Certain parts of this Chapter of the Supervisory Handbook have been omitted from the publication. These omitted sections contain confidential information that is integral to the effective functioning of the supervisory review process.

EIOPA SUPERVISORY HANDBOOK

Supervision of climate change risks in the context of Solvency II Pillar II requirements

The Supervisory Handbook recommends good practices to National Supervisory Authorities (NSAs) for the supervision of insurance and reinsurance undertakings and groups. The recommendations provided to NSAs through this Chapter should not be interpreted as legally binding nor as applicable in all cases to all undertakings and groups. When following the guidance from the handbook, NSAs are always expected to implement a risk-based approach, to use their supervisory judgment, and to take into account the specific risks and characteristics of each undertaking or group under their supervision.

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EIOPA-BoS-22/101
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European Insurance and Occupational Pensions Authority

CONTENTS

1. BACKGROUND

1.1 Following EIOPA's advice[1], COM Delegated Regulation 2021/1256 amending the Solvency II Delegated Regulation 2015/35 integrates sustainability risk management in the governance of insurance and reinsurance undertakings, including in the risk management (function), actuarial function, remuneration policy and in the implementation of the prudent person principle.[2] The requirements apply from 2 August 2022.

1.2 (Re)insurers need to manage climate change risks, which affect their assets and liabilities, and manage the impact on their investment, technical provisions, underwriting and reinsurance strategy and take decisions on sustainability factors with a view to mitigating and adapting to the impact of sustainability risks.[3] Insurance and reinsurance undertakings shall also take into account the potential long-term impact of their investment strategy and decisions on sustainability factors.

1.3 The proposal for a Directive amending Solvency II[4] requires, for the purpose of the undertakings' own risk and solvency assessment, a materiality assessment of exposure to climate change risk, and where the risk is material, analysis of the impact of at least two long-term climate change scenarios on the business of the undertaking.[5] EIOPA's Opinion on the supervision of the use of climate change risk scenarios in ORSA sets out EIOPA's expectations of insurers to identify material climate change risk exposures and subject the material exposures to at least two long-term climate change scenarios.[6]

1.4 Step-by-step measures are being taken by EIOPA and national supervisors to integrate the assessment and management of sustainability risks into prudential and conduct supervision, as part of oversight and supervisory convergence initiatives[7].

1.5 The integration of sustainability risks in EIOPA supervisory handbook is part of EIOPA's effort to

[1] EIOPA's technical advice on the integration of sustainability risks and factors in the delegated acts under Solvency II and IDD, EIOPA-BoS-19/172, April 2019. https://www.eiopa.europa.eu/sites/default/files/publications/advice/technical_advice_for_the_integration_of_sustainability_risks_and_factors.pdf

[2] Commission Delegated Regulation (EU) 2021/1256 of 21 April 2021 amending Delegated Regulation (EU) 2015/35 as regards the integration of sustainability risks in the governance of insurance and reinsurance undertakings, https://eur-lex.europa.eu/legal-content/EN/TXT/?toc=OJ%3AL%3A2021%3A277%3ATOC&uri=uriserv%3AOJ.L_.2021.277.01.0014.01.ENG

[3] EIOPA-BoS-19-493, Action Plan on Sustainable Finance 2020-2022, Nov. 2019.

[4] As off 22.09.2021, subject to trilogue.

[5] See proposed art. 45a: https://eur-lex.europa.eu/resource.html?uri=cellar:da66a00c-1c51-11ec-b4fe-01aa75ed71a1.0001.02/DOC_1&format=PDF

[6] See https://www.eiopa.europa.eu/sites/default/files/publications/opinions/opinion-on-climate-change-risk-scenarios-in-orsa.pdf

[7] See EIOPA Supervisory Convergence Plan for 2022: EIOPA-BoS-21-619.

support the active supervision of sustainability risks and supervisory convergence in the EU.

2. DEFINITIONS

2.1 The following definitions apply:

- "Sustainability risk" or "ESG risk" means an environmental, social or governance event or condition that, if it occurs, could cause an actual or potential negative impact on an entity, sovereign or individual and on the value of the investment or on the value of the liability of the insurer or reinsurer[8].
- "Sustainability factor" or "ESG factor" means an environmental, social or governance event or condition that, if it occurs, could cause an actual positive or negative impact on an entity, sovereign or individual and on the value of the investment or of the liability of an insurance or reinsurer[9].
- "Environmental factors or risks" mean issues related to e.g climate change mitigation or adaptation, the sustainable use and protection of water and marine resources, the transition to a circular economy, pollution prevention and control, and the protection and restoration of biodiversity and ecosystems.[10]
- "Social factors or risks" mean issues related to e.g. social or employee matters, human rights, (anti-)corruption and (anti-)bribery matters.[11]
- "Governance factors or risks" mean issues relating to e.g. the governance of public and private institutions – including management structures, employee relations and executive remuneration as elements that can contribute to the inclusion of social and environmental considerations in the decision-making process.[12]

[8] Based on article 2, point 24, of Regulation (EU) 2019/2088 of the European Parliament and of the Council of 27 November 2019 on sustainability-related disclosures in the financial services sector (SFDR). See also EBA Report on management and supervision of ESG risks for credit institutions and investment firms.

[9] As defined in Article 1 Commission Delegated Regulation (EU) 2021/1256 of 21 April 2021 amending Delegated Regulation (EU) 2015/35 as regards the integration of sustainability risks in the governance of insurance and reinsurance undertakings.

[10] See: Regulation (EU) 2020/852 of the European Parliament and of the Council of 18 June 2020 on the establishment of a framework to facilitate sustainable investment, and amending Regulation (EU) 2019/2088 ('Taxonomy Regulation'), Article 9. See also EIOPA April 2019 Technical advice to EC on the integration of sustainability risks and factors in Solvency II and in the Insurance Distribution Directive.

[11] Based on article 2, point 24, of Regulation (EU) 2019/2088 of the European Parliament and of the Council of 27 November 2019 on sustainability-related disclosures in the financial services sector (SFDR). As per the Taxonomy Regulation, the Commission is required to publish a report describing the provisions that would be required to extend the scope of the taxonomy beyond environmentally sustainable economic activities and describing the provisions that would be required to cover social objectives.

