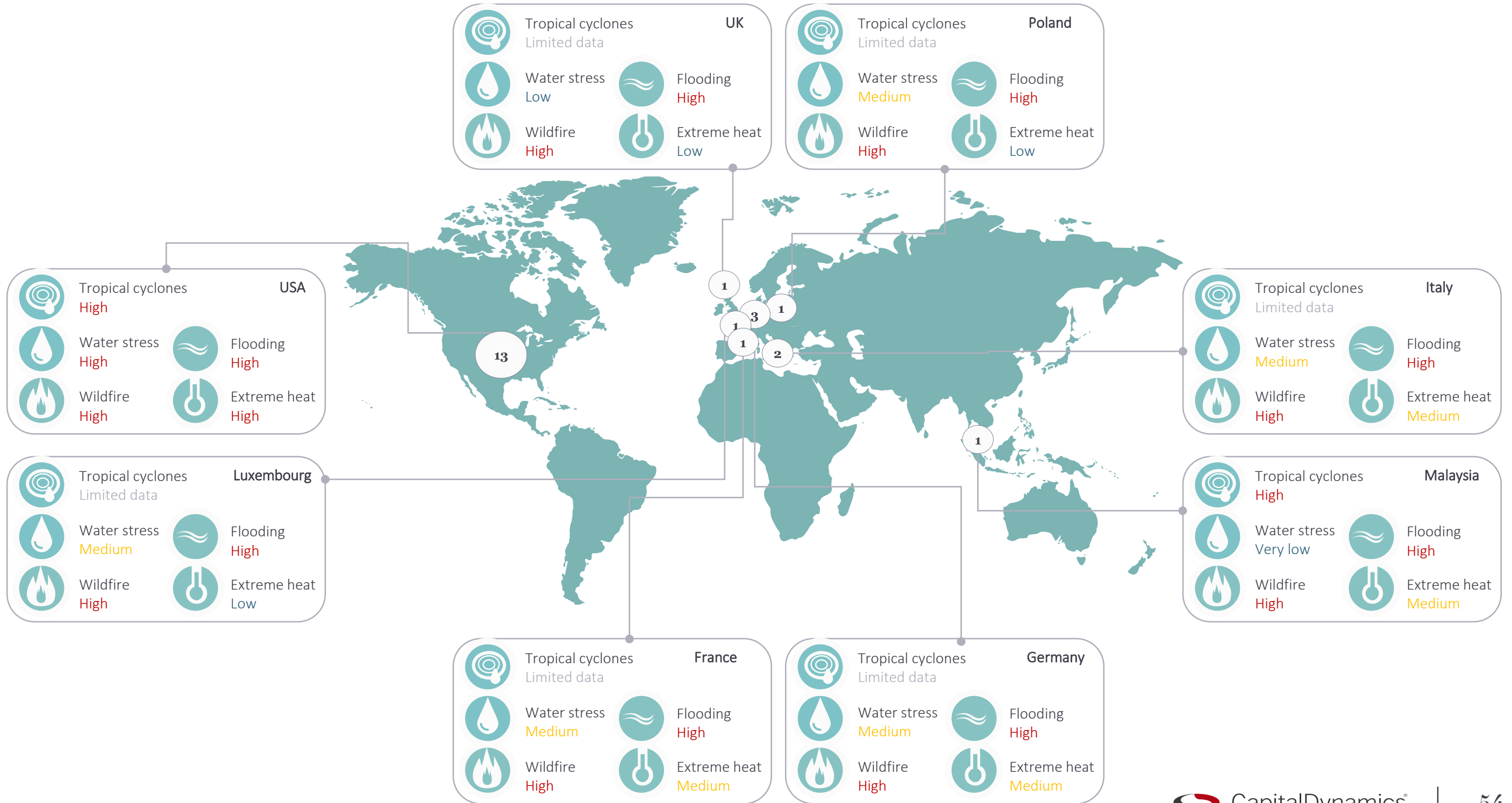
- Mean air temperature
- Labor productivity loss due to heat stress
- Land fraction exposed to wildfires
- Precipitation
- Expected damage from river floods
- Expected damage from tropical cyclones



Impact of climate risks and opportunities on MMD

Financially material impacts of climate change occur in regards to sector and geographic exposure, as certain industries, such as high emitting sectors, are faced with a variety of transition risks (e.g. regulation and legislation in jurisdictions with heightened carbon pricing policies and other environmental laws, and shifting consumer demands towards sustainable companies). Geographic location is the primary driver for physical climate risks, as certain locations are more highly exposed to acute and chronic climate risks (e.g. rising sea levels in coastal areas, loss of labor productivity in locations with extreme heat, and disruption to production processes and supply chains in geographies exposed to extreme weather events). Transition and physical climate risks can therefore impact a portfolio company’s prospective profitability and could lead to changes in equity valuations (through reduced revenues, early asset impairment and increased costs). The financial materiality of these risks are more severe for companies that have a business model incompatible with a low-carbon economy and are operating in locations with high physical risks. Mid-Market Direct V implements a broad diversification strategy both in terms of geographic and sector exposure and invests alongside GPs who themselves are committed to strong Responsible Investment principles, including the identification and management of climate-related risks. Where Capital Dynamics holds sufficient board seats or otherwise has the ability to influence portfolio companies, our team actively seeks to improve portfolio companies’ Responsible Investment practices, including those pertaining to climate risks. For example, the team helps portfolio companies to manage their transition risks through the implementation of energy efficiency measures, waste reduction schemes and the procurement of renewable energy. Overall, the transition risks score is moderately low due to the strong sector exposure to less carbon-intensive industries and the aggregated physical climate risk score is medium. Please refer to the next page for a map of physical climate risks relevant for MMD V, followed by an overview of the transition risks exposure.

Physical climate risk exposure



#

Number of portfolio companies located in area

Transition risk exposure

Exposure to transition risks drivers

Financial impacts of transition risks *(impact portfolio company's equity valuation)*

Policy & Litigation	<ul style="list-style-type: none"> • Carbon pricing policies / increased pricing of GHG emissions • Increased reporting obligations on GHG emissions (e.g. proposed SEC rules on mandatory climate-related risks disclosures and EU Corporate Sustainability Reporting Directive “CSRD”) • Regulation of existing high emitting products and services • Increased exposure to litigation / penalties 	<ul style="list-style-type: none"> • Increased operating costs • Increased costs associated with GHG emissions reporting • Write-offs, asset impairment and early retirement of existing assets due to policy changes • Increased litigation costs and reduced demand for products and services resulting from fines and judgments
Technology	<ul style="list-style-type: none"> • Increased operating costs from high emitting technologies (for example, costs associated with combustion engine vehicles) • Sunk costs to transition to low emitting technologies • Substitution of existing products and services with lower emitting options 	<ul style="list-style-type: none"> • Write-offs and early retirement of existing high emitting assets • Research and development (“R&D”) expenditures in new and alternative technologies • Capital investments in technology development • Reduced revenue from decreased demand for high emitting products and services • Costs to adopt and / or deploy new practices and processes
Market	<ul style="list-style-type: none"> • Changing consumer behavior in favor of sustainable products • Shift in consumer preferences for green products / local produce/ low emitting options • Increased costs of raw materials • Shifts in financial and balance sheet asset valuations • Failure to capture new market opportunities to invest in clean technologies 	<ul style="list-style-type: none"> • Reduced demand for goods and services due to shift in consumer preferences • Increased production costs due to changing input prices and output requirements • Abrupt and unexpected shifts in energy costs • Change in revenue mix and sources, resulting in decreased revenues • Re-pricing of assets
Reputation	<ul style="list-style-type: none"> • Stigmatization of high emitting sectors • Increased consumer concern about environmental practices • Shifts in consumer preferences 	<ul style="list-style-type: none"> • Reduced revenue from decreased demand for goods / services for companies operating in high emitting sectors • Reduced revenue from decreased production capacity as a result of stakeholder concerns on environmental performance • Reduced capital availability • Reduced revenue from decreased demand for smaller businesses that have less free capital to implement mitigation measures in response to climate risks

Fund-level climate risks and opportunities – Future Essentials II

Transition risks score (aggregated): Moderately low

Direct emissions costs	Indirect emissions costs	Low-carbon CapEx	Revenue	Overall
Moderately low	Moderate	Moderate	Moderately low	Moderately low

Current physical climate risk drivers (aggregated): Medium

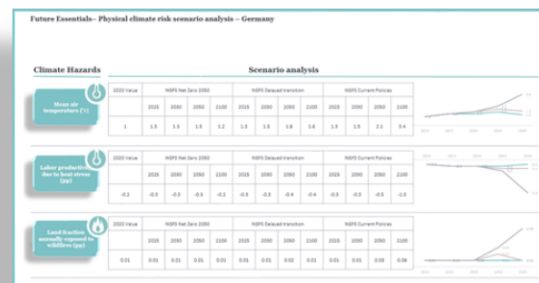
 Tropical cyclones **Low**
 Water stress **Medium**
 Wildfire **High**
 Flooding **High**
 Extreme heat **Medium**

Financial impacts of physical climate risks include:

Reduced revenue and higher costs from labor productivity loss	Increased operating costs and insurance premiums or unavailability of insurance	Reduced revenue from decreased production capacity and from lower sales and output	Write-offs and early asset retirement
---	---	--	---------------------------------------

Click on the image to view the physical climate risk assessment across the time horizons 2020, 2025, 2030, 2050 and 2100 for the NGFS scenarios (Net zero 2050, Delayed transition, Current Policies) for the following climate hazards:

- Mean air temperature
- Labor productivity loss due to heat stress
- Land fraction exposed to wildfires
- Precipitation
- Expected damage from river floods
- Expected damage from tropical cyclones

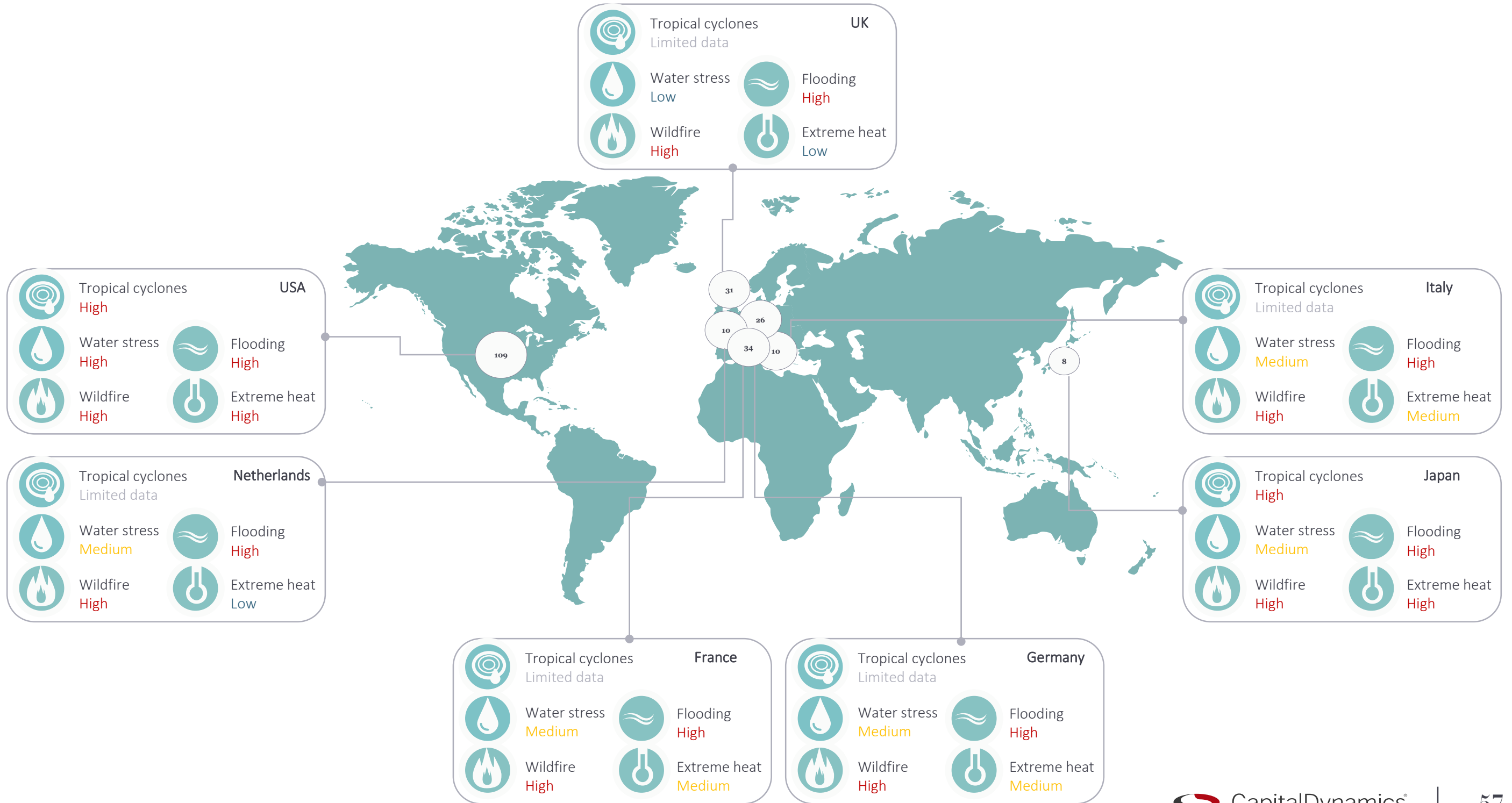


Impact of climate risks and opportunities on Future Essentials

Financially material impacts of climate change occur in regards to sector and geographic exposure, as certain industries, such as high emitting sectors, are faced with a variety of transition risks (e.g. regulation and legislation in jurisdictions with heightened carbon pricing policies and other environmental laws, and shifting consumer demands towards sustainable companies). Geographic location is the primary driver for physical climate risks, as certain locations are more highly exposed to acute and chronic climate risks (e.g. rising sea levels in coastal areas, loss of labor productivity in locations with extreme heat, and disruption to production processes and supply chains in geographies exposed to extreme weather events). Transition and physical climate risks can therefore impact a portfolio company’s prospective profitability and could lead to changes in equity valuations (through reduced revenues, early asset impairment and increased costs). The financial materiality of these risks are more severe for companies that have a business model incompatible with a low-carbon economy and are operating in locations with high physical risks.

Future Essentials implements a broad diversification strategy both in terms of geographic and sector exposure and invests with managers who themselves are committed to strong Responsible Investment principles, including the identification and management of climate-related risks. Overall, the transition risks score is moderately low due to the strong sector exposure to less carbon-intensive industries, although the fund also has exposure to geographies subject to carbon pricing and other environmental policies. The aggregated physical climate risk score is medium. The physical climate risks vary substantially by region and climate hazard and our detailed physical climate risk scenario analysis concentrates on the regions in which at least 8 underlying portfolio companies are headquartered (as of Q3 2022). Please refer to the next page for a map of physical climate risks relevant for Future Essentials II, followed by an overview of the transition risks exposure.

Physical climate risk exposure*



Number of portfolio companies located in area

*Due to the wide-spread geographic exposure of our Future Essentials II fund, physical risk exposure is only shown for locations in which at least 8 underlying portfolio companies are headquartered

Transition risk exposure

Exposure to transition risks drivers

Financial impacts of transition risks

(impact portfolio company's equity valuation)

Policy & Litigation	Exposure to transition risks drivers	Financial impacts of transition risks <i>(impact portfolio company's equity valuation)</i>
Technology	<ul style="list-style-type: none"> Carbon pricing policies / increased pricing of GHG emissions Increased reporting obligations on GHG emissions (e.g. proposed SEC rules on mandatory climate-related risks disclosures and EU Corporate Sustainability Reporting Directive “CSRD”) Regulation of existing high emitting products and services Increased exposure to litigation / penalties 	<ul style="list-style-type: none"> Increased operating costs Increased costs associated with GHG emissions reporting Write-offs, asset impairment and early retirement of existing assets due to policy changes Increased litigation costs and reduced demand for products and services resulting from fines and judgments
Market	<ul style="list-style-type: none"> Increased operating costs from high emitting technologies (for example, costs associated with combustion engine vehicles) Sunk costs to transition to low emitting technologies Stranding new investments and / or unsuccessful investment in new technology Substitution of existing products and services with lower emitting options 	<ul style="list-style-type: none"> Write-offs and early retirement of existing high emitting assets Research and development (“R&D”) expenditures in new and alternative technologies Capital investments in technology development Reduced revenue from decreased demand for high emitting products and services Costs to adopt and / or deploy new practices and processes
Reputation	<ul style="list-style-type: none"> Changing consumer behavior in favor of sustainable products Shift in consumer preferences for green products / local produce/ low emitting options Increased costs of raw materials Shifts in financial and balance sheet asset valuations Failure to capture new market opportunities to invest in clean technologies 	<ul style="list-style-type: none"> Reduced demand for goods and services due to shift in consumer preferences Increased production costs due to changing input prices and output requirements Abrupt and unexpected shifts in energy costs Change in revenue mix and sources, resulting in decreased revenues Re-pricing of assets
Reputation	<ul style="list-style-type: none"> Stigmatization of high emitting sectors Increased consumer concern about environmental practices Shifts in consumer preferences 	<ul style="list-style-type: none"> Reduced revenue from decreased demand for goods / services for companies operating in high emitting sectors Reduced revenue from decreased production capacity as a result of stakeholder concerns on environmental performance Reduced capital availability

Fund-level climate risks and opportunities – Global Secondaries V

Transition risks score (aggregated): Moderately low

Direct emissions costs	Indirect emissions costs	Low-carbon CapEx	Revenue	Overall
Moderate	Moderate	Moderate	Moderately low	Moderately low

Current physical climate risk drivers (aggregated): Medium

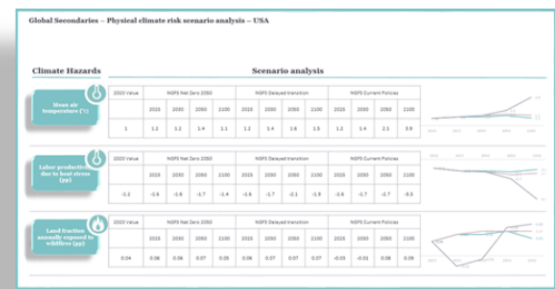


Financial impacts of physical climate risks include:

Reduced revenue and higher costs from labor productivity loss	Increased operating costs and insurance premiums or unavailability of insurance	Reduced revenue from decreased production capacity and from lower sales and output	Write-offs and early asset retirement
---	---	--	---------------------------------------

Click on the image to view the physical climate risk assessment across the time horizons 2020, 2025, 2030, 2050 and 2100 for the NGFS scenarios (Net zero 2050, Delayed transition, Current Policies) for the following climate hazards:

- Mean air temperature
- Labor productivity loss due to heat stress
- Land fraction exposed to wildfires
- Precipitation
- Expected damage from river floods
- Expected damage from tropical cyclones



Impact of climate risks and opportunities on GSEC

Financially material impacts of climate change occur in regards to sector and geographic exposure, as certain industries, such as high emitting sectors, are faced with a variety of transition risks (e.g. regulation and legislation in jurisdictions with heightened carbon pricing policies and other environmental laws, and shifting consumer demands towards sustainable companies). Geographic location is the primary driver for physical climate risks, as certain locations are more highly exposed to acute and chronic climate risks (e.g. rising sea levels in coastal areas, loss of labor productivity in locations with extreme heat, and disruption to production processes and supply chains in geographies exposed to extreme weather events). Transition and physical climate risks can therefore impact a portfolio company’s prospective profitability and could lead to changes in equity valuations (through reduced revenues, early asset impairment and increased costs). The financial materiality of these risks are more severe for companies that have a business model incompatible with a low-carbon economy and are operating in locations with high physical risks.

Global Secondaries V implements a broad diversification strategy both in terms of geographic and sector exposure and invests with managers who themselves are committed to strong Responsible Investment principles, including the identification and management of climate-related risks. Overall, the transition risks score is moderately low due to the strong sector exposure to less carbon-intensive industries, although the fund also has exposure to geographies subject to carbon pricing and other environmental policies. The aggregated physical climate risk score is medium. The physical climate risks vary substantially by region and climate hazard and our detailed physical climate risk scenario analysis concentrates on the regions in which at least 50 underlying portfolio companies are headquartered (as of Q3 2022). Please refer to the next page for a map of physical climate risks relevant for GSEC V, followed by an overview of the transition risks exposure.

Physical climate risk exposure*



Number of portfolio companies located in area

*Due to the wide-spread geographic exposure of our Global Secondaries V fund, physical risk exposure is only shown for locations in which at least 50 underlying portfolio companies are headquartered

Transition risk exposure

Exposure to transition risks drivers

Financial impacts of transition risks (*impact portfolio company's equity valuation*)

Policy & Litigation	<ul style="list-style-type: none"> • Carbon pricing policies / increased pricing of GHG emissions • Increased reporting obligations on GHG emissions (e.g. proposed SEC rules on mandatory climate-related risks disclosures and EU Corporate Sustainability Reporting Directive “CSRD”) • Regulation of existing high emitting products and services • Increased exposure to litigation / penalties 	<ul style="list-style-type: none"> • Increased operating costs • Increased costs associated with GHG emissions reporting • Write-offs, asset impairment and early retirement of existing assets due to policy changes • Increased litigation costs and reduced demand for products and services resulting from fines and judgments
Technology	<ul style="list-style-type: none"> • Increased operating costs from high emitting technologies (for example, costs associated with combustion engine vehicles) • Sunk costs to transition to low emitting technologies • Stranding new investments and / or unsuccessful investment in new tech • Substitution of existing products and services with lower emitting options 	<ul style="list-style-type: none"> • Write-offs and early retirement of existing high emitting assets • Research and development (“R&D”) expenditures in new and alternative technologies • Capital investments in technology development • Reduced revenue from decreased demand for high emitting products and services • Costs to adopt and / or deploy new practices and processes
Market	<ul style="list-style-type: none"> • Changing consumer behavior in favor of sustainable products • Shift in consumer preferences for green products/ local produce/ low emitting options • Increased costs of raw materials • Shifts in financial and balance sheet asset valuations • Failure to capture new market opportunities to invest in clean technologies 	<ul style="list-style-type: none"> • Reduced demand for goods and services due to shift in consumer preferences • Increased production costs due to changing input prices and output requirements • Abrupt and unexpected shifts in energy costs • Change in revenue mix and sources, resulting in decreased revenues • Re-pricing of assets; as carbon-intensive businesses become increasingly out of favor, investment managers in the Secondaries market will need to factor in the climate risks in the pricing
Reputation	<ul style="list-style-type: none"> • Stigmatization of high emitting sectors • Increased consumer concern about environmental practices • Shifts in consumer preferences 	<ul style="list-style-type: none"> • Reduced revenue from decreased demand for goods / services for companies operating in high emitting sectors • Reduced revenue from decreased production capacity as a result of stakeholder concerns on environmental performance • Reduced capital availability

Climate risks and opportunities – Capital Dynamics operations

Transition risks score (aggregated): Moderately low

Direct emissions costs	Indirect emissions costs	Low-carbon CapEx	Revenue	Overall
Low	Moderately low	Moderately low	Moderate	Moderately low

Current physical climate risk drivers (aggregated): Low

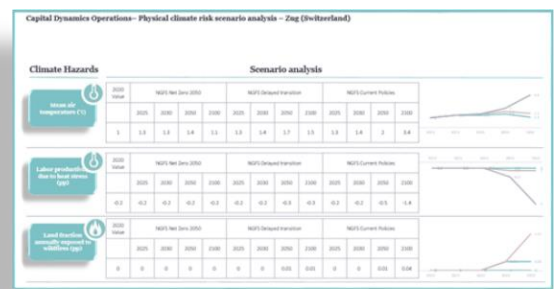
 Tropical cyclones Low
  Water stress Low
  Wildfire Medium
  Flooding Medium
  Extreme heat Low

Financial impacts of physical climate risks include:

Reduced revenue and higher costs from labor productivity loss	Increased operating costs and insurance premiums or unavailability of insurance	Reduced revenue from decreased production capacity and from lower sales and output	Write-offs and early asset retirement
---	---	--	---------------------------------------

Click on the image to view the physical climate risk assessment across the time horizons 2020, 2025, 2030, 2050 and 2100 for the NGFS scenarios (Net zero 2050, Delayed transition, Current Policies) for the following climate hazards:

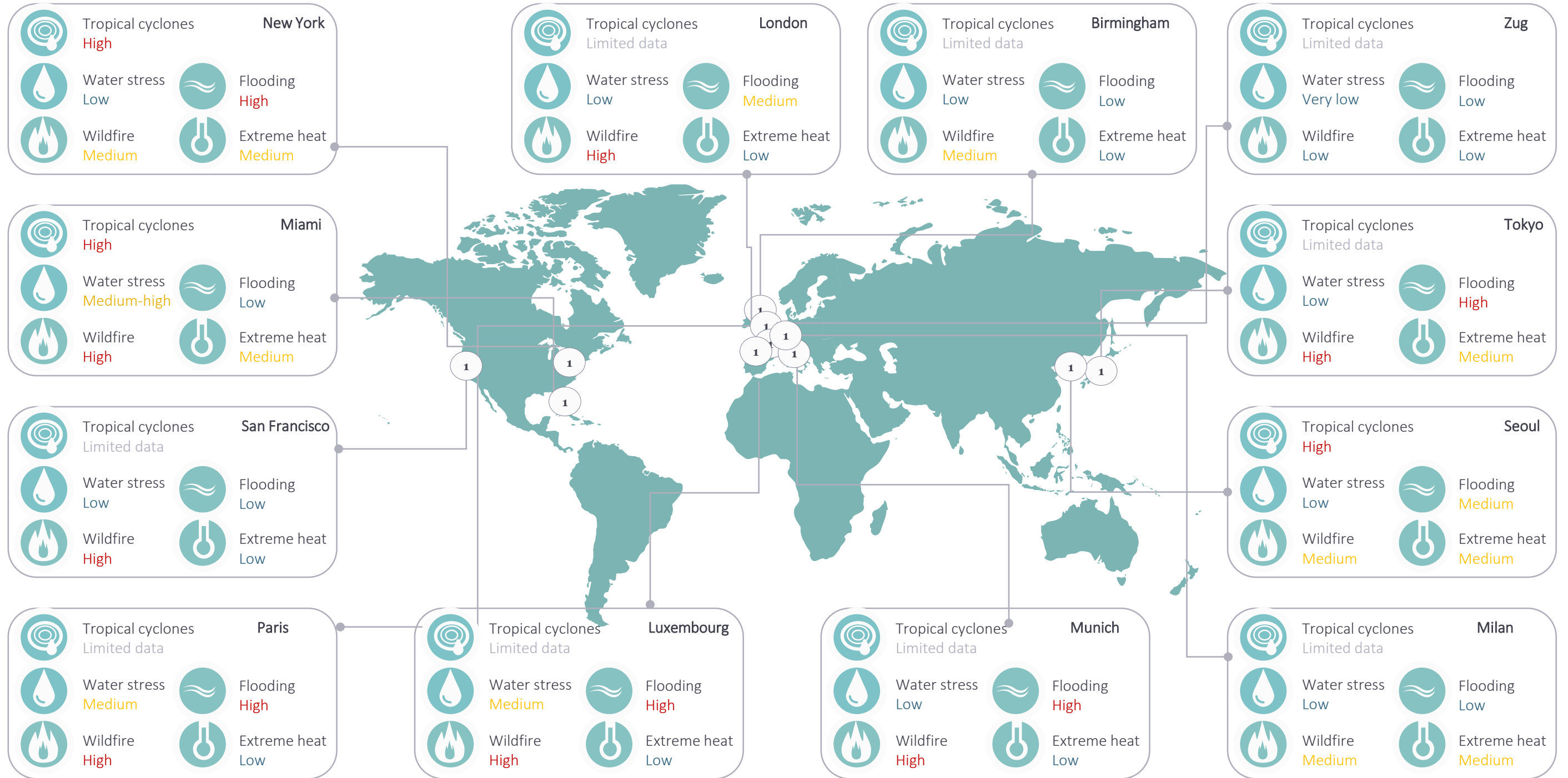
- Mean air temperature
- Labor productivity loss due to heat stress
- Land fraction exposed to wildfires
- Precipitation
- Expected damage from river floods
- Expected damage from tropical cyclones



Impact of climate risks and opportunities on Capital Dynamics

As an asset manager, our exposure to financially material climate risks and opportunities mainly stems from our investment activity, whereby the sector and geographic exposure of our underlying investee companies translates into possible risks and opportunities for us. Our diversified sector exposure generally favors companies operating in comparatively less carbon-intensive sectors. Moreover, we actively seek to improve our portfolio companies' transition risk management processes to build a pipeline of companies that have viable business models in place, as we transition towards a lower carbon economy. Further, our own operational carbon footprint is relatively low and so overall the transition risks score for Capital Dynamics operations is moderately low. Our broadly diversified geographic footprint means that our firm is exposed to a variety of physical climate risks, although in aggregate our physical climate risk score for our operations is low. We manage these through our business continuity management and flexible work arrangements that allow our employees to perform their duties remotely, if unexpected disruptions occur. Please refer to the next page for a map of physical climate risks relevant for Capital Dynamics' operations, followed by an overview of the transition risks exposure.

Physical climate risk exposure



Number of Capital Dynamics offices located in area

Transition risk exposure

Exposure to transition risks drivers

Financial impacts of transition risks

(impact revenues and costs of Capital Dynamics' operations)

	Exposure to transition risks drivers	Financial impacts of transition risks <i>(impact revenues and costs of Capital Dynamics' operations)</i>
Policy & Litigation	<ul style="list-style-type: none"> Carbon pricing policies / increased pricing of GHG emissions Increased reporting obligations on GHG emissions Increased exposure to litigation / penalties (e.g. regulatory risk associated with sustainable finance regulation) 	<ul style="list-style-type: none"> Increased operating costs Increased costs associated with GHG emissions reporting Increased litigation costs and reduced demand for products and services resulting from fines and judgments (e.g. fines in relation to sustainable finance regulations)
Technology	<ul style="list-style-type: none"> Stranding new investments and / or unsuccessful investment in new tech 	<ul style="list-style-type: none"> Sunk costs associated with unsuccessful investment
Market	<ul style="list-style-type: none"> Changing consumer behavior in favor of sustainable finance products Shift in consumer preferences for sustainable investments Shifts in financial and balance sheet asset valuations Failure to capture new market opportunities to invest in clean technologies and sustainable companies 	<ul style="list-style-type: none"> Reduced demand for financial product offerings due to shift in consumer preferences Change in revenue mix and sources, resulting in decreased revenues from financial products with less focus on sustainable investments Re-pricing of assets
Reputation	<ul style="list-style-type: none"> Increased consumer concern about environmental practices Shifts in consumer preferences 	<ul style="list-style-type: none"> Reduced revenue from financial products with less focus on decarbonization and other sustainability goals

Climate scenario analysis result

The climate scenario analysis helps us identify and assess our investment holdings' exposure to financially material physical and transition risks and climate opportunities under three different scenarios. The outputs of the assessment inform us about which sectors are most exposed to certain risks and opportunities, which in turn feeds back into the continuous enhancement of our Responsible Investment approach and reporting capabilities. We regularly engage with our portfolio companies on sustainability improvement measures that have a financially material impact on our investments. We also use the results of the climate scenario analysis in our own business continuity planning, business strategy, product strategy and financial planning.

Most importantly, however, the scenario analysis provides us valuable insights into how resilient our firm is and how we best mitigate and adapt climate risks and capture attractive climate opportunities during the transition to a more sustainable future. Please refer to the section ['resilience of Capital Dynamics' strategy'](#) for more details.



Embedding climate risks and opportunities into our business strategy and financial planning

At Capital Dynamics, sustainability is a core part of our strategy and firmly integrated into our Responsible Investment approach across our investment strategies and in our Corporate Social Responsibility initiatives. We consider the impact of climate-related risks and opportunities on our firm's business lines, the strategy and financial planning. In addition, our business planning process assesses the need for business model changes in response to financially material climate matters, where appropriate.

Bryn Gostin, Chief Product & Strategy Officer and Co-Chair of Responsible Investment leads Capital Dynamics' product strategy that addresses climate-related risks and opportunities. The scenario analyses performed in our 2021 and 2022 TCFD reports form a basis to assess and understand the extent to which our investment strategies are exposed to climate-related risks and opportunities and as such form a core part in financial planning across our funds.

Forecasted assets under management ("AUM") are considered in our revenue assumptions (usually for a 5-year period) and include the impact of client demand shifts towards sustainable financial product options. An example of financial planning made with consideration of climate-related risks and opportunities is the broadening of our funds range which disclose sustainability information under SFDR Article 8 and Article 9. We consider this part of our adaptation strategy to address climate-related transition risks, in particular in response to market demand shifts and reputational risks.

Climate-related opportunities are financially material for us across all investment strategies, the most material being our Clean Energy business line (as demonstrated by the orderly and disorderly transition scenario analysis). The revenue forecasts assess the likely impact of climate-related opportunities, such as those arising from shifts in energy source and market shifts towards increased financing of renewable energy projects.

An example of capitalizing on financially material climate opportunities is therefore the continuous expansion of our Clean Energy fund offerings and integration of core environmental sustainability aspects in our new Clean Energy funds, including the alignment with the EU Taxonomy criteria and setting net zero targets at the fund level.

Our increased offering of funds that firmly incorporate sustainability enables us to direct more capital in support of the transition to a lower carbon economy, whilst increasing

revenues for Capital Dynamics. A further mitigation action resulting from climate-related risks consideration is the sector exposure in our investment universe. Capital Dynamics has limited exposure to more traditional carbon-intensive energy investments and generally takes a skeptical view with respect to this kind of exposure. Further, Capital Dynamics' Private Equity Co-Investment team seeks to utilize its influence over portfolio companies to enhance Sustainability performance, including measuring GHG emissions, setting emission reduction targets and tracking progress towards the targets to mitigate financially material climate risks. Capital Dynamics utilizes these adaptation and mitigation steps in the investment research and development process to reduce risks for our clients and enhance long-term risk-adjusted returns, thereby creating value for our clients over time.

Across our own operations, we also consider financially material climate-related matters. For example, our Chief Operations Officer leads the firm's operational financial planning, and in this role is focused on reducing unnecessary business travel, procuring renewable energy at our office sites and offsetting our operational carbon footprint to reduce our climate impact. Financial planning also includes sustainability initiatives aimed at reducing the climate-related risks faced in our operations as identified in our scenario analysis, and capturing financially material opportunities. These include the measurement of our operational carbon footprint, resource planning for our dedicated Responsible Investment team in support of enhanced reporting of climate-related matters, and opportunities for our workforce to participate in Corporate Social Responsibility projects. Examples of business model changes in consideration of climate-related impacts include the expansion of working from home options for our own employees that allows our firm to remain operational and resilient in light of disruptions, such as the disruption caused by Hurricane Ian in Florida in 2022. The remote working scheme also reduces carbon emissions arising from employee commuting. Our resilience considerations as part of our business planning processes ensure we lower our costs that otherwise would be incurred and we continue to serve our client base without interruption.

GHG reduction commitments in our Clean Energy funds

At Capital Dynamics, we are strongly committed to supporting the expansion of clean energy in Europe and doing our part to reduce greenhouse gas emissions associated with our investments. The majority of project lifecycle emissions of a typical renewable energy project occur during the manufacturing and construction process, whereas operational GHG emissions account for a small portion as part of the electricity transmission process.

Carbon reduction targets - construction

- 1 **Measurement of construction emissions** at project level (excl. manufacturing of materials and transport to site)
- 2 **Reduction of construction emissions** of carbon emitting activities (e.g. through solar powered temporary offices, use of electric vehicles for worker transportation and waste reduction)
- 3 **Offsetting carbon emissions** with verified carbon removal project



In our new clean energy funds, we are committed to taking action to reduce project lifecycle emissions from the construction process and operations. Our commitment is to reduce or offset emissions for all clean energy projects in the fund in line with net zero targets, from the construction date through the exit of that project, based on the actual emissions for each investment or, where such data is not available, the average emissions intensity of all such investments.

Carbon reduction targets - operations

- 1 **Measurement of operational emissions** (e.g. electricity used onsite, waste generation)
- 2 **Reduction of operational carbon emissions:** reduce own energy usage of investments and increase procurement of renewable energy at asset level (e.g. through REGOs or Guarantees of Origin)
- 3 **Offsetting carbon emissions** with verified carbon removal project



GHG reductions in our own operations

In early 2022, we undertook a firm-wide employee commuting survey to better understand the commuting habits of our staff. We asked employees about their commuting distance, frequency and choice of transport mode in 2019 and 2021.

Due to the COVID-19 pandemic and the resulting prolonged period of working from home in 2020, we were interested in understanding our employees' commuting habits prior to the pandemic as a baseline, and the impact our hybrid working model from 2021 had on these commuting patterns.

Not only did the survey reveal the effectiveness of our hybrid working model on reducing emissions from employee commuting; it also helped us identify ways in which we can incentivize employees to make environmentally-conscious choices when commuting to work.

Utilizing the data, we have measured our operational carbon footprint (scope 1, scope 2 and scope 3, excluding category 15 'investments') and identified our main carbon hotspots arising from electricity consumption, business flights and employee commuting. Our energy consumption across our offices was responsible for 50 tCO₂e emissions in 2021, as measured by the location-based method in line with the Greenhouse Gas Protocol. Each year, we offset our emissions from electricity consumption with the purchase of "REGOs" (Renewable Energy Guarantees of Origin). In 2022, Capital Dynamics has offset the remainder of the operational carbon emissions arising from employee commuting and business flights (521.5 tCO₂e) with a verified carbon removal project [Rimba Raya](#).

We are also committed to make a positive impact on the environment through our supplier selection. In 2022, we partnered with "A Good Company" for the purchase of climate-positive notebooks. Each product sold not only made a positive contribution to the environment, but our order also enabled donations to [charity: water](#) ([charitywater.org](#)) and has generated 20,000 liters of water to communities.

At Capital Dynamics we have a responsibility to reduce our own impact on the environment and support local communities most affected by climate change. A fundamental component of contributing towards environmental sustainability is to offset our firm's carbon footprint with a verified carbon removal project. In summer 2022, we conducted a firm-wide vote and asked our employees which carbon removal project we should support to remove the equivalent amount of carbon emissions we have emitted as part of our operations.

An overwhelming majority voted for the forest protection project Rimba Raya in Indonesia. With our contributions to the project, we offset all of our operational carbon emissions from 2021, making us a carbon neutral firm.

Further, our project support helped protect biodiversity in the Rimba Raya region and funded local community development and provincial government infrastructure.



What is carbon neutrality?

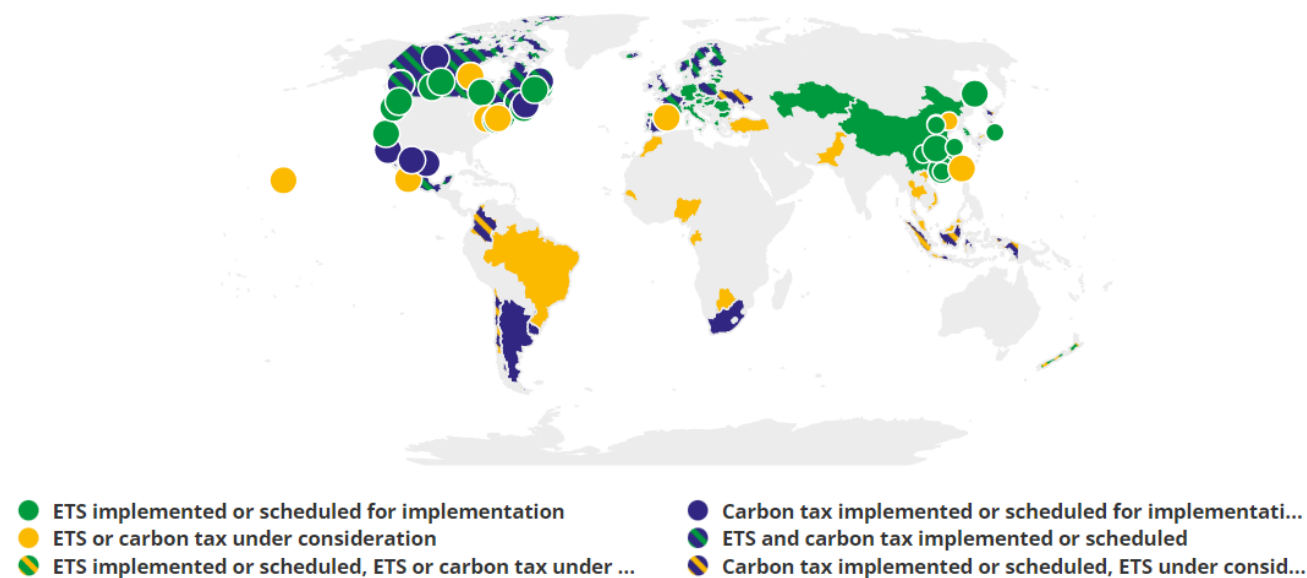
Carbon neutrality means that the carbon footprint of a company has been calculated in line with internationally recognized standards and was fully offset with a verified carbon offset project. Capital Dynamics has offset its 2021 operational carbon footprint from its energy consumption, employee commuting and business flights through REGOs and Rimba Raya. Our actions helped us achieve carbon neutrality at the firm level.

Resilience of Capital Dynamics' strategy

The result of our scenario analysis under the orderly transition, disorderly transition and hot house world scenarios reveals our investment strategies' strong resilience against climate-related risks over different time horizons.

Our investment strategies in Private Equity and Private Credit are most exposed to transition risks associated with carbon pricing policies in the medium-term (7-15 years) in jurisdictions that have implemented respective policies or are currently considering such policies. The exposure of this risk is largely concentrated on European jurisdictions, as the majority of our US investments do not face the risk of carbon pricing policy implementation yet as of today. However, with our well-diversified investment portfolio,

Summary map of regional, national and subnational carbon pricing initiatives



Source: The World Bank Carbon Pricing Dashboard database, available at: [Carbon Pricing Dashboard | Up-to-date overview of carbon pricing initiatives \(worldbank.org\)](https://www.worldbank.org/en/topic/climatechange/Carbon-Pricing-Dashboard)

in terms of both sector and geographic exposure, we are able to mitigate the risk associated with intensified carbon pricing schemes. Further, at Capital Dynamics we do not invest in or lend to traditionally carbon-intensive businesses, such as businesses involved in the exploration of fossil fuels. This allows our firm to reduce transition risks to generate enhanced long-term returns for our clients.

Another prominent climate-related risk we identified across our sector exposures is related to shifts in market demand towards more sustainable companies and the reputational risks associated with firms failing to address climate matters. The integration of Responsible Investment factors, including those pertaining to climate-related risks and opportunities, is core to our due diligence and investment monitoring processes and forms a fundamental part of our Co-Investment team's mandate to influence sustainability improvements at the portfolio company level. The team seeks to utilize its influence over portfolio companies to enhance sustainability performance, including measuring GHG emissions, setting emission reduction targets and tracking progress towards the targets to mitigate environmental and financial risks, making the portfolio companies more resilient in the transition to a low-carbon economy. Many of our portfolio companies are already implementing sustainability measures, such as on-site waste reduction initiatives that help address potential climate-related transition risks.

We also invest in companies that already today capture financially material climate-related opportunities, such as offering green products (e.g. sustainable packaging) and switching energy sources to renewable energy (e.g. on-site solar PV installation).

In our Private Equity Fund-of-Funds business we mitigate climate-related risks as part of our manager selection process. We incorporate Responsible Investment factors, including climate-related matters, holistically in our due diligence and monitoring processes and select managers who themselves are committed to enhancing portfolio companies' resilience and profitability in a sustainable economy.

Physical climate hazard exposure (in particular the intensified chronic and acute climate

risks in the hot house world scenario) are likely to affect our investment strategies in the long-run (2050 and 2100).

One of the main mitigants of these risks is the geographic footprint we take with our investments, as our investment universe spans from the U.S. to Europe and Asia. Overall, given we own a number of businesses across strategies, geographies and industries, our climate risks in many ways map closely to broader considerations for middle-sized businesses across the private market.

Finally, our strategies are comparatively resilient to climate-related risks and opportunities, as we take a forward-looking approach in our investment platform offerings in support of a transition to a lower-carbon economy. We established our Clean Energy business in 2010 and since then have continuously expanded our successive fund offerings.

The scenario analysis we performed in our 2021 and 2022 TCFD reports demonstrate a substantial financially material climate opportunity associated with our Clean Energy strategy, driven by the mitigation and adaptation needs of companies operating in the real economy to address climate risks, and driven by the immense market opportunity for new investments in clean energy projects, including the opportunity to diversify among renewable energy technologies. The steep increase in client demand for net zero fund offerings has also led us to address such needs in our new Clean Energy funds, which seek to achieve a minimum of 50% EU Taxonomy alignment* and set net zero targets aimed at reducing or offsetting emissions associated with the construction and operational phases of our clean energy assets.

We therefore feel confident that our approach to climate-related risks and opportunities across our investment platform results in strong resilience in support of a transition to a low-carbon economy that enhances long-term risk-adjusted returns for our clients.

*applicable to EU fund only

3

Risk Management






Approach for identifying and assessing climate-related risks

Capital Dynamics conducts rigorous Responsible Investment screening throughout the entire investment process and assesses our long-term portfolio alignment utilizing a range of resources and tools. The processes described below encompass the consideration of climate-related risks and opportunities, as well as broader RI factors, which are firmly integrated into our organization’s Risk Management processes and are applied to each of our investment strategies:

Pre-acquisition / Due Diligence

During the due diligence phase, RI matters including climate-related risks and opportunities are identified and assessed through the following processes and tools:

- 
Proprietary R-Eye™ Scorecard
(Investment Management)
- 
RepRisk screening of RI-related risks
(Risk Management)
- 
RI Alert Process
(Responsible Investment Committee)


Hold period / Post hold period

Risks arising during the hold period or in the period post planned divestment (if a risk affects the exit multiple) are assessed and monitored as follows:

- 
Proprietary R-Eye™ Scorecard
(Investment Management)
- 
RepRisk monitoring of RI-related risks
(Risk Management and Co-Chair Responsible Investment)
- 
RI Alert Process
(Responsible Investment Committee)
- 
Climate scenario analysis
(Co-Chairs Responsible Investment, presentations to the Board)

Long-term portfolio alignment

We assess long-term climate risks under a range of scenarios to determine how transition risks impact us and how our investment solutions support the transition to a low-carbon economy

- 
Climate scenario analysis
(Co-Chairs Responsible Investment, presentations to the Board)

R-Eye Scorecard



Our proprietary R-Eye™ Rating System, based on the United Nations Sustainable Development Goals, was adopted across the entire investment platform to ensure a consistent and transparent approach to Responsible Investment due diligence. Each investment made by Capital Dynamics, regardless of strategy, is rated on a 0 to 5 scale on our trademarked R-Eye Scorecard with 10-12 criteria at the time of investment, which are re-assessed annually thereafter as part of our active monitoring.

If Responsible Investment issues, including financially material climate risks are identified during the holding period, Capital Dynamics' RI Alert process is triggered (see below). The Investment Management team reviews RI metrics and reports them to the Responsible Investment Committee for governance, advice and recommendation.

The output of our R-Eye assessment forms a core part of our engagement strategy with our portfolio companies, GPs and Sponsors. We utilize the scoring to understand improvement potentials and conduct targeted engagement to understand potential mitigation and adaptation actions.

RepRisk



RepRisk is an artificial technology-enabled platform that analyzes public information and identifies material RI risks with its flagship product, the RepRisk ESG Risk Platform, covering 205,000+ public and private companies and 55,000+ infrastructure projects. It provides software which screens over 500,000 documents daily in the media for Responsible Investment matters, including those pertaining to climate risk. We utilize RepRisk during the due diligence phase to collect ESG related information about companies/ funds or major supply chain providers. After an investment has been made, we use RepRisk to monitor our investments.

The Risk Management team has created watchlists for funds to monitor third parties and their supply chains. Each week, Philippe Jost, Head of Risk Management, and Verena Rossolatos, Co-Chair of the Responsible Investment Committee, review RI alerts received and flag material RI risks for further evaluation. The alerts are compiled in a weekly summary and sent to the respective Investment Management teams or to the Operations teams for alerts related to Capital Dynamics supply chain providers. Capital Dynamics' Investment Management memos contain a summary of the major metrics followed by a brief summary of the incidents with high or very high risk.

RI Alert Process



If material Responsible Investment risks are identified through our R-Eye Scorecard and RepRisk tools, then Investment Management representatives escalate these matters to the firm's Responsible Investment Committee. The RIC is headed by Bryn Gostin, Chief Product & Strategy Officer and Co-Chair Responsible Investment, and by Verena Rossolatos, Co-Chair Responsible Investment. Depending on the severity of the RI issue identified, the committee may escalate further to our Executive Committee for evaluation and further consideration. Please refer to our [governance](#) section of this report to view the details of our RI Alert process.

Climate scenario analysis



As detailed in the [strategy](#) section of this report, the Co-Chairs of Responsible Investment utilize climate scenario analysis to identify and assess financially material climate-related risks and opportunities impacting our investment strategies and our firm. The findings of the analysis form part of the quarterly presentation to the EC and are integrated in our assessment of long-term portfolio alignment, business strategy, and financial planning.

Monitoring of regulatory developments

In addition to the above-mentioned risk management processes and tools, Capital Dynamics takes a proactive approach in monitoring regulatory developments pertaining to climate change that impact us as an asset manager (for example Sustainable Finance regulations in the EU and UK), represent attractive long-term investment opportunities for our clients (for example the U.S. Inflation Reduction Act, EU Green Deal and UK Net Zero targets) and could have an impact on our portfolio companies (for example the proposed SEC rules on mandatory climate-related disclosures). Our Co-Chairs of Responsible Investment are actively monitoring and assessing the regulatory considerations and manage the implementation of sustainable finance regulations at our firm. We also take the opportunity to be an active voice in the development of upcoming regulations by regularly participating in industry consultations.

Our support for the SEC’s proposed rules on climate-related disclosures for investors

In 2022, Capital Dynamics submitted commentary to the SEC expressing strong support for proposed rules regarding the enhancement and standardization of climate-related disclosures for investors.

The commentary outlines, among other things, our beliefs that:



Investment managers should disclose climate-related risks and opportunities to investors in a succinct, clear and non-misleading form



Climate-related risks and opportunities are decision-useful information for investors to assess the financial risk and return potential of an underlying business. Transparent disclosures of climate-related risks have the potential to promote greater stability of the financial markets

This commentary on climate-related disclosures aligns with our longstanding support of the TCFD disclosure framework and builds upon Capital Dynamics’ numerous RI milestones in 2022. It also underpins our belief that investment managers and financial market regulators have a key role to play to scale sustainable investments and protect the stability of financial markets.

Find out more about our submitted commentary on the proposed SEC rules on climate-related disclosures at:

<https://www.sec.gov/comments/s7-10-22/s71022-298787.htm>



Engagement on climate change

Engagement with our portfolio companies and industry peer groups is a cornerstone of our risk management processes relating to climate matters. We encourage our portfolio companies to disclose climate-related data, such as GHG emissions metrics, climate risk adaptation and mitigation actions taken or planned to be taken, whether the portfolio company has transition plans in place in line with the 1.5°C temperature goal, and whether the company discloses its climate-related financial risks and opportunities in line with the TCFD framework. Improving the availability of climate-related data helps us to better identify and assess climate-related risks and opportunities in our investment portfolio, as well as provide our clients with better and more transparent reporting.

In addition to engaging with policy makers on regulatory developments, Capital Dynamics is also a member of key associations that support the transition towards a low-carbon economy, as detailed below. Our engagement with these industry groups are an important part of our climate change risk management process.



We were early adopters of the Principles for Responsible Investment (“PRI”), signing on in 2008. In the most recent (2021) assessment, we received 5-Star ratings for Investment & Stewardship Policy, Private Debt and Clean Energy.



As a member of IIGCC, Capital Dynamics signed a letter calling upon the leaders of the European Union to include provisions related to a sustainable future, such as green technologies and Clean Energy, in stimulus packages helping European Union nation states in their recovery from the global pandemic.

Capital Dynamics is also a co-chair of an IIGCC committee and has been working on the creation of a framework for private equity firms to achieve net-zero emissions.



Capital Dynamics is a member of iC International – France, a collective commitment to understand and reduce carbon emissions of private equity-backed companies and secure sustainable investment performance.



Capital Dynamics joined the Partnership for Carbon Accounting Financials (“PCAF”) in April 2022. PCAF is a global partnership of financial institutions that work together to develop and implement a harmonized approach to assess and disclose the greenhouse gas emissions associated with their loans and investments. The PCAF standard is the only global standard reviewed by the GHG Protocol for measuring and disclosing financed emissions of financial portfolios. Using the standard allows financial institutions to deploy a harmonized, robust method to assess climate-related financial risks in line with the Task Force on Climate-related Financial Disclosures (“TCFD”).



Capital Dynamics is a supporter of the Task Force on Climate-related Financial Disclosures (“TCFD”), an initiative created to develop a set of recommendations for voluntary and consistent climate-related financial risk disclosures in mainstream filings. We are proud to have issued our first annual Task Force on Climate-related Financial Disclosures (“TCFD”) Report in 2020 and we have produced our second TCFD report including firm-level and asset-level scenario analysis in 2021.

Management of climate-related risks

We primarily manage climate-related risks in our investment strategies through our engagements with portfolio company management, GPs and Sponsors. In addition, we actively manage a variety of transition risks through our sector diversification (we avoid carbon-intensive sectors such as fossil fuel exploration) and geographic diversification (allowing us to manage the risk of carbon pricing across jurisdictions and manage the physical climate risks in the long-term). We identify and manage risks, including those pertaining to climate matters, as part of our holistic approach to Responsible Investment. Our identified climate-related risks are captured in our risk registers together with our RI alerts, and the appropriate risk management response (mitigate, avoid, accept or control) is evaluated on a case-by-case basis.



Moreover, we manage climate-related risks as part of our product development processes. We assess our product range and shifting client demands in support of sustainable investing, and ensure our offerings meet client expectations for Responsible Investment and climate change matters. This also includes our review of sustainable finance regulations, such as the EU Taxonomy and SFDR disclosure regimes, which form a core part of our launch of bespoke products and solutions aimed at helping our investors meet climate-related commitments and enhance long-term risk-adjusted returns.



The following pages detail our risk response to the [climate-related risks](#) disclosed in the strategy section of this report and how we manage material climate-related risks for our investment strategies.






RISK	TIMEFRAME	RISK RESPONSE - PRIVATE EQUITY	RISK RESPONSE - PRIVATE CREDIT	RISK RESPONSE - CLEAN ENERGY
<p>Policy & Regulation</p>  <p>Carbon-intensive businesses are most vulnerable to carbon pricing policies and increased environmental litigation. Investments made into high emitting firms and / or companies operating in geographies most at risk of stringent carbon pricing policies are therefore most exposed to equity valuation adjustments and higher credit risks</p>	<p>M</p>	<p><i>Mitigate</i></p> <p>Capital Dynamics' Private Equity Co-Investment team seeks to utilize its influence over portfolio companies to enhance sustainability performance, including measuring emissions, setting emission reduction targets and tracking progress towards the targets to mitigate environmental and financial risks.</p> <p>In our fund-of-funds business we conduct thorough due diligence on the GPs with whom we invest and actively monitor our investments utilizing RepRisk, as well as engage with GPs on best RI practices</p>	<p><i>Avoid</i></p> <p>Capital Dynamics' Private Credit team does not lend to borrower companies located in jurisdictions highly exposed to carbon pricing policies. Further, our borrower companies are traditionally carbon-light firms and implement initiatives, such as working from home schemes, that reduce the borrower's overall carbon footprint</p>	<p><i>Accept</i></p> <p>Risk of carbon pricing represents a financially attractive opportunity for our Clean Energy business</p>
<p>Technology</p>  <p>Carbon-intensive businesses are most vulnerable to risks arising from technology (i.e. innovation to support the transition towards a low-carbon economy could replace existing technology, leading to high capital expenditure) and are most exposed to equity valuation adjustments and higher credit risk</p>	<p>M</p>	<p><i>Mitigate</i></p> <p>As above, Capital Dynamics' Private Equity Co-Investment team seeks to utilize its influence over portfolio companies to enhance sustainability performance and invests with GPs that have strong RI processes in place to mitigate the risk</p>	<p><i>Avoid</i></p> <p>As above, Capital Dynamics' Private Credit team generally lends to carbon-light businesses</p>	<p><i>Accept</i></p> <p>Risk of low-carbon technology represents a financially attractive opportunity for our Clean Energy business</p>



RISK	TIMEFRAME	RISK RESPONSE - PRIVATE EQUITY	RISK RESPONSE - PRIVATE CREDIT	RISK RESPONSE - CLEAN ENERGY
<p>Reputation</p>  <p>Businesses failing to address changing client demands in support of a lower carbon economy are most exposed to reputational risks leading to equity valuation adjustments and higher credit risk</p>		<p>Mitigate</p> <p>As above, Capital Dynamics' Private Equity Co-Investment team seeks to utilize its influence over portfolio companies to enhance sustainability performance and invests with GPs that have strong RI processes in place to mitigate the risk</p>	<p>Avoid</p> <p>As above, Capital Dynamics' Private Credit team generally lends to carbon-light businesses or firms that implement sustainability initiatives</p>	<p>Accept</p> <p>Reputational risk associated with businesses failing to reduce their carbon intensity represents a financially attractive opportunity for our Clean Energy business, as firms increasingly need to source renewable energy to mitigate the risk</p>
<p>Technology</p>  <p>Rapid technological change, such as the widespread use of electric vehicles, affects the value of financial assets in the automotive industry</p>		<p>Mitigate</p> <p>As above</p>	<p>Avoid</p> <p>As above</p>	<p>Accept</p> <p>Risk of low-carbon technology adoption represents a financially attractive opportunity for our Clean Energy business</p>
<p>Market</p>  <p>Companies with a narrow product range that could be phased out in the transition to a low-carbon economy (for example a manufacturing firm whose sole customer base is a high emitting sector, such as thermal coal) are most affected by equity valuation adjustments and higher credit risk</p>		<p>Avoid</p> <p>Capital Dynamics has limited exposure to more traditional carbon-intensive energy investments and generally takes a skeptical view with respect to this kind of exposure</p>	<p>Avoid</p> <p>Capital Dynamics has limited exposure to more traditional carbon-intensive energy investments and generally takes a skeptical view with respect to this kind of exposure</p>	<p>Accept</p> <p>Risk of phasing out high emitting sectors, such as thermal coal represents a financially attractive opportunity for our Clean Energy business</p>

RISK	TIMEFRAME	RISK RESPONSE - PRIVATE EQUITY	RISK RESPONSE - PRIVATE CREDIT	RISK RESPONSE - CLEAN ENERGY
<p>Market</p>  <p>Investments in companies failing to mitigate market risks that emerge from the shifts in demand and supply in support of a transition towards a low-carbon economy are most affected by equity valuation adjustments and higher credit risk</p>	<p>M</p>	<p><i>Mitigate</i></p> <p>As above, Capital Dynamics' Private Equity Co-Investment team seeks to utilize its influence over portfolio companies to enhance sustainability performance and invests with GPs that have strong RI processes in place to mitigate the risk</p>	<p><i>Avoid</i></p> <p>As above, Capital Dynamics' Private Credit team generally lends to carbon-light businesses or firms that implement sustainability initiatives</p>	<p><i>Accept</i></p> <p>Market demand and supply shifts in support of a low-carbon economy represent a financially attractive opportunity for our Clean Energy business</p>
<p>Cyclones, storms (acute)</p>  <p>The increased frequency and severity of cyclones and storms affect a multitude of businesses located in geographies most exposed to the climate hazard. The extreme weather events could cause physical damage to operations of portfolio and borrower companies and cause disruption to supply chains, affecting equity valuations and increasing credit risk</p>	<p>L</p>	<p><i>Mitigate</i></p> <p>Capital Dynamics' Private Equity business has a well-diversified geographic exposure to mitigate risks</p>	<p><i>Accept</i></p> <p>Capital Dynamics' private credit business is concentrated in the U.S. Risks associated with long-term physical climate hazards are monitored through our scenario analysis</p>	<p><i>Mitigate</i></p> <p>Capital Dynamics' Clean Energy business has a well-diversified geographic exposure in Europe and the United Kingdom to mitigate risks</p>

RISK	TIMEFRAME	RISK RESPONSE - PRIVATE EQUITY	RISK RESPONSE - PRIVATE CREDIT	RISK RESPONSE - CLEAN ENERGY
<p>Coastal and river Flooding (acute)</p>  <p>The increasingly rising sea levels and changes in precipitation patterns could pose flooding risks to companies located in geographies most exposed to rising risks of flooding</p>	<p>L</p>	<p>Mitigate Capital Dynamics' Private Equity business has a well-diversified geographic exposure to mitigate risks</p>	<p>Accept Capital Dynamics' Private Credit business is concentrated in the U.S. Risks associated with long-term physical climate hazards are monitored through our scenario analysis</p>	<p>Mitigate Capital Dynamics' Clean Energy business has a well-diversified geographic exposure in Europe and the United Kingdom to mitigate risks</p>
<p>Drought (chronic)</p>  <p>Drought could lead to greater competition for water resources between portfolio companies/ borrower companies. It could also likely lead to an expectation of increased environmental regulation focusing on protecting water supply and quality, which would lead to steep increases in additional costs for water-intensive industries</p>	<p>L</p>	<p>Mitigate Capital Dynamics' Private Equity business has a well-diversified geographic and sectoral exposure to mitigate risks</p>	<p>Mitigate Capital Dynamics' Private Credit business has a well-diversified sectoral diversification and generally lends to borrower companies with strong sustainability credentials to mitigate the risk</p>	<p>Avoid Capital Dynamics' Clean Energy business is not water-intensive and has a well well-diversified geographic exposure in Europe and the United Kingdom</p>

RISK	TIMEFRAME	<i>RISK RESPONSE - PRIVATE EQUITY</i>	<i>RISK RESPONSE - PRIVATE CREDIT</i>	<i>RISK RESPONSE - CLEAN ENERGY</i>
<p>Mean air temperature rise (chronic) </p> <p>The rise in average air temperature in some jurisdictions could be substantial, affecting agriculture and availability of raw materials, transport, and medical care. It also affects the labor productivity of companies. These effects have an impact on equity valuation and credit risk of underlying companies</p>	<p>L</p>	<p><i>Accept</i></p> <p>The rising average air temperature globally will have a long-term effect on businesses across all sectors and geographies. Capital Dynamics monitors the long-term risks through climate scenario analysis</p>	<p><i>Accept</i></p> <p>The rising average air temperature globally will have a long-term effect on businesses across all sectors and geographies. Capital Dynamics monitors the long-term risks through climate scenario analysis</p>	<p><i>Accept</i></p> <p>The rising average air temperature globally will have a long-term effect on businesses across all sectors and geographies. Capital Dynamics monitors the long-term risks through climate scenario analysis</p>
<p>Rising sea levels, temperature rise, drought, extreme weather events (chronic / acute) </p> <p>The increasing frequency and severity of climate hazards (chronic and acute) could lead to some companies and assets most exposed to the risks to become uninsurable, impacting equity valuations and increasing credit risks</p>	<p>L</p>	<p><i>Mitigate</i></p> <p>Capital Dynamics' Private Equity business has a well-diversified geographic exposure to mitigate risks</p>	<p><i>Accept</i></p> <p>Capital Dynamics' Private Credit business is concentrated in the US. Risks associated with long-term physical climate hazards are monitored through our scenario analysis</p>	<p><i>Mitigate</i></p> <p>Capital Dynamics' Clean Energy business has a well-diversified geographic exposure in Europe and the United Kingdom to mitigate risks</p>

RISK	TIMEFRAME	RISK RESPONSE - Capital Dynamics operations
<p>Policy & Regulation</p>  <p>Enhanced regulatory disclosure obligations increase costs for data collection of climate-related KPIs and reporting efforts</p>	<p>S</p>	<p><i>Mitigate</i></p> <p>Capital Dynamics has identified regulatory developments in sustainable finance regimes and conducted impact assessments. The firm prepares well in advance for changes to regulations (for example amendments to SFDR disclosures) and works in close cooperation with Legal and Compliance subject matter experts on the implementation of regulatory reporting obligations</p>
<p>Policy & Regulation</p>  <p>Increased carbon pricing policies could lead to higher costs for our own operational carbon emissions</p>	<p>L</p>	<p><i>Mitigate</i></p> <p>Capital Dynamics sources renewable energy at its largest office premises to reduce scope 2 GHG emissions. Further, our measurement of our operational carbon footprint revealed that our largest contribution to GHG emissions stems from business flights. Our firm is committed to reduce unnecessary business travel and has reflected this in the financial planning for our firm. In addition, our firm offers employees the opportunity to work from home, which further reduces our scope 3 GHG emissions</p>
<p>Technology</p>  <p>Upgrades to technology in support of a transition to a low-carbon economy could become necessary for certain office locations (for example making electric vehicle charging points available)</p>	<p>L</p>	<p><i>Accept</i></p> <p>Long-term climate transition risks are monitored through our scenario analysis to determine best course of action in the long-run</p>

RISK	TIMEFRAME	RISK RESPONSE - Capital Dynamics operations
<p>Policy & Regulation, Reputation </p> <p>Perception of not having appropriately engaged with policy makers on regimes supporting a lower carbon economy and portfolio / borrower companies to address climate risks, increases reputational risks and represents missed opportunities to mitigate climate risks</p>	<p>M</p>	<p>Mitigate</p> <p>Capital Dynamics plays an active role in support of the transition to a low-carbon economy. We regularly engage with policy makers on regulatory consultations (for example in 2022 we engaged with the SEC on the proposed rules for mandatory climate-related disclosures and expressed our strong support for the rules). We also engage with our industry peers to promote best practices in driving decarbonization efforts in private markets (for example, we co-led the IIGCC working group to develop the Net Zero Investment Framework (“NZIF”) for Private Equity). Additionally, we engage with our portfolio companies on Responsible Investment matters, including climate change, and seek to implement sustainability improvements that have a financially material impact on exit multiples</p>
<p>Market, Reputation </p> <p>Increased shifts in client preferences towards sustainable investments reduce revenue from financial products with lower Responsible Investment ambitions</p>	<p>S</p>	<p>Mitigate</p> <p>We mitigate climate-related risks as part of our product development processes. We assess our product range and shifting client demands in support of sustainable investing, and ensure our offerings meet client expectations for Responsible Investment and climate change matters. This also includes our review of sustainable finance regulations, such as the EU Taxonomy and SFDR disclosure regimes, which form a core part of our launch of bespoke products and solutions aimed at helping our investors meet climate-related commitments and enhance risk-adjusted long-term returns</p>
<p>Reputation </p> <p>Increased stakeholder demand for climate-related impact disclosures increases costs for carbon accounting measures and tools and enhanced climate-related reporting offerings</p>	<p>S</p>	<p>Accept</p> <p>In 2021, Capital Dynamics hired an employee fully dedicated to sustainability across our investment strategies and our firm-wide Corporate Social Responsibility initiatives. We continuously strive to develop enhanced RI reporting in-house for our clients and are committed to further expand our sustainability team over time</p>

RISK	TIMEFRAME	RISK RESPONSE - Capital Dynamics operations
<p>Mean air temperature Rise (chronic) </p> <p>The global rise in average air temperature could cause employee productivity to decline, in particular in regions most affected by chronic heat</p>	<p>L</p>	<p><i>Accept</i></p> <p>Long-term physical climate risks are monitored through our scenario analysis to determine best course of action in the long-run</p>
<p>Cyclones, storms, Flooding, wildfires (acute) </p> <p>The increased severity and frequency of extreme weather events could cause disruption to operations (for example due to physical damage to data centers and office buildings, and difficulties for staff to reach office locations)</p>	<p>L</p>	<p><i>Mitigate</i></p> <p>At Capital Dynamics, we have a well-diversified location strategy with office locations across the globe. Further, we offer our employees the ability to work from home, which mitigates the risks of disruptions caused by severe weather events</p>
<p>Chronic and acute climate hazards (chronic/ acute) </p> <p>Climate hazards can affect the choice of office locations away from jurisdictions most exposed to climate risks and increased insurance costs</p>	<p>L</p>	<p><i>Mitigate</i></p> <p>At Capital Dynamics, we have a well-diversified location strategy with office locations across the globe. Further, we offer our employees the ability to work from home, which mitigates the risks of disruptions caused by severe weather events</p>

Our risk management processes incorporate climate considerations

Capital Dynamics has defined a risk management framework for all strategies, outlining the key risk categories, risk mitigation steps and risk management assessments as described below:

RISK CATEGORY	DESCRIPTION	RISK MITIGATION
Company-specific risk	Risks associated with the portfolio company’s business model and strategy	Monitoring of portfolio company during due diligence
Macroeconomic / regulatory	Risks associated with the global economy or changes in regulation	Monitoring of macroeconomic and regulatory developments that could have an impact on portfolio companies and invest in tail-risk insurance investments
Credit risk	Risks associated with leverage, interest rate, payment default and prepayment	Negotiating refinancing and other favorable terms in case of early repayment, performing interest rate hedging, assessing credit-worthiness of portfolio companies and estimating probability of default
Asset liquidity risk	Risks associated with investing into an illiquid asset (for example the restrictions in selling a position of an underperforming company)	Negotiating sales contracts and key terms underpinning revenue certainty. Monitoring of market developments and allocating risk effectively in sales contract structures

RISK CATEGORY**DESCRIPTION****RISK MITIGATION**

RISK CATEGORY	DESCRIPTION	RISK MITIGATION
Funding liquidity risk	Risks associated with investors failing to meet commitments after capital calls by the AIF	Establishing strong relationships with LPs and ensuring appropriate legal terms to protect non-defaulting LPs
Currency & geographic risk	Risks associated with currency devaluations and investing in companies with broad geographic footprint	Monitoring of currency exposures and geographic exposure to regions with heightened uncertainties and geo-political events
GP / Management risk	Risks associated with GP management and portfolio company management (for example reputational risks)	Conducting strong due diligence prior to investment decision
Responsible Investment risks	Risks associated with environmental, social and governance issues, including risks associated with climate change	Conducting strong due diligence prior to investment decision and monitoring portfolio company's Responsible Investment risks during hold period
Investment risk	Risks associated with an investment incurring a loss relative to the expected return	Conducting strong due diligence in assessing the private equity firm or direct investment opportunities as well as the management teams
Operational risk	Risks associated with day-to-day operations at a portfolio company level (for example IT disruptions)	Conducting strong due diligence on GP's track record of portfolio company choice, establishing strong relationships with GPs with good past experiences and negotiating contracts to mitigate performance risk
Concentration risk	Risks associated with failing to adequately diversify investments across industries, geographies, strategies and GPs	Ensure well-diversified exposure to sectors, geographies, strategies and funds

Capital Dynamics' risk management assessment framework

On a quarterly basis, Capital Dynamics produces the Risk Management Assessment Report in line with our Risk Management Policy. Our risk management team shares the report with the investment management teams for review and confirmation that the AIF has complied with any applicable investment restrictions.

