

Sustainable Investment Report 2021



*Combining the Art and Science of Risk*  
**to protect  
societies**

---

**SCOR**  
The Art & Science of Risk

Cover image –

**The loggerhead sea turtle is increasingly threatened by human activity** - from becoming enmeshed in fishing gear to climate change affecting the turtles' nesting sites. Although widespread across many of the world's oceans, the loggerhead turtle is listed as vulnerable.

# Combining the Art & Science of Risk to protect societies

As a global independent reinsurance company, SCOR contributes to the welfare, resilience and sustainable development of society by bridging the protection gap, increasing insurance reach, helping to protect the insured against the risks they face, pushing back the frontiers of insurability and acting as a responsible investor.

Through the expertise and know-how of its employees, it combines the Art and Science of Risk to offer its clients an optimum level of security and creates value for its shareholders by developing its Life and P&C business lines, respecting strict corporate governance rules. SCOR provides its clients with a broad range of innovative reinsurance solutions and pursues an underwriting policy founded on profitability, supported by effective risk management and a prudent investment policy.



---

**Contents** —

---

**Chapter 1**

# Governance

- P. 08** – General framework
- P. 10** – A dedicated governance for sustainability
- P. 12** – Performance conditions on social and environmental issues
- P. 13** – The Sustainable Investing Policy
- P. 13** – The role of asset managers
- P. 13** – ESG information
- P. 15** – Communication
- P. 15** – Spreading knowledge on sustainability and development of internal expertise
- P. 16** – Participation in public initiative

**Chapter 2**

# Strategy

- P. 19** – SCOR's investment philosophy
- P. 19** – SCOR's sustainable investing approach
- P. 19** – Being a responsible investor
- P. 20** – Climate change: The rationale of time horizons
- P. 22** – Climate scenarios
- P. 26** – Addressing the double materiality
- P. 26** – 2021 major steps in investment strategy

**Chapter 3**

# Risk, impact and risk management

- P. 29** – Organisation
- P. 29** – Tools and Processes
- P. 34** – Assessing companies transition pathways
- P. 36** – Assessing acute risk on physical assets
- P. 37** – Climate stress testing
- P. 41** – Dependencies and impacts on nature: ENCORE
- P. 43** – Deforestation: assessing risks and impacts
- P. 45** – Plastic: preliminary mapping
- P. 46** – Real estate risk assessment: CRREM

**Chapter 4**

# Metrics and targets

- P. 51** – Metrics
- P. 56** – Targets

- 
- P. 58** – Annex

A portrait of François de Varenne, a man with short, light-colored hair and a beard, wearing glasses, a white shirt, and a dark suit jacket. He is sitting in a black leather chair with his hands clasped. A watch with a blue and red bezel is visible on his left wrist.

François de Varenne —

*Investments, Technology, Transformation and Group Corporate Finance*

---

**“Combating climate change and protecting natural ecosystems are interconnected issues.”**



**In a context of the continuing Covid-19 pandemic, 2021 was again an instrumental year for climate change.** The COP26 in Glasgow was the most important climate event of 2021 and was an additional move in the race to zero. Indeed, the Glasgow agreements kept the goal of limiting warming to 1.5C alive despite huge challenges ahead. Significant outcomes like commitments on cutting methane emissions or halting deforestation by 2030 were obtained and confirmed that combatting climate change and protecting natural ecosystems are interconnected issues. Agreements on market mechanisms for carbon offset also provides incentives to the private sector to increase its efforts toward Net Zero.

**2021 has seen some key regulatory milestones at European and French levels.** The Taxonomy Regulation has come into force, improving transparency for investors as they learn how to use the new dark green dictionary. In France, Article 173 has been replaced by Article 29 of the Law for Energy and Climate, extending mandatory requirements to biodiversity, enhanced sustainability risk management and disclosures. As an institutional investor and a reinsurer, SCOR is more than ever determined to contribute to the welfare and resilience of society. The Group's Raison d'Etre, "Combining the Art & Science of Risk to protect societies" published in 2021 resonates with its sustainable investment journey. In 2021, SCOR reinforced its commitment to tackling climate change and reversing nature loss while considering all environmental, social and governance aspects in its investment decisions. A new Sustainable Investment Policy has been released, setting more stringent guidelines vis-a-vis carbon-intensive sectors and demonstrating SCOR's ambition to constantly uplift its commitments for a more sustainable world. SCOR has also joined the Climate Action 100+ initiative as a key driver to bolster its engagement with investees on decarbonization and its impact on the real economy.

**New exploratory studies have been performed to better understand the biodiversity challenge.** They provide valuable inputs to structure our engagement activities and better select targeted investees. Joining the PRI Sustainable Commodities Practitioners' Group (SCPG) has been critical to initiate concrete actions to reverse biodiversity loss focusing on key issues like halting deforestation.

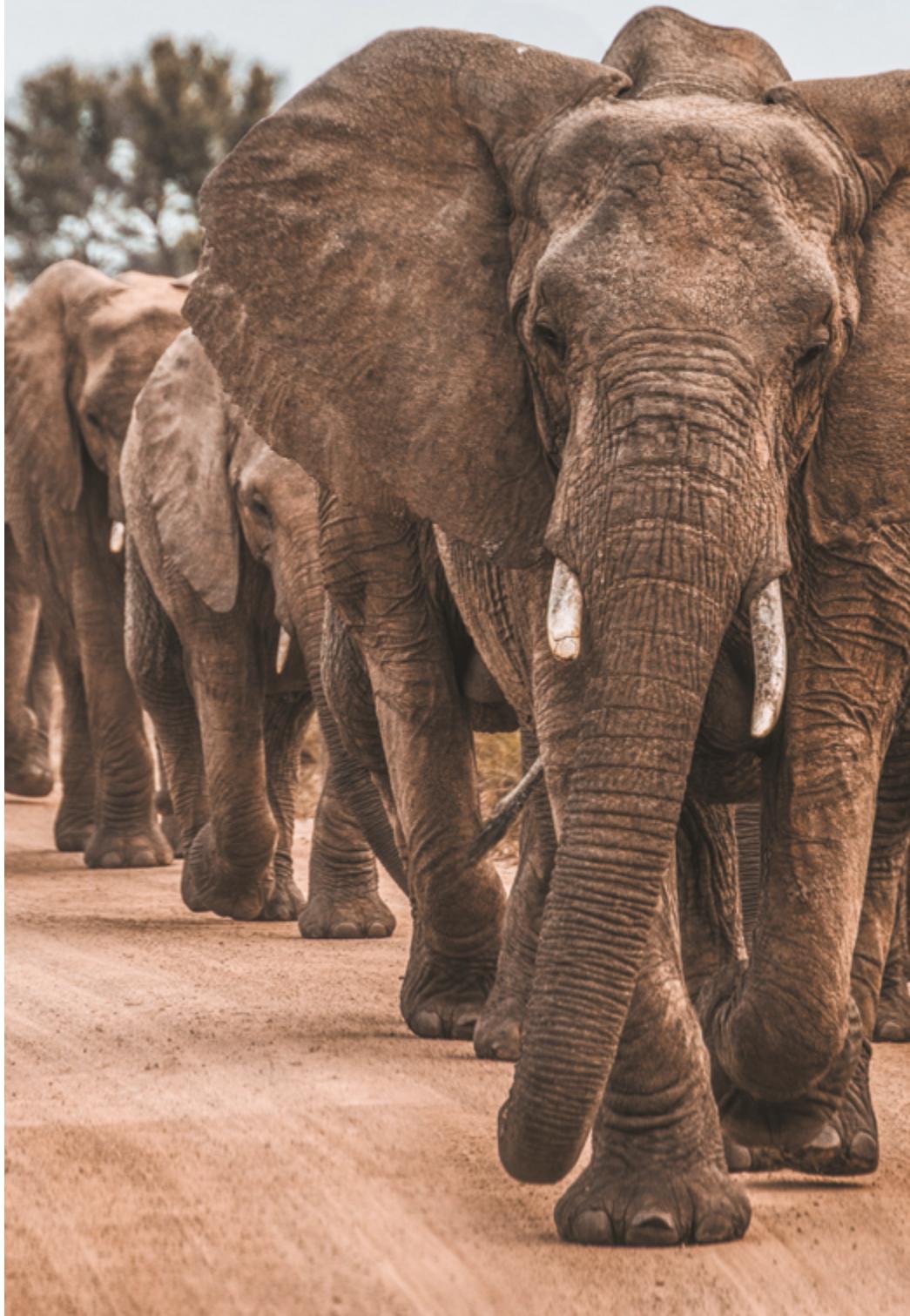
**Participating in these initiatives alongside the gold standard Net-Zero Asset Owner Alliance enables SCOR to constantly improve its knowledge** to better understand the challenges and limitations of cutting-edge methodologies. Addressing the various drivers of nature loss remains a top priority for SCOR despite the material delays and postponements of the Conference of Parties (CoP15) on Biodiversity.

**Combining the three dimensions of responsible investment - risk, return and impact - is of utmost importance to address the global challenge of sustainable development.** While better addressing double materiality, SCOR continues to play its role when taking investment decisions. This means reflecting on SCOR's theory of change and amplifying those actions where the Group can optimize its impact for a better tomorrow. —

"In 2021, SCOR reinforced its commitment to tackling climate change and reversing nature loss while considering all environmental, social and governance aspects in its investment decisions."

*Chapter 1.*

# Governance



---

**The African bush elephant** is the largest terrestrial animal, with bulls reaching 4m in height. The species is threatened by habitat loss and poaching and is listed as endangered.

**A**n integrated governance system has been established to consider social, environmental, and governance-related impacts of SCOR's business activities, including the main related environmental, social and governance (ESG) risks, as well as sustainability initiatives.

This system is structured around five core pillars:

- a general reference framework consisting of the Group's Raison d'Être and adherence to global initiatives supported by UN programs, supplemented where appropriate by subject-specific reference frameworks and transposed into standards (e.g., the Code of Conduct) and relevant Group activities;
- a dedicated governance framework, under the supervision of the Board of Directors, assisted, as provided for in its Internal Charter, by the preparatory work of its specialized committees, in particular the Sustainability Committee, the Risk Committee and the Audit Committee;
- integrated initiatives, translated into operational measures in annual action plans, the implementation of which is periodically reported to the supervisory and management bodies;
- a risk management system shaped by the formal procedures in place. This system is applied to the most relevant functional processes and the monitoring of megatrends and associated emerging and operational risks;
- a framework of performance conditions indexed to sustainability criteria, applied taking into account the responsibilities exercised within the Company.

## 1.1 General framework

— The consideration of social, environmental and governance-related risks related to the Group's business activities and operations, and more generally the Group's sustainability approach, are guided by involvement in UN global initiatives and by orientations set out in the SCOR's raison d'être.

These initiatives provide a general reference framework and useful principles for addressing social, environmental and governance issues, given that the Group conducts business in countries with legal and governance environments characterized by varying degrees of maturity in these areas:

- at cross-sector level, as part of its longstanding participation in the United Nations Global Compact, SCOR is aligning with the initiative's ten principles, covering human rights, international labour standards, environmental protection, and the fight against corruption, in a framework tailored to its sphere of influence;
- at the level of the (re)insurance sector, several initiatives provide a framework for incorporating the risks and opportunities arising from environmental, social, societal and governance issues, including the development of expertise and solutions to address issues relevant to the business activities of the Group. Hence, SCOR has been a founding member of the Principles for Sustainable Insurance since 2012. It is also a member of the Principles for Responsible Investment as an institutional investor (2019) as well as via its asset management subsidiary, SCOR Investment Partners (2017). More recently, SCOR joined two strategic initiatives aimed at fostering the transition to net-zero greenhouse gas (GHG) emissions by 2050: the Net-Zero Asset Owner Alliance in May 2021 and the Net-Zero Insurance Alliance in July 2021 (see section 6.3 of the URD – Environmental impact of SCOR activities).

The principles contained in these initiatives are translated into standards in the Group's main reference texts, in particular its Code of Conduct, an entire section of which is dedicated to the United Nations Global Compact and the Principles for Sustainable Insurance, and its sustainable investment policy.

They are also embedded in internal guidelines setting out the rules of conduct and the procedures to be followed in the exercise of the Group's business activities (e.g. anti-corruption policy, ESG underwriting guide for the Group's P&C insurance activities).

## 1.2. A dedicated governance for sustainability



— SCOR's Board of Directors has various advisory committees responsible for preparing its discussions, assisting it in its supervisory role, and making recommendations to it in specific areas, including on environmental, social and governance matters.

Under the conditions defined by the Board's Internal Charter, the Board of Directors defines the strategic orientations of the Group, ensures their implementation in accordance with its corporate interest, taking into consideration the social and environmental aspects of its activity. As of December 31, 2021, four of its Board members had an expertise in sustainability as specified in Section 2.1.3.2 of the URD – Information concerning the members of the Board of Directors. Several specialized committees of the Board of Directors provide regular supervision of the initiatives conducted by the Group's Management, including on sustainability matters:

- the Sustainability Committee ensures that the Group's sustainability approach is consistent with its long-term development, and that the direct and indirect impacts of its activities on the environment and society are incorporated into its strategy. As such, this Committee monitors the sustainability dashboard and oversees the execution of the sustainability action plan, which sets out the practical application of the Group's approach in this area on an annual basis. This plan covers a range of relevant topics, such as relations with Group stakeholders, the integration of ESG into (re)insurance and investment activities, the Group's environmental performance with regard to its operations, and the areas covered by the #WorkingWellTogether program described in Section 6.2. of the URD. In addition, this committee is also responsible for making proposals to the Board of Directors on how to take social, societal and environmental issues into account in the Group's strategic choices and the remuneration scheme for executives.
- the Risk Committee examines, based on the Own Risk and Solvency Assessment (ORSA), the major risks to which the Group is exposed, both on the assets and liabilities side, and ensures that tools for monitoring and controlling these risks are in place. It examines the Group's main risks and its Enterprise Risk Management (ERM) policy. It also examines the Group's strategic risks (including emerging risks) as well as the Group's main technical and financial commitments (underwriting, reserving, market, concentration, counterparty, asset-liability management, liquidity and operating risks as well as the risks relating to changes in prudential regulations). The Risk Committee is kept regularly informed of the major social and environmental issues that may influence the Group's activities, including megatrends (e.g., climate change and environmental degradation, changing demographics and lifestyles, digitali-

zation of the economy) and the associated emerging risks closely linked to these issues.

- the Audit Committee, in addition to its accounting and financial remit, has ethics-related, internal audit and compliance responsibilities. Accordingly, the Committee reviews the annual compliance plan and is kept informed about the Company's activities in this area. The compliance plan addresses the main risks identified in Section 6.6.1 of the URD. It sets out the activities of the compliance function, its annual priorities – defined on the basis of a prior risk analysis – and the procedures for detecting, preventing and responding to the most significant risks facing the Group.
- the Compensation Committee is tasked primarily with determining the basis of calculation of the variable compensation of executive corporate officers and ensuring that these rules are in line with the annual performance assessment of executive corporate officers, taking the Group's strategy into account. The Group's environmental and social performance is one of the performance conditions associated with these compensation instruments.
- the Nomination Committee ensures that executive corporate officers implement a policy of non-discrimination and diversity, in particular with regard to the balanced representation of men and women in the executive bodies. In this regard, the Committee is kept regularly informed of the trends observed.

The Management bodies play an important role in the management of the sustainability strategy. Three committees are notably advising the Group Executive Committee on sustainability issues related to the Group's activities and operations:

- the Group Sustainability Committee meets on a quarterly basis ahead of the Board of Directors' sustainability Committee meetings and is tasked with approving decisions concerning SCOR's approach and initiatives related to sustainability. More specifically, it approves the sustainability strategy for the Group's core business and makes sure that the action plan is executed properly.
- the Group Risk Committee also meets every quarter ahead of the Board Risk Committee. In addition to preparing the Board Risk Committee, the main duties of the Group Risk Committee are to steer the Group's risk profile, maintain an effective enterprise risk management framework and foster an appropriate risk culture throughout the Group. Climate risks, extreme events and their direct impact on SCOR's risk profile, are regularly discussed in these meetings.
- the Group Investment Committee meets at least once every quarter. Its role is to define the investment strategy at Group level and to supervise the implementation of this strategy in compliance with regulatory and contractual

constraints. The Group Investment Committee validates the investment universe and approves normative and thematic exclusions, as well as major portfolio reallocations related to risk management. For investment purposes, SCOR Investments interacts on a quarterly basis with the Group Investment Committee to report on the implementation of the investment strategy and present the roadmap for the months to come. Whenever sustainable considerations have direct impact on the investment universe or the expected return on invested assets, they are discussed within this committee

The main topics discussed in 2021 are the following: SCOR Investments proposed some targets that needed to be set as a NAZAOA member.

In Q2 2021, SCOR Investments presented the update of the sustainable investment policy, setting the long-term vision for sustainable investment, affirming climate and nature as SCOR's priorities, leveraging directions already taken (pledges and commitments AOA, Finance for Biodiversity, ...) and affirming the double materiality principle.

In Q3 2021, SCOR Investments made a presentation about the various carbon markets including Emission Trading Scheme and carbon offset credits.

In Q4 2021, SCOR Investments proposed to the Group Executive Committee a roadmap for the sustainable investment strategy over the next years.

The composition of these committees, the combination of skills within them, the preparatory work conducted by each of them ahead of Board meetings, and the regular interactions with Executive Management and the Executive Committee provide a structured environment for the analysis of social and environmental issues, from both a financial materiality standpoint and a social and environmental materiality standpoint.

The coordination and execution of the sustainability action plan is ensured at the operational level by the Group CSO function which is responsible for defining the sustainability framework and coordinating the elaboration and implementation of the sustainability aspects of the Group's ESG strategy. The CSO function also coordinates the internal Sustainability Committee that meets once a month. This committee aims to promote discussions and bring consistency to the Group's actions in terms of social and societal responsibility and sustainability. It consists of representatives from each Group business unit and Group functions (e.g., Risk management, Human Resources, Compliance, Investor Relations, Rating Agencies, Communications and Group Hub representatives).

Finally, also at the operational level, the Mandate Investment Committee, brings together the Group Investment Risk

and Sustainability (GIRS) Department of the asset owner and representatives from SCOR Investment Partners, SCOR's principal asset manager. This Committee regularly analyzes portfolio positions at a more granular level and discusses strategic choices in light of the Group's sustainable investing strategy. The GIRS monitors the compliance of all investment decisions with the various risk limits set by the Group (e.g., risk appetite and tolerance), and is responsible for developing the ESG strategy for investments, which is submitted to the Group Executive Committee. In addition, the GIRS Department monitors ESG ratings, exclusion lists and operational implementation of the sustainability action plan. Quarterly reporting on achievements against targets is presented at Executive Committee and Board levels.

### 1.3. Performance conditions on social and environmental issues

— SCOR has incorporated sustainability-related criteria into the compensation of its teams, based on arrangements appropriate for the relevant compensation mechanisms and the responsibilities held within the organization:

- a portion of the short-term variable compensation paid to the Group's executive corporate officer has, since 2015, expressly been based on individual sustainability-related objectives.
- since 2020, a portion of the short-term variable compensation of the members of the Executive Committee has also been based on sustainability-related objectives;
- all the beneficiaries of long-term compensation components (performance shares and stock options) must satisfy the allocation conditions based on sustainability, and in particular, since 2012, comply with ethical principles as provided for in the Code of Conduct, and since 2017 complete sustainability training;
- finally, in 2019 SCOR introduced the option for managers and their employees to set specific sustainability-related goals (e.g., relating to diversity, well-being at work, environmental performance, or the integration of ESG issues into the Group's business activities) as part of its Annual Appraisal.