[12] See https://ec.europa.eu/info/business-economy-euro/banking-and-finance/sustainable-finance/overview-sustainable-finance_en

- "Climate change risk" means risks stemming from trends or events caused by climate change. The two main risk drivers of climate change risk are transition and physical risk.[13]
- "Physical risks" means the risks that arises from the physical effects of climate change. They include:
  a. acute physical risks, which arise from particular events, especially weather-related events such as storms, floods, fires or heatwaves that may damage production facilities and disrupt value chains; and
  b. chronic physical risks, which arise from longer-term changes in the climate, such as temperature changes, rising sea levels, reduced water availability, biodiversity loss and changes in land and soil productivity.
- "Transition risks" means the risks that arise from the transition to a low-carbon and climate-resilient economy. They include :
  a. Policy risks, for example as a result of energy efficiency requirements, carbon-pricing mechanisms which increase the price of fossil fuels, or policies to encourage sustainable land use.
  b. Legal risks, for example the risk of litigation for failing to avoid or minimise adverse impacts on the climate, to adapt to climate change or to disclose the impact of climate change.
  c. Technology risks, for example if a technology with a less damaging impact on the climate replaces a technology that is more damaging to the climate.
  d. Market sentiment risks, for example if social norms and choices of consumers and business customers shift towards products and services that are less damaging to the climate
  e. Reputational risks, for example the difficulty of attracting and retaining customers, employees, business partners and investors if a company has a reputation for damaging the climate.
- "Climate change mitigation" means the process of holding the increase in the global average temperature to well below 2 °C and pursuing efforts to limit it to 1.5 °C above pre-industrial levels, as laid down in the Paris Agreement.[14]

[13] See EIOPA ORSA Opinion on on the supervision of the use of climate change risk scenarios in ORSA, https://www.eiopa.europa.eu/media/news/eiopa-issues-opinion-supervision-of-use-of-climate-change-risk-scenarios-orsa_en. See also TCFD 2021, https://www.fsb.org/2021/10/2021-status-report-task-force-on-climate-related-financial-disclosures/ .

[14] As defined in Article 2, point 5, of Regulation (EU) 202/852 of the European Parliament and of the Council of 18 June 2020 on the establishment of a framework to facilitate sustainable investment.

- "Climate change adaptation" means the process of adjustment to actual and expected climate change and its impacts.[15]
- "Double materiality" refers to the impact (re)insurers, as institutional investors and managers of risk of the society can have on climate change through their investment and underwriting strategy by aiming to reduce climate change risks and losses (inside-out perspective) and the impact climate change can have on the value of (re)insurers' assets and liabilities (outside-in perspective).

3. OBJECTIVE AND SUPERVISORY OUTCOME

3.1 This chapter of the Supervisory Handbook aims at integrating the assessment of climate change risks in the supervisory review process of (re)insurers' activity. This should enable the supervisor to form its own judgement of the effectiveness of the integration of climate change risks (and opportunities) in the governance and risk management of (re)insurance companies, and to challenge undertakings on their strategy and decisions where necessary.

3.2 In a first step, the supervisory guidance focuses on the integration of the climate change risks assessment in the governance and risk management system, including the prudent person principle.

3.3 This chapter of the Supervisory Handbook is focused on climate change risks from a prudential perspective addressing aspects such as identifying and assessing climate change risks. Group supervision considerations are not addressed.

3.4 The chapter builds on available technical analysis and initial experience from EIOPA, NCAs and global standard setters, as well as publicly available evidence on industry practices, and reflects EU regulatory developments. EIOPA work so far regarding climate change and sustainable finance, and relevant external references used to build this chapter are listed in Annex.

4. CLIMATE CHANGE RISKS IN THE CONTEXT OF (RE) INSURANCE ACTIVITY

[15] As defined in Article 2, point 6, of Regulation (EU) 202/852 of the European Parliament and of the Council of 18 June 2020 on the establishment of a framework to facilitate sustainable investment.

4.1 The objective of this section is to provide background information to supervisors in order to assess whether and how climate change risks have been identified as a potential source of prudential risk by the (re)insurer and to make sure that undertakings apply a proportionate approach reflecting their exposure to climate change risks and the complexity of the business.

4.2 In line with Commission Delegated Regulation (EU) 2021/1256 amending Delegated Regulation (EU) 2015/35 as regards the integration of sustainability risks in the governance of insurance and reinsurance undertakings, are required to integrate climate change risk assessment in their system of governance, risk-management system and ORSA, similar to all risks undertakings are or could be exposed to, in line with Articles 44(2) and 45(2) of the Solvency II Directive and Article 262(1)(a) of the Delegated Regulation.

4.3 EIOPA's Opinion on the supervision of the use of climate change scenarios (ORSA Opinion) sets out that, subject to the risk being material, the undertaking should apply at least two long-term scenarios for climate change risk assessment. Undertakings should identify the materiality of exposures to climate change risks through a combination of qualitative and quantitative analyses.

4.4 Risks are considered to be material where ignoring the risk could influence the decision-making or the judgment of the users of the information from undertaking's perspective, or if the risk potentially materially impacts the risk profile of the (re)insurer.

4.5 The qualitative analysis could provide insight in the relevance of the main drivers of climate change risks in terms of traditional prudential risks, i.e. market risk, counterparty risk, underwriting risk, operational risk, reputational risk and strategic risk.

4.6 The quantitative analysis could be used to assess the exposure of assets and technical provisions to transition risk (for example, based on their carbon footprint) and physical risks (for example, based on their geographical location).

4.7 In practice, the assessment of material exposures of assets and underwriting activities to physical risks necessitates an examination of the future impact of climate change on the incidence rate of those physical risks. For example, certain geographical locations may not be subject to flood risk now, but may be in the future due to sea level rise. Also, undertakings should not prematurely conclude that physical risks are not a material issue because underwriting activities are (currently) covered by (re)insurance arrangements because some events might be of a systemic nature and as such impacting also reinsurers.

4.8 Supervisors are recommended to review undertakings' materiality assessment of the climate change risks, as part of the ORSA, in order to review the relevance of the risk to the (re)insurers' business. If the undertaking concludes that climate change is not a material risk, it is expected to provide an explanation as to how that conclusion has been reached.

4.9 Supervisors are recommended to make sure that undertakings take the following characteristics of climate change risks into consideration in the context of their governance and business activity:

- Climate change risks are potential drivers of prudential risk on both sides of the (re)insurers' balance sheet.
- Climate change risks can materialise well beyond the one-year time horizon as well as have sudden and immediate impact.
- Climate change risks can lead to potential secondary effects or indirect impacts.
- The exposure of undertakings to climate change risks can vary across regions, sectors and lines of business.

Climate change risks are a potential source of prudential risk

4.10 Climate change risks can translate in a (financial) impact on the (re)insurer's assets and liabilities through existing risk categories, such as underwriting, market, counterparty default or operational risk as well as reputational risk and / or strategic risk.[16] In other words, they are not a separate risk class but 'drivers' to existing risk categories, which need to be integrated in the existing risk management framework.[17]

4.11 Climate change physical and transition risk can impact on the value of assets and liabilities of life and non-life undertakings, but also affect the governance, risk management, reporting and disclosure requirements of companies. **Further examples of how physical and transition risk can impact on the assets and liabilities of non-life and life (re)insurers can be found in Annex 3 of this Chapter.**

Climate change risks materialise well beyond the one-year time horizon as well as having sudden and immediate impact

4.12 The impact of climate change can materialise over a longer time horizon than the usual time horizon applied for prudential or business strategy purposes. What is long term for a business or strategic planning, is mid-term for climate change developments.

4.13 General consequences of this longer time horizon of climate change, expected to be of prudential supervisory relevance are the following:

- the current **solvency capital requirements**, which are calibrated over a 1-year time horizon may not sufficiently capture the risk of climate change, leading to a potential

[16] See EIOPA advice on sustainability in Solvency II, para 22, https://www.eiopa.europa.eu/document-library/advice/technical-advice-integration-of-sustainability-risks-and-factors-solvency-ii_en .