Risks are quantified on a scale ranging from 1 (low) to 5 (high) with the following risk assessment framework:

RISK SCORE

PROBABILITY OF OCCURRING

1 = low	0% - 20% probability (nil or negligible)
2 = low to medium	21% - 40% probability
3 = medium	41% - 60% probability (risk exists but is manageable)
4 = medium to high	61% - 80% probability
5 = high	81% - 100% probability (potentially significant)

Members of the Capital Dynamics investment teams are responsible for monitoring, assessing and reviewing the risks on a continuous basis. All detected breaches or anticipated risks with a scoring of 4 or 5 (medium to high or high probability of occurring) are reported immediately to our firm's Head of Risk who in turn escalates such risks to the EC and take action as appropriate to address the risks.

Incorporation of climate change into our overall risk management

Climate-related risks are projected to have far-reaching impacts across several risk metrics that are monitored by our risk management function. The below summary details the overlay of financially material climate risks and the intersection with more traditional risk categories:

Credit risk

Credit risk of companies might be impacted, if they are exposed to realized risk events (such as physical damage to production facilities due to extreme weather events). This could cause financial difficulties for borrower companies and impact their ability to service debt

Operational risk

Physical effects of climate change may impact the operations of our portfolio and borrower companies, as well as our own firm, which could lead to losses in revenue

Foreign exchange risk

Global trade patterns are projected to change due to the shift in supply and demand for more sustainable products in the transition to a low-carbon economy. This affects currency values, which in turn could have a financial impact on portfolio and borrower companies that are exposed to impacted currencies

Reputational risk

If we are perceived as not sufficiently addressing climate-related risks, we could be exposed to reputational risks with our investors. Likewise, if our portfolio and borrower companies are not managing climate risks appropriately, they could be exposed to heightened reputational risk

Product strategy risk

Climate-related considerations may dominate the regulatory landscape and investor demand for sustainable financial products, which could impact our product offerings more broadly (for example an increasing demand for Art. 8 and Art. 9 products across our investment strategies)

Regulatory risk

Climate-related regulatory requirements continue to be introduced in jurisdictions in which we operate. Failure to meet the requirements could result in regulatory sanctions

4

Metrics & Targets



Metrics & Targets

We use a number of metrics to monitor our climate-related risks and track progress in order to respond appropriately to financially material climate opportunities in our annual TCFD reports. The following section discloses the metrics we use and the underlying methodology.

Private Equity and Private Credit – Financed emissions intensity

For our Co-Investment private equity and private credit strategies we apply the PCAF methodology for measuring and reporting financed emissions, in line with TCFD recommendations. We utilize the PCAF emissions factor database to approximate the attributable emissions. PCAF is the original owner of the Database and the reported emissions were derived from Scope 1, Scope 2 and Scope 3 emissions and extracted from the PCAF Database. The emissions factor source in the PCAF database used is EXIOBASE (2015) and S&P Capital IQ (2019). All copy rights are reserved.

Disclaimer:

PCAF will provide Services using appropriately qualified professionals, with a reasonable degree of care and in accordance with appropriate industry standards. Subject to the preceding sentence, PCAF offers this License as is and as available and makes no representation or warranties of any kind on the Database whether express, implied, statutory or other. This includes without limitation warranties of title, merchantability, fitness for a particular purpose, non-infringement, absence of latent or other defects, accuracy, or the presence or absence of errors, whether or not known or discoverable. PCAF disclaims any liability for any loss or damage resulting from use of information in this Database or reliance or decisions based upon the Outputs or Contents of the Database. Each Authorized User and/or third parties are advised that they are responsible for reliance on the database, data, information, findings and opinions provided by PCAF. Any reference to a specific data source, data provider or service by trade name, trademark, manufacturer, or otherwise, does not constitute or imply an endorsement, recommendation, or favoring by PCAF.

In the absence of a defined methodology for financed emissions of fund-of-funds, we approximate the emissions based on the sector average emissions factors available in the PCAF database and attribute the emissions based on the ownership percentage (based on commitments).

The following calculation applies to the financed GHG emissions for our Private Equity and Private Credit strategies (data quality score 5):

The emissions factors in the PCAF database for data quality score 5 are emission factors for the sector per unit of the asset (tCO₂e per euro of an asset in a sector). The PCAF database provides these emission factors in CO₂e/M\$ (i.e. GHG emissions per unit asset) for sectors and regions, which are derived by multiplying the data quality score 4 emission factors (which are emission factors by revenue) with asset turnover ratios. The ratios are sector averages that are multiplied with the emission factors for the sector and region. The variance in asset turnover ratios is high and can amount to up to 50%. When using the PCAF data quality score 5 methodology (PCAF option 3b) for a single asset, the emission factor for the corresponding sector and location is obtained from the PCAF database and multiplied by the outstanding amount to compute the financed emissions. The outstanding amount for private credit is the outstanding loan amount, and for private equity the ownership percentage. For our indirect private equity strategies we utilize the ownership percentage based on commitments to attribute the emissions. The following formula is used, where s= sector and c=borrower or portfolio company:

$$\sum_{c,s} \text{Outstanding Amount}_c \times \frac{\text{GHG emissions}_s}{\text{Assets}_s}$$

Clean Energy – Absolute GHG emissions, carbon footprint and WACI

For our Clean Energy funds, we compute the GHG emissions, carbon footprint and weighted carbon intensity (“WACI”) of our investments in line with the below formulas:

Absolute GHG emissions

$$\sum_n^i \left(\frac{\text{current value of investment}_i}{\text{investee company's enterprise value}_i} \times \text{investee company's Scope}(x) \text{ GHG emissions}_i \right)$$

Emissions intensity (carbon footprint)

$$\frac{\sum_n^i \left(\frac{\text{current value of investment}_i}{\text{investee company's enterprise value}_i} \times \text{investee company's Scope 1, 2 and 3 GHG emissions}_i \right)}{\text{current value of all investments (€M)}}$$

Please note, the portfolio value excludes assets under construction.

Emissions intensity (Weighted Average Carbon Footprint “WACI”)

$$\sum_n^i \left(\frac{\text{current value of investment}_i}{\text{current portfolio value}} \times \frac{\text{issuer's scope 1 and scope 2 GHG emissions}_i}{\text{issuer's \$M revenue}_i} \right)$$

Please note, the portfolio value includes assets under construction. We calculate the WACI in local currency, i.e. EUR.

Other metrics and KPIs

Other metrics we use to measure the exposure to financially material climate-related risks and opportunities include the following:

- % of portfolio with exposure to fossil fuel extraction sector
- % of portfolio with exposure to fossil fuels processing and generation
- % of portfolio with exposure to climate solutions
- % of portfolio with climate transition plans in place
- % of portfolio for which data has been estimated
- % of the portfolio where there has been engagement with the underlying entity on climate change during the past 12 months
- % of the portfolio at year end for which the underlying company reports against TCFD recommendations

Further, for our Clean Energy investments we track a number of environmental benefits generated by our investments (see below).

Environmental benefits Clean Energy

2022

Ownership adjusted generation MWh	679,939.93
Adjusted avoided emissions t CO2e	119,326.22

The environmental benefits generated by our Clean Energy investments in 2022 were equivalent to:

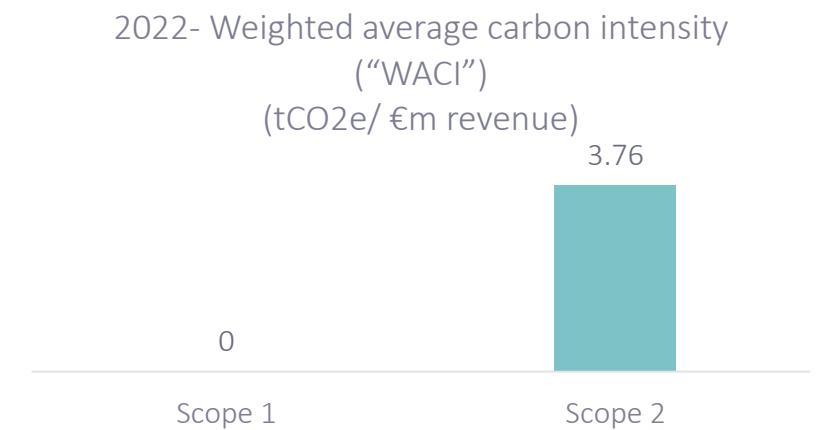
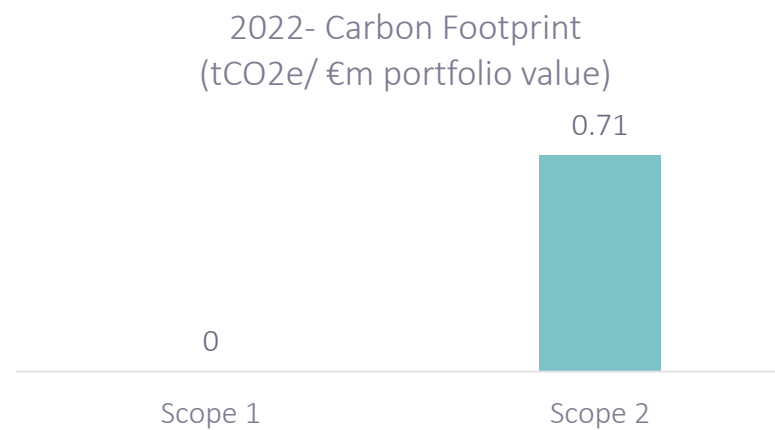
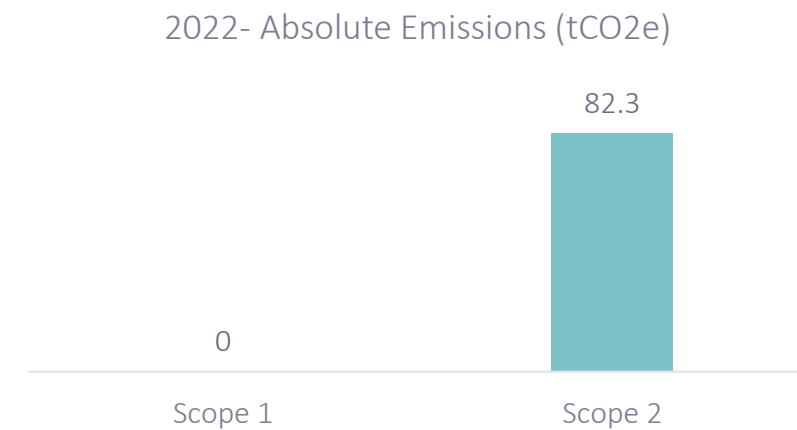
Cars taken off road	50,683.87
Houses powered	68,181.89
Gallons of gasoline	14,593,820.24
Barrels of oil	347,471.91
Total carbon emissions Clean Energy portfolio in tCO2e	7,144.49

Data valid as at 31st December 2022. Figures include all operational assets of funds owned by Capital Dynamics. Figures include data until the effective ownership transfer date of sold assets. Carbon emissions and equivalents have been calculated in accordance with the Greenhouse Gas Protocol Corporate Accounting and Reporting Standard. Data is adjusted by ownership share. Carbon factors are obtained from the 2022 UK Government GHG Conversion Factors for Company Reporting (Greenhouse gas reporting: conversion factors 2022 - GOV.UK (www.gov.uk)) and the International Energy Agency (IEA) Emission Factors 2022.

Clean Energy: CEI VIII

Metrics – Climate risks and opportunities exposure 2022

% of portfolio with exposure to fossil fuel extraction sector (by assets)	0%
% of portfolio with exposure to fossil fuels processing and generation (by assets)	0%
% of portfolio with exposure to climate solutions (by assets)	100%
% of portfolio with climate transition plans in place (by assets)	0%
% of portfolio for which data has been reported by underlying Entity, rather than being estimated	100%
% of the portfolio where there has been engagement with the Underlying entity on climate change during the past 12 months	100%
% of the portfolio at year end for which the underlying company reports against TCFD recommendations	100%



Metrics – Absolute GHG emissions 2022

Scope 1	0
Scope 2	82.3 tCO2e
Scope 3	unavailable

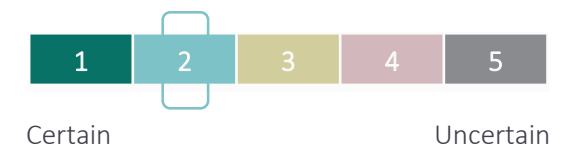
Metrics – Emissions intensity (carbon footprint) 2022

Scope 1	0
Scope 2	0.71 tCO2e/ €m portfolio value
Scope 3	unavailable

Metrics – Emissions intensity (WACI) 2022

Scope 1	0
Scope 2	3.76 tCO2e/ €m revenue
Scope 3	unavailable

PCAF Data Quality score

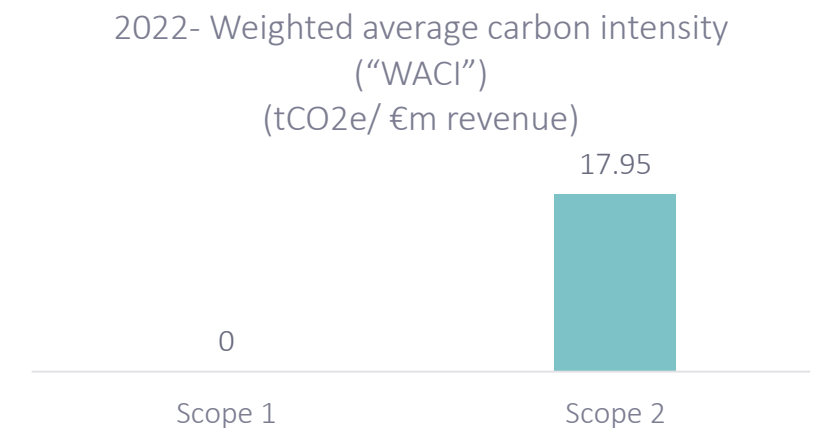
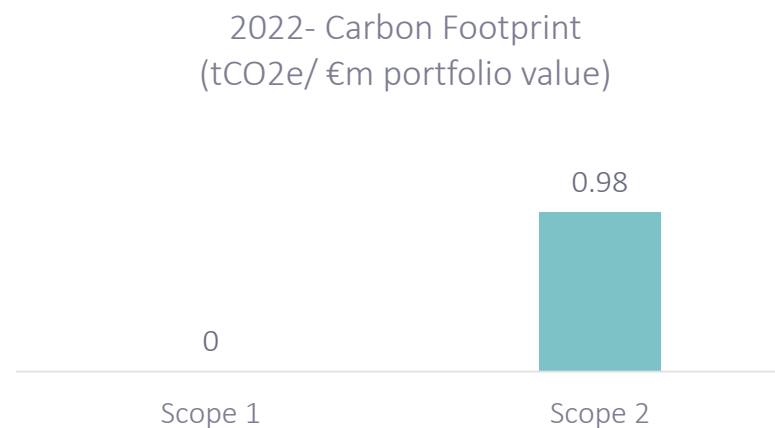
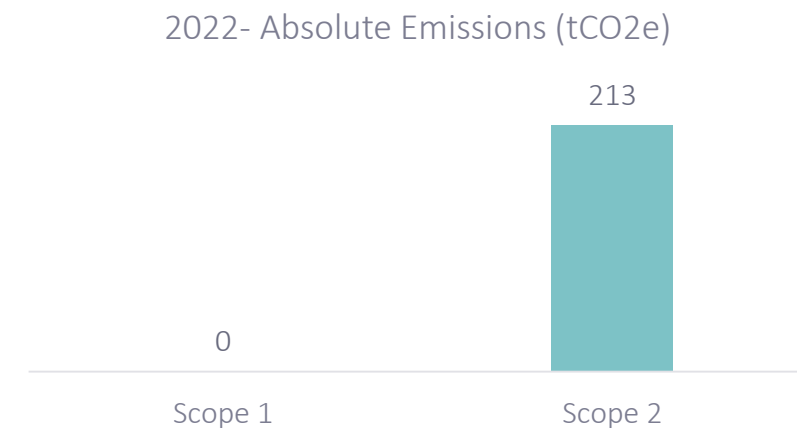


Clean Energy: CEI IX

Metrics – Climate risks and opportunities exposure

2022

% of portfolio with exposure to fossil fuel extraction sector (by assets)	0%
% of portfolio with exposure to fossil fuels processing and generation (by assets)	0%
% of portfolio with exposure to climate solutions (by assets)	100%
% of portfolio with climate transition plans in place (by assets)	0%
% of portfolio for which data has been reported by underlying Entity, rather than being estimated	100%
% of the portfolio where there has been engagement with the Underlying entity on climate change during the past 12 months	100%
% of the portfolio at year end for which the underlying company reports against TCFD recommendations	100%



Metrics – Absolute GHG emissions

2022

Scope 1	0
Scope 2	213 tCO2e
Scope 3	unavailable

Metrics – Emissions intensity (carbon footprint)

2022

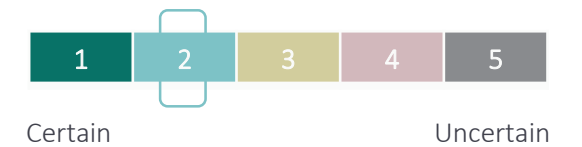
Scope 1	0
Scope 2	0.98 tCO2e/ €m portfolio value
Scope 3	unavailable

Metrics – Emissions intensity (WACI)

2022

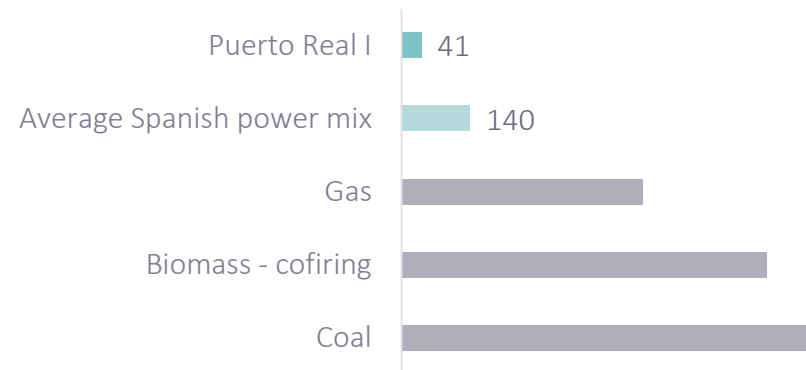
Scope 1	0
Scope 2	17.95 tCO2e/ €m revenue
Scope 3	unavailable

PCAF Data Quality score



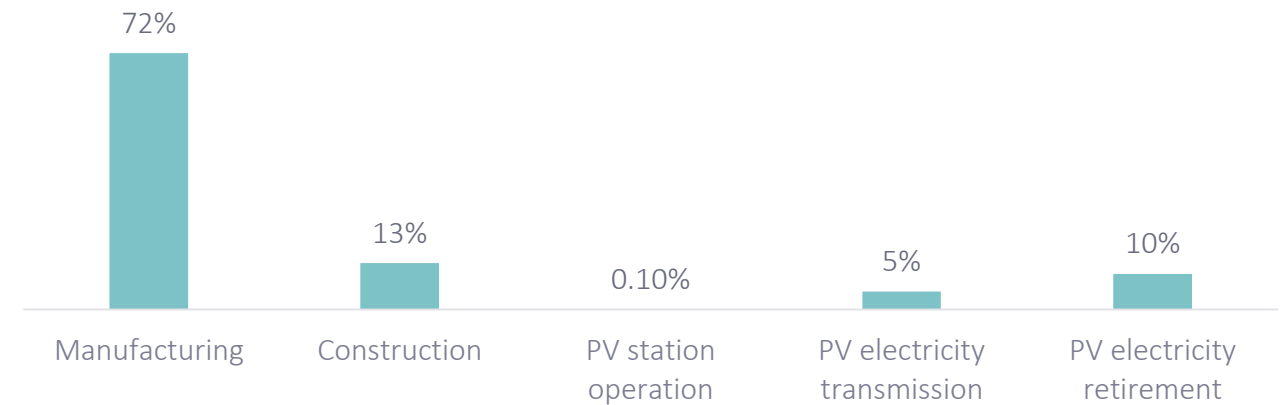
GHG Accounting of Puerto Real I (solar PV)- by Carbometrix

Emissions per kWh electricity per energy source (gCO₂e / kWh)



41g CO₂e / kWh

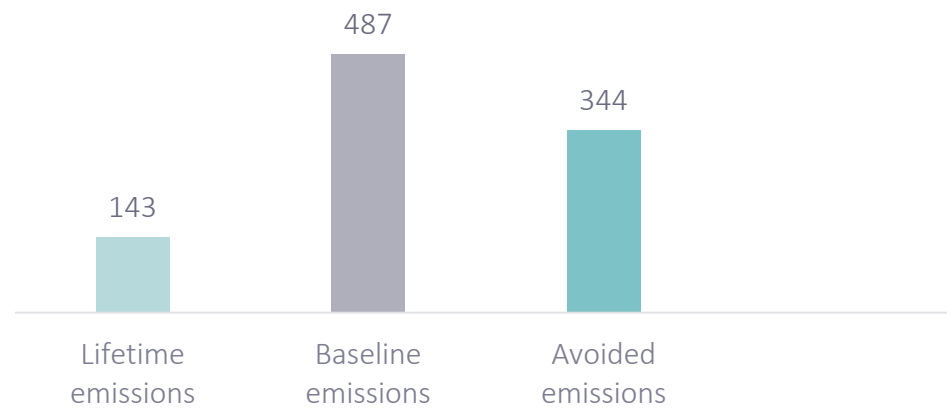
Photovoltaic panel CO₂e emissions per lifecycle phase ³



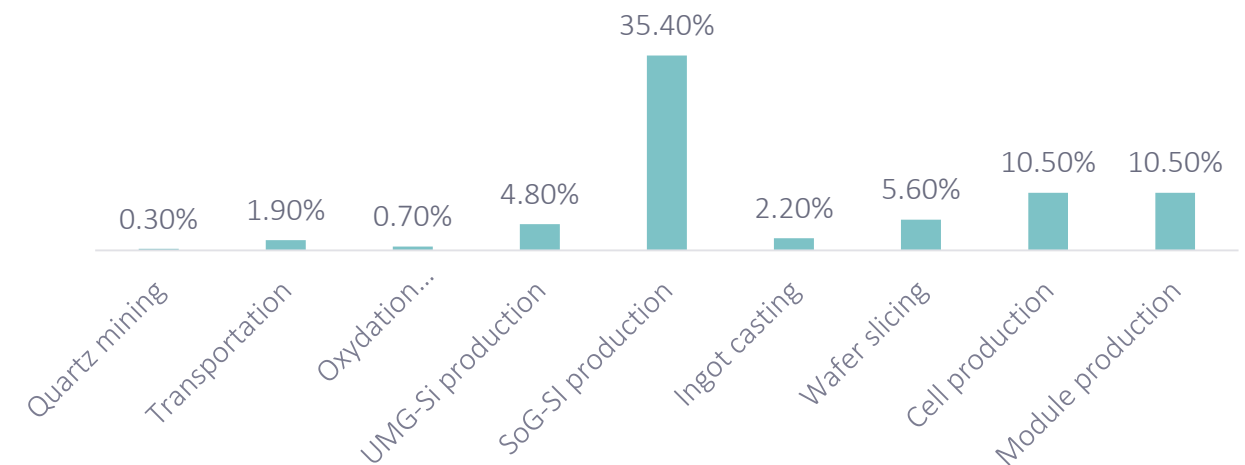
On average, to generate a kWh of electricity, this project will emit 41 grams of CO₂e, substantially less than the average energy mix in Spain.

The majority of lifecycle emissions of Puerto Real I occur upstream in the manufacturing and construction phases.

Avoided emissions (ktCO₂e)



Photovoltaic panel CO₂e emissions per manufacturing step ³



The projected avoided emissions from Puerto Real I amount to 344 ktCO₂e over a lifetime of 20 years

³ Source: Hou et al., 2016. Chart provided by [Carbometrix](#).

GHG reduction targets for Clean Energy

Our new Clean Energy funds set net zero impact targets, whereby we commit to reduce or offset emissions from all of the Clean Energy projects in the Funds in line with net zero targets, from the construction date through the exit of that project. The Funds will be consistent with a decarbonization pathway for the operational emissions. Carbon offsets will be used to neutralize operational emissions while the Funds transition to a net-zero status. The Funds will achieve carbon neutrality for the construction emissions through the purchase of credible carbon credit schemes while its supply chain adjusts to a decarbonization pathway.

EU Taxonomy alignment targets

In addition to the net zero targets, our new European fund also aims to achieve a minimum of 50% EU Taxonomy-alignment. The EU Taxonomy is a classification system that allows investors to identify and report on the proportions of investments that are environmentally sustainable as defined in Regulation (EU) 2020/852 of The European Parliament and of the Council. Investments fulfilling the alignment criteria under the EU Taxonomy meet the highest standards in sustainability in support of the EU’s environmental objectives, including climate change mitigation and adaptation.

Operational emissions – reported annually

Construction emissions – reported at COD

Measurement

Carbon assessment for annual operational emissions (electricity used on site, water usage, waste generation, O&M activities etc.)

Carbon assessment for construction emissions at project level- excludes manufacturing of materials and transport to site

GHG emissions reduction

Implementation of solutions to reduce own energy usage of investments (e.g. measures for electricity reduction, water and waste minimization etc.). Increase procurement of renewable energy at asset level (e.g. through REGOs or other green tariffs)

Stakeholder engagement to reduce carbon emitting activities (e.g. through solar powered temporary offices, use of electric vehicles for worker transportation/ on-site transportation and site-level waste management plans)

Offsetting

Annual carbon offsets via a recognized offsetting framework

One-off carbon offsets via a recognized offsetting framework at COD

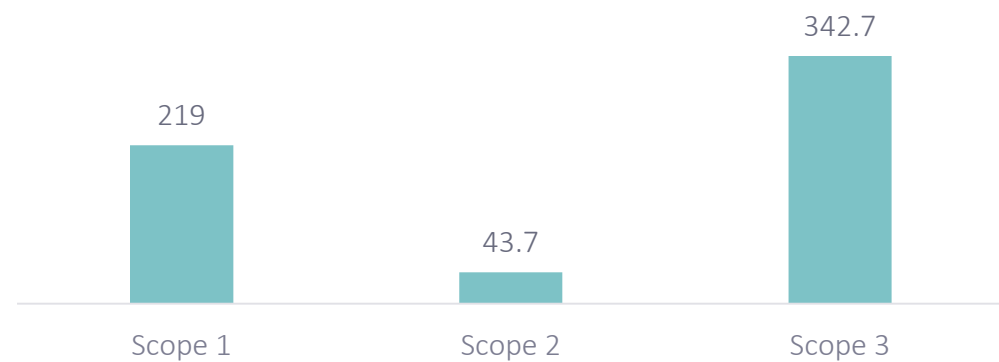
Private Equity Mid-Market Direct: MMD V

Metrics – Climate risks and opportunities exposure

2022

% of portfolio with exposure to fossil fuel extraction sector (by number of companies)	0%
% of portfolio with exposure to fossil fuels processing and generation (by number of companies)	0%
% of portfolio with exposure to climate solutions (by number of companies)	0%
% of portfolio with climate transition plans in place (by number of companies)	0%
% of portfolio for which data has been estimated	100%
% of the portfolio where there has been engagement with the Underlying entity on climate change during the past 12 months	0%
% of the portfolio at year end for which the underlying company reports against TCFD recommendations	0%

Financed GHG emissions intensity (tCO2e / \$M revenue)

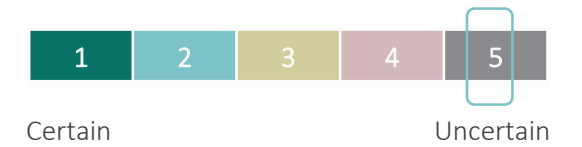


Metrics – Financed GHG emissions intensity

2022

Scope 1	219 tCO2e / \$m revenue
Scope 2	43.7 tCO2e / \$m revenue
Scope 3	342.7 tCO2e / \$m revenue

PCAF Data Quality score



Contribution to total financed GHG emissions intensity by sector (tCO2e / \$M revenue) – top 5



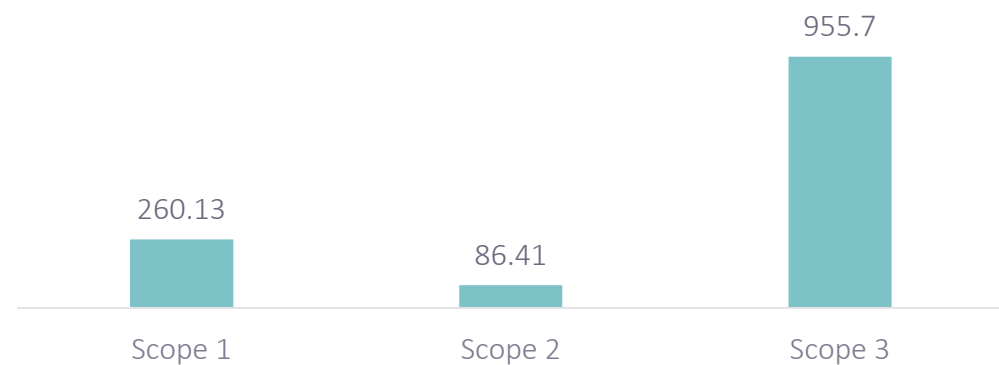
Mid-Market Credit: MMC I

Metrics – Climate risks and opportunities exposure

2022

% of portfolio with exposure to fossil fuel extraction sector (by number of companies)	0%
% of portfolio with exposure to fossil fuels processing and generation (by number of companies)	0%
% of portfolio with exposure to climate solutions (by number of companies)	0%
% of portfolio with climate transition plans in place (by number of companies)	0%
% of portfolio for which data has been estimated	100%
% of the portfolio where there has been engagement with the Underlying entity on climate change during the past 12 months	0%
% of the portfolio at year end for which the underlying company reports against TCFD recommendations	0%

Financed GHG emissions intensity (tCO2e / \$M revenue)

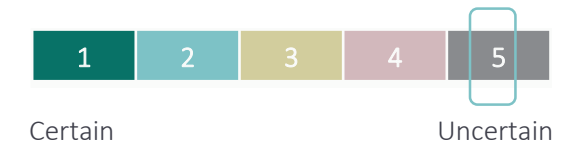


Metrics – Financed GHG emissions intensity

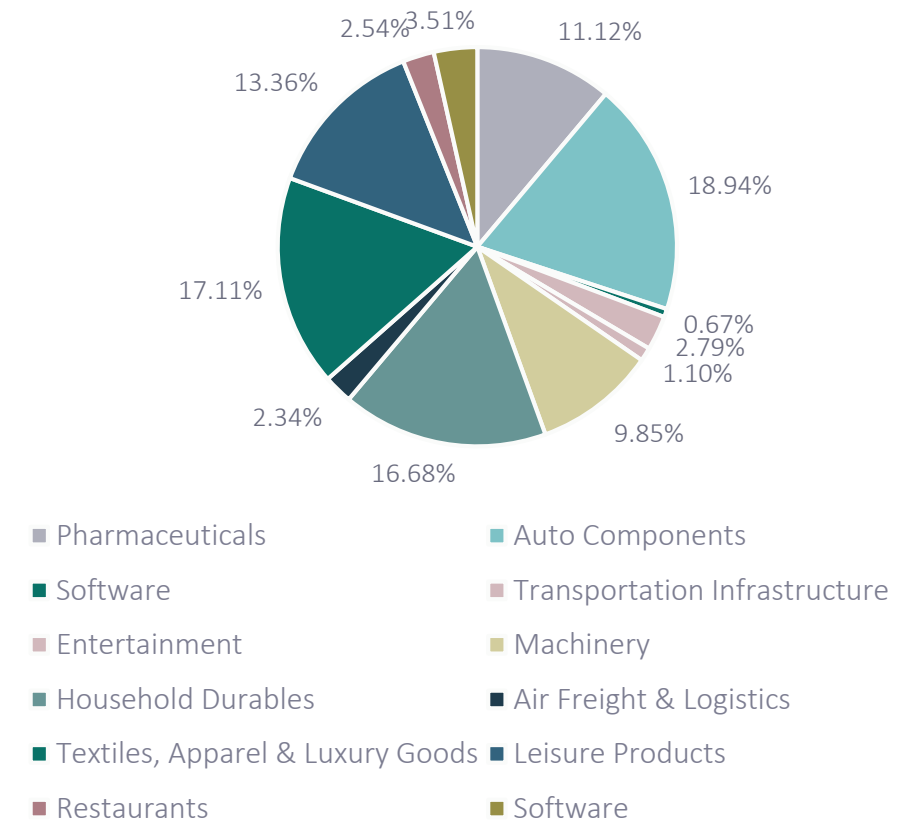
2022

Scope 1	260.13 tCO2e / \$m revenue
Scope 2	86.41 tCO2e / \$m revenue
Scope 3	955.7 tCO2e / \$m revenue

PCAF Data Quality score



Contribution to total financed GHG emissions intensity by sector (tCO2e / \$M revenue)



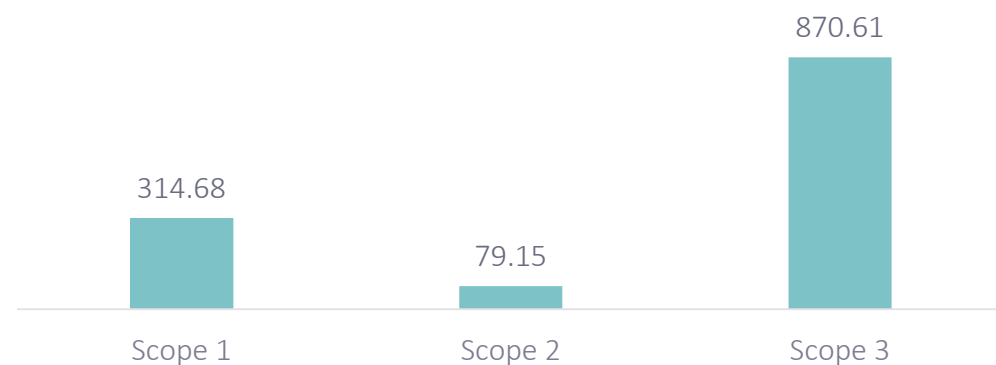
Private Equity Primaries: Future Essentials II

Metrics – Climate risks and opportunities exposure

2022

% of portfolio with exposure to fossil fuel extraction sector (by number of companies)	0%
% of portfolio with exposure to fossil fuels processing and generation (by number of companies)	0%
% of portfolio with exposure to climate solutions (by number of companies)	0%
% of portfolio with climate transition plans in place (by number of companies)	0%
% of portfolio for which data has been estimated	100%
% of the portfolio where there has been engagement with the Underlying entity on climate change during the past 12 months	0%
% of the portfolio at year end for which the underlying company reports against TCFD recommendations	0%

Financed GHG emissions intensity (tCO₂e / \$M revenue)

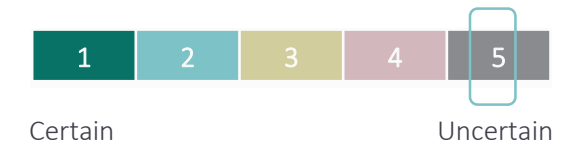


Metrics – Financed GHG emissions intensity

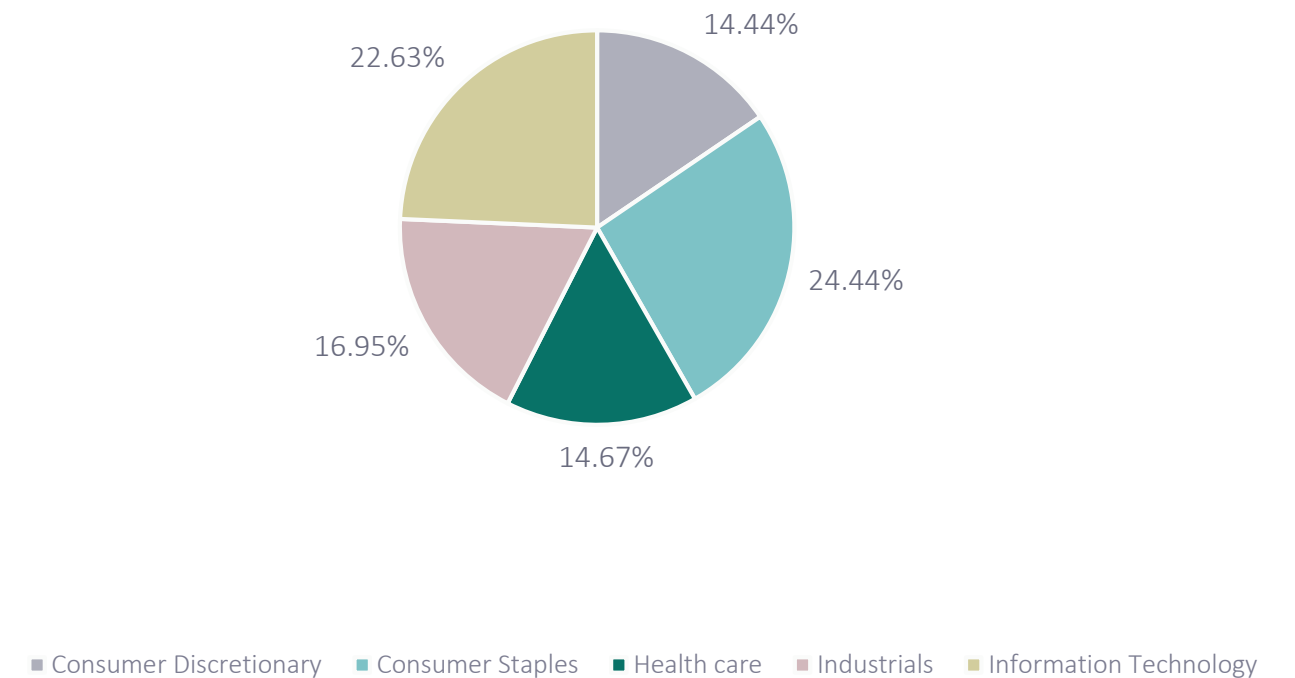
2022

Scope 1	314.68 tCO ₂ e / \$m revenue
Scope 2	79.15 tCO ₂ e / \$m revenue
Scope 3	870.61 tCO ₂ e / \$m revenue

PCAF Data Quality score



Contribution to total financed GHG emissions intensity by sector (tCO₂e / \$M revenue) – top 5



Capital Dynamics' operational carbon footprint

In early 2022, we undertook a firm-wide employee commuting survey to better understand the commuting habits of our staff. We asked employees about their commuting distance, frequency and choice of transport mode in 2019 and 2021.

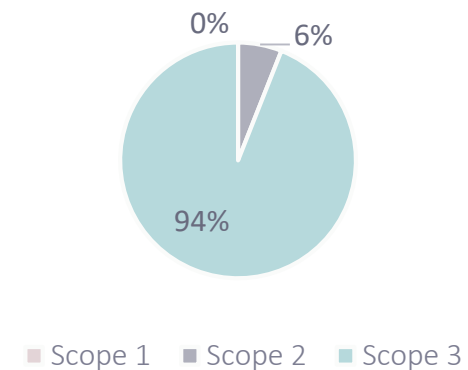
Due to the COVID-19 pandemic and the resulting prolonged periods of working from home in 2020, we were interested in understanding our employees' commuting habits prior to the pandemic as a baseline, and the impact our hybrid working model from 2021 had on the commuting patterns.

Not only did the survey reveal the effectiveness of our hybrid working model on reducing emissions from employee commuting, it also helped us identify ways in which we can incentivize employees to make environmentally-conscious choices when commuting to work.

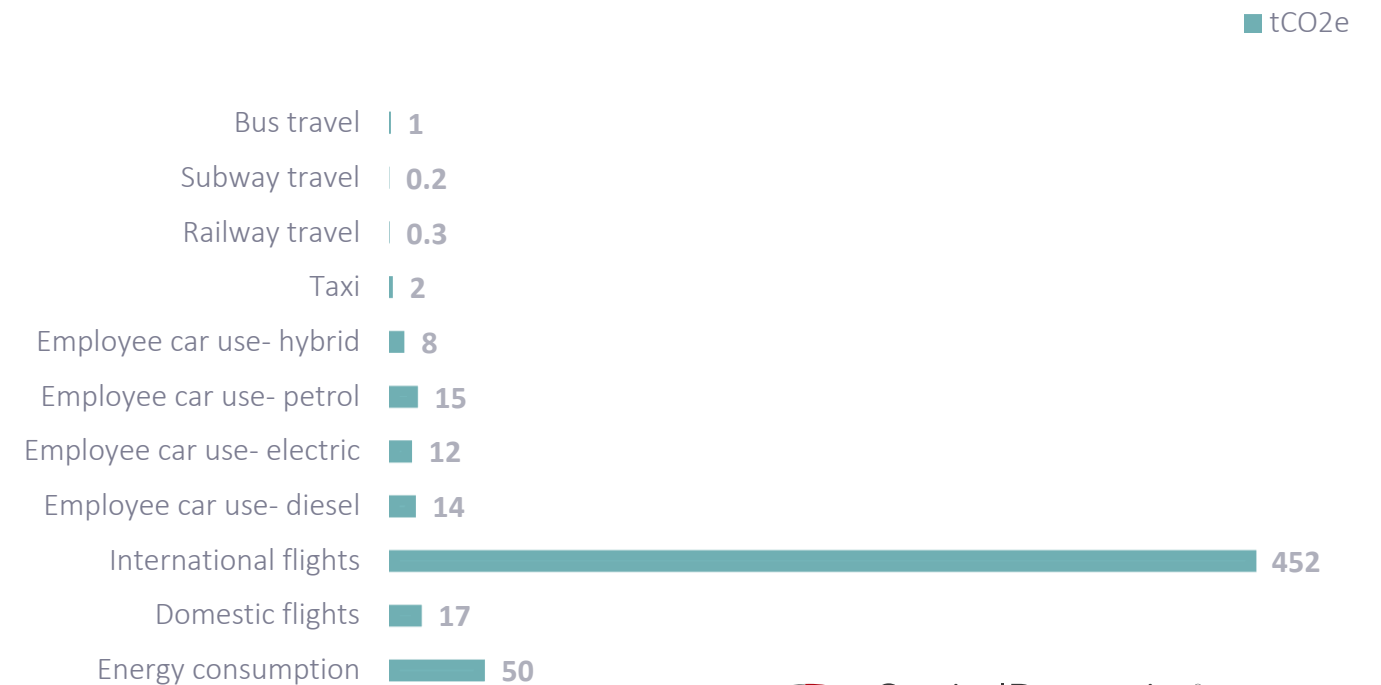
Utilizing the data, we have measured our operational carbon footprint (scope 1, scope 3 and scope 3, excluding category 15 'investments') and identified our main carbon hotspots arising from electricity consumption, business flights and employee commuting. Our energy consumption across our offices was responsible for 50 tCO2e emissions in 2021, as measured by the location-based method in line with the Greenhouse Gas Protocol. Each year, we offset our emissions from electricity consumption with the purchase of REGOs (Renewable Energy Guarantees of Origin). In 2022, Capital Dynamics has offset the remainder of the operational carbon emissions arising from employee commuting and business flights (521.5 tCO2e) with a verified carbon removal project [Rimba Raya](#).

We are also committed to make a positive impact on the environment through our supplier selection. In 2022, we partnered with "A Good Company" for the purchase of climate-positive notebooks. Each product sold not only made a positive contribution to the environment, but our order also enabled donations to [charity: water](#) ([charitywater.org](#)) and has generated 20,000 liters of water to communities.

OPERATIONAL CARBON FOOTPRINT- BY SCOPE



OPERATIONAL CARBON FOOTPRINT- BY CATEGORY



Appendix



- Physical climate risk assessment
- Sector-level climate risks and opportunities
- Methodologies
- Index – TCFD recommendations
- List of figures

Physical climate risk assessment

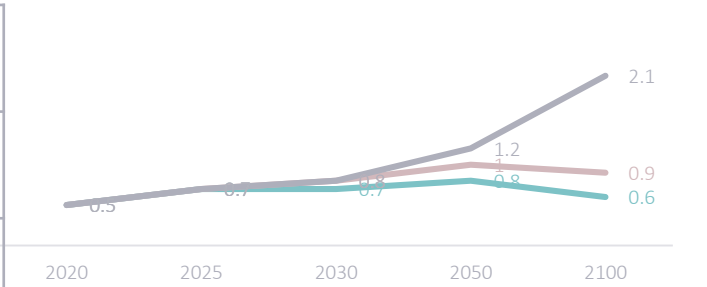
Clean Energy – European portfolio

Climate Hazards

Scenario analysis

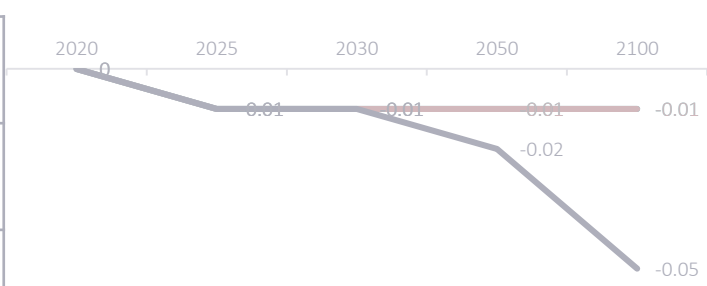
Mean air temperature (°C)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.5	0.7	0.7	0.8	0.6	0.7	0.8	1	0.9	0.7	0.8	1.2	2.1



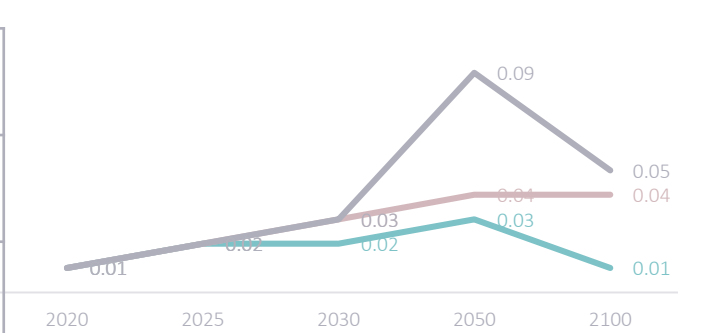
Labor productivity due to heat stress (pp)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.02	-0.05



Land fraction annually exposed to wildfires (pp)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.01	0.02	0.02	0.03	0.01	0.02	0.03	0.04	0.04	0.02	0.03	0.09	0.05

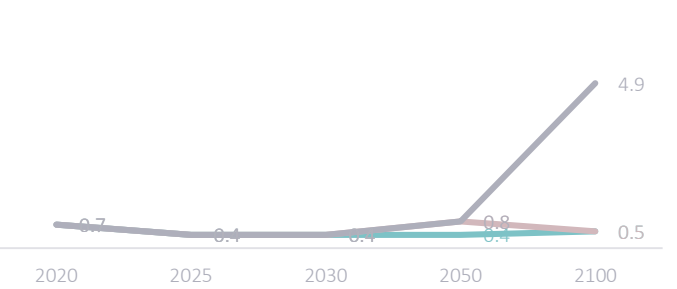


Climate Hazards

Scenario analysis

Precipitation (%)

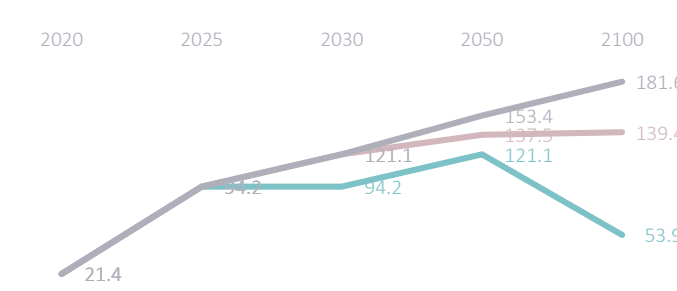
2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.7	0.4	0.4	0.4	0.5	0.4	0.4	0.8	0.5	0.4	0.4	0.8	4.9



Expected damage from river floods (p.a. in%)

Data based on national levels due to unavailability in the selected region

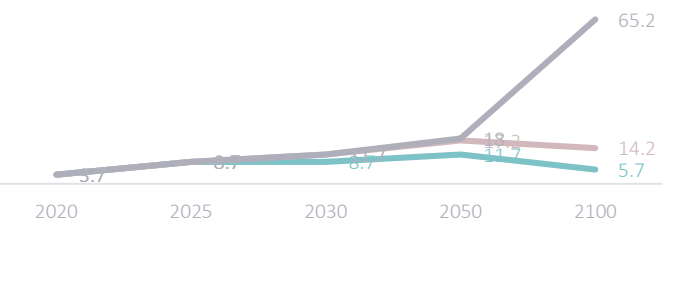
2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
21.4	94.2	94.2	121.1	53.9	94.2	121.1	137.5	139.4	94.2	121.1	153.4	181.6



Expected damage from tropical cyclones (p.a. in%)

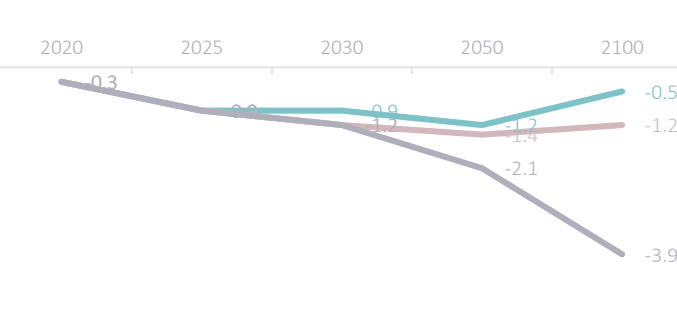
Data based on national levels due to unavailability in the selected region

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
3.7	8.7	8.7	11.7	5.7	8.7	11.7	17.2	14.2	8.7	11.7	28	65.2



Relative change in wind speed (in %)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
-0.3	-0.9	-0.9	-1.2	-0.5	-0.9	-1.2	-1.4	-1.2	-0.9	-1.2	-2.1	-3.9

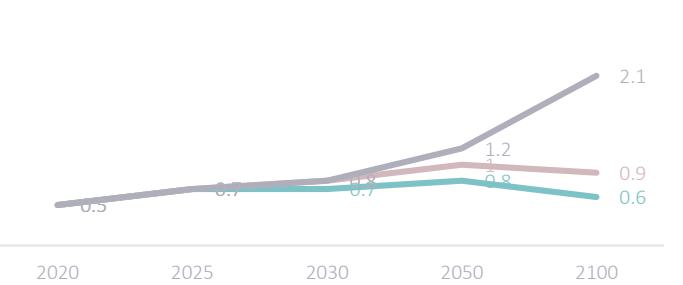


Climate Hazards

Scenario analysis

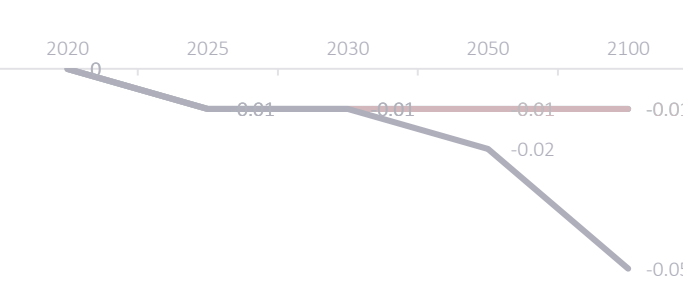
Mean air temperature (°C)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.5	0.7	0.7	0.8	0.6	0.7	0.8	1	0.9	0.7	0.8	1.2	2.1



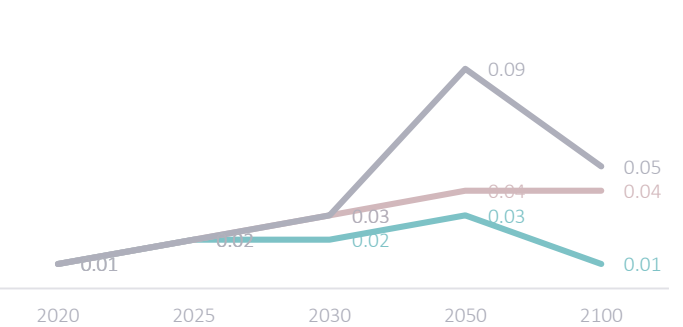
Labor productivity due to heat stress (pp)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.02	-0.05



Land fraction annually exposed to wildfires (pp)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.01	0.02	0.02	0.03	0.01	0.02	0.03	0.04	0.04	0.02	0.03	0.09	0.05

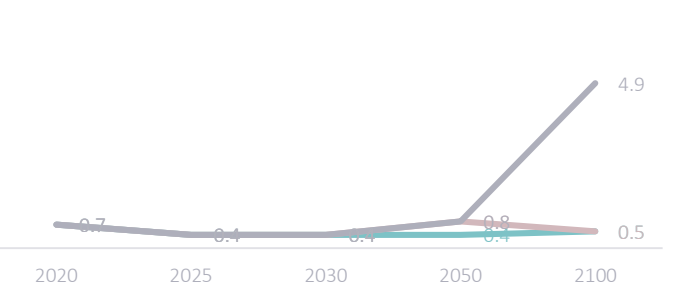


Climate Hazards

Scenario analysis

Precipitation (%)

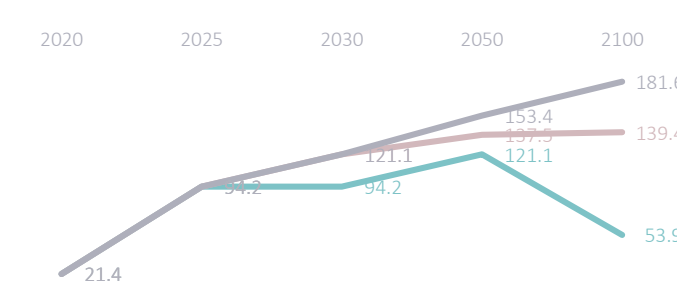
2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.7	0.4	0.4	0.4	0.5	0.4	0.4	0.8	0.5	0.4	0.4	0.8	4.9



Expected damage from river floods (p.a. in%)

Data based on national levels due to unavailability in the selected region

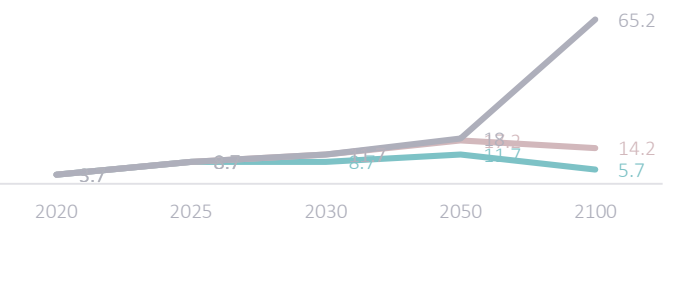
2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
21.4	94.2	94.2	121.1	53.9	94.2	121.1	137.5	139.4	94.2	121.1	153.4	181.6



Expected damage from tropical cyclones (p.a. in%)

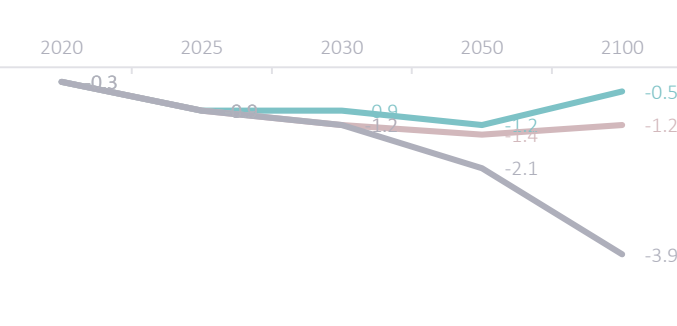
Data based on national levels due to unavailability in the selected region

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
3.7	8.7	8.7	11.7	5.7	8.7	11.7	17.2	14.2	8.7	11.7	28	65.2



Relative change in wind speed (in %)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
-0.3	-0.9	-0.9	-1.2	-0.5	-0.9	-1.2	-1.4	-1.2	-0.9	-1.2	-2.1	-3.9

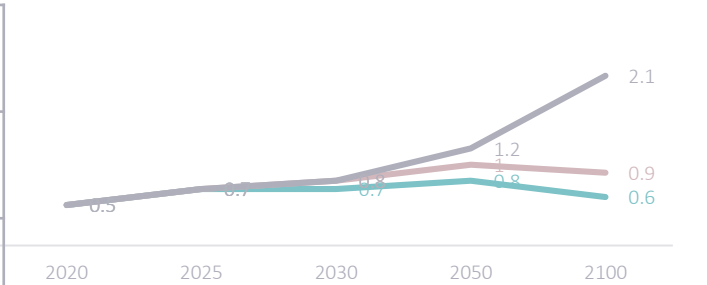


Climate Hazards

Scenario analysis

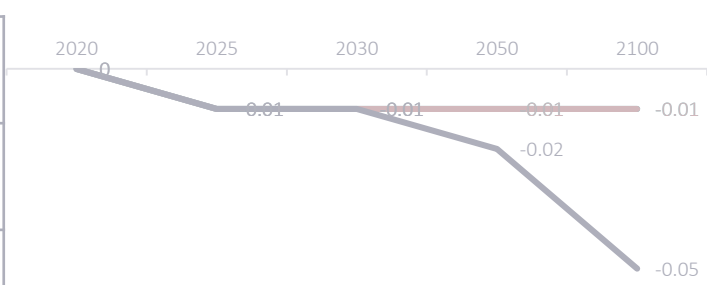
Mean air temperature (°C)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.5	0.7	0.7	0.8	0.6	0.7	0.8	1	0.9	0.7	0.8	1.2	2.1



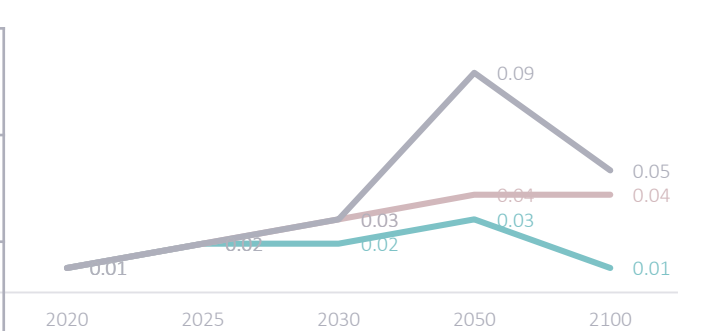
Labor productivity due to heat stress (pp)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.02	-0.05



Land fraction annually exposed to wildfires (pp)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.01	0.02	0.02	0.03	0.01	0.02	0.03	0.04	0.04	0.02	0.03	0.09	0.05

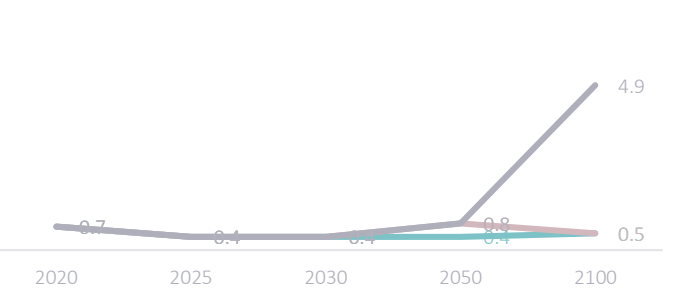


Climate Hazards

Scenario analysis

Precipitation (%)