### 1.4. The Sustainable Investing Policy

— SCOR's sustainable investing policy complements the Group Climate policy and is part of the Group Investment Guidelines. It sets the principles for integration of sustainability within the investment strategy.

- Building a resilient portfolio thanks to strong risk management
- Enhancing sustainable investment decisions with portfolio screening
- Fostering more sustainable behavior by engaging
- Financing a more sustainable world by selecting thematic opportunities
- Supporting climate awareness among the financial community

It encompasses all aspects of non-financial risks and opportunities and presents the way SCOR intends to consider them in its strategy. It is validated by the Board and reviewed on an ad-hoc basis following the sustainable agenda of investments. In 2021, several actions have been taken to improve SCOR's sustainability in its investment strategy:

- Regarding exit strategies, the scope on thermal coal has been extended by adding absolute thresholds: 20 MT per year for thermal coal producers and 5 GW of coal installed capacity for power utilities companies
- SCOR has put in place additional restrictions applying to upstream oil and gas regarding Shale oil & gas and best-in-class companies with expansion plans have been put on an observation list that is defined using the Global Oil & Gas Exit List from Urgewald. Regarding exclusions, the threshold has been lowered to 10%

SCOR intends to apply restrictions in its investment universe leveraging the EU taxonomy works and taking into account the need for a just transition. This means that priority is given to exiting sub-sectors where more sustainable alternatives exist and to allow for support to companies committed to transition to a low carbon economy.

## 1.5. The role of asset managers

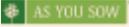
— SCOR has delegated the management of its assets to its fully owned asset management company SCOR Investment Partners (SCOR IP) alongside external asset managers. Its sustainable strategy is fully embedded in all mandates. SCOR's Sustainable Investing Policy is foundational to its sustainable investment strategy. Publicly available and referenced in every investment guidelines provided to asset managers, it forms part of the investment management agreement and ensures consistency of the Group strategy across the world and legal entities. SCOR relies on the expertise of its investment managers, who will ultimately select securities based on their own ESG processes. SCOR IP plays a predominant role in the integration of ESG criteria in investment decisions, given the size of the assets it manages. External asset managers are asked to provide their ESG principles and processes during the selection process. Their engagement and capabilities vis à vis

ESG are key factors alongside risk management processes. Once selected, the way investment managers factor ESG criteria into investment decisions relating to SCOR's mandate forms part of the annual due diligence performed by Group Investment Risk & Sustainability. During the meetings, updates and in-depth discussions ensure a good understanding of the status of the Group in its journey towards sustainability. Investment managers can also be asked to provide ESG analyses of issuers to support ESG analyses of issuers to support SCOR supervisory tasks.

As an asset owner, SCOR has the ultimate responsibility of its portfolio positioning. As such, the Group performs independent ESG analysis including climate stress tests on an aggregated basis, using its own data providers and methodologies.

## 1.6. ESG information

— The Group relies mainly on information provided by extra-financial rating agencies and ESG consulting firms. As industry consolidation continues, SCOR pays specific attention to its data providers and reassesses its selection on a yearly basis. This may hamper year-on-year comparability but allows for the most recent innovations and the highest level of expertise.

Area	Data methodology or provider	Asset class	Type of data provided	Comment
Climate change	ISS 	<ul style="list-style-type: none"> <li>➤ Sovereign bonds</li> <li>➤ Corporate bonds</li> <li>➤ Equity</li> <li>➤ Corporate loans</li> <li>➤ Real assets loans</li> <li>➤ Real assets</li> </ul>	Carbon footprint	<ul style="list-style-type: none"> <li>➤ Carbon intensity by revenue: in tCO<sub>2</sub>e per EUR million of revenue or GDP</li> <li>➤ Carbon intensity by enterprise value: in tCO<sub>2</sub>e per EUR million invested</li> </ul>
		<ul style="list-style-type: none"> <li>➤ Corporate bonds</li> <li>➤ Equity</li> </ul>	EU taxonomy for sustainable activities	Alignment assessment
	Carbone 4 	<ul style="list-style-type: none"> <li>➤ Sovereign bonds</li> <li>➤ Corporate Implied Temperature Rise bonds</li> <li>➤ Equity</li> </ul>	Implied Temperature Rise	Global temperature rise associated with the forward-looking GHG of a portfolio or entity expressed in a temperature unit typically °C
	SCOR P&C	<ul style="list-style-type: none"> <li>➤ Real assets</li> </ul>	Physical risk	Impact of extreme weather events expressed in EUR million
	ACPR or other 	<ul style="list-style-type: none"> <li>➤ Sovereign bonds</li> <li>➤ Corporate bonds</li> <li>➤ Equity</li> </ul>	Stress testing: transition risk	Impact on assets valuation in EUR million
Biodiversity	ENCORE	<ul style="list-style-type: none"> <li>➤ Corporate bonds</li> <li>➤ Equity</li> </ul>	Biodiversity mapping	Investments impacts and dependencies on nature
	CDP 	<ul style="list-style-type: none"> <li>➤ Corporate bonds</li> <li>➤ Equity</li> </ul>	Deforestation risk assessment	Companies' scores
	Forest 500 	<ul style="list-style-type: none"> <li>➤ Corporate bonds</li> <li>➤ Equity</li> </ul>	Deforestation risk assessment	Companies' scores
	Trase Finance 	<ul style="list-style-type: none"> <li>➤ Corporate bonds</li> <li>➤ Equity</li> </ul>	Deforestation risk assessment	Companies' deforestation impact
	Iceberg Data Lab 	<ul style="list-style-type: none"> <li>➤ Corporate bonds</li> <li>➤ Equity</li> </ul>	Biodiversity footprint	Biodiversity impact expressed in km <sup>2</sup> MSA (Mean Species Abundance)
	Ellen MacArthur Foundation 	<ul style="list-style-type: none"> <li>➤ Corporate bonds</li> <li>➤ Equity</li> </ul>	Plastic pollution risk assessment	Companies' performance towards a circular economy
	As You Sow 	<ul style="list-style-type: none"> <li>➤ Corporate bonds</li> <li>➤ Equity</li> </ul>	Plastic pollution risk assessment	Companies' scores
ESG General data	ISS 	<ul style="list-style-type: none"> <li>➤ Sovereign bonds</li> <li>➤ Corporate bonds</li> <li>➤ Equity</li> </ul>	ESG ratings	Countries' and companies' scores
		<ul style="list-style-type: none"> <li>➤ Corporate bonds</li> <li>➤ Equity</li> </ul>	Controversies	Controversies analysis
	RepRisk 	<ul style="list-style-type: none"> <li>➤ Sovereign bonds</li> <li>➤ Corporate bonds</li> <li>➤ Equity</li> </ul>	Controversies	Systematic screening

## 1.7. Communication

— SCOR is a reinsurance company providing property, casualty and life biometric risk transfer solutions to insurance companies and corporates. As such, premiums remain its ownership until claims need to be paid. SCOR sets its own preferences for investment decisions in line with its own risk appetite and prudential regulation on the prudent person principle.

SCOR issues a sustainable investment report on a yearly basis, complementing i) regulatory information on sustainability under Article 29 of the French bill on Energy and Climate available in section 6 of its Universal Registration Document and ii) its climate report providing a holistic view on how the Group tackles climate change in its business, investments and operations.

SCOR promotes research, and for instance finances the SCOR-MNHN (Musée National d'Histoire Naturelle) Research Chair in Biodiversity and (re)insurance. In 2021, this collaboration has led to the publication of the report: "Biodiversity and (re)insurance: An Ecosystem at Risk".

## 1.8. Spreading knowledge on sustainability and development of internal expertise

— SCOR updates regularly its asset managers on its sustainability journey. Employees are also invited regularly to presentations on how sustainable finance impacts SCOR's investment strategy. People from SCOR Investments also participate to external conferences on sustainability as panelists or speakers to share experience on tackling climate change in investments and foster good climate-related reporting practices. In 2021, SCOR Investments participated to more than 15 public events on sustainability, including conferences and roundtables.

### Technical resources

— As a P&C reinsurer, SCOR has a very strong internal expertise in modelling natural catastrophes especially atmospheric perils. SCOR leverages this when analysing the physical risk of real assets.

SCOR also keeps a constant watch on technological developments in order to use the most relevant tools to analyse nature-related risks and impacts. An example of this is the usage of the Carbon Risk Real Estate Monitor (CRREM) tool to assess the transition risk of SCOR real estate portfolio. This is also why SCOR has performed a quite comprehensive analysis of climate scenarios in order to better understand the implications for its portfolio and the real economy. Using the ENCORE tool is also a key milestone to have a more precise picture of the impacts and dependencies of the portfolio companies on nature.

### Human resources

— Five people are currently in charge of sustainability on the investment side and this team keeps growing on a regular basis. The objective is also to spread sustainability knowledge in the Group.

### Financial resources

— SCOR has increased budgets dedicated to ESG data and tools over the past few years in a constant effort to foster sustainability integration in SCOR lines of business and operations.

### Skills in development

— In order to continue to develop internal skills on sustainability matters, SCOR employees participate to various external training programmes organized by institutions like Novethic, SFAF (La Société Française des Analystes Financiers – SFAF) or some providers.

### Internal capacity building

— Internal awareness regarding sustainability topics is maintained through regular conferences, townhalls and more informal talks on the matter, leveraging internal expertise. The Internal Sustainability Committee plays a key role in spreading knowledge inside the Group.

1.9. Participation in public initiatives

# SCOR's journey toward sustainability

- Environmental and climate commitment
- General commitment
- Health commitment
- Human rights and diversity commitment

**February 21, 2007**

SCOR is leading the debate on the financial protection of developing countries from natural catastrophe risks

**May 1, 2015**

Denis Kessler co-chairs the Extreme Events and Climate Risk program of the Geneva Association

**June 9, 2015**

The SCOR Foundation hosts a seminar on Climate Risks

**November 19, 2015**

SCOR reaffirms its commitment to the management of climate risk, announces its divestment from all exposure to coal and invests EUR 930 million in low-carbon projects

**November 26, 2015**

SCOR commits to the first French climate pledge

2003	2007	2008	2012	2015	2016
<p><b>June 3, 2003</b> SCOR joins the Global Compact initiative</p>			<p><b>June 25, 2012</b> SCOR is a founding signatory of the Principles for Sustainable Insurance (PSI)</p>		<p><b>November 1, 2016</b> SCOR, a member of the CRO Forum Emerging Risks Initiative, publishes a report on water risks</p>
		<p><b>February 20, 2008</b> SCOR (Paris office) commits to a policy of anti-discrimination and to male/female equality among its staff</p>			<p><b>November 7, 2016</b> SCOR signs a global charter on professional equality between women and men</p>

**March 9, 2017**

The SCOR Foundation hosts a seminar on climate risks with the Geneva Association

**March 21, 2017**

SCOR signs the Shift Project's "Decarbonize Europe Manifesto"

**September 6, 2017**

SCOR announces further environmental sustainability initiatives

**December 11, 2017**

SCOR reaffirms its commitment to the environment at the One Planet Summit and signs the second French Climate pledge

**April 26, 2018**

SCOR expands its coal divestment strategy based on the Global Coal Exit List (GCEL)

**December 1, 2018**

SCOR commits to protecting World Heritage Sites

**July 9, 2019**

SCOR releases its Sustainable Investing Policy

**September 11, 2019**

SCOR signs the United Nations Principles for Responsible Investment (PRI)

**May 2020**

Net-Zero Asset Owner Alliance

**December 2020**

Finance for Biodiversity pledge

**February 2021**

Joining the Climate Action 100+ initiative

**May 2021**

Joining the PRI Sustainable Commodities Practitioners' Group (SCPG)

**May 2021**

Joining the Finance for Biodiversity Foundation

**September 2021**

Joining the TNFD Forum

**October 2021**

Joining the Powering Past Coal Alliance (PPCA)

**November 2021**

Joining Act4Nature

**2017**

**2018**

**2019**

**2020**

**2021**

**May 31, 2017**

SCOR sponsors a global statement supporting stronger regulation around tobacco control

**September 26, 2018**

SCOR is a founding signatory of the tobacco-free finance pledge

SCOR is a member of the Climate and Sustainable Finance Commission of the French Autorité des Marchés Financiers. In 2021, SCOR was co-lead of the working group on Carbon Neutrality.

## Chapter 2.

# Strategy



---

**Western honey bees** play a crucial role in the pollination of plants and crops. Yet their numbers have declined in recent years. In 2019, the population in the US plummeted by 40%, although it has since partially recovered.

## 2.1. SCOR's investment philosophy

— The Group intends to optimize risk adjusted returns while limiting negative externalities and promoting positive impacts of its investments. Preserving natural assets is a key priority for investments and goes beyond fighting against climate change and reversing biodiversity loss. Nature must be thought in its entirety and SCOR intends to play its role in addressing this tremendous challenge.

### Sustainable Development Goals

— The Sustainable Development Goals (“SDG”) serve our investment purpose. Our priorities focus on five areas, all directly related to natural assets: clean water and sanitation (SDG # 6), sustainable cities and communities (SDG # 11), climate action (SDG # 13), life below water (SDG # 14), life on land (SDG # 15). SCOR intends to align with international objectives to limit global warming and preserve biodiversity. Becoming Net-Zero emissions on investments by 2050, in line with international agreements, is the first ambition of SCOR to help preserve nature. As the Group becomes more mature, it will strengthen and extend its actions as sustainable development must be considered holistically.

### Double materiality principle

— Protecting the portfolio from downside effects linked to non-financial risks, and particularly nature-related adverse impacts, is at the heart of SCOR's investment risk management. Financing the sustainable development of societies encompasses another dimension requiring SCOR to consider impacts of its investment decisions on ecosystems with the aim to not compromise the ability of future generations to meet their own needs. By doing so, SCOR actively contributes to a more sustainable world and, in return, protects its portfolio against damages over a much longer time horizon. This loop-back effect drives back the long-term horizon within shorter-term investment decisions. This double materiality principle underpins SCOR's responsible investment philosophy.

## 2.2. SCOR's sustainable investing approach

— SCOR's sustainable investing approach is structured around the five pillars of its Sustainable Investing Policy, which form a consistent and robust framework to design the strategy. The Group addresses both the resilience of its invested assets vis-a-vis ESG risks and the positive and adverse environmental and social impacts of its portfolio. The current state of play of sustainability is evolving very fast, advocating for flexibility and constant improvement in terms of approach, methodologies and tools.

## 2.3. Being a responsible investor

### A strong risk management culture

— Thanks to its core business as a reinsurer, SCOR has developed a strong risk culture across the entire Group. Risk ma-

agement includes sustainability as non-financial risks and opportunities as well as potential impacts of the portfolio on ecosystems. Environmental, social and governance criteria are embedded in investment decisions and monitored closely during the investment life cycle. SCOR considers E, S and G criteria as potential early signals of future risks. As such, issuers' extra-financial ratings are screened within risk management processes to better anticipate potential deterioration of credit quality and environmental and social impacts. Controversial issues are also analysed to detect potentially at-risk positions at an early stage. Identifying risks – financial as well as non-financial ones – and managing them to increase the resilience of the portfolio serves the investment strategy and the long-term profitability of SCOR.

### Embedding new trends and opportunities

— Monitoring new trends is critical to keep momentum and detect not only new risks but also new opportunities. SCOR is involved in several initiatives at national, European and international levels to stay connected with innovation around sustainable finance and non-financial corporate reporting. Detecting opportunities is part of the Group strategy to build a resilient portfolio and create long-term value. As an example, SCOR has developed a unique real estate business model based on buying brown buildings in core locations to retrofit them following the highest environmental and energy efficiency standards before selling them to externalize the value created. Over the last 10 years, SCOR has also built a material bucket of infrastructure debt and real estate debt financing the transition to a low carbon economy. This “green bucket” has been built leveraging SCOR Investment Partners' historical expertise in real estate and debt investments.

SCOR also invests in Insurance-Linked Securities that participate to the resilience of communities following extreme events. Unlike physical risk borne by direct investments, SCOR gets compensated for accepting to build exposures to selected physical risks that can be either climate driven like storms or other types of extreme events like earthquakes. As there is no correlation between financial markets evolutions and natural catastrophes occurrence, this strategy provides diversification to the invested assets portfolio and increases its resilience. The Group leverages upon SCOR Investment Partners' long-lasting performance in managing this asset class.

### Theory of change/ Impact framework

— SCOR intends to contribute to international goals about climate and biodiversity highlighted by the Paris agreement and the Convention on Biological diversity. As an investor, SCOR aims at reducing the environmental impact of its investees and of its investment portfolio in line with these frameworks by combining exclusion, best-in-class strategy, stewardship and by investing in climate and nature-based solutions. SCOR high level theory of change regarding investment is summarized in the table below.

Objective	Action	Outcome	Impact
Aligning with the Paris agreement	Exclusion/ Divestment Best-in-class Stewardship	Investees reducing their GHG emissions	Contribution to Net-Zero and Contribution to reversing Nature loss
		Reduction of SCOR portfolio carbon footprint in line with 1,5°C IPCC scenarios	
Aligning with the Convention on Biological Diversity (CBD) goals	Exclusion/ Divestment Best-in-class Stewardship	Investees reducing their biodiversity footprint	Contribution to Net-Zero and Contribution to reversing Nature loss
		Reduction of SCOR portfolio biodiversity footprint	
	Investing in climate solutions and nature-based solutions	Increasing the «Nature Positive Impact Investment» bucket in SCOR portfolio	

## 2.4. Climate change: The rationale of time horizons

—Time horizons are important drivers of decisions and must align with the objectives of the strategy. The duration of invested assets is relatively short, around 4 years, in line with SCOR's reinsurance business. This enables to increase the resilience of the portfolio against long term adverse trends. Bonds represent the bulk of the portfolio. Time horizon can be split in three buckets: less than 2 years, 2 to 5 years and

above 5 years. We can consider that below two years, the risk is mainly a default risk as the sensitivity of bonds is relatively small. Above 5 years, uncertainties mainly around policy responses for transition risks and climate evolution for physical risks may lead to higher volatility in assets valuation. Climate-related risks

Climate Physical risk					
	Short term (below 2 years)	Medium term (2 to 5 years)	Long term (above 5 years)	Risk management / impact assessment	SCOR mitigation action
Within investments, physical risk relates to exposures to climate-related extreme events (acute) or to global trends due to climate change (chronic)					
Acute	<b>Directly:</b> Related to investments in physical assets (buildings and real estate debt, infrastructure debt)			Models and simulations Assessment of climate risk performed internally using property cat models	Location of investments Focusing on deforestation risk as a mitigation action to climate-change risks
	<b>Indirectly:</b> Related to corporate exposures Companies in which SCOR invests may suffer from climate-related extreme events depending on their geographical locations			Models and simulations: portfolio monitoring	
Chronic			The business models of companies in which SCOR invests may suffer from major climate-related trends (increase of sea level, droughts...)	Models and simulations: portfolio monitoring	Focusing on deforestation risk as a mitigation action to climate-change risks

Climate Transition risk					
	Short term (below 2 years)	Medium term (2 to 5 years)	Long term (above 5 years)	Risk management / impact assessment	SCOR mitigation action
Within investments, this risk mainly relates to carbon intensive sectors which may be hit by new regulation. It can also relate to more stringent regulation and reputation risk linked to deforestation. Risks may differ between investments in equities and in bonds as equity prices may never recover whereas bonds may be redeemed at par at maturity. For SCOR the risk is on corporate bonds given the low appetite of the Group for investments in equities					
Carbon intensity	Coal Coal power	Oil Gas	Automotive	Models and simulations: Portfolio monitoring  Foot printing	Divest from highest emitters or sectors with alternative activities Implement a best-in-class strategy and engage companies to foster an orderly transition Set decarbonation pathways Limit exposures to most carbon intensive sectors and divest from laggards to limit market downside
		Cement Steel Gas power			
			Real estate	CRREM	
Deforestation		Agri Food Personal Care / Cosmetics		Screening of the portfolio	Joining initiatives to engage with companies Finance for Biodiversity CDP forest champion

Climate-related opportunities				
	Short term (below 2 years)	Medium to long term (above 2 years)	Assessment	SCOR answer
Physical	Insurance Linked Securities		Diversification effect	Selection of perils / geography
Transition	Green bonds Solar, wind (corporate bonds, infrastructure debt) Energy efficiency (direct real estate and real estate debt)	Potential new technologies providing diversification to the invested assets portfolio (including carbon sinking solutions and clean energies)	Internal taxonomy Leverage the AOA financing transition initiatives	7,3% of the portfolio invested in "green" investments as of end of 2021

## 2.5. Climate scenarios

— After running several scenarios provided by regulators or think tanks over the last years, SCOR wanted to dig in to better understand similarities and differences in existing climate scenarios. Both TCFD and Art 29 LEC recommend that when choosing scenarios to stress test their business model, companies assess which ones are appropriate.