[17] See ECB - Guide on climate-related and environmental risks: Supervisory expectations relating to risk management and disclosure, November 2020, https://www.bankingsupervision.europa.eu/press/pr/date/2020/html/ssm.pr201127~5642b6e68d.en.html .

underestimation of climate change risk in certain risk modules (e.g. NAT CAT underwriting risk[18]).

- as extreme weather events are becoming more severe and more frequent due to climate change, resulting higher losses will lead to higher prices for insurance, and over time put **affordability of insurance products** at risk, raising concerns on the sustainability of the business model over a longer time horizon. The rise in physical risks may stimulate demand for insurance cover, but higher (re)insurance costs and premiums are also likely to constrain demand. Higher physical risk may render more risks in more geographical locations uninsurable, paired with a tightening of reinsurance offer, jeopardizing (insurance) business opportunity.[19] The transition to a low-carbon economy has the potential of disrupting economic sectors, eroding insurance undertakings' customer base in 'conventional' industries, but also offering opportunities for selling new types of insurance products and services.
- assuming on the longer term materialisation of risks, (re)insurers may **postpone adapting their investment or underwriting strategy**, increasing the risk of having stranded assets on their balance sheet or inadequate business models over the longer term.
- supervisors should be aware that over a longer time horizon assumptions may need to be of more qualitative nature, and predictions may be less precise, due to the lack of necessary data and information.

4.14 Climate change risks can however also arise in the short term, can happen at any time and suddenly and is already happening today, with increased frequency and severity of events. This may put under pressure the solvency position of (re)insurers or the insurance sector more broadly at any given time. Also, the potential for important transition efforts to a low carbon economy until 2030, can lead to short term shocks on the (re)insurers balance sheet.

<u>Interlinkage of transition and physical risks paired with secondary effects and following events, creating potentially systemic risk</u>

4.15 Physical risk (e.g. a heatwave leading to increased mortality) can potentially create legal transition risk if the conditions for triggering a liability insurance have been met (e.g. a company failing to mitigate/adapt the risk), and may result in policy transition risk.

4.16 A sharp increase in physical risks can lead to policies focusing on a faster economy transition, leading in turn to higher transition risks.

[18] Methodological paper on potential inclusion of climate change in the Nat Cat standard formula, https://www.eiopa.europa.eu/document-library/methodology/methodological-paper-potential-inclusion-of-climate-change-nat-cat_en

[19] See EIOPA application guidance, https://www.eiopa.europa.eu/media/news/eiopa-consults-application-guidance-climate-change-risk-scenarios-orsa_en .

4.17 Physical and transition risks can impact economic activities, which in turn can impact the financial system. The interconnectedness of the financial sector, and more generally of the economy, can create secondary effects and different scenarios may occur:

- physical risk reducing the value of property, reducing in turn the value of collateral for lending purposes or increasing the cost of credit insurance, leading to economic slowdown; or
- physical damage caused by extreme weather events to critical infrastructure increasing the potential for cyber security incidents, amplifying supply chain disruption and disruption to global production of goods.

The exposure of undertakings to climate change risks varying across regions, sectors and lines of business.

4.18 Climate change risks exposure is also very much dependent on the geographical region the (re)insurance is active – even if climate change is recognised as a global issue nowadays there are number of areas across the globe which are highly exposed to climate change risks (floods, storms etc.) This can be seen by the loss ratios reported for certain lines of businesses within those regions after severe climate events (property, casualty etc.)[20].

5. SUPERVISORY APPROACH TOWARDS CLIMATE CHANGE RISKS IN (RE)INSURANCE

5.1 SUPERVISORY APPROACH TO BUSINESS MODEL ANALYSIS AND STRATEGY

Legal references

- Commission Delegated Regulation (EU) 2021/1256 of 21 April 2021 amending Delegated Regulation (EU) 2015/35 as regards the integration of sustainability risks in the governance of insurance and reinsurance undertakings.
- Directive 2014/95/EU of 22 October 2014 of the European Parliament and of the Council amending Directive 2013/34/EU as regards disclosure on non-financial and diversity

[20] See further information on climate in Europe under global warming in EIOPA's Methodological paper on potential inclusion of climate change in the Nat Cat standard formula, Annex C

information by certain large undertakings and groups ('NFRD', Non-Financial Reporting Directive), supported by European Commission's Guidelines on reporting climate-related information.

- Commission Delegated Regulation (EU) 2021/2178 of 6 July 2021 supplementing Regulation (EU) 2020/852 of the European Parliament and of the Council by specifying the content and presentation of information to be disclosed by undertakings subject to Articles 19a or 29a of Directive 2013/34/EU concerning environmentally sustainable economic activities, and specifying the methodology to comply with that disclosure obligation ('Art. 8 Taxonomy Regulation').
- Regulation (EU) 2019/2088 of the European Parliament and of the Council of 27 November 2019 on sustainability-related disclosures in the financial services sector ('SFDR', Sustainable Finance Disclosure Regulation).
- Under development: Commission Proposal for a Corporate Sustainability Reporting Directive (CSRD)[21].

Cross-reference to Business-model analysis chapter of EIOPA Supervisory Handbook:

5.1 The objective of this section is to provide elements for the supervisory approach to assess the appropriateness and sustainability of the business model and strategy of the undertaking in the context of climate change.

5.2 Supervisors are expected to consider the following in assessing climate change risks in the context of (re)insurers' business models and strategy, beyond the usual 3-year business planning or ORSA time horizon:

- The potential materiality of climate change risks exposure of the undertaking and its impact on investment and/or technical provisions.
- The undertaking's assessment of the impact of risk of climate change in its business model and strategy will need to identify physical and transition risk, over the different time horizons for business and strategic planning and according to the potentially affected lines of business.
- The undertaking will need to effectively communicate its business and strategic planning relating to climate change risks and opportunities to all relevant operations and key functions, business units and product lines in order to operationalise the goals in a measurable manner.
- The AMSB's setting of the undertakings risk appetite having regard to the materiality of the undertaking's exposure to climate change risks.
- The business opportunities for (re)insurers' in adapting investment or underwriting strategy to contribute to climate change adaptation or mitigation.

[21] See https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52021PC0189

Business model and strategy in light of climate change risks

5.3 In order to assess the potential impact of climate change risks on a (re)insurers business, supervisors are recommended to assess (and review the undertaking's) materiality assessment of impact of climate change risks in its business model and strategy. This can be done through a combination of qualitative and quantitative analyses.[22] Different sources of information can support the high level supervisory review of the potential materiality of the insurers' exposure to climate change risks, ranging from undertakings' ORSA to non-prudential reporting (including corporate and product disclosure).

Prudential reporting:

- ✓ **Solvency II quantitative reporting -** list of assets and CAT SCR[23].
- ✓ **The undertaking's ORSA**: to assess the impact on the (re)insurers' balance sheet and solvency requirements. In accordance with the EIOPA ORSA opinion[24], the ORSA should include a materiality assessment of climate change risks. Where the undertaking concluded that climate change is not a material risk, it should provide an explanation as to how that conclusion has been reached. Guidance on how a materiality assessment can be conducted is included in EIOPA's Application guidance on running climate change materiality assessment and using climate change scenarios in the ORSA.