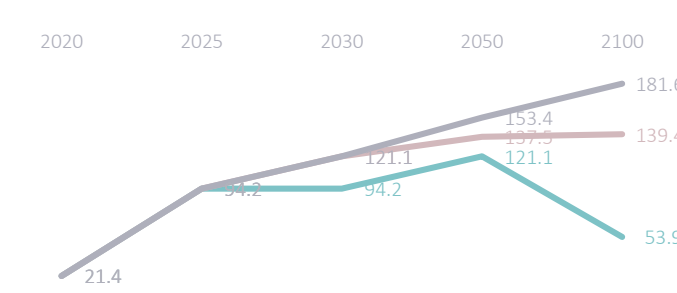
2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.7	0.4	0.4	0.4	0.5	0.4	0.4	0.8	0.5	0.4	0.4	0.8	4.9



Expected damage from river floods (p.a. in%)

Data based on national levels due to unavailability in the selected region

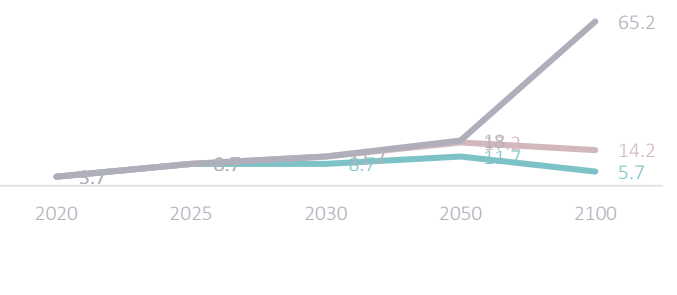
2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
21.4	94.2	94.2	121.1	53.9	94.2	121.1	137.5	139.4	94.2	121.1	153.4	181.6



Expected damage from tropical cyclones (p.a. in%)

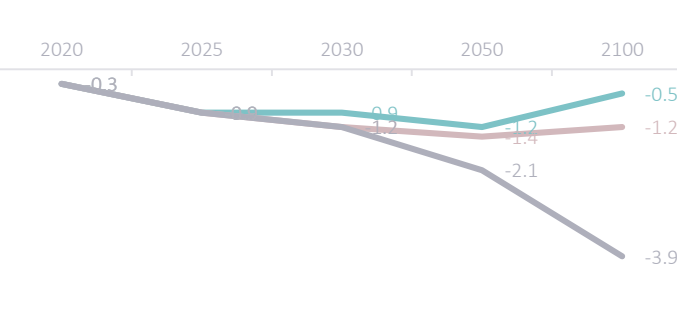
Data based on national levels due to unavailability in the selected region

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
3.7	8.7	8.7	11.7	5.7	8.7	11.7	17.2	14.2	8.7	11.7	28	65.2



Relative change in wind speed (in %)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
-0.3	-0.9	-0.9	-1.2	-0.5	-0.9	-1.2	-1.4	-1.2	-0.9	-1.2	-2.1	-3.9

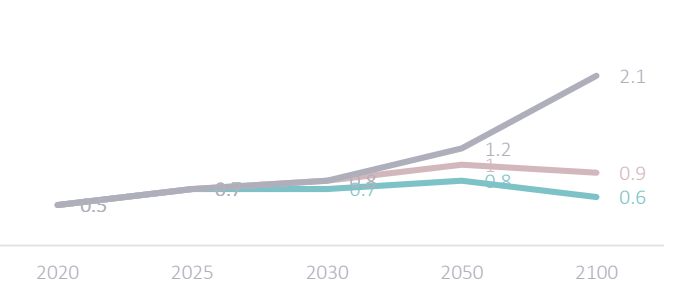


Climate Hazards

Scenario analysis

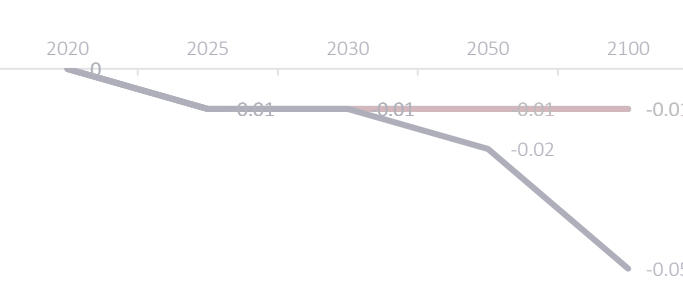
Mean air temperature (°C)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.5	0.7	0.7	0.8	0.6	0.7	0.8	1	0.9	0.7	0.8	1.2	2.1



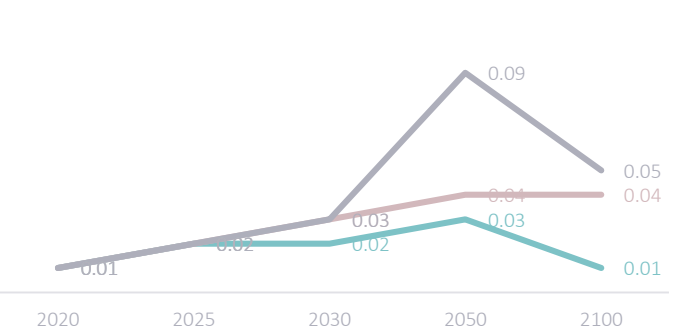
Labor productivity due to heat stress (pp)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.02	-0.05



Land fraction annually exposed to wildfires (pp)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.01	0.02	0.02	0.03	0.01	0.02	0.03	0.04	0.04	0.02	0.03	0.09	0.05

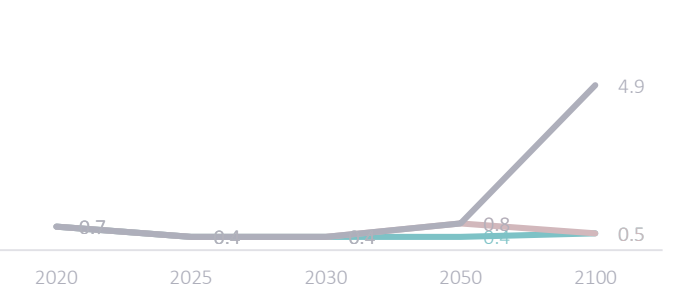


Climate Hazards

Scenario analysis

Precipitation (%)

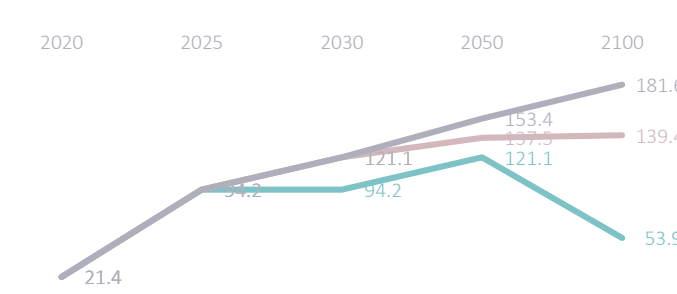
2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.7	0.4	0.4	0.4	0.5	0.4	0.4	0.8	0.5	0.4	0.4	0.8	4.9



Expected damage from river floods (p.a. in%)

Data based on national levels due to unavailability in the selected region

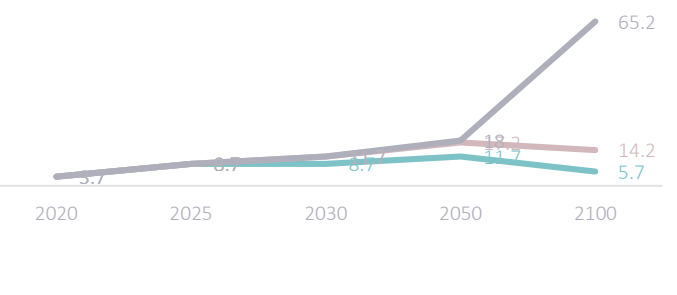
2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
21.4	94.2	94.2	121.1	53.9	94.2	121.1	137.5	139.4	94.2	121.1	153.4	181.6



Expected damage from tropical cyclones (p.a. in%)

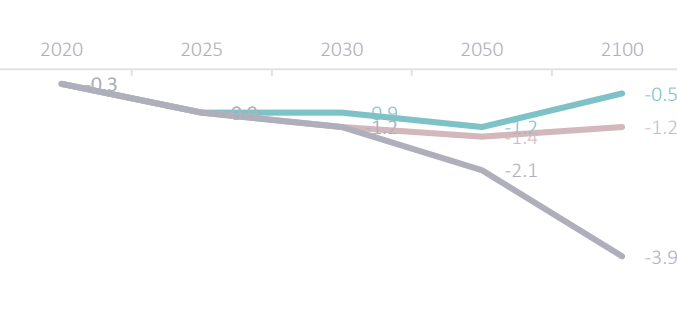
Data based on national levels due to unavailability in the selected region

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
3.7	8.7	8.7	11.7	5.7	8.7	11.7	17.2	14.2	8.7	11.7	28	65.2



Relative change in wind speed (in %)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
-0.3	-0.9	-0.9	-1.2	-0.5	-0.9	-1.2	-1.4	-1.2	-0.9	-1.2	-2.1	-3.9

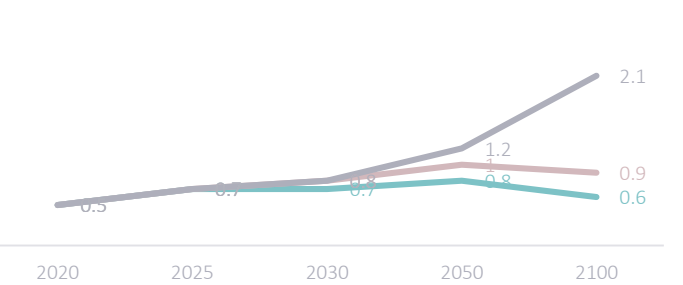


Climate Hazards

Scenario analysis

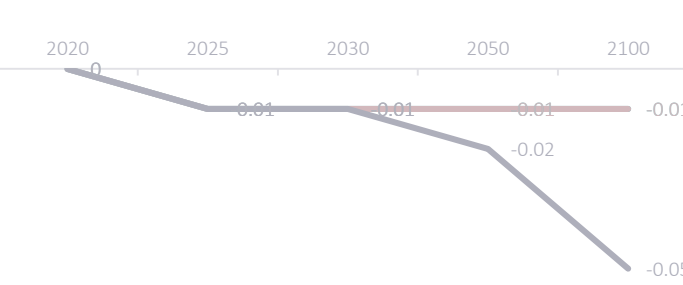
Mean air temperature (°C)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.5	0.7	0.7	0.8	0.6	0.7	0.8	1	0.9	0.7	0.8	1.2	2.1



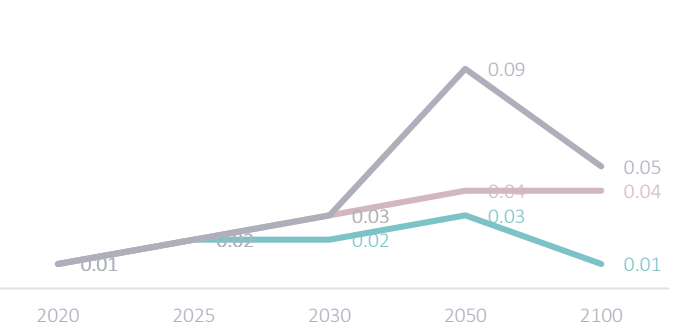
Labor productivity due to heat stress (pp)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.02	-0.05



Land fraction annually exposed to wildfires (pp)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.01	0.02	0.02	0.03	0.01	0.02	0.03	0.04	0.04	0.02	0.03	0.09	0.05

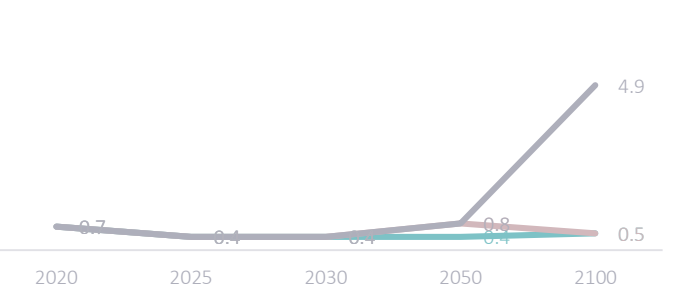


Climate Hazards

Scenario analysis

Precipitation (%)

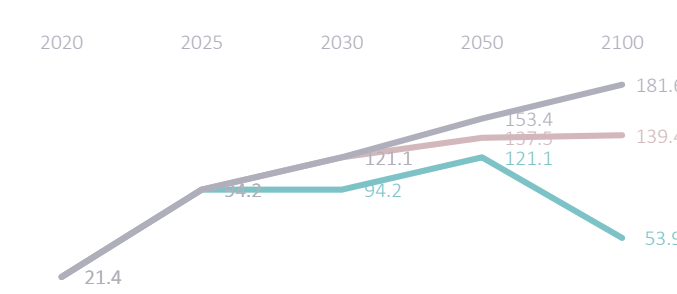
2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.7	0.4	0.4	0.4	0.5	0.4	0.4	0.8	0.5	0.4	0.4	0.8	4.9



Expected damage from river floods (p.a. in%)

Data based on national levels due to unavailability in the selected region

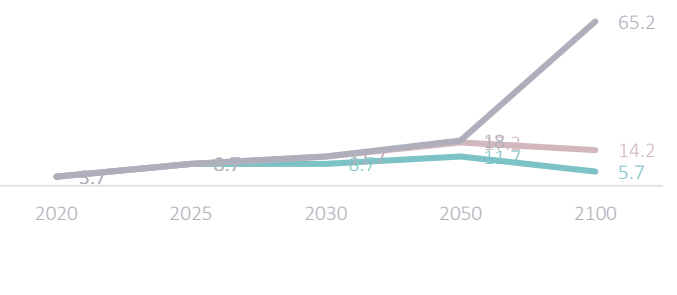
2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
21.4	94.2	94.2	121.1	53.9	94.2	121.1	137.5	139.4	94.2	121.1	153.4	181.6



Expected damage from tropical cyclones (p.a. in%)

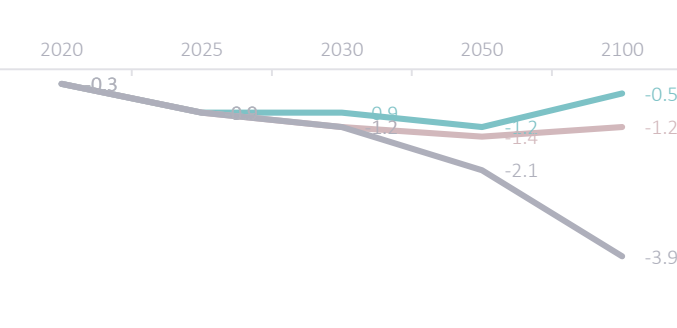
Data based on national levels due to unavailability in the selected region

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
3.7	8.7	8.7	11.7	5.7	8.7	11.7	17.2	14.2	8.7	11.7	28	65.2



Relative change in wind speed (in %)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
-0.3	-0.9	-0.9	-1.2	-0.5	-0.9	-1.2	-1.4	-1.2	-0.9	-1.2	-2.1	-3.9

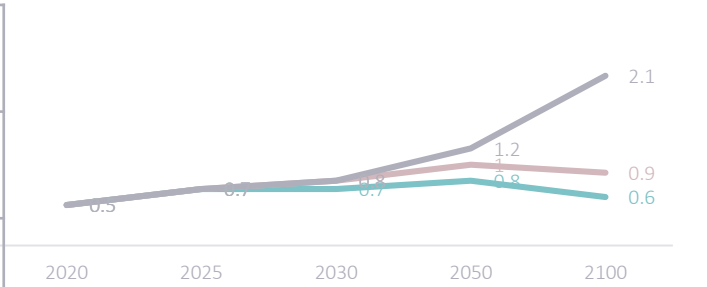


Climate Hazards

Scenario analysis

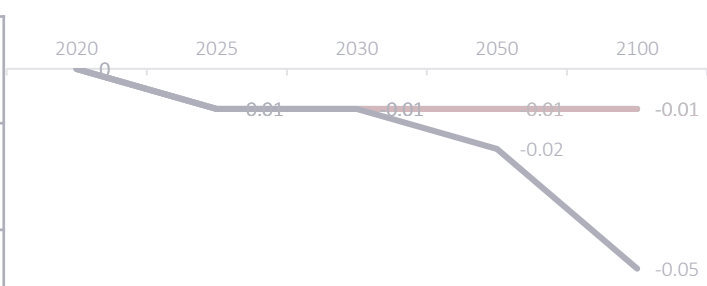
Mean air temperature (°C)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.5	0.7	0.7	0.8	0.6	0.7	0.8	1	0.9	0.7	0.8	1.2	2.1



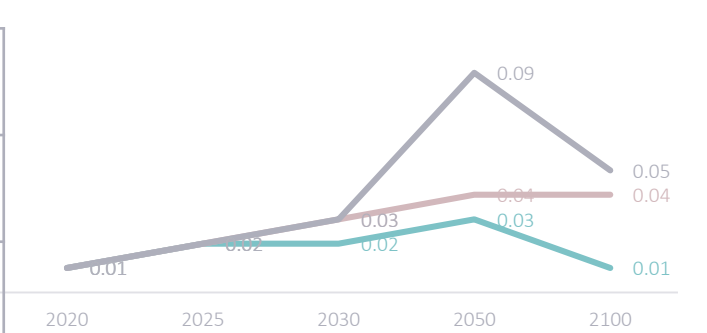
Labor productivity due to heat stress (pp)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.02	-0.05



Land fraction annually exposed to wildfires (pp)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.01	0.02	0.02	0.03	0.01	0.02	0.03	0.04	0.04	0.02	0.03	0.09	0.05

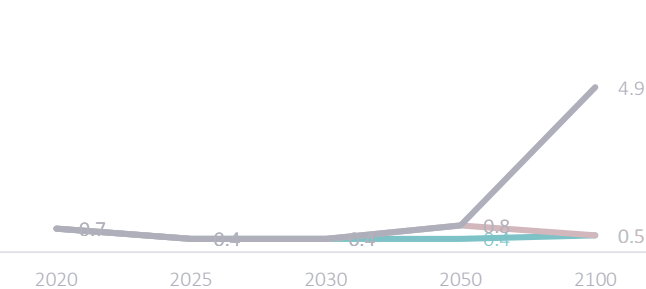


Climate Hazards

Scenario analysis

Precipitation (%)

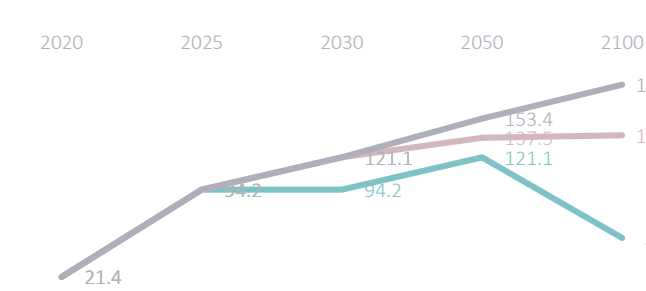
2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.7	0.4	0.4	0.4	0.5	0.4	0.4	0.8	0.5	0.4	0.4	0.8	4.9



Expected damage from river floods (p.a. in%)

Data based on national levels due to unavailability in the selected region

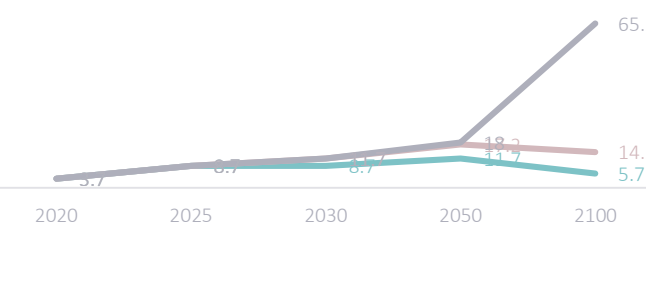
2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
21.4	94.2	94.2	121.1	53.9	94.2	121.1	137.5	139.4	94.2	121.1	153.4	181.6



Expected damage from tropical cyclones (p.a. in%)

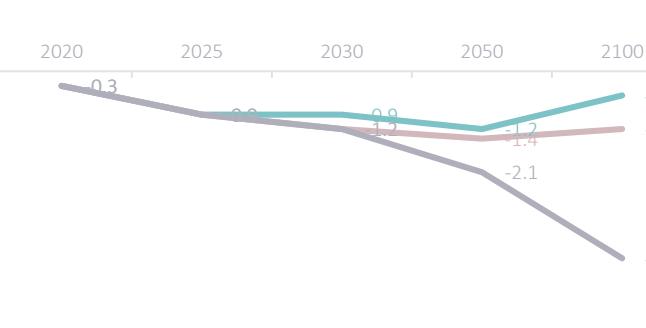
Data based on national levels due to unavailability in the selected region

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
3.7	8.7	8.7	11.7	5.7	8.7	11.7	17.2	14.2	8.7	11.7	28	65.2



Relative change in wind speed (in %)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
-0.3	-0.9	-0.9	-1.2	-0.5	-0.9	-1.2	-1.4	-1.2	-0.9	-1.2	-2.1	-3.9

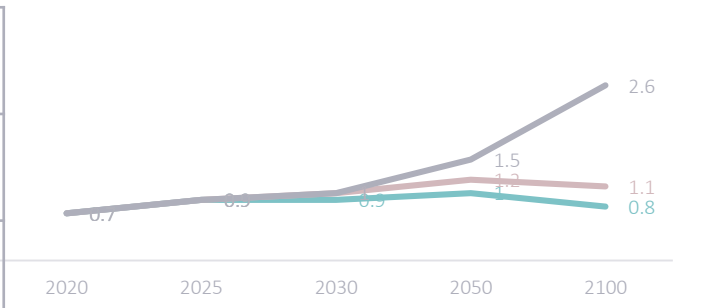


Climate Hazards

Scenario analysis

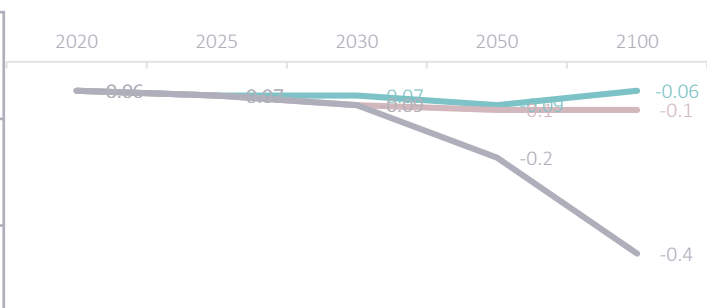
Mean air temperature (°C)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.7	0.9	0.9	1	0.8	0.9	1	1.2	1.1	0.9	1	1.5	2.6



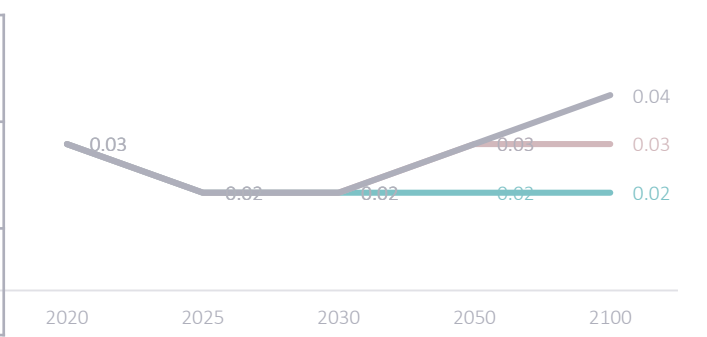
Labor productivity due to heat stress (pp)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
-0.06	-0.07	-0.07	-0.09	-0.06	-0.07	-0.09	-0.1	-0.1	-0.07	-0.09	-0.2	-0.4



Land fraction annually exposed to wildfires (pp)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.02	0.02	0.03	0.04

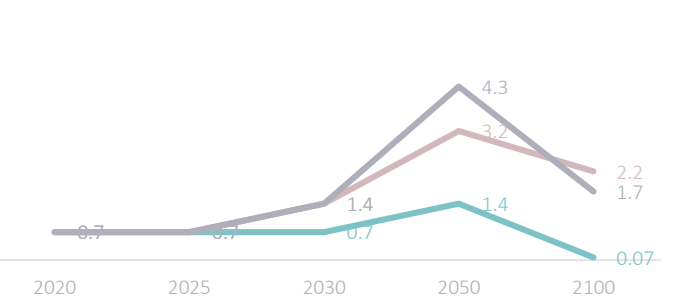


Climate Hazards

Scenario analysis

Precipitation (%)

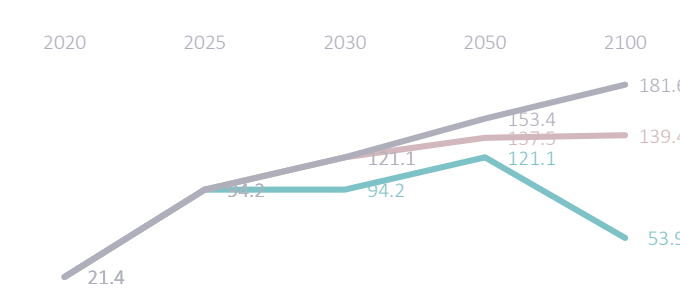
2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.08	0.7	0.7	1.4	0.07	0.7	1.4	3.2	2.2	0.7	1.4	4.3	1.7



Expected damage from river floods (p.a. in%)

Data based on national levels due to unavailability in the selected region

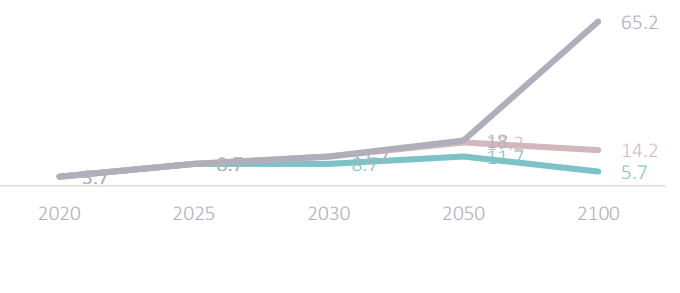
2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
21.4	94.2	94.2	121.1	53.9	94.2	121.1	137.5	139.4	94.2	121.1	153.4	181.6



Expected damage from tropical cyclones (p.a. in%)

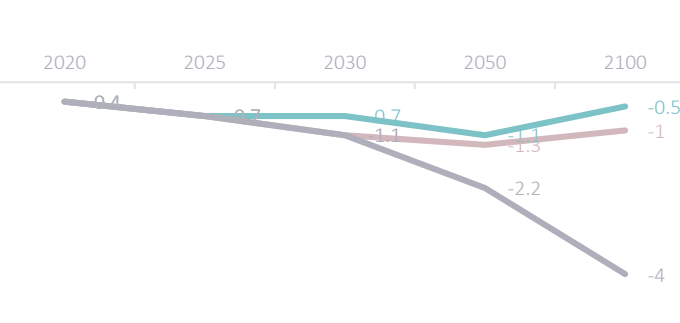
Data based on national levels due to unavailability in the selected region

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
3.7	8.7	8.7	11.7	5.7	8.7	11.7	17.2	14.2	8.7	11.7	28	65.2



Relative change in wind speed (in %)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
-0.4	-0.7	-0.7	-1.1	-0.5	-0.7	-1.1	-1.3	-1	-0.7	-1.1	-2.2	-4

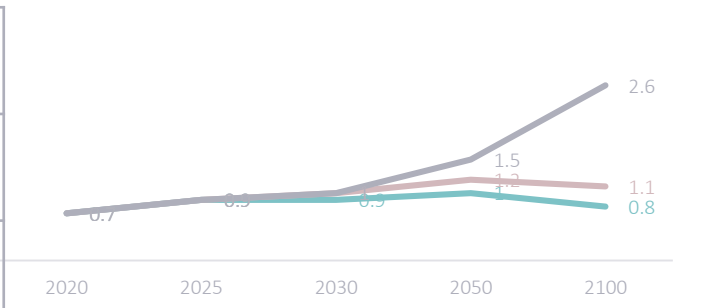


Climate Hazards

Scenario analysis

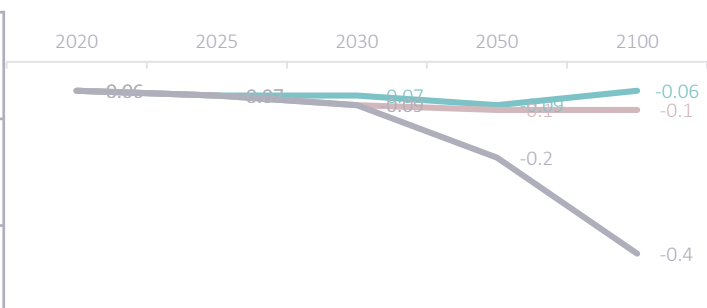
Mean air temperature (°C)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.7	0.9	0.9	1	0.8	0.9	1	1.2	1.1	0.9	1	1.5	2.6



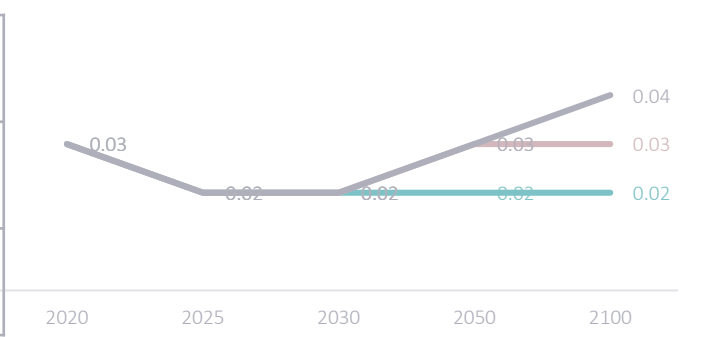
Labor productivity due to heat stress (pp)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
-0.06	-0.07	-0.07	-0.09	-0.06	-0.07	-0.09	-0.1	-0.1	-0.07	-0.09	-0.2	-0.4



Land fraction annually exposed to wildfires (pp)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.02	0.02	0.03	0.04

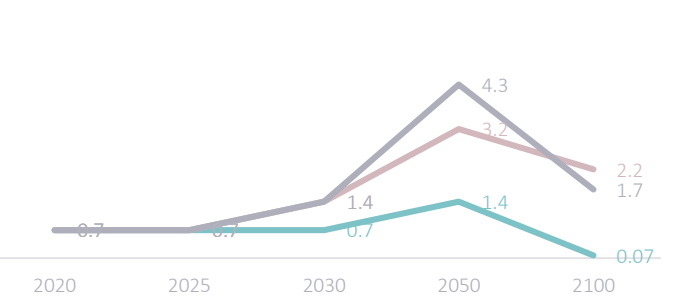


Climate Hazards

Scenario analysis

Precipitation (%)

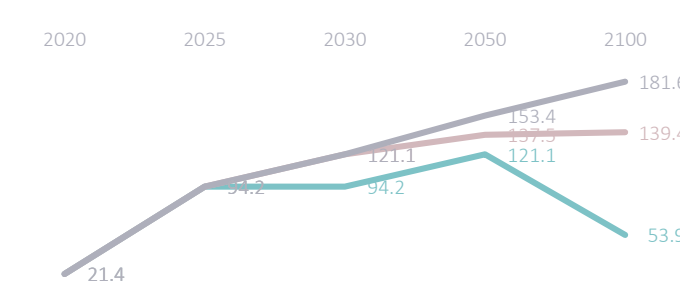
2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.08	0.7	0.7	1.4	0.07	0.7	1.4	3.2	2.2	0.7	1.4	4.3	1.7



Expected damage from river floods (p.a. in%)

Data based on national levels due to unavailability in the selected region

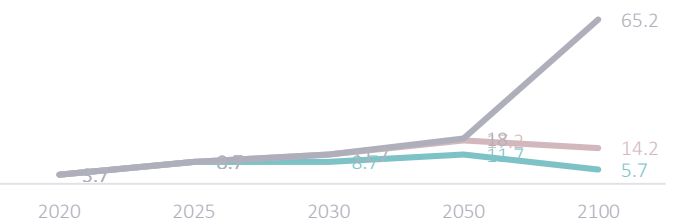
2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
21.4	94.2	94.2	121.1	53.9	94.2	121.1	137.5	139.4	94.2	121.1	153.4	181.6



Expected damage from tropical cyclones (p.a. in%)

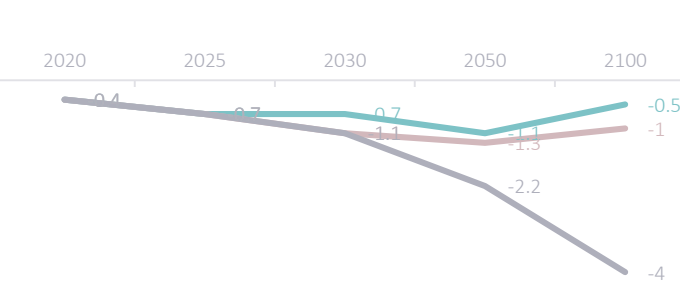
Data based on national levels due to unavailability in the selected region

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
3.7	8.7	8.7	11.7	5.7	8.7	11.7	17.2	14.2	8.7	11.7	28	65.2



Relative change in wind speed (in %)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
-0.4	-0.7	-0.7	-1.1	-0.5	-0.7	-1.1	-1.3	-1	-0.7	-1.1	-2.2	-4

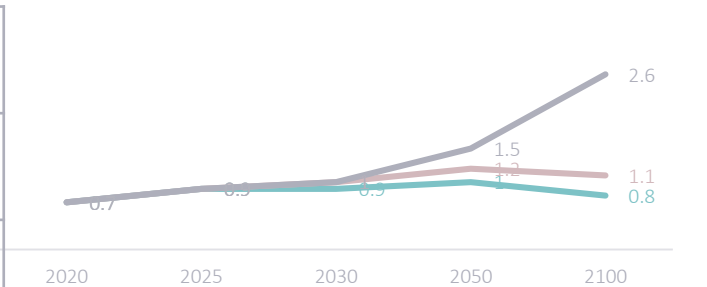


Climate Hazards

Scenario analysis

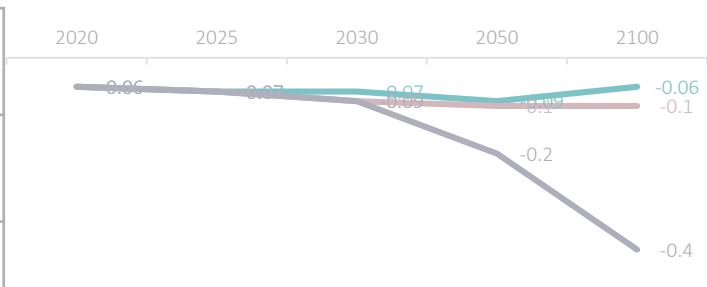
Mean air temperature (°C)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.7	0.9	0.9	1	0.8	0.9	1	1.2	1.1	0.9	1	1.5	2.6



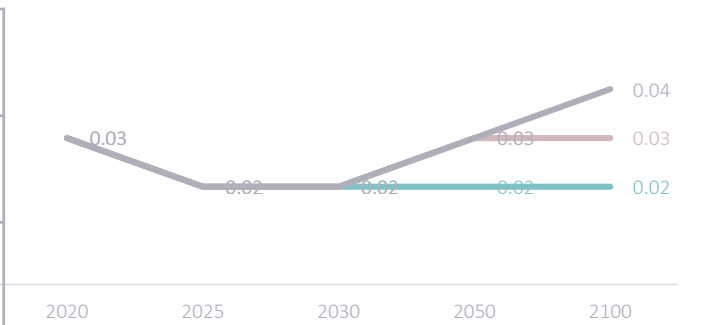
Labor productivity due to heat stress (pp)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
-0.06	-0.07	-0.07	-0.09	-0.06	-0.07	-0.09	-0.1	-0.1	-0.07	-0.09	-0.2	-0.4



Land fraction annually exposed to wildfires (pp)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.02	0.02	0.03	0.04

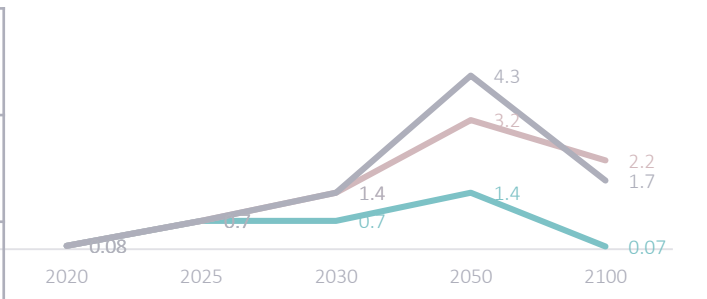


Climate Hazards

Scenario analysis

Precipitation (%)

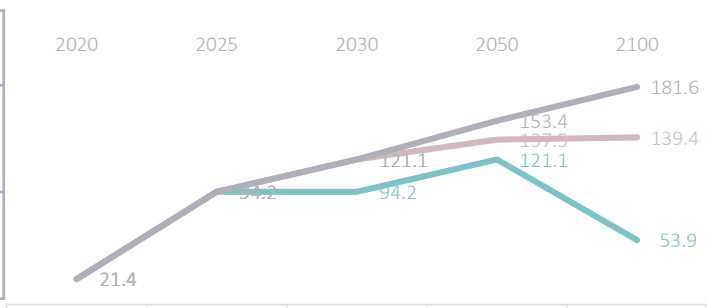
2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.08	0.7	0.7	1.4	0.07	0.7	1.4	3.2	2.2	0.7	1.4	4.3	1.7



Expected damage from river floods (p.a. in%)

Data based on national levels due to unavailability in the selected region

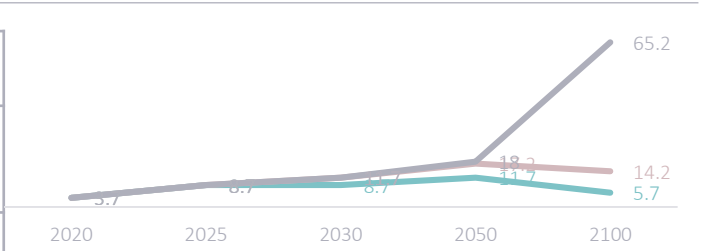
2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
21.4	94.2	94.2	121.1	53.9	94.2	121.1	137.5	139.4	94.2	121.1	153.4	181.6



Expected damage from tropical cyclones (p.a. in%)

Data based on national levels due to unavailability in the selected region


2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
3.7	8.7	8.7	11.7	5.7	8.7	11.7	17.2	14.2	8.7	11.7	28	65.2



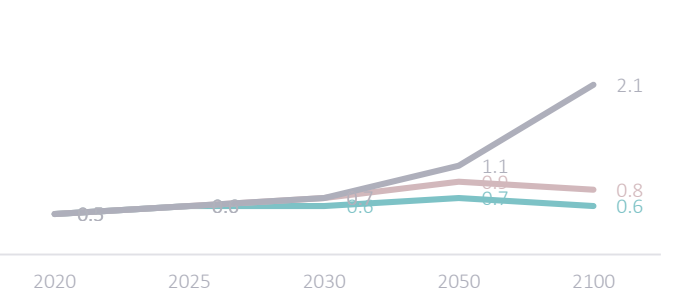
Climate Hazards

Scenario analysis


Mean air temperature (°C)



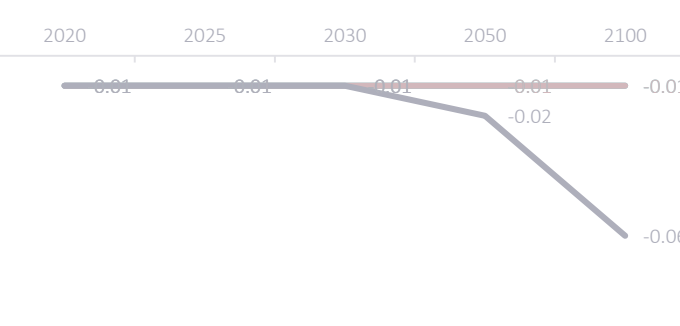
2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.5	0.6	0.6	0.7	0.6	0.6	0.7	0.9	0.8	0.6	0.7	1.1	2.1



Labor productivity due to heat stress (pp)



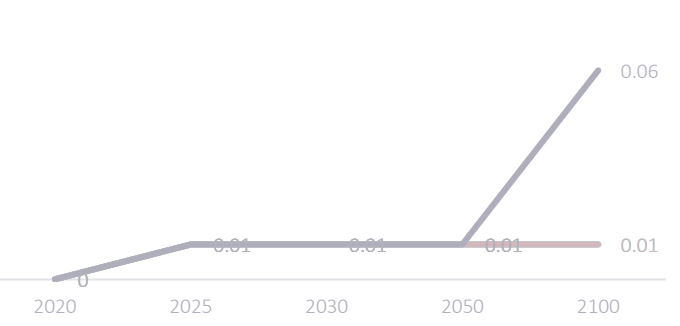
2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.02	-0.06



Land fraction annually exposed to wildfires (pp)



2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.06

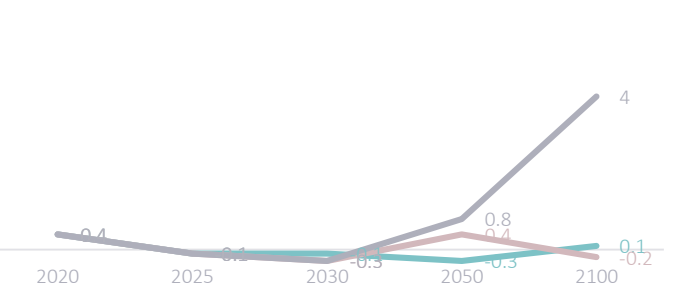


Climate Hazards

Scenario analysis

Precipitation (%)

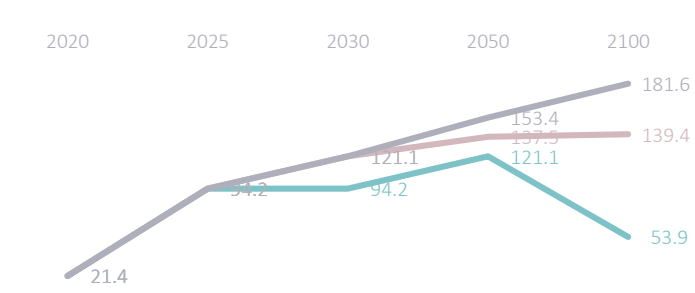
2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.4	-0.1	-0.1	-0.3	0.1	-0.1	-0.3	0.4	-0.2	-0.1	-0.3	0.8	4



Expected damage from river floods (p.a. in%)

Data based on national levels due to unavailability in the selected region

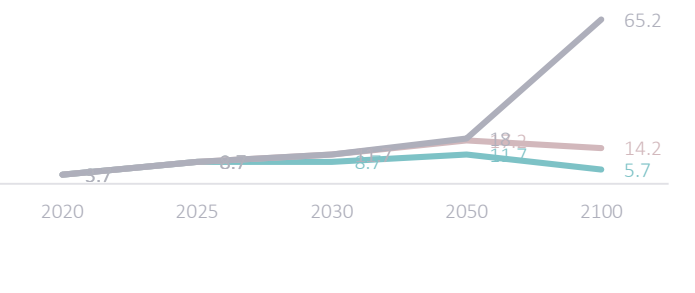
2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
21.4	94.2	94.2	121.1	53.9	94.2	121.1	137.5	139.4	94.2	121.1	153.4	181.6



Expected damage from tropical cyclones (p.a. in%)

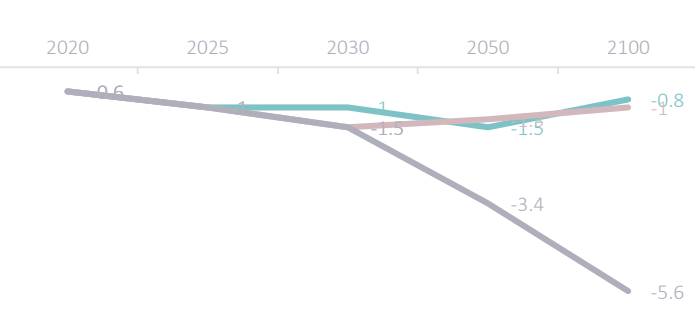
Data based on national levels due to unavailability in the selected region

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
3.7	8.7	8.7	11.7	5.7	8.7	11.7	17.2	14.2	8.7	11.7	28	65.2



Relative change in wind speed (in %)


2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
-0.6	-1	-1	-1.5	-0.8	-1	-1.5	-1.7	-1.3	-1	-1.5	-3.4	-5.6



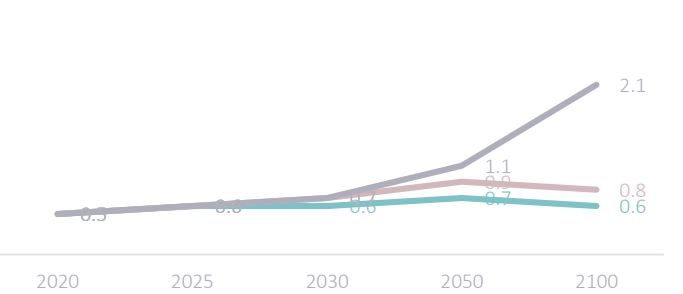
Climate Hazards

Scenario analysis


Mean air temperature (°C)



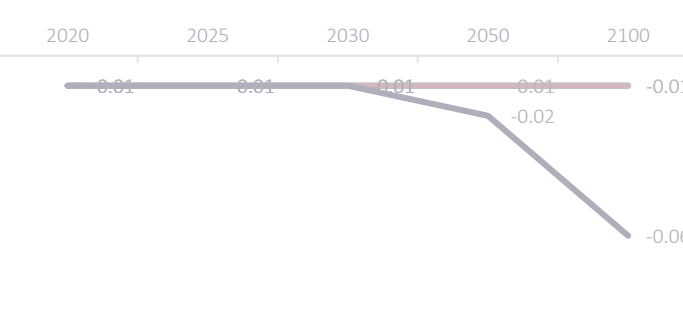
2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.5	0.6	0.6	0.7	0.6	0.6	0.7	0.9	0.8	0.6	0.7	1.1	2.1



Labor productivity due to heat stress (pp)



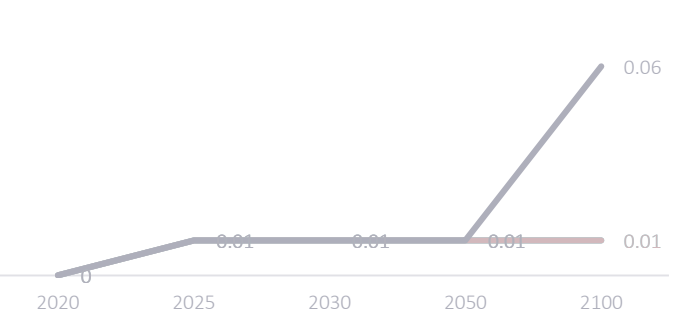
2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.02	-0.06



Land fraction annually exposed to wildfires (pp)



2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.06

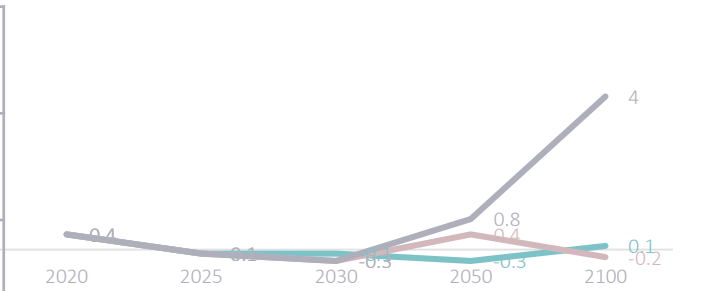


Climate Hazards

Scenario analysis

Precipitation (%)

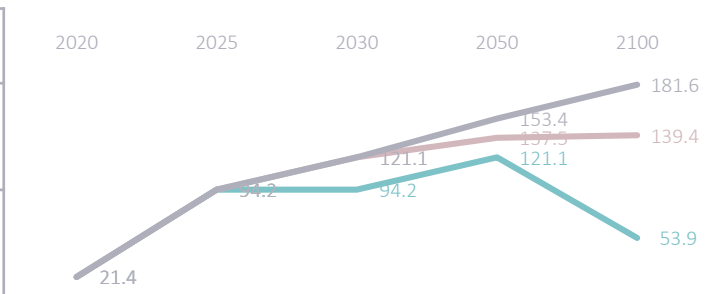
2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.4	-0.1	-0.1	-0.3	0.1	-0.1	-0.3	0.4	-0.2	-0.1	-0.3	0.8	4



Expected damage from river floods (p.a. in%)

Data based on national levels due to unavailability in the selected region

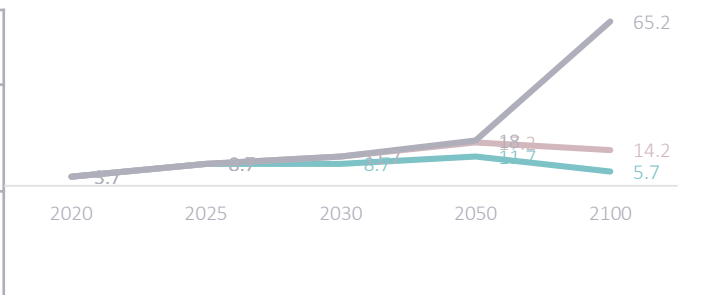
2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
21.4	94.2	94.2	121.1	53.9	94.2	121.1	137.5	139.4	94.2	121.1	153.4	181.6



Expected damage from tropical cyclones (p.a. in%)

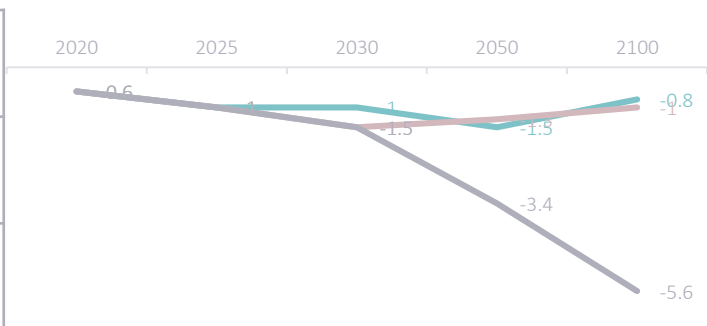
Data based on national levels due to unavailability in the selected region

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
3.7	8.7	8.7	11.7	5.7	8.7	11.7	17.2	14.2	8.7	11.7	28	65.2



Relative change in wind speed (in %)


2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
-0.6	-1	-1	-1.5	-0.8	-1	-1.5	-1.7	-1.3	-1	-1.5	-3.4	-5.6



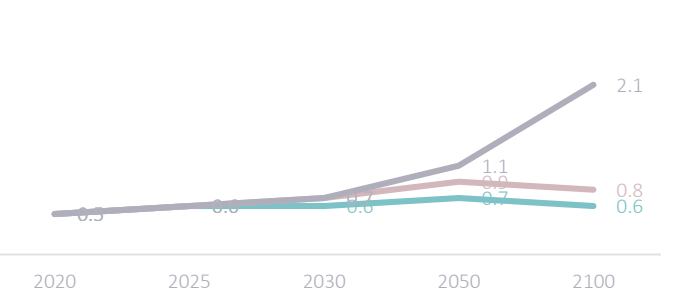
Climate Hazards

Scenario analysis


Mean air temperature (°C)



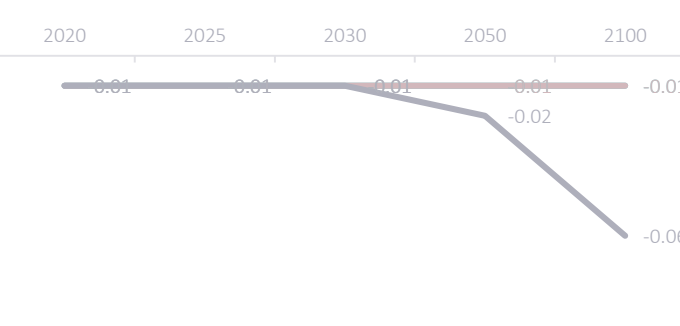
2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.5	0.6	0.6	0.7	0.6	0.6	0.7	0.9	0.8	0.6	0.7	1.1	2.1



Labor productivity due to heat stress (pp)



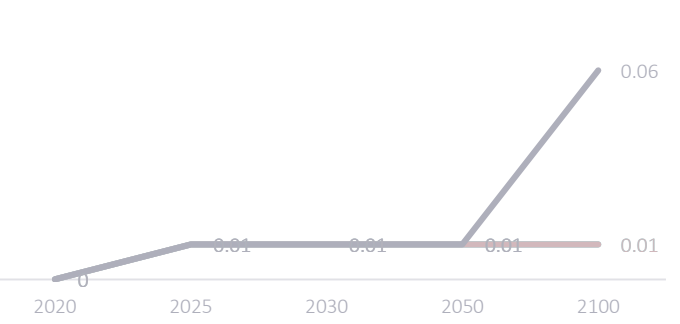
2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.02	-0.06



Land fraction annually exposed to wildfires (pp)



2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.06

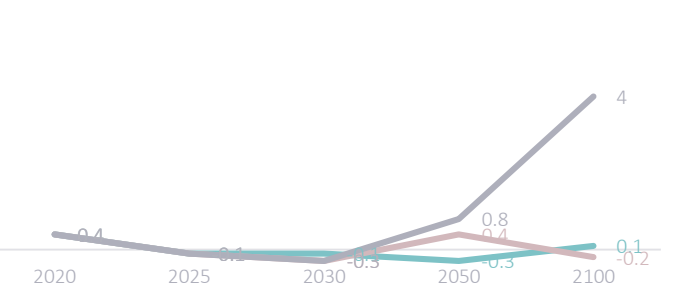


Climate Hazards

Scenario analysis

Precipitation (%)

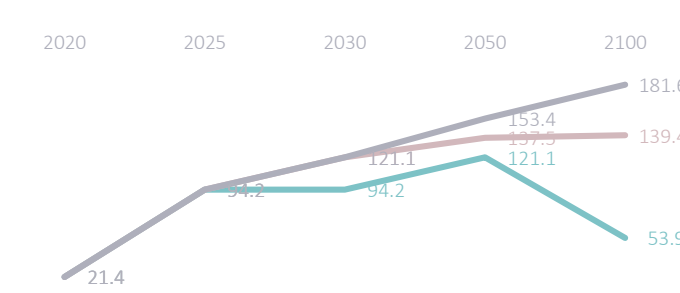
2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.4	-0.1	-0.1	-0.3	0.1	-0.1	-0.3	0.4	-0.2	-0.1	-0.3	0.8	4



Expected damage from river floods (p.a. in%)

Data based on national levels due to unavailability in the selected region

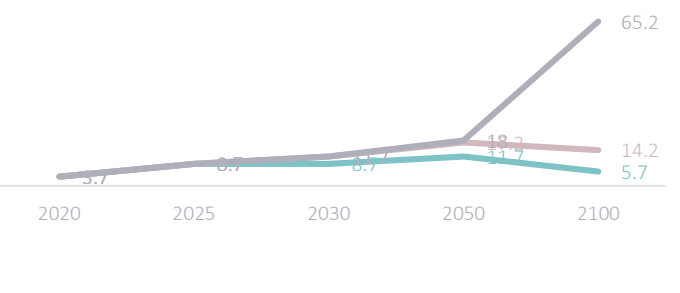
2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
21.4	94.2	94.2	121.1	53.9	94.2	121.1	137.5	139.4	94.2	121.1	153.4	181.6



Expected damage from tropical cyclones (p.a. in%)

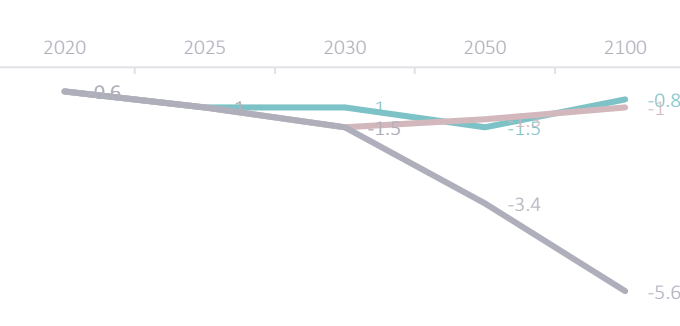
Data based on national levels due to unavailability in the selected region

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
3.7	8.7	8.7	11.7	5.7	8.7	11.7	17.2	14.2	8.7	11.7	28	65.2



Relative change in wind speed (in %)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
-0.6	-1	-1	-1.5	-0.8	-1	-1.5	-1.7	-1.3	-1	-1.5	-3.4	-5.6

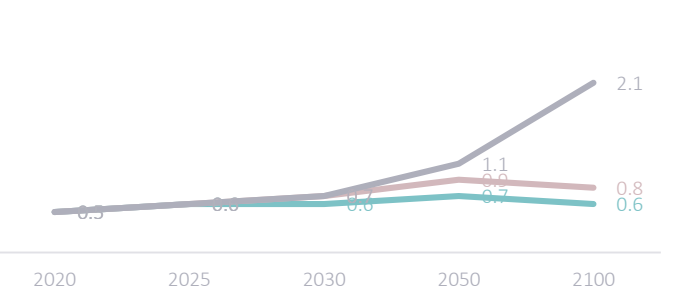


Climate Hazards

Scenario analysis

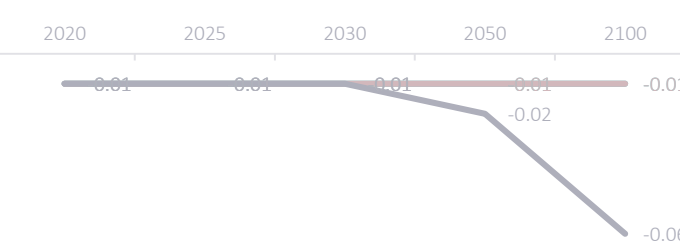
Mean air temperature (°C)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.5	0.6	0.6	0.7	0.6	0.6	0.7	0.9	0.8	0.6	0.7	1.1	2.1



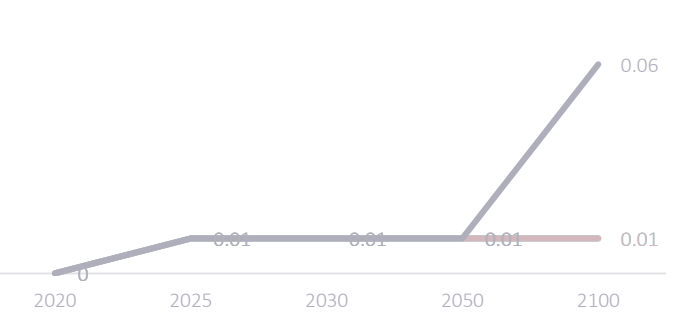
Labor productivity due to heat stress (pp)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.02	-0.06



Land fraction annually exposed to wildfires (pp)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.06

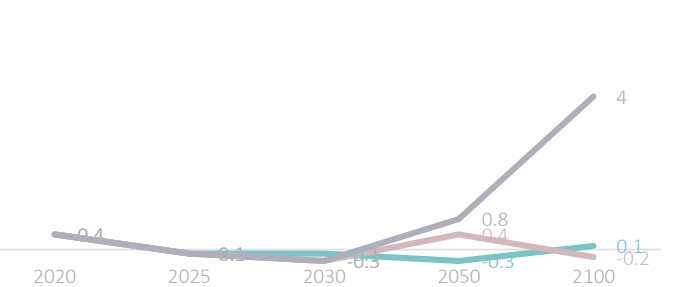


Climate Hazards

Scenario analysis

Precipitation (%)

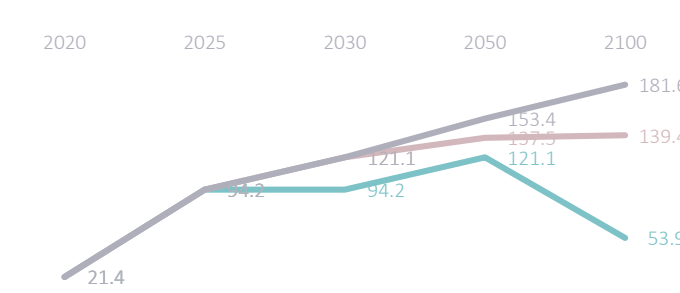
2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.4	-0.1	-0.1	-0.3	0.1	-0.1	-0.3	0.4	-0.2	-0.1	-0.3	0.8	4



Expected damage from river floods (p.a. in%)

Data based on national levels due to unavailability in the selected region

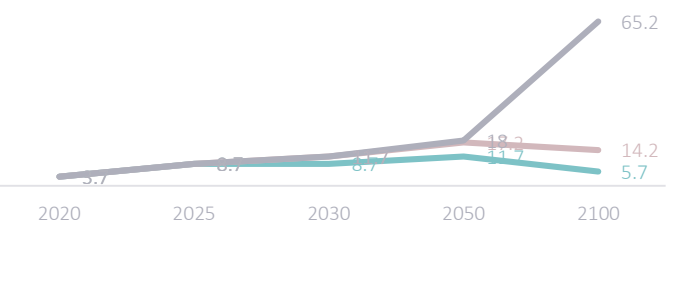
2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
21.4	94.2	94.2	121.1	53.9	94.2	121.1	137.5	139.4	94.2	121.1	153.4	181.6



Expected damage from tropical cyclones (p.a. in%)

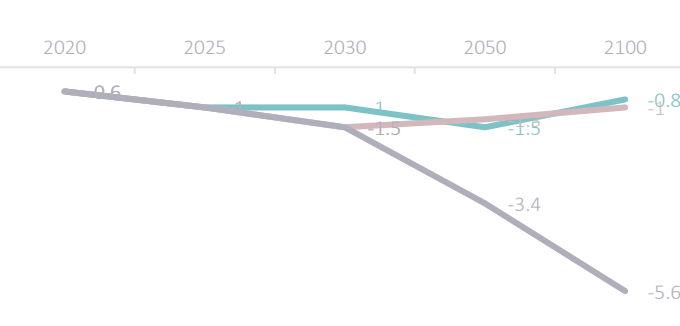
Data based on national levels due to unavailability in the selected region

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
3.7	8.7	8.7	11.7	5.7	8.7	11.7	17.2	14.2	8.7	11.7	28	65.2



Relative change in wind speed (in %)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
-0.6	-1	-1	-1.5	-0.8	-1	-1.5	-1.7	-1.3	-1	-1.5	-3.4	-5.6

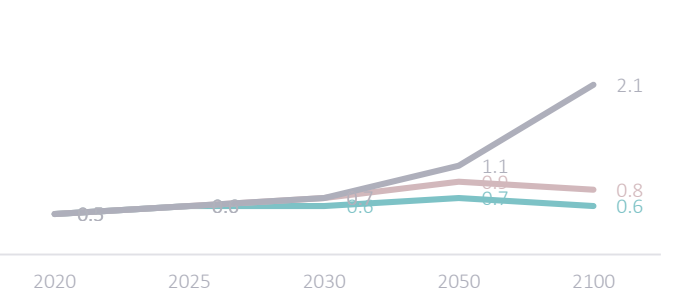


Climate Hazards

Scenario analysis

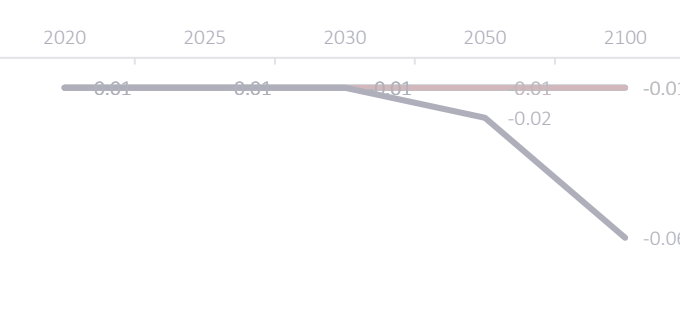
Mean air temperature (°C)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.5	0.6	0.6	0.7	0.6	0.6	0.7	0.9	0.8	0.6	0.7	1.1	2.1



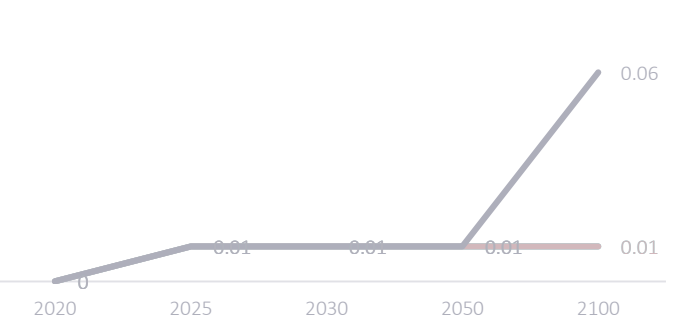
Labor productivity due to heat stress (pp)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.02	-0.06



Land fraction annually exposed to wildfires (pp)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.06

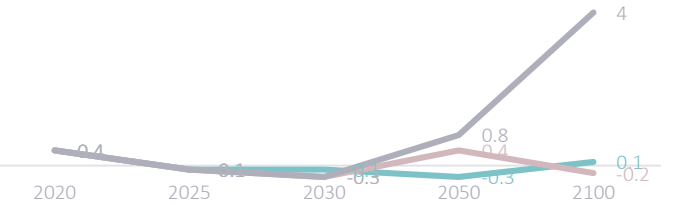


Climate Hazards

Scenario analysis

Precipitation (%)