Literature related to climate scenarios is extensive and provides detailed information on assumptions underlying most of the ones commonly considered by the finance industry. SCOR has performed a study that covers transition scenarios of IPCC, IEA, PRI, NGFS and One Earth Climate Model. Comparability is not straightforward as achieving Net-Zero is a combination of carbon emissions reduction and/or Carbon Dioxide Removal (CDR). Hence, many scenarios can lead to Net-Zero by 2050 following very different pathways depending on how much overshoot and / or CDR are deemed acceptable and considered realistic.

### General background

— In December 2015, 195 nations adopted the Paris Agreement at the twenty-first session of the Conference of the Parties (COP) to the UNFCCC. It is a historic instrument, without equivalent, which intends to strengthen the global response to the threat posed by climate change, in particular by "containing the rise in the average temperature of the planet significantly below 2°C compared to pre-industrial levels and by continuing the action taken to limit the rise in temperatures to 1.5°C compared to pre-industrial levels".

In 2018, the Intergovernmental Panel on Climate Change (IPCC) released a special report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty. Based on Integrated Assessment Models (IAMs) it offers a holistic view of pathways leading to a 1.5°C global warming.

The International Energy Agency (IEA) is an autonomous inter-governmental organization within the OECD framework. It publishes every year the World Energy Outlook (WEO) which provides critical analysis and insights on trends in energy demand and supply, and what they mean for energy security, environmental protection, and economic development. The WEO especially contains the Stated Policies Scenario (STEPS), the Sustainable Development Scenario (SDS) and the new Net-Zero Emissions 2050 (NZE2050).

The One Earth Climate Model (OECM) is one of the most detailed climate and energy studies based on the same methodology as the IPCC through IAMs. It offers a unique look at what the renewables revolution could look like on the

path to meeting the most ambitious, yet essential, goals of the Paris Climate Agreement – limiting global temperature rise to 1.5°C – with no reliance on nuclear (0% of primary energy in 2050) and no negative emissions technology use. It also offers a Business-as-Usual scenario based on the 2017 IEA's STEPS.

Also based on IAMs, but built independently from the IPCC scenarios, the Network for Greening the Financial System (NGFS) climate scenarios offer a set of 8 pathways representing three categories: Orderly, Disorderly and Hot House. The NGFS scenarios have been developed to provide a common reference framework to Central Banks in analysing climate risks to the economy and financial system. They provide key features of transition & physical risks and economic impacts of climate change.

The Inevitable Policy Response (IPR): Forecast Policy Scenario (FPS) has been developed by the United-Nations PRI to model the impact of the forecasted climate-related policies on the real economy up to 2050. Based on a Disorderly framework, this scenario traces detailed effects on all emitting sectors, including changes to energy demand (oil, gas, coal), transport, food prices, crop yields, and rates of deforestation. It provides a realistic outline of the coming policy response in the 2020s and quantifies the financial risks that it presents.

The objective of SCOR's study was to present the current state of play of climate scenarios and provide rationale for setting decarbonization targets under the Net-Zero Asset Owner Alliance 2025 Inaugural Target Setting Protocol.

### Methodology

— Comparisons were drawn between the different reports to find elements which can bring closer or differentiate the models. Then it allows to understand how these pathways can be used and what their scopes are.

First, the study highlighted the reasons why the different scenarios are based on a particular 1.5°C of global warming compared to pre-industrial levels. And the bases of negative emissions technologies were introduced.

Using the 2018 IPCC special report Global Warming of 1.5°C a review was made with specific focus on the Summary for Policymakers, the Chapter 2 about mitigation pathways compatible with 1.5°C in the context of sustainable development, and on the Chapter 3 about impacts of 1.5°C global warming on natural and human systems.

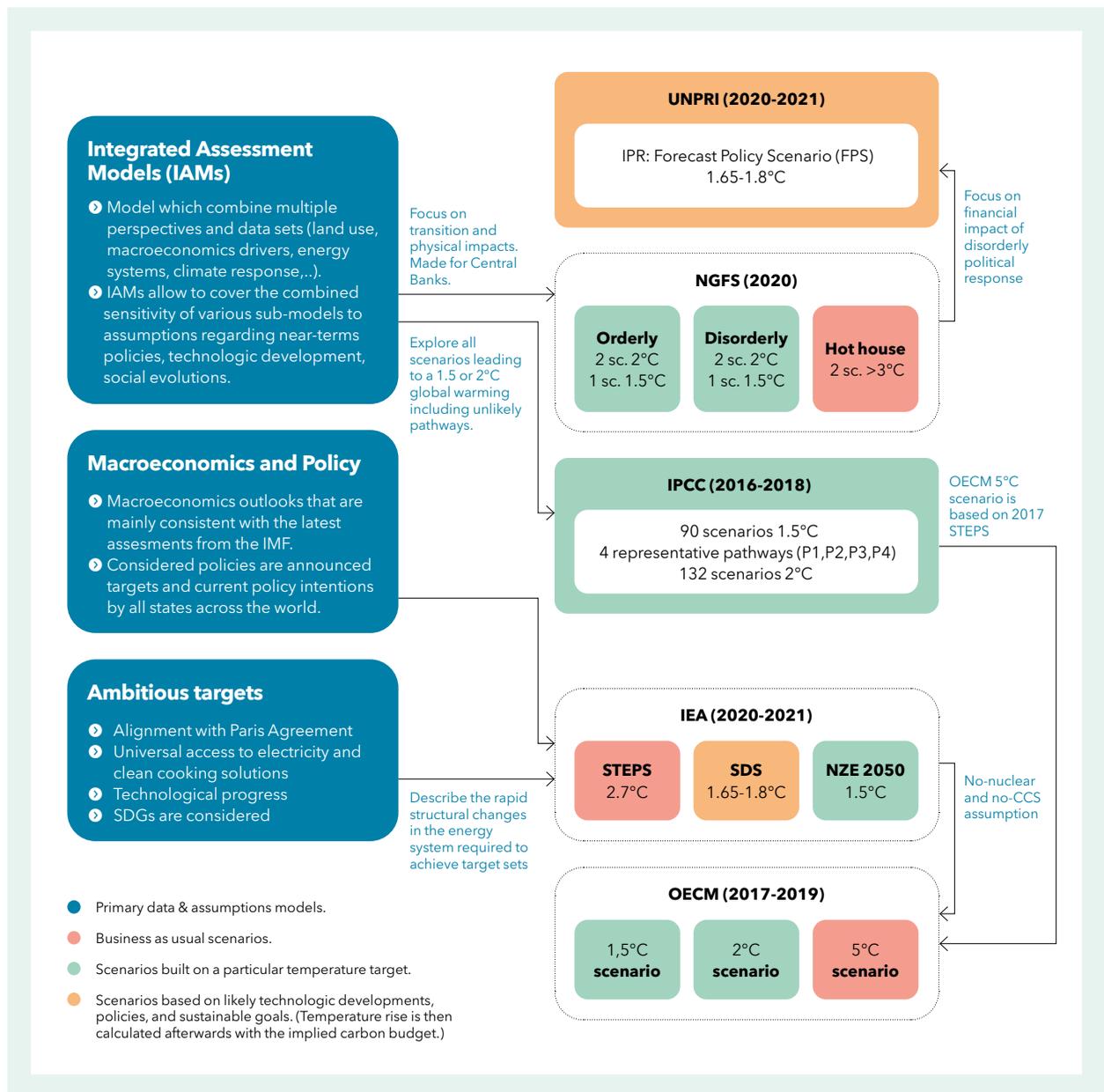
Concerning the IEA reports, as the 2020 WEO is mainly focused on the consequences of the pandemic for the next decade, the 2019 WEO was also reviewed. This report introduced a set of scenarios that explore different possible futures, the actions – or inactions – that bring them about and the interconnections between different parts of the system. A review of the new NZE2050 scenario for which a special report was

issued in May 2021 was also made. A striking feature is that in the NZE2050 pathway there are no new oil and gas fields approved for development, and no new coal mines or mine extensions are required.

For other scenarios, the same method was applied: first, we look at the methodology and at the assumptions; secondly, we analyse the outputs and the main findings for each scenario.

**Climate scenarios comparison**

— The graph below shows the difficulty to compare scenarios due to the various stances taken by the scenario providers. Some of them derive actions from temperature targets, others play the other way round and assess temperature rise from actions implemented to transition.



In the table below, a comparison of the general assumptions of the various climate scenarios that were reviewed is performed.

Scenarios	Temperature trajectories		Carbon Budget (from 2020 to 2100)		CDR use assumptions	
	Temperature in 2100	Overshoot (over 1.5°C)	50% probability	66% probability	BECCS (Bioenergy with Carbon Capture and Storage)	Other (DAC: Direct Air Capture ; AFOLU: Agriculture, Forestry and Other Land Use)
<b>IEA NZE (Net zero in 2050 )</b>	1.5°C	No or low Overshoot	450 Gt (2021-2050)	No data	1150 mtCO <sub>2</sub> in 2030 (2.5x more than P2) 1.3Gt in 2050	0.6Gt in 2050
<b>IEA SDS (Sustainable Development)</b>	1,65°C-1,8°C	Yes	No data	795 Gt	802 mtCO <sub>2</sub> in 2050 45 GtCO <sub>2</sub> cumulative until 2070	2.7 GtCO <sub>2</sub> cumulative until 2070 with DAC
<b>IEA STEPS (Business as usual)</b>	2.7°C	Yes	No data	No data	N/A	N/A
<b>IPCC Low Energy Demand (P1)</b>	1.4°C	No	495 Gt	335 Gt	No BECCS	200 GtCO <sub>2</sub> cumulative until 2100 with AFOLU
<b>IPCC Sustainable Development (P2)</b>	1.3°C	No or low Overshoot			151 GtCO <sub>2</sub> cumulative until 2100	197 GtCO <sub>2</sub> cumulative until 2100 with AFOLU
<b>IPCC Middle of the Road (P3)</b>	1.3°C	1.6°C low Overshoot			414 GtCO <sub>2</sub> cumulative until 2100	273 GtCO <sub>2</sub> cumulative until 2100 with AFOLU
<b>IPCC Fossil-Fuelled Development (P4)</b>	1.3°C	1.8°C high Overshoot			1191 GtCO <sub>2</sub> cumulative until 2100	27 GtCO <sub>2</sub> cumulative until 2100 with AFOLU
<b>OECD 1.5°C Scenario</b>	1.5°C	No	450 Gt (2015-2050)	No data	No BECCS	151.9 GtCO <sub>2</sub> (cumulative 2015-2150) with reforestation
<b>OECD 2°C Scenario</b>	2°C	Yes	587 Gt (2015-2050)	No data	No BECCS	
<b>OECD 5°C Scenario</b>	5°C	Yes	1388 Gt (2015-2050 no net zero)	No data	No BECCS	
<b>NGFS 2°C Orderly representative scenario (2 alternate scenarios exist)</b>	<2°C	Yes	800 Gt (2020-2060)	No data	1 GtCO <sub>2</sub> in 2050 15 GtCO <sub>2</sub> in 2100	2.5 GtCO <sub>2</sub> in 2050 4 GtCO <sub>2</sub> in 2100 with afforestation
<b>NGFS 2°C Disorderly representative scenario (2 alternate scenarios exist)</b>	<2°C	Yes	900 Gt (2020-2050)	No data	Negligible use	2.5 GtCO <sub>2</sub> in 2050 4 GtCO <sub>2</sub> in 2100 with afforestation
<b>NGFS 2°C Disorderly representative scenario (2 alternate scenarios exist)</b>	>3°C	Yes	1430 Gt (2020-2050 no net-zero)	No data	Negligible use	Negligible use
<b>IPR: Forecast Policy Scenario (UNPRI)</b>	1,65°C-1,8°C	Yes	No data-60% fall in CO <sub>2</sub> emissions	No data	Slow development	N/A

Related Energy Mix (% of primary energy demand)							Other key assumptions		
Coal	Oil	Gas	Nuclear	Renewables	Traditional use of biomass	Population in 2040	Primary energy demand in 2030 vs 2019	Carbon pricing per CO <sub>2</sub> ton	
14% in 2030 3% in 2050	25% in 2030 9% in 2050	24% in 2030 11% in 2050	9% in 2030 11% in 2050	28% in 2030 66% in 2050	0% in 2030 0% in 2050	9154m (64% urban)	-17%	205-250\$ in advanced economies 2040-2050	
17% in 2030	30% in 2030	25% in 2030	7% in 2030	22% in 2030	0% in 2030		-7%	125-140\$(2019) in 2040	
22% in 2030	30% in 2030	24% in 2030	5% in 2030	15% in 2030	4% in 2030		10%	125-140\$(2019) in 2040	
6% in 2030 1% in 2050	21% in 2030 4% in 2050	16% in 2030 5% in 2050	8% in 2030 12% in 2050	42% in 2030 71% in 2050	7% in 2030 6% in 2050	8.5 B	-29%	25\$ on average 2030-2100	
9% in 2030 4% in 2050	24% in 2030 10% in 2050	14% in 2030 6% in 2050	8% in 2030 6% in 2050	38% in 2030 67% in 2050	7% in 2030 7% in 2050	8.5 B	-17%	115\$ on average 2030-2100	
6% in 2030 5% in 2050	26% in 2030 4% in 2050	24% in 2030 16% in 2050	8% in 2030 18% in 2050	27% in 2030 47% in 2050	9% in 2030 11% in 2050	8.5 B	3%	105\$ on average 2030-2100	
9% in 2030 0% in 2050	45% in 2030 11% in 2050	22% in 2030 6% in 2050	7% in 2030 14% in 2050	12% in 2030 49% in 2050	6% in 2030 20% in 2050	8.5 B	21,50%	120\$ on average 2030-2100	
9% in 2030 1% in 2050	16% in 2030 4% in 2050	25% in 2030 2% in 2050	2% in 2030 0% in 2050	30% in 2030 75% in 2050	18% in 2030 18% in 2050	9210m	-31,7%	160\$ on average 2040-2050	
17% in 2030 1% in 2050	22% in 2030 3% in 2050	24% in 2030 2% in 2050	2% in 2030 0% in 2050	21% in 2030 74% in 2050	16% in 2030 19% in 2050		-27,2%	160\$ on average 2040-2050	
26% in 2030 26% in 2050	28% in 2030 26% in 2050	25% in 2030 26% in 2050	6% in 2030 5% in 2050	6% in 2030 8% in 2050	10% in 2030 10% in 2050		38,8%	78\$ on average 2040-2050	
13% in 2030 2% in 2050	32% in 2030 23% in 2050	23% in 2030 20% in 2050	5% in 2030 10% in 2050	27% in 2030 55% in 2050	Included in the coal section	8.9 B	No data	300\$(2010) in 2050	
22% in 2030 1% in 2050	30% in 2030 19% in 2050	27% in 2030 9% in 2050	2% in 2030 4% in 2050	19% in 2030 67% in 2050			No data	700\$(2010) in 2050	
26% in 2030 22% in 2050	35% in 2030 33% in 2050	24% in 2030 28% in 2050	2% in 2030 1% in 2050	13% in 2030 16% in 2050			No data	17\$(2010) in 2050	
15% in 2030 0% in 2050 (electricity generation only)	2% in 2030 0% in 2050 (electricity generation only)	23% in 2030 8% in 2050 (electricity generation only)	10% in 2030 7% in 2050 (electricity generation only)	50% in 2030 81% in 2050 (electricity generation only)	0% in 2030 4% in 2050 (electricity generation only)	8.9 B	No data	\$60-85 in 2030 for leading countries, \$35-50 elsewhere	

**Conclusion**

—The study tends to validate the option taken by the NZAOA to rely on IPCC scenarios and the One Earth Climate Model to set credible and science-based target ranges for portfolio decarbonization.

## 2.6. Addressing the double materiality

— When considering environmental, social and governance criteria in its investment strategy, SCOR believes that materiality is key to both assess potential risks and identify best opportunities. Protecting the portfolio from downside effects linked to non-financial risks and in particular climate-related adverse impact is at the heart of SCOR's investment risk management. Resilience intends to protect the value of assets against both transition and physical risks. These two risks move in opposite directions as the faster the transition the higher the possibility of containing global warming. However, this works to the extent where transition occurs early enough and in an orderly manner. Otherwise, transition damages – mainly stranded assets – and significant increase in severity and /or frequency of climate-related extreme events may both hit the value of investment portfolios.

In order to improve longer-term resilience, it is of utmost importance to also address inside-out effects of investment decisions. By doing so, SCOR actively contributes to a faster transition and, in return, protects its portfolio against physical damage in a much longer time horizon. This loopback effect drives back long-term horizon within shorter-term investment decisions.

This has led SCOR to early exit some sectors that are not compatible with the Paris Agreement and the Group has extended its divestment from thermal coal in 2021. The Group has also taken additional steps to better impact the real economy. This includes joining engagement initiatives and enhancing the best-in-class strategy applicable to upstream oil & gas companies.

## 2.7. 2021 major steps in investment strategy

— In 2021, SCOR has accelerated its investment journey toward sustainability:

- SCOR has refined its sustainable investment policy regarding thermal coal and has joined the Powering Past Coal Alliance (PPCA) to reinforce its commitment
- SCOR has decided to refine its best-in-class strategy when investing in upstream oil & gas, and has also defined an observation list of the best-in-class companies with expansion plans, based the Global Oil & Gas Exit List from Urgerwald
- SCOR has increased its dialogue with investees, has pursued its active participation to the NZAOA and the Finance for Biodiversity Foundation. SCOR has also joined new initiatives to reinforce its commitments

### Net-Zero Asset Owner Alliance

— In May 2020, SCOR has joined the Net-Zero Asset Owner Alliance (NZAOA). This initiative aims at supporting asset owners in their commitment to carbon neutrality by 2050 in their portfolios.

In 2021, SCOR actively participated to NZAOA various working groups that are meant to enhance the Alliance approach and to foster decarbonation of the real economy. The Net-Zero Asset Owner Alliance invites all members to set targets for end of 2024 based on 2019 portfolio positioning, called the “baseline”.

### Net-Zero Asset Owner Alliance: impacting the real economy

The Net-Zero Asset Owner Alliance provides a unique framework for investors to design, implement and report on their decarbonation strategy. The science-based Target Setting Protocol enables to rely on a credible set of assumptions supported by robust academic research. It offers the possibility to combine portfolio targets, sector targets and engagement targets to ensure actual translation of investment decisions into the real economy. Calling for enlarging investment universe in transition solutions complements the toolkit to design the net-zero world. The Protocol provides the collective answer of investors and a relevant benchmark to support decision making in a near future. As such it brings back the long-term vision of a carbon-neutral world within the time horizon of investment decisions.