Financial stability reporting:

- ✓ **EIOPA financial stability and conduct ESG risk indicators**: to assess the external environment and business context in which climate change-related risks / opportunities can arise for the (re)insurer, the risk indicators will give an indication of macro-prudential

[22] See EIOPA ORSA opinion and draft ORSA application guidance on running climate change materiality assessment and using climate change scenarios in the ORSA https://www.eiopa.europa.eu/sites/default/files/publications/consultations/consultation-paper-on-application-guidance-on-using-climate-change-scenarios-in-the-orsa.pdf.

[23] The amount of the SCR for Nat cat underwriting risk can serve as a (crude) proxy for the exposure of the (re)insurer to climate change physical risk on its liabilities. It should be noted however, that Nat cat UW risk SCR is not calibrated based on climate change factors and this information is only available on a regular basis for the standard formula users; where the risks related to Nat Cat are modelled using internal models, supervisors would need to engage with internal model users during their supervisory review.

The current factors for Nat cat SCR calibration are mainly based on output from Nat cat models, which would reflect the Nat cat risk for the next 12 months. The impact of climate change is mostly not explicitly reflected in the current Nat cat models - and as a result also not in the Nat cat SCR calibration. See Methodological paper on potential inclusion of climate change in the natural catastrophe standard formula

[24] EIOPA Opinion on the supervision of the use of climate change risk scenarios in ORSA.

risk in the insurance sector[25], and potential ESG related developments at sector level to the detriment of consumer protection.

Corporate and product disclosure:

✓ **Sustainability-related corporate disclosure under the Non-Financial Reporting Directive 2014/95/EU**[26] – the share of environmentally sustainable activities[27] (investments in relation to total investments and non-life gross written premium as share of total non-life gross written premiums) can be used as crude proxy for transition risk, under the assumption that environmentally sustainable taxonomy-aligned activities would be less prone to transition risk. The disclosure of these key performance indicators (KPIs) will be accompanied by contextual information, and explanations on the nature and objectives of these economic activities, including on business strategy, product design, and engagement with clients and counterparties. [28]

✓ **Sustainability-related entity and product disclosure under the Sustainable Finance Disclosure Regulation (EU) 2019/2088**

- Entity- level adverse sustainability impacts, related to climate can give an indication on how the undertaking may be exposed to transition risk (art. 4);
  At product level:
- Pre-contractual and/or periodic information on products that promote or invest in economic activities contributing to climate objectives can give an indication on the type of products the undertaking is developing with sustainability objectives in mind, and at

[25] EIOPA Financial Stability Risk dashboard | Eiopa (europa.eu), Cost and Past Performance Reports and Consumer Trend Reports: Reports and data on consumer protection | Eiopa (europa.eu)

[26] Under revision by the COM Proposal for a Directive of the European Parliament and of the Council [on] corporate sustainability reporting, 2021/0104. The scope of the reporting may be extended from public-interest entities (PIEs) with more than 500 employees (and that have either a balance sheet total of more than EUR 20 million or a net turnover of more than EUR 40 million) to include all large and listed companies (except listed micro-companies).

[27] As from January 2022, non-financial companies will report on the eligibility of their activities for environmental objectives. From January 2023 financial companies will report on the eligibility of their activities, based on the non-financial companies reporting. From January 2024, financial companies will be required to report on alignment, and from January 2025 financial companies are required to report the KPI.

[28] See Commission Delegated Regulation (EU) 2021/2178 of 6 July 2021 supplementing Regulation (EU) 2020/852 of the European Parliament and of the Council by specifying the content and presentation of information to be disclosed by undertakings subject to Articles 19a or 29a of Directive 2013/34/EU concerning environmentally sustainable economic activities, and specifying the methodology to comply with that disclosure obligation: EUR-Lex - 32021R2178 - EN - EUR-Lex (europa.eu)Annex IX, X and Xi. For the underwriting activities reported meeting a climate change adaptation objective, the KPI will report the insurance revenue corresponding to the gross written premiums related to the underwriting of climate related perils in selected lines of business: medical expense, income protection, workers' compensation, motor vehicle liability, other motor, MAT, fire and other damage to property and assistance insurance. The activity will in addition need fulfil technical screening criteria supporting a substantial contribution to climate change adaptation (proven leadership in modelling and pricing of climate change risks, risk-based rewards in the product design for preventive actions, innovative coverage solutions, data sharing and a high level of service in post-disaster situations. In addition, the activity should not include insurance of the extraction, storage, transport or manufacture of fossil fuels or insurance of vehicles, property or other assets dedicated to such purposes. See Commission Delegated Regulation (EU) …/… of 6.7.2021, Annex IX, X and Xi.

the same time, the quality of the information provided may give an insight into potential issues of greenwashing.

- In addition to that, supervisors can also approach the above mentioned issues through information sourced from: Article 3 SFDR (Transparency of sustainability risk policies at company level) or under Article 6 a) and (especially) also b) SFDR (Transparency of the integration of sustainability risks at product level).

5.3 Supervisors can also conduct a high level materiality assessment of climate change transition and physical risk exposure, based on existing supervisory reporting.

5.4 Climate change-related risks and opportunities can affect the business planning over a short-to-medium term and the strategic planning over a longer term.

5.4 Supervisors are recommended to assess how the AMSB has set risk exposure limits and thresholds for the risks that the undertaking is willing to bear with regards to climate change risks, taking into account:

- A longer-term time horizon, considering the impact climate change may have in the near future, but also over the longer term, to be reflected in the business planning over a short-to-medium term and the strategic planning over a longer term.
- The impact of climate change-risks on the external business environment will feed into the (re)insurers' strategic planning: the impact of the business planning and strategy may be difficult to judge as standards and technology are developing, as well as industry's practices and compliance with industry pledges may evolve.
- The undertaking's exposure to material physical and transition risk, across sectors and geographies, the transmission channels across risk categories and lines of business.
- Qualitative and quantitative results from scenario, sensitivity and stress testing.

5.5 When assessing the undertaking's business model and strategy including its risk appetite in the context of climate change risk supervisors should consider the questions listed below.[29] Where the undertaking provides only basic answers, this may give an indication for insufficient analysis on the materiality of the risk and the consequences for its business.

5.6 Supervisors should observe over time how the situation would evolve and whether there would be any progress made in case the particular undertaking is at the beginning of its 'learning curve'.

- ***How does the AMSB expect that climate change might affect its business?***

- ***Does the AMSB consider climate change as a risk and/or opportunity? If yes, in what ways might climate change pose risks to the undertaking's business in economic or financial terms, or create opportunities? If neither risk nor opportunities seem to exist, why not? Has the undertakings elaborated different strategic options to manage climate change risks and how they have been developed?***

- ***Has the AMSB implemented or planned any substantive changes to its business strategy in response to current and potential future climate change impacts? If yes, what are the key climate change drivers that it would consider relevant to its strategy? If not, why not?***

- ***Is the AMSB concerned about secondary effects or indirect impacts of climate change on undertaking's overall strategy (e.g. any systemic repercussions on the industry or the economy)?***

- ***What is the undertaking's time horizon for considering climate change impacts? Can the AMSB distinguish between the short-to-medium term impact on business planning (5-10 years) and the long term strategic considerations (10 to 30 years)?***

5.2 SUPERVISORY APPROACH TO GOVERNANCE AND

[29] Reference to SIF question bank, https://www.google.de/url?esrc=s&q=&rct=j&sa=U&url=https://www.sustainableinsuranceforum.org/case-study/question-bank-on-climate-change-risks-to-the-insurance-sector-why-does-sif-have-a-question-bank/&ved=2ahUKEwifwKLavcz1AhVzh_0HHQpJAsMQFnoECAoQAg&usg=AOvVaw2M5JsPt_54918SN8FIr5uY .