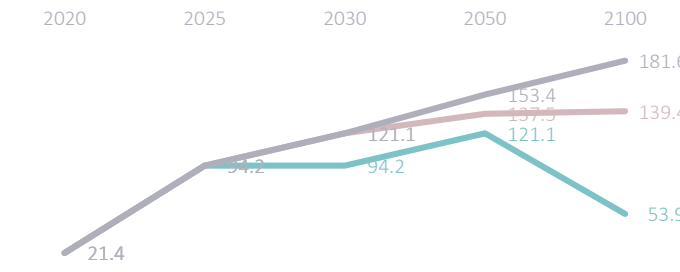
2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.4	-0.1	-0.1	-0.3	0.1	-0.1	-0.3	0.4	-0.2	-0.1	-0.3	0.8	4



Expected damage from river floods (p.a. in%)

Data based on national levels due to unavailability in the selected region

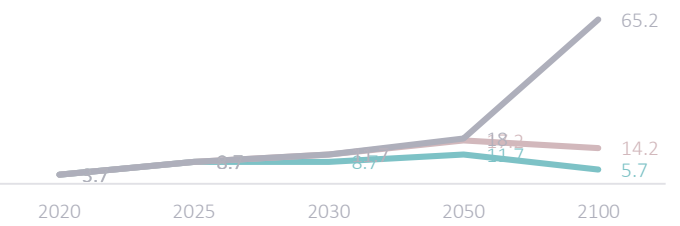
2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
21.4	94.2	94.2	121.1	53.9	94.2	121.1	137.5	139.4	94.2	121.1	153.4	181.6



Expected damage from tropical cyclones (p.a. in%)

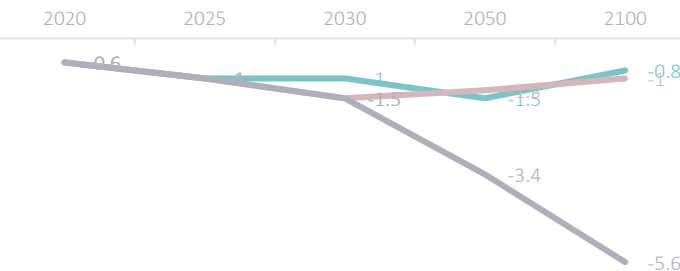
Data based on national levels due to unavailability in the selected region

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
3.7	8.7	8.7	11.7	5.7	8.7	11.7	17.2	14.2	8.7	11.7	28	65.2



Relative change in wind speed (in %)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
-0.6	-1	-1	-1.5	-0.8	-1	-1.5	-1.7	-1.3	-1	-1.5	-3.4	-5.6

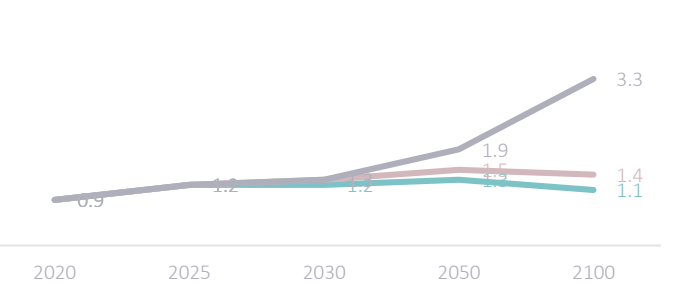


Climate Hazards

Scenario analysis

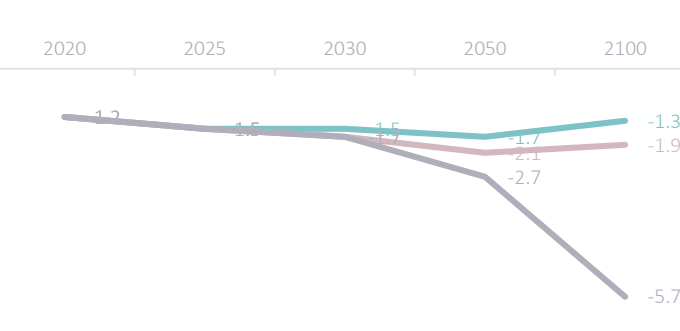
Mean air temperature (°C)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.9	1.2	1.2	1.3	1.1	1.2	1.3	1.5	1.4	1.2	1.3	1.9	3.3



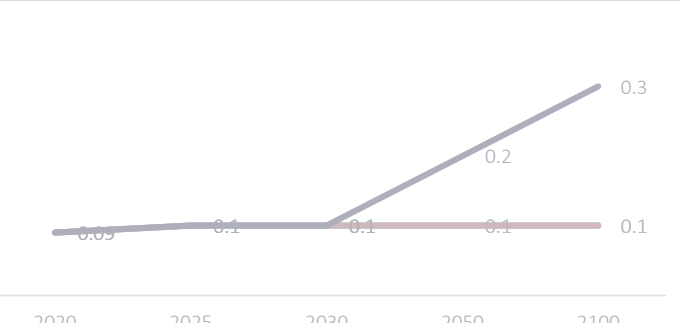
Labor productivity due to heat stress (pp)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
-1.2	-1.5	-1.5	-1.7	-1.3	-1.5	-1.7	-2.1	-1.9	-1.5	-1.7	-2.7	-5.7



Land fraction annually exposed to wildfires (pp)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.09	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3

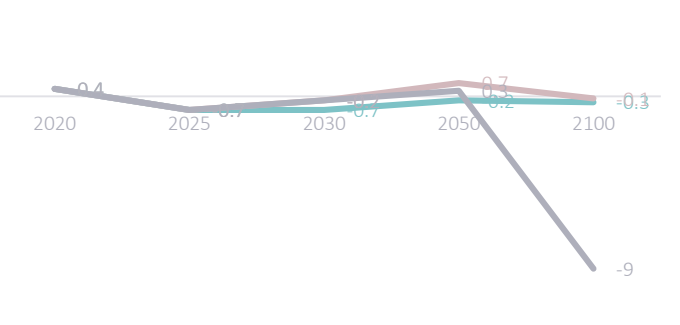


Climate Hazards

Scenario analysis

Precipitation (%)

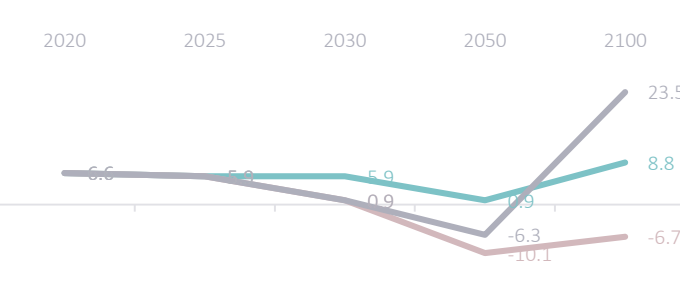
2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.4	-0.7	-0.7	-0.2	-0.3	-0.7	-0.2	0.7	-0.1	-0.7	-0.2	0.3	-9



Expected damage from river floods (p.a. in%)

Data based on national levels due to unavailability in the selected region

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
6.6	5.9	5.9	0.9	8.8	5.9	0.9	-10.1	-6.7	5.9	0.9	-6.3	23.5



Expected damage from tropical cyclones (p.a. in%)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
No data	No data											

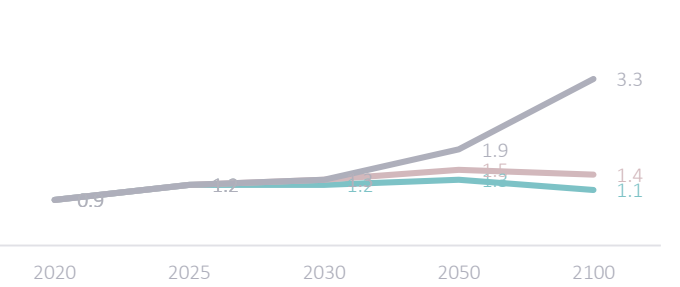
No data currently available in the Climate Impact Explorer tool for the selected indicator in this region

Climate Hazards

Scenario analysis

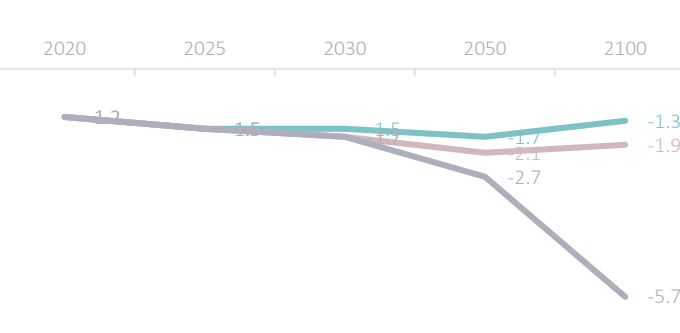
Mean air temperature (°C)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.9	1.2	1.2	1.3	1.1	1.2	1.3	1.5	1.4	1.2	1.3	1.9	3.3



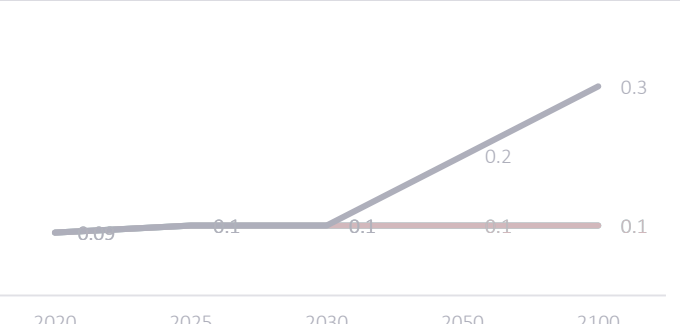
Labor productivity due to heat stress (pp)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
-1.2	-1.5	-1.5	-1.7	-1.3	-1.5	-1.7	-2.1	-1.9	-1.5	-1.7	-2.7	-5.7



Land fraction annually exposed to wildfires (pp)


2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.09	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3



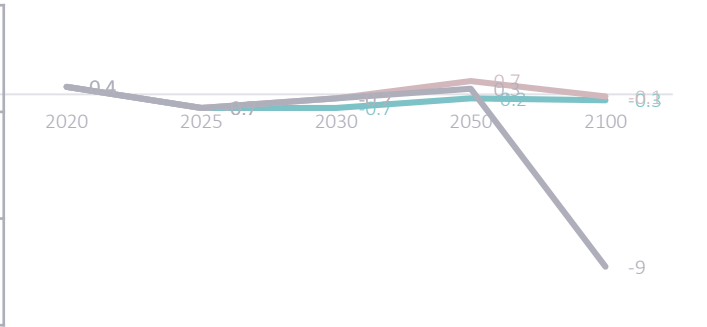
Climate Hazards

Scenario analysis


Precipitation (%)



2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.4	-0.7	-0.7	-0.2	-0.3	-0.7	-0.2	0.7	-0.1	-0.7	-0.2	0.3	-9

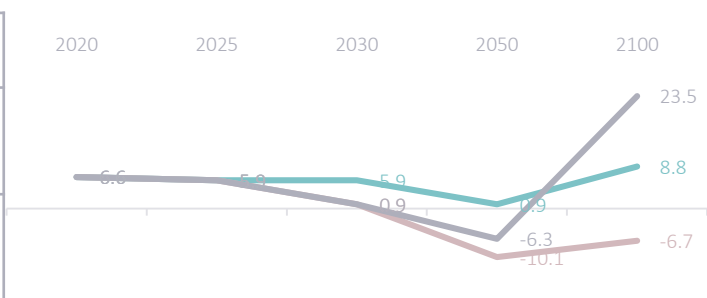


Expected damage from river floods (p.a. in%)




Data based on national levels due to unavailability in the selected region

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
6.6	5.9	5.9	0.9	8.8	5.9	0.9	-10.1	-6.7	5.9	0.9	-6.3	23.5



Expected damage from tropical cyclones (p.a. in%)



2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
No data	No data											

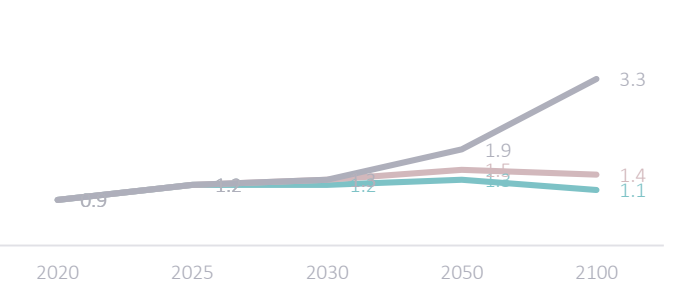
No data currently available in the Climate Impact Explorer tool for the selected indicator in this region

Climate Hazards

Scenario analysis

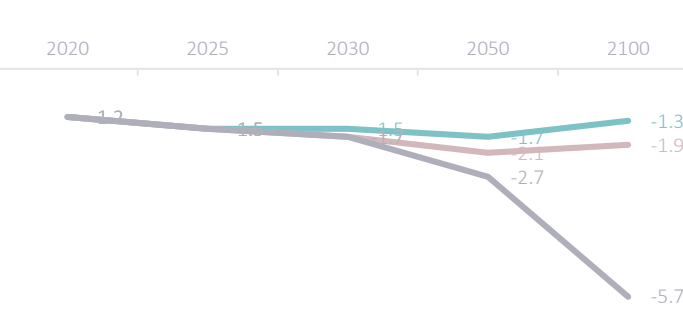
Mean air temperature (°C)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.9	1.2	1.2	1.3	1.1	1.2	1.3	1.5	1.4	1.2	1.3	1.9	3.3



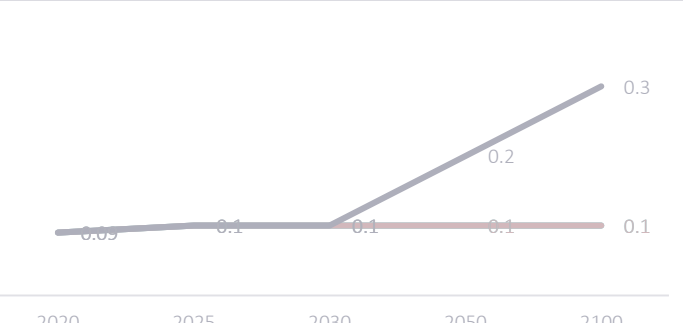
Labor productivity due to heat stress (pp)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
-1.2	-1.5	-1.5	-1.7	-1.3	-1.5	-1.7	-2.1	-1.9	-1.5	-1.7	-2.7	-5.7



Land fraction annually exposed to wildfires (pp)


2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.09	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3



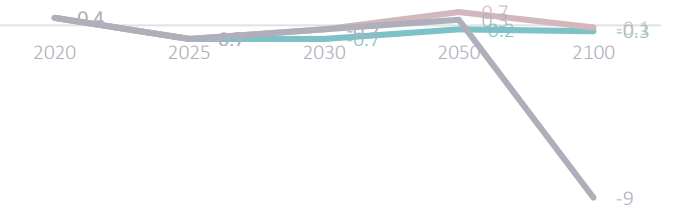
Climate Hazards

Scenario analysis

Precipitation (%)



2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.4	-0.7	-0.7	-0.2	-0.3	-0.7	-0.2	0.7	-0.1	-0.7	-0.2	0.3	-9

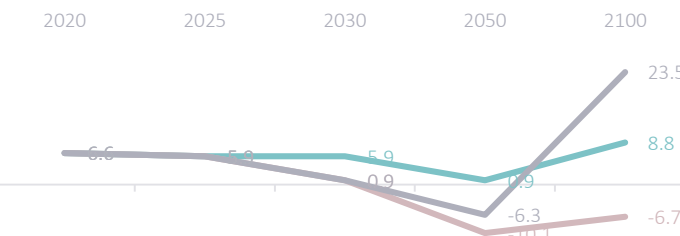


Expected damage from river floods (p.a. in%)




Data based on national levels due to unavailability in the selected region

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
6.6	5.9	5.9	0.9	8.8	5.9	0.9	-10.1	-6.7	5.9	0.9	-6.3	23.5



Expected damage from tropical cyclones (p.a. in%)



2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
No data	No data											

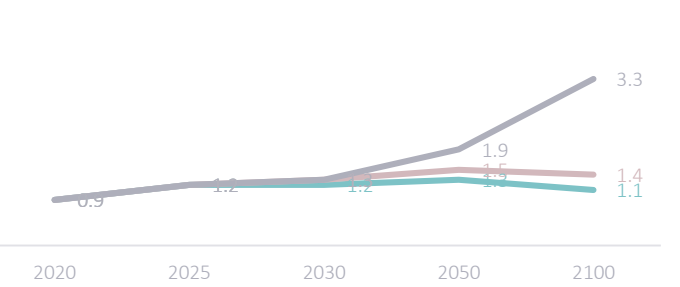
No data currently available in the Climate Impact Explorer tool for the selected indicator in this region

Climate Hazards

Scenario analysis

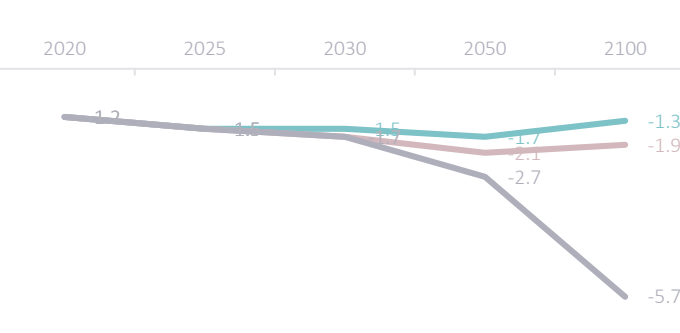
Mean air temperature (°C)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.9	1.2	1.2	1.3	1.1	1.2	1.3	1.5	1.4	1.2	1.3	1.9	3.3



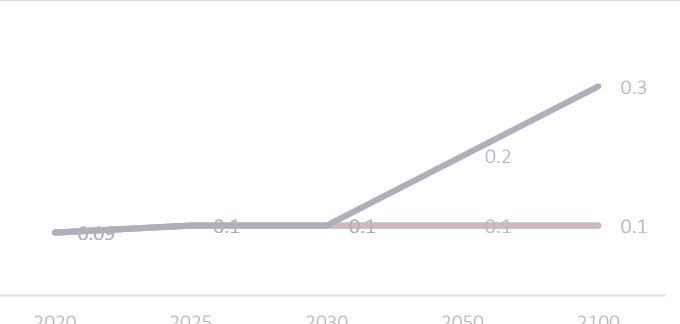
Labor productivity due to heat stress (pp)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
-1.2	-1.5	-1.5	-1.7	-1.3	-1.5	-1.7	-2.1	-1.9	-1.5	-1.7	-2.7	-5.7



Land fraction annually exposed to wildfires (pp)


2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.09	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3



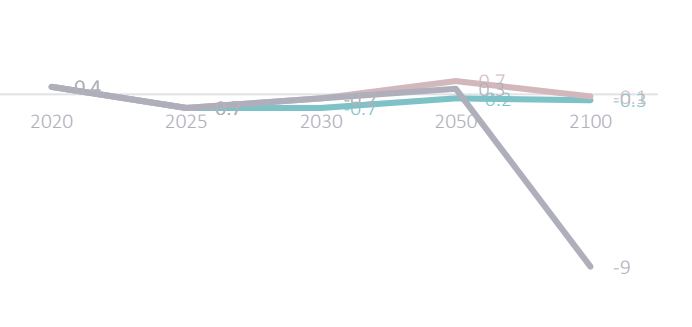
Climate Hazards

Scenario analysis


Precipitation (%)



2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.4	-0.7	-0.7	-0.2	-0.3	-0.7	-0.2	0.7	-0.1	-0.7	-0.2	0.3	-9

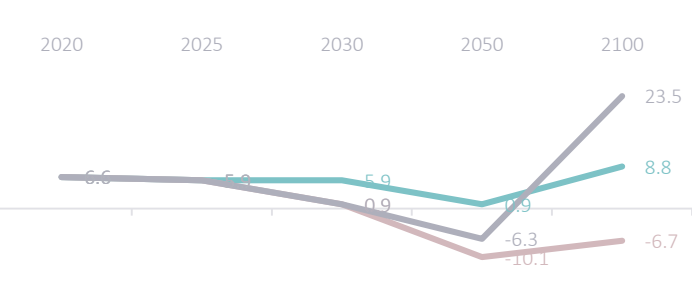


Expected damage from river floods (p.a. in%)




Data based on national levels due to unavailability in the selected region

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
6.6	5.9	5.9	0.9	8.8	5.9	0.9	-10.1	-6.7	5.9	0.9	-6.3	23.5



Expected damage from tropical cyclones (p.a. in%)



2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
No data	No data											

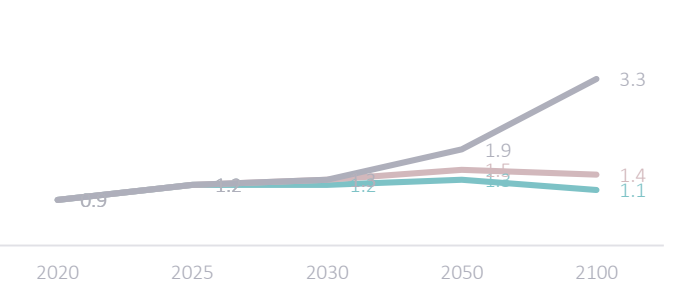
No data currently available in the Climate Impact Explorer tool for the selected indicator in this region

Climate Hazards

Scenario analysis

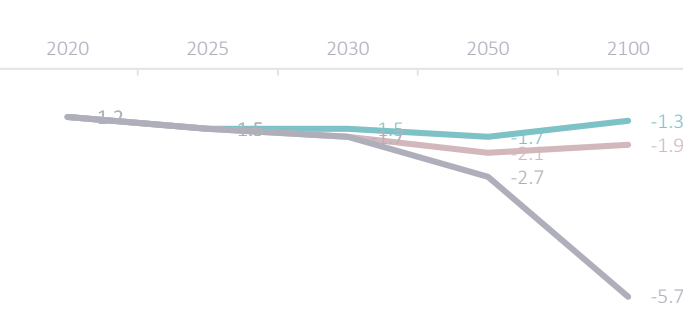
Mean air temperature (°C)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.9	1.2	1.2	1.3	1.1	1.2	1.3	1.5	1.4	1.2	1.3	1.9	3.3



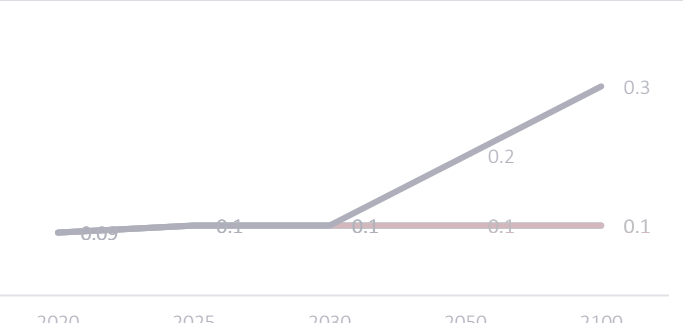
Labor productivity due to heat stress (pp)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
-1.2	-1.5	-1.5	-1.7	-1.3	-1.5	-1.7	-2.1	-1.9	-1.5	-1.7	-2.7	-5.7



Land fraction annually exposed to wildfires (pp)


2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.09	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3



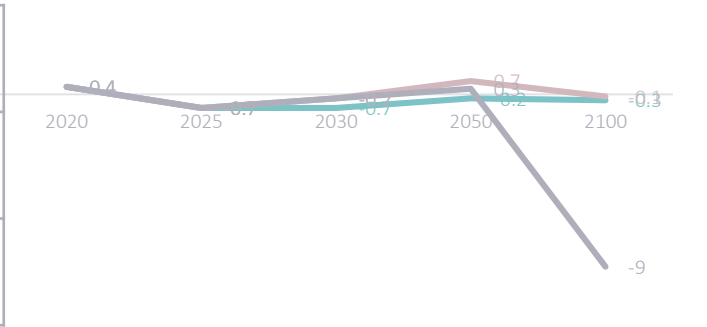
Climate Hazards

Scenario analysis


Precipitation (%)



2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.4	-0.7	-0.7	-0.2	-0.3	-0.7	-0.2	0.7	-0.1	-0.7	-0.2	0.3	-9

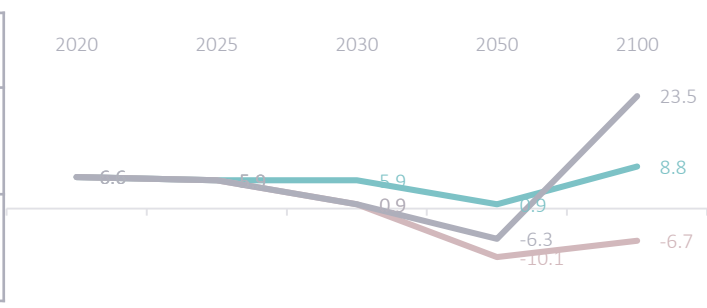


Expected damage from river floods (p.a. in%)




Data based on national levels due to unavailability in the selected region

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
6.6	5.9	5.9	0.9	8.8	5.9	0.9	-10.1	-6.7	5.9	0.9	-6.3	23.5



Expected damage from tropical cyclones (p.a. in%)



2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
No data	No data											

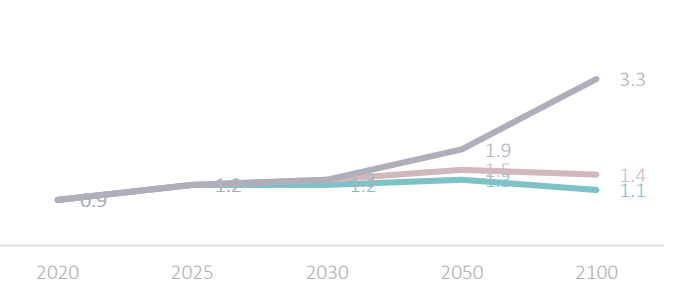
No data currently available in the Climate Impact Explorer tool for the selected indicator in this region

Climate Hazards

Scenario analysis

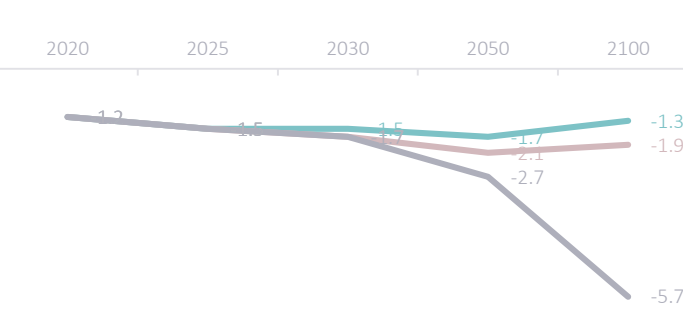
Mean air temperature (°C)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.9	1.2	1.2	1.3	1.1	1.2	1.3	1.5	1.4	1.2	1.3	1.9	3.3



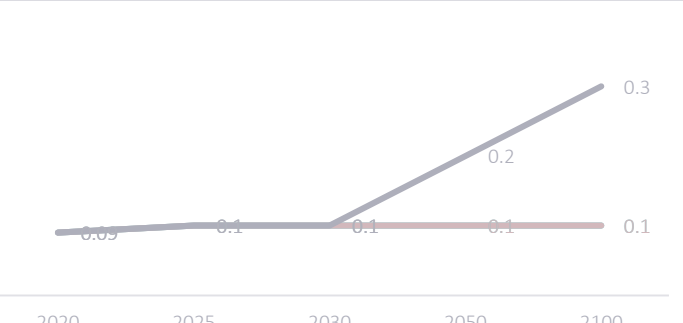
Labor productivity due to heat stress (pp)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
-1.2	-1.5	-1.5	-1.7	-1.3	-1.5	-1.7	-2.1	-1.9	-1.5	-1.7	-2.7	-5.7



Land fraction annually exposed to wildfires (pp)


2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.09	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3



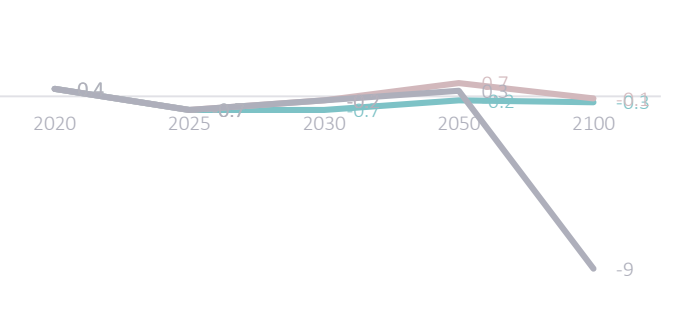
Climate Hazards

Scenario analysis


Precipitation (%)



2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.4	-0.7	-0.7	-0.2	-0.3	-0.7	-0.2	0.7	-0.1	-0.7	-0.2	0.3	-9

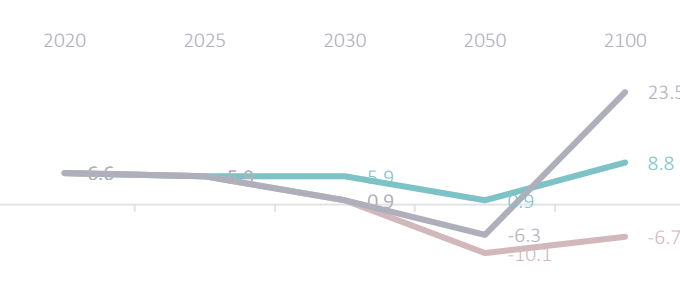


Expected damage from river floods (p.a. in%)




Data based on national levels due to unavailability in the selected region

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
6.6	5.9	5.9	0.9	8.8	5.9	0.9	-10.1	-6.7	5.9	0.9	-6.3	23.5



Expected damage from tropical cyclones (p.a. in%)



2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
No data	No data											

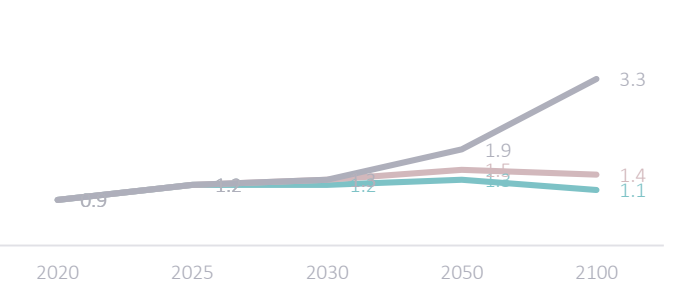
No data currently available in the Climate Impact Explorer tool for the selected indicator in this region

Climate Hazards

Scenario analysis

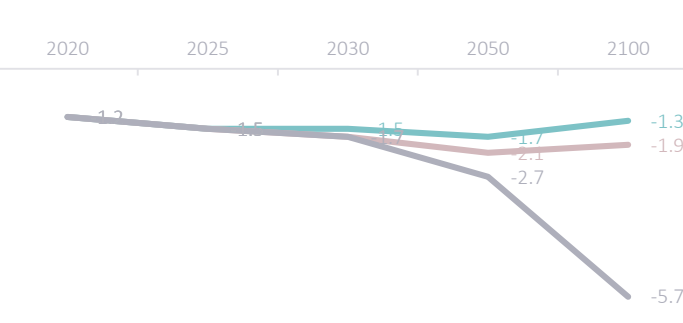
Mean air temperature (°C)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.9	1.2	1.2	1.3	1.1	1.2	1.3	1.5	1.4	1.2	1.3	1.9	3.3



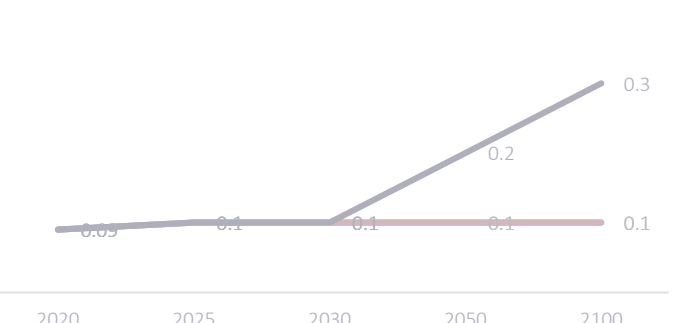
Labor productivity due to heat stress (pp)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
-1.2	-1.5	-1.5	-1.7	-1.3	-1.5	-1.7	-2.1	-1.9	-1.5	-1.7	-2.7	-5.7



Land fraction annually exposed to wildfires (pp)


2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.09	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3



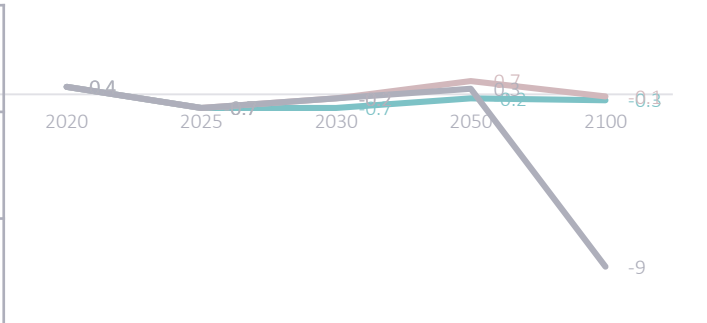
Climate Hazards

Scenario analysis


Precipitation (%)



2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.4	-0.7	-0.7	-0.2	-0.3	-0.7	-0.2	0.7	-0.1	-0.7	-0.2	0.3	-9

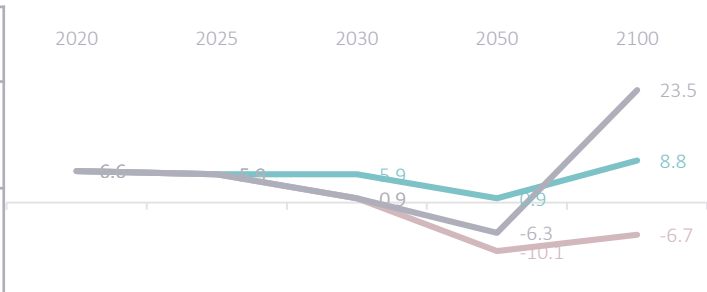


Expected damage from river floods (p.a. in%)




Data based on national levels due to unavailability in the selected region

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
6.6	5.9	5.9	0.9	8.8	5.9	0.9	-10.1	-6.7	5.9	0.9	-6.3	23.5



Expected damage from tropical cyclones (p.a. in%)



2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
No data	No data											

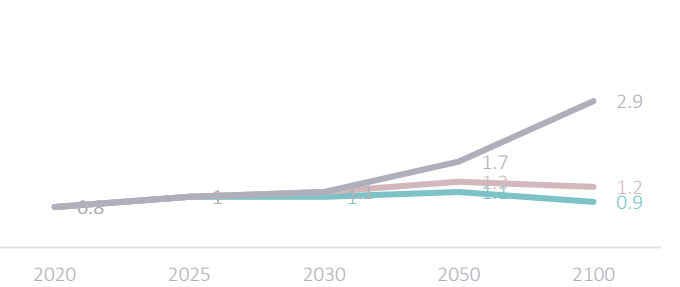
No data currently available in the Climate Impact Explorer tool for the selected indicator in this region

Climate Hazards

Scenario analysis

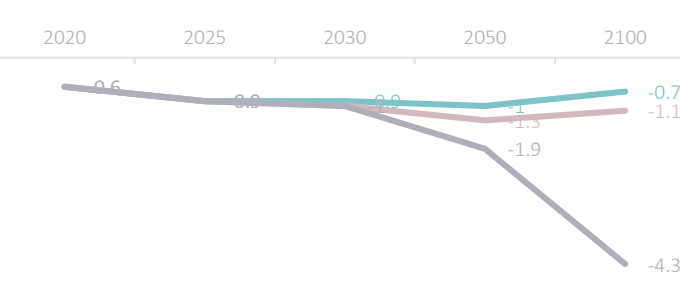
Mean air temperature (°C)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.8	1	1	1.1	0.9	1	1.1	1.3	1.2	1	1.1	1.7	2.9



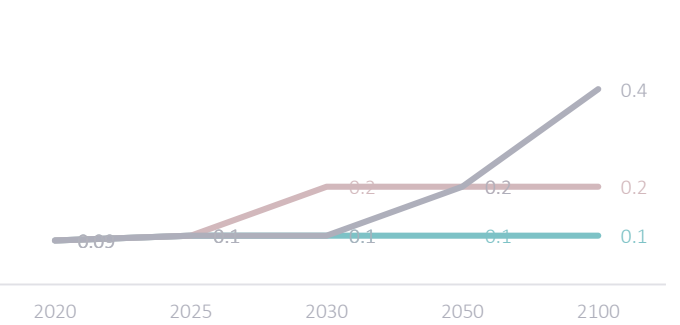
Labor productivity due to heat stress (pp)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
-0.6	-0.9	-0.9	-1	-0.7	-0.9	-1	-1.3	-1.1	-0.9	-1	-1.9	-4.3



Land fraction annually exposed to wildfires (pp)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.09	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.1	0.2	0.4

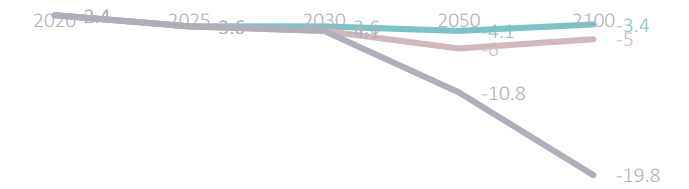


Climate Hazards

Scenario analysis

Precipitation (%)

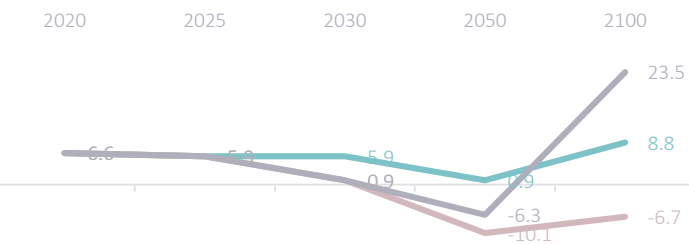
2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
-2.4	-3.6	-3.6	-4.1	-3.4	-3.6	-4.1	-6	-5	-3.6	-4.1	-10.8	-19.8



Expected damage from river floods (p.a. in%)

Data based on national levels due to unavailability in the selected region

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
6.6	5.9	5.9	0.9	8.8	5.9	0.9	-10.1	-6.7	5.9	0.9	-6.3	23.5



Expected damage from tropical cyclones (p.a. in%)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
No data	No data											

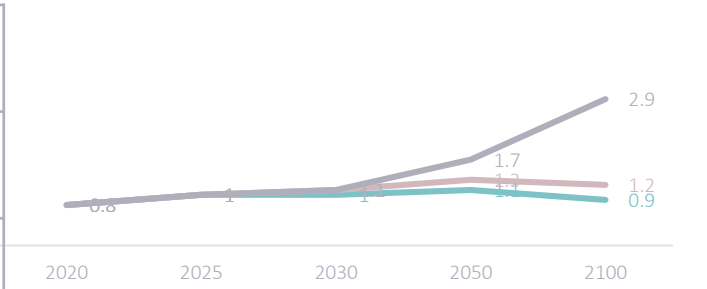
No data currently available in the Climate Impact Explorer tool for the selected indicator in this region

Climate Hazards

Scenario analysis

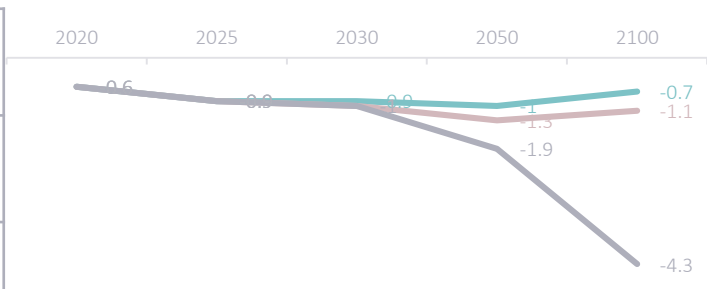
Mean air temperature (°C)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.8	1	1	1.1	0.9	1	1.1	1.3	1.2	1	1.1	1.7	2.9



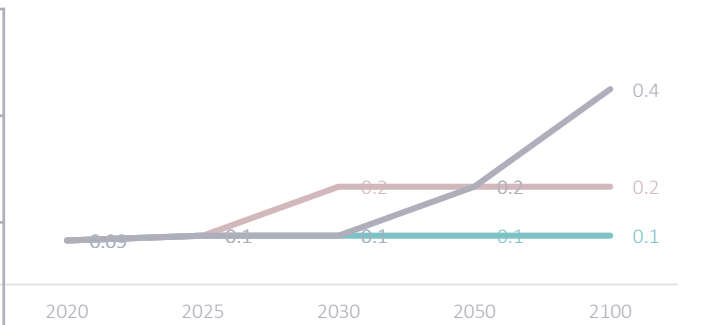
Labor productivity due to heat stress (pp)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
-0.6	-0.9	-0.9	-1	-0.7	-0.9	-1	-1.3	-1.1	-0.9	-1	-1.9	-4.3



Land fraction annually exposed to wildfires (pp)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.09	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.1	0.2	0.4

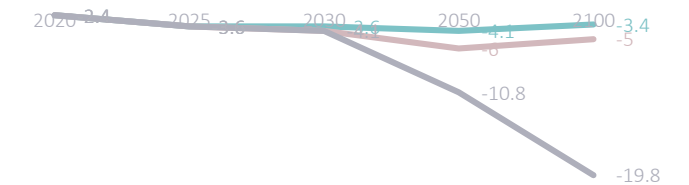


Climate Hazards

Scenario analysis

Precipitation (%)

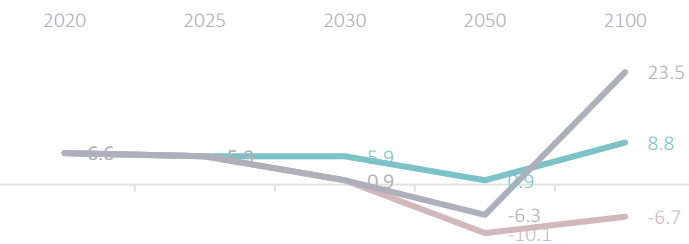
2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
-2.4	-3.6	-3.6	-4.1	-3.4	-3.6	-4.1	-6	-5	-3.6	-4.1	-10.8	-19.8



Expected damage from river floods (p.a. in%)

Data based on national levels due to unavailability in the selected region

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
6.6	5.9	5.9	0.9	8.8	5.9	0.9	-10.1	-6.7	5.9	0.9	-6.3	23.5



Expected damage from tropical cyclones (p.a. in%)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
No data	No data											

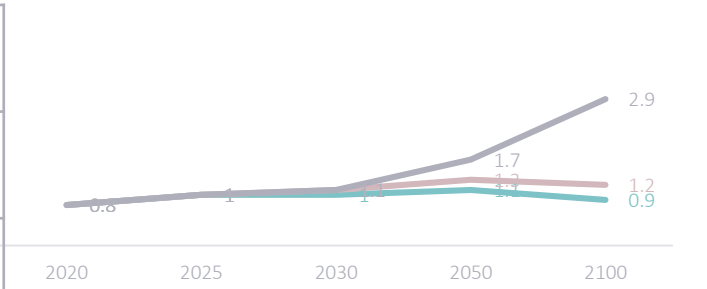
No data currently available in the Climate Impact Explorer tool for the selected indicator in this region

Climate Hazards

Scenario analysis

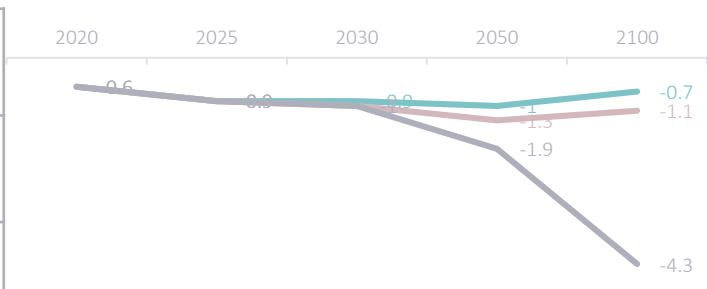
Mean air temperature (°C)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.8	1	1	1.1	0.9	1	1.1	1.3	1.2	1	1.1	1.7	2.9



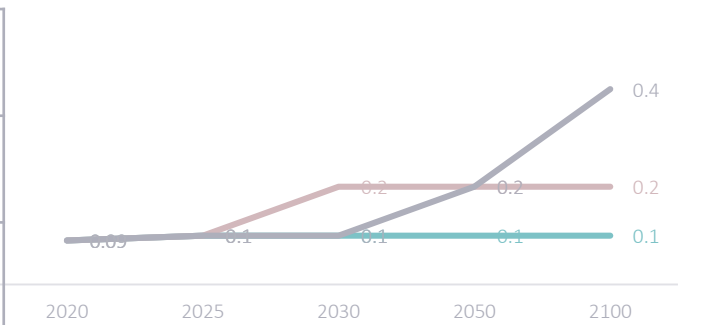
Labor productivity due to heat stress (pp)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
-0.6	-0.9	-0.9	-1	-0.7	-0.9	-1	-1.3	-1.1	-0.9	-1	-1.9	-4.3



Land fraction annually exposed to wildfires (pp)


2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.09	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.1	0.2	0.4



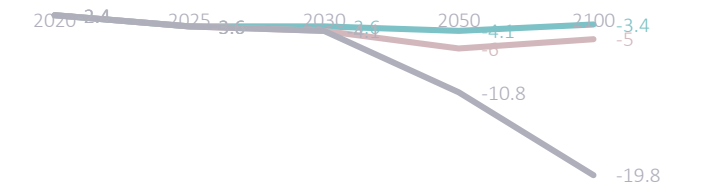
Climate Hazards

Scenario analysis


Precipitation (%)



2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
-2.4	-3.6	-3.6	-4.1	-3.4	-3.6	-4.1	-6	-5	-3.6	-4.1	-10.8	-19.8

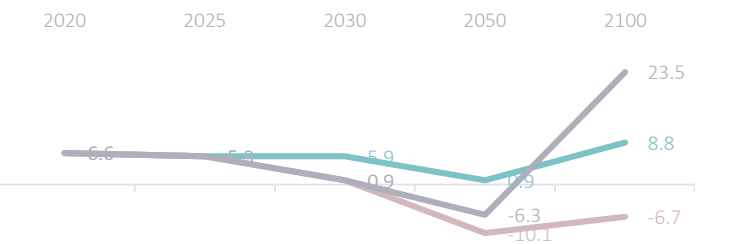


Expected damage from river floods (p.a. in%)




Data based on national levels due to unavailability in the selected region

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
6.6	5.9	5.9	0.9	8.8	5.9	0.9	-10.1	-6.7	5.9	0.9	-6.3	23.5



Expected damage from tropical cyclones (p.a. in%)



2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
No data	No data											

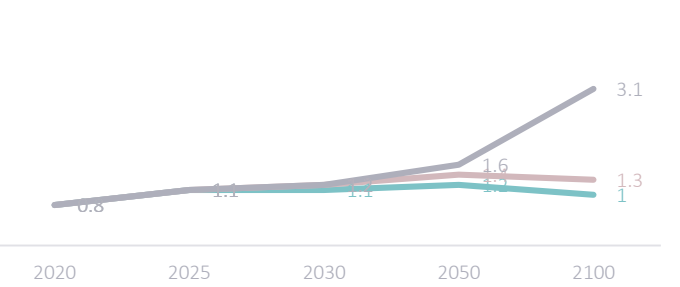
No data currently available in the Climate Impact Explorer tool for the selected indicator in this region

Climate Hazards

Scenario analysis

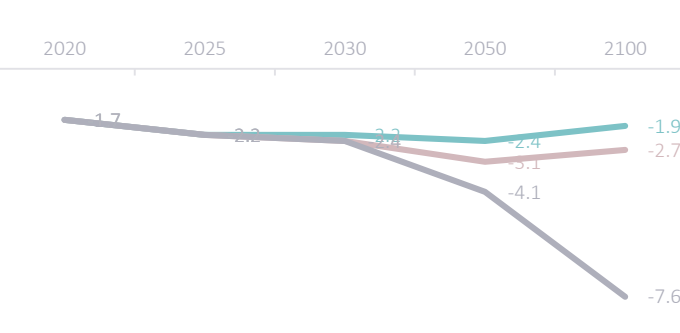
Mean air temperature (°C)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.8	1.1	1.1	1.2	1	1.1	1.2	1.4	1.3	1.1	1.2	1.6	3.1



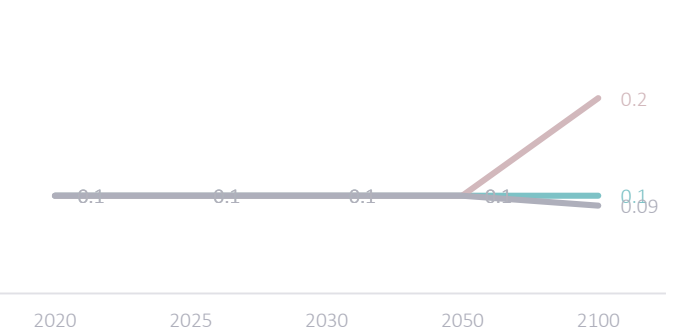
Labor productivity due to heat stress (pp)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
-1.7	-2.2	-2.2	-2.4	-1.9	-2.2	-2.4	-3.1	-2.7	-2.2	-2.4	-4.1	-7.6



Land fraction annually exposed to wildfires (pp)


2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.09



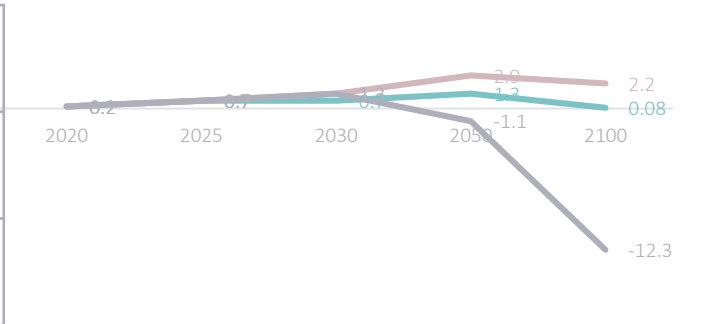
Climate Hazards

Scenario analysis


Precipitation (%)



2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.2	0.7	0.7	1.3	0.08	0.7	1.3	2.9	2.2	0.7	1.3	-1.1	-12.3

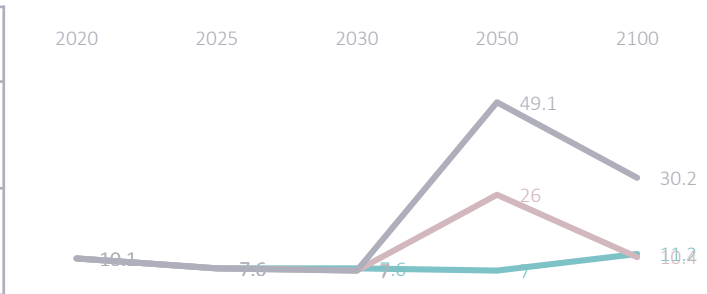


Expected damage from river floods (p.a. in%)




Data based on national levels due to unavailability in the selected region

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
10.1	7.6	7.6	7	11.2	7.6	7	26	10.4	7.6	7	49.1	30.2

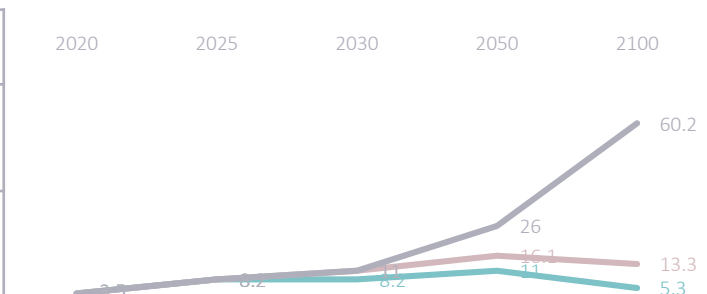


Expected damage from tropical cyclones (p.a. in%)



Data based on national levels due to unavailability in the selected region

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
3.5	8.2	8.2	11	5.3	8.2	11	16.1	13.3	8.2	11	26	60.2

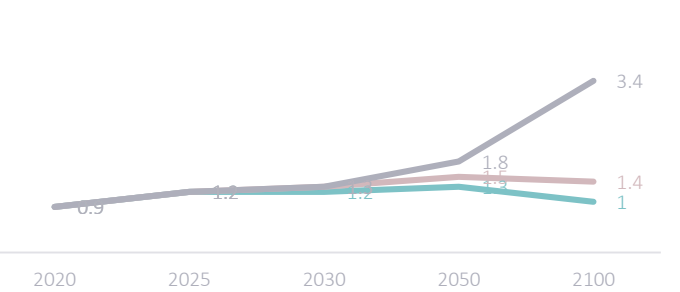


Climate Hazards

Scenario analysis

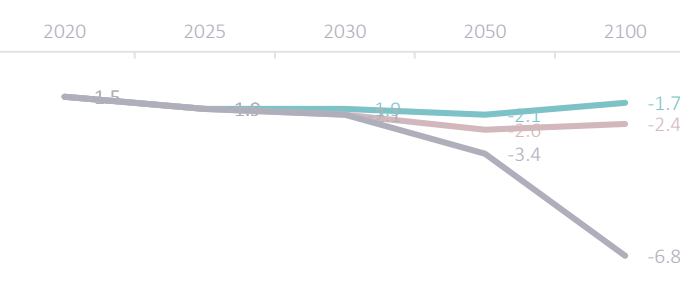
Mean air temperature (°C)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.9	1.2	1.2	1.3	1	1.2	1.3	1.5	1.4	1.2	1.3	1.8	3.4



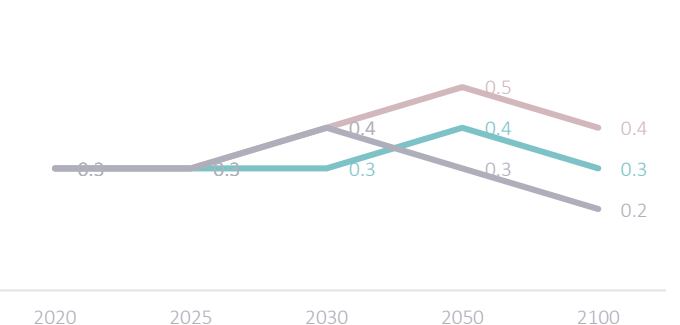
Labor productivity due to heat stress (pp)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
-1.5	-1.9	-1.9	-2.1	-1.7	-1.9	-2.1	-2.6	-2.4	-1.9	-2.1	-3.4	-6.8



Land fraction annually exposed to wildfires (pp)


2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.3	0.3	0.3	0.4	0.3	0.3	0.4	0.5	0.4	0.3	0.4	0.3	0.2



Climate Hazards

Scenario analysis


Precipitation (%)



2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
-1.5	-1.9	-1.9	-2.1	-1.4	-1.9	-2.1	-1.7	-2	-1.9	-2.1	-4.5	-18.6

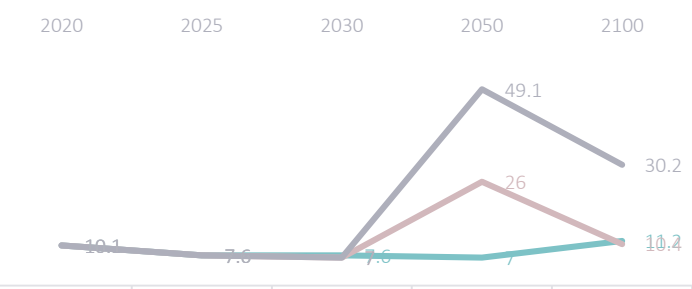


Expected damage from river floods (p.a. in%)




Data based on national levels due to unavailability in the selected region

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
10.1	7.6	7.6	7	11.2	7.6	7	26	10.4	7.6	7	49.1	30.2

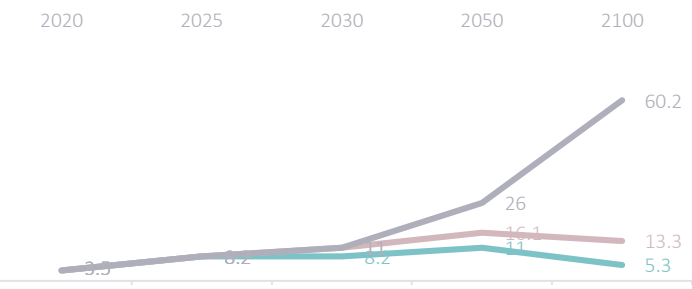


Expected damage from tropical cyclones (p.a. in%)



Data based on national levels due to unavailability in the selected region

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
3.5	8.2	8.2	11	5.3	8.2	11	16.1	13.3	8.2	11	26	60.2

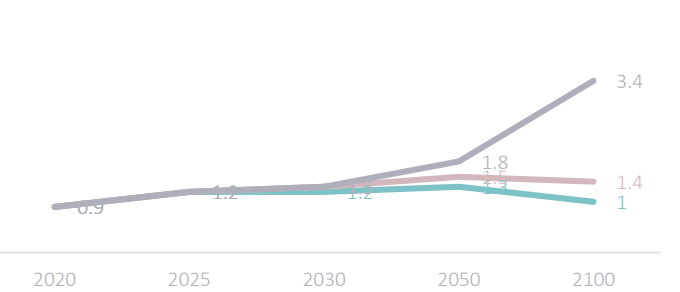


Climate Hazards

Scenario analysis

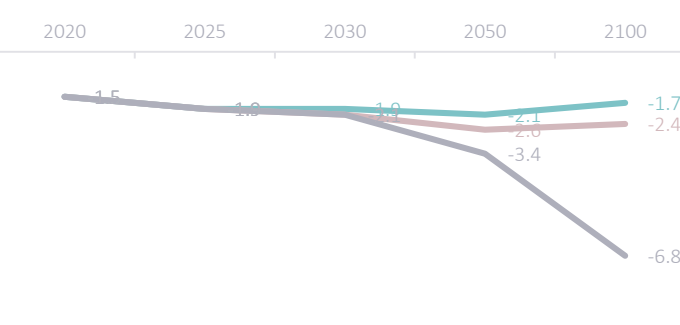
Mean air temperature (°C)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.9	1.2	1.2	1.3	1	1.2	1.3	1.5	1.4	1.2	1.3	1.8	3.4



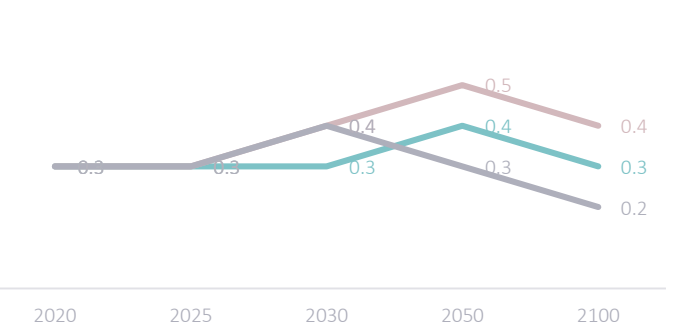
Labor productivity due to heat stress (pp)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
-1.5	-1.9	-1.9	-2.1	-1.7	-1.9	-2.1	-2.6	-2.4	-1.9	-2.1	-3.4	-6.8



Land fraction annually exposed to wildfires (pp)


2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.3	0.3	0.3	0.4	0.3	0.3	0.4	0.5	0.4	0.3	0.4	0.3	0.2



Climate Hazards

Scenario analysis


Precipitation (%)



2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
-1.5	-1.9	-1.9	-2.1	-1.4	-1.9	-2.1	-1.7	-2	-1.9	-2.1	-4.5	-18.6

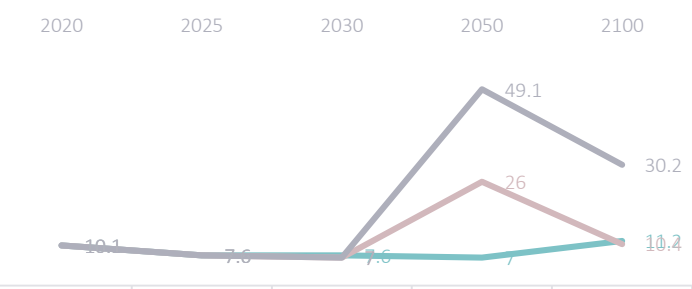


Expected damage from river floods (p.a. in%)




Data based on national levels due to unavailability in the selected region

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
10.1	7.6	7.6	7	11.2	7.6	7	26	10.4	7.6	7	49.1	30.2

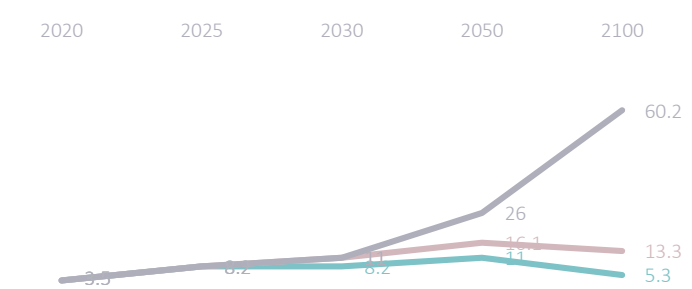


Expected damage from tropical cyclones (p.a. in%)



Data based on national levels due to unavailability in the selected region

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
3.5	8.2	8.2	11	5.3	8.2	11	16.1	13.3	8.2	11	26	60.2

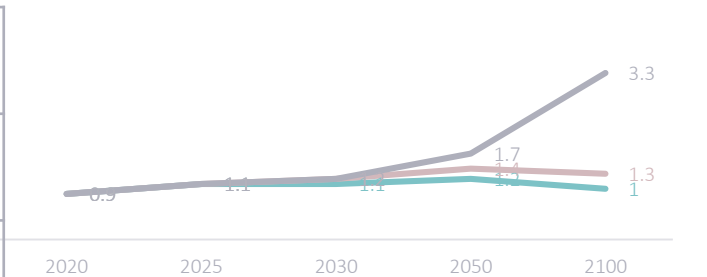


Climate Hazards

Scenario analysis

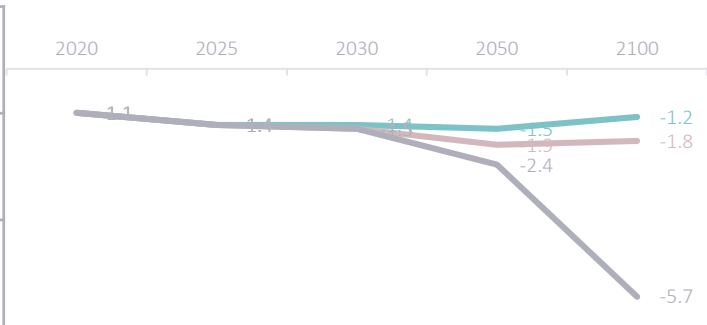
Mean air temperature (°C)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.9	1.1	1.1	1.2	1	1.1	1.2	1.4	1.3	1.1	1.2	1.7	3.3



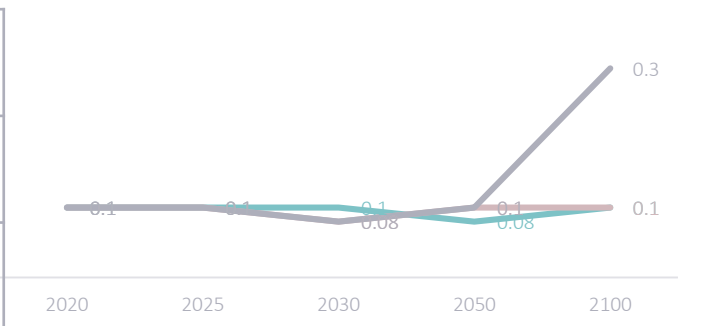
Labor productivity due to heat stress (pp)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
-1.1	-1.4	-1.4	-1.5	-1.2	-1.4	-1.5	-1.9	-1.8	-1.4	-1.5	-2.4	-5.7



Land fraction annually exposed to wildfires (pp)


2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.1	0.1	0.1	0.08	0.1	0.1	0.08	0.1	0.1	0.1	0.08	0.1	0.3



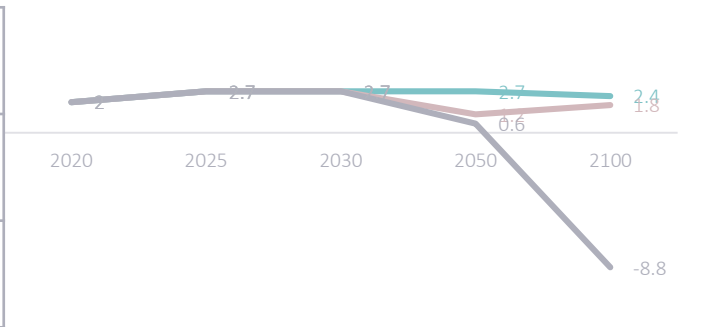
Climate Hazards

Scenario analysis

Precipitation (%)



2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
2	2.7	2.7	2.7	2.4	2.7	2.7	1.2	1.8	2.7	2.7	0.6	-8.8