The pathway investees will follow in their decarbonation journey is a critical element of investor success in their attempt to align their portfolio with the Paris agreement.

- Engagement targets are mandatory as the Alliance considers dialogue as the most powerful tool to impact the real economy. However, this needs to be complemented with decarbonation targets to better align interests of engagement with investors commitments
- Portfolio decarbonation: Using IPCC P1 to P3 pathways, the Alliance has concluded that investors should set an interim target of decarbonation in the range of -16% to -29% by end of 2024 to align with a carbon budget compatible with carbon neutrality by 2050. Each member sets its own targets depending on its portfolio sector mix and the efforts already made prior to the baseline. As a first step, targets are expected for publicly traded corporate bonds and listed equities, as well as real estate for investment purposes when possible. Other asset classes will be progressively covered over time, Sovereign, Supranational and Agencies bonds expected in 2021.
- Sector Decarbonation: The Alliance has used the One Earth Climate Model commissioned to the University of Technology Sydney (UTS) to set decarbonation objectives for the highest emitting sectors.

- Members are strongly encouraged to develop financing solutions to support the transition to a low carbon economy and are invited to set targets on initiatives or contributions to foster new solutions.

In 2021, SCOR took some steps to decarbonize the investment portfolio in line with its commitments taken as a NZAOA member. Fully and systematically exiting highest emitting sectors is not compatible with engagement with companies operating in those sectors that most need to transition to a low carbon economy. Setting targets means designing the right balance between fast decarbonation and engagement results. This also aligns with SCOR's principles set in its Sustainable Investing Policy to apply a balanced approach between enhancing access to development and reducing CO<sub>2</sub> emissions.

### Finance for Biodiversity Foundation

— Carbon sinking participates to climate-change mitigation and SCOR recognizes the need to better consider biodiversity when tackling climate change. In 2020, SCOR has signed the Finance for Biodiversity pledge and has become member of the CDP forest champion initiative. In order to deliver on this commitment, SCOR joined in 2021 the Finance for Biodiversity Foundation and collaborates with other investors to develop a common understanding of the topic and share knowledge and experience. This has led to several guides on methodologies and preliminary engagement actions, mainly on deforestation. In 2021, SCOR also joined the TNFD Forum, a consultative grouping of institutional supporters who share the vision and mission of the TNFD and have expressed a willingness to make themselves available to contribute to the work and objectives of the Taskforce.

### Climate Action 100+

— In order to increase its dialogue with carbon intensive investees, SCOR joined in 2021 Climate Action 100+ which is an investor-led initiative to ensure the world's largest corporate greenhouse gas emitters take necessary action on climate change.

### PRI's Sustainable Commodities Practitioners' Group (SCPG)

— In 2021, SCOR joined the PRI's Sustainable Commodities Practitioners' Group (SCPG), a forum for building investors' awareness and share current practice in responding to commodity-driven deforestation. SCOR has committed to draft a "zero deforestation policy" and assess the risks linked to deforestation in its invested assets portfolio. A detailed agenda covering 2022 to 2025 sets ambitious milestones to tackle deforestation in investments.

### The Powering Past Coal Alliance (PPCA)

— To reinforce its commitment about thermal coal, SCOR joined in 2021 the Powering Past Coal Alliance (PPCA) which is a coalition of national and subnational governments, businesses and organisations working to advance the transition

from unabated coal power generation to clean energy. The PPCA aims to:

- secure commitments from governments and the private sector to phase out existing unabated coal power;
- encourage a global moratorium on the construction of new unabated coal-fired power plants;
- shift investment from coal to clean energy, including by working to restrict financing for coal-fired projects;
- achieve coal phase-out in a sustainable and economically inclusive way, including appropriate support for workers and communities.

### Act4nature

— To demonstrate the rising concern of the Group on biodiversity, SCOR took in 2021 some commitments through the Act4nature international initiative, including specifically the investment portfolio. Act4nature international is a pragmatic alliance initiated to accelerate concrete business actions in favour of nature and born by businesses and stakeholders, including NGOs, academic bodies and public institutions. Committed businesses have signed at CEO-level 10 common commitments and SMART individual commitments (Specific, Measurable, Attainable, Relevant and Time-bound). SCOR's commitments are available on the Act4nature international website (access to the report on [act4nature.com](http://act4nature.com)).

## 2.8. Engagement

— SCOR intends to take its part in supporting a more sustainable world. This relies on selecting investments but also on engaging a fruitful dialogue with companies to foster actions towards more sustainable business models. SCOR has exercised its voting rights in 2021, especially for climate resolutions. For most resolutions, the Group has followed its Glass Lewis proxy's recommendations. Regarding specifically TotalEnergies resolution on "Say on climate", SCOR did abstain from voting.

Beyond voting and exercising its shareholder's duty, SCOR has decided to join several initiatives like the Climate Action 100+ one for efficient engagement. Given its low appetite for equities as an asset class and the limited amount of its invested assets (circa EUR 23billion), the Group favours collaborative initiatives rather than individual dialogue.

SCOR fosters also dialogue with its external asset managers, mainly during the yearly due diligence monitoring processes. This is the opportunity of an in-depth explanation of the philosophy underpinning the Sustainable Investing Policy and a fruitful dialogue on the way investment managers consider SCOR's preferences in their investment decisions and ensure alignment between investment managers calibration tools and SCOR's investment strategy. Compliance ensures restrictions are correctly coded in their systems. Best in class strategies are discussed and detailed to ensure they are based on the same understanding and criteria.

*Chapter 3.*

# Risk, impact and Risk Management

---

**Intensely colored red corals** have long been prized as a material for jewelry. Over-harvesting and climate change increasingly threaten their survival, yet protected colonies (notably in the Mediterranean) have enabled the species to regrow.

### 3.1. Organisation

— Group Investment Risk & Sustainability encompasses financial risks, non-financial risks and impacts of investment decisions. It monitors portfolio positioning and ensures it complies with the risk limits set globally by the Group as part of its risk management framework. Four people are in charge of sustainability, analysing risks, impacts and opportunities.

### 3.2. Tools and Processes

— Group Investment Risk & Sustainability has developed a robust risk management toolkit to address both financial and non-financial risks as well as the double materiality. Depending on data availability and methodologies maturity, Group Investment Risk & Sustainability uses different approaches. Some are qualitative, others are more quantitative. As maturity evolves and methodologies become more robust, Group Investment Risk & Sustainability improves its awareness and understanding of sustainability issues and increases internal expertise. Partnering with external data providers and consulting firms speeds up the journey from awareness to understanding and decision making. As we push the envelope to explore unknown territory, we often start with exploratory and very preliminary results that may not be robust enough to take sound investment decisions. However, it helps the Group fine-tune its approach and better anticipate next challenges.

#### Models and simulations

— Two main quantitative tools are used to assess climate-related risks.

- Nat cat modelling tools: the natural catastrophe modeling tool is SCOR's proprietary tool developed internally for pricing natural catastrophe business. Based on scenarios validated by the Group's modeling teams, this model estimates potential losses from natural catastrophes. It enables to calculate damage rates which provide estimates of the potential losses physical assets may suffer in the event of different perils such as Japan earthquakes, Europe wind, US hurricanes, etc. Intensity and frequency of perils are provided by zip codes, enabling a granular assessment of the risks borne by each physical asset of the portfolio.
- CRREM: the Carbon Risk Real Estate Monitor is a tool using science-based decarbonation pathways aligned with the Paris Agreement to measure the (mis)alignment of direct real estate investments with a 2°C and a 1,5°C pathways. It enables to assess the risk of write-downs due to change in market regulations and consumer behavior depending on current levels of consumption linked to national determined contributions. Limited to EU, it fits quite well with SCOR's real estate investment portfolio mainly

located in France. However, as consumption data is still missing currently, Group Investment Risk & Sustainability concentrated in 2020 the analysis on real estate for own use located in Europe and representing around EUR 625 million. About one fourth of operating real estate was located outside of Europe and could not be part of this first assessment. With the "Décret tertiaire" regulation coming into force in France, SCOR will be in a position to analyse the real estate for investment in the future.

Scenario / stress testing: for liquid and listed securities, usually government and corporate bonds as well as equities, stress tests have been developed based on IPCC or IEA climate scenarios. They intend to translate the consequence of "temperature scenarios" into macro-economic variables, enabling to project the value of investment portfolios in a certain time-horizon under certain rates, credit spreads and equity level assumptions. The higher the temperature scenario, the higher the physical risk. The lower the temperature scenario, the higher the transition risk. SCOR recognizes the limitation of the approach as the superposition of assumptions (climate scenarios, NDCs realization, macro-economic consequences, expected positioning of the portfolio in the future, mitigation actions) may limit conclusions. However, SCOR sees a lot of benefits in running those scenarios. It raises awareness internally at every level of the company from Group Investment Risk & Sustainability teams to Executive and Board Committees. It fosters fruitful discussions on the level of maturity and demonstrates constant improvement and involvement on the topic. It fastens processes when data and methodologies become robust enough to start and use the results to amend the Sustainable Investing Policy and drill it down into the investment strategy. The transition from experimental to usable information smoothens with experience and comparison of results under different scenarios.

#### Foot printing

— Foot printing is an attempt to assess the "inside out" impact of investments. It can be also considered as a preliminary assessment of future risks as negative impacts may in turn harm the portfolio in a longer time horizon.

- Carbon footprint: Despite a lot of attempts to foster transparency and comparability, carbon foot printing is a complex exercise as it relies on a large amount of data, a lot of which being either not available or not robust. When related to past information on GHG emissions, data may be criticized for being backward looking. When trying to assess forward looking foot printing as for implicit temperature rise, data may be based on assumptions of company's future behavior or pathway, with all the surrounding un-

certainties. There is no ideal metric nor solution, but this should not refrain from acting to better align the investment portfolio.

- Combining both carbon footprint and implicit temperature rise provides an indication on how a company is engaged in its transition to a low carbon economy and how it actually delivers on its own targets. Tracking both backward and forward-looking information helps select best-in-class companies and provides a benchmark to regularly reassess their progress.
- Biodiversity footprint: Assessing the impact of investments on biodiversity requires natural capital indicators and meaningful methodologies. Several approaches to measure impacts and dependencies on ecosystem services and biodiversity are being developed. For the time being, no standard has emerged because of the complexity of the topic: dependencies on nature are not the same for different sectors and hence for different companies. Moreover, each ecosystem is sensitive to different pressures.

### Portfolio screening

— Portfolio screening is useful as a first attempt to assess materiality of a nascent topic. Group Investment Risk & Sustainability usually uses it on a top-down basis, isolating sectors that may be at risk for a specific sustainability topic. Such analysis enables to assess how much of the portfolio may be at risk. It needs to be complemented by a bottom-up approach as non-financial risks may be mitigated at company level. Such an approach has been used in the past when trying to assess how much of the corporate bonds and equity portfolio could be exposed to carbon pricing transition risk. It has been tested again in 2021 when trying to assess the materiality of deforestation risk and plastic pollution risk within SCOR's investment portfolio.

**Taxonomy:** As a member of the Technical Expert Group on Sustainable Finance, SCOR has participated to the design of the taxonomy and considers the value of the screening criteria. Activities falling into the taxonomy are likely to be less exposed to environmental risks and the “Do No Significant Harm” factor ensures minimum safeguards that addressing one environmental objective is compatible with the protection of environment as a whole. Applying the taxonomy to investment portfolios provides a robust assessment of the opportunities provided by the transition to a sustainable economic model.

**ESG rating and controversies:** Sustainability encompasses a lot of aspects and climate change is only one broad topic among others that need to be considered. SCOR relies on data providers for ESG rating on most liquid asset classes. It provides additional information on the potential adverse impact of its investments. Controversies complement individual screening and contribute to a more robust monitoring of positions

within the portfolio. It can also support decisions to ban a specific issuer.

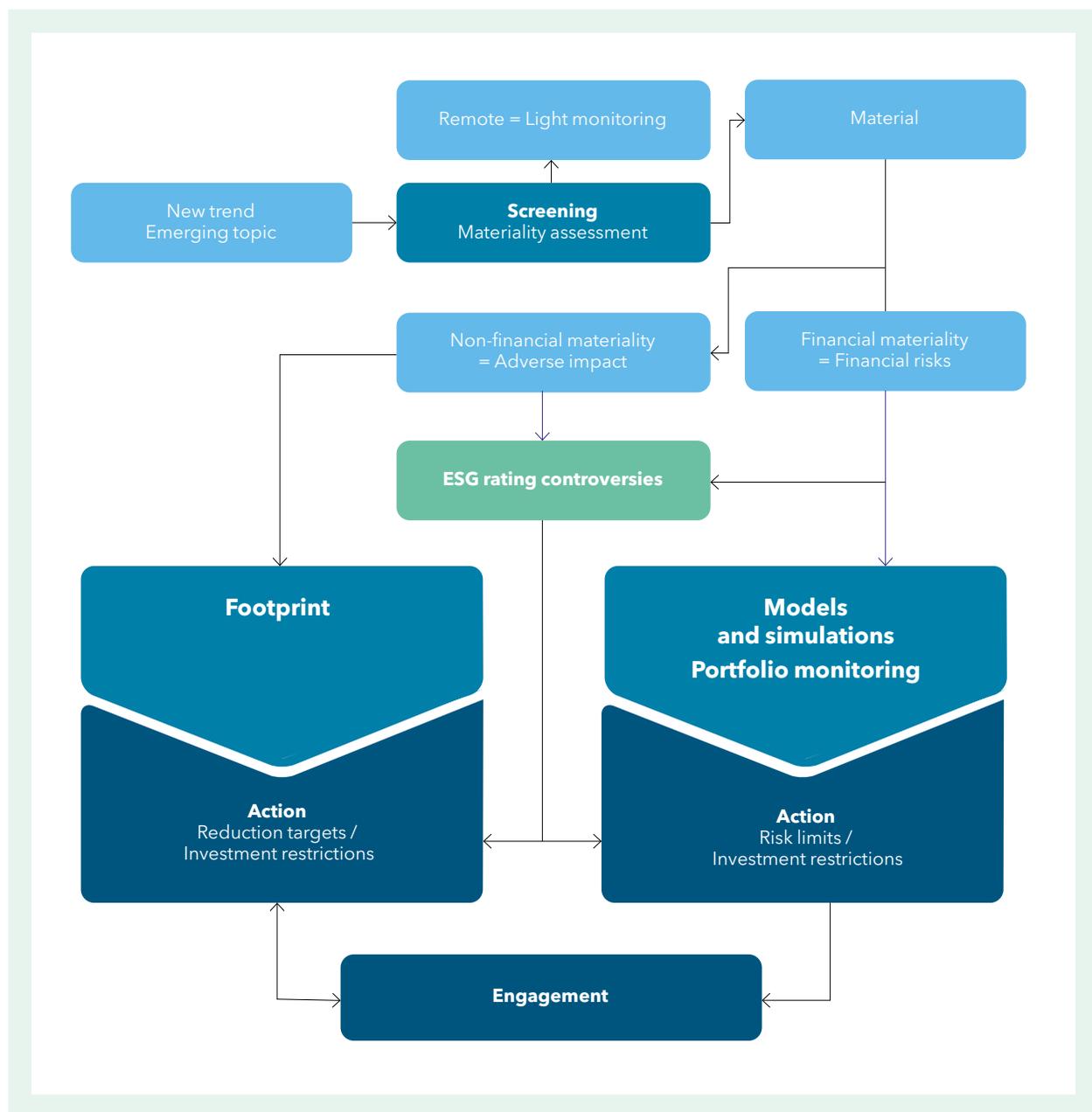
The integration of ESG criteria is measured primarily by assessing the quality of the asset portfolio. Given the extremely high level of diversification of its investments, the Group works with the independent, non-financial ratings agency ISS-ESG to assess its portfolio's standard instruments. The agency assesses mainly government bonds, corporate bonds and listed equities. For debt instruments, particularly infrastructure and real estate debt, the Group relies on the expertise of its subsidiary SCOR IP, a recognized leader in the European debt instrument management industry. Issuers with the lowest ratings may be on a watchlist, and investments managers may be asked to provide rationale for selecting or keeping the position. SCOR does not apply systematic exclusions based only on ESG rating but favours a pragmatic approach. The Group aims to reconcile risk control with profitability and solvency targets. Like all reinsurers operating in multiple jurisdictions, SCOR is subject to multiple regulatory and business constraints. The main growth drivers are in Asia, where national law often requires that assets be owned and held locally. In those locations, to optimize its capital allocation, the Group focuses primarily on its core business and often refrains from allocating capital to market risks. Investments in those countries are strictly designed to back liabilities and address ALM constraints. Consequently, the bulk of the portfolio is invested in government bonds in the riskiest countries. This asset class has been growing steadily in line with the expansion of SCOR's Asian business. At the same time, the Group is mindful of any local initiatives, especially on sovereign green bonds.

Sustainability is still evolving and there is no size-fits-all type of assessment. Assessing and managing sustainability risk is a combination of those different tools and methodologies and the selection of the most relevant risk / impact assessment approach depends on maturity and materiality. There is not one single holistic way of tackling sustainability within investment and the multi-dimensions of sustainability deserve agility, reactivity, and adaptability. As the robustness of tools increases and their understanding allows for more reliance on the output, they provide better material for internal discussions, raising awareness, risk management and investment decision support.

**Risk management process**

— SCOR Investments strives to actively follow sustainability trends on investments by constantly watching initiatives and news-flow, and stimulating debates with peers, regulators, professional associations. New trends are analysed from the two materiality lenses and when considered material, they enter the

double process of risk management and impact assessment. Depending on the maturity of methodologies and availability of data, results can lead to internal discussions, or amendments to the investment strategy.



Outcomes of the process can be summarized as follows:

		Risk / Opportunities assessment	Impact assessment	Asset classes	% of coverage of related asset classes
Models and simulations	Nat cat modeling tool	Climate physical risk		SCOR's physical assets	9%
	CRREM	Climate transition risk		SCOR's real estate for own use	Real estate for own use - Experimental
	Climate stress testing	Climate transition risk Climate physical risk		Government bonds Corporate bonds Listed equities	77%
Foot printing	Carbon intensity	Climate transition risks		Government bonds Corporate bonds Listed equities Corporate and leverage loans	73% (on enterprise value)
	Implied temperature rise (ITR)	Climate transition risk	Pathway to reach carbon neutrality by 2050 including interim targets by 2025		74%
	Biodiversity	Transition risk	   		Experimental
Portfolio screening	Taxonomy	Resilience of activities	 	Utilities	Not relevant - Experimental
	Biodiversity	Deforestation risk		Corporate bonds Listed equities	
	ESG rating	Identify most critical positions for monitoring	Limiting adverse impacts Enhancing positive impacts	All invested assets	75%
	Controversies			Liquid assets	Not relevant



Source - Stockholm Resilience Centre: This graph shows the links between SDGs and the dependency of societies on the biosphere. By contributing to the achievement of SDGs 6, 13, 14 and 15, SCOR supports the wellbeing of the biosphere and therefore the sustainable development of societies.

### 3.3. Assessing companies transition pathways

— In 2021, as part of our efforts to decarbonize our portfolio, we decided to study the transition plans of our portfolio companies. We focused on two assessments: commitments to the SBTi (Science Based Target Initiative) and grades in Climate Action 100+ (CA 100+) Net Zero Benchmark (NZB).