RISK MANAGEMENT

Legal references

- Articles 41-50 of Directive 2009/138/EC (Solvency II Directive).
- Articles 268-274 of the SII Delegated Regulation 2015/35/E, where applicable amended by Delegated Regulation 2021/1256 amending articles 260, 269, 272(6), 275, and introducing a new article 275a
- EIOPA's Guidelines on system of governance (EIOPA-BoS-14/253)
- EIOPA's Guidelines on own risk and solvency assessment (EIOPA-BoS-14/259)
- Cross-reference to AMSB chapter of EIOPA Supervisory Handbook:
- Cross-reference to Key functions chapter of EIOPA Supervisory Handbook:

5.5 The objective of this section is to provide elements to implement a supervisory approach for assessing the appropriateness of the system of governance of the undertaking to address climate change risks (and opportunities).

5.6 Further, this section aims at providing elements to implement a supervisory approach to assess the appropriateness of the risk management performed by the undertaking for climate change risks, having regard to the materiality of the exposure of the undertaking to these risks in its investment or underwriting portfolios.

5.7 Considering that climate change risks are drivers of other prudential/financial risks, in order to ensure the effective management of these risks, the allocation of tasks and responsibilities for the identification, measurement, monitoring, management, mitigation and reporting of climate change-related risks needs to be integrated throughout the governance structure, establishing clear working procedures and responsibilities.[30]

5.8 Supervisors are expected to consider the following in assessing climate change risks in the context of (re)insurance activity:

- Key functions in fulfilling their tasks should contribute to the AMSB decision-taking by communicating the exposure to material climate change risks and advise the AMSB strategy/approach to manage and mitigate risks.
- Particular attention is given to the risk management function having a central role in the following aspects:

    i. How climate change risks could materialise within each area of the risk management system (risk identification);

[30] Reference to EBA report on ESG risks management and supervision 2021, https://www.eba.europa.eu/eba-publishes-its-report-management-and-supervision-esg-risks-credit-institutions-and-investment .

ii. The approach used by undertakings to measure and quantify their exposure to risks, including the limitation the methods used, the gaps the undertaking faces in data and methodologies to assess the risks (risk measurement);
iii. Which methodologies, tools, metrics and key performance indicators the undertaking uses to monitor the risks and monitor that risks are consistent with internal limit and its risk appetite (risk monitoring);
iv. The approach to managing and/or mitigating climate changes risks (risk management/mitigation).

- The remuneration policy can contribute to managing risks arising from climate change as well as contributing to implementing climate change adaptation or mitigation objectives.

<u>Fitness and propriety of the AMSB members with regard to climate change risks</u>

5.9 AMSB is ultimately responsible for setting undertakings' risk appetite and making sure that all risks, and therefore also climate change risks, if material, are effectively identified, managed and controlled.

5.10 For this, the AMSB should collectively possess the appropriate qualification, experience and knowledge relevant to assess long-term risks and opportunities related to climate change, which may be obtained or improved through appropriate training.

5.11 A supervisor can rely on the processes and information as provided by the undertaking, but where appropriate, will need to review and verify that information. In doing so, the supervisor would be expected to have the following questions in mind:

- How does the AMSB address filling in the potential gaps with regards to the knowledge on climate change risks?
- Where material risks are identified are the new members of the AMSB being appointed to ensure adequate knowledge or the process of obtaining additional qualification of the current members is implemented? In view of Article 42[31], which states that the fit and proper requirement shall be met "at all times", NCAs are recommended to review the compliance with that requirement, when climate risk is considered material, in particular with regards to climate change related skills by addressing the following relevant questions that apply to the collective:
  - (a) Has consideration been given to the overall mix of skills and abilities in the AMSB in particular relevant to assess the risks associated with climate change?
  - (b) Is this mix appropriate? If an individual AMSB member lacks skills in the area of climate change risks, is the overall group affected by that?

[31] Article 42 of of the Directive 2009/138/EC (Solvency II Directive)

(c) Has the AMSB member made the necessary preparations for an orderly takeover of her/his responsibilities to a new AMSB member, including safeguarding and sharing the knowledge about the assessment of the long-term risks and opportunities in the area of climate- change within that entity he/ she is leaving?

<u>Effectiveness of the AMSB with regard to climate change risks</u>

5.12 A supervisory assessment of the effectiveness of the AMSB is to include at least the following aspects:

- awareness of their obligations in the context of the long-term impact of climate change;
- awareness and identification of the climate change as possible key risks for the undertaking;
- open debate within the AMSB with regards to the risks and opportunities climate change is bringing;
- effective communication on climate change risks as possible key risks to in the short and long term;
- the effectiveness of the AMSB's interaction with the rest of the organisation by putting climate change risk as a possible key topic in the day-to-day business;
- the effectiveness in planning and delivering results by considering the impact of climate change risks and opportunities;
- the decision making process by taking into consideration climate change risks.

5.13 The assessment needs to be carried out on a forward looking basis, specific regard should be given to the AMSB's awareness of the undertaking's strategy, business planning, future capital projections and growth plans in the context of climate change risks.

<u>Fitness and propriety of the key functions with regard to climate change risks</u>

5.14 The allocation of responsibility for identifying and managing climate change risk to the relevant existing key function will need to reflect the undertaking’s structure and risk profile, its strategy and risk appetite. Adequate resources and sufficient skills and expertise should be devoted to managing climate change risks, which may be obtained or improved through appropriate training.

5.15 A supervisor can rely on the processes and information as provided by the undertaking, but where appropriate, will need to review and verify that information. In doing so, the supervisor would be expected to have the following questions in mind:

- How did the particular key function (holder) addressed the potential gaps with regards to the knowledge on climate change risks?

- Is the process of appointing a new specific key function or other business function (holder) with this specific knowledge or the process of obtaining additional qualification of the current key functions being formalised?
- Is the process of appointing new key function (holder) with this specific knowledge or the process of obtaining additional qualification of the current key function (holder) effective?

5.16 Supervisors are recommended to monitor ongoing (besides at appointment) fitness and propriety of key function holders. This is in particular relevant to be done with climate change risks becoming possible key risks for (re)insurers by addressing the following relevant questions that apply to the collective:

- Has consideration been given to the skills and abilities among key function holders in particular relevant to assess the risks associated with climate change?
- Are the skills and abilities appropriate taking into account the risks, scale and complexity of the business run by the undertaking?
- In case of exit interviews with key function holders, have individuals raised issues regarding the assessment of the long-term risks and opportunities in the area of climate change?

5.17 In case of outsourcing the climate change risk assessment and data collection to third-party providers, Supervisors are recommended to assess whether/how undertakings check the quality of services provided, or the transparency and reliability of the methodologies applied by rating providers to integrate ESG risks.32

Effectiveness of the key functions with regard to climate change risks

5.18 The risk management function is required to consider, where relevant climate change in the tasks performed:

Risk identification and measurement

5.19 (Re)insurance undertakings need to apply relevant tools to identify risks in a proportionate way depending on the nature, scale and complexity of the risks.