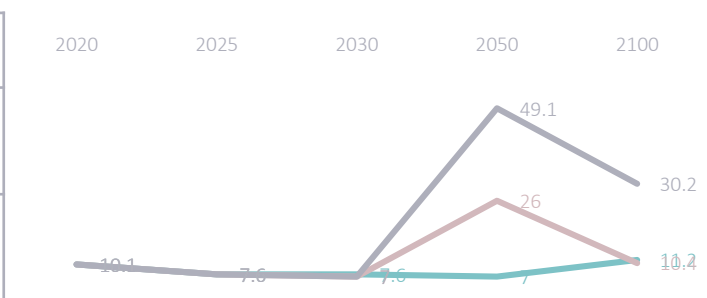


Expected damage from river floods (p.a. in%)




Data based on national levels due to unavailability in the selected region

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
10.1	7.6	7.6	7	11.2	7.6	7	26	10.4	7.6	7	49.1	30.2

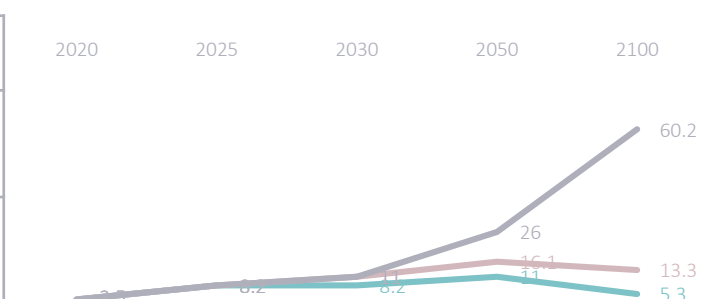


Expected damage from tropical cyclones (p.a. in%)



Data based on national levels due to unavailability in the selected region

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
3.5	8.2	8.2	11	5.3	8.2	11	16.1	13.3	8.2	11	26	60.2

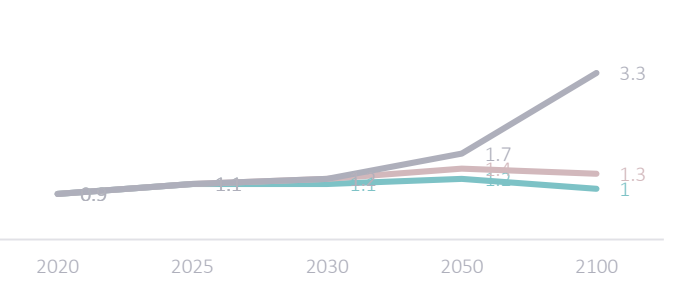


Climate Hazards

Scenario analysis

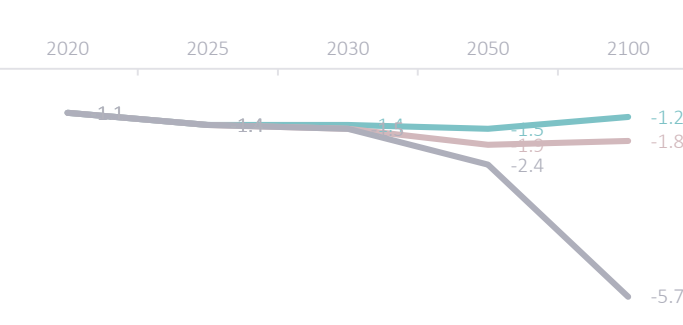
Mean air temperature (°C)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.9	1.1	1.1	1.2	1	1.1	1.2	1.4	1.3	1.1	1.2	1.7	3.3



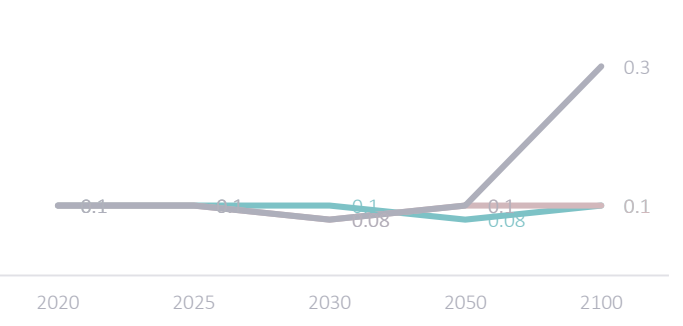
Labor productivity due to heat stress (pp)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
-1.1	-1.4	-1.4	-1.5	-1.2	-1.4	-1.5	-1.9	-1.8	-1.4	-1.5	-2.4	-5.7



Land fraction annually exposed to wildfires (pp)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.1	0.1	0.1	0.08	0.1	0.1	0.08	0.1	0.1	0.1	0.08	0.1	0.3

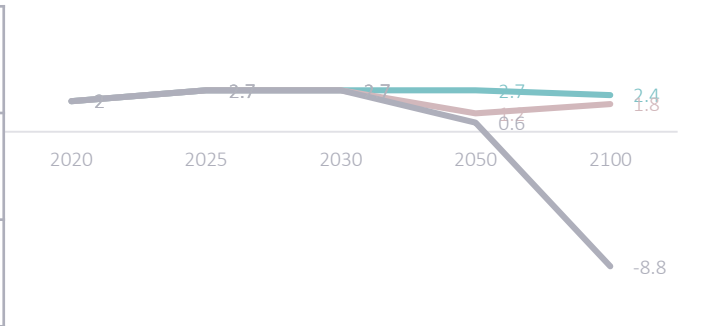


Climate Hazards

Scenario analysis

Precipitation (%)

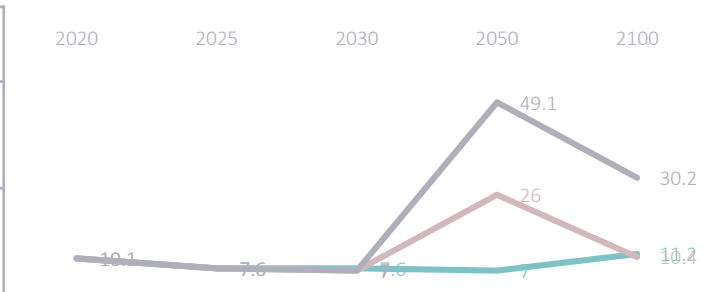
2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
2	2.7	2.7	2.7	2.4	2.7	2.7	1.2	1.8	2.7	2.7	0.6	-8.8



Expected damage from river floods (p.a. in%)

Data based on national levels due to unavailability in the selected region

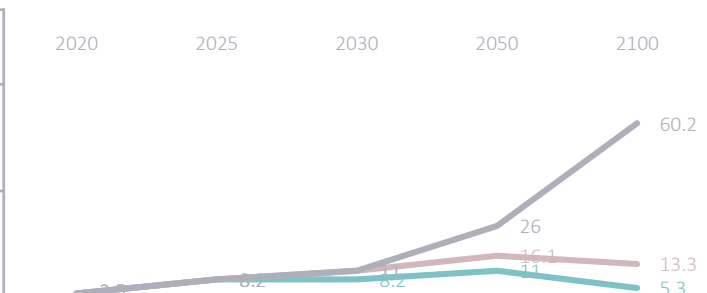
2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
10.1	7.6	7.6	7	11.2	7.6	7	26	10.4	7.6	7	49.1	30.2



Expected damage from tropical cyclones (p.a. in%)

Data based on national levels due to unavailability in the selected region

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
3.5	8.2	8.2	11	5.3	8.2	11	16.1	13.3	8.2	11	26	60.2



Physical climate risk assessment

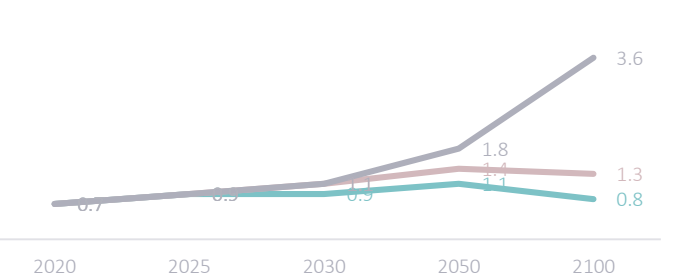
Mid-Market Credit I

Climate Hazards

Scenario analysis

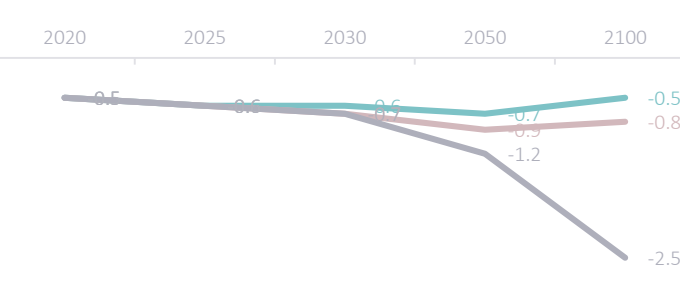
Mean air temperature (°C)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.7	0.9	0.9	1.1	0.8	0.9	1.1	1.4	1.3	0.9	1.1	1.8	3.6



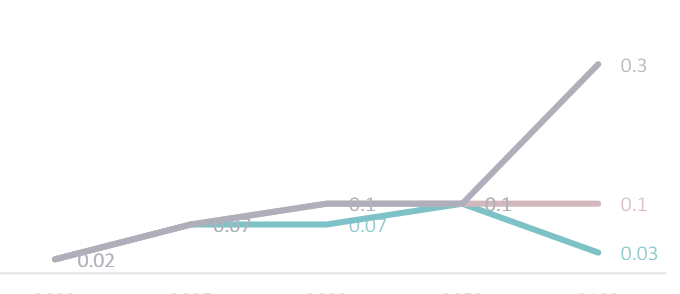
Labor productivity due to heat stress (pp)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
-0.5	-0.6	-0.6	-0.7	-0.5	-0.6	-0.7	-0.9	-0.8	-0.6	-0.7	-1.2	-2.5



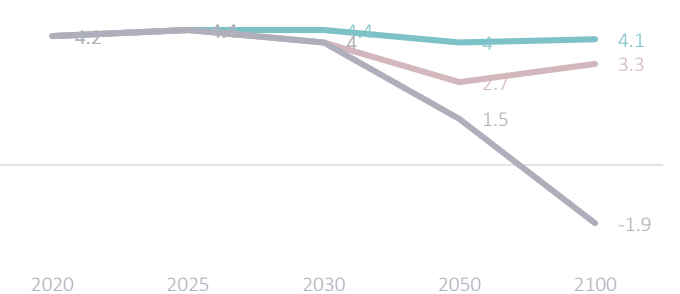
Land fraction annually exposed to wildfires (pp)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.02	0.07	0.07	0.1	0.03	0.07	0.1	0.1	0.1	0.07	0.1	0.1	0.3



Precipitation (%)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
4.2	4.4	4.4	4	4.1	4.4	4	2.7	3.3	4.4	4	1.5	-1.9

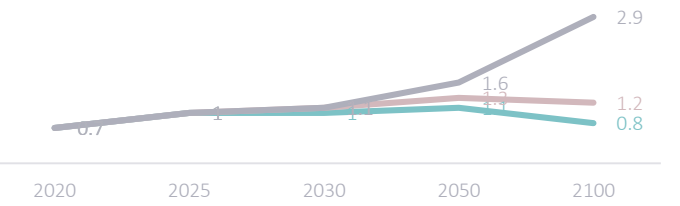


Climate Hazards

Scenario analysis

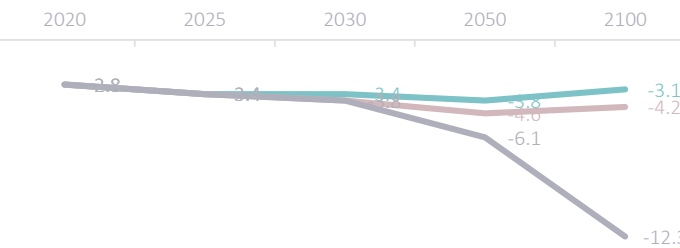
Mean air temperature (°C)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.7	1	1	1.1	0.8	1	1.1	1.3	1.2	1	1.1	1.6	2.9



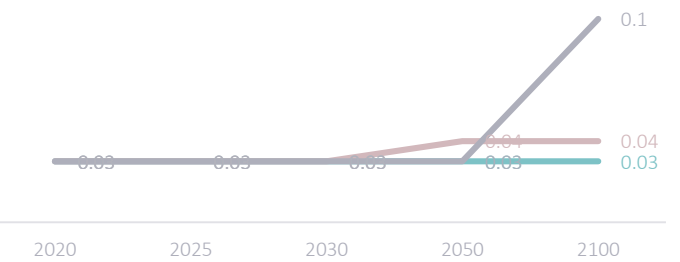
Labor productivity due to heat stress (pp)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
-2.8	-3.4	-3.4	-3.8	-3.1	-3.4	-3.8	-4.6	-4.2	-3.4	-3.8	-6.1	-12.3



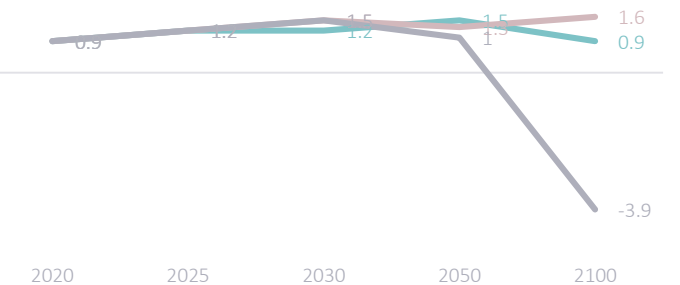
Land fraction annually exposed to wildfires (pp)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.04	0.04	0.03	0.03	0.03	0.1



Precipitation (%)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.9	1.2	1.2	1.5	0.9	1.2	1.5	1.3	1.6	1.2	1.5	1	-3.9

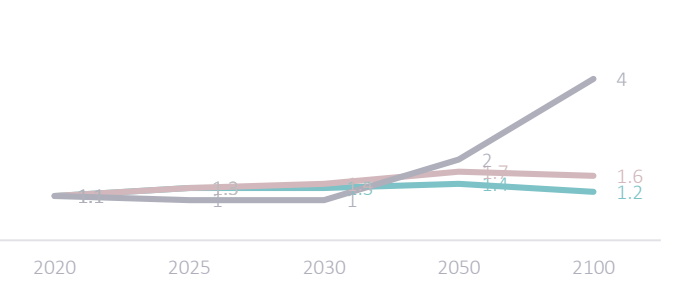


Climate Hazards

Scenario analysis

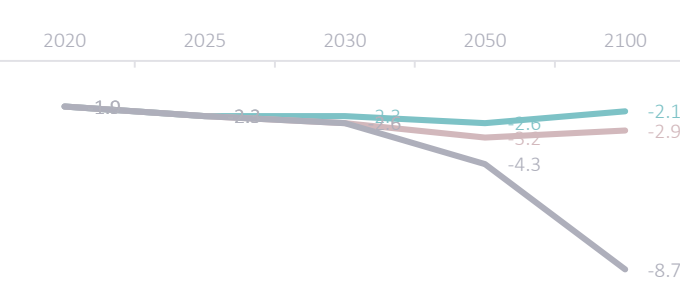
Mean air temperature (°C)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
1.1	1.3	1.3	1.4	1.2	1.3	1.4	1.7	1.6	1	1	2	4



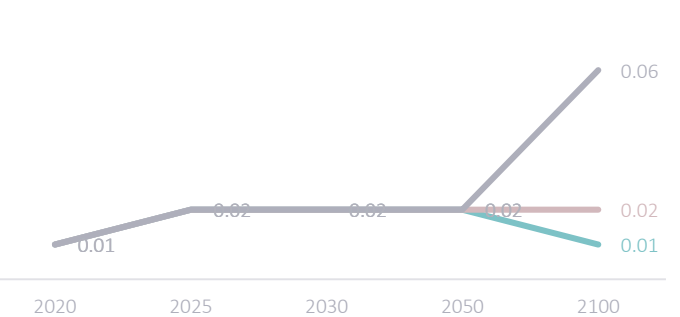
Labor productivity due to heat stress (pp)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
-1.9	-2.3	-2.3	-2.6	-2.1	-2.3	-2.6	-3.2	-2.9	-2.3	-2.6	-4.3	-8.7



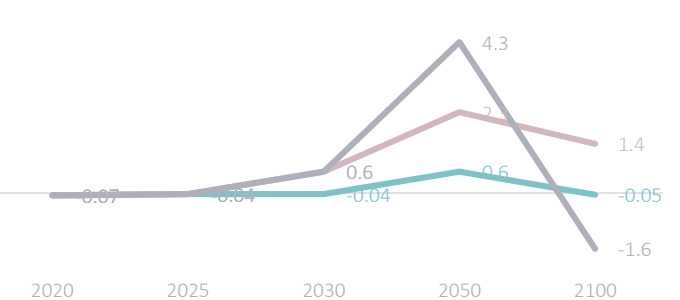
Land fraction annually exposed to wildfires (pp)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.01	0.02	0.02	0.02	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.06



Precipitation (%)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
-0.07	-0.04	-0.04	0.6	-0.05	-0.04	0.6	2.3	1.4	-0.04	0.6	4.3	-1.6

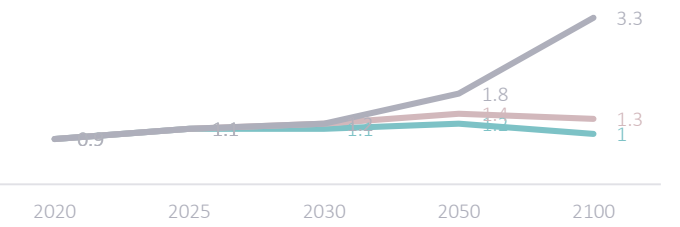


Climate Hazards

Scenario analysis

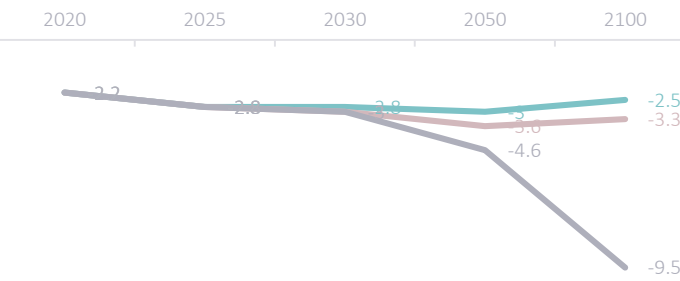
Mean air temperature (°C)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.9	1.1	1.1	1.2	1	1.1	1.2	1.4	1.3	1.1	1.2	1.8	3.3



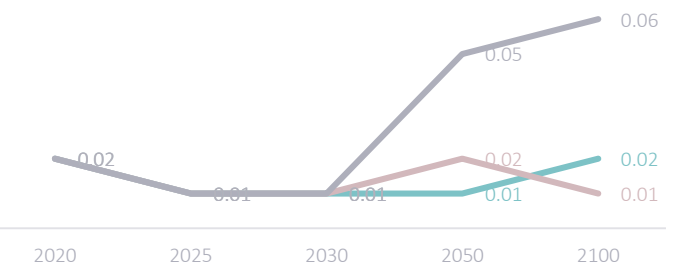
Labor productivity due to heat stress (pp)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
-2.2	-2.8	-2.8	-3	-2.5	-2.8	-3	-3.6	-3.3	-2.8	-3	-4.6	-9.5



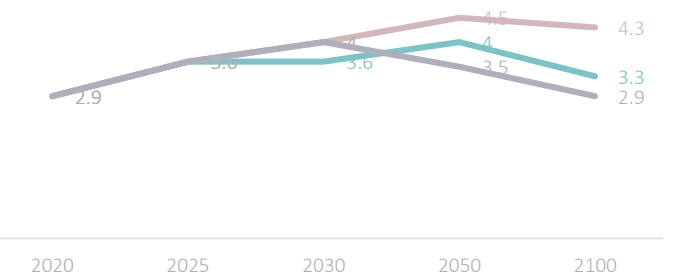
Land fraction annually exposed to wildfires (pp)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.02	0.01	0.01	0.01	0.02	0.01	0.01	0.02	0.01	0.01	0.01	0.05	0.06



Precipitation (%)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
2.9	3.6	3.6	4	3.3	3.6	4	4.5	4.3	3.6	4	3.5	2.9

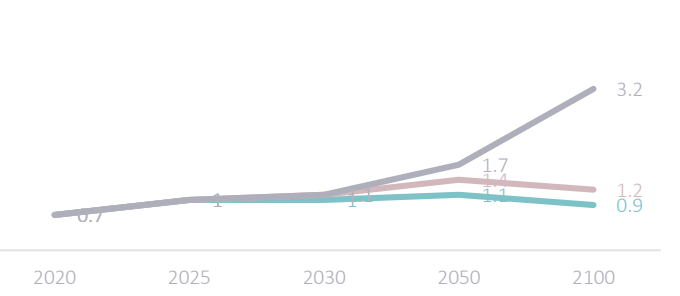


Climate Hazards

Scenario analysis

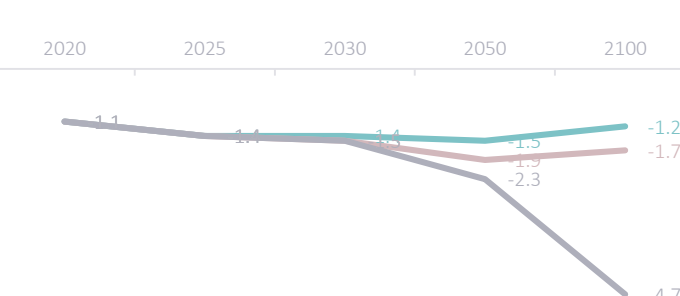
Mean air temperature (°C)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.7	1	1	1.1	0.9	1	1.1	1.4	1.2	1	1.1	1.7	3.2



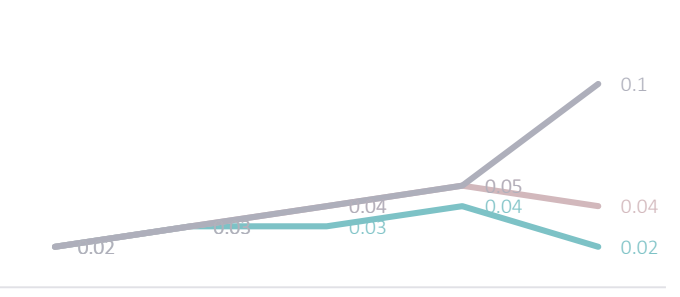
Labor productivity due to heat stress (pp)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
-1.1	-1.4	-1.4	-1.5	-1.2	-1.4	-1.5	-1.9	-1.7	-1.4	-1.5	-2.3	-4.7



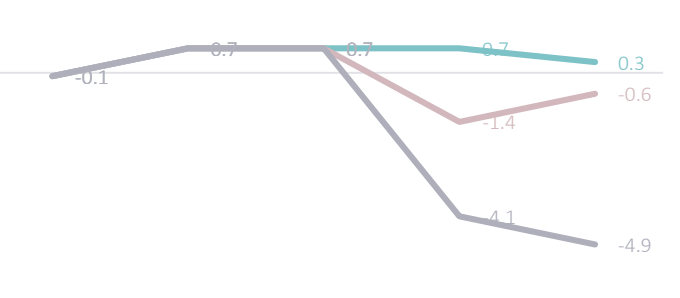
Land fraction annually exposed to wildfires (pp)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.02	0.03	0.03	0.04	0.02	0.03	0.04	0.05	0.04	0.03	0.04	0.05	0.1



Precipitation (%)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
-0.1	0.7	0.7	0.7	0.3	0.7	0.7	-1.4	-0.6	0.7	0.7	-4.1	-4.9

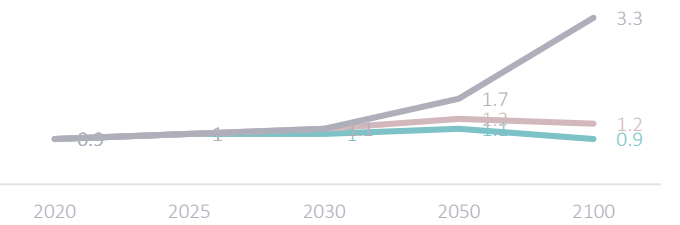


Climate Hazards

Scenario analysis

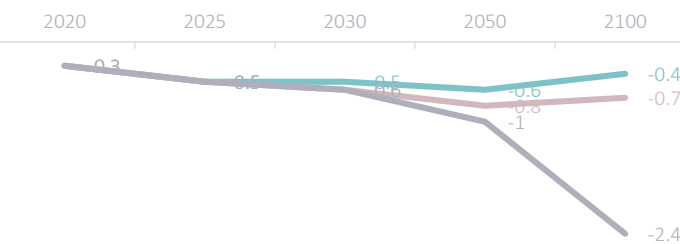
Mean air temperature (°C)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.9	1	1	1.1	0.9	1	1.1	1.3	1.2	1	1.1	1.7	3.3



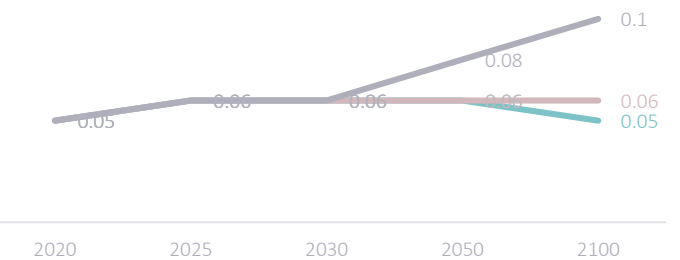
Labor productivity due to heat stress (pp)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
-0.3	-0.5	-0.5	-0.6	-0.4	-0.5	-0.6	-0.8	-0.7	-0.5	-0.6	-1	-2.4



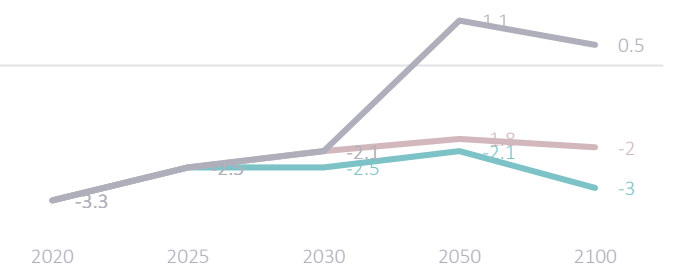
Land fraction annually exposed to wildfires (pp)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.05	0.06	0.06	0.06	0.05	0.06	0.06	0.06	0.06	0.06	0.06	0.08	0.1



Precipitation (%)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
-3.3	-2.5	-2.5	-2.1	-3	-2.5	-2.1	-1.8	-2	-2.5	-2.1	1.1	0.5

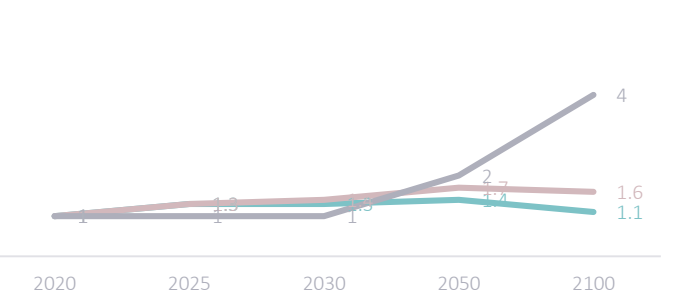


Climate Hazards

Scenario analysis

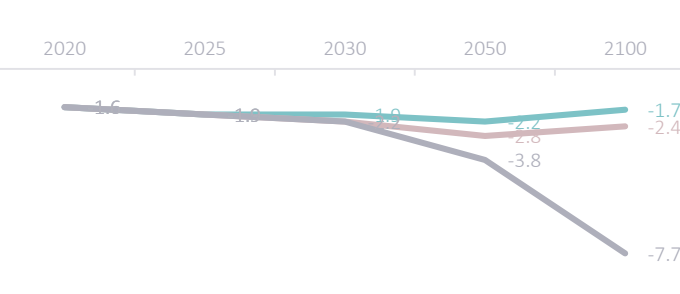
Mean air temperature (°C)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
1	1.3	1.3	1.4	1.1	1.3	1.4	1.7	1.6	1	1	2	4



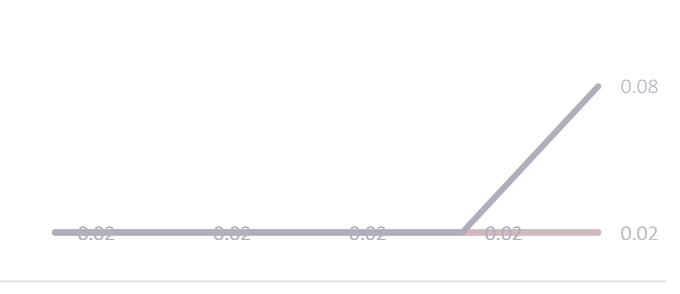
Labor productivity due to heat stress (pp)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
-1.6	-1.9	-1.9	-2.2	-1.7	-1.9	-2.2	-2.8	-2.4	-1.9	-2.2	-3.8	-7.7



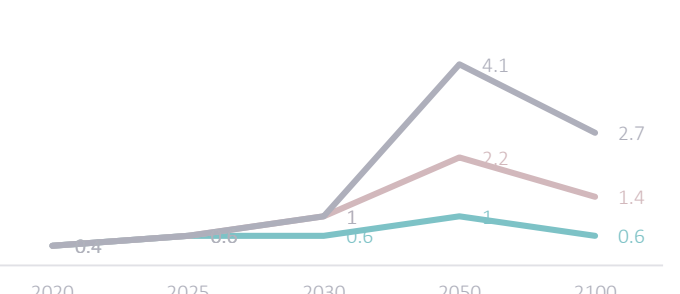
Land fraction annually exposed to wildfires (pp)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.08



Precipitation (%)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.4	0.6	0.6	1	0.6	0.6	1	2.2	1.4	0.6	1	4.1	2.7

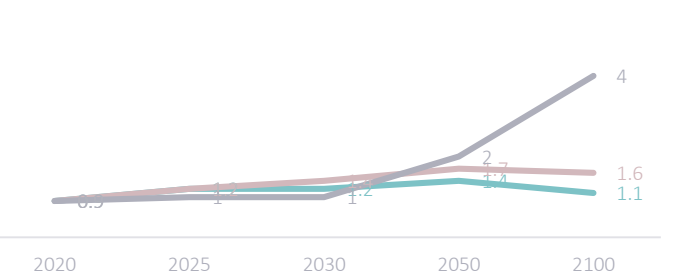


Climate Hazards

Scenario analysis

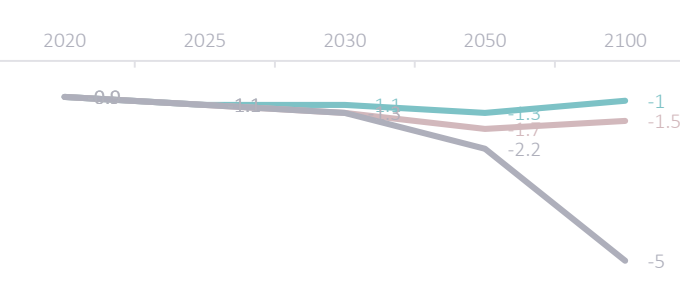
Mean air temperature (°C)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.9	1.2	1.2	1.4	1.1	1.2	1.4	1.7	1.6	1	1	2	4



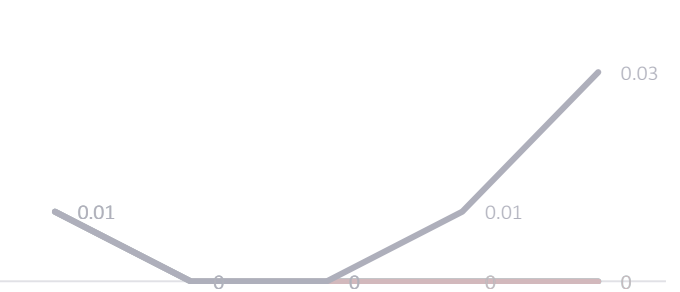
Labor productivity due to heat stress (pp)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
-0.9	-1.1	-1.1	-1.3	-1	-1.1	-1.3	-1.7	-1.5	-1.1	-1.3	-2.2	-5



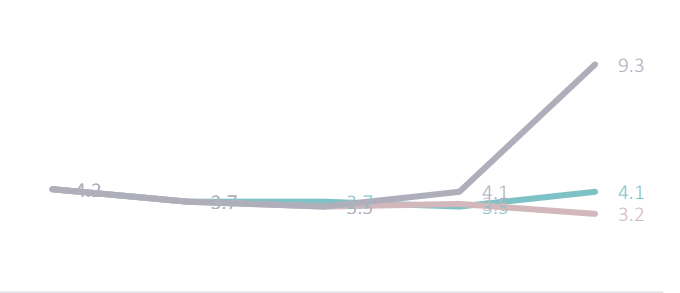
Land fraction annually exposed to wildfires (pp)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.01	0	0	0	0	0	0	0	0	0	0	0.01	0.03



Precipitation (%)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
4.2	3.7	3.7	3.5	4.1	3.7	3.5	3.6	3.2	3.7	3.5	4.1	9.3

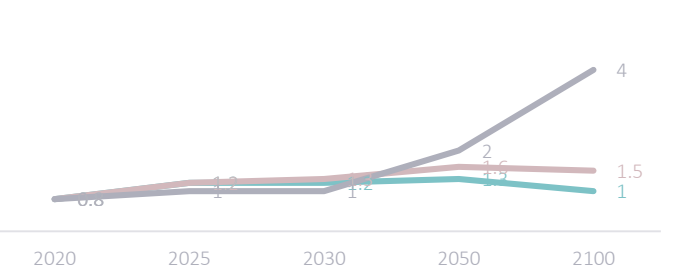


Climate Hazards

Scenario analysis

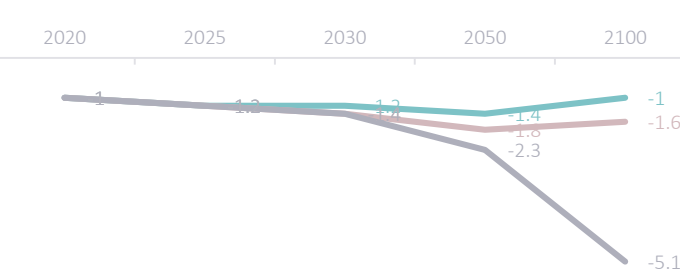
Mean air temperature (°C)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.8	1.2	1.2	1.3	1	1.2	1.3	1.6	1.5	1	1	2	4



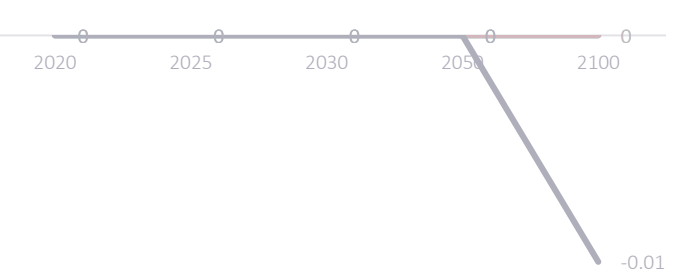
Labor productivity due to heat stress (pp)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
-1	-1.2	-1.2	-1.4	-1	-1.2	-1.4	-1.8	-1.6	-1.2	-1.4	-2.3	-5.1



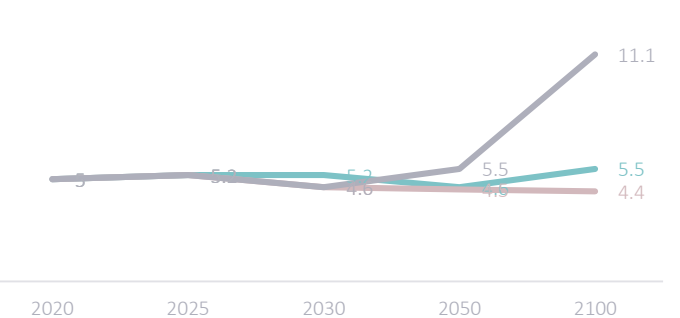
Land fraction annually exposed to wildfires (pp)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0	0	0	0	0	0	0	0	0	0	0	0	-0.01



Precipitation (%)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
5	5.2	5.2	4.6	5.5	5.2	4.6	4.5	4.4	5.2	4.6	5.5	11.1

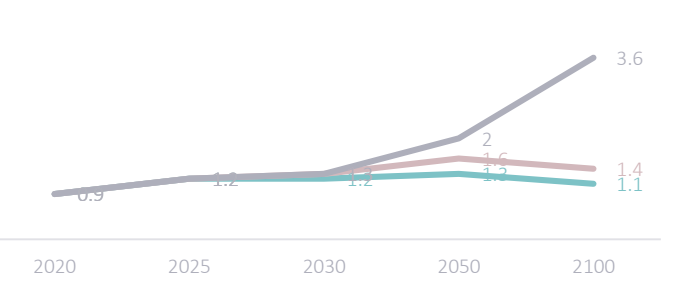


Climate Hazards

Scenario analysis

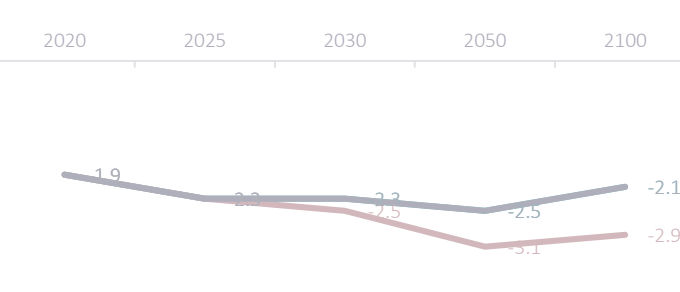
Mean air temperature (°C)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.9	1.2	1.2	1.3	1.1	1.2	1.3	1.6	1.4	1.2	1.3	2	3.6



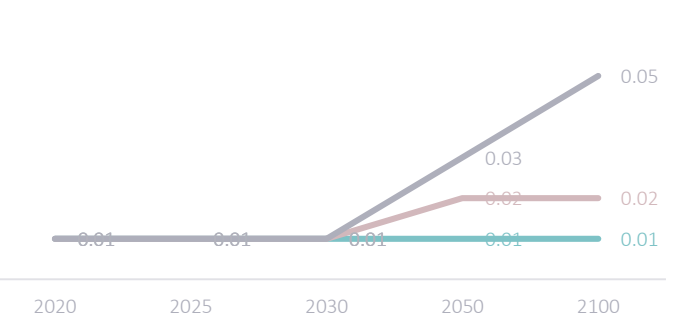
Labor productivity due to heat stress (pp)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
-1.9	-2.3	-2.3	-2.5	-2.1	-2.3	-2.5	-3.1	-2.9	-2.3	-2.3	-2.5	-2.1



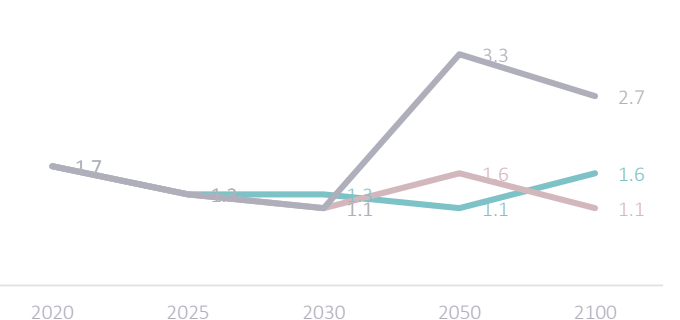
Land fraction annually exposed to wildfires (pp)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.01	0.01	0.03	0.05



Precipitation (%)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
1.7	1.3	1.3	1.1	1.6	1.3	1.1	1.6	1.1	1.3	1.1	3.3	2.7



Physical climate risk assessment

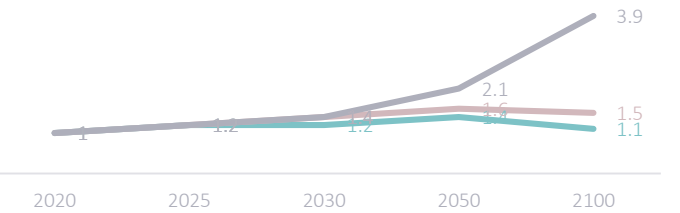
Mid-Market Direct V

Climate Hazards

Scenario analysis

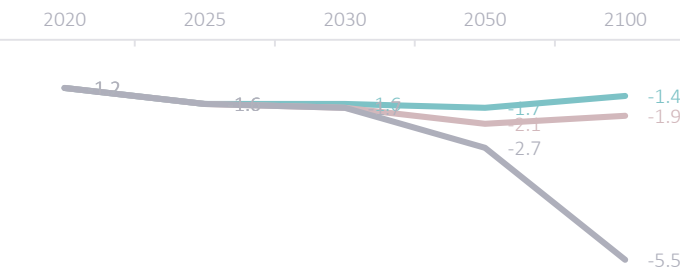
Mean air temperature (°C)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
1	1.2	1.2	1.4	1.1	1.2	1.4	1.6	1.5	1.2	1.4	2.1	3.9



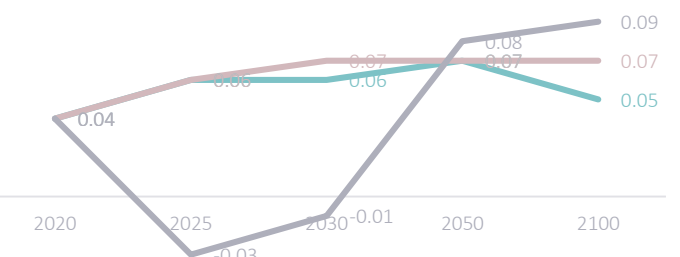
Labor productivity due to heat stress (pp)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
-1.2	-1.6	-1.6	-1.7	-1.4	-1.6	-1.7	-2.1	-1.9	-1.6	-1.7	-2.7	-5.5



Land fraction annually exposed to wildfires (pp)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.04	0.06	0.06	0.07	0.05	0.06	0.07	0.07	0.07	-0.03	-0.01	0.08	0.09

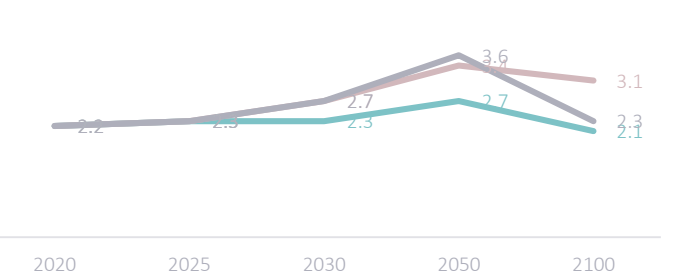


Climate Hazards

Scenario analysis

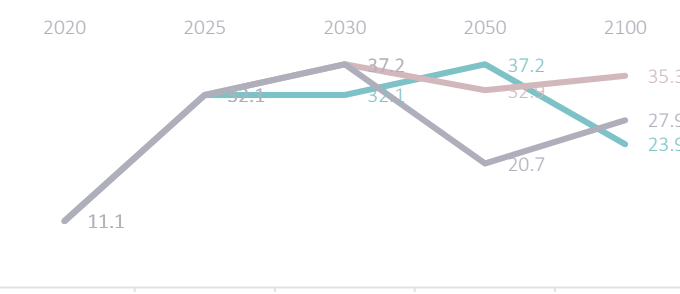
Precipitation (%)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
2.2	2.3	2.3	2.7	2.1	2.3	2.7	3.4	3.1	2.3	2.7	3.6	2.3



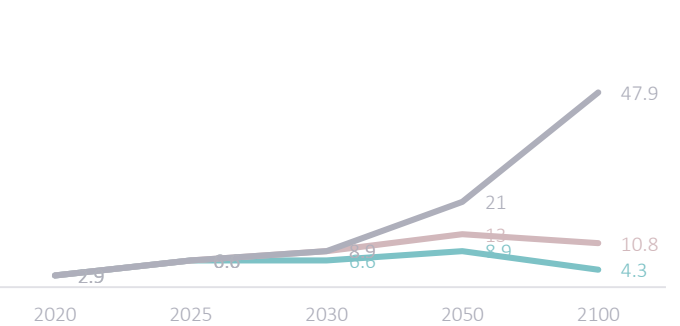
Expected damage from river floods (p.a. in%)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
11.1	32.1	32.1	37.2	23.9	32.1	37.2	32.9	35.3	32.1	37.2	20.7	27.9



Expected damage from tropical cyclones (p.a. in%)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
2.9	6.6	6.6	8.9	4.3	6.6	8.9	13	10.8	6.6	8.9	21	47.9

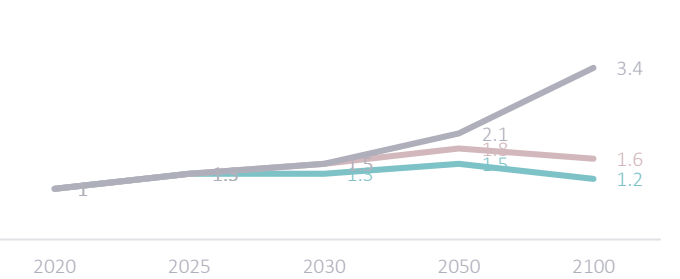


Climate Hazards

Scenario analysis

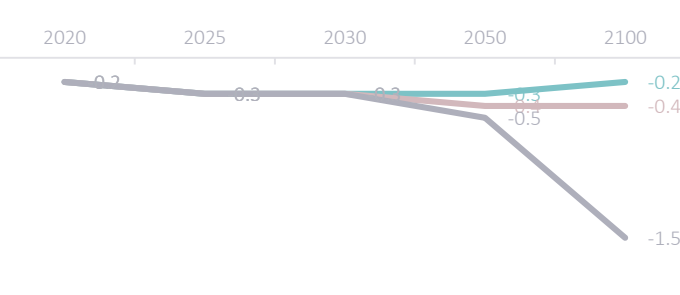
Mean air temperature (°C)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
1	1.3	1.3	1.5	1.2	1.3	1.5	1.8	1.6	1.3	1.5	2.1	3.4



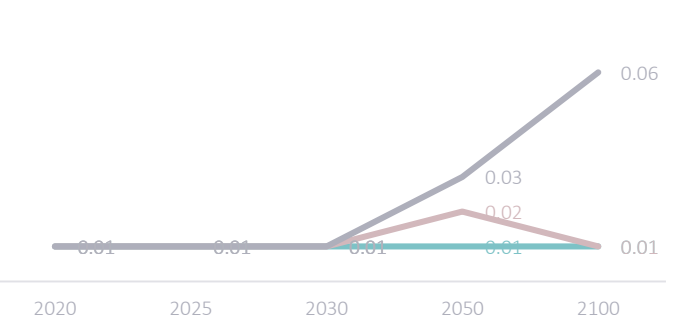
Labor productivity due to heat stress (pp)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
-0.2	-0.3	-0.3	-0.3	-0.2	-0.3	-0.3	-0.4	-0.4	-0.3	-0.3	-0.5	-1.5



Land fraction annually exposed to wildfires (pp)


2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.01	0.01	0.01	0.03	0.06



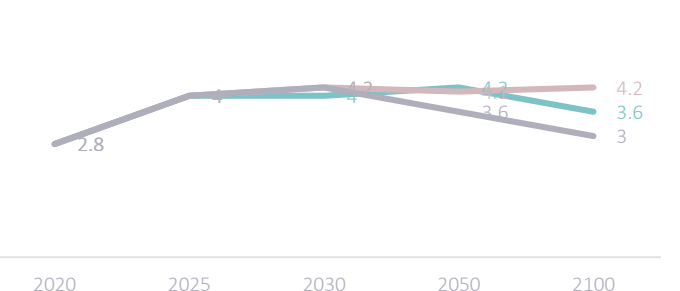
Climate Hazards

Scenario analysis


Precipitation (%)



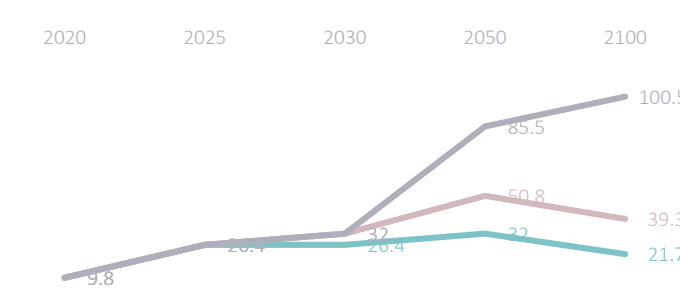
2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
2.8	4	4	4.2	3.6	4	4.2	4.1	4.2	4	4.2	3.6	3




Expected damage from river floods (p.a. in%)



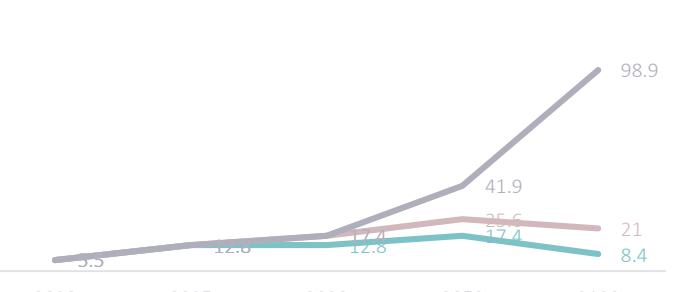
2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
9.8	26.4	26.4	32	21.7	26.4	32	50.8	39.3	26.4	32	85.5	100.5



Expected damage from tropical cyclones (p.a. in%)



2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
5.5	12.8	12.8	17.4	8.4	12.8	17.4	25.6	21	12.8	17.4	41.9	98.9

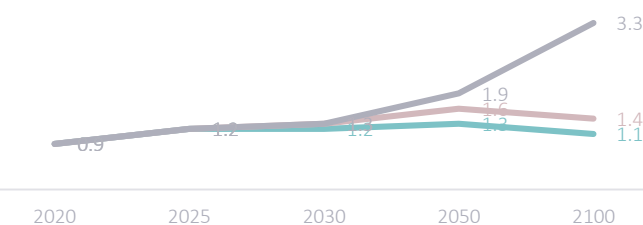


Climate Hazards

Scenario analysis

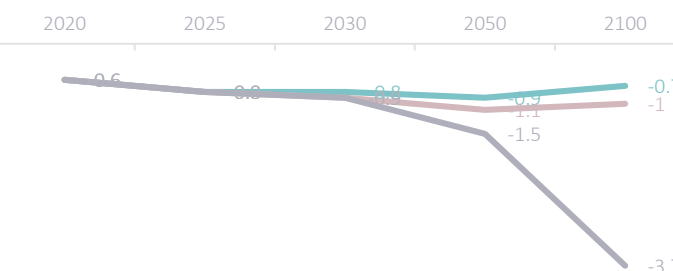
Mean air temperature (°C)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.9	1.2	1.2	1.3	1.1	1.2	1.3	1.6	1.4	1.2	1.3	1.9	3.3



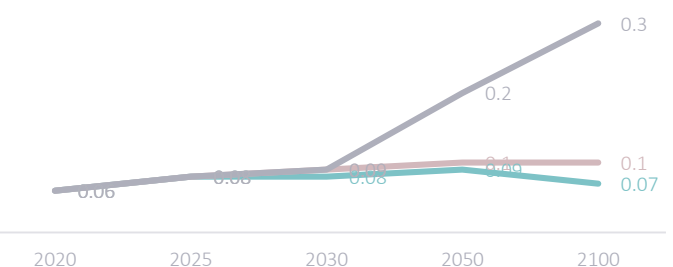
Labor productivity due to heat stress (pp)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
-0.6	-0.8	-0.8	-0.9	-0.7	-0.8	-0.9	-1.1	-1	-0.8	-0.9	-1.5	-3.7



Land fraction annually exposed to wildfires (pp)


2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.06	0.08	0.08	0.09	0.07	0.08	0.09	0.1	0.1	0.08	0.09	0.2	0.3



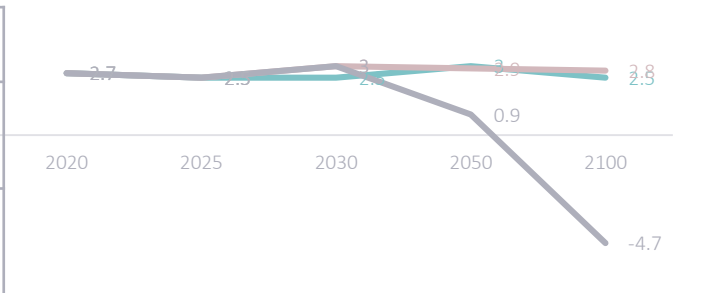
Climate Hazards

Scenario analysis


Precipitation (%)



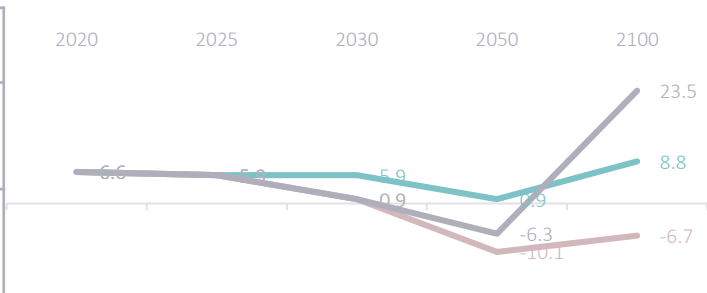
2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
2.7	2.5	2.5	3	2.5	2.5	3	2.9	2.8	2.5	3	0.9	-4.7




Expected damage from river floods (p.a. in%)



2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
6.6	5.9	5.9	0.9	8.8	5.9	0.9	-10.1	-6.7	5.9	0.9	-6.3	23.5



Expected damage from tropical cyclones (p.a. in%)



2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
no data	no data											

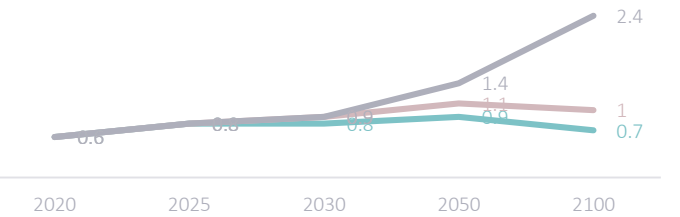
No data currently available in the Climate Impact Explorer tool for the selected indicator in this region

Climate Hazards

Scenario analysis

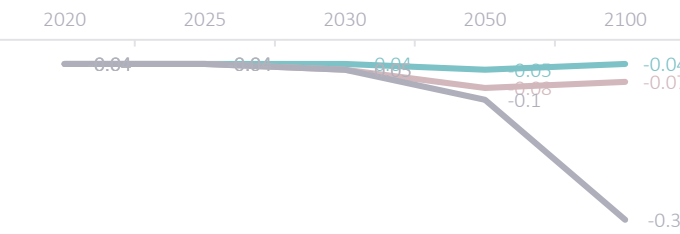
Mean air temperature (°C)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.6	0.8	0.8	0.9	0.7	0.8	0.9	1.1	1	0.8	0.9	1.4	2.4



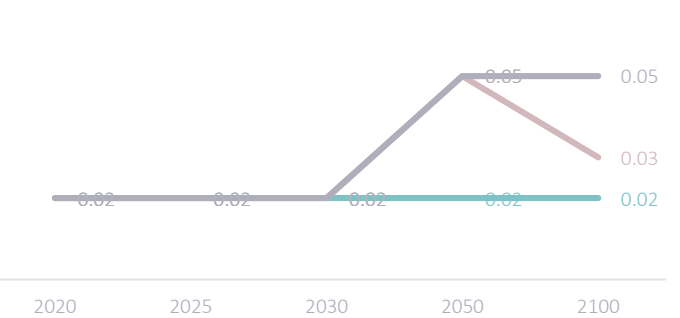
Labor productivity due to heat stress (pp)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
-0.04	-0.04	-0.04	-0.05	-0.04	-0.04	-0.05	-0.08	-0.07	-0.04	-0.05	-0.1	-0.3



Land fraction annually exposed to wildfires (pp)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.05	0.03	0.02	0.02	0.05	0.05

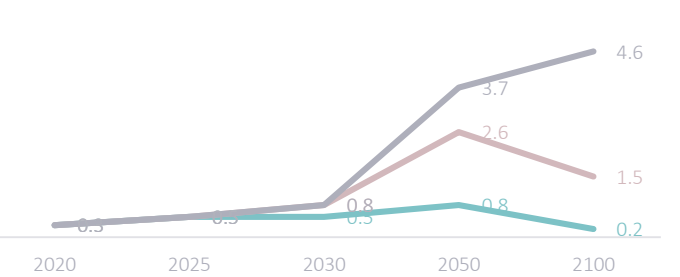


Climate Hazards

Scenario analysis

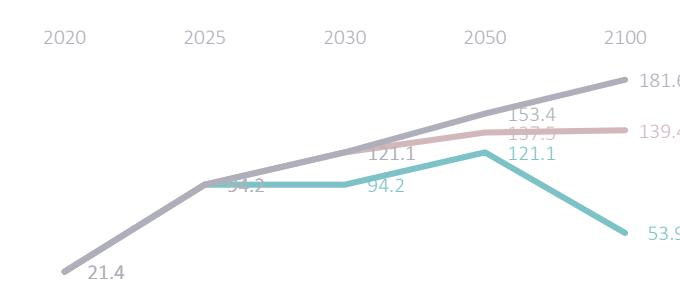
Precipitation (%)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.3	0.5	0.5	0.8	0.2	0.5	0.8	2.6	1.5	0.5	0.8	3.7	4.6



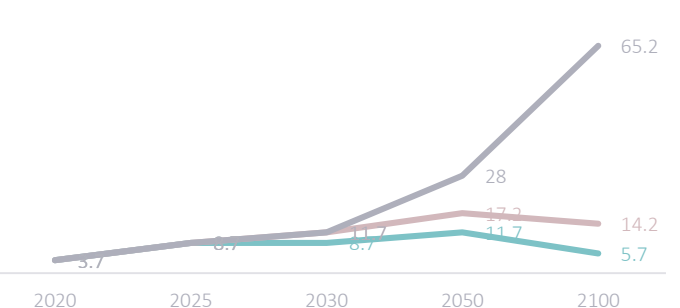
Expected damage from river floods (p.a. in%)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
21.4	94.2	94.2	121.1	53.9	94.2	121.1	137.5	139.4	94.2	121.1	153.4	181.6



Expected damage from tropical cyclones (p.a. in%)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
3.7	8.7	8.7	11.7	5.7	8.7	11.7	17.2	14.2	8.7	11.7	28	65.2

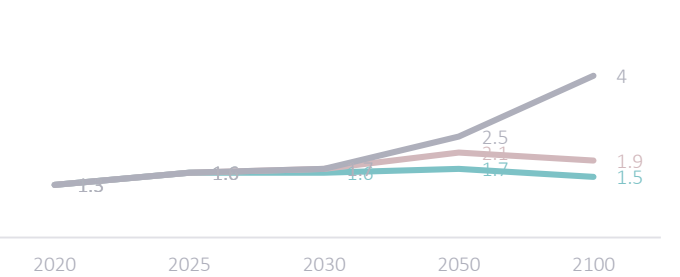


Climate Hazards

Scenario analysis

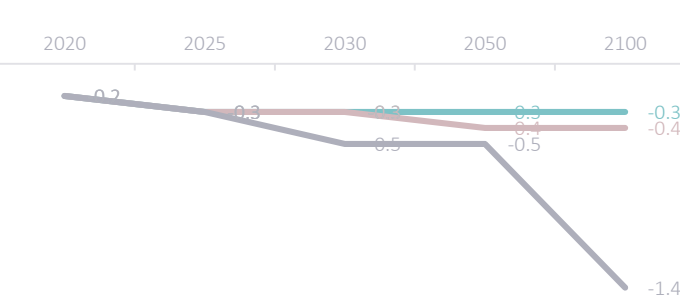
Mean air temperature (°C)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
1.3	1.6	1.6	1.7	1.5	1.6	1.7	2.1	1.9	1.6	1.7	2.5	4



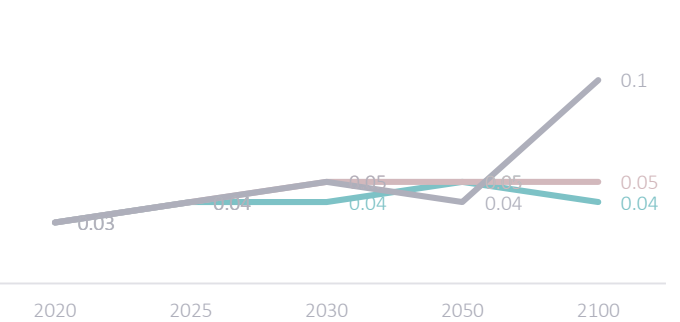
Labor productivity due to heat stress (pp)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
-0.2	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.4	-0.4	-0.3	-0.5	-0.5	-1.4



Land fraction annually exposed to wildfires (pp)


2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.03	0.04	0.04	0.05	0.04	0.04	0.05	0.05	0.05	0.04	0.05	0.04	0.1



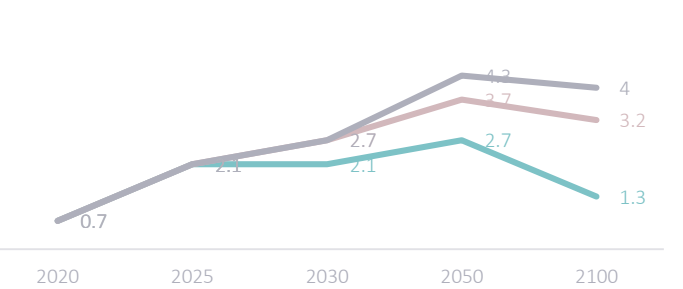
Climate Hazards

Scenario analysis


Precipitation (%)



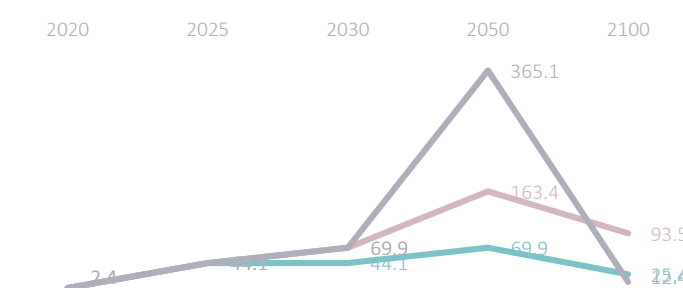
2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.7	2.1	2.1	2.7	1.3	2.1	2.7	3.7	3.2	2.1	2.7	4.3	4




Expected damage from river floods (p.a. in%)



2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
2.4	44.1	44.1	69.9	25.4	44.1	69.9	163.4	93.5	44.1	69.9	365.1	12.4



Expected damage from tropical cyclones (p.a. in%)



2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
no data	no data											

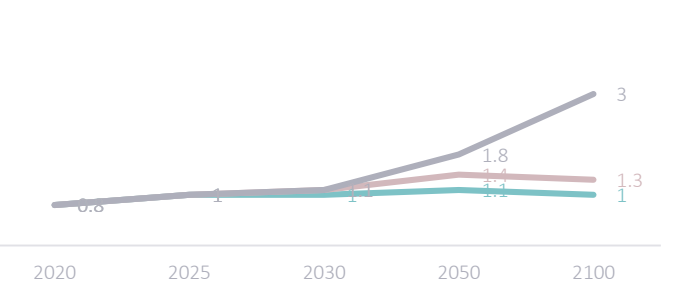
No data currently available in the Climate Impact Explorer tool for the selected indicator in this region

Climate Hazards

Scenario analysis

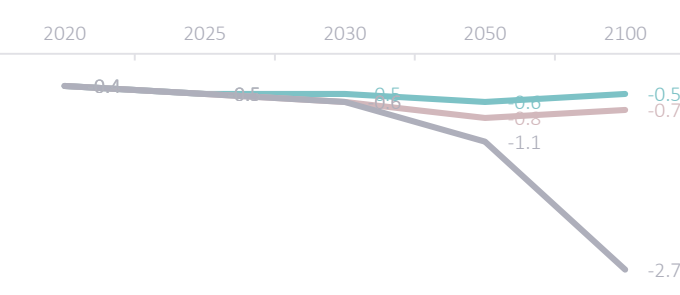
Mean air temperature (°C)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.8	1	1	1.1	1	1	1.1	1.4	1.3	1	1.1	1.8	3



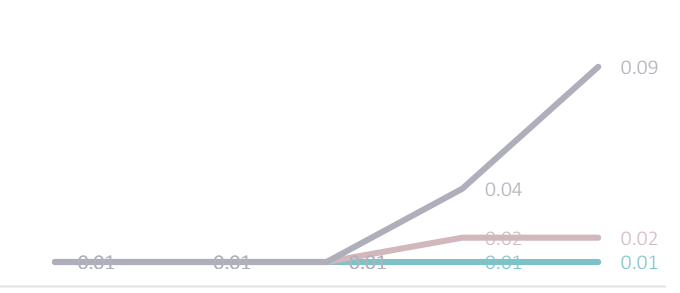
Labor productivity due to heat stress (pp)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
-0.4	-0.5	-0.5	-0.6	-0.5	-0.5	-0.6	-0.8	-0.7	-0.5	-0.6	-1.1	-2.7



Land fraction annually exposed to wildfires (pp)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.01	0.01	0.04	0.09