The SBTi is a joint project of CDP, UN Global Compact, WWF and WRI that assesses GHG emissions reduction targets of voluntary companies against science-based methods. When we performed the study (April 2021), 1 346 companies had committed to set SBTi targets and were classified depending on their ambition as 1.5°C, well below 2°C or 2°C, per

time horizon (short, mid or long term). Companies which strategies were being in the process of being assessed were classified as “Committed”.

CA 100+ is an investor-led initiative (545 investors managing more than \$52 trillion as of November 2020) to ensure that the world’s largest corporate GHG emitters take necessary action on climate change. The net-zero commitments of these corporations (159) were compared in March 2021 in CA 100+ Net-Zero benchmark (NZB), based on ten indicators, which receive the mention “Yes” if all sub-indicators are met, “Partial” if at least one sub-indicator is met, “No” otherwise.

We found out that 17% of our entire Q1 2021 portfolio had committed to the SBTi and 7% was studied by CA 100+.

Asset class	% of portfolio committed to the SBTi	% of portfolio studied in CA 100+ Net Zero Benchmark	% of portfolio committed to the SBTi and studied in CA 100+ NZB
Fixed income	21%	9%	5%
Loans	1%	0.3%	
Equity	29%	10%	4%
<b>Total portfolio</b>	<b>17%</b>	<b>7%</b>	<b>4%</b>

The results vary widely depending on the sector. Indeed, since CA 100 + NZB focuses on the largest emitters, the carbon intensive sectors of our portfolio are more covered. On the other hand, since participation in the SBTi is voluntary and indicates a strategy to decarbonize operations, the sector co-

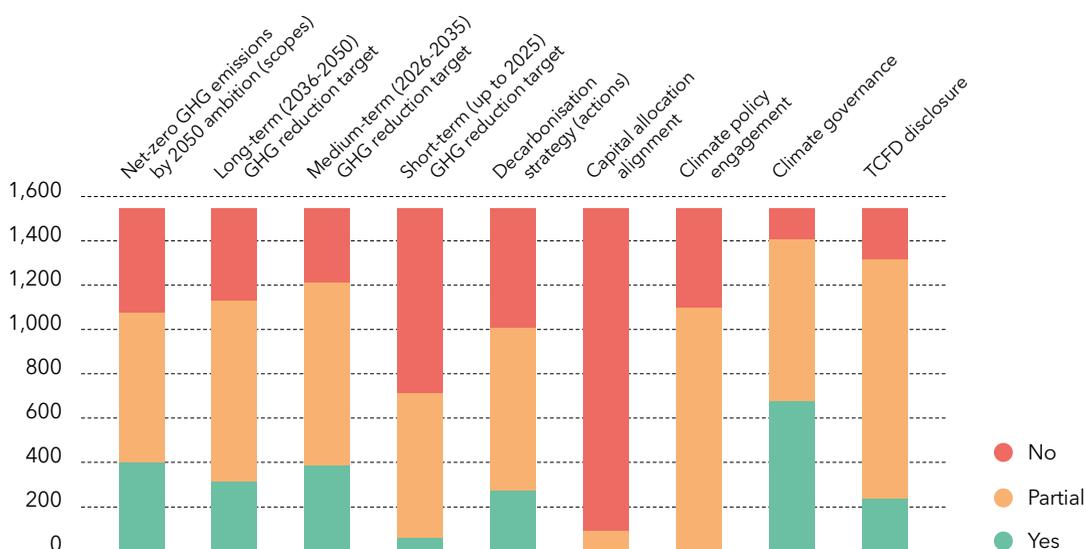
verage is different: we found out that some carbon-intensive sectors from our portfolio were highly committed to the SBTi, such as basic materials or consumer goods (cyclical or not). For the industrial and energy sectors though, the participation to the SBTi is less homogeneous.

Status	% of sector committed to the SBTi	% of sector studied by CA100+	% of sector studied by CA100+ and SBTi
Financial	19%		
Consumer, Non-cyclical	46%	17%	17%
Industrial	25%	29%	6%
Consumer, Cyclical	47%	41%	23%
Communications	57%		
Technology	25%		
Utilities	51%	37%	35%
Energy	15%	74%	
Basic Materials	42%	34%	21%
Diversified	1%		
<b>Total</b>	<b>17%</b>	<b>7%</b>	<b>4%</b>

We determined that for the share of portfolio that belongs to the SBTi, 34% was “Committed”, 35% “1.5°C”, 18% “Well-below 2°C” and 13% “2°C”. The sectoral view again shows strong disparities between sectors: for instance, the sectors that have chosen the most ambitious targets are consumer goods (cyclical or not), technology and communications. For the industrial or utilities sectors, the distribution is more homogenous between the different target types.

The chart below illustrates the proportion of results for the portfolio covered by CA 100+ NZB. Two criteria receive the lowest grades: the CAPEX allocation (indicator 6) and the short-term decarbonization target (indicator 4). For the first three criteria, about scopes of net-zero targets and long and mid-term decarbonization target, the results are mixed. The sectoral view presents large discrepancies among the carbon intensive sectors: the utilities sector has the best grades when the basic materials and industrial sectors have the worst.

**Company assessment results by clean value**



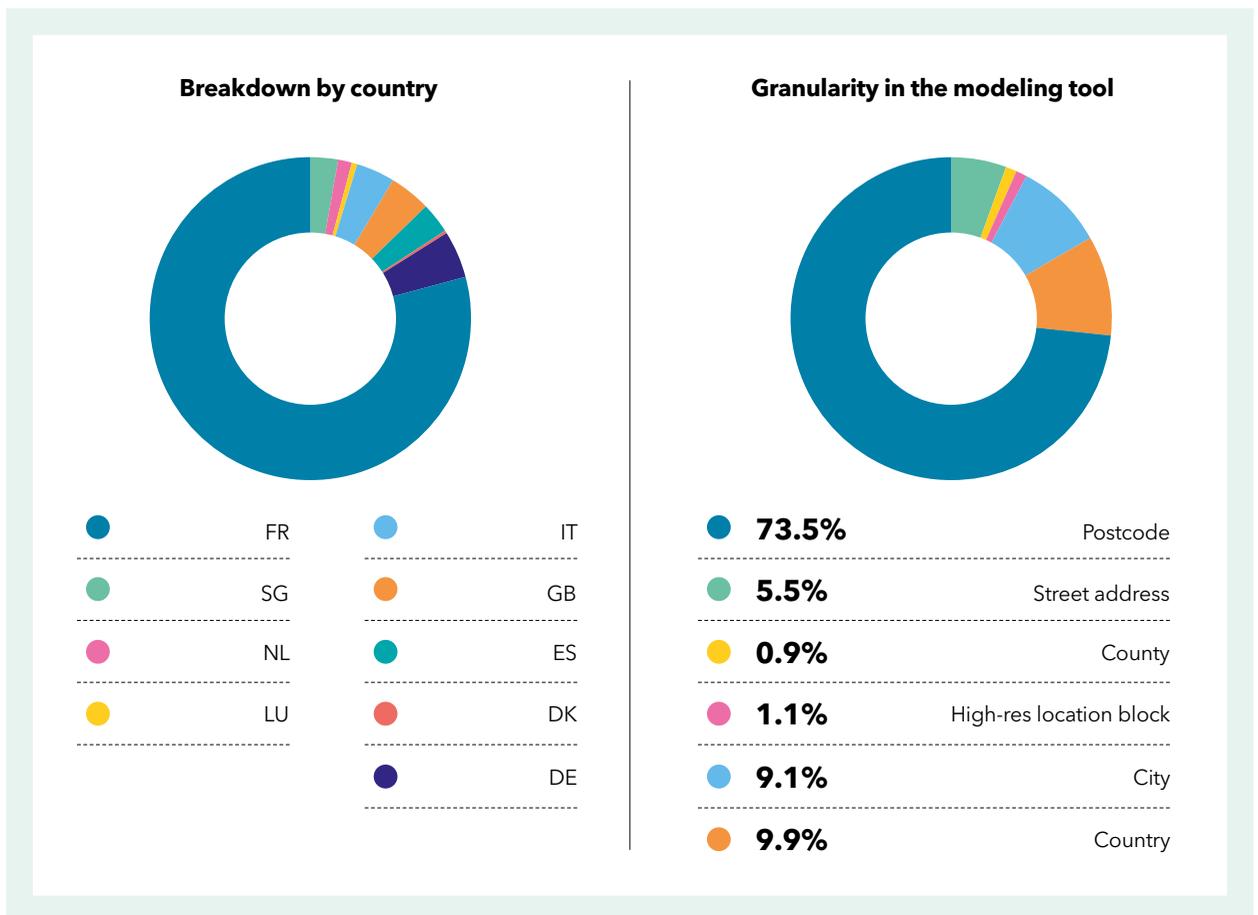
**Conclusion:** The results of this study notably served to update our sustainable investment policy on upstream Oil & Gas. SCOR decided to invest only if companies met sub-sectors thresholds and were best-in-class, which means that these companies have commitments to the SBTi or meet at least

partially the CA100+ Net-Zero Company Benchmark criteria. More generally, this view of 2021 commitments is a starting point to prioritize our engagement on companies that have taken the less stringent measures so far.

### 3.4. Assessing acute risk on physical assets

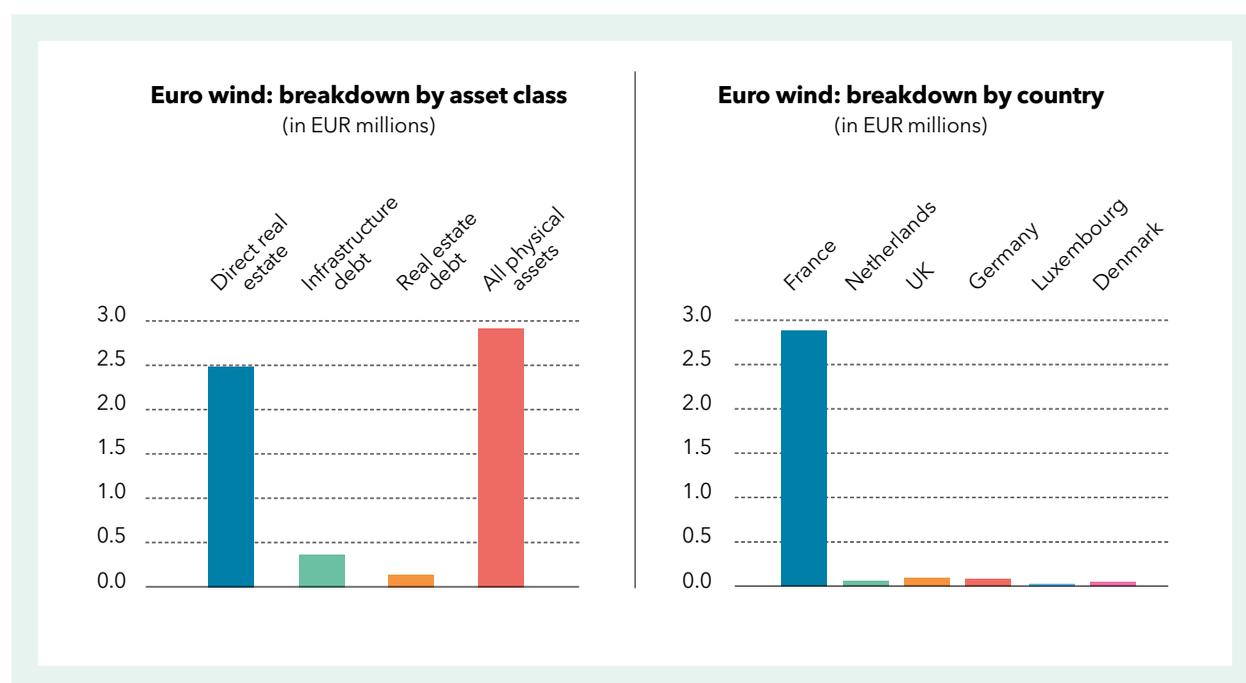
— SCOR uses internal modeling capabilities to assess “acute” physical risks which could affect its portfolio of real estate debt, infrastructure debt and direct real estate investments: 82% of the real estate and the real estate and infrastructure debt portfolio is located in France. The “acute” physical risks are assessed using SCOR’s internal model for simulating natural catastrophes. Based on scenarios validated by the Group’s

modeling teams, this model estimates potential losses from natural catastrophes. Depending on the geographical location of the investments, the model calculates damage rates, which provide estimates of the potential losses that these investments may suffer in the event of a natural catastrophe. The modeling is run at the highest level of granularity available to ensure maximum accuracy of the results. Seventy-four percent of the portfolio feeds into the model at postcode level and some positions are even modeled at street address level.



Given the portfolio profile, SCOR has calculated the risk exposure of storms in Europe, the most significant climatic event. To date, the metric remains highly approximate: one limitation is that the climate models underpinning SCOR's modelling are based on historical data rather than a forward-looking view of climate change impacts on extreme events. The path of climate change will depend on the actions taken by governments and their willingness to deliver on their National Determined Contributions. Another limitation is the insurance coverage of physical assets, which works as a mitigant of po-

tential losses and is not taken into account by SCOR's model. The results are shown on the graphs below. As in previous years, the physical asset portfolio benefits from its geographical location, mainly in Paris for direct real estate investment and in Europe for real estate and infrastructure debt investments. Its resilience to the risk of extreme climate events is reinforced by a very selective investment process. Thus, the loss (around EUR 3 million) remains very modest compared with the size of the investments (around EUR 2 billion).

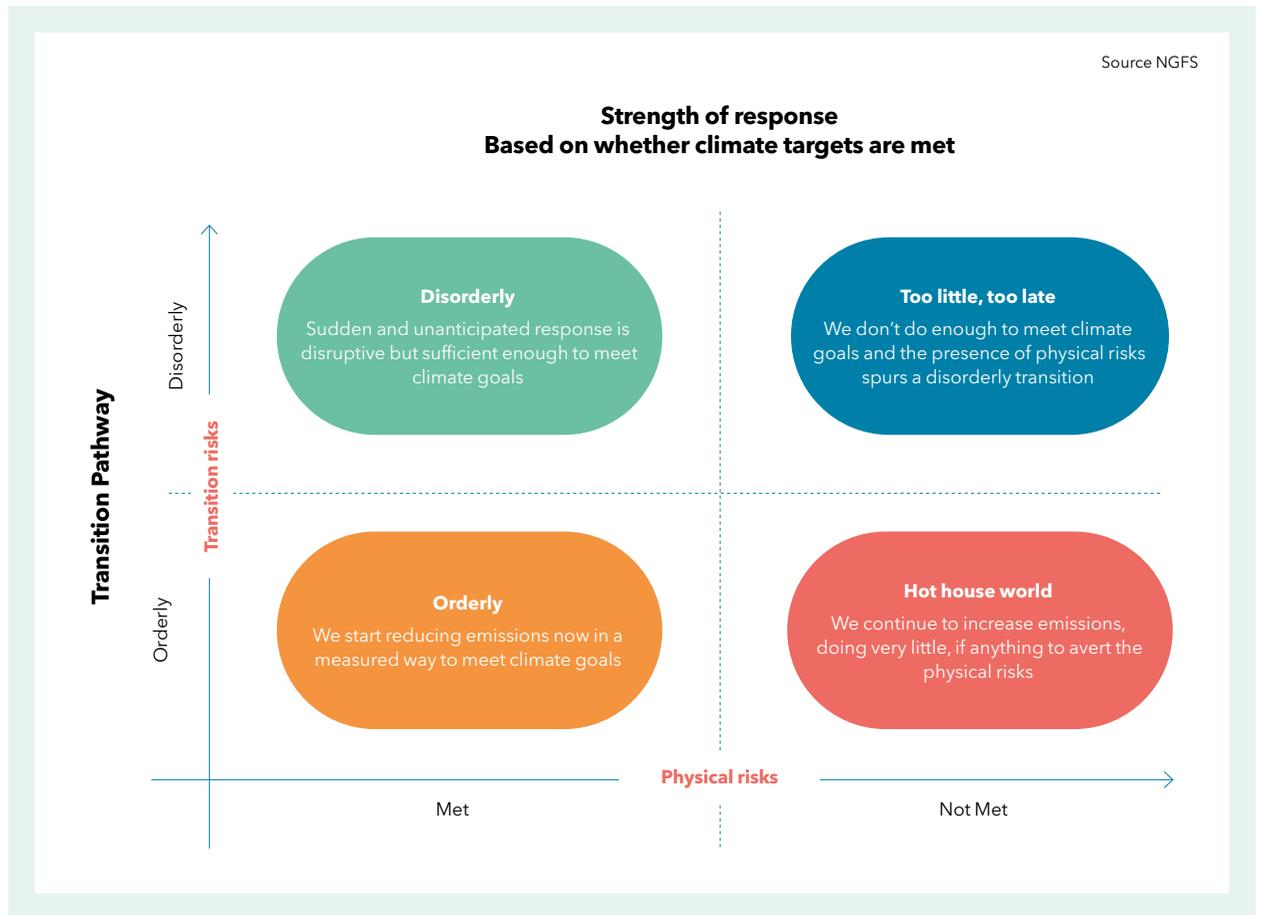


### 3.5. Climate stress testing

— Building a resilient portfolio is part of SCOR's sustainable investment journey. Over the last years, the Group has played an active role in numerous working groups and initiatives aiming at better understanding the potential impact of climate risks on investment portfolios. Stress tests, usually considered as “what-if” scenarios, are helpful to better understand the factors driving change in valuations and to derive potential mitigation measures to increase resilience. When considering climate change risks on invested assets, SCOR considers different scenarios and time horizons depending on the risk: transition risks may occur in a relatively short time horizon whe-

reas physical damage may increase over time with increase of temperature. In principle, the faster the transition, the higher the transition risk but this should efficiently decrease the risk of reaching the tipping point in global warming and limit the damage of physical risks in a longer-term horizon. Conversely, too slow a transition will limit potential “stranded assets”, but temperature is likely to rise far above 2°C with possible tremendous impacts on frequency and magnitude of climate extreme events. The worst scenario would be a late and disorderly transition that comes too late to contain global warming and too suddenly to allow for a progressive adaptation of business models.

The graph from the Network for Greening the Financial System below summarizes the various combinations.



**SCOR's journey**

— In 2018, SCOR has produced its first heatmap of climate transition risk on its invested assets using a Moody's study highlighting most vulnerable sectors. This first assessment has been complemented in 2019 with a first attempt to quantify the potential decrease in invested assets valuation using both the 2° investing initiative Storm Ahead study, very close to the Inevitable Political Response proposed late 2019 by the PRI, and the DNB stress test scenarios. Results have provided a lot of valuable material for internal discussions on methodologies and limitations at Executive Committee and Board levels.

Exercises performed in 2019 have been complemented in 2020 with the ACPR climate stress tests. Given the uncertainties around i) the climate scenarios, ii) their consequences in terms of macro-economic variables and iii) their inherent limitations, we updated as of end of 2021 the 2° investing initiative Storm Ahead study and the DNB stress scenarios. SCOR will continue to follow new developments from regulators and other institutions regarding climate stress scenarios with care and interest.