5.20 Given the forward-looking nature of the risks and the inherent uncertainty associated with climate change risks, (re)insurers will need to use appropriate methodologies and tools (e.g. scenario analysis and stress testing) necessary to capture the size and scale of climate change risks.

[32] For example, undertakings can refer to established EU benchmarks or labels for products or use information from certified credit rating agencies which apply the EU standards on disclosure of how ESG factors are integrated in the credit rating action: https://www.esma.europa.eu/policy-activities/sustainable-finance/cras-sustainability.

5.21 Analytical work also needs to be done to determine the climate exposure of (re)insurance undertakings, and conduct vulnerability assessments or execute sensitivity analysis/stress tests.33

5.22 To conclude the risk assessment exercise the focus should be on questioning the assumptions, measures, etc. against the background of climate change, formulating the supervisory response and presenting the report to the different stakeholders.[34]

5.23 Due the emerging and forward-looking nature of climate risks, (Re)insurance undertakings should be challenged by supervisors to go beyond using only historical data for the purposes of the risk assessment and, depending on the materiality of risk at stake, implement forward-looking technique (i.e. stress testing and scenario analysis), for example by considering also future trends in catastrophe modelling.

5.24 It is acknowledged that there are some areas where science, data or tools are not yet sufficient to estimate the risks accurately. As undertakings' expertise and practices develops, the expectation should be that the approach to identifying and measuring the climate change risks will mature over time.

5.25 Questions to support the supervisor in the assessment of the climate change risk in undertaking's scenario analysis[35]:

- Does the (re)insurance undertaking have clear policies and procedures for identifying, measure, monitor, managing and report climate change risks? Are the policies reviewed regularly and approved by the AMSB?
- Is the (re)insurance undertaking approach (e.g. using qualitative or quantitative or a mix of both approach) appropriate to identify and measures climate change risks to which undertaking is exposed to?
- In case of material exposure to climate change risk, Is the (re)insurance undertaking using or seeking to undertake forward-looking analysis of underwriting liabilities or investment portfolios under different future transition scenarios, including through scenario analysis?
- What types of scenarios is the (re)insurance undertaking seeking to apply in scenario analysis activities? What are the data inputs and key assumptions applied?
- What types of gaps and barriers (information, data, scenarios) might complicate undertaking's efforts to undertake scenario analysis?

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[33] Please refer to methodological-principles-insurance-stress-testing.pdf (europa.eu) see pages 38-39

[34] Reference to NGFS guide for supervisors, 2020, https://www.ngfs.net/en/guide-supervisors-integrating-climate-related-and-environmental-risks-prudential-supervision .

[35] Reference to the Sustainable Insurance Forum – Question bank on climate change risks to the insurance sector, 2020, https://www.sustainableinsuranceforum.org/case-study/question-bank-on-climate-change-risks-to-the-insurance-sector-why-does-sif-have-a-question-bank/ .

- Is the assessment outsourced to external parties? Is there a minimum understanding/oversight/challenge of the activities performed by the external service provider?

Risk monitoring

5.26 Where appropriate, supervisors are expected to ask (re)insurance undertakings to consider a range of quantitative and qualitative tools and metrics or key performance and key risk indicators to monitor their exposure to risks caused by climate change.

5.27 These quantitative and qualitative tools and metrics would aim, for example, at monitoring exposures to climate change risk factors which could result from changes in the concentration of the investment or lending portfolios; or the potential impact of physical risk factors on outsourcing arrangements and supply chains.

5.28 These quantitative and qualitative tools and metrics have to be updated regularly to monitor that risks underwritten remains in line with undertakings' risk appetite and support decision making by the AMSB. In addition to that, a list of circumstances which would trigger a review of the strategy for addressing the sustainability risks, in particular climate change risks, can be considered as a good practice.

Risk management and mitigation

5.29 Where material potential impacts of the climate change risks have been identified, (re)insurance undertaking(s) should identify risk management and mitigating measures. The written policies on the investment and underwriting strategy should include such potential measures.

5.30 Based on the double materiality principle, the investment and underwriting policy will not only consider the risks from climate change to the balance sheet, but also take into consideration the risks posed by the underwriting and investment strategy and decisions on climate change.

Underwriting policy in light of climate change risks as part of the risk management in the undertaking

5.31 Consistently with actuarial risk based principles, (re)insurers, as risk managers and underwriters, can contribute to climate adaptation and mitigation by applying their data, expertise and risk assessment capacity to incentivise policyholders to mitigate insured risks via risk-based pricing and contractual terms, and consider in their underwriting strategy measures that contribute to climate change adaptation and/or mitigation.[36]

5.32 As a consequence of this supervisors are expected to make sure that:

[36] Reference to EIOPA Report on non-life underwriting and pricing in light of climate change, 2021, https://www.eiopa.europa.eu/document-library/report/report-non-life-underwriting-and-pricing-light-of-climate-change_en . .

- Climate change risks are explicitly referred to in the undertaking's underwriting policy. This includes establishing guidelines, supported in some cases by ESG experts, to help underwriters take appropriately into account ESG risks, in particular climate change risks.
- While premiums need to remain risk-based, and reflect the risks insurers and consumers or business are exposed to, (re)insurers, as risk managers, can also contribute to reducing the risks caused by climate change by using appropriate modelling and data in the adequate assessment and pricing of climate change risks.

Examples of existing practices among (re)insurers for incorporating of sustainability risks into underwriting policy can be found in Annex 3 of this chapter.

5.33 Furthermore supervisors are recommended to keep in mind that the EU Taxonomy Regulation requires the disclosure of a key performance indicator (KPI) on environmentally sustainable activities as part of the non-financial statements under the Non-Financial Reporting Directive37. Undertakings will also be required to disclose the premium ratio of their underwriting activities aligned with the Taxonomy's criteria38.

- For the underwriting activities meeting a climate change adaptation objective, the KPI will report the insurance revenue corresponding to the gross written premiums by underwriting climate related perils in selected lines of business: medical expense, income protection, workers' compensation, motor vehicle liability, other motor, marine aviation transport, fire and other damage to property and assistance insurance.
- The activity will in addition need to fulfil technical screening criteria supporting a substantial contribution to climate change adaptation (proven leadership in modelling and pricing of climate change risks, risk-based rewards in the product design for preventive actions, innovative coverage solutions, data sharing and a high level of service in post-disaster situations).

5.34 Questions to support the supervisor in the assessment of the sustainability risks, in particular climate change risks in undertaking's underwriting practices[39]:

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[37] As from January 2022, non-financial companies will report on the eligibility of their activities for environmental objectives. From January 2023 financial companies will report on the eligibility of their activities, based on the non-financial companies reporting. From January 2024, financial companies will be required to report on alignment, and from January 2025 financial companies are required to report the KPI.