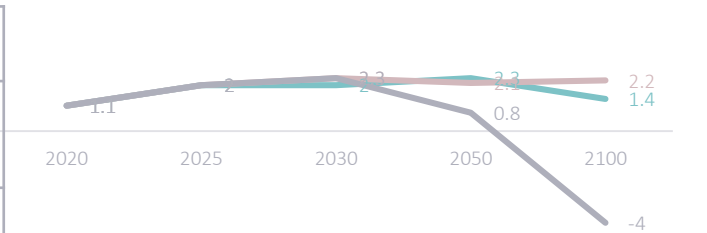


Climate Hazards

Scenario analysis

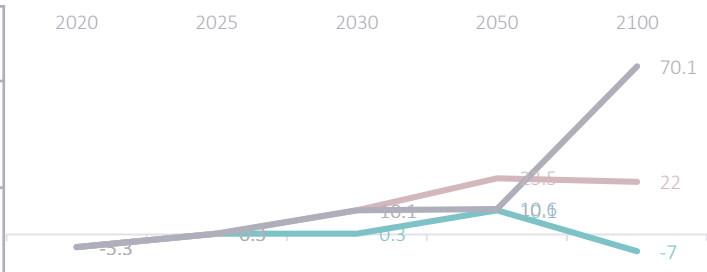
Precipitation (%)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
1.1	2	2	2.3	1.4	2	2.3	2.1	2.2	2	2.3	0.8	-4



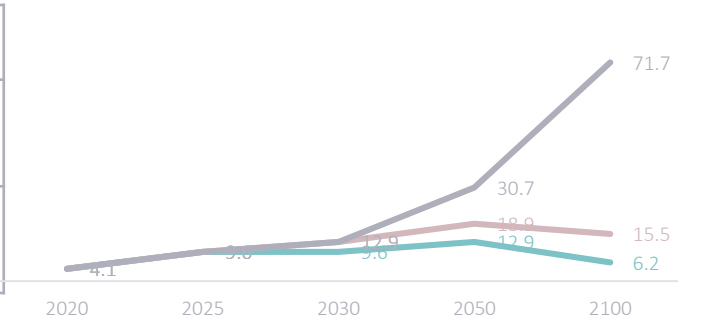
Expected damage from river floods (p.a. in%)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
-5.3	0.3	0.3	10.1	-7	0.3	10.1	23.5	22	0.3	10.1	10.6	70.1



Expected damage from tropical cyclones (p.a. in%)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
4.1	9.6	9.6	12.9	6.2	9.6	12.9	18.9	15.5	9.6	12.9	30.7	71.7

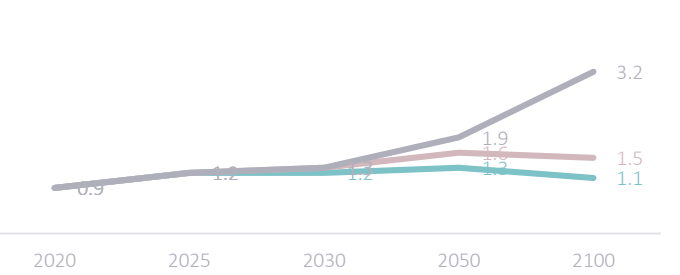


Climate Hazards

Scenario analysis

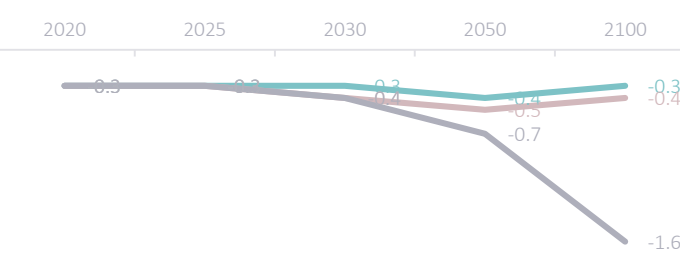
Mean air temperature (°C)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.9	1.2	1.2	1.3	1.1	1.2	1.3	1.6	1.5	1.2	1.3	1.9	3.2



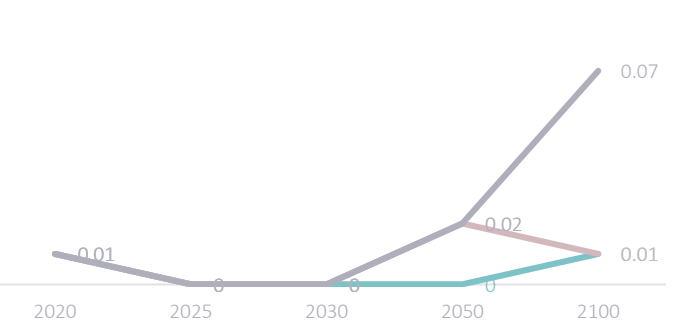
Labor productivity due to heat stress (pp)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
-0.3	-0.3	-0.3	-0.4	-0.3	-0.3	-0.4	-0.5	-0.4	-0.3	-0.4	-0.7	-1.6



Land fraction annually exposed to wildfires (pp)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.01	0	0	0	0.01	0	0	0.02	0.01	0	0	0.02	0.07

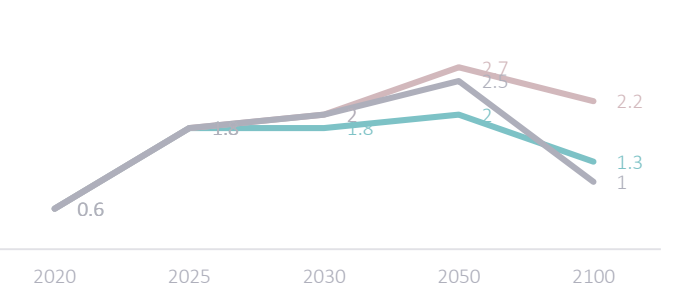


Climate Hazards

Scenario analysis

Precipitation (%)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.6	1.8	1.8	2	1.3	1.8	2	2.7	2.2	1.8	2	2.5	1



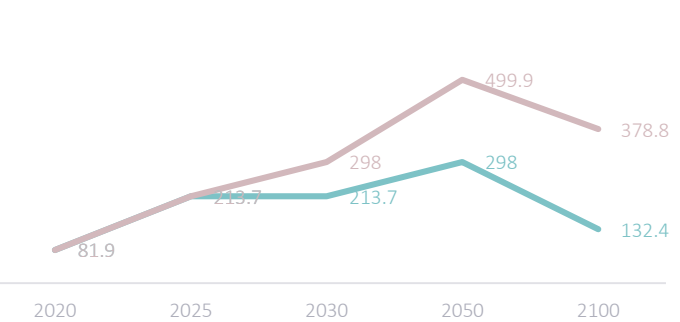
Expected damage from river floods (p.a. in%)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
no data displayed	no data displayed											

No data currently displayed in Climate Impact Explorer, as projected changes attain very high values which hint at challenges with the underlying data for this indicator and selected region

Expected damage from tropical cyclones (p.a. in%)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
81.9	213.7	213.7	298	132.4	213.7	298	499.9	378.8	no data displayed, as projected changes attain very high values, which hint at challenges with the underlying data			

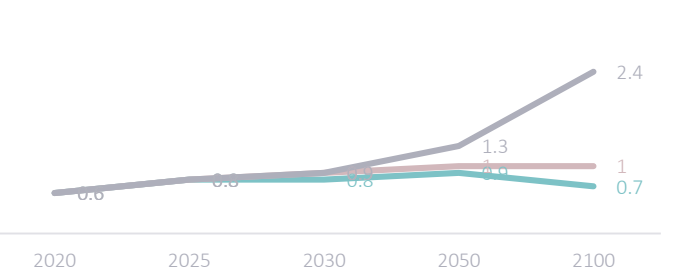


Climate Hazards

Scenario analysis

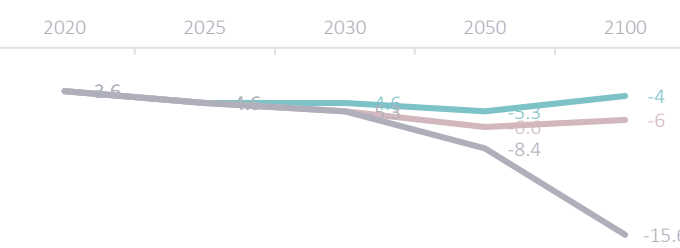
Mean air temperature (°C)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.6	0.8	0.8	0.9	0.7	0.8	0.9	1	1	0.8	0.9	1.3	2.4



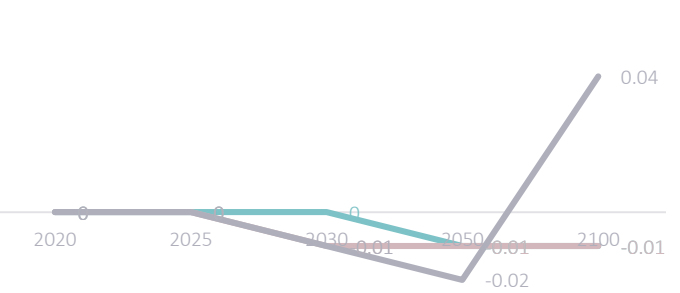
Labor productivity due to heat stress (pp)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
-3.6	-4.6	-4.6	-5.3	-4	-4.6	-5.3	-6.6	-6	-4.6	-5.3	-8.4	-15.6



Land fraction annually exposed to wildfires (pp)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0	0	0	-0.01	-0.01	0	-0.01	-0.01	-0.01	0	-0.01	-0.02	0.04

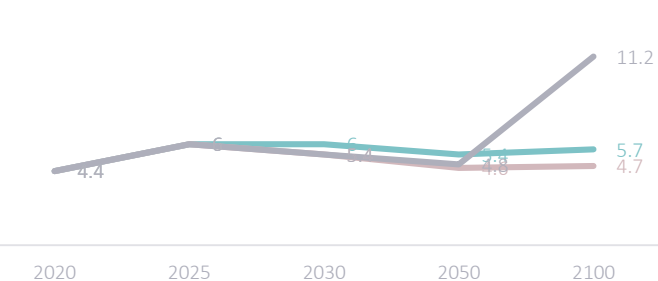


Climate Hazards

Scenario analysis

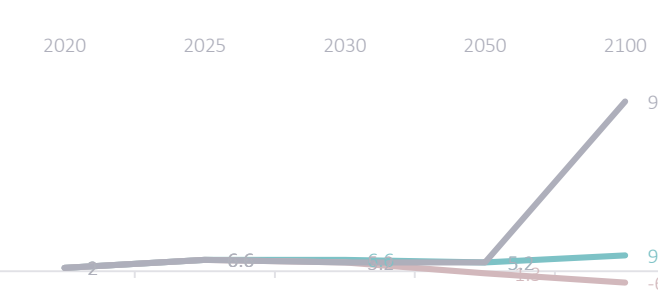
Precipitation (%)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
4.4	6	6	5.4	5.7	6	5.4	4.6	4.7	6	5.4	4.8	11.2



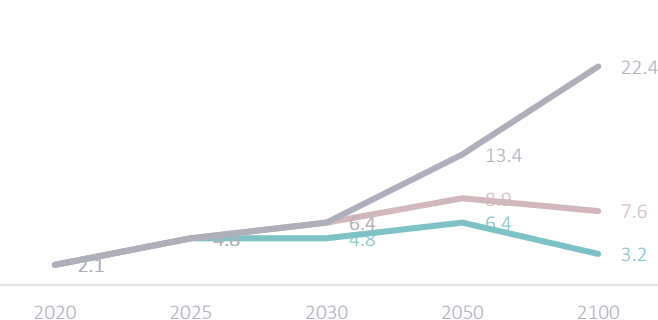
Expected damage from river floods (p.a. in%)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
2	6.6	6.6	5.2	9.3	6.6	5.2	-1.3	-6.6	6.6	5.2	5.2	99.1



Expected damage from tropical cyclones (p.a. in%)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
2.1	4.8	4.8	6.4	3.2	4.8	6.4	8.9	7.6	4.8	6.4	13.4	22.4



Physical climate risk assessment

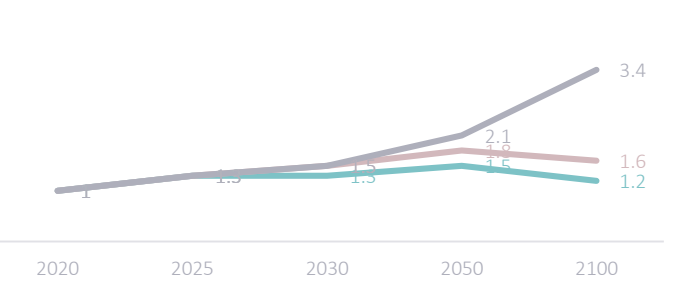
Future Essentials II

Climate Hazards

Scenario analysis

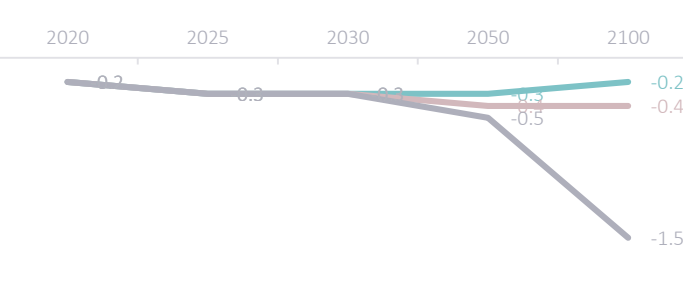
Mean air temperature (°C)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
1	1.3	1.3	1.5	1.2	1.3	1.5	1.8	1.6	1.3	1.5	2.1	3.4



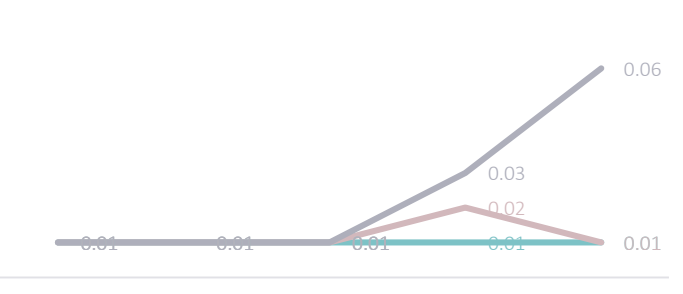
Labor productivity due to heat stress (pp)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
-0.2	-0.3	-0.3	-0.3	-0.2	-0.3	-0.3	-0.4	-0.4	-0.3	-0.3	-0.5	-1.5



Land fraction annually exposed to wildfires (pp)


2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.01	0.01	0.01	0.03	0.06



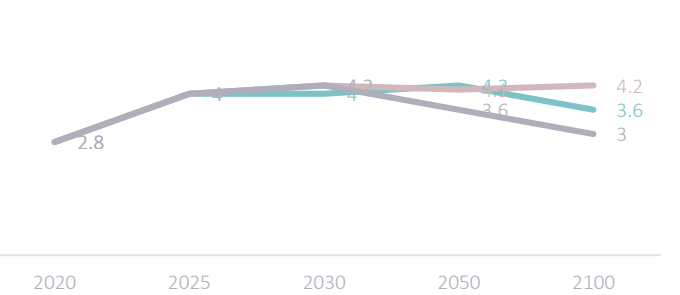
Climate Hazards

Scenario analysis


Precipitation (%)



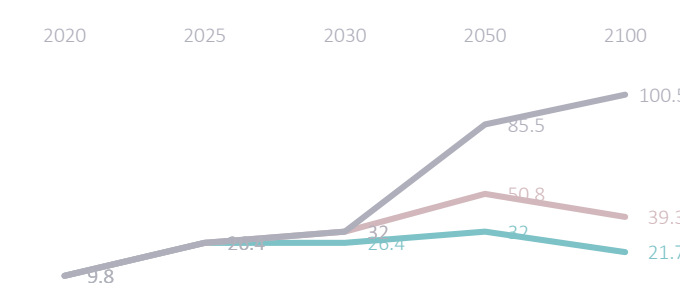
2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
2.8	4	4	4.2	3.6	4	4.2	4.1	4.2	4	4.2	3.6	3




Expected damage from river floods (p.a. in%)



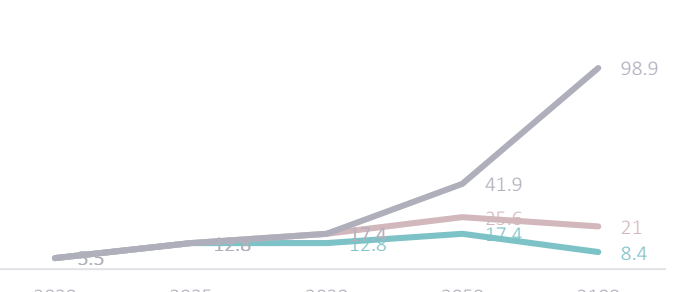
2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
9.8	26.4	26.4	32	21.7	26.4	32	50.8	39.3	26.4	32	85.5	100.5



Expected damage from tropical cyclones (p.a. in%)



2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
5.5	12.8	12.8	17.4	8.4	12.8	17.4	25.6	21	12.8	17.4	41.9	98.9

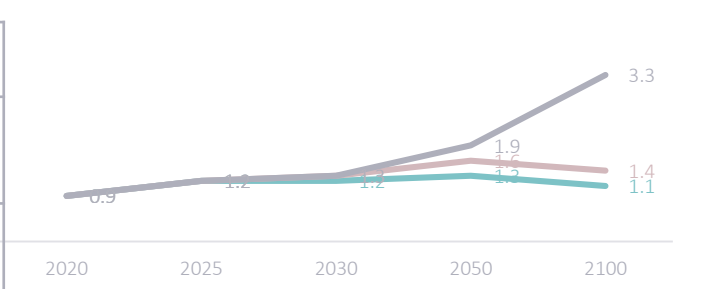


Climate Hazards

Scenario analysis

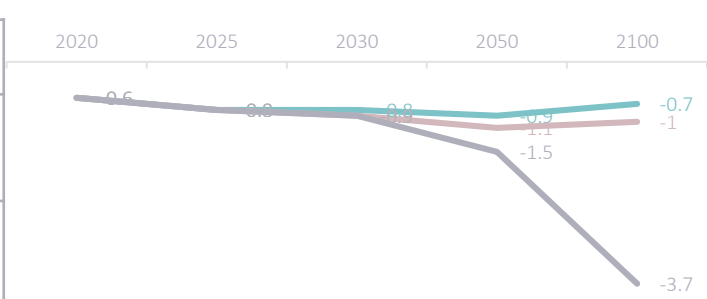
Mean air temperature (°C)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.9	1.2	1.2	1.3	1.1	1.2	1.3	1.6	1.4	1.2	1.3	1.9	3.3



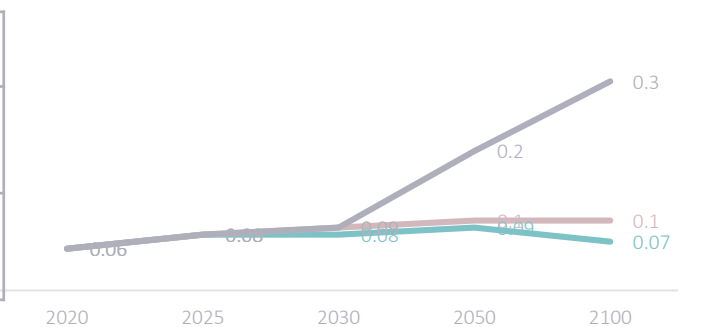
Labor productivity due to heat stress (pp)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
-0.6	-0.8	-0.8	-0.9	-0.7	-0.8	-0.9	-1.1	-1	-0.8	-0.9	-1.5	-3.7



Land fraction annually exposed to wildfires (pp)


2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.06	0.08	0.08	0.09	0.07	0.08	0.09	0.1	0.1	0.08	0.09	0.2	0.3



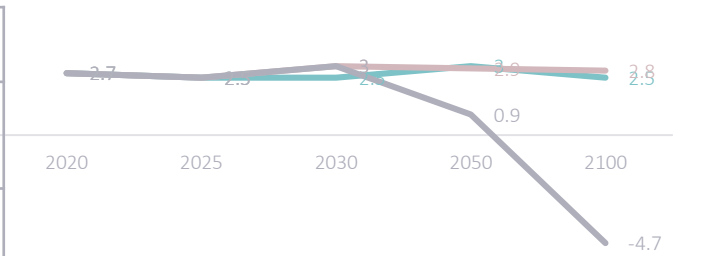
Climate Hazards

Scenario analysis


Precipitation (%)



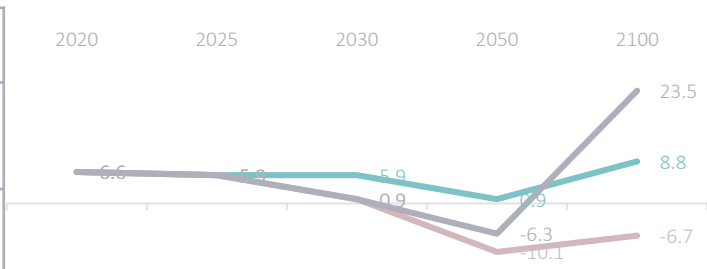
2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
2.7	2.5	2.5	3	2.5	2.5	3	2.9	2.8	2.5	3	0.9	-4.7




Expected damage from river floods (p.a. in%)



2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
6.6	5.9	5.9	0.9	8.8	5.9	0.9	-10.1	-6.7	5.9	0.9	-6.3	23.5



Expected damage from tropical cyclones (p.a. in%)



2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
no data	no data											

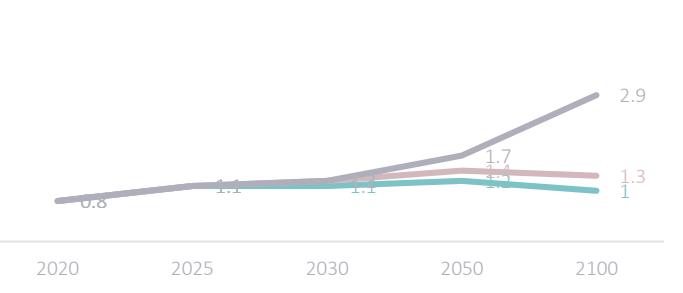
No data currently available in the Climate Impact Explorer tool for the selected indicator in this region

Climate Hazards

Scenario analysis

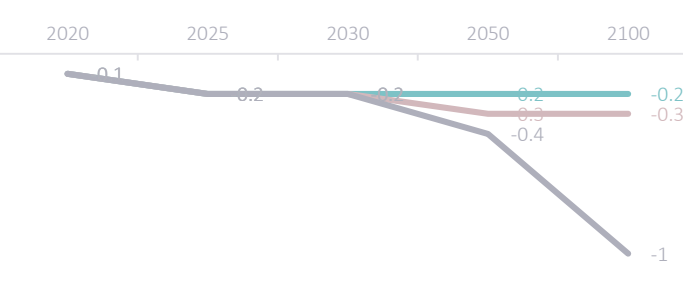
Mean air temperature (°C)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.8	1.1	1.1	1.2	1	1.1	1.2	1.4	1.3	1.1	1.2	1.7	2.9



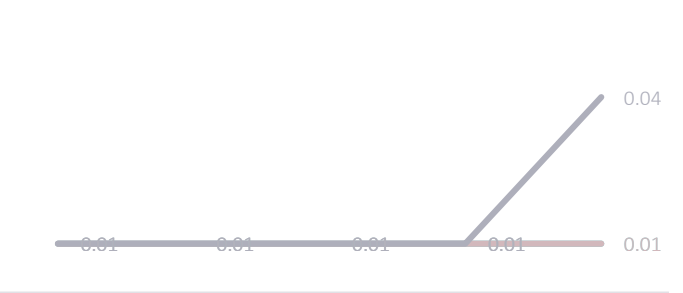
Labor productivity due to heat stress (pp)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
-0.1	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.3	-0.3	-0.2	-0.2	-0.4	-1



Land fraction annually exposed to wildfires (pp)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.04

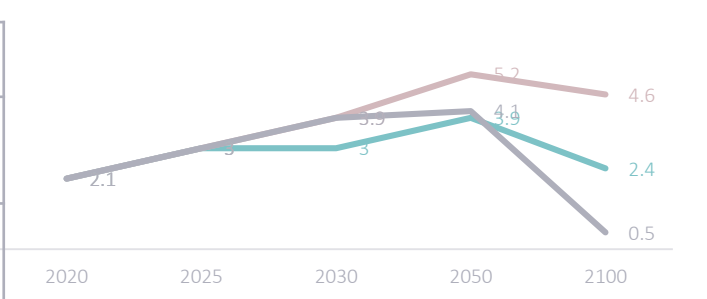


Climate Hazards

Scenario analysis

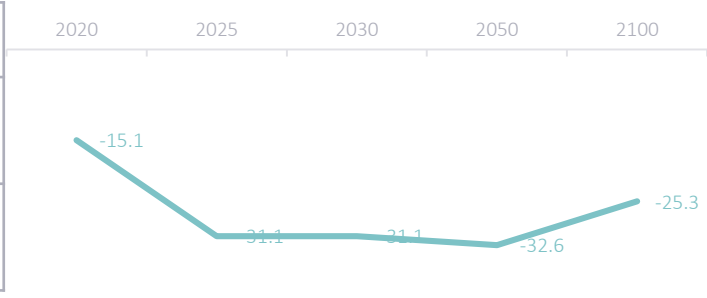
Precipitation (%)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
2.1	3	3	3.9	2.4	3	3.9	5.2	4.6	3	3.9	4.1	0.5



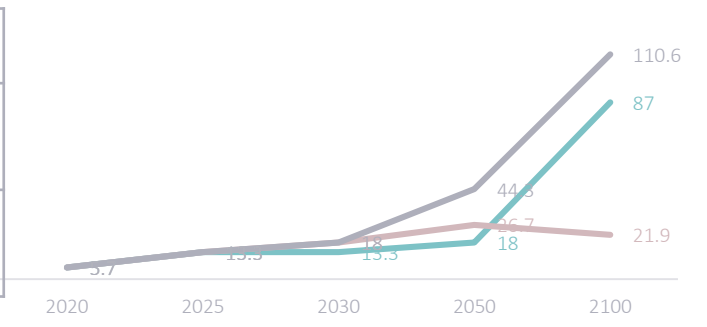
Expected damage from river floods (p.a. in%)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
-15.1	-31.1	-31.1	-32.6	-25.3	no data displayed, as projected changes attain very high values, which hint at challenges with the underlying data							



Expected damage from tropical cyclones (p.a. in%)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
5.7	13.3	13.3	18	8.7	13.3	18	26.7	21.9	13.3	18	44.3	110.6

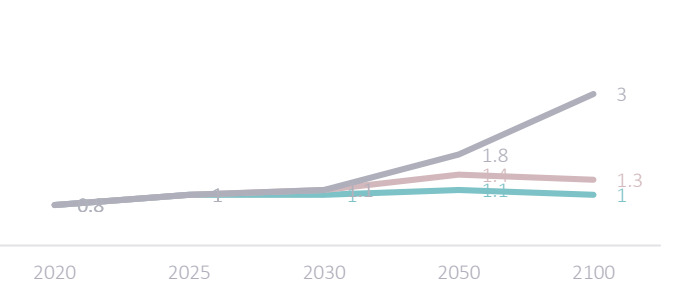


Climate Hazards

Scenario analysis

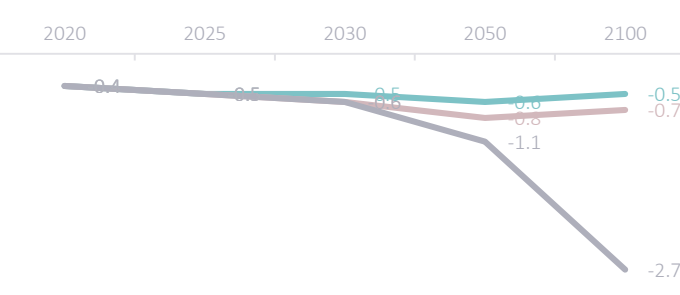
Mean air temperature (°C)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.8	1	1	1.1	1	1	1.1	1.4	1.3	1	1.1	1.8	3



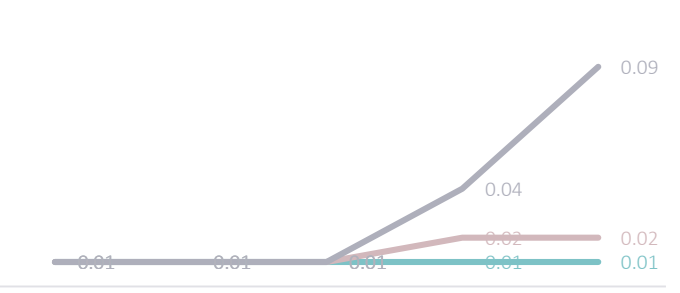
Labor productivity due to heat stress (pp)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
-0.4	-0.5	-0.5	-0.6	-0.5	-0.5	-0.6	-0.8	-0.7	-0.5	-0.6	-1.1	-2.7



Land fraction annually exposed to wildfires (pp)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.01	0.01	0.04	0.09

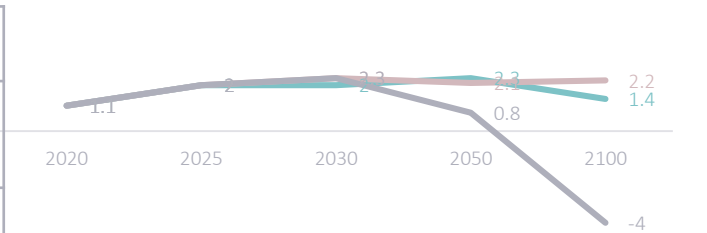


Climate Hazards

Scenario analysis

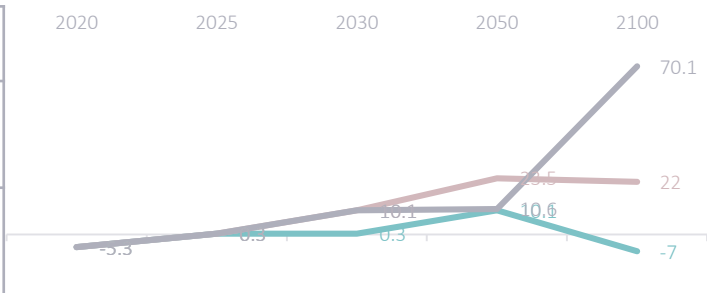
Precipitation (%)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
1.1	2	2	2.3	1.4	2	2.3	2.1	2.2	2	2.3	0.8	-4



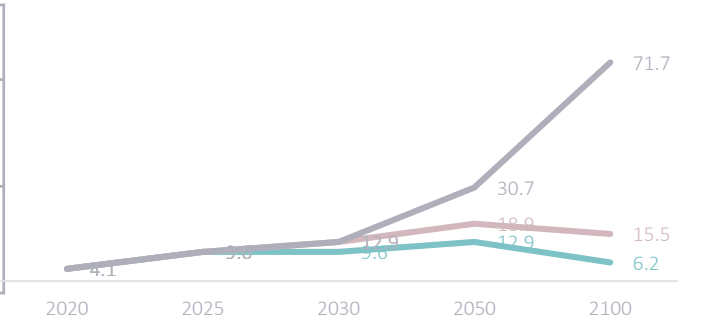
Expected damage from river floods (p.a. in%)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
-5.3	0.3	0.3	10.1	-7	0.3	10.1	23.5	22	0.3	10.1	10.6	70.1



Expected damage from tropical cyclones (p.a. in%)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
4.1	9.6	9.6	12.9	6.2	9.6	12.9	18.9	15.5	9.6	12.9	30.7	71.7

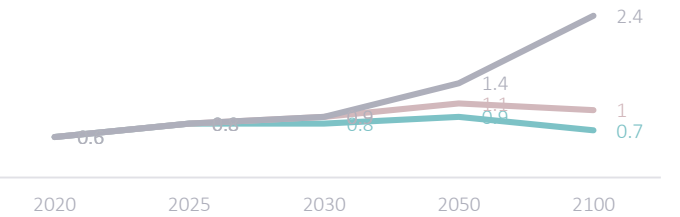


Climate Hazards

Scenario analysis

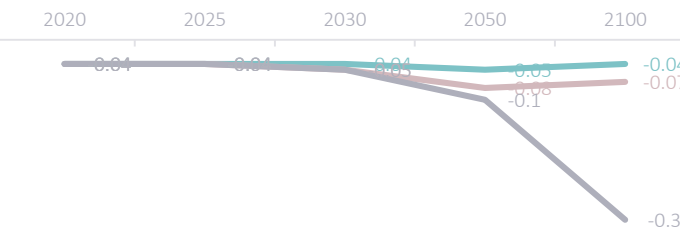
Mean air temperature (°C)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.6	0.8	0.8	0.9	0.7	0.8	0.9	1.1	1	0.8	0.9	1.4	2.4



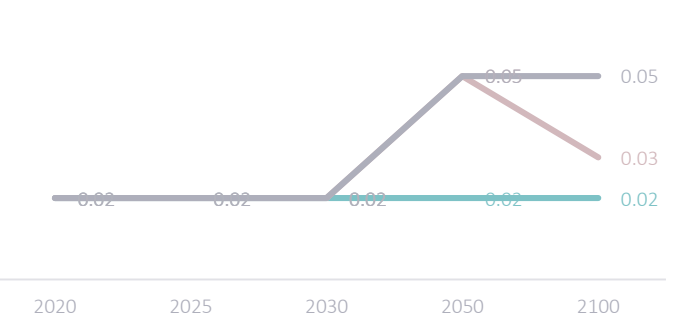
Labor productivity due to heat stress (pp)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
-0.04	-0.04	-0.04	-0.05	-0.04	-0.04	-0.05	-0.08	-0.07	-0.04	-0.05	-0.1	-0.3



Land fraction annually exposed to wildfires (pp)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.05	0.03	0.02	0.02	0.05	0.05

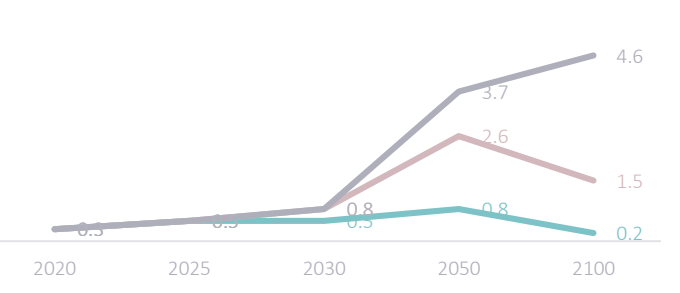


Climate Hazards

Scenario analysis

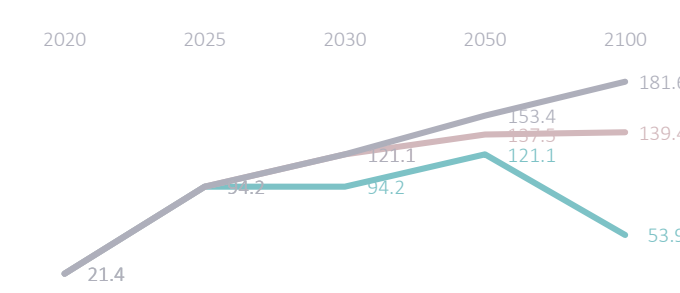
Precipitation (%)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.3	0.5	0.5	0.8	0.2	0.5	0.8	2.6	1.5	0.5	0.8	3.7	4.6



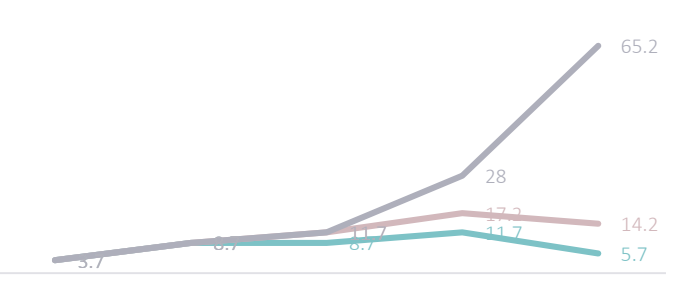
Expected damage from river floods (p.a. in%)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
21.4	94.2	94.2	121.1	53.9	94.2	121.1	137.5	139.4	94.2	121.1	153.4	181.6



Expected damage from tropical cyclones (p.a. in%)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
3.7	8.7	8.7	11.7	5.7	8.7	11.7	17.2	14.2	8.7	11.7	28	65.2

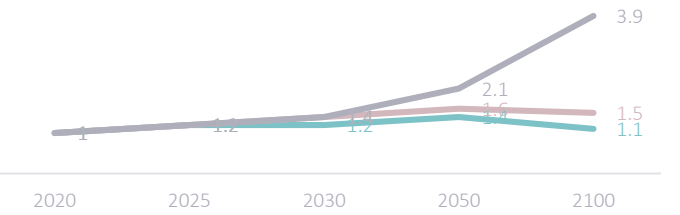


Climate Hazards

Scenario analysis

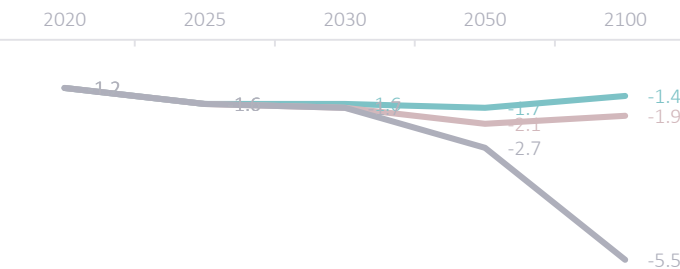
Mean air temperature (°C)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
1	1.2	1.2	1.4	1.1	1.2	1.4	1.6	1.5	1.2	1.4	2.1	3.9



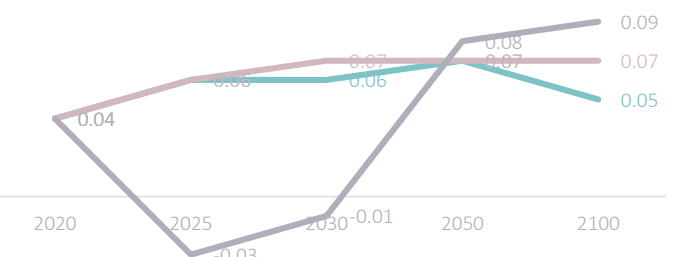
Labor productivity due to heat stress (pp)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
-1.2	-1.6	-1.6	-1.7	-1.4	-1.6	-1.7	-2.1	-1.9	-1.6	-1.7	-2.7	-5.5



Land fraction annually exposed to wildfires (pp)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.04	0.06	0.06	0.07	0.05	0.06	0.07	0.07	0.07	-0.03	-0.01	0.08	0.09

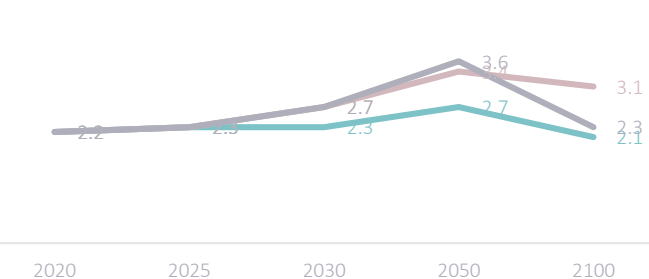


Climate Hazards

Scenario analysis

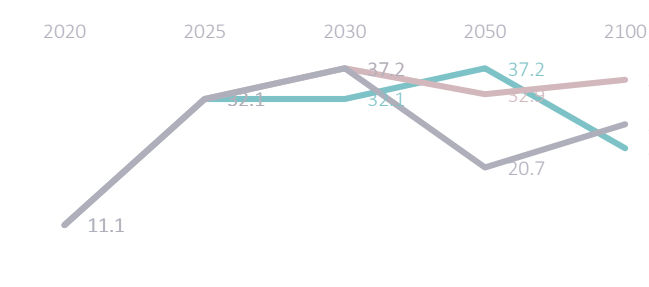
Precipitation (%)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
2.2	2.3	2.3	2.7	2.1	2.3	2.7	3.4	3.1	2.3	2.7	3.6	2.3



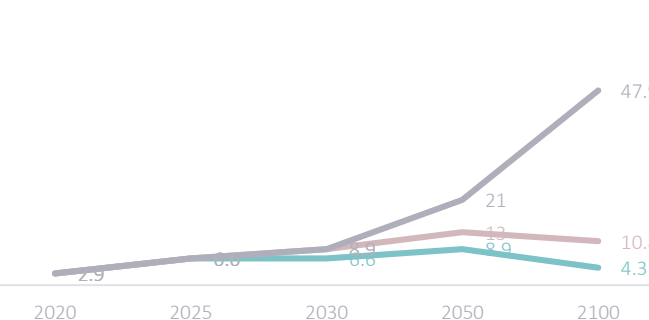
Expected damage from river floods (p.a. in%)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
11.1	32.1	32.1	37.2	23.9	32.1	37.2	32.9	35.3	32.1	37.2	20.7	27.9



Expected damage from tropical cyclones (p.a. in%)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
2.9	6.6	6.6	8.9	4.3	6.6	8.9	13	10.8	6.6	8.9	21	47.9

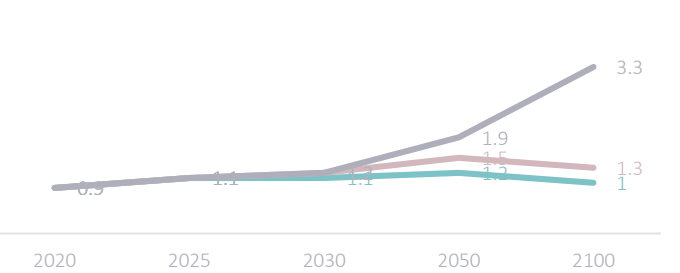


Climate Hazards

Scenario analysis

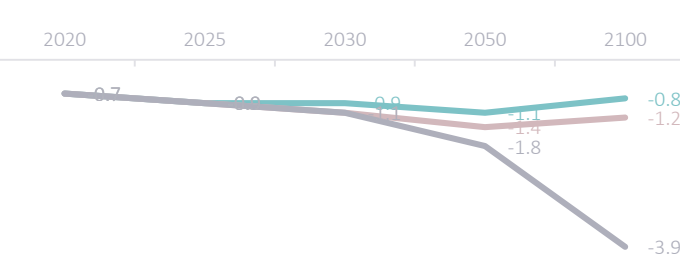
Mean air temperature (°C)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.9	1.1	1.1	1.2	1	1.1	1.2	1.5	1.3	1.1	1.2	1.9	3.3



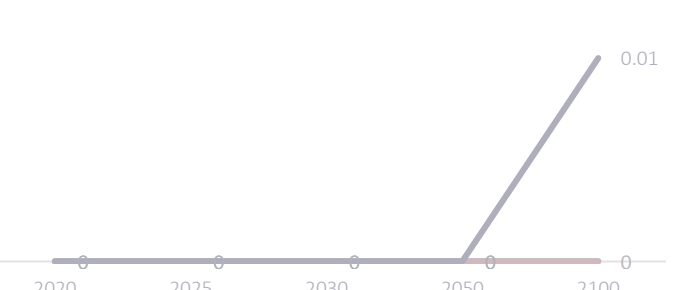
Labor productivity due to heat stress (pp)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
-0.7	-0.9	-0.9	-1.1	-0.8	-0.9	-1.1	-1.4	-1.2	-0.9	-1.1	-1.8	-3.9



Land fraction annually exposed to wildfires (pp)


2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0	0	0	0	0	0	0	0	0	0	0	0	0.01



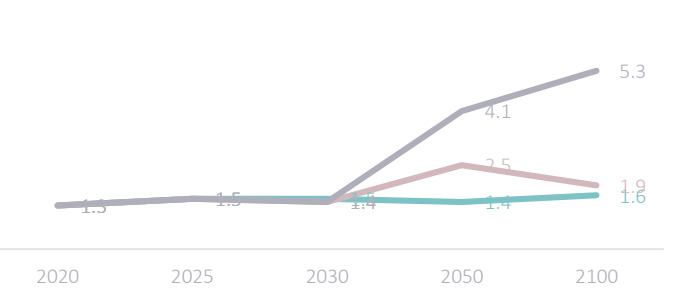
Climate Hazards

Scenario analysis


Precipitation (%)



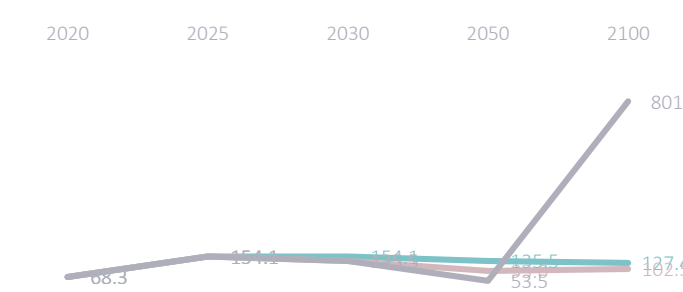
2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
1.3	1.5	1.5	1.4	1.6	1.5	1.4	2.5	1.9	1.5	1.4	4.1	5.3




Expected damage from river floods (p.a. in%)



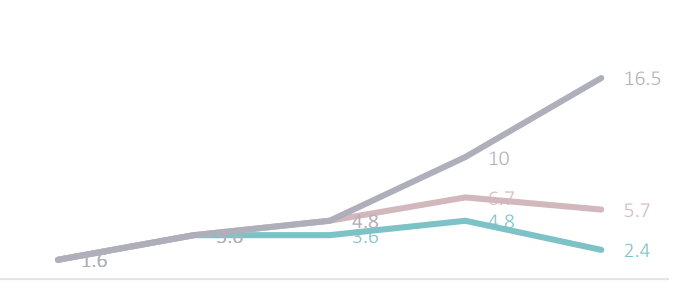
2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
68.3	154.1	154.1	135.5	127.4	154.1	135.5	93.6	102.5	154.1	135.5	53.5	801



Expected damage from tropical cyclones (p.a. in%)



2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
1.6	3.6	3.6	4.8	2.4	3.6	4.8	6.7	5.7	3.6	4.8	10	16.5



Physical climate risk assessment

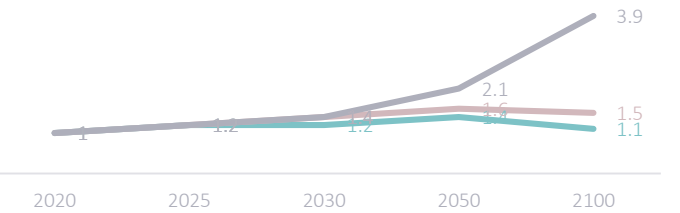
Global Secondaries V

Climate Hazards

Scenario analysis

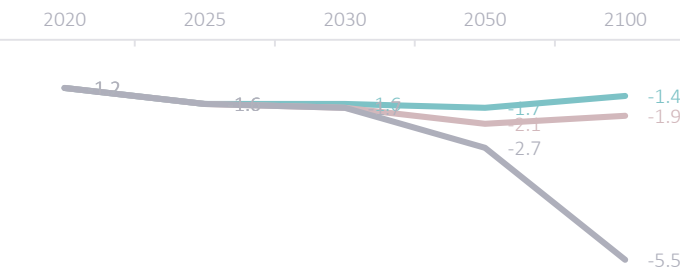
Mean air temperature (°C)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
1	1.2	1.2	1.4	1.1	1.2	1.4	1.6	1.5	1.2	1.4	2.1	3.9



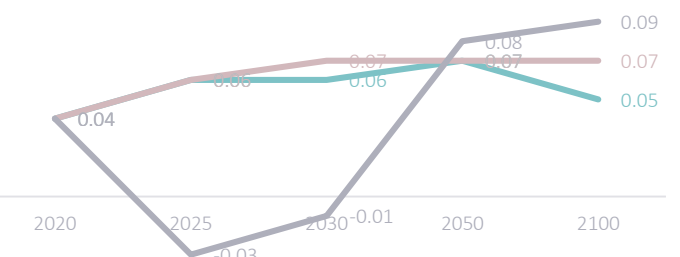
Labor productivity due to heat stress (pp)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
-1.2	-1.6	-1.6	-1.7	-1.4	-1.6	-1.7	-2.1	-1.9	-1.6	-1.7	-2.7	-5.5



Land fraction annually exposed to wildfires (pp)


2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.04	0.06	0.06	0.07	0.05	0.06	0.07	0.07	0.07	-0.03	-0.01	0.08	0.09



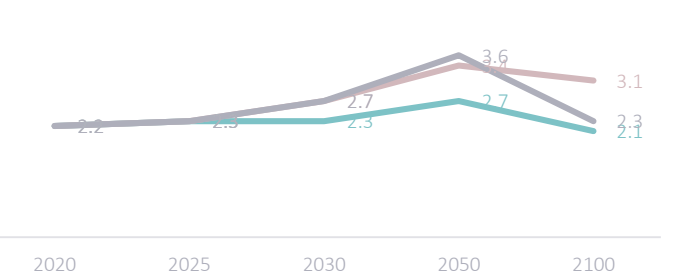
Climate Hazards

Scenario analysis


Precipitation (%)



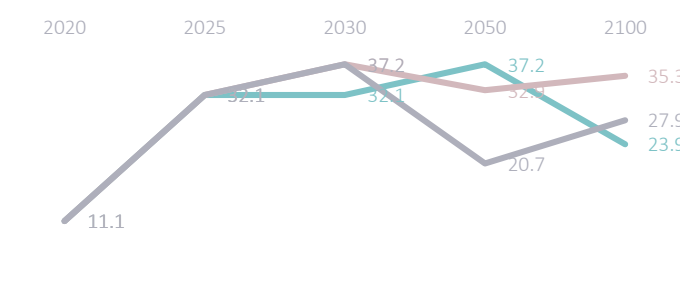
2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
2.2	2.3	2.3	2.7	2.1	2.3	2.7	3.4	3.1	2.3	2.7	3.6	2.3




Expected damage from river floods (p.a. in%)



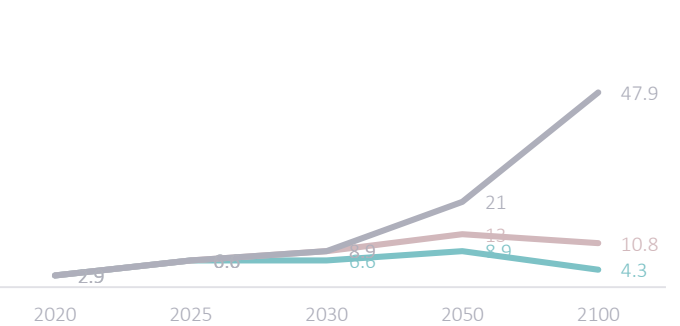
2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
11.1	32.1	32.1	37.2	23.9	32.1	37.2	32.9	35.3	32.1	37.2	20.7	27.9



Expected damage from tropical cyclones (p.a. in%)



2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
2.9	6.6	6.6	8.9	4.3	6.6	8.9	13	10.8	6.6	8.9	21	47.9

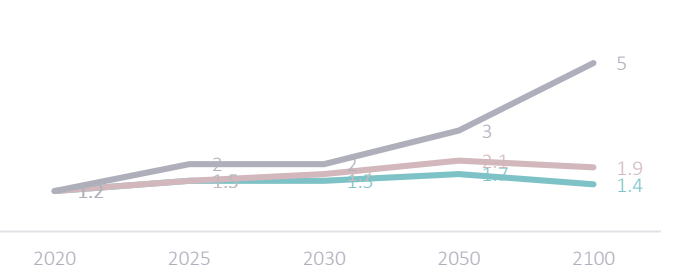


Climate Hazards

Scenario analysis

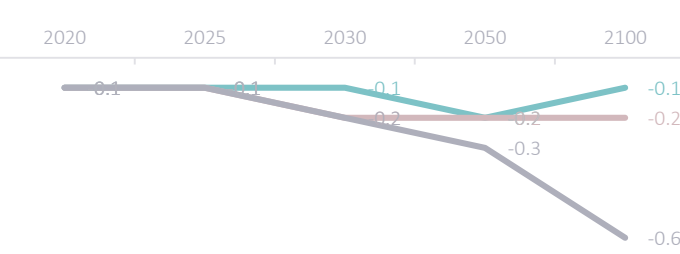
Mean air temperature (°C)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
1.2	1.5	1.5	1.7	1.4	1.5	1.7	2.1	1.9	2	2	3	5



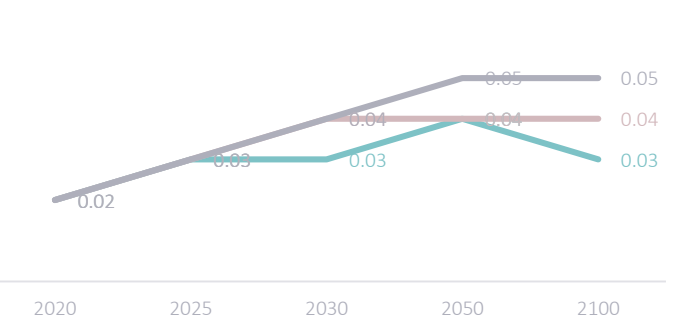
Labor productivity due to heat stress (pp)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
-0.1	-0.1	-0.1	-0.2	-0.1	-0.1	-0.2	-0.2	-0.2	-0.1	-0.2	-0.3	-0.6



Land fraction annually exposed to wildfires (pp)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.02	0.03	0.03	0.04	0.03	0.03	0.04	0.04	0.04	0.03	0.04	0.05	0.05

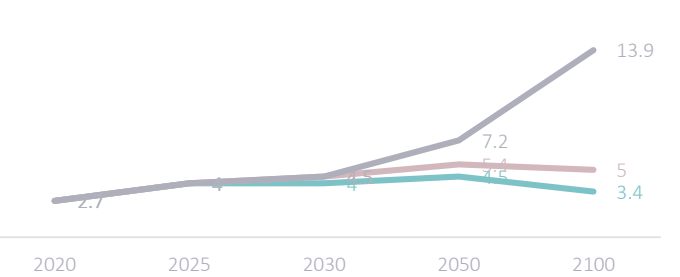


Climate Hazards

Scenario analysis

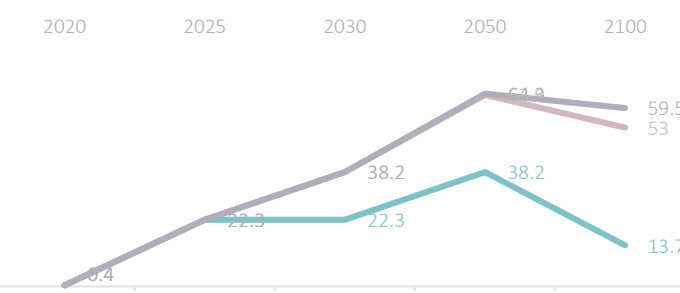
Precipitation (%)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
2.7	4	4	4.5	3.4	4	4.5	5.4	5	4	4.5	7.2	13.9



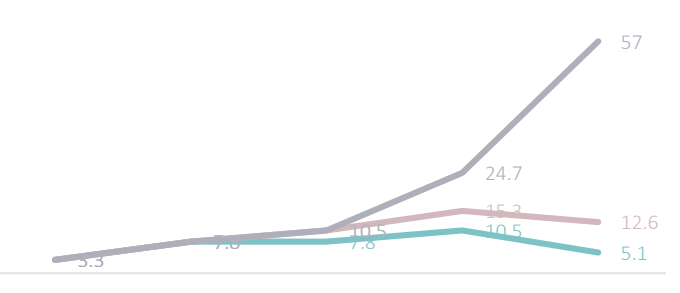
Expected damage from river floods (p.a. in%)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.4	22.3	22.3	38.2	13.7	22.3	38.2	63.9	53	22.3	38.2	64.3	59.5



Expected damage from tropical cyclones (p.a. in%)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
3.3	7.8	7.8	10.5	5.1	7.8	10.5	15.3	12.6	7.8	10.5	24.7	57

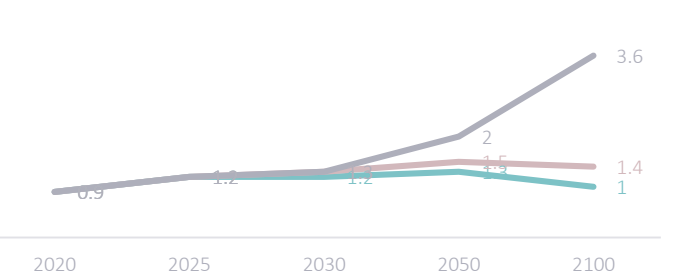


Climate Hazards

Scenario analysis

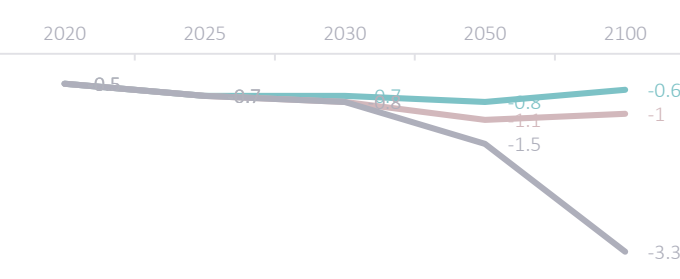
Mean air temperature (°C)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.9	1.2	1.2	1.3	1	1.2	1.3	1.5	1.4	1.2	1.3	2	3.6



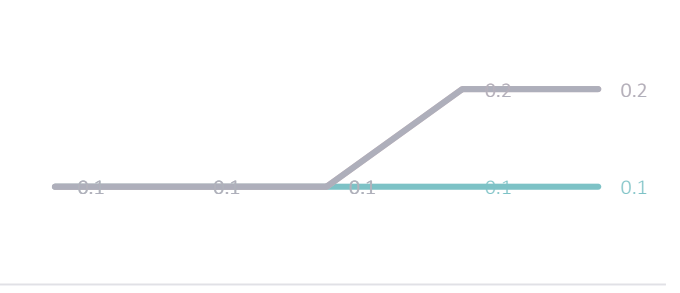
Labor productivity due to heat stress (pp)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
-0.5	-0.7	-0.7	-0.8	-0.6	-0.7	-0.8	-1.1	-1	-0.7	-0.8	-1.5	-3.3



Land fraction annually exposed to wildfires (pp)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.2	0.2

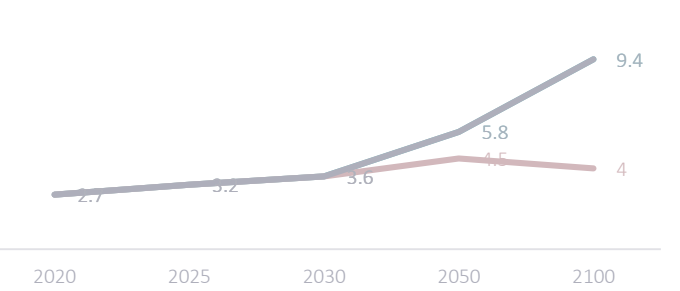


Climate Hazards

Scenario analysis

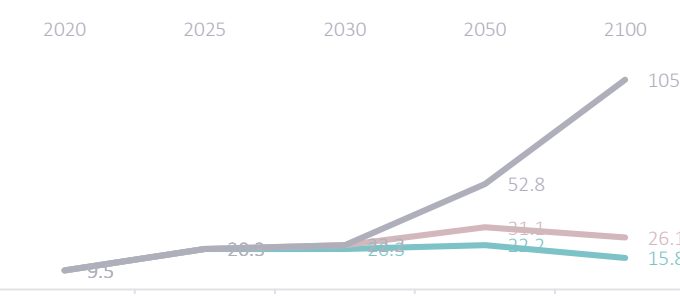
Precipitation (%)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
2.7	3.2	3.6	5.8	9.4	3.2	3.6	4.5	4	3.2	3.6	5.8	9.4



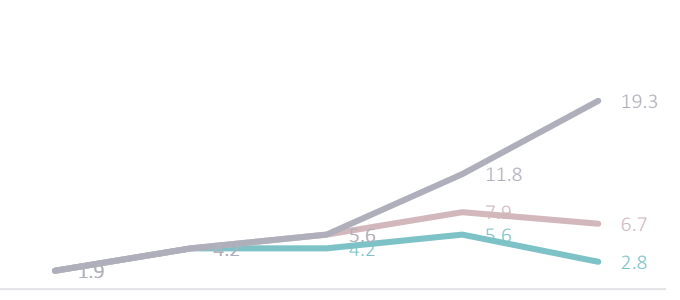
Expected damage from river floods (p.a. in%)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
9.5	20.3	20.3	22.2	15.8	20.3	22.2	31.1	26.1	20.3	22.2	52.8	105



Expected damage from tropical cyclones (p.a. in%)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
1.9	4.2	4.2	5.6	2.8	4.2	5.6	7.9	6.7	4.2	5.6	11.8	19.3

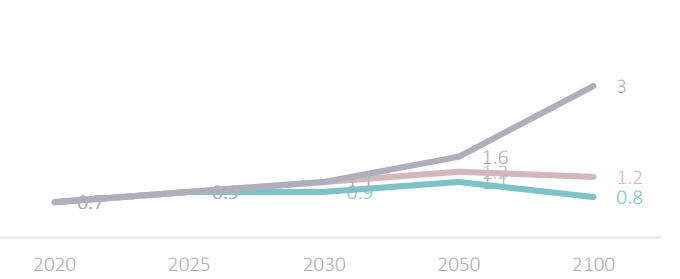


Climate Hazards

Scenario analysis

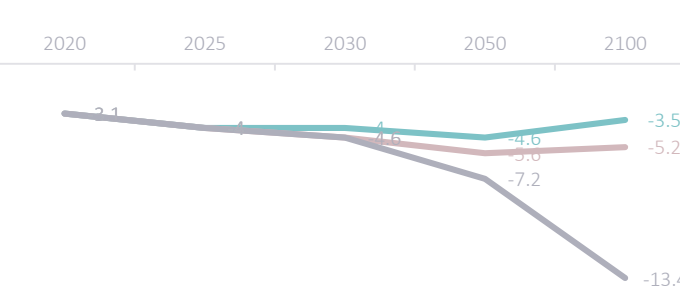
Mean air temperature (°C)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.7	0.9	0.9	1.1	0.8	0.9	1.1	1.3	1.2	0.9	1.1	1.6	3



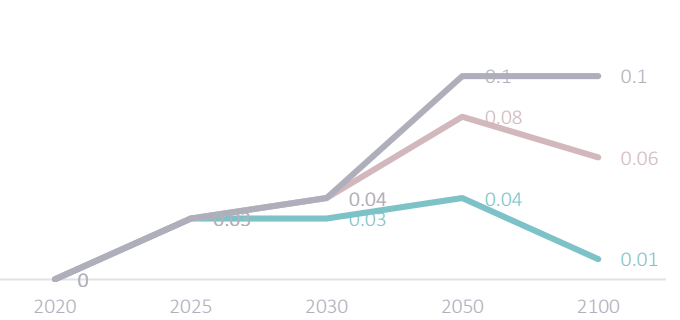
Labor productivity due to heat stress (pp)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
-3.1	-4	-4	-4.6	-3.5	-4	-4.6	-5.6	-5.2	-4	-4.6	-7.2	-13.4



Land fraction annually exposed to wildfires (pp)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0	0.03	0.03	0.04	0.01	0.03	0.04	0.08	0.06	0.03	0.04	0.1	0.1

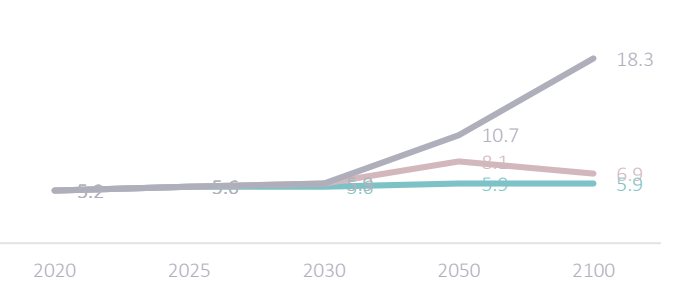


Climate Hazards

Scenario analysis

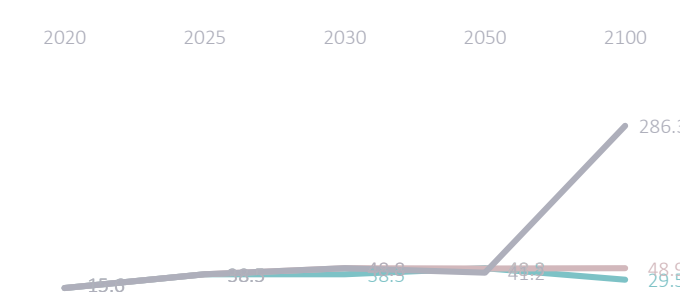
Precipitation (%)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
5.2	5.6	5.6	5.9	5.9	5.6	5.9	8.1	6.9	5.6	5.9	10.7	18.3



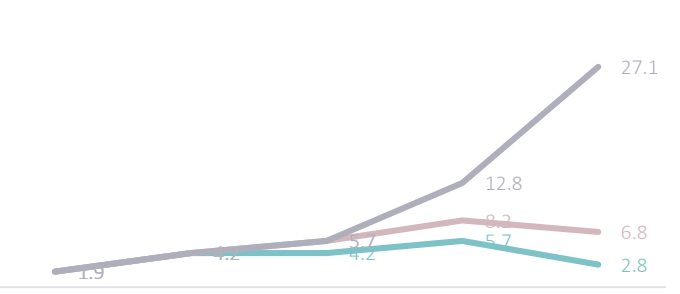
Expected damage from river floods (p.a. in%)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
15.6	38.5	38.5	48.8	29.5	38.5	48.8	48.3	48.9	38.5	48.8	41.2	286.3