Transition risk:

Scenario provider	2°ii		De Netherlands Bank
	Transition risk	Physical risk	Transition risk
<b>Climate scenario</b>	Below 2° scenario (EIA B2DS) (Too late too sudden)	IPCC 8.5 for full damages scenario (chronic and acute) and S&P's "The heat is on" report for weather shock (acute) scenario	Policy shock / Technology shock / Double shock / Confidence shock
<b>Main assumptions</b>	Global warming is contained below 2°C		Government policy: +USD 100 per ton of CO <sub>2</sub> Technology development: the share of renewable energy in the energy mix doubles Consumer and investor confidence
<b>Time horizon</b>	2025	2060 / 2100 for full damage scenarios  One-off for acute	2025
<b>Risk assessment</b>	Credit migration  Quantification of credit deterioration (spreads) and equity values based on sector breakdown	Credit migration  Quantification of credit deterioration (spreads) and equity values based on sector breakdown	Quantification of credit deterioration (spreads) and equity values based on sector breakdown Interest rate impacts
<b>Positive aspects</b>	Enables a better understanding of sectoral exposure to transition risks and opportunities	Worldwide map on equities as well as sovereign and corporate bonds	Provides credit spreads and rate impacts, as well as equity value impacts
<b>Limitations</b>	Translation of the shock into full macro-economic variables No interest rates shock  Top-down approach which does not allow for best-in-class strategy	High level view of potential credit migration No interest rates shock	Only addresses transition risk  Migration of credit ratings not analyzed

Results are not directly comparable among the two simulations. The most advanced macro-economic impacts relate to transition risk.

#### Time horizons

— 2025 is a common horizon proposed in the two simulations and the one on which SCOR has concentrated its efforts. SCOR's guidance was to run simulations based on the portfolio as of end of 2021 "as if" the asset allocation was kept fully unchanged by 2025.

#### Climate scenarios

— Climate scenarios underpinning macro-economic variables are not directly comparable between 2° investing initiative and the Central Bank of the Netherlands (DNB). All refer to keeping the global warming below 2 degrees, but the pathways and reference scenarios are not aligned. 2°ii links it to a specific International Energy Agency, DNB relies more on a carbon price to derive macro-economic variables.

#### Macro-economic variables

— Rates are not always taken into account in the scenarios. One has to keep in mind that for (re)insurers, the bulk of fixed income assets are backing liabilities. As a consequence, most of the variations on assets are likely to be offset when running the same simulations on the liability side, modulo assets / liabilities mismatch which is always closely monitored. Hence, even if the order of magnitude of rates changes is significantly higher than for credit spreads, SCOR focuses on credit impact when analysing results.

#### Other limitations

— Data is still a critical issue as the European regulation on transparency is yet under implementation and investees are still struggling to disclose meaningful and relevant information. A lot still needs to be developed to gather static information where quantification of projections should rely on forward-looking metrics.

SCOR uses public tools and stress tests. The current level of granularity provides sub sector information on transition climate-change impacts. The success of the transition to a low carbon economy requires additional efforts than exiting highest emitting sub-sectors to invest in green activities. As transition plays an important role to build a climate resilient economy, implementing a best-in-class strategy must be part of the solution which is incorrectly accounted for in these simulations.

#### Physical risks

— SCOR has not performed new simulations on physical risks linked to stress testing in 2021.

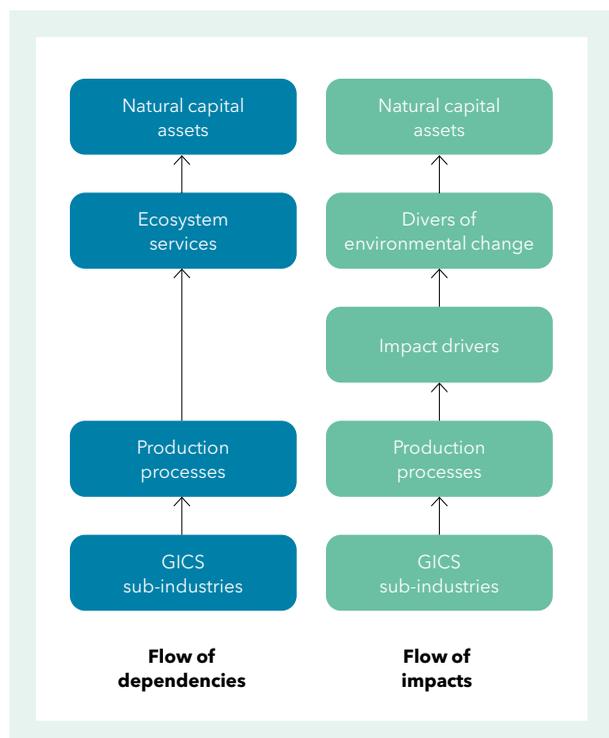
#### Results and conclusion

— The table below shows the comparison of the quantification under the three simulations: 2°ii, DNB and ACPR. The conclusion is unchanged compared to 2019. If the quantification may be challenged given the limitations already highlighted in this section, the exercise is still very helpful to stimulate discussions and enhance SCOR's understanding of the risk drivers of its invested assets.

	Time horizon 2025		Physical (full damage) - 2060 Credit	Physical Acute (no time horizon)
	Transition - Credit + Equities	Transition - Rates		
2°ii	loss <1%	N/A	loss <1%	< 5% and offset by liabilities
DNB	loss <1%	< 5% and offset by liabilities		

### 3.6. Dependencies and impacts on nature: ENCORE

— ENCORE was developed by the Natural Capital Finance Alliance (NCFA) and the UN Environment Programme World Conservation Monitoring Centre (UNEP-WCMC) to visualize the double materiality link between economic sectors and biodiversity.



#### ENCORE definitions

— “**Natural capital assets** are specific elements within nature that provide the goods and services that the economy depends on.”

“**Drivers of environmental change** are natural or man-made pressures that can affect natural capital assets and their ability to continue providing goods and services.”

“A single **impact driver** may be associated with multiple impacts. **Impacts** are changes in the quantity or quality of natural capital that occurs as a consequence of an impact driver.”

“**Ecosystem services** are the links between nature and business. Each of these services represent a benefit that nature provides to enable or facilitate business production processes.”

“Each sector’s potential dependency on ecosystem services and potential impacts on natural capital assets were assessed (...) to determine **materiality**”. We transformed these appreciations (5 notches from Very High to Very Low to grades from 5 to 1).

We performed the analysis at GICS sector level on 57% of our investment portfolio - cash, derivatives, funds and structured products were excluded and GICS sectors do not encompass government bonds or assimilated.

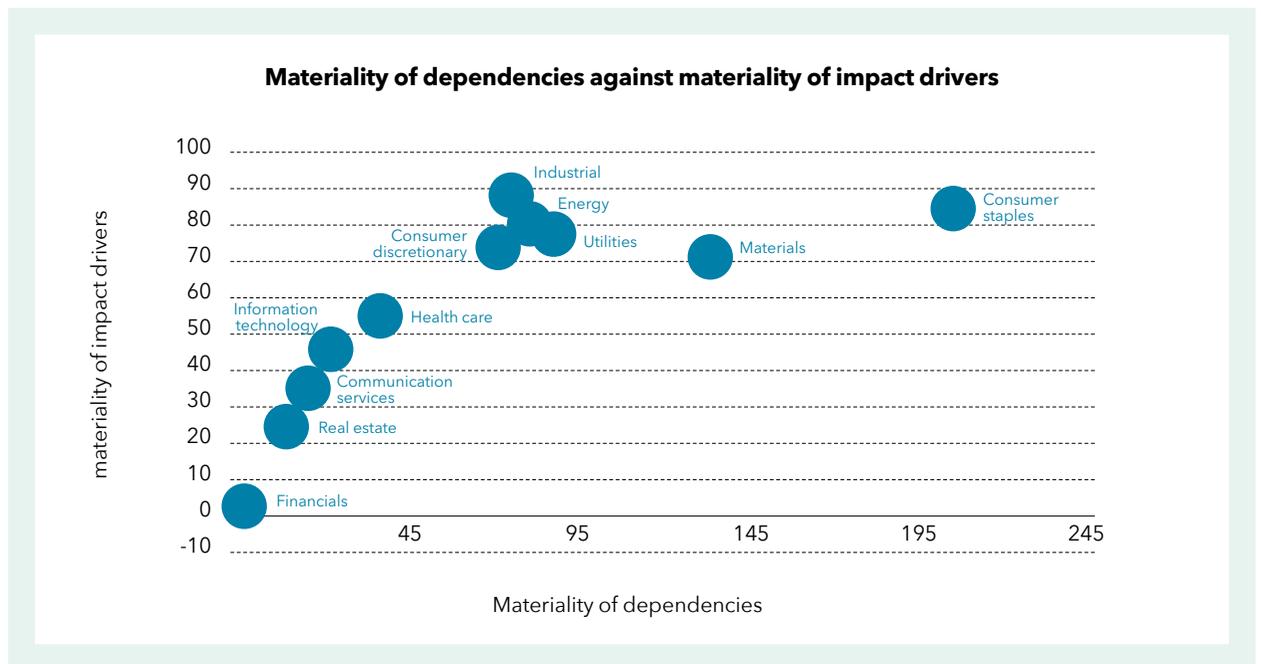
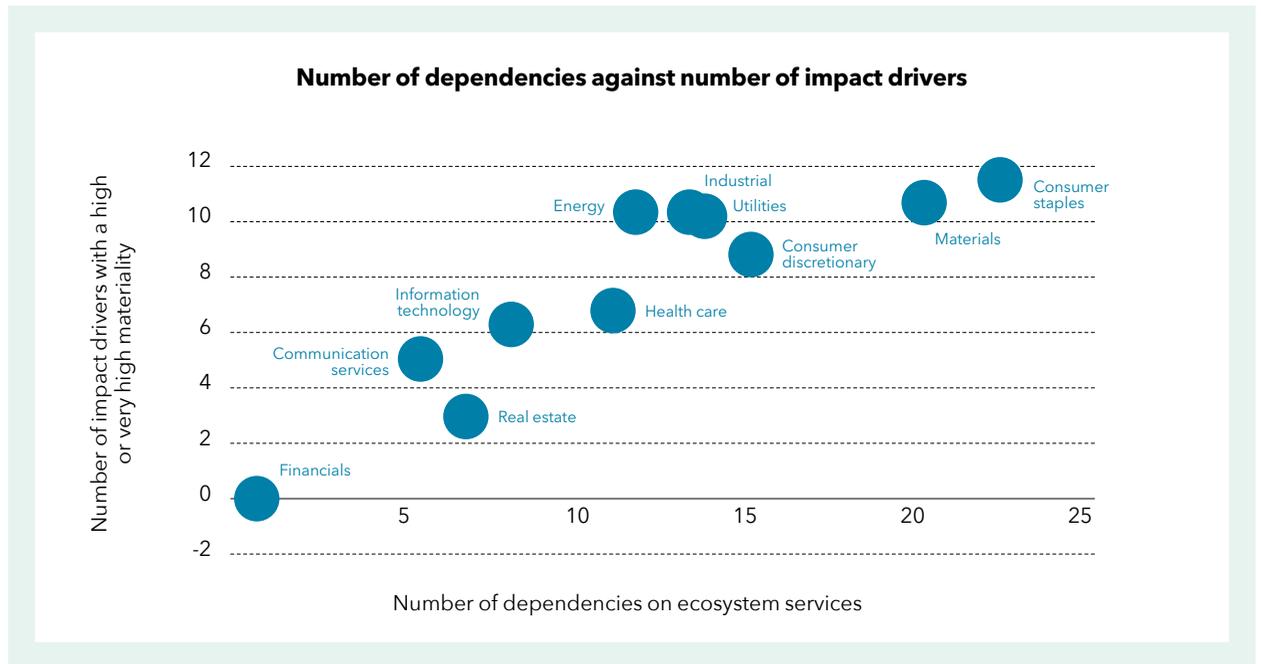
In order to prioritize our internal efforts to study biodiversity and implement measures for our investment portfolio, we used ENCORE to understand on which natural capital assets economic sectors were most dependant and most impactful but also, conversely, which economic sectors were most dependent and most impactful on natural capital assets.

We obtained the following results: the natural capital assets with the largest number of dependencies on ecosystem services are habitats, species and water. The natural capital assets most impacted are not as easy to identify: all natural capital assets are affected by the same number of impact drivers (except ocean geomorphology) with a high or very high materiality.

Natural Capital Assets	Habitats	Species	Water	Atmosphere	Soils and sediments	Land geomorphology	Ocean geomorphology	Minerals
Number of dependencies on ecosystem services	83	72	65	38	29	20	7	6
Number of impact drivers with a high or very high materiality	81	81	81	81	81	81	22	81

The limitation identified is the calculation per number of dependencies or impact drivers linked to a natural capital asset instead of financial cost or externality cost, respectively.

Two graphs below exemplify our results per economic sector.



The sectors the most dependent on natural capital assets are consumer staples, materials and consumer discretionary. The sectors with the largest number of impact drivers with a high or very high materiality on natural capital assets are consumer staples then industrials, energy, utilities and materials.

The materiality score per sector was obtained by multiplying the materiality grade with the number of dependencies on ecosystem services or the number of impact drivers per sector. Consumer staples, then materials and utilities stand out with the largest materiality of dependencies. Industry, consumer staples and energy have the most material impact.

**Conclusion:** This study confirmed that our 2020 preliminary assessment of deforestation risks in the portfolio was crucial as it impacts habitats and species. For 2021, we used ENCORE to prioritize the fields to study, which led to the continuation of the work on deforestation and a new study on plastics, which is detrimental to the first three largest natural capital assets with the largest number of dependencies: habitats, species and water. This study also confirmed that a holistic approach is necessary to address environmental issues and opens new avenues to tackle nature-related challenges.

### 3.7. Deforestation: assessing risks and impacts

— In June 2020, SCOR studied the deforestation risk in its investment portfolio based on a portfolio screening exercise. The sources used were the grades from the forest questionnaire of CDP, which is sent to companies representing the largest deforestation risk, and the ranking of Forest 500, which focuses on the top 350 corporates and 150 financiers driving most of tropical deforestation. We also used RepRisk, our controversy monitor tool, to identify the most controversial sectors.

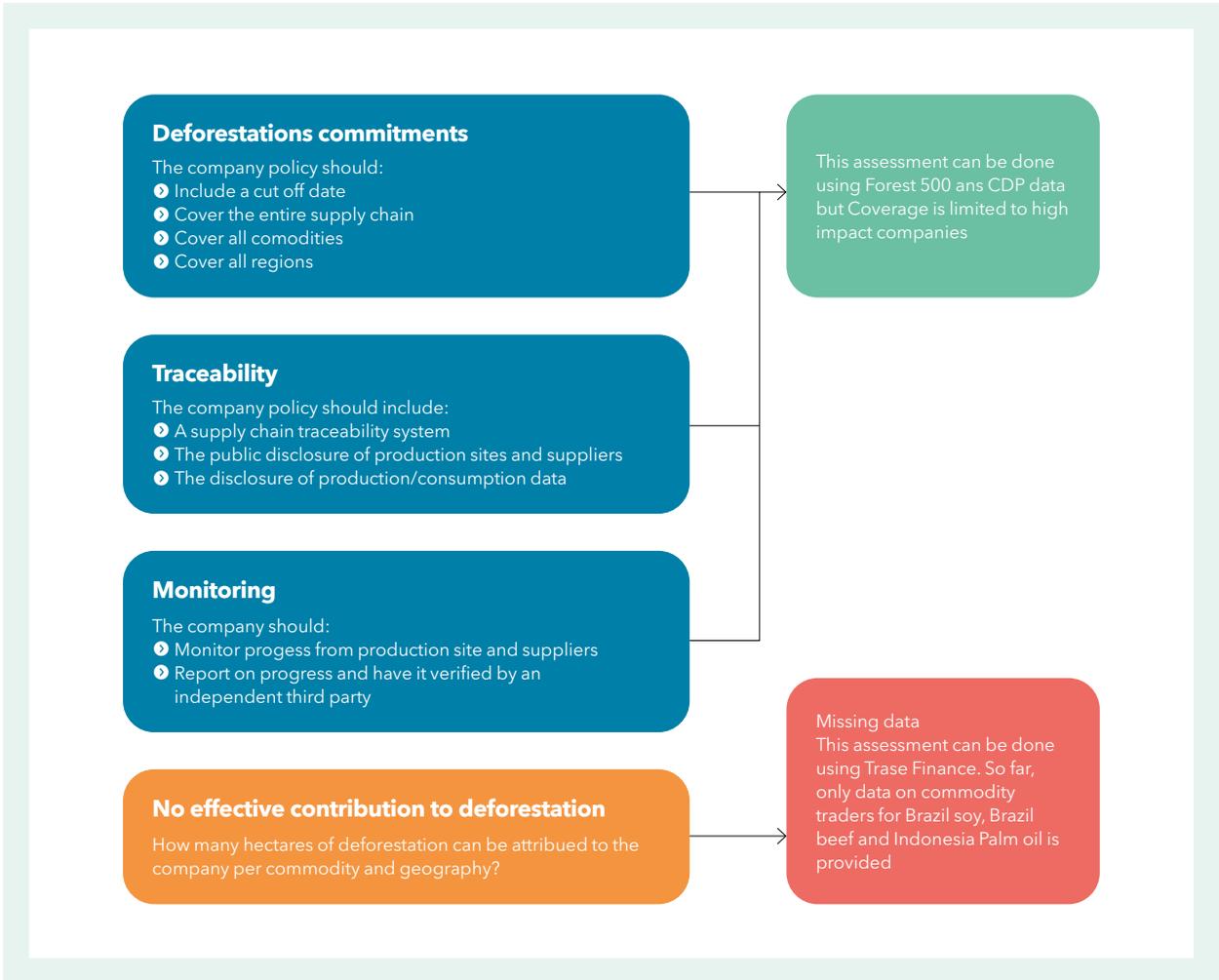
We studied two types of sectors: those of companies rated by the aforementioned data sources and those at the largest risk of using palm oil, soy, cattle, wood. For the companies badly rated either by CDP or by Forest 500, Group Investment Risk & Sustainability ran a deeper analysis to confirm or infirm the rating. Only 40% of the companies assessed were

found to mostly address deforestation risks, when 45% did not address them adequately (for the 15% remaining, we did not find evidence that they were linked to deforestation), which demonstrates that work remains to be done to eliminate deforestation. We also found, using RepRisk controversy monitor tool, that the top 3 most controversial sectors were Food, Cosmetics/Personal Care and Oil & Gas.

After this 2020 analysis, to improve our understanding of the problematic and to frame engagement with companies at risk, SCOR has decided to join several initiatives connected to the deforestation (or broader biodiversity) subject, including:

- The Finance for Biodiversity Pledge, an investor group that contains 75 signatories, representing an AUM of EUR 12 trillion and which aims at reversing Nature loss by 2030. Our participation to this group was motivated by the willingness to increase knowledge on biodiversity and share best practices with peers. SCOR the joined the Finance for Biodiversity Foundation in 2021 to reinforce its commitment.
- Achmea's engagement group with the agriculture & food value chain. The goals are centered around reduction of negative impacts on biodiversity, which includes reduction of deforestation.
- UN PRI Sustainable commodities practitioners' group and CDP Forest champions to increase knowledge on deforestation and share best practices with investors before writing a deforestation policy.
- the Financial sector commitment letter on eliminating commodity-driven deforestation from Race to Zero. The letter's objective is for 2025 to publicly report progress on the milestones to eliminate forest-risk agricultural commodity driven deforestation and, on a best effort basis, only provide finance to clients that have met risk-reduction criteria. Besides, by 2022, signatories will have to assess exposure to deforestation risk, which is also a commitment we made to Act4Nature International in 2021

In line with our participation to these initiatives, our 2021 work on deforestation has been on refining our rating system of companies. For our corporate portfolio, we found that the following indicators were the most relevant to assess how companies were fighting against deforestation.



The following data sources were used:

- Deforestation commitments, reporting and monitoring strength, assessed by Forest 500
- Effective deforestation caused by commodity traders, assessed by Trase Finance
- Disclosure level on forests policies and risks, assessed by CDP

We evaluated the portfolio companies based on the aforementioned KPIs. The data sources available allowed us to grade 13% of the listed equities, loans and corporate bonds portfolio, based on an internal methodology to separate, among relevant sectors, the companies as “Ahead”, “Average” or “Lagging” concerning deforestation. We found that only 10% could be considered “Ahead” based on these criteria, 44% “average” and 46% “lagging”.