[38] Commission Delegated Regulation (EU) 2021/2178 of 6 July 2021 supplementing Regulation (EU) 2020/852 of the European Parliament and of the Council by specifying the content and presentation of information to be disclosed by undertakings subject to Articles 19a or 29a of Directive 2013/34/EU concerning environmentally sustainable economic activities, and specifying the methodology to comply with that disclosure obligation ('Art. 8 Taxonomy Regulation')

[39] Reference to the Sustainable Insurance Forum – Question bank on climate change risks to the insurance sector, 2020, https://www.sustainableinsuranceforum.org/case-study/question-bank-on-climate-change-risks-to-the-insurance-sector-why-does-sif-have-a-question-bank/ .

- How does the (re)insurance undertaking consider climate change risks in the context of underwriting risk management processes and functions?
- Is the (re)insurance undertaking seeking to reduce, mitigate, or transfer climate change risks with respect to its underwriting liabilities?
- Is the (re)insurance undertaking assessing potential impacts of climate change on capital adequacy and solvency?
- What methods does the (re)insurance undertaking apply to model the impacts of climate change risks on insurance liabilities?

<u>Risk reporting and management information</u>

5.35 Supervisors should make sure that the AMSB of the undertaking is provided timely with management information on the exposure to the sustainability risks, in particular the climate change risk. In addition to that the mitigating actions and a timeframe to apply them should be part of the 'package' brought to the attention of the undertaking's management.

5.36 Also the other key functions have important tasks/roles related to climate change risks.

5.37 The actuarial function is required to consider, where relevant, climate change risks in the tasks performed:

- expressing an opinion on the underwriting policy. In particular, in light of the increasing expected losses from physical damage due to increasingly severe and frequent natural catastrophes, the choice of underwriting certain perils, but also the pricing of the perils will need to be considered in a forward-looking manner, having regard to the sustainability of the business strategy.
- expressing a fully informed technical opinion on the adequacy of the reinsurance arrangements of the undertaking taking special account of the risk profile of the undertaking, the undertaking's reinsurance policy and the interrelationship between reinsurance and technical provisions. In times of increasing losses due to climate change, the reinsurance market may 'harden' and increase the cost for primary insurance.
- contributing to the effective implementation of the risk management system, providing the necessary support to the risk management function. In light of increasing losses for natural catastrophes due to climate change, the actuarial function will need to contribute to the assessment of the risk and opportunity of underwriting certain natural perils. The actuarial pricing of climate change risks can inform the overall risk management strategy and contribute to the underwriting policy by informing on the risks of underwriting certain perils and the opportunity to invest in prevention measures to reduce the losses.
- coordinating of the calculation of technical provisions and overseeing the calculation of technical provisions by explicitly referring to climate change driven technical provision risks. The consideration of climate change in an actuarial risk-based manner should allow

for the consideration of incentives in the pricing and underwriting of certain natural hazards, with the view to potentially reduce losses over a longer term perspective.

- ensuring the appropriateness of the methodologies and underlying models used as well as the assumptions made in the calculation of technical provisions. This may involve using different data sets, as well apply more involved scenario analysis, over a longer time horizon. Quantitative analyses of long-term climate change scenarios can aim for a lower level of precision of balance sheet projections or can be conducted at a lower frequency.
- assessing the sufficiency and quality of the data used in the calculation of technical provisions including the validation of relevant climate change input data and comparison of best estimates against experience. With regard to climate change risk, limited data may be available and forward-looking assumptions will need to be made.

5.38 The compliance function is required to consider, where relevant, climate change risks in the tasks performed:

- assessing legal and legal change risks related to climate change risks. Especially as regulatory requirements are building up in the area of climate change risk management, reporting and disclosure, the compliance with new legal requirements will require attention.
- providing information on the high risk areas within the undertaking as regards to compliance. The transition policy and legal risk attached to climate change is a relevant potential area of focus for compliance officers, too, in contributing to the underwriting or investment strategy of the undertaking.
- drafting, implementing and maintaining of compliance policy.
- establishing compliance plan.
  preparing a catalogue including measures in place to prevent non-compliance. The risk of greenwashing in product offer, i.e. the risk that the undertaking makes unsubstantiated claims for the sustainable or taxonomy-compliant nature, will be a corollary of the detailed sustainability reporting and disclosure requirements and subject to supervisory scrutiny.

5.39 The internal audit function is required to consider, where relevant climate change risks in the tasks performed:

- preparation and maintaining of internal audit plan.
- highlighting of high-risk areas to be granted with special attention. The potentially increased reliance on external parties as data providers on climate risks, or for verification of the sustainability of investments with regard to climate objectives, may need particular attention in order to ascertain the quality of the outsourced activity.
- coping with follow up actions in particular recommendations in areas, processes and activities subject to review.

<u>Function/ Unit/ Committee with special responsibility for sustainability risks</u>

5.40 If a (re)insurance undertaking sets up or intends to set up a unit or a function with special responsibility for sustainability risks, its integration with existing processes and interfaces with key and other functions must be clearly defined. A dedicated sustainability unit or function would therefore be involved, in addition to the risk management function, actuarial function and/or compliance function, whenever the insured risk or investment is sensitive to climate change risk, e.g. by virtue of the economic sector in which the investment was made, or the geographical location of the insured object. In such cases in particular, misunderstandings regarding the role or extent of the assessment to be made by the sustainability unit/ function must be avoided. In other words, it needs to be ascertained whether the function has a mere corporate/communication role (e.g. in dealing with corporate responsibility and reputational risks) or is also intended to and equipped for climate change financial risk analysis.[40]

5.41 The AMSB may decide to delegate the task of addressing sustainability matters to specific committee(s). Such committees discuss and propose matters to the AMSB for it to take appropriate actions and pass resolutions. It is important to highlight that the responsibility about decisions about material climate change risks remains with the AMSB.

<u>Remuneration</u>

5.42 Remuneration can be used as a tool for the integration of climate change risks and incentives for sustainable investment or underwriting decisions. The Solvency II framework stipulates that the remuneration policy and remuneration practices shall be in line with the undertaking's business and risk management strategy, its risk profile, objectives, risk management practices and the long-term interests and performance of the undertaking. The amended Solvency II Delegated Regulation stipulate that the remuneration policy shall include information on how it takes into account the integration of sustainability risks in the risk management system (Article 275, new paragraph 4).

5.43 Furthermore, the Sustainable Finance Disclosure Regulation[41] requires "financial market participants (including large (re)insurance undertakings) and financial advisers to include in their remuneration policies information on how those policies are consistent with the integration of sustainability risks, and to publish that information on their websites".

5.44 Changes in the undertaking's investment risk management policy to incorporate climate change risks are therefore expected to have a subsequent impact on the undertaking's remuneration policy and vice versa. Supervisors are recommended to make sure that undertakings have taken into account both financial and non-financial criteria when assessing an individual's performance at certain point of time. The consideration of sustainability factors

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[40] Reference to BaFin guidance, 2020, https://www.bafin.de/SharedDocs/Veroeffentlichungen/EN/Meldung/2019/meldung_191220_MB_Nachhaltigkeitsrisiken_en.html .

[41] Article 5 of Regulation EU 2019/2088 of the European Parliament and the Council of 27 November 2019 on sustainability financial related disclosures

is a good example of non-financial criteria that could be taken into account when assessing individual performance.[42]

5.45 Supervisors are expected to make sure that all activities within (re)insurance undertaking are carefully managed within the risk framework, and individual variable remuneration outcomes should be reviewed and may be reduced in the light of any associated risk outcomes. For investment professionals, the risk framework should include an assessment of sustainability risks.