Expected damage from tropical cyclones (p.a. in%)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
1.9	4.2	4.2	5.7	2.8	4.2	5.7	8.2	6.8	4.2	5.7	12.8	27.1

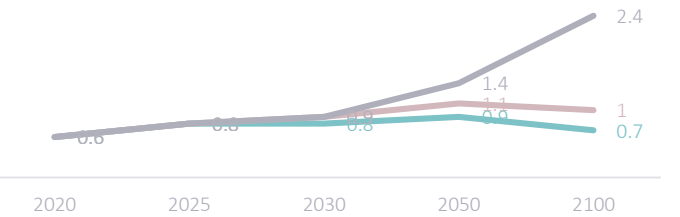


Climate Hazards

Scenario analysis

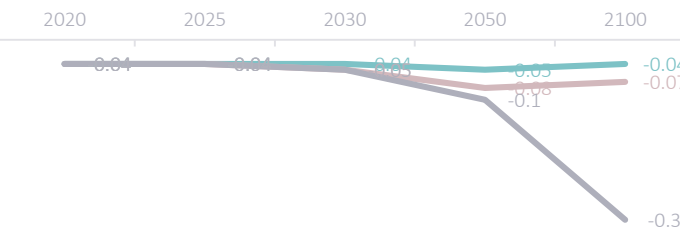
Mean air temperature (°C)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.6	0.8	0.8	0.9	0.7	0.8	0.9	1.1	1	0.8	0.9	1.4	2.4



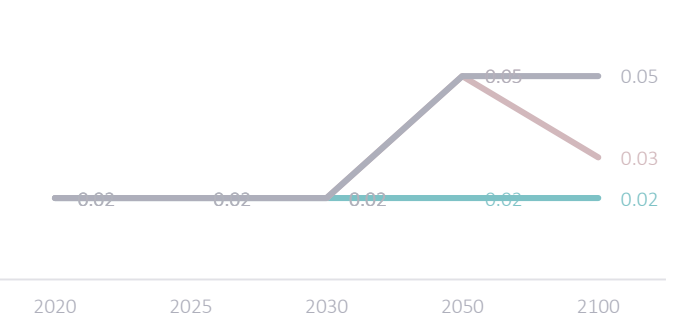
Labor productivity due to heat stress (pp)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
-0.04	-0.04	-0.04	-0.05	-0.04	-0.04	-0.05	-0.08	-0.07	-0.04	-0.05	-0.1	-0.3



Land fraction annually exposed to wildfires (pp)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.05	0.03	0.02	0.02	0.05	0.05

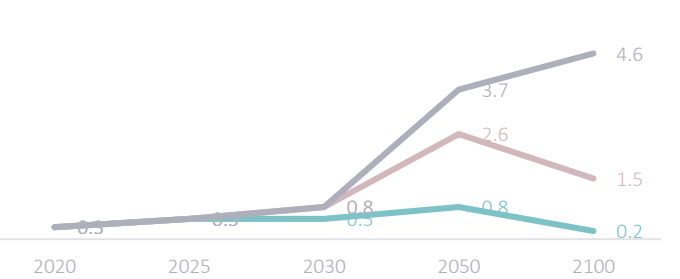


Climate Hazards

Scenario analysis

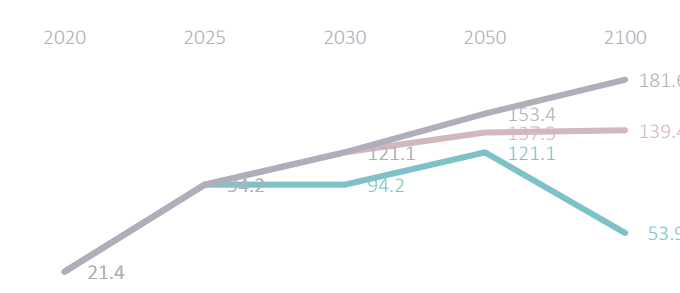
Precipitation (%)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.3	0.5	0.5	0.8	0.2	0.5	0.8	2.6	1.5	0.5	0.8	3.7	4.6



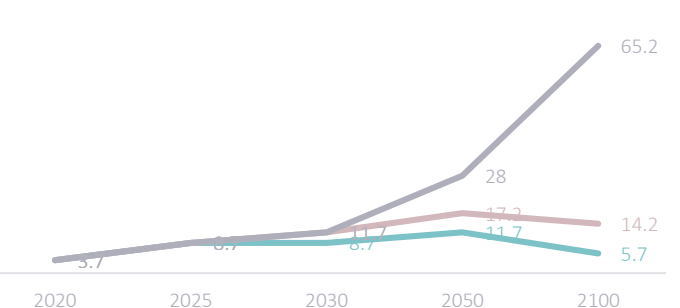
Expected damage from river floods (p.a. in%)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
21.4	94.2	94.2	121.1	53.9	94.2	121.1	137.5	139.4	94.2	121.1	153.4	181.6



Expected damage from tropical cyclones (p.a. in%)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
3.7	8.7	8.7	11.7	5.7	8.7	11.7	17.2	14.2	8.7	11.7	28	65.2

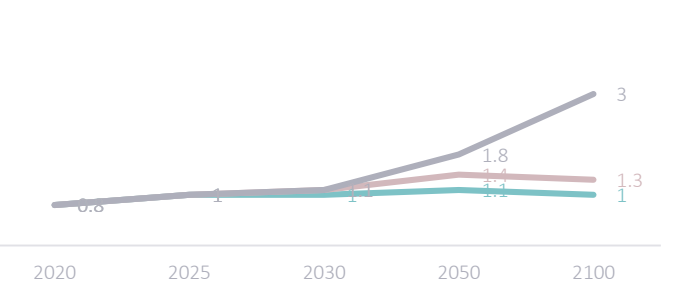


Climate Hazards

Scenario analysis

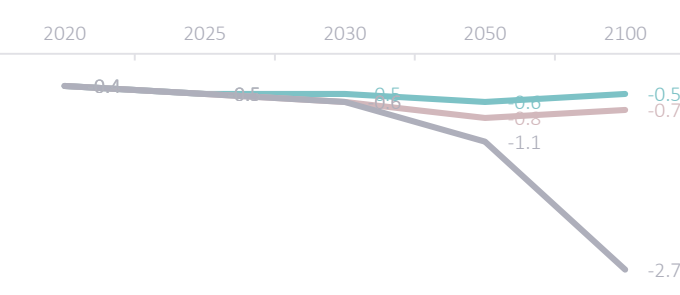
Mean air temperature (°C)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.8	1	1	1.1	1	1	1.1	1.4	1.3	1	1.1	1.8	3



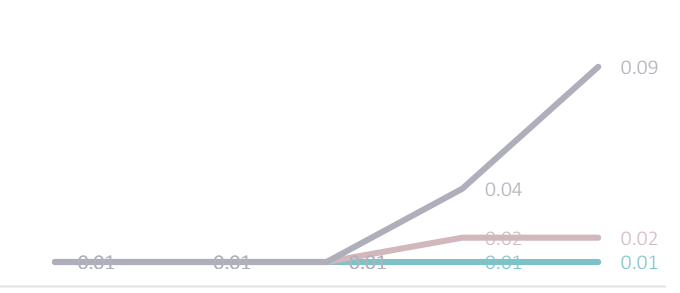
Labor productivity due to heat stress (pp)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
-0.4	-0.5	-0.5	-0.6	-0.5	-0.5	-0.6	-0.8	-0.7	-0.5	-0.6	-1.1	-2.7



Land fraction annually exposed to wildfires (pp)


2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.01	0.01	0.04	0.09



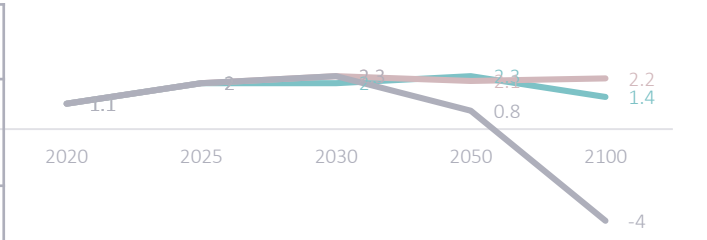
Climate Hazards

Scenario analysis


Precipitation (%)



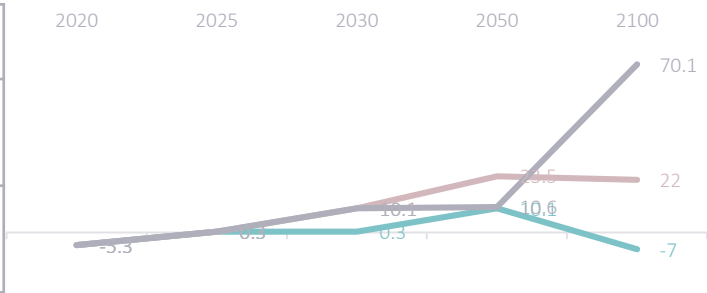
2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
1.1	2	2	2.3	1.4	2	2.3	2.1	2.2	2	2.3	0.8	-4




Expected damage from river floods (p.a. in%)



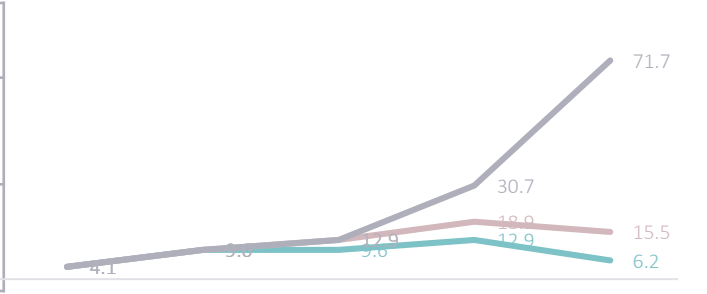
2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
-5.3	0.3	0.3	10.1	-7	0.3	10.1	23.5	22	0.3	10.1	10.6	70.1



Expected damage from tropical cyclones (p.a. in%)



2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
4.1	9.6	9.6	12.9	6.2	9.6	12.9	18.9	15.5	9.6	12.9	30.7	71.7

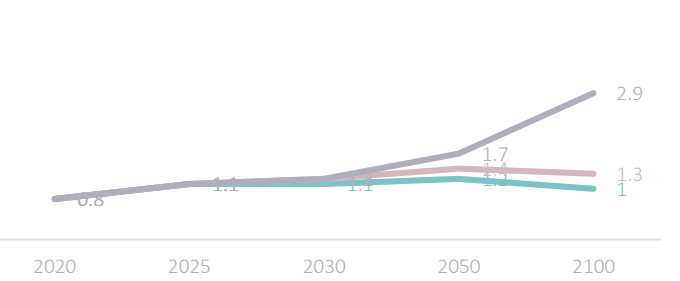


Climate Hazards

Scenario analysis

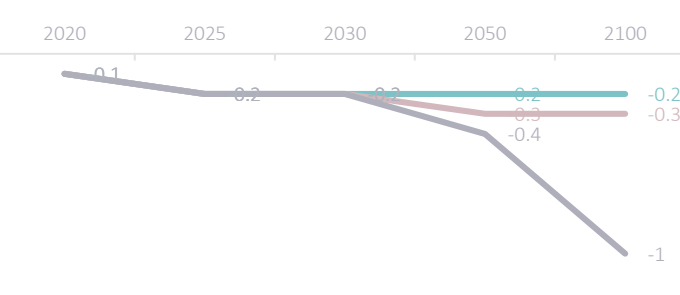
Mean air temperature (°C)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.8	1.1	1,1	1.2	1	1.1	1.2	1.4	1.3	1.1	1.2	1.7	2.9



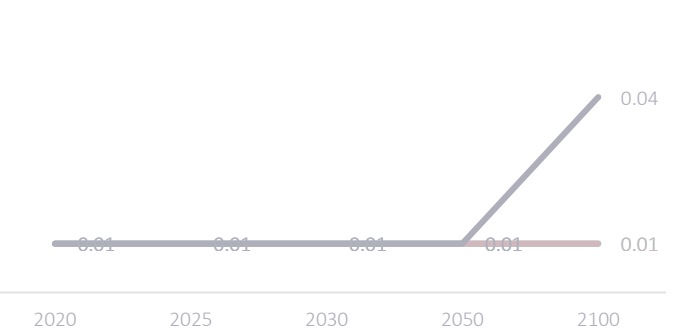
Labor productivity due to heat stress (pp)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
-0.1	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.3	-0.3	-0.2	-0.2	-0.4	-1



Land fraction annually exposed to wildfires (pp)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.04

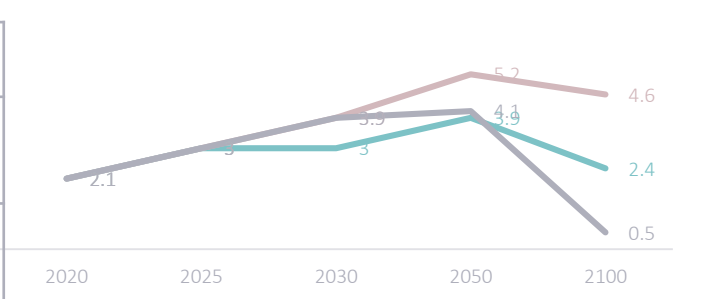


Climate Hazards

Scenario analysis

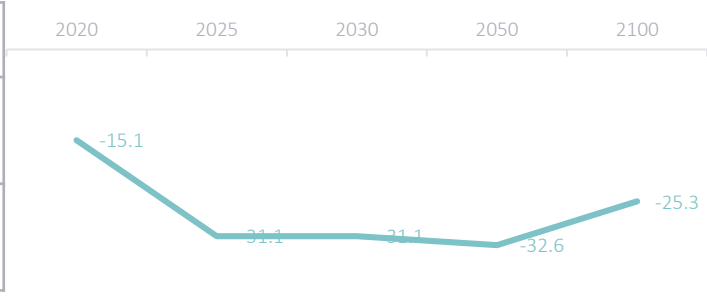
Precipitation (%)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
2.1	3	3	3.9	2.4	3	3.9	5.2	4.6	3	3.9	4.1	0.5



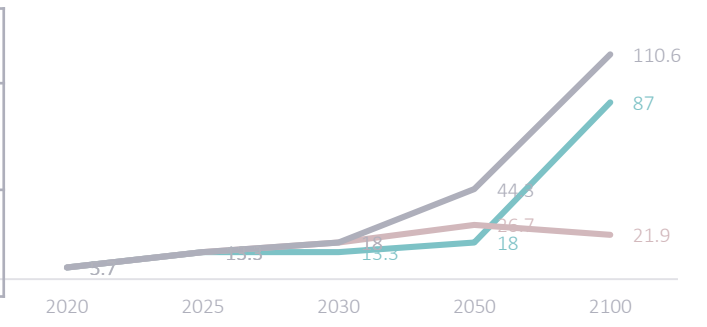
Expected damage from river floods (p.a. in%)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
-15.1	-31.1	-31.1	-32.6	-25.3	no data displayed, as projected changes attain very high values, which hint at challenges with the underlying data							



Expected damage from tropical cyclones (p.a. in%)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
5.7	13.3	13.3	18	8.7	13.3	18	26.7	21.9	13.3	18	44.3	110.6

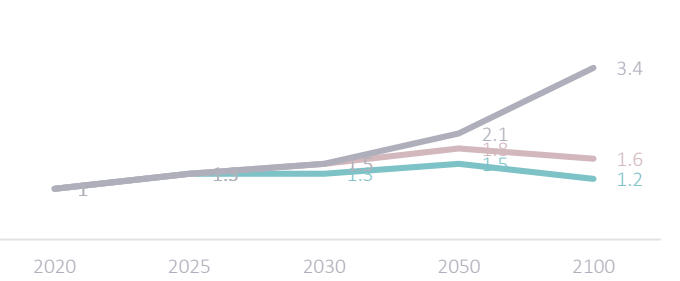


Climate Hazards

Scenario analysis

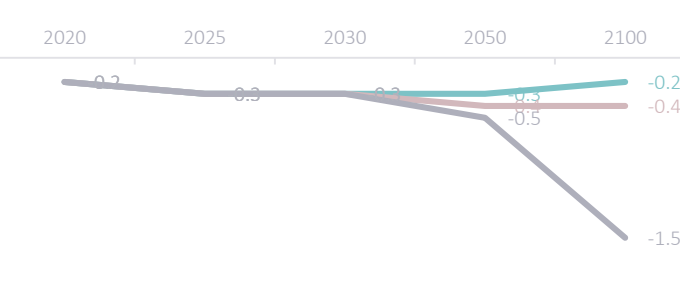
Mean air temperature (°C)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
1	1.3	1.3	1.5	1.2	1.3	1.5	1.8	1.6	1.3	1.5	2.1	3.4



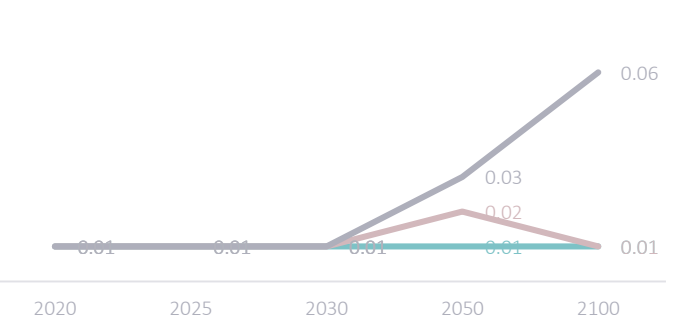
Labor productivity due to heat stress (pp)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
-0.2	-0.3	-0.3	-0.3	-0.2	-0.3	-0.3	-0.4	-0.4	-0.3	-0.3	-0.5	-1.5



Land fraction annually exposed to wildfires (pp)


2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.01	0.01	0.01	0.03	0.06



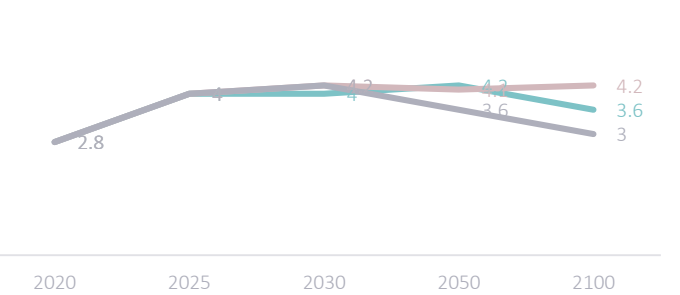
Climate Hazards

Scenario analysis


Precipitation (%)



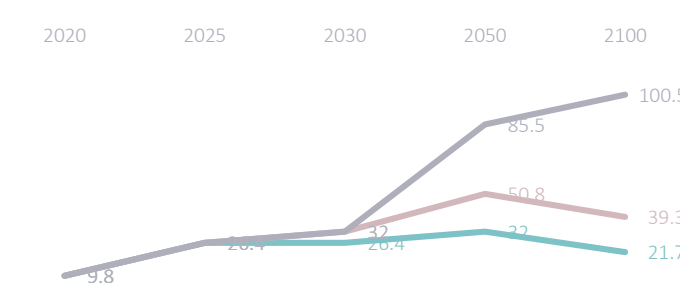
2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
2.8	4	4	4.2	3.6	4	4.2	4.1	4.2	4	4.2	3.6	3




Expected damage from river floods (p.a. in%)



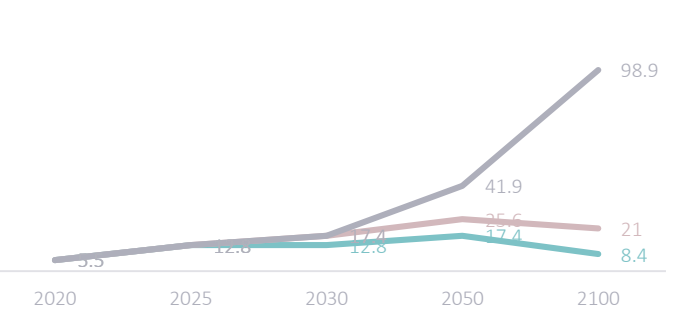
2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
9.8	26.4	26.4	32	21.7	26.4	32	50.8	39.3	26.4	32	85.5	100.5



Expected damage from tropical cyclones (p.a. in%)



2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
5.5	12.8	12.8	17.4	8.4	12.8	17.4	25.6	21	12.8	17.4	41.9	98.9



Physical climate risk assessment

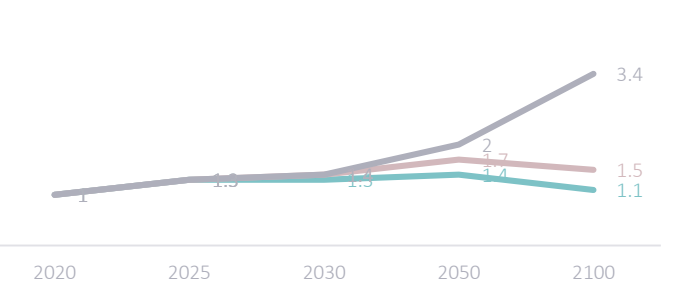
Capital Dynamics Operations

Climate Hazards

Scenario analysis

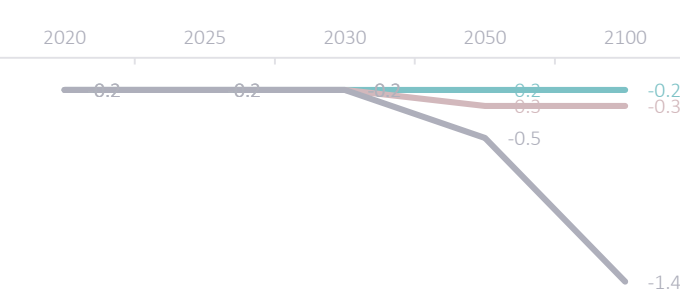
Mean air temperature (°C)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
1	1.3	1.3	1.4	1.1	1.3	1.4	1.7	1.5	1.3	1.4	2	3.4



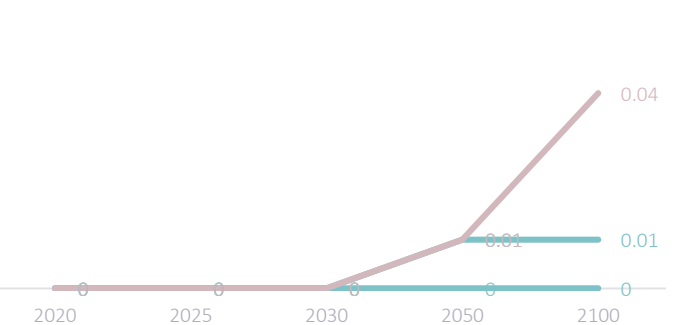
Labor productivity due to heat stress (pp)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.3	-0.3	-0.2	-0.2	-0.5	-1.4



Land fraction annually exposed to wildfires (pp)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0	0	0	0	0	0	0	0.01	0.01	0	0	0.01	0.04

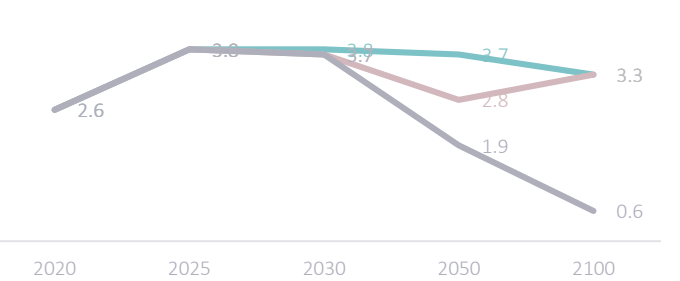


Climate Hazards

Scenario analysis

Precipitation (%)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
2.6	3.8	3.8	3.7	3.3	3.8	3.7	2.8	3.3	3.8	3.7	1.9	0.6



Expected damage from river floods (p.a. in%)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
No data	No data											

No data currently available in the Climate Impact Explorer tool for the selected indicator in this region

Expected damage from tropical cyclones (p.a. in%)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
No data	No data											

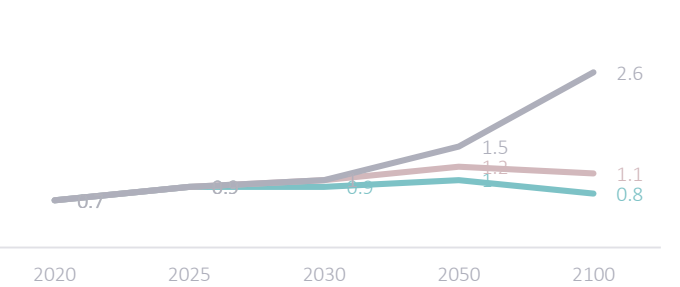
No data currently available in the Climate Impact Explorer tool for the selected indicator in this region

Climate Hazards

Scenario analysis

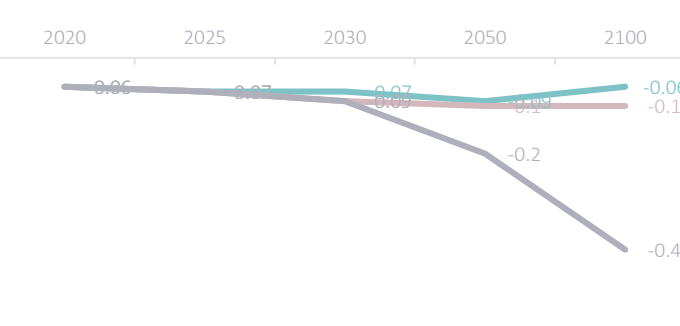
Mean air temperature (°C)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.7	0.9	0.9	1	0.8	0.9	1	1.2	1.1	0.9	1	1.5	2.6



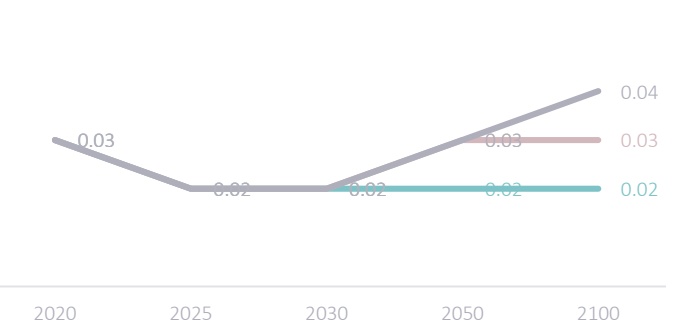
Labor productivity due to heat stress (pp)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
-0.06	-0.07	-0.07	-0.09	-0.06	-0.07	-0.09	-0.1	-0.1	-0.07	-0.09	-0.2	-0.4



Land fraction annually exposed to wildfires (pp)


2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.02	0.02	0.03	0.04



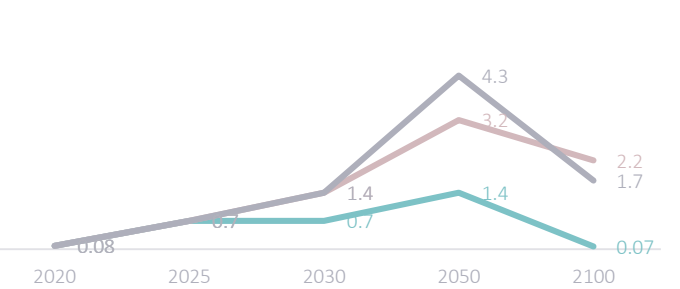
Climate Hazards

Scenario analysis


Precipitation (%)



2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.08	0.7	0.7	1.4	0.07	0.7	1.4	3.2	2.2	0.7	1.4	4.3	1.7




Expected damage from river floods (p.a. in%)



2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
No data	No data											

No data currently available in the Climate Impact Explorer tool for the selected indicator in this region

Expected damage from tropical cyclones (p.a. in%)



2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
No data	No data											

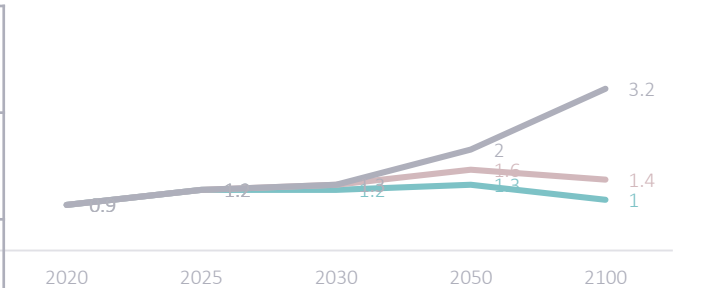
No data currently available in the Climate Impact Explorer tool for the selected indicator in this region

Climate Hazards

Scenario analysis

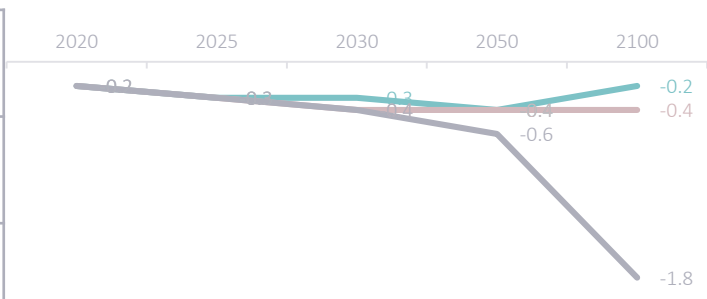
Mean air temperature (°C)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.9	1.2	1.2	1.3	1	1.2	1.3	1.6	1.4	1.2	1.3	2	3.2



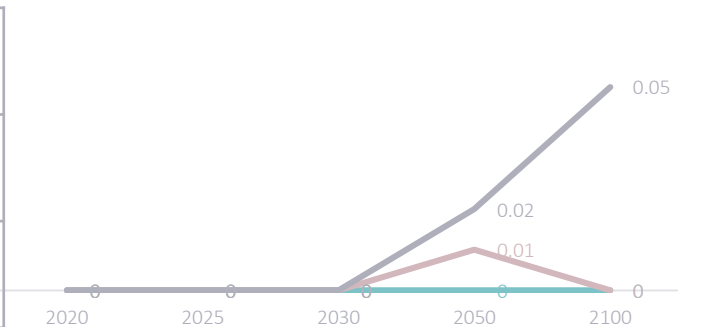
Labor productivity due to heat stress (pp)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
-0.2	-0.3	-0.3	-0.4	-0.2	-0.3	-0.4	-0.4	-0.4	-0.3	-0.4	-0.6	-1.8



Land fraction annually exposed to wildfires (pp)


2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0	0	0	0	0	0	0	0.01	0	0	0	0.02	0.05



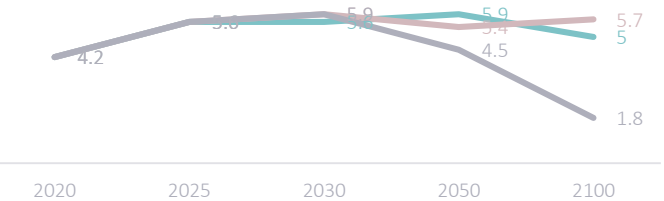
Climate Hazards

Scenario analysis


Precipitation (%)



2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
4.2	5.6	5.6	5.9	5	5.6	5.9	5.4	5.7	5.6	5.9	4.5	1.8




Expected damage from river floods (p.a. in%)



2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
no data	no data											

No data currently available in the Climate Impact Explorer tool for the selected indicator in this region

Expected damage from tropical cyclones (p.a. in%)



2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
no data	no data											

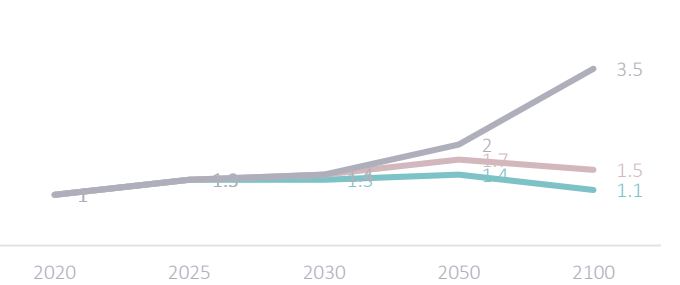
No data currently available in the Climate Impact Explorer tool for the selected indicator in this region

Climate Hazards

Scenario analysis

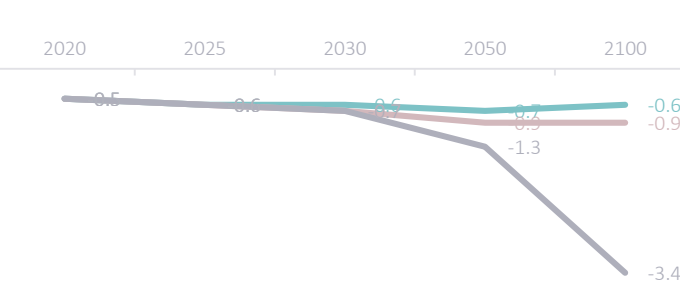
Mean air temperature (°C)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
1	1.3	1.3	1.4	1.1	1.3	1.4	1.7	1.5	1.3	1.4	2	3.5



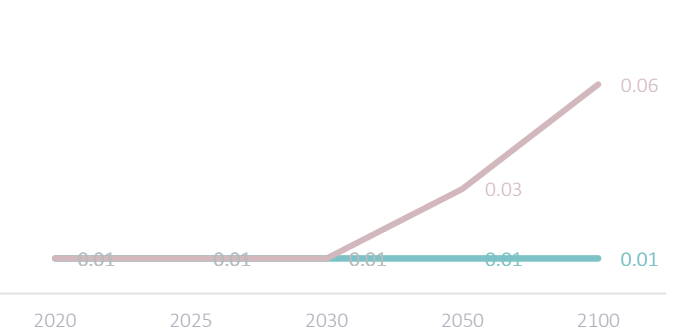
Labor productivity due to heat stress (pp)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
-0.5	-0.6	-0.6	-0.7	-0.6	-0.6	-0.7	-0.9	-0.9	-0.6	-0.7	-1.3	-3.4



Land fraction annually exposed to wildfires (pp)


2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.03	0.06



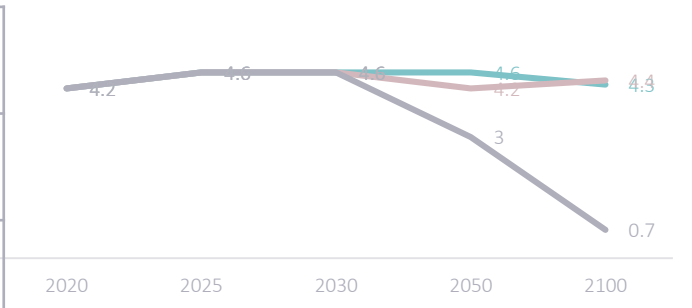
Climate Hazards

Scenario analysis


Precipitation (%)



2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
4.2	4.6	4.6	4.6	4.3	4.6	4.6	4.2	4.4	4.6	4.6	3	0.7




Expected damage from river floods (p.a. in%)



2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
No data	No data											

No data currently available in the Climate Impact Explorer tool for the selected indicator in this region

Expected damage from tropical cyclones (p.a. in%)



2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
No data	No data											

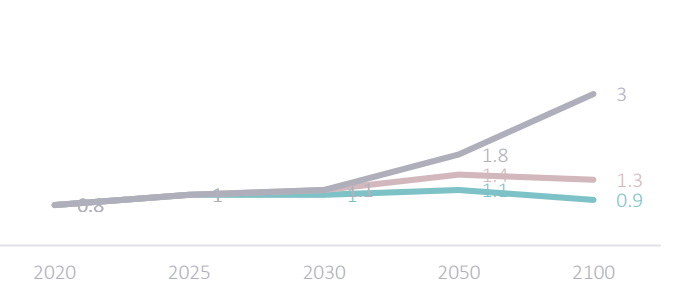
No data currently available in the Climate Impact Explorer tool for the selected indicator in this region

Climate Hazards

Scenario analysis

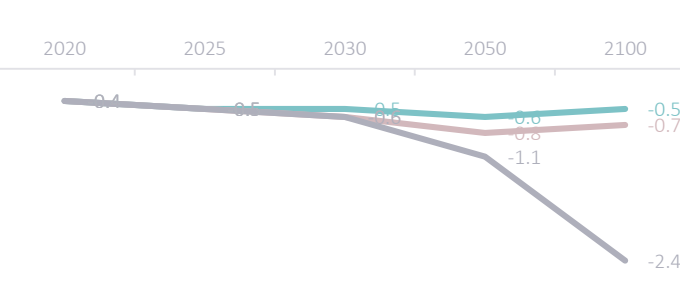
Mean air temperature (°C)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.8	1	1	1.1	0.9	1	1.1	1.4	1.3	1	1.1	1.8	3



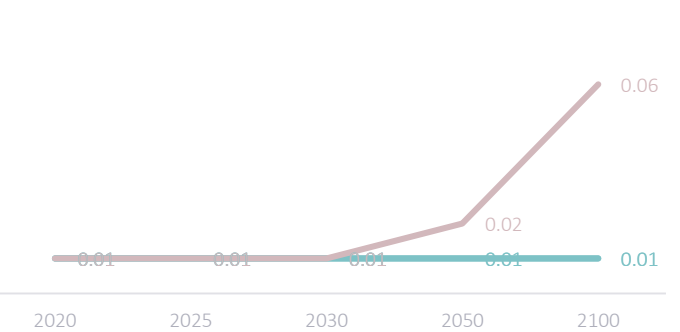
Labor productivity due to heat stress (pp)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
-0.4	-0.5	-0.5	-0.6	-0.5	-0.5	-0.6	-0.8	-0.7	-0.5	-0.6	-1.1	-2.4



Land fraction annually exposed to wildfires (pp)


2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.06



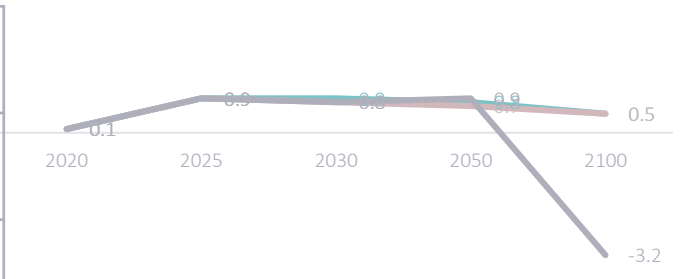
Climate Hazards

Scenario analysis


Precipitation (%)



2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.1	0.9	0.9	0.8	0.5	0.9	0.8	0.7	0.5	0.9	0.8	0.9	-3.2




Expected damage from river floods (p.a. in%)



2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
No data	No data											

No data currently available in the Climate Impact Explorer tool for the selected indicator in this region

Expected damage from tropical cyclones (p.a. in%)



2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
No data	No data											

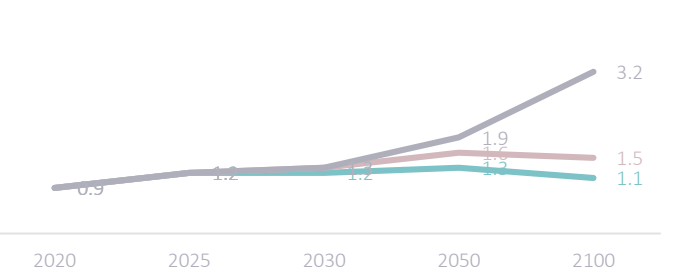
No data currently available in the Climate Impact Explorer tool for the selected indicator in this region

Climate Hazards

Scenario analysis

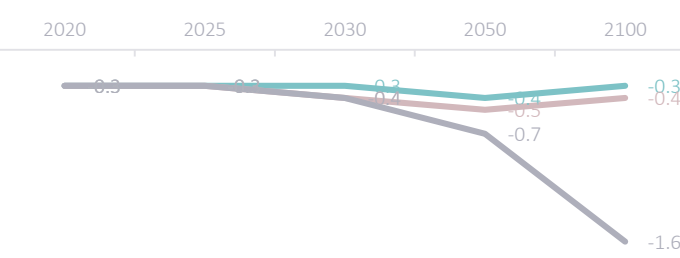
Mean air temperature (°C)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.9	1.2	1.2	1.3	1.1	1.2	1.3	1.6	1.5	1.2	1.3	1.9	3.2



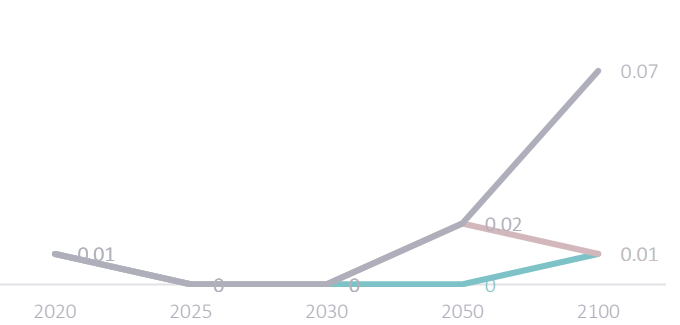
Labor productivity due to heat stress (pp)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
-0.3	-0.3	-0.3	-0.4	-0.3	-0.3	-0.4	-0.5	-0.4	-0.3	-0.4	-0.7	-1.6



Land fraction annually exposed to wildfires (pp)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.01	0	0	0	0.01	0	0	0.02	0.01	0	0	0.02	0.07

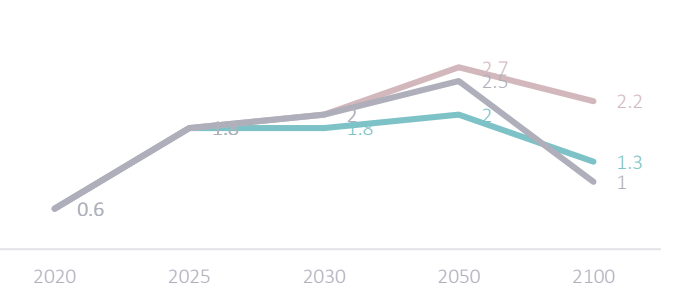


Climate Hazards

Scenario analysis

Precipitation (%)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.6	1.8	1.8	2	1.3	1.8	2	2.7	2.2	1.8	2	2.5	1



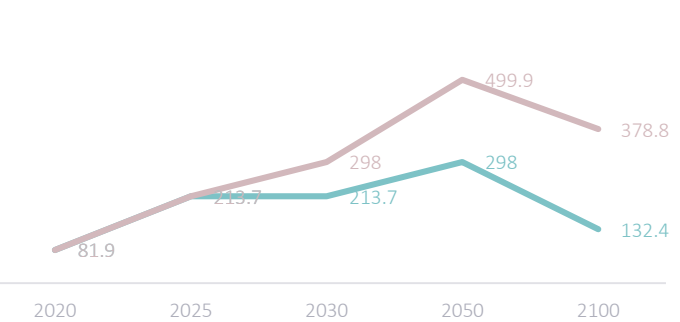
Expected damage from river floods (p.a. in%)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
no data displayed	no data displayed											

No data currently displayed in Climate Impact Explorer, as projected changes attain very high values which hint at challenges with the underlying data for this indicator and selected region

Expected damage from tropical cyclones (p.a. in%)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
81.9	213.7	213.7	298	132.4	213.7	298	499.9	378.8	no data displayed, as projected changes attain very high values, which hint at challenges with the underlying data			

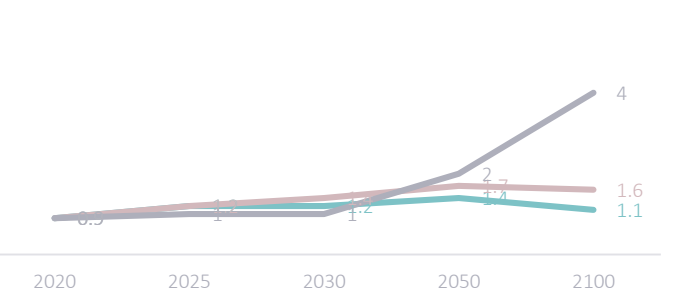


Climate Hazards

Scenario analysis

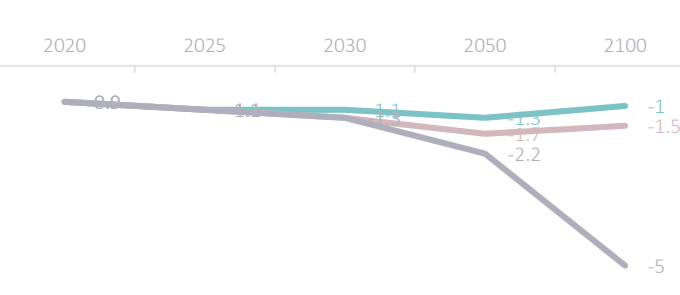
Mean air temperature (°C)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.9	1.2	1.2	1.4	1.1	1.2	1.4	1.7	1.6	1	1	2	4



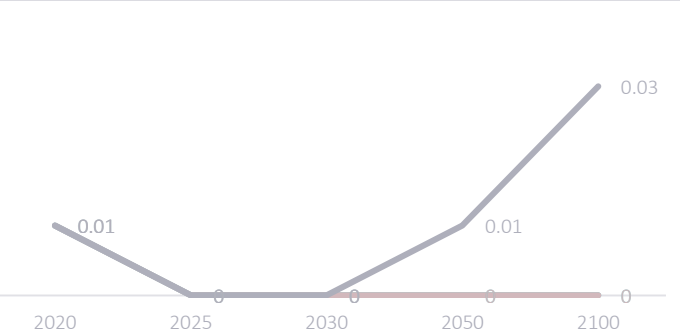
Labor productivity due to heat stress (pp)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
-0.9	-1.1	-1.1	-1.3	-1	-1.1	-1.3	-1.7	-1.5	-1.1	-1.3	-2.2	-5



Land fraction annually exposed to wildfires (pp)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.01	0	0	0	0	0	0	0	0	0	0	0.01	0.03

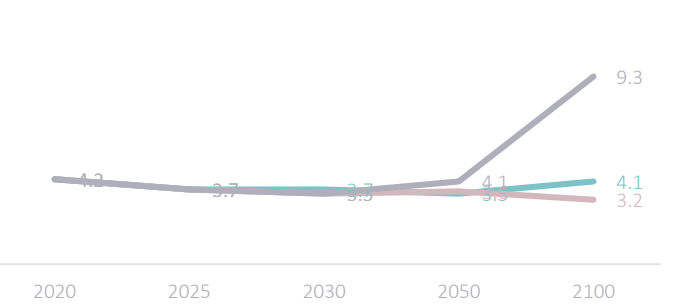


Climate Hazards

Scenario analysis

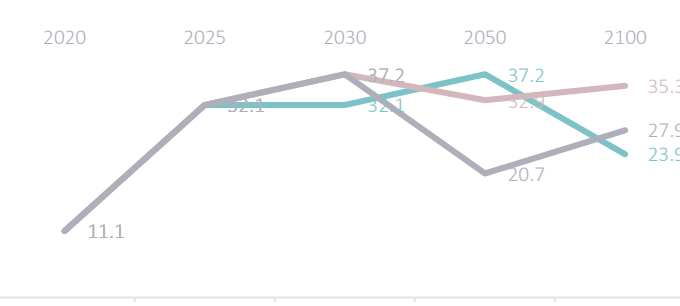
Precipitation (%)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
4.2	3.7	3.7	3.5	4.1	3.7	3.5	3.6	3.2	3.7	3.5	4.1	9.3



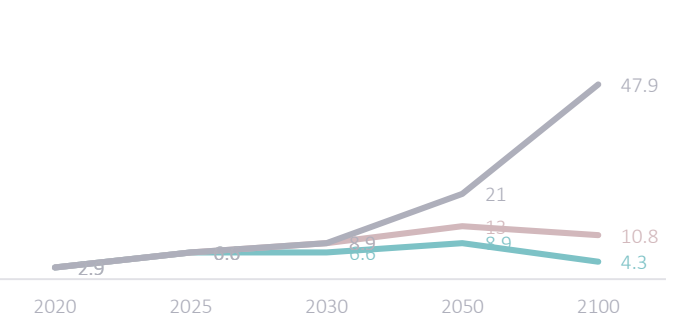
Expected damage from river floods (p.a. in%)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
11.1	32.1	32.1	37.2	23.9	32.1	37.2	32.9	35.3	32.1	37.2	20.7	27.9



Expected damage from tropical cyclones (p.a. in%)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
2.9	6.6	6.6	8.9	4.3	6.6	8.9	13	10.8	6.6	8.9	21	47.9

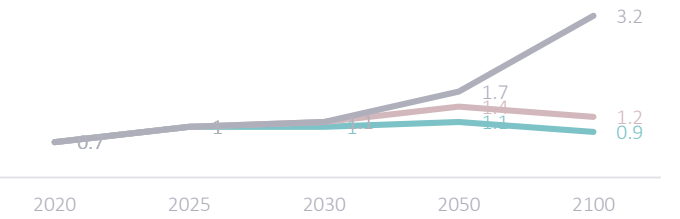


Climate Hazards

Scenario analysis

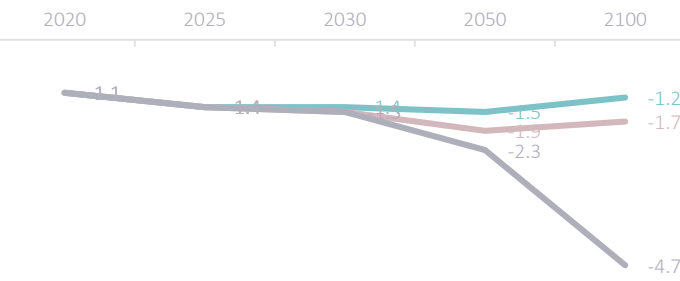
Mean air temperature (°C)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.7	1	1	1.1	0.9	1	1.1	1.4	1.2	1	1.1	1.7	3.2



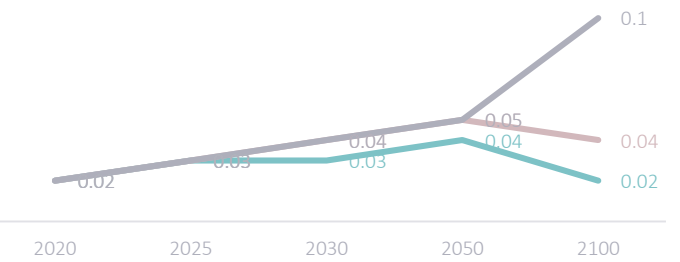
Labor productivity due to heat stress (pp)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
-1.1	-1.4	-1.4	-1.5	-1.2	-1.4	-1.5	-1.9	-1.7	-1.4	-1.5	-2.3	-4.7



Land fraction annually exposed to wildfires (pp)


2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.02	0.03	0.03	0.04	0.02	0.03	0.04	0.05	0.04	0.03	0.04	0.05	0.1



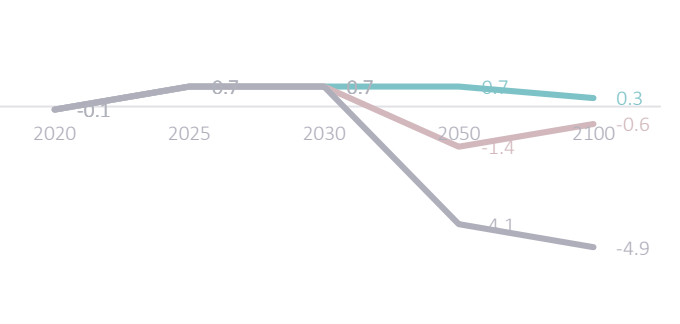
Climate Hazards

Scenario analysis


Precipitation (%)



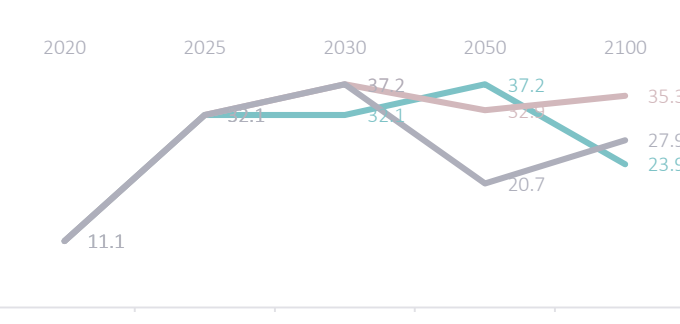
2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
-0.1	0.7	0.7	0.7	0.3	0.7	0.7	-1.4	-0.6	0.7	0.7	-4.1	-4.9




Expected damage from river floods (p.a. in%)



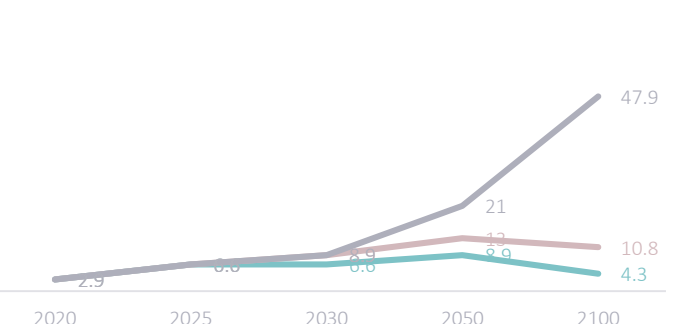
2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
11.1	32.1	32.1	37.2	23.9	32.1	37.2	32.9	35.3	32.1	37.2	20.7	27.9



Expected damage from tropical cyclones (p.a. in%)



2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
2.9	6.6	6.6	8.9	4.3	6.6	8.9	13	10.8	6.6	8.9	21	47.9

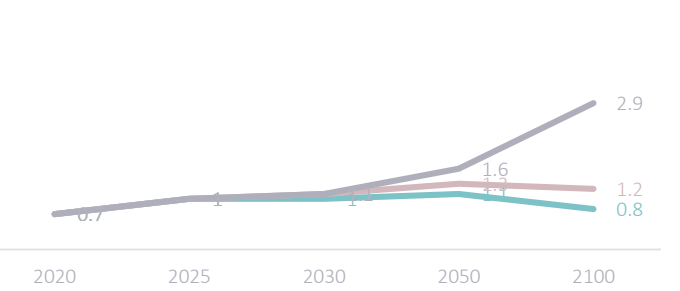


Climate Hazards

Scenario analysis

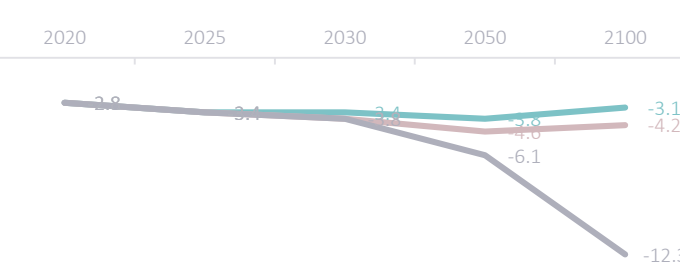
Mean air temperature (°C)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.7	1	1	1.1	0.8	1	1.1	1.3	1.2	1	1.1	1.6	2.9



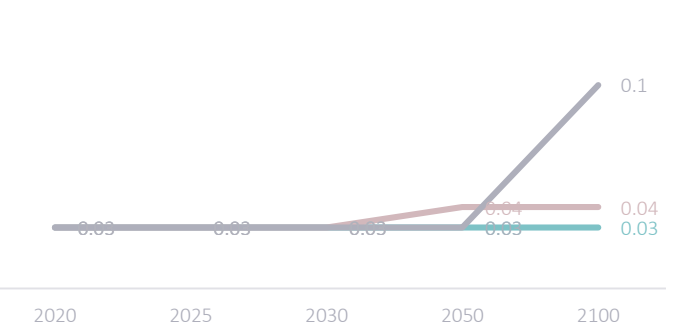
Labor productivity due to heat stress (pp)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
-2.8	-3.4	-3.4	-3.8	-3.1	-3.4	-3.8	-4.6	-4.2	-3.4	-3.8	-6.1	-12.3



Land fraction annually exposed to wildfires (pp)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.04	0.04	0.03	0.03	0.03	0.1

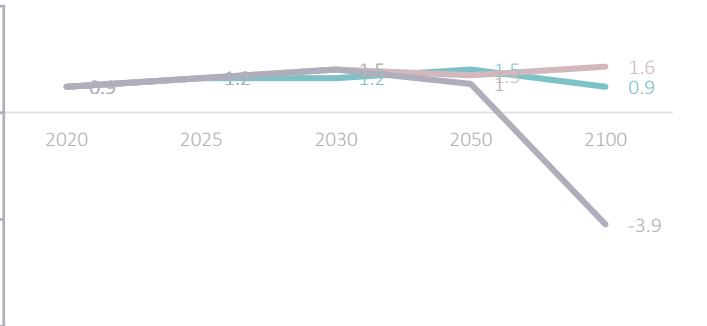


Climate Hazards

Scenario analysis

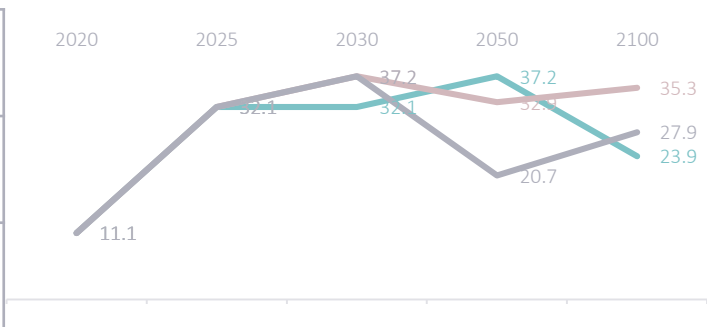
Precipitation (%)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.9	1.2	1.2	1.5	0.9	1.2	1.5	1.3	1.6	1.2	1.5	1	-3.9



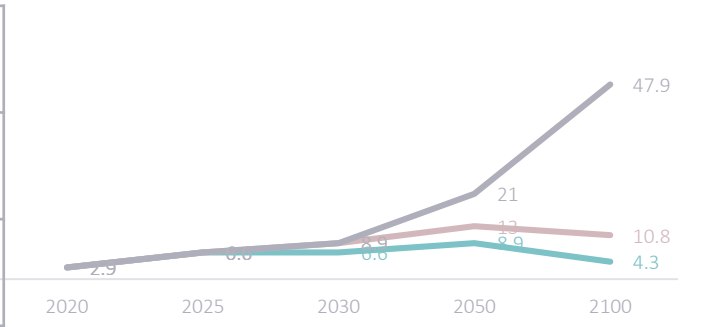
Expected damage from river floods (p.a. in%)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
11.1	32.1	32.1	37.2	23.9	32.1	37.2	32.9	35.3	32.1	37.2	20.7	27.9



Expected damage from tropical cyclones (p.a. in%)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
2.9	6.6	6.6	8.9	4.3	6.6	8.9	13	10.8	6.6	8.9	21	47.9

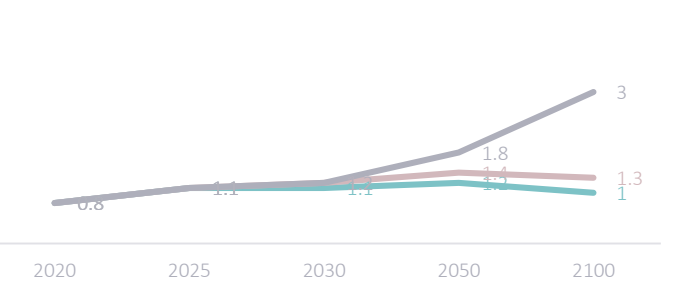


Climate Hazards

Scenario analysis

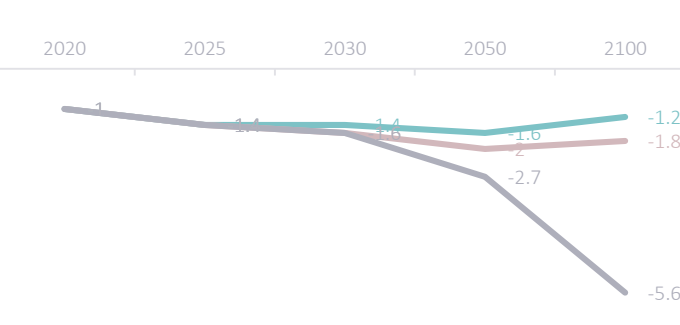
Mean air temperature (°C)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.8	1.1	1.1	1.2	1	1.1	1.2	1.4	1.3	1.1	1.2	1.8	3



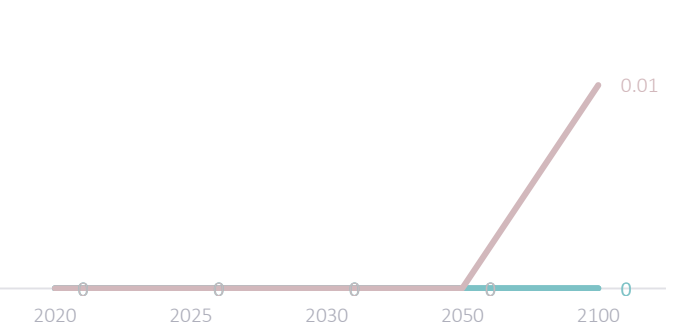
Labor productivity due to heat stress (pp)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
-1	-1.4	-1.4	-1.6	-1.2	-1.4	-1.6	-2	-1.8	-1.4	-1.6	-2.7	-5.6



Land fraction annually exposed to wildfires (pp)


2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0	0	0	0	0	0	0	0	0	0	0	0	0.01



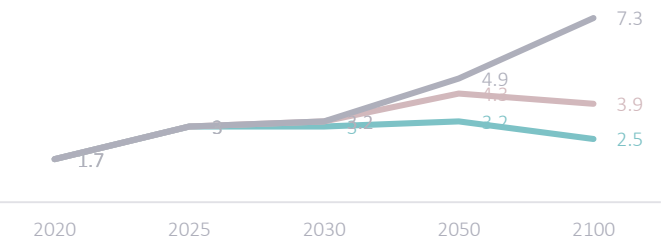
Climate Hazards

Scenario analysis


Precipitation (%)



2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
1.7	3	3	3.2	2.5	3	3.2	4.3	3.9	3	3.2	4.9	7.3




Expected damage from river floods (p.a. in%)



2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
No data	No data											

No data currently available in the Climate Impact Explorer tool for the selected indicator in this region

Expected damage from tropical cyclones (p.a. in%)




2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
No data	No data											

No data currently available in the Climate Impact Explorer tool for the selected indicator in this region

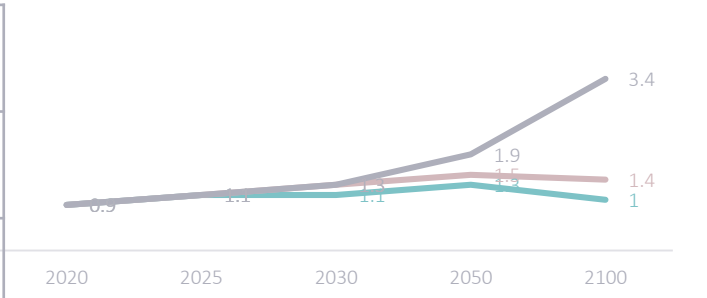
Climate Hazards

Scenario analysis


Mean air temperature (°C)



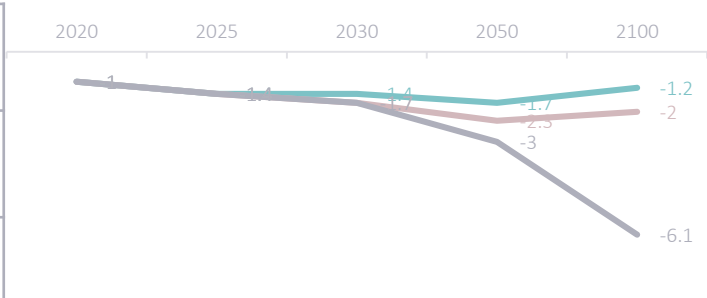
2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0.9	1.1	1.1	1.3	1	1.1	1.3	1.5	1.4	1.1	1.3	1.9	3.4



Labor productivity due to heat stress (pp)



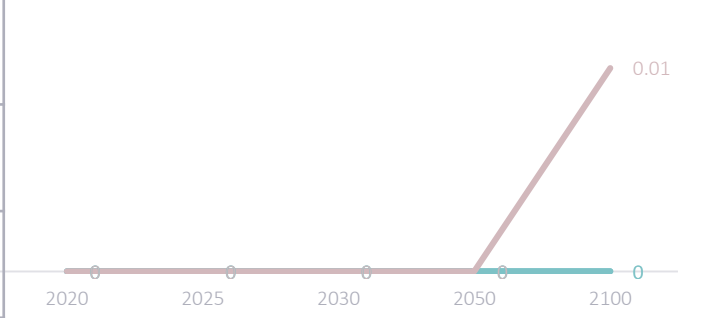
2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
-1	-1.4	-1.4	-1.7	-1.2	-1.4	-1.7	-2.3	-2	-1.4	-1.7	-3	-6.1



Land fraction annually exposed to wildfires (pp)



2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
0	0	0	0	0	0	0	0	0	0	0	0	0.01