**Conclusion:** The results vary greatly per company and metric, which illustrates the need to continue to monitor this issue in order to create an adequate and efficient zero deforestation policy. These preliminary results, to be further refined in the future, were an interesting step to better understand the criteria that we considered as the most significant and to have a preliminary opinion on which portfolio companies were most critical to address deforestation risks. The addition of a new data source, Trase Finance, was a notable improvement since it goes beyond the assessment of the deforestation policy to estimate its impact (deforestation, in hectares). The main limitation of this data source is its limited coverage, that should expand in the future.

### 3.8. Plastic: preliminary mapping

— Plastics is widely used in our economy. It is used for packaging but can be found in finished goods. It represents a cheap material with many advantages, but it is linked to negative externalities through pollution, namely on health and on the environment. For this reason, concerns are increasing around its role in our economy. Plastic production has surged over the past 50 years, from 15 million tons in 1964 to 311 million tons in 2014 and is expected to double again over the next 20 years, as plastics come to serve increasingly many applications. Outside-in business impacts are numerous: brand-damage (especially in consumer-oriented sectors), transition risks, etc. The immediate concern seems to be the increasing regulation targeting plastics, making virgin plastic possibly become a stranded asset in a near future. Several initiatives have emerged to better tackle plastics challenges targeting both corporates and investors.

Plastic represents both threats and opportunities along the value chain. The plastic value chain can be divided between three categories: Raw-material producers (oil and petrochemical companies), plastic users and manufacturers (retail, food, pharmaceuticals, etc), and plastic recyclers.

In 2021, SCOR conducted an in-depth research on plastics with the aim to better understand its role in the environmental landscape and how it may affect investment decisions before performing a first assessment of SCOR's invested assets positioning vis a vis plastics.

#### Screening methodology

— The study focuses on plastic users in order to highlight SCOR involvement in plastic consumption issues, as this part of the value chain is deemed responsible for a significant part of the plastic pollution. The objective is to map SCOR portfolio exposure regarding plastic and to classify companies of sectors potentially concerned (among plastic producers and manufacturers) in four categories, using a proprietary scoring methodology:

- **Leader:** The company is on a good path to translate circular economy principles into business practices regarding plastic. The company has taken some commitments to reduce plastic use and to innovate in material sourcing. The company is part of corporate initiatives regarding plastic. Not only the company is in a position to avoid plastic-related sustainability risks but also will likely be able to capture benefits from the transition to a circular economy model
- **Committed:** The company has shown some efforts regarding the plastic problematic; either by joining plastic-related initiatives or having set some targets resulting in positive evolution in plastic consumption. The plastic impact of the company is likely to be limited
- **Involved:** The company has demonstrated little consideration of the plastic problematic. The plastic impact of the company is limited, and efforts can be noticed

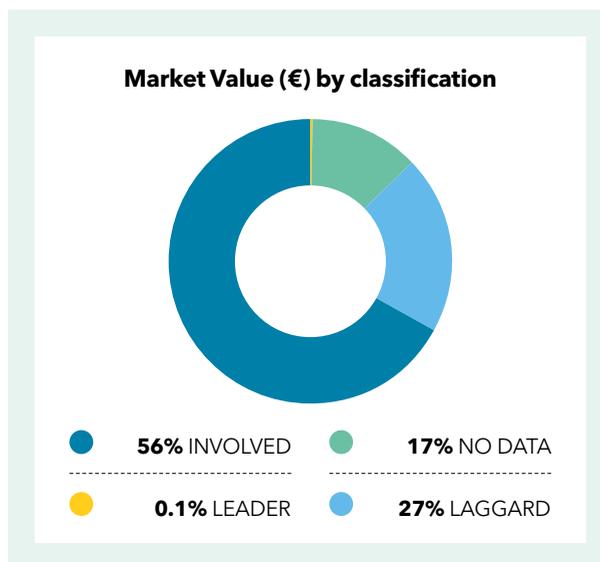
- **Laggard:** The company shows really limited consideration of plastic-related problematics. The plastic impact of the company can be considered significant, or the company doesn't disclose enough plastic-related data.

Outside-in impacts are based on an external study linking sectors to percentage of revenue at risk because of plastics issues. SCOR has used various data sources that rate companies on an annual basis:

- The Ellen MacArthur Foundation (EMF) is a UK registered charity which promotes the circular economy. The foundation launched in 2018 the Global Commitment as part of their work "The New Plastics Economy". The objective is to gather corporates, investors and governments in order to encourage a transition to more sustainable plastic practices. The foundation publishes every year a report tracking companies progress towards predefined goals.
- As You Sow is an American non-profit dealing with shareholder advocacy founded in 1992. Its goal is to promote environmental and social corporate responsibility through shareholder advocacy, coalition building, and innovative legal strategies. As You Sow ranks main relevant corporations on plastic packaging pollution.
- ISS data on criteria related to plastic.

#### Mapping used for raising awareness

— As of Q1 2021, a screening of relevant positions is performed, and the following breakdown is obtained:



The coverage is deemed satisfactory since "NO DATA" category has a limited size. Most of the exposure is classified under the "INVOLVED" category.

**Monitoring controversies relating to plastic**

— In order to complete the above analysis, a controversies screening about plastic is performed on the SCOR portfolio using the RepRisk platform. This tool provides a timely and effective reality check about what is happening on the ground, i.e., how a company conducts its business where it operates around the world. It is designed to detect quicker potential controversies than traditional controversies providers.

**Conclusion**

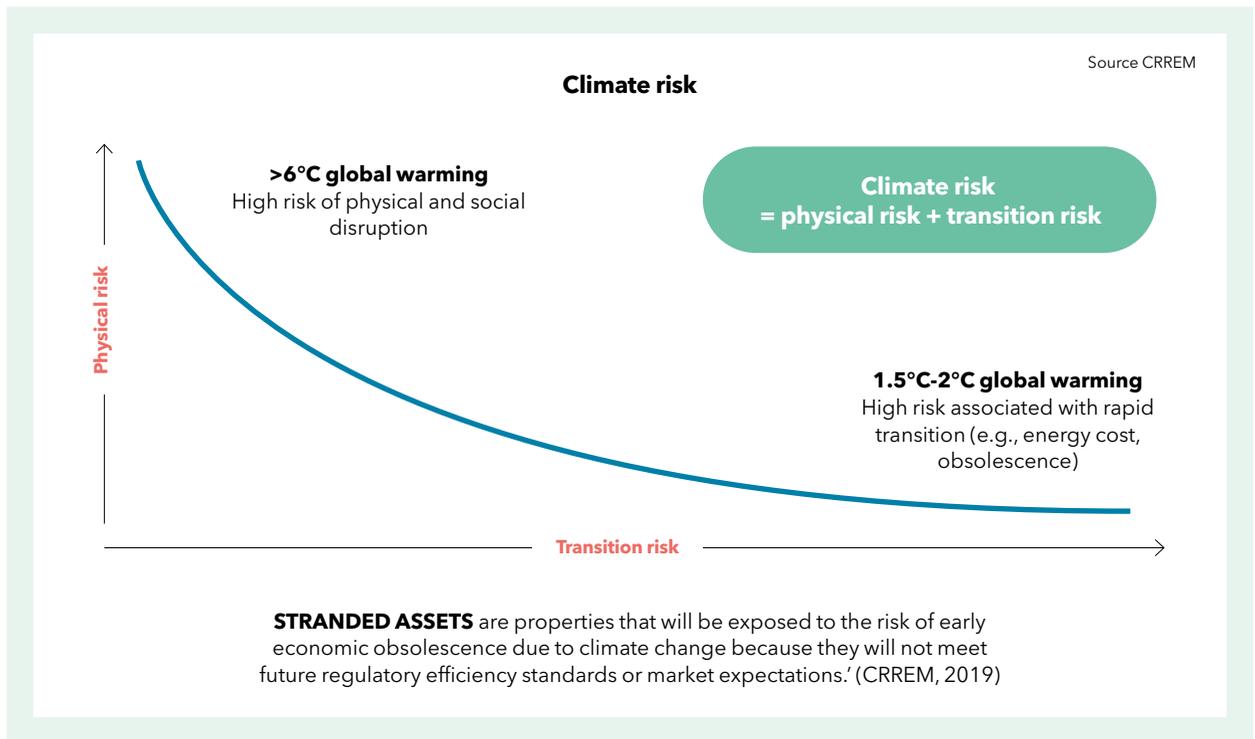
— Based on SCOR’s holdings as of end of March 2021, the study shows that most material risks for SCOR are inside-out risks, especially in the food sector. Sectors potentially subject to outside-in risks because of significant invested market value

or high percentage of revenue at risk perform well in our plastic grade.

As a result, a particular attention should be paid to inside-out risks on food. Monitoring issuers progress and controversies over the years will be key in a first phase. SCOR will contemplate joining some initiatives in a second phase to engage with investees.

**3.9. Real estate risk assessment: CRREM**

— CRREM (Carbon Risk Real Estate Monitor) is an EU project that enables to assess the climate transition risk for a given commercial real estate property and more specifically the potential stranding risk that faces a building.

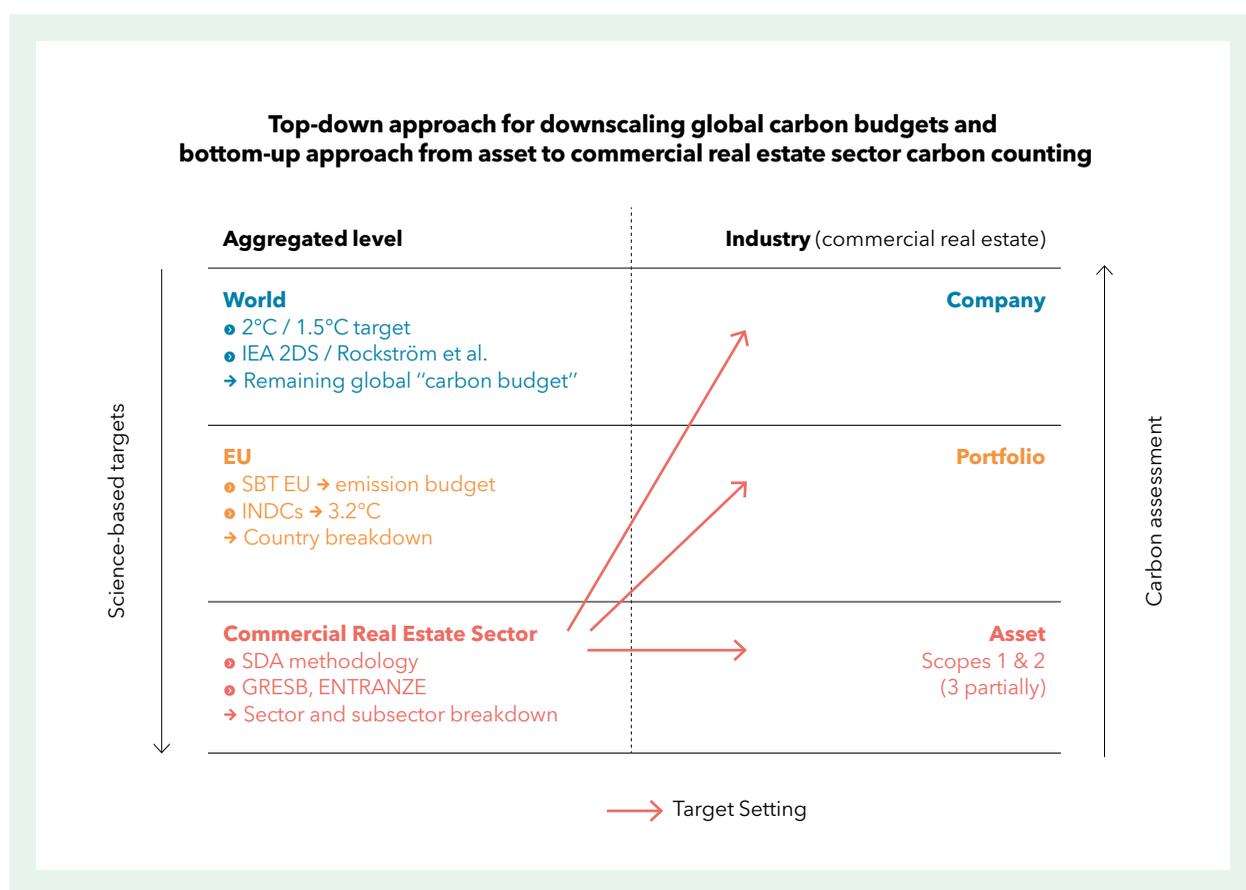


In 2020, we made a first usage of CRREM in order to assess the transition risk of the direct real estate owned and operated by SCOR, that is own-use buildings (AUM of 650 million EUR as of June 2020). Applying it to investment real

estate was not possible as consumption data is still missing. For buildings located in France, the “Décret tertiaire” will help the collection of information and should enable to run the same simulation next year.

**The underlying scenario**

- To compute the carbon reduction pathways for a given property, the CRREM methodology involves three consecutive steps:
- To derive the decarbonization efforts that are necessary for the EU economy, from the global carbon budget that can be emitted without exceeding the 1.5 or 2°C warming level, CRREM uses data from the International Energy Agency (IEA) and climate models like Rockström et al.
- To derive the country specific commercial real estate targets from total EU budget, CREEM uses the Sectoral Decarbonisation Approach (SDA), a methodology that is utilized by the Science Based Targets initiative (SBTi)
- To derive building type specific carbon reduction targets from country specific targets, CRREM considers commercial building features like size or current carbon emission intensity in each country and subsector

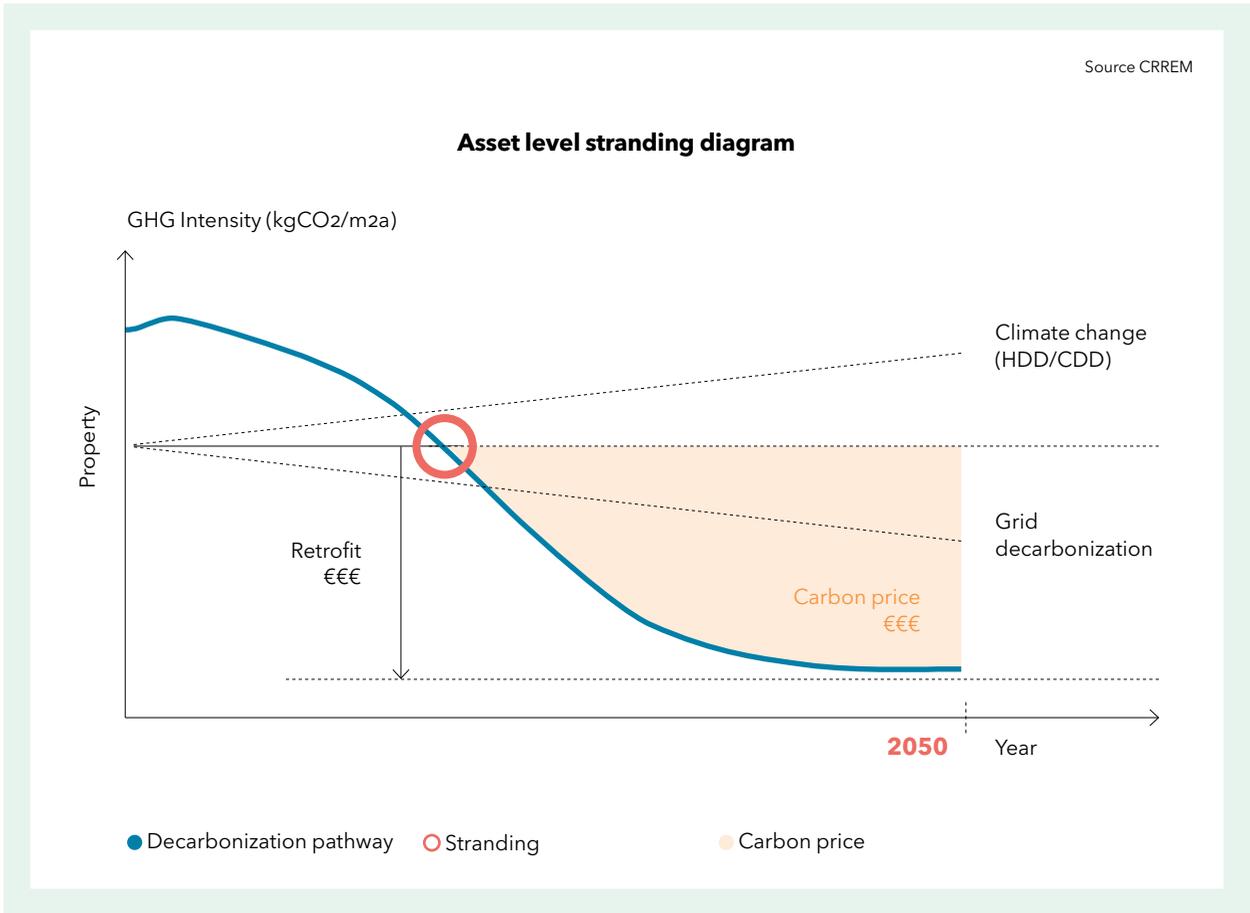


**The tool**

— CRREM simulates the carbon intensity (defined as kg-CO<sub>2</sub>e/m<sup>2</sup>/year) trajectory of a given building based on the current energy consumption and a forecast over the next years of the electricity generation mix (and so of the carbon emission factor) of a given country. The energy consumption in the future is set at the current level with few adjustments to take into account the climate warming trend and to neutralize the effect of weather variability.

CRREM compares “Buildings’ carbon performance” (black solid line) with Country “Decarbonization Pathway” (“the target”, green line).

When property’s carbon intensity is higher than “the target” at the “year of stranding”, property becomes “stranded asset”. Stranded assets will encounter value write-out since they have excess emissions, for which they will need to pay extra carbon costs. For these assets, retrofit is needed to reduce their carbon intensity.



**Update**

— CREEM enables to assess climate transition risk on direct real estate which is an asset class that is not covered by the vast majority of the climate risk related methodologies. Especially it gives an assessment of the Implied Temperature Rise of a real estate portfolio.

Climate scenarios of the IEA and the way decarbonation pathways are derived from National Determined Contributions are the most impactful assumptions in the model. It may not be aligned with assumptions underpinning other simula-

tions of the portfolio. However, CRREM results provided in 2020 valuable information on the resilience of SCOR’s direct real estate building for own use. It is the positive effect of the Group’s real estate business model and its long-lasting efforts to race for energy efficient buildings. SCOR still plans to use CRREM for its investment real estate portfolio in order to assess risks and set decarbonation targets once energy consumption data is fully available. In this respect, the “Décret tertiaire” regulation in France will ease data collection.



*Chapter 4.*

# Metrics and targets



---

**The bald, or white-headed, eagle** has a wingspan of around 2 meters. Bald eagles have recovered from a low in the 1950s, when DDT and habitat loss threatened their survival. Today there are an estimated 316,700 bald eagles in the US.

## 4.1. Metrics

### Risk and opportunities

#### Exposure to fossil energies

— The amount of investments in companies active in the fossil fuel sector as per Art 29 definition amounts to 139 m EUR as of end of 2021. 4.6 m EUR is exposed to thermal coal and 74,9 m EUR is exposed to unconventional oil and gas. SCOR is working on defining a timeline for the progressive exit of unconventional hydrocarbons along with a regular review process (at least every five years) to assess its progress.

#### ESG ratings - ISS ESG methodology

— The ISS-ESG rating methodology is based on the analysis of environmental and social (“E” and “S”) factors, including governance criteria.

- Government bonds: For government securities, ISS-ESG assigns equal weighting to the two groups of E and S factors. At SCOR, Government bonds are used mainly for ALM purposes, backing the Group’s underwriting commitments. Investing in other asset classes entails other risks and capital constraints that are not deemed relevant given SCOR risk appetite.
- Corporate bonds: The methodology developed by ISS-ESG to rate private companies is also based on the two groups of E and S factors, but their weighting depends on the business sector they relate to. Analyses are based on financial and non-financial data provided by the companies complemented with interviews with employees and external stakeholders.

ESG rating	Average ESG rating	Coverage ratio	% of total assets
Total portfolio	C	75%	100%
Government bonds		100%	30%
Covered bonds		100%	3%
Corporate bonds		94%	43%
Equity		72%	1%

SCOR’s portfolio is rated C on average, unchanged compared with the previous year. The coverage ratio is very different from one asset class to another but stands overall at 75 % of the total invested assets. As expected, government bonds and corporate bonds are the most widely covered. As they represent the bulk of SCOR’s assets, the current assessment of the overall portfolio is deemed acceptable. Some asset classes like real assets are not meant to be covered by ISS ratings.

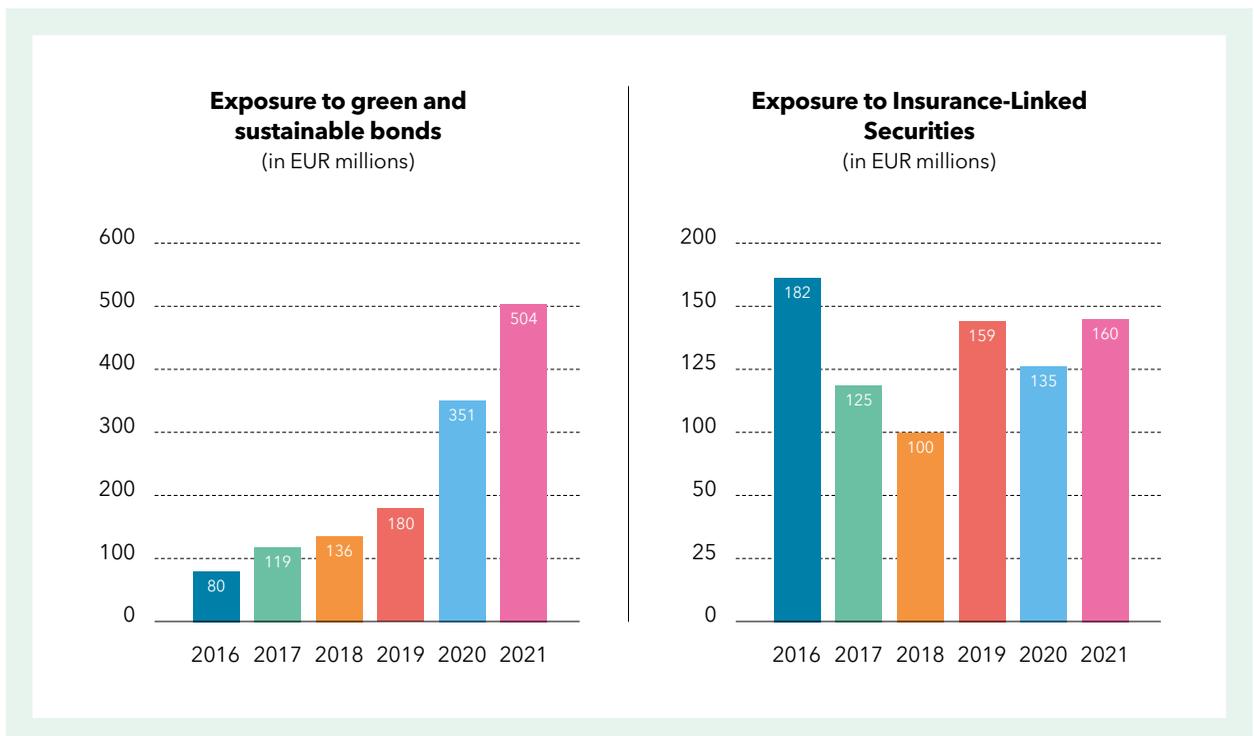
the same methodology until data availability and robustness have materially improved. Asset classes in SCOR’s “transition and social bucket” include direct real estate investments, infrastructure and real estate debts, and green, social and sustainable bonds. To be eligible, real estate must be certified and infrastructure debt must finance the transition to a low-carbon economy. In addition, individual due diligence is performed on a line-by-line basis to assess the internal “green stamp”.

### Opportunities

— Transition and social bucket: SCOR defines “sustainable” assets depending on its internal taxonomy. The current limitations when applying EU taxonomy criteria advocate for keeping

As of Q4 2021, the transition and social bucket of SCOR's investment portfolio stands at EUR 1.8 billion including operating real estate. This represents 7,5% of SCOR's overall assets versus 7,3% at the end of 2020.

ILS: SCOR invests in Insurance-Linked-Securities through funds managed by its subsidiary SCOR Investments Partners. SCOR gets return for taking climate acute physical risk when investing in this type of products. The bucket offers strong performance and diversification to its portfolio.

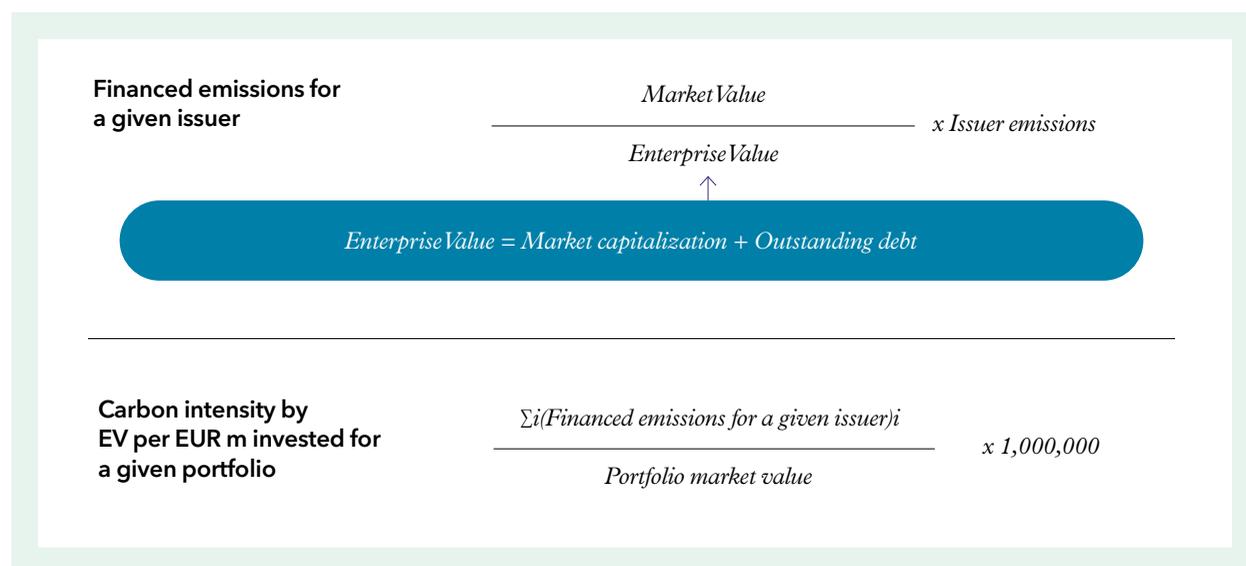


**Impact**

**Carbon footprint**

— SCOR continues to rely on ISS ESG data to measure the carbon footprint of its portfolio. Since 2016, the Group has used the weighted average carbon intensity for both its corporate bonds, equities and government bonds portfolio.

Following the work of the Net-Zero Asset Owner Alliance, and in order to solve the question of allocation between debt and equity, SCOR has decided to move from WACI based on revenue or GDP to Carbon Intensity based on Enterprise Value. The formula used for this computation is the following:



**The carbon intensity of a portfolio measured with Enterprise Value metrics is sensitive to portfolio allocation and to issuers’ data:**

- The higher the assets invested in carbon intensive companies, the higher the intensity
- The higher the emission, the higher the intensity
- The lower the market capitalization, the higher the intensity
- The lower the outstanding debt, the higher the intensity

There is also a one-year lag when computing the figures at portfolio level as issuers’ data are dated one year at the time of the calculation. This lag is even more so visible that market capitalization is captured daily.

Carbon intensity on Enterprise Value (EV) (tCO <sub>2</sub> e per EUR m invested)	2020	2021	Coverage ratio in 2021	Year-on-year evolution
	<b>All scope 1, scope 2 and scope 3</b>			
Government bonds	820	625	99.4%	-24%
Covered bonds	2	2	98.1%	+0%
Corporate bonds	347	169	97.5%	-51%
Equity (incl. convertibles)	496	486	95.5%	-2%

The decrease in corporate bonds carbon intensity year on year is mainly driven by the reduction of investments in carbon-intensive sectors, especially the oil and gas sector. This reduction results directly from new constraints specified in the sustainable investment policy as no oil & gas company is aligned with SCOR's best-in-class criteria. Should this be the case in the future, SCOR may reinvest in those company and increase the carbon intensity of its portfolio to enable active engagement with investees. This demonstrates the difficulty to translate a medium-term objective into a linear pathway as the actual decarbonization of the real economy may not be aligned with investors' time horizon for interim targets.

The decrease in government bonds carbon intensity year on year is explained by debt amounts growing faster than carbon emission levels.

### Implied Temperature Rise

— The Implied Temperature Rise is a forward-looking metric used to try and measure the alignment of the portfolio or of an asset class with the Paris agreement to limit global warming well below 2°C by 2100 compared to preindustrial levels. As already explained in the past, the data lacks robustness and is still being adjusted with models and methodologies improving regularly. More than the absolute level, SCOR prefers to consider the trend.

As in the past, SCOR has selected Carbone 4 for this assessment. The measure is quite stable year on year at 3.3°C but shows increase compared to last year's figures due to model changes implemented by Carbone 4. This demonstrates again this year the relative weakness of this forward-looking measure.

Implied Temperature Rise	2019	2020	2021
Previous methodology	2.8°C	2.8°C	
2021 methodology / metrics	3°C	3°C	3.3°C

### Taxonomy

— In 2020, SCOR performed a first assessment of the application of the draft EU Taxonomy for sustainable activities to its investment portfolio. It was also the opportunity to get familiar with the data provided by ISS.

In 2021, the taxonomy regulation delegated acts were released for climate mitigation and climate adaptation. SCOR was able to assess the Taxonomy-eligibility of its investment portfolio as requested by the NFRD regulation in 2022. It was however challenging to identify clearly the companies sub-

mitted to NFRD as requested in the regulatory mandatory formula. Moreover, data for companies is provided by ISS sometimes on an estimation basis and for real assets SCOR performed an in-house analysis to determine the eligibility. SCOR has therefore set by default the mandatory eligibility ratio to 0% and calculated a voluntary eligibility ratio including all the companies and based on potential estimations, which is useful for internal purposes.

In 2021, the voluntary eligibility ratio amounted to 16% taking into account the assumptions above. This is a very preliminary figure as the Regulation applies the same year for investors and for investees. This does not allow investors to leverage the current reporting cycle to access mandatory KPIs to be provided by investees.

**Biodiversity footprint**

— In 2020, SCOR partnered with Iceberg Data Lab in its preliminary attempt to understand methodologies and how they can contribute to understand the challenges and find remediation actions when possible. In the 2020 Sustainable Investment Report, SCOR provided a complete description of Iceberg Data Lab methodology CBF (Corporate Biodiversity Footprint) and a first assessment of this metric applied to its investment portfolio.

In 2021, SCOR continued the partnership with Iceberg Data Lab which improved data accuracy, added pressures, and extended coverage. In 2021, the metric covered around 20% of SCOR’s corporate bond and equities sub-portfolio and using the absolute biodiversity footprint by Enterprise Value, this exposure had a footprint of roughly -231 km<sup>2</sup>MSA per year. This metric is still in a development phase, but SCOR considers it provides valuable inputs to support the work of the Finance for Biodiversity Foundation and accelerates the approach to protect biodiversity.

Source: CDC Biodiversité

**Biodiversity indicator: MSA and km<sup>2</sup>MSA**

The mean Species Abundance (MSA) is used to describe biodiversity changes with reference to the original state of ecosystems. It is defined as the average abundances of originally occurring species relative to their abundance in the undisturbed ecosystem.

The km<sup>2</sup>MSA indicator is the expression of the MSA on a specific surface.

For example, a 1km<sup>2</sup> of an intensively cultivated field

(10% MSA) has the value of  $1 \times 10\% = 0,1 \text{ km}^2 \text{ MSA}$ . Also, the MSA change from 100% to 75% on a 1km<sup>2</sup> field means a loss of  $(100\% - 75\%) \times 1 = 0,25 \text{ km}^2 \text{ MSA}$ . Of course, this means that a MSA change from 100% to 0% on a 0,25km<sup>2</sup> field will also have the value of 0,25 km<sup>2</sup>MSA loss.

Considering two fields of equal superficies and a MSA of 100%, the two different changes of MSA below would result in the same amount of km<sup>2</sup>MSA lost:



	2021	2020	Coverage ratio 2021
<b>Exposure to fossil energies (EUR m)</b>	139	461	NA
<b>Average ESG rating</b>	C	C	75% of total AUM
<b>Financing transition bucket (% Total AUM)</b>	7.5%	7.3%	NA
<b>Carbon intensity by EV (tCO<sub>2</sub>e per EUR m invested)</b>			
Government bonds	625	820	99.4% of the asset class AUM
Covered bonds	2	2	98.1% of the asset class AUM
Corporate bonds	169	347	97.5% of the asset class AUM
Equity (incl. Convertibles)	486	496	95.5% of the asset class AUM
<b>Implied Temperature Rise</b>	3.3°C	3°C	73.7% of total AUM
<b>EU taxonomy for sustainable activities</b>			
Eligibility ratio (voluntary)	16%	NA	72.8% of total AUM
<b>Biodiversity footprint (CBF) in km<sup>2</sup> MSA</b>	-231	Not meaningful	9% of total AUM

## 4.2. Targets

### Decarbonisation target

— As a member of the Net Zero Asset Owner Alliance, SCOR commits to setting targets for the decarbonation of its portfolio. The baseline is end of year 2019 and the target is set in a 5-year time horizon, running until end of 2024. SCOR believes that a carbon footprint is more meaningful when taking scope 3 into account and that carbon intensive sectors are the ones for which scope 3 matters most. For these reasons and despite some weaknesses in the current data, SCOR has decided to set Carbon Intensity targets, including scope 3, on its corporate bond and equities sub-portfolio based on Enterprise Value of issuers.

SCOR commits to reducing its carbon intensity by 27% by the end of 2024. This will be achieved by combining a best-in-

class selection and active engagement with investees to allow for impacting the real economy. The decarbonation path cannot be achieved by rebalancing most emitting sectors to least emitting ones with no consideration for supporting companies with a credible path to decarbonation. Progress should be measured globally over the entire period, keeping in mind the lag of the data and the time it takes for companies to show visible results in their own decarbonization path.

For the sake of transparency, SCOR will report on its decarbonization progress on a yearly basis. However, figures should be read cautiously and only a longer-term trend provides reasonable information on the decarbonization achievements.

Carbon intensity on Enterprise Value (EV) (tCO <sub>2</sub> e per EUR m invested)	2019	2021	Coverage Ratio in 2021 <sup>1</sup>	Evolution versus 2019 (31/12/2019)	Target 2025
	<b>All scope 1, scope 2 and scope 3</b>				
Corporate bonds + Equity	273	173	97.5%	-37%	-27%

The carbon intensity of the corporate bonds and equities sub-portfolio (representing 43% of the total portfolio AUM as of end of 2021) is ahead of the planned decarbonization trajectory (-27% by Dec 2024 (Target 2025) compared to Dec 19 level). This evolution results from the revision of the Sustainable Investing Policy leading to divestment from some high emitting issuers.

SCOR's portfolio positioning and its selection of best-in-class companies in the highest emitting sectors will continue to support its approach to decarbonate with positive impact on the real economy.

As part of the NZAOA membership, SCOR will work in the coming months with other members to extend targets to additional asset classes and set new decarbonization targets by 2030. This will enable SCOR to align with the mandatory requirements of Article 29 of the Law for Energy and Climate.

#### Biodiversity target

— The coverage and precision of the existing tools is not sufficient yet to set biodiversity targets. This is a subject we are currently monitoring closely.

<sup>1</sup>ISS data covers 97.5% of the corporate bonds and equities sub-portfolio AUM

## Annex

— Correspondence table with Art 29 decree<sup>2</sup> :

Art 29 decree no. 2021-663 of 27 May 2021 sections	Sustainable Investment Report sections
II 1°	1.6. and 3.2.
II 2°	1.6. and 3.2.
II 1°	1.9. and 2.
II 2°	1.8.
II 3°	1.3.
II 4°	2.8.
II 5°	4.1.
II 6°	4.2.
II 7°	3.6. and 3.7. and 3.8. and 4.1 and 4.2.
III 8° and III 8° bis	3.
III 9°	4.
IV	As SCOR is an international group, the information is published at the group level with no distinction between P&C and Life businesses

<sup>2</sup><https://www.tresor.economie.gouv.fr/Articles/2021/06/08/publication-of-the-implementing-decree-of-article-29-of-the-energy-climate-law-on-non-financial-reporting-by-market-players>

## References

Convention on Biological Diversity (CBD).  
Fifth edition of the Global Biodiversity  
Outlook, 2020.

Folke, C., R. Biggs, A. V. Norström,  
B. Reyers, and J. Rockström, 2016.

Social-ecological resilience and  
biosphere-based sustainability science.

Ecology and Society 21(3):41. <http://dx.doi.org/10.5751/ES-08748-210341>

Carbon Risk Real Estate Monitor (CRREM).  
Stranding Risk & Carbon. Science-based  
decarbonizing of the EU commercial real  
estate sector, 2019.

CDC Biodiversité. Global Biodiversity  
Score: measuring a company's biodiversity  
footprint. N°11 - November 2017.

## Credits

Design and production: **Pelham Media**

Photos: **Unsplash, Thomas Laisne**



*e-accessibility*®

The digital version of this document is conform to Web content accessibility standards, WCAG 2.1, and is certified ISO 14289-1. Its design enables people with motor disabilities to browse through this PDF using keyboard commands. Accessible for people with visual impairments, it has been tagged in full, so that it can be transcribed vocally by screen readers using any computer support. It has also been tested in full and validated by a visually-impaired expert.

Accessibility version by



## SCOR around the world

### EMEA<sup>3</sup>

Belgium – France – Germany – Ireland – Italy – Russia – South Africa – Spain – Sweden – Switzerland – United Kingdom

### Americas

Argentina – Brazil – Canada – Chile – Colombia – Mexico – United States

### Asia-Pacific

Australia – China – Hong Kong – India – Japan – Malaysia – Singapore – South Korea – Taiwan

## Contact

### Media Relations

Nathalie Mikaeloff  
[media@scor.com](mailto:media@scor.com)

### Investor Relations

Yves Cormier  
[ycormier@scor.com](mailto:ycormier@scor.com)

<sup>3</sup>Europe, Middle East, Africa



To learn more about  
SCOR's strategy, goals,  
commitments  
and markets, visit our  
website.

**[www.scor.com](http://www.scor.com)**

---

Follow us  
on social media