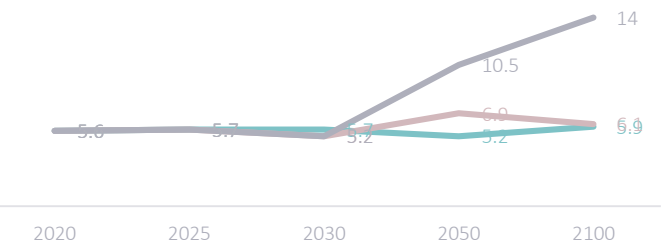


Climate Hazards

Scenario analysis

Precipitation (%)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
5.6	5.7	5.7	5.2	5.9	5.7	5.2	6.9	6.1	5.7	5.2	10.5	14



Expected damage from river floods (p.a. in%)

2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
No data	No data											

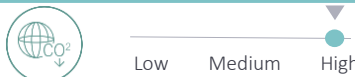





No data currently available in the Climate Impact Explorer tool for the selected indicator in this region

Expected damage from tropical cyclones (p.a. in%)



2020 Value	NGFS Net Zero 2050				NGFS Delayed transition				NGFS Current Policies			
	2025	2030	2050	2100	2025	2030	2050	2100	2025	2030	2050	2100
No data	No data											


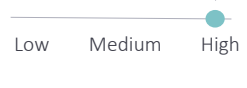
No data currently available in the Climate Impact Explorer tool for the selected indicator in this region

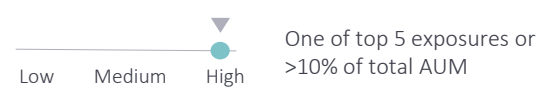
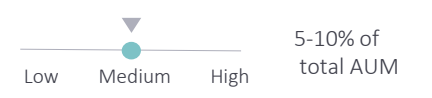
Sector-level climate risks

RISK	MATERIALITY	FINANCIAL IMPACT	TIMEFRAME	ORDERLY TRANSITION	DISORDERLY TRANSITION	HOT HOUSE WORLD
<p>Policy & Regulation</p> <p>Policies aimed at decarbonizing the supply chain, in particular imports (for example through the EU Carbon Border Adjusted Mechanism), increase fixed costs for consumer products firms</p>		<p><u>Portfolio companies:</u></p> <ul style="list-style-type: none"> Increased fixed costs and lower profitability for Portfolio companies <p><u>Capital Dynamics:</u></p> <ul style="list-style-type: none"> Decrease in equity valuation Reduced creditworthiness 		<p>High risk to margin compression, which could be partially managed through passing on higher costs to consumers. However, competitiveness may be impacted as larger firms might be able to avoid passing on costs</p>	<p>Higher risk to margin compression compared to orderly transition, as policies in support of decarbonization are projected to compensate for inaction before 2030</p>	<p>N/A for hot house world scenario, as no transition to lower carbon economy is assumed</p>
<p>Market</p> <p>Market demands shift towards energy efficient commercial real estate which impacts financing costs of less environmentally friendly property, as lenders increasingly seek to reduce financed emissions</p>		<p><u>Portfolio companies:</u></p> <ul style="list-style-type: none"> Increased fixed costs and lower profitability for Portfolio companies <p><u>Capital Dynamics:</u></p> <ul style="list-style-type: none"> Decrease in equity valuation Reduced creditworthiness 		<p>High risk to margin compression, which could be partially managed through passing on higher costs to consumers. However, competitiveness may be impacted as larger firms might be able to avoid passing on costs</p>	<p>Higher risk to margin compression compared to orderly transition, as policies in support of decarbonization are projected to compensate for inaction before 2030</p>	<p>N/A for hot house world scenario, as no transition to lower carbon economy is assumed</p>
<p>Technology</p> <p>Investments into electric distribution fleets and/ or new energy efficient lighting, refrigeration, air conditioning and heating systems increase capital investment costs for consumer products firms</p>		<p><u>Portfolio companies:</u></p> <ul style="list-style-type: none"> Increased capital investment costs and lower profitability for carbon-intensive portfolio companies <p><u>Capital Dynamics:</u></p> <ul style="list-style-type: none"> Decrease in equity valuation Reduced creditworthiness 		<p>Risk to margin compression, which could be partially managed through passing on higher costs to consumers. Lack of investments into decarbonization-enabling technology increases reputational and legal risks</p>	<p>Higher risk to margin compression compared to orderly transition, as investments would need to be made within shorter timeframe to avoid additional reputational and legal risks</p>	<p>N/A for hot house world scenario, as no transition to lower carbon economy is assumed</p>

RISK	MATERIALITY	FINANCIAL IMPACT	TIMEFRAME	ORDERLY TRANSITION	DISORDERLY TRANSITION	HOT HOUSE WORLD
------	-------------	------------------	-----------	--------------------	-----------------------	-----------------

<p>Technology, Reputation, Policy & Regulation</p>  <p>Less energy-efficient infrastructure, such as lighting, refrigeration, air conditioning and heating systems, as well as distribution fleets could become stranded assets as replacements for energy-efficient alternatives would be required to adapt technology, meet changing customer demand to manage reputational risk and to meet increasingly high standards of environmental regulation</p>		<p><u>Portfolio companies:</u></p> <ul style="list-style-type: none"> Increased disposal costs and capital write-downs <p><u>Capital Dynamics:</u></p> <ul style="list-style-type: none"> Decrease in equity valuation Reduced creditworthiness 	<p>M</p>	<p>Assets could get stranded due to the need for replacing existing infrastructure with more energy-efficient alternatives. One-off capital write-downs would be hard to mitigate</p>	<p>More rapid capital write-downs as drastic action in support of decarbonization would occur later than in the orderly transition (post 2030)</p>	<p>N/A for hot house world scenario, as no transition to lower carbon economy is assumed</p>
--	---	--	----------	---	--	--

<p>Market</p>  <p>Meeting the changing market demand for climate-conscious product offerings requires consumer product companies to invest into environmentally friendly packaging solutions, change of product lines to meet consumer preferences and advertising of new product lines</p>		<p><u>Portfolio companies:</u></p> <ul style="list-style-type: none"> Increased variable costs and lower profitability for portfolio companies <p><u>Capital Dynamics:</u></p> <ul style="list-style-type: none"> Decrease in equity valuation Reduced creditworthiness 	<p>M</p>	<p>Risk can be managed through slow and steady phasing-in of the climate-friendly initiatives over time</p>	<p>More rapid increase in variable costs expected, as firms lagging to start the initiatives early would need to quickly ramp up their product offerings to meet decarbonization targets within shorter timeframe to compensate for inaction prior to 2030</p>	<p>N/A for hot house world scenario, as no transition to lower carbon economy is assumed</p>
---	---	--	----------	---	--	--



RISK	MATERIALITY	FINANCIAL IMPACT	TIMEFRAME	ORDERLY TRANSITION	DISORDERLY TRANSITION	HOT HOUSE WORLD
------	-------------	------------------	-----------	--------------------	-----------------------	-----------------

Market, Reputation



Companies failing to adapt to increased demand for environmentally sustainable products could lose customer base. Higher demand for local produce could lower revenues for some companies

Portfolio companies:

- **Lower revenues**
- Capital Dynamics:
- Decrease in equity valuation
 - Reduced creditworthiness

M

Lower revenues would be a risk for companies that fail to adapt, whereas companies that make the transition early on could face an attractive financially material climate opportunity

More rapid revenue declines compared to the orderly transition scenario

N/A for hot house world scenario, as no transition to lower carbon economy is assumed

Policy and Regulation, Reputation



Risk of increasing litigation due to growing amount of environmental policy and disclosure regimes that require increased harmonization of taxonomies and standardization of disclosures. Reputational risks for Portfolio companies exist due to the risk of greenwashing accusations, if market standards are not adhered to

Portfolio companies:

- Increased **governance and litigation costs** and lower profitability for portfolio companies
- Capital Dynamics:
- Decrease in equity valuation
 - Reduced creditworthiness

M

Risk can be managed through early increase in focus on RI-related disclosures and meeting industry standards. Litigation costs may arise through third party assessments and assurances of environmental disclosures

More rapid increase in litigation costs compared to orderly transition due to shorter timeframe being available to familiarize and adjust reporting standards. Increased third party assessments and assurance would be required to meet disclosure standards within a short timeframe

N/A for hot house world scenario, as no transition to lower carbon economy is assumed



RISK	MATERIALITY	FINANCIAL IMPACT	TIMEFRAME	ORDERLY TRANSITION	DISORDERLY TRANSITION	HOT HOUSE WORLD
<p>Rising sea levels (chronic)</p> <p>Rising sea levels could cause local and permanent disruption to distribution networks, disruption to store location choices, consumer geographical migration as well as increasing inability to obtain insurance</p>		<p><u>Portfolio companies:</u></p> <ul style="list-style-type: none"> Lower revenues Higher insurance costs <p><u>Capital Dynamics:</u></p> <ul style="list-style-type: none"> Decrease in equity valuation Reduced creditworthiness 	L	High risk to profitability due to increased costs and lower revenues	High risk to profitability due to increased costs and lower revenues	Highest risk to profitability due to increased costs and lower revenues, possible risk of being uninsurable
<p>High mean air temperatures (chronic)</p> <p>Perturbation in climate can lead to significant disruption in crop yields and corresponding disruption to food supply chains</p>		<p><u>Portfolio companies:</u></p> <ul style="list-style-type: none"> Lower revenues <p><u>Capital Dynamics:</u></p> <ul style="list-style-type: none"> Decrease in equity valuation Reduced creditworthiness 	L	Even small perturbations in climate can lead to significant disruption in crop yields and corresponding disruption to food supply chains	Even small perturbations in climate can lead to significant disruption in crop yields and corresponding disruption to food supply chains	Perturbations in climate can lead to significant disruption in crop yields and corresponding disruption to food supply chains
<p>Cyclones, storms (acute)</p> <p>Extreme weather events, such as cyclones and storms could result in disruption of the distribution network and stock losses through direct damage</p>		<p><u>Portfolio companies:</u></p> <ul style="list-style-type: none"> Lower revenues <p><u>Capital Dynamics:</u></p> <ul style="list-style-type: none"> Decrease in equity valuation Reduced creditworthiness 	L	High risk to profitability due to lower revenues resulting from disruption to distribution and stock losses	High risk to profitability due to lower revenues resulting from disruption to distribution and stock losses	Highest risk to profitability due to lower revenues resulting from disruption to distribution and stock losses

RISK	MATERIALITY	FINANCIAL IMPACT	TIMEFRAME	ORDERLY TRANSITION	DISORDERLY TRANSITION	HOT HOUSE WORLD
<p>Cyclones, storms (acute)</p> <p>Extreme weather events could cause product shortages due to disruption of the supply chain (particularly posing issues for retailers with low diversified product offerings) and reduced footfall due to consumers being unable to access shopping locations. Frequent disruption could cause insurance ineligibility.</p>		<p><u>Portfolio companies:</u></p> <ul style="list-style-type: none"> • Lower revenues • Higher costs <p><u>Capital Dynamics:</u></p> <ul style="list-style-type: none"> • Decrease in equity valuation • Reduced creditworthiness 	L	High risk to profitability due to increased costs and lower revenues	High risk to profitability due to increased costs and lower revenues	Highest risk to profitability due to increased costs and lower revenues, possible risk of being uninsurable
<p>Flooding (acute)</p> <p>Flash flooding can pose problems for manufacturers exposed to such geographies, leading to supply chain issues, and direct impacts for retailers based in these locations</p>		<p><u>Portfolio companies:</u></p> <ul style="list-style-type: none"> • Higher costs <p><u>Capital Dynamics:</u></p> <ul style="list-style-type: none"> • Decrease in equity valuation • Reduced creditworthiness 	L	High risk to profitability due to increased costs	High risk to profitability due to increased costs	Highest risk to profitability due to increased costs

Climate-related risks: Consumer products sector

Timeframe

S Short-term (3-7 years)

M Medium-term (7-15 years)

L Long-term (2050)

RISK	MATERIALITY	FINANCIAL IMPACT	TIMEFRAME	ORDERLY TRANSITION	DISORDERLY TRANSITION	HOT HOUSE WORLD
<p>Drought (acute)</p> <p>Drought could lead to competition for water resources as well as increased environmental regulation focusing on protecting water supply and quality</p>		<p><u>Portfolio companies:</u></p> <ul style="list-style-type: none"> Higher costs <p><u>Capital Dynamics:</u></p> <ul style="list-style-type: none"> Decrease in equity valuation Reduced creditworthiness 	L	High risk to profitability due to increased costs	High risk to profitability due to increased costs	Highest risk to profitability due to increased costs
<p>Flooding, cyclones, storms (acute)</p> <p>Extreme weather events could cause store closures as a result from direct damage to the store, inability of staff to get to the location due to transport disruption or power outages. Internet outages can also result in customers being unable to access online shopping services</p>		<p><u>Portfolio companies:</u></p> <ul style="list-style-type: none"> Reduced revenues <p><u>Capital Dynamics:</u></p> <ul style="list-style-type: none"> Decrease in equity valuation Reduced creditworthiness 	L	High risk to profitability due to reduced revenues	High risk to profitability due to reduced revenues	Highest risk to profitability due to reduced revenues
<p>All climate hazards (chronic, acute)</p> <p>Increased costs due to adaptation to new climatic conditions and increased insurance costs</p>		<p><u>Portfolio companies:</u></p> <ul style="list-style-type: none"> Higher costs <p><u>Capital Dynamics:</u></p> <ul style="list-style-type: none"> Decrease in equity valuation Reduced creditworthiness 	L	High risk to profitability due to increased costs	High risk to profitability due to increased costs	Highest risk to profitability due to increased costs

Materiality







<5% of total AUM

5-10% of total AUM

One of top 5 exposures or >10% of total AUM

RISK	MATERIALITY	FINANCIAL IMPACT	TIMEFRAME	ORDERLY TRANSITION	DISORDERLY TRANSITION	HOT HOUSE WORLD
<p>Policy & Regulation</p> <p>Carbon pricing policies on exports (for example through the EU Carbon Border Adjusted Mechanism), increase costs for manufacturing firms</p>		<p><u>Portfolio companies:</u></p> <ul style="list-style-type: none"> Higher costs <p><u>Capital Dynamics:</u></p> <ul style="list-style-type: none"> Decrease in equity valuation Reduced creditworthiness 	M	High risk of increasing costs for carbon intensive exports	High risk of increasing costs for carbon intensive exports	N/A for hot house world scenario, as no transition to lower carbon economy is assumed
<p>Market</p> <p>Reduced demand for consumer discretionary manufacturing products as abatement costs are likely passed onto the consumer</p>		<p><u>Portfolio companies:</u></p> <ul style="list-style-type: none"> Reduced revenues <p><u>Capital Dynamics:</u></p> <ul style="list-style-type: none"> Decrease in equity valuation Reduced creditworthiness 	M	High risk to profitability due to reduced revenues	High risk to profitability due to reduced revenues	N/A for hot house world scenario, as no transition to lower carbon economy is assumed
<p>Market, Reputation</p> <p>Meeting shifts in demand for climate-conscious products and managing reputational risks for businesses failing to address climate, requires readjusting capital expenditures to pivot business model towards low-carbon manufacturing processes and the integration of renewable energy sources in largescale manufacturing</p>		<p><u>Portfolio companies:</u></p> <ul style="list-style-type: none"> Higher costs <p><u>Capital Dynamics:</u></p> <ul style="list-style-type: none"> Decrease in equity valuation Reduced creditworthiness 	M	High risk of increasing costs for carbon intensive manufacturing processes	High risk of increasing costs for carbon intensive manufacturing processes	N/A for hot house world scenario, as no transition to lower carbon economy is assumed



RISK	MATERIALITY	FINANCIAL IMPACT	TIMEFRAME	ORDERLY TRANSITION	DISORDERLY TRANSITION	HOT HOUSE WORLD
<p>Technology</p> <p>Risk of stranded assets in carbon-intensive manufacturing industries</p>		<p><u>Portfolio companies:</u></p> <ul style="list-style-type: none"> Asset impairment <p><u>Capital Dynamics:</u></p> <ul style="list-style-type: none"> Decrease in equity valuation Reduced creditworthiness 		High risk to early asset impairment	High risk to early asset impairment	N/A for hot house world scenario, as no transition to lower carbon economy is assumed
<p>Wildfires (acute)</p> <p>Increased frequency of wildfires could influence the regional availability of raw materials and influence volatility in commodity markets. Wildfires could also cause damage to facilities and equipment</p>		<p><u>Portfolio companies:</u></p> <ul style="list-style-type: none"> Reduced revenues Higher costs Early asset retirement <p><u>Capital Dynamics:</u></p> <ul style="list-style-type: none"> Decrease in equity valuation Reduced creditworthiness 		High risk to profitability due to reduced revenues (due to disruption) and increased costs (repair, insurance)	High risk to profitability due to reduced revenues (due to disruption) and increased costs (repair, insurance)	Extreme Wildfire events may result in significant material losses for some manufacturing activities due to raw material scarcity and damage to facilities and equipment
<p>Flooding (acute)</p> <p>Increased frequency of flooding damage to facilities and equipment</p>		<p><u>Portfolio companies:</u></p> <ul style="list-style-type: none"> Higher costs <p><u>Capital Dynamics:</u></p> <ul style="list-style-type: none"> Decrease in equity valuation Reduced creditworthiness 		High risk to profitability due to increased costs	High risk to profitability due to increased costs	Highest risk to profitability, as flooding could cause significant damage to facilities and equipment

Climate-related risks: Manufacturing sector

Timeframe




S Short-term (3-7 years)

M Medium-term (7-15 years)

L Long-term (2050)

RISK	MATERIALITY	FINANCIAL IMPACT	TIMEFRAME	ORDERLY TRANSITION	DISORDERLY TRANSITION	HOT HOUSE WORLD
<p>Mean air temperature rise (chronic)</p> <p>Reduced labor productivity as a result of higher average temperatures</p>		<p><u>Portfolio companies:</u></p> <ul style="list-style-type: none"> Reduced revenue Higher labor costs <p><u>Capital Dynamics:</u></p> <ul style="list-style-type: none"> Decrease in equity valuation Reduced creditworthiness 	L	High risk to productivity and associated costs	High risk to productivity and associated costs	Significant reductions to labor productivity due to extreme temperatures. Highest risk to increase in production/ labor costs
<p>Drought (chronic)</p> <p>Drought could affect production levels as industry accounts for approximately 40% of total water abstractions. It could also likely lead to increased environmental regulation focusing on protecting water supply and quality, causing hefty additional costs for water-intensive manufacturing processes</p>		<p><u>Portfolio companies:</u></p> <ul style="list-style-type: none"> Higher costs <p><u>Capital Dynamics:</u></p> <ul style="list-style-type: none"> Decrease in equity valuation Reduced creditworthiness 	L	High risk to profitability due to increased costs	High risk to profitability due to increased costs	Highest risk to profitability due to increased costs
<p>Rising sea levels (chronic)</p> <p>Rising sea levels could damage facilities and equipment, which is particularly apparent for the manufacturing hubs that are dominantly located at Asia's costal pathways</p>		<p><u>Portfolio companies:</u></p> <ul style="list-style-type: none"> Asset impairment <p><u>Capital Dynamics:</u></p> <ul style="list-style-type: none"> Decrease in equity valuation Reduced creditworthiness 	L	High risk to asset impairment	High risk to asset impairment	Highest risk to asset impairment due to very high rising sea levels



RISK	MATERIALITY	FINANCIAL IMPACT	TIMEFRAME	ORDERLY TRANSITION	DISORDERLY TRANSITION	HOT HOUSE WORLD
<p>Mean air temperature rise (chronic) </p> <p>The expansion of tropical pests and diseases due to rising temperatures could influence the regional availability of raw materials and increase the volatility of global commodity markets. For example, it is thought a lack of genetic variation amongst rubber trees means rubber production is highly susceptible to diseases which could significantly reduce availability of rubber on a global scale</p>		<p><u>Portfolio companies:</u></p> <ul style="list-style-type: none"> • Reduced revenue <p><u>Capital Dynamics:</u></p> <ul style="list-style-type: none"> • Decrease in equity valuation • Reduced creditworthiness 		High risk to profitability due to reduced revenues	High risk to profitability due to reduced revenues	Highest risk to profitability, as expansion of tropical diseases could cause highest disruption

Climate-related risks: Utilities sector (renewable energy)

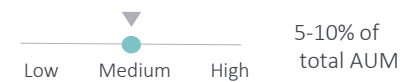
Timeframe

S Short-term (3-7 years)

M Medium-term (7-15 years)

L Long-term (2050)

RISK	MATERIALITY	FINANCIAL IMPACT	TIMEFRAME	ORDERLY TRANSITION	DISORDERLY TRANSITION	HOT HOUSE WORLD
<p>Mean air temperature rise (chronic)</p> <p>The increase in average air temperature could reduce the demand for heating</p>		<p><u>Renewable energy project:</u></p> <ul style="list-style-type: none"> Reduced revenue <p><u>Capital Dynamics:</u></p> <ul style="list-style-type: none"> Decrease in equity valuation 		High risk to profitability due to reduced revenues	High risk to profitability due to reduced revenues	Highest risk to profitability due to highest temperature increases
<p>Rising sea levels (chronic)</p> <p>Rising sea levels damage wind turbine foundations in low-lying coastal areas, and can cause physical permanent destruction to PV solar projects located in coastal areas, which raises costs (repair/ insurance) and represents risk of stranded assets</p>		<p><u>Renewable energy project:</u></p> <ul style="list-style-type: none"> Increased costs Asset impairment <p><u>Capital Dynamics:</u></p> <ul style="list-style-type: none"> Decrease in equity valuation 		High risk to profitability due to increased costs and high risk to early asset retirement	High risk to profitability due to increased costs and high risk to early asset retirement	Highest risk to profitability due to highest sea level rise and highest risk to early asset retirement
<p>Chronic changes in Wind patterns (chronic)</p> <p>Wind patterns are assumed to slow down over time in the hot house world scenario in certain geographies. Changes in wind patterns and speed affect energy generation output</p>		<p><u>Renewable energy project:</u></p> <ul style="list-style-type: none"> Reduced revenue <p><u>Capital Dynamics:</u></p> <ul style="list-style-type: none"> Decrease in equity valuation 		Low risk to profitability in a transition scenario, as worst climate impacts are mitigated	Low risk to profitability in a transition scenario, as worst climate impacts are mitigated	Highest risk to profitability due to chronic changes in wind patterns which reduce energy generation and thereby revenues







Climate-related risks: Utilities sector (renewable energy)

Timeframe

S Short-term (3-7 years)


M Medium-term (7-15 years)

L Long-term (2050)

RISK	MATERIALITY	FINANCIAL IMPACT	TIMEFRAME	ORDERLY TRANSITION	DISORDERLY TRANSITION	HOT HOUSE WORLD
<p>Wildfires, flooding, cyclones, storms (acute)</p> <p>Increased severity of extreme weather events, such as hailstorms, severe storms and flood cause physical damage to assets and can lead to early asset impairment (for example of solar PV panels and wind turbines). The severe weather conditions can lead to operational disruption and increased operational costs for repairs and insurance and supply chain disruption</p>		<p><u>Renewable energy project:</u></p> <ul style="list-style-type: none"> Increased costs Reduced revenue <p><u>Capital Dynamics:</u></p> <ul style="list-style-type: none"> Decrease in equity valuation 		High risk to profitability due to increased costs and reduced revenue	High risk to profitability due to increased costs and reduced revenue	Highest risk to profitability due to increased costs and reduced revenue and frequent disruptions to operations
<p>Wildfires, flooding, cyclones, storms (acute)</p> <p>Severe weather events in East Asia, including intensified tropical cyclones and heavy precipitation disrupt supply chains for solar PV equipment procurement</p>		<p><u>Renewable energy project:</u></p> <ul style="list-style-type: none"> Increased costs <p><u>Capital Dynamics:</u></p> <ul style="list-style-type: none"> Decrease in equity valuation 		High risk to profitability due to increased costs of procurement and supply chain disruption	High risk to profitability due to increased costs of procurement and supply chain disruption	Highest risk to profitability due to increased costs as a result of severe supply chain disruptions and significant additional procurement costs

Materiality  <5% of total AUM

 5-10% of total AUM

 One of top 5 exposures or >10% of total AUM

RISK	MATERIALITY	FINANCIAL IMPACT	TIMEFRAME	ORDERLY TRANSITION	DISORDERLY TRANSITION	HOT HOUSE WORLD
<p>Policy & Regulation</p> <p>The increase in carbon pricing policy could lead to higher costs for companies operating in the telecommunications sector</p>		<p><u>Portfolio:</u></p> <ul style="list-style-type: none"> Higher costs <p><u>Capital Dynamics:</u></p> <ul style="list-style-type: none"> Decrease in equity valuation 	M	High risk to profitability due to higher costs	High risk to profitability due to higher costs	N/A for hot house world scenario, as no transition to lower carbon economy is assumed
<p>Market</p> <p>The increasing demand for consideration of climate-related risks could pose a risk for companies failing to adapt</p>		<p><u>Portfolio companies</u></p> <ul style="list-style-type: none"> Reduced revenues <p><u>Capital Dynamics:</u></p> <ul style="list-style-type: none"> Decrease in equity valuation 	M	High risk to profitability due to reduced revenue	High risk to profitability due to reduced revenue	N/A for hot house world scenario, as no transition to lower carbon economy is assumed
<p>Reputation</p> <p>Reputational risks for businesses failing to address climate considerations of customers</p>		<p><u>Portfolio companies</u></p> <ul style="list-style-type: none"> Reduced revenues <p><u>Capital Dynamics:</u></p> <ul style="list-style-type: none"> Decrease in equity valuation 	M	High risk to profitability due to reduced revenue	High risk to profitability due to reduced revenue	N/A for hot house world scenario, as no transition to lower carbon economy is assumed
<p>Rising sea levels (chronic)</p> <p>Rising sea levels could cause network damage or service impacts / disruption</p>		<p><u>Portfolio companies:</u></p> <ul style="list-style-type: none"> Higher costs Reduced revenues <p><u>Capital Dynamics:</u></p> <ul style="list-style-type: none"> Decrease in equity valuation Reduced creditworthiness 	L	High risk to profitability due to higher costs and reduced revenue	High risk to profitability due to higher costs and reduced revenue	Highest risk to profitability due to highest impact of sea level rises



Climate-related risks: Telecommunications sector

Timeframe

S Short-term (3-7 years)

M Medium-term (7-15 years)

L Long-term (2050)

RISK	MATERIALITY	FINANCIAL IMPACT	TIMEFRAME	ORDERLY TRANSITION	DISORDERLY TRANSITION	HOT HOUSE WORLD
<p>Wildfires, flooding, cyclones, storms (acute)</p> <p>Increased frequency and severity of extreme weather events can cause increasing disruption to productivity</p>		<p><u>Portfolio:</u></p> <ul style="list-style-type: none"> Higher operational costs Reduced revenue <p><u>Capital Dynamics:</u></p> <ul style="list-style-type: none"> Decrease in equity valuation 		High risk to profitability due to higher costs and reduced revenue	High risk to profitability due to higher costs and reduced revenue	Highest risk to profitability due to highest impact of extreme weather events and the resulting disruption and inability to meet customer demand

Materiality



<5% of total AUM



5-10% of total AUM



One of top 5 exposures or >10% of total AUM

RISK	MATERIALITY	FINANCIAL IMPACT	TIMEFRAME	ORDERLY TRANSITION	DISORDERLY TRANSITION	HOT HOUSE WORLD
<p>Policy & Regulation</p> <p>The increase in carbon pricing policy could lead to higher costs for companies operating in the transport sector</p>		<p><u>Portfolio:</u></p> <ul style="list-style-type: none"> Higher costs <p><u>Capital Dynamics:</u></p> <ul style="list-style-type: none"> Decrease in equity valuation 	M	High risk to profitability due to higher costs	High risk to profitability due to higher costs	N/A for hot house world scenario, as no transition to lower carbon economy is assumed
<p>Market</p> <p>The increasing demand for consideration of climate-related risks could pose a risk for companies failing to adapt</p>		<p><u>Portfolio companies</u></p> <ul style="list-style-type: none"> Reduced revenues <p><u>Capital Dynamics:</u></p> <ul style="list-style-type: none"> Decrease in equity valuation 	M	High risk to profitability due to reduced revenue	High risk to profitability due to reduced revenue	N/A for hot house world scenario, as no transition to lower carbon economy is assumed
<p>Reputation</p> <p>Reputational risks for businesses failing to address climate considerations of customers. Capital expenditure increase would be required to pivot firms' business models towards sustainability, for example switching to low-carbon fuel use</p>		<p><u>Portfolio companies</u></p> <ul style="list-style-type: none"> Reduced revenues Higher costs <p><u>Capital Dynamics:</u></p> <ul style="list-style-type: none"> Decrease in equity valuation 	M	High risk to profitability due to reduced revenue and higher costs	High risk to profitability due to reduced revenue and higher costs	N/A for hot house world scenario, as no transition to lower carbon economy is assumed
<p>Technology</p> <p>Firms might face higher fuel costs, in particular those using carbon-intensive fuels</p>		<p><u>Portfolio companies</u></p> <ul style="list-style-type: none"> Higher costs <p><u>Capital Dynamics:</u></p> <ul style="list-style-type: none"> Decrease in equity valuation 	M	High risk to profitability due to higher costs	High risk to profitability due to higher costs	N/A for hot house world scenario, as no transition to lower carbon economy is assumed



Climate-related risks: Transport sector

Timeframe

S Short-term (3-7 years)

M Medium-term (7-15 years)

L Long-term (2050)

RISK	MATERIALITY	FINANCIAL IMPACT	TIMEFRAME	ORDERLY TRANSITION	DISORDERLY TRANSITION	HOT HOUSE WORLD
<p>Wildfires, flooding, cyclones, storms (acute)</p> <p>Increased frequency and severity of extreme weather events can impact vehicle performance and disrupt operations (through frequent re-routings and temporary route closures)</p>		<p><u>Portfolio:</u></p> <ul style="list-style-type: none"> Higher operational costs Reduced revenue <p><u>Capital Dynamics:</u></p> <ul style="list-style-type: none"> Decrease in equity valuation 		High risk to profitability due to higher costs and reduced revenue	High risk to profitability due to higher costs and reduced revenue	Highest risk to profitability due to highest impact of extreme weather events and the resulting disruption and inability to meet customer demand

Materiality



<5% of total AUM



5-10% of total AUM



One of top 5 exposures or >10% of total AUM

Climate Risk category



Sector-level climate opportunities

OPPORTUNITY

MATERIALITY

FINANCIAL IMPACT

TIMEFRAME

ORDERLY TRANSITION

DISORDERLY TRANSITION

HOT HOUSE WORLD

Resource efficiency



Portfolio and borrower companies can achieve direct cost savings in the longer term by shifting to lower carbon intensive supplies and reducing the carbon intensity of their physical stores or sales platforms

Portfolio companies:

- Lower costs and greater profitability for Portfolio companies

Capital Dynamics:

- Increase in equity valuation
- Improved creditworthiness



Companies mitigating the risk of carbon pricing policies can enhance their costs structures and profitability and competitiveness compared to firms failing to adapt

Companies mitigating the risk of carbon pricing policies can enhance their costs structures and profitability and competitiveness compared to firms failing to adapt

N/A for hot house world scenario, as no transition to lower carbon economy is assumed

Energy source



Utilizing clean energy sources, such as wind and solar, can help companies to reduce their GHG emissions and thereby appealing to climate-conscious customers and reducing costs associated with carbon pricing policies

Portfolio companies:

- Lower costs and increased revenues for Portfolio companies

Capital Dynamics:

- Increase in equity valuation
- Improved creditworthiness



Companies switching their energy source to renewable energy benefit from improved customer relations and greater competitiveness compared to firms failing to adapt

Companies switching their energy source to renewable energy benefit from improved customer relations and greater competitiveness compared to firms failing to adapt

N/A for hot house world scenario, as no transition to lower carbon economy is assumed

Products & services



Increased demand for sustainable products represents opportunity for firms with low-carbon products and services supporting the shift towards a low-carbon economy and mitigating transition risks

Portfolio companies:

- Increased revenues for Portfolio companies

Capital Dynamics:

- Increase in equity valuation
- Improved creditworthiness









Companies meeting the increasing demand for green products can capture large market share of climate-conscious consumers

Companies meeting the increasing demand for green products can capture large market share of climate-conscious consumers

N/A for hot house world scenario, as no transition to lower carbon economy is assumed



OPPORTUNITY	MATERIALITY	FINANCIAL IMPACT	TIMEFRAME	ORDERLY TRANSITION	DISORDERLY TRANSITION	HOT HOUSE WORLD
<p>Resilience</p>  <p>Improving efficiency and building diversified supply chains increase resilience of companies to respond to transition climate risks</p>		<p><u>Portfolio companies:</u></p> <ul style="list-style-type: none"> Lower costs for Portfolio companies <p><u>Capital Dynamics:</u></p> <ul style="list-style-type: none"> Increase in equity valuation Improved creditworthiness 		<p>Companies adapting to and mitigating transition risks in their operations and supply chains experience less disruption and can thereby reduce costs otherwise incurred</p>	<p>Companies adapting to and mitigating transition risks in their operations and supply chains experience less disruption and can thereby reduce costs otherwise incurred</p>	<p>N/A for hot house world scenario, as no transition to lower carbon economy is assumed</p>
<p>Markets</p>  <p>Opportunities could arise to increase sales of items that help consumers mitigate against acute physical climate risks, such as severe weather events and flooding (sandbags, barriers), or assist adaptation to new weather norms (such as rainwear) or extended seasonal product periods (beachwear)</p>		<p><u>Portfolio companies:</u></p> <ul style="list-style-type: none"> Higher revenues for Portfolio companies <p><u>Capital Dynamics:</u></p> <ul style="list-style-type: none"> Increase in equity valuation Improved creditworthiness 		<p>Companies increasing diversification through access into new markets in response to climate-related risks may capture attractive opportunities when offering solutions to more frequent climate-related issues and could thereby increase their revenues</p>	<p>Companies increasing diversification through access into new markets in response to climate-related risks may capture attractive opportunities when offering solutions to more frequent climate-related issues and could thereby increase their revenues</p>	<p>Companies increasing diversification through access into new markets in response to climate-related risks may capture attractive opportunities when offering solutions to more frequent climate-related issues and could thereby substantially increase their revenues</p>



OPPORTUNITY

MATERIALITY

FINANCIAL IMPACT

TIMEFRAME

ORDERLY TRANSITION

DISORDERLY TRANSITION

HOT HOUSE WORLD

Resource efficiency



Manufacturing companies can mitigate the risk from carbon pricing policies through driving towards a circular economy which increases materials efficiency and adopts the widespread carbon capture and storage (CCS) utilization

Portfolio companies:

- Lower costs for Portfolio companies

Capital Dynamics:

- Increase in equity valuation
- Improved creditworthiness



Companies mitigating the risk of carbon pricing policies can enhance their costs structures and profitability and competitiveness compared to firms failing to adapt

Companies mitigating the risk of carbon pricing policies can enhance their costs structures and profitability and competitiveness compared to firms failing to adapt

N/A for hot house world scenario, as no transition to lower carbon economy is assumed

Energy source



Manufacturing companies utilizing clean energy sources, such as wind and solar, can help reduce overall emissions, reduce costs otherwise incurred with high emitting energy sources and support efforts to achieve long-term carbon neutrality in the end-to-end supply chain, which can enhance revenues as it appeals to climate-conscious clients

Portfolio companies:

- Lower costs and higher revenues for Portfolio companies

Capital Dynamics:

- Increase in equity valuation
- Improved creditworthiness









Companies switching their energy source to renewable energy benefit from improved customer relations and greater competitiveness compared to firms failing to adapt

Companies switching their energy source to renewable energy benefit from improved customer relations and greater competitiveness compared to firms failing to adapt

N/A for hot house world scenario, as no transition to lower carbon economy is assumed



OPPORTUNITY	MATERIALITY	FINANCIAL IMPACT	TIMEFRAME	ORDERLY TRANSITION	DISORDERLY TRANSITION	HOT HOUSE WORLD
<p>Products & services</p>  <p>Manufacturing companies can mitigate the environmental impact of utilizing high carbon footprint metals in potentially carbon-neutral manufacturing equipment and motors</p>		<p><u>Portfolio companies:</u></p> <ul style="list-style-type: none"> Lower costs and increased revenue for Portfolio companies <p><u>Capital Dynamics:</u></p> <ul style="list-style-type: none"> Increase in equity valuation Improved creditworthiness 	M	Companies mitigating the transition risks can enhance their costs structures, profitability and competitiveness compared to firms failing to adapt	Companies mitigating the transition risks can enhance their costs structures, profitability and competitiveness compared to firms failing to adapt	N/A for hot house world scenario, as no transition to lower carbon economy is assumed
<p>Resource efficiency</p>  <p>Integrating energy efficiency capital and processes into existing manufacturing processes in a way that considers whole-life carbon (to avoid capital-expensive rebuilds)</p>		<p><u>Portfolio companies:</u></p> <ul style="list-style-type: none"> Lower costs for Portfolio companies <p><u>Capital Dynamics:</u></p> <ul style="list-style-type: none"> Increase in equity valuation Improved creditworthiness 	M	Companies mitigating the transition risks can enhance their costs structures, profitability and competitiveness compared to firms failing to adapt	Companies mitigating the transition risks can enhance their costs structures, profitability and competitiveness compared to firms failing to adapt	N/A for hot house world scenario, as no transition to lower carbon economy is assumed
<p>Products & services</p>  <p>Revising business models to consider global supply chain emissions, particularly from raw material extraction and transportation, as well as reducing the demand for high-temperature processes, help mitigate transition risks</p>		<p><u>Portfolio companies:</u></p> <ul style="list-style-type: none"> Lower costs and increased revenue for Portfolio companies <p><u>Capital Dynamics:</u></p> <ul style="list-style-type: none"> Increase in equity valuation Improved creditworthiness 	M	Companies mitigating the transition risks can enhance their costs structures, profitability and competitiveness compared to firms failing to adapt	Companies mitigating the transition risks can enhance their costs structures, profitability and competitiveness compared to firms failing to adapt	N/A for hot house world scenario, as no transition to lower carbon economy is assumed



OPPORTUNITY

MATERIALITY

FINANCIAL IMPACT

TIMEFRAME

ORDERLY TRANSITION

DISORDERLY TRANSITION

HOT HOUSE WORLD

Resilience



Manufacturing companies can adapt to high physical climate risks through investing in more resilient physical infrastructure, significantly diversifying supplier portfolios, increasing the geographical competence of manufacturing operations and creating robust technical systems that can identify future physical stresses (particularly in the case of food manufacturing)

Portfolio companies:

- Lower costs for Portfolio companies

Capital Dynamics:

- Increase in equity valuation
- Improved creditworthiness



Companies mitigating the physical climate risks may lower their costs in the long-term by embedding adaptation measures into long-term business planning to better absorb physical shocks of acute and chronic climate hazards

Companies mitigating the physical climate risks may lower their costs in the long-term by embedding adaptation measures into long-term business planning to better absorb physical shocks of acute and chronic climate hazards

Companies mitigating the physical climate risks may substantially lower their costs in the long-term by embedding adaptation measures into long-term business planning to better absorb physical shocks of acute and chronic climate hazards

Resilience



Manufacturing companies can adapt to the declining availability of certain raw materials (due to physical climate impacts) through diversification of materials used in manufacturing processes, which reduce the supply-side risks associated with one material

Portfolio companies:

- Increased revenue for Portfolio companies

Capital Dynamics:

- Increase in equity valuation
- Improved creditworthiness



Companies mitigating the effects of climate change on raw material availability are better placed in the long-run to manage supply chain risks

Companies mitigating the effects of climate change on raw material availability are better placed in the long-run to manage supply chain risks

Companies mitigating the effects of climate change on raw material availability are substantially better placed in the long-run to manage supply chain risks



OPPORTUNITY

MATERIALITY

FINANCIAL IMPACT

TIMEFRAME

ORDERLY TRANSITION

DISORDERLY TRANSITION

HOT HOUSE WORLD

Resilience



Manufacturing companies can adapt to high physical climate risks and mitigate potential supply chain risks through (1) increasing suppliers where possible, (2) understanding the vulnerabilities, location, and operations of its first and second tier suppliers and adopt strategies to reduce their risk accordingly such as increasing inventory stocks to mitigate acute stresses, (3) assessing the feasibility of replacing standard parts in its manufacturing process, and (4) assessing the ease at which physical machinery and other manufacturing operations can be moved when faced with disaster

Portfolio companies:

- Lower costs for Portfolio companies

Capital Dynamics:

- Increase in equity valuation
- Improved creditworthiness



Companies mitigating the physical climate risks may lower their costs in the long-term by embedding adaptation measures into long-term business planning to better absorb physical shocks of acute and chronic climate hazards and mitigate the risk of supply chain disruptions

Companies mitigating the physical climate risks may lower their costs in the long-term by embedding adaptation measures into long-term business planning to better absorb physical shocks of acute and chronic climate hazards and mitigate the risk of supply chain disruptions

Companies mitigating the physical climate risks may substantially lower their costs in the long-term by embedding adaptation measures into long-term business planning to better absorb physical shocks of acute and chronic climate hazards and mitigate the risk of supply chain disruptions



OPPORTUNITY

MATERIALITY

FINANCIAL IMPACT

TIMEFRAME

ORDERLY TRANSITION

DISORDERLY TRANSITION

HOT HOUSE WORLD

Markets



The increase in carbon pricing policies incentivizes firms to procure renewable energy to lower costs. This in turn increases the demand for renewable energy projects

Renewable energy project:

- Increased revenue



Capital Dynamics:

- Increase in equity valuation

In transition scenarios, renewable energy from wind and solar gain a steep rise in demand due to the need to decarbonize the economy rapidly, which substantially increases revenues of renewable energy projects

In transition scenarios, renewable energy from wind and solar gain a steep rise in demand due to the need to decarbonize the economy rapidly, which substantially increases revenues of renewable energy projects

N/A for hot house world scenario, as no transition to lower carbon economy is assumed

Energy source



Companies increasingly switch to clean energy to meet climate commitments made in line with the Paris Agreement, allowing them to remain competitive in the transition to a low-carbon economy. This in turn increases the demand for renewable energy projects

Renewable energy project:

- Increased revenue



Capital Dynamics:

- Increase in equity valuation

In transition scenarios, renewable energy from wind and solar gain a steep rise in demand due to the need to decarbonize the economy rapidly, which substantially increases revenues of renewable energy projects

In transition scenarios, renewable energy from wind and solar gain a steep rise in demand due to the need to decarbonize the economy rapidly, which substantially increases revenues of renewable energy projects

N/A for hot house world scenario, as no transition to lower carbon economy is assumed

Products & services



Companies increasingly switch to clean energy to decarbonize and meet demands of climate-conscious consumers, raising the demand for clean energy projects

Renewable energy project:

- Increased revenue



Capital Dynamics:

- Increase in equity valuation



In transition scenarios, renewable energy from wind and solar gain a steep rise in demand due to the need to decarbonize the economy rapidly, which substantially increases revenues of renewable energy projects

In transition scenarios, renewable energy from wind and solar gain a steep rise in demand due to the need to decarbonize the economy rapidly, which substantially increases revenues of renewable energy projects

N/A for hot house world scenario, as no transition to lower carbon economy is assumed



OPPORTUNITY	MATERIALITY	FINANCIAL IMPACT	TIMEFRAME	ORDERLY TRANSITION	DISORDERLY TRANSITION	HOT HOUSE WORLD
-------------	-------------	------------------	-----------	--------------------	-----------------------	-----------------

<p>Products & services</p>  <p>Firms addressing the increasing need of climate-conscious customers for sustainable products and services, have the potential to capture greater market share</p>		<p><u>Portfolio company:</u></p> <ul style="list-style-type: none"> Increased revenue <p><u>Capital Dynamics:</u></p> <ul style="list-style-type: none"> Increase in equity valuation 	<p>M</p>	<p>In the transition scenarios, customers increasingly demand companies to offer green products and services, which result in firms offering such products can increase their revenue compared to firms failing to address the shifting demand patterns</p>	<p>In the transition scenarios, customers increasingly demand companies to offer green products and services, which result in firms offering such products can increase their revenue compared to firms failing to address the shifting demand patterns</p>	<p>N/A for hot house world scenario, as no transition to lower carbon economy is assumed</p>
--	---	---	----------	---	---	--

<p>Resilience</p>  <p>Firms that are responding to climate-related transition risks, such as rising carbon prices, through initiatives aimed at reducing GHG emissions can build greater resilience and improve efficiency (for example energy efficiency), thereby reducing costs otherwise incurred</p>		<p><u>Portfolio company:</u></p> <ul style="list-style-type: none"> Lower costs <p><u>Capital Dynamics:</u></p> <ul style="list-style-type: none"> Increase in equity valuation 	<p>M</p>	<p>Companies mitigating the transition risks by embedding mitigation measures into their business planning are better placed to build resilience and maintain profitable in the transition to a lower carbon economy</p>	<p>Companies mitigating the transition risks by embedding mitigation measures into their business planning are better placed to build resilience and maintain profitable in the transition to a lower carbon economy</p>	<p>N/A for hot house world scenario, as no transition to lower carbon economy is assumed</p>
---	---	---	----------	--	--	--



OPPORTUNITY

MATERIALITY

FINANCIAL IMPACT

TIMEFRAME

ORDERLY TRANSITION

DISORDERLY TRANSITION

HOT HOUSE WORLD

Products & services



Firms addressing the increasing need of climate-conscious customers for sustainable products and services (for example through the switch towards low-carbon fuels), have the potential to capture greater market share

Portfolio company:

- Increased revenue



Capital Dynamics:

- Increase in equity valuation

In the transition scenarios, customers increasingly demand companies to offer green products and services. Transport firms switching to low-carbon fuels can increase their revenue compared to firms failing to address the shifting demand patterns

In the transition scenarios, customers increasingly demand companies to offer green products and services. Transport firms switching to low-carbon fuels can increase their revenue compared to firms failing to address the shifting demand patterns

N/A for hot house world scenario, as no transition to lower carbon economy is assumed

Resilience



Transport firms that are responding to climate-related transition risks, such as rising carbon prices, through switching towards low-carbon fuels can build greater resilience and reduce costs otherwise incurred

Portfolio company:

- Lower costs



Capital Dynamics:

- Increase in equity valuation

Companies mitigating the transition risks by switching to lower carbon fuels are better placed to build resilience and maintain profitable in the transition to a lower carbon economy

Companies mitigating the transition risks by switching to lower carbon fuels are better placed to build resilience and maintain profitable in the transition to a lower carbon economy

N/A for hot house world scenario, as no transition to lower carbon economy is assumed



Methodologies

Methodologies used to assess climate-related risks and opportunities

Physical climate risk exposure

We assess the physical climate risk exposure for our funds and own operations utilizing a variety of specialized tools. The score of the current physical climate risk exposure is defined as follows for the selected indicators:

Tropical cycles

- **High:** indicates that the cyclone hazard in the selected region is high, i.e. there is a >20% chance of potentially damaging wind speeds in the region in the next 10 years. Such damages occur due to wind, induced heavy rainfall and subsequent flooding (including coastal flooding at seaside locations)
- **Medium:** indicates that the cyclone hazard in the selected region is medium, i.e. there is a 10% chance of potentially damaging wind speeds in the region in the next 10 years. Such damages occur due to wind, induced heavy rainfall and subsequent flooding (including coastal flooding at seaside locations)
- **Low:** indicates that the cyclone hazard in the selected region is low, i.e. there is a 1% chance of potentially damaging wind speeds in the region in the next 10 years. Such damages occur due to wind, induced heavy rainfall and subsequent flooding (including coastal flooding at seaside locations)
- **Very low:** indicates that the cyclone hazard in the selection region is very low, i.e. there is less than a 1% chance of potentially damaging wind speeds in the region in the next 10 years
- **No data:** indicates that for the hazard in the selected region, data is currently unavailable in the tool used for assessing physical climate risk exposure. Capital Dynamics will monitor the data availability and will update its physical risk exposure assessment when data availability improves

Data for this hazard are obtained from [ThinkHazard](#).

Water stress

- **High:** indicates that the water scarcity in the region is high, i.e. droughts are expected to occur on average every 5 years, which can have an effect on human beings, agriculture and the corresponding food security, and infrastructure
- **Medium:** indicates that the water scarcity in the region is medium, i.e. there is up to a 20% chance droughts will occur in the next 10 years, which can have an effect on human beings, agriculture and the corresponding food security, and infrastructure
- **Low:** indicates that the water scarcity in the region is low, i.e. there is a 1% chance drought will occur in the next 10 years, which can have an effect on human beings, agriculture and the corresponding food security, and infrastructure
- **Very low:** indicates that the water scarcity in the region is very low, or virtually non-existent, i.e. in the selected regions droughts are projected to occur less than once every 1000 years
- **No data:** indicates that for the hazard in the selected region, data is currently unavailable in the tool used for assessing physical climate risk exposure. Capital Dynamics will monitor the data availability and will update its physical risk exposure assessment when data availability improves

Data for this hazard are obtained from [ThinkHazard](#). Additionally, for more precise water stress level analysis in U.S. regions, we draw upon data from the [Aqueduct Water Risk Atlas](#). In the Aqueduct tool, baseline water stress is measured as the ratio of total water withdrawals (incl. domestic, industrial, irrigation and livestock consumptive and non-consumptive use) to available renewable surface and groundwater supplies. Higher values indicate higher competition among water users. Water stress is measured according to the following ranges: Low (<10%), Low-medium (10-20%), Medium-high (20-40%), High (40-80%) and Extremely high (>80%).

Wildfire



- **High:** indicates that the wildfire hazard in the selected region is high, i.e. there is >50% chance of encountering weather that could support a significant wildfire, which is likely to result in life and property loss in any given year. Damage from wildfire can occur due to the direct flame and radiation exposure and include ember storm and low level surface fire. In extreme fire weather events, strong winds and wind born debris can cause further damage to the infrastructure in the region. Climate projections identify a likely increase in the frequency and severity of fire weather in regions with increased mean air temperature and greater variance in rainfall
- **Medium:** indicates that the wildfire hazard in the selected region is medium, i.e. there is between a 10% - 50% chance of encountering weather that could support a significant wildfire, which is likely to result in life and property loss in any given year. Damage from wildfire can occur due to the direct flame and radiation exposure and include ember storm and low level surface fire. In extreme fire weather events, strong winds and wind born debris can cause further damage to the infrastructure in the region. Climate projections identify a likely increase in the frequency and severity of fire weather in regions with increased mean air temperature and greater variance in rainfall
- **Low:** indicates that the wildfire hazard in the selected region is low, i.e. there is between a 4% - 10% chance of experiencing weather that could support a significant wildfire, which is likely to result in life and property loss in any given year. Damage from wildfire can occur due to the direct flame and radiation exposure and include ember storm and low level surface fire
- **Very low:** indicates that the wildfire hazard in the selected region is very low, i.e. there is a less than 4% chance of experiencing weather that could support a significant wildfire, which is likely to result in life and property loss in any given year.
- **No data:** indicates that for the hazard in the selected region, data is currently unavailable in the tool used for assessing physical climate risk exposure. Capital Dynamics will monitor the data availability and will update its physical risk exposure assessment when data availability improves

Data for this hazard are obtained from [ThinkHazard](#).

Flooding



- **High:** indicates that the flood hazard is high. For coastal regions, this means that potentially damaging waves are expected to flood the coast at least once in the next 10 years. For regions located by rivers, this means that potentially damaging and life-threatening river floods are projected to occur at least once in the next 10 years. High flood hazard in an urban setting indicates high levels of surface flood in urban and rural areas, which means that potentially damaging and life-threatening urban floods are expected to occur at least once in the next 10 years. The projected increase in frequency and severity of precipitation due to climate change increase the present hazard levels further, as the risk of flooding intensifies
- **Medium:** indicates the flood hazard is medium, i.e. there is a chance of more than 20% that potentially damaging and life-threatening floods occur in the next 10 years
- **Low:** indicates the flood hazard is low, i.e. there is a chance of more than 1% that potentially damaging and life-threatening floods occur in the next 10 years
- **Very low:** indicates the flood hazard is very low, i.e. there is a less than 1% chance that potentially damaging and life-threatening floods occur in the next 10 years
- **No data:** indicates that for the hazard in the selected region, data is currently unavailable in the tool used for assessing physical climate risk exposure. Capital Dynamics will monitor the data availability and will update its physical risk exposure assessment when data availability improves

Data for this hazard are obtained from [ThinkHazard](#).



- **High:** indicates that extreme heat hazard is high, i.e. prolonged exposure to extreme heat is expected to occur at least once in the next five years. Climate change projections indicate that the continued greenhouse gas emissions will intensify warming, which result in more frequent heatwaves, impacting human beings, agriculture and the corresponding food security, and infrastructure
- **Medium:** indicates that the extreme heat hazard is medium, i.e. there is >25% chance that at least one period of prolonged exposure to extreme heatwaves will occur in the next five years
- **Low:** indicates that the extreme heat hazard is low, i.e. there is between a 5% - 25% chance that at least one period of prolonged exposure to extreme heatwaves will occur in the next five years
- **Very low:** indicates that the extreme heat hazard is very low, i.e. there is less than a 5% chance that at least one period of prolonged exposure to extreme heatwaves will occur in the next five years
- **No data:** indicates that for the hazard in the selected region, data is currently unavailable in the tool used for assessing physical climate risk exposure. Capital Dynamics will monitor the data availability and will update its physical risk exposure assessment when data availability improves

Data for this hazard are obtained from [ThinkHazard](#).

Climate projections of physical climate risk hazards under NGFS Net Zero by 2050, NGFS Delayed Transition and NGFS Current Policies (hot house world) scenarios

We assess the physical climate risk projections for a range of acute and chronic climate hazards and analyze how the hazards are modelled to evolve over the following time horizons:

- 2025: climate projections for the short-term (i.e. within the hold period)
- 2030: climate projections for the medium-term (i.e. post hold period)
- 2050: climate projections for the long-term (2050)
- 2100: climate projections for the very long term, since the effects of climate change often manifest themselves in the long-run

Further, we provide the 2020 value for each climate hazard to approximate the current risk levels. We utilize the [Climate Impact Explorer¹](#) to assess the climate projections for each hazard under the NGFS scenarios. All projections are computed assuming socio-economic conditions, such as population and land use, will maintain constant levels as of 2005. This allows the analysis to isolate the sole effect of climate change on the climate hazards. The projections provided include uncertainty ranges to incorporate global climate sensitivity to emissions, and the response of localized effects to global warming. The aggregation is performed at the continental, national and subnational levels and use weighted averages (by area, GDP or population).

The Climate Impact Explorer builds on the data sources by ISIMIP (changes in biophysical systems and extreme events, built on the Emissions Scenarios (IAMs), and the Global Mean Temperature Trajectories (MAGICC) and CLMIADA (Direct Damages from Extreme Events). Additionally, trajectories for the NFGS scenarios are obtained from academic institutions in collaboration with the Network for Greening the Financial System.

The climate hazard indicators used in our analysis provide information about the projected changes of these hazards according to different levels of global warming and greenhouse gas emissions. Such information is derived from numerous climate impact models. Global mean temperature projections show the various greenhouse gas emission pathways used by the NGFS, which are derived by the three Integrated Assessment Models (IAMs): MESSAGEix-GLOBIOM, GCAM and REMIND-MAgPIE.

The NGFS scenarios were last updated in September 2022 and are based on MAGICC7 (in correspondence to the IPCC Sixth Assessment Report (AR6)), and therefore represent the latest climate science projections. The Climate Impact Explorer provides data on climate impacts on biophysical systems, extreme events and resulting economic damages for the NGFS scenarios (1) Net Zero 2050, (2) Delayed transition and (3) Current Policies.

¹ Climate Analytics, 2022. Climate Impact Explorer. Available at: <https://climate-impact-explorer.climateanalytics.org/>.

The climate hazards subject to the scenario analysis presented in this report are defined as follows:

Mean air temperature

Absolute change in mean air temperature in selected region, expressed in degrees Celsius (°C). The changes in mean air temperature projections are shown over time at different global warming levels compared to the reference period 1986-2006, based on the selected NGFS scenario (Net zero 2050, Delayed transition, Current Policies). Data after 2060 are indicative model results.

Labor productivity due to heat stress

Relative change in labor productivity due to heat stress in the selected region, expressed in percentage points. The changes in relative labor productivity are shown over time at different global warming levels compared to the reference period 1986-2006, based on the selected NGFS scenario (Net zero 2050, Delayed transition, Current Policies). Data after 2060 are indicative model results.

Land fraction annually exposed to wildfires

Changes in land fraction annually exposed to wildfires in the selected region, expressed in percentage points. The changes in land fraction exposed to wildfires are shown over time at different global warming levels compared to the reference period 1986-2006, based on the selected NGFS scenario (Net zero 2050, Delayed transition, Current Policies). Data after 2060 are indicative model results.

Precipitation

Relative change in precipitation in the selected region, expressed in percent. The changes in precipitation are shown over time at different global warming levels compared to the reference period 1986-2006, based on the selected NGFS scenario (Net zero 2050, Delayed transition, Current Policies). Data after 2060 are indicative model results.

Annual expected damage from river floods

Relative change in annual expected damage from river floods in selected region, expressed in percent. The changes in annual expected damage from river floods are shown over time at different global warming levels compared to the reference year 2015, based on the selected NGFS scenario (Net zero 2050, Delayed transition, Current Policies). Data after 2060 are indicative model results.

Annual expected damage from tropical cyclones

Relative change in annual expected damage from tropical cyclones in the selected region, expressed in percent. The changes in annual expected damage from tropical cyclones are shown over time at different global warming levels compared to the reference year 2015, based on the selected NGFS scenario (Net zero 2050, Delayed transition, Current Policies). Data after 2060 are indicative model results.

Relative change in wind speed

Relative changes in wind speed in the selected region, expressed in percent. The relative changes in wind speed are shown over time at different global warming levels compared to the reference period 1986-2006, based on the selected NGFS scenario (Net zero 2050, Delayed transition, Current Policies). Data after 2060 are indicative model results. Please note, we assess this climate hazard for our Clean Energy wind power assets only.

Index – TCFD recommendations

Index – TCFD Recommendations

	DESCRIPTION	RECOMMENDED DISCLOSURES	PAGE
GOVERNANCE	Disclose the organization’s governance around climate-related risks and opportunities	<ul style="list-style-type: none"> a) Describe the board’s oversight of climate-related risks and opportunities b) Describe management’s role in assessing and managing climate-related risks and opportunities 	<ul style="list-style-type: none"> p. 7 p. 8 - 9
STRATEGY	Disclose the actual and potential impacts of climate-related risks and opportunities on the organization’s businesses, strategy, and financial planning where such information is material	<ul style="list-style-type: none"> a) Describe the climate-related risks and opportunities the organization has identified over the short, medium, and long term b) Describe the impact of climate-related risks and opportunities on the organization’s businesses, strategy, and financial planning c) Describe the resilience of the organization’s strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario 	<ul style="list-style-type: none"> p. 26 -64; 101 - 269 p. 20; 65 - 66 p. 69-70
RISK MANAGEMENT	Disclose how the organization identifies, assesses, and manages climate-related risks	<ul style="list-style-type: none"> a) Describe the organization’s processes for identifying and assessing climate-related risks b) Describe the organization’s processes for managing climate-related risks c) Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organization’s overall risk management 	<ul style="list-style-type: none"> p. 72-73 p. 76-86 p. 85-88
METRICS & TARGETS	Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material	<ul style="list-style-type: none"> a) Disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process b) Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks c) Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets 	<ul style="list-style-type: none"> p. 90-99 p. 92-99 p. 95

List of figures

FIGURE

PAGE

Figure 1: Capital Dynamics' Governance structure for climate-related risks and opportunities

p. 7

Figure 2: Capital Dynamics' RI Alert Process

p. 8

Contact details

North America

New York

Capital Dynamics, Inc.
Capital Dynamics
Broker Dealer LLC
156W – 56th Street,
CitySpire Building, Squad 301
New York, NY 10019
United States
1 212 798 3400

Miami

Capital Dynamics, Inc.
350 Lincoln Rd, 3rd Floor
Miami Beach, FL 33139
United States

San Francisco

Capital Dynamics, Inc.
50 California Street
San Francisco, CA
94111
United States
1650 388 7000

Europe

London

Capital Dynamics Ltd
Whitfield Court, 2nd Floor
30-32 Whitfield Street
London, W1T 2RQ
United Kingdom
44 20 7297 0200

Munich

Capital Dynamics GmbH
Possartstrasse 12
81679 Munich, Germany
49 89 2000 4180

Milan

Capital Dynamics SRG S.p.A.
Via degli Omenoni 2, 1st Floor
Milan 20121, Italy
39 02 3031 771

Zug

Capital Dynamics AG
Bahnhofstrasse 22
6301 Zug, Switzerland
41 41 748 84 44

Luxembourg

Capital Dynamics AG
Luxembourg Office
16, rue Jean-Pierre Brasseur
L-1258 Luxembourg
352 661 261 245

Birmingham

Capital Dynamics Ltd
One Snowhill
Snow Hill Queensway
Birmingham B4 6GB
United Kingdom
44 121 200 8800

Paris

Capital Dynamics France
124 Rue Reaumur
Paris 75002
France
33 1 73 06 25 96

Middle East

Tel Aviv

Capital Dynamics Israel
Ramat Aviv
Tel Aviv
Israel
972 52 618 6598

Asia

Tokyo

Capital Dynamics Co. Ltd
7F Otemachi Park Building
1-1-1 Otemachi Chiyoda-ku
Tokyo, 100-0004
Japan
81 3 6551 2700

Seoul

Capital Dynamics
(Hong Kong Ltd)
10th Floor, Miso Building
Daechi-dong 890-47,
Gangnam-gu,
Seoul 06193
Korea, Republic of
82 2 556 2351

Disclaimer

DISCLOSURE STATEMENT

Capital Dynamics Group is an independent asset management Firm focusing on private assets and comprises Capital Dynamics Holding AG and its affiliates.

For investors based in the **United Kingdom**, this presentation is being communicated to you by Capital Dynamics Ltd (CDL). CDL is a firm authorized and regulated by the UK Financial Conduct Authority.

For investors qualifying as professional investors (as that term is defined under the AIFMD) based in European select countries (**Austria, Belgium, Cyprus, Czech Republic, Denmark, Finland, France, Germany, Greece, Italy, Republic of Ireland Liechtenstein, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Spain, Sweden**) this presentation is being communicated to you by Capital Dynamics Ltd (CDL) in agreement with the external AIFM, Alter Domus Management Company S.A. The AIFM is authorized and regulated by the Commission de Surveillance du Secteur Financier (CSSF) in Luxembourg as an Alternative Investment Fund Manager. Capital Dynamics Ltd is authorized and regulated by the Financial Conduct Authority (FCA). Any Recipient not interested in the analysis described herein should return this document to Capital Dynamics Limited, Whitfield Court, 2nd Floor, 30-32 Whitfield Street, London W1T 2RQ, United Kingdom and contact Capital Dynamics as soon as possible (t. +44 20 7297 0200).

For investors based in the **United States**, this presentation is being communicated to you by Capital Dynamics Broker Dealer LLC, a registered broker-dealer with the SEC, and a member of the Financial Industry Regulatory Authority (FINRA) and Securities Investor Protection Corporation (SIPC). Such registration does not imply in any manner whatsoever that Capital Dynamics Broker Dealer LLC has been sponsored, approved or recommended or that its abilities or qualifications have in any way respect been passed upon by the United States or any agency or office thereof.

For all other investors, the presentation is being communicated by the firm entity acting as the manager or general partner, adviser to the client or such other firm entity authorized to make this communication as appropriate.

The information contained herein is provided for informational purposes only and is not and may not be relied on as investment advice, as an offer to sell, or a solicitation of an offer to buy securities. Any such offer or solicitation shall be made pursuant to a private placement memorandum furnished by Capital Dynamics. No person has been authorized to make any statement concerning the information contained herein other than as set forth herein, and any such statement, if made, may not be relied upon. This document is strictly confidential, is intended only for the person to whom it has been and may not be shown, reproduced or redistributed in whole or in part (whether in electronic or hard copy form) to any person other than the authorized Recipient, or used for any purpose other than the authorized purpose, without the prior written consent of Capital Dynamics. The Recipient should not construe the contents of this document as legal, tax, accounting, investment or other advice. Each investor should make its own inquiries and consult its advisors as to any legal, tax, financial and other relevant matters concerning an investment in any fund or other investment vehicle. Capital Dynamics does not render advice on tax accounting matters to clients. This document was not intended or written to be used, and it cannot be used by any taxpayer for the purpose of avoiding penalties which may be imposed on the taxpayer under said individuals tax laws. Federal and state tax laws are complex and constantly changing. The Recipient should always consult with a legal or tax adviser for information concerning its individual situation. When considering alternative investments, such as private equity funds, the Recipient should consider various risks including the fact that some funds may use leverage and engage in a substantial degree of speculation that may increase the risk of investment loss, can be illiquid, are not required by law to provide periodic pricing or valuation information to investors, may involve complex tax structures and delays in distributing important tax information, often charge high fees, and in many cases the underlying investments are not transparent and are known only to the investment manager. Any such investment involves significant risks, including the risk that an investor will lose its entire investment. By accepting delivery of this document, each Recipient agrees to the foregoing and agrees to return the document to Capital Dynamics promptly upon request.