5.46 Performance and risk management are expected to be built into an undertaking's remuneration framework by ensuring that employees are assessed against risk and behavioral standards, which are considered upon allocation of short-term and long-term incentives. Variable remuneration outcomes should therefore be based on both what was achieved (goals) and how it was achieved (values), with adjustments for risk outcomes applied where required.

5.47 From a sustainability perspective, the alignment of the remuneration policy with the institution's long-term risk management framework and objectives, seems most relevant. In addition a number of studies[43] concluded that, although it is difficult to prove that short-term strategies result in the destruction of long-term values, in some cases the short-term orientations of managers and investors become self-reinforcing. Therefore, Jackson (2010) suggested incentives to shift the overall business strategy towards more long-term goals (e.g. promoting 'patient capital', increasing the long-term commitments of shareholders or tie managers' remunerations to long-term performances through training and disclosure of long-term oriented metrics).

5.48 The impact of the remuneration policies on the achievement of sound and effective long-term risk management objectives may be especially relevant when it comes to the variable remuneration of categories of staff whose professional activities have a material impact on the institution's risk profile, taking into account their roles and responsibilities in relation to its ESG strategy.[44]

<u>Remuneration practices</u>

5.49 Within the currently existing practices across the EU, employees of (re)insurance undertakings are remunerated through performance pay mostly on short-term basis - annual bonuses, or bonuses linked to the business strategy over 3-5 years. With the climate change risks being

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[42] See also EIOPA's Opinion on the supervision of remuneration principles in the insurance and reinsurance sector, EIOPA-BoS-20-040 31 January 2020 3.11 and 3.12.

[43] For instance, Gregory Jackson, Understanding short-termism: The role of corporate governance, 2010, Freie Universitat Berlin

[44] Reference to EBA report on management and supervision of ESG risks, 2021, https://www.eba.europa.eu/eba-publishes-its-report-management-and-supervision-esg-risks-credit-institutions-and-investment .

considered by (re)insurance undertakings' activity the performance of employees needs to be aligned with the longer term horizon of particular climate change risks.

5.50 Supervisors are recommended to pay attention in cases where the remuneration strategy is concentrated only on short-term targets such as operational efficiency, rather than long-term goals such as emission reductions by asking alignment of the business strategy horizon with the remuneration goals horizon, or the inclusion in the insurer's product offer of incentives for investing in risk prevention measures with the aim to reduce overall losses from natural catastrophes. The following examples show an adequate mix of short and long term incentives for remuneration:

- Medium-to-short term remuneration incentives linked to achieving set targets in reducing CO2 emissions of investments or reduction of losses through risk prevention initiatives for climate adaptation purposes;
- Longer term incentives linked to payment with shares in the company, nudging the executive to take decisions in the long term interest of the company.

5.51 NCAs are expected to intervene in cases where the remuneration strategy of the (re)insurer refers to vague discretionary measures of progress such as 'improving sustainability' or 'driving a robust ESG program' and ask undertakings to rather include a specific goal or commitment to a specific number in order to refer to measurable, meaningful and auditable remuneration criteria. The lack of transparency on the remuneration pay should also be a reason for the supervisor to intervene timely.

5.3 SUPERVISORY APPROACH TO THE INTEGRATION OF SUSTAINABILITY RISKS IN A PRUDENT PERSON PRINCIPLE INVESTMENT STRATEGY

Legal references

- Commission Delegated Regulation 2021/1256 amending the Solvency II Delegated Regulation as regards the integration of sustainability risks in the governance of insurance and reinsurance undertakings (recital 3, recital 6, article 275a);[45]
- Art. 132 Solvency II Directive: prudent person principle
- Cross-reference to the PPP chapter of EIOPA Supervisory handbook:

[45] https://eur-lex.europa.eu/legal content/EN/TXT/?toc=OJ%3AL%3A2021%3A277%3ATOC&uri=uriserv%3AOJ.L_.2021.277.01.0014.01.ENG

- EIOPA-Guideline 31 on the system of governance: conflict of interest arising regarding investments

5.52 The objective of this section is to provide guidance to supervisors on how to review, in a forward-looking manner the integration of sustainability considerations in undertaking's investment strategy and decisions while complying with the prudent person principle.

5.53 As a general principle, the Prudent Person Principle (PPP) involves the assessment of the security, quality, liquidity and profitability of the investment portfolio as a whole, including the diversification of assets, and requirements as to the availability and matching of the assets to the liabilities. Investments need to be made in the best interest of policyholders and conflicts of interest need to be managed.

5.54 Supervisory expectations: supervisors are recommended to consider the following in assessing climate change risk in the context of (re)insurance investment activity, as part of the prudent person principle:

- It is prudentially relevant to take into account the potential long-term impact of investment decisions on sustainability factors. Integrating sustainability/ climate considerations in the investment strategy and decisions impact on the risk-return characteristics of investments. For example, the investment in non-sustainable economic activity may lead to the risk of an asset being stranded in the insurer's portfolio (due to market sentiment or penalizing regulatory requirements), but may also contribute to a disorderly transition at a macro-economic level (fire sales when the climate change risks materialize further), depressing further economic resilience.
- Climate change-related risks can affect the security and/or quality and/or liquidity and/or profitability of the investment portfolio in various ways, not necessarily all at the same time, and the effect of secondary effects need to be considered in the risk assessment.
- From a prudential perspective, to address the perceived trade-off between investing in the best interest of policyholders and taking into account sustainability factors, sustainable investment goals should be assessed on the basis of the strategy's effective maximization of financial returns (=instrumental returns), while utilizing sustainability factors such as climate adaptation or mitigation objectives to help assess risks and opportunities, particularly over the medium-to-long term. Integrating sustainability-related information as part of a prudent person investment strategy should aim at adequately managing risk and aligning the investment strategy for long-term returns. The pursuit of maximisation of financial returns and enhanced risk-management have been consistently highlighted as key motivating reasons for committing to ESG integration.[46]

[46] OECD 2020 ESG investing practices, progress and challenges ,p. 14, https://www.oecd.org/finance/esg-investing.htm .

5.55 The integration of sustainability considerations in the prudent person principle requires undertakings to take into account the following three aspects (1) sustainability risks when identifying, monitoring, managing, controlling, reporting and assessing risks arising from investments, (2) the potential long-term impact of the undertaking's investment strategy and decisions on sustainability factors, and (3) where relevant, to integrate customers' sustainability preferences in the undertakings' investment strategy and decisions. In the sections below, the first two aspects are addressed in more detail, leaving conduct related aspects to future work.

<u>Take into account climate change risks when identifying, monitoring, managing, controlling, reporting and assessing risks arising from investments.</u>

5.56 Supervisors should asses how undertakings have taken into account climate change risk when identifying, monitoring, managing, controlling, reporting and assessing risks arising from investments. In particular supervisors should pay attention to the undertaking's due diligence of investments with climate adaptation or mitigation objectives, as the verification may be hampered by lack of access to reliable data or sufficiently long-term evidence on the performance of the assets.

5.57 For the supervisory review of the PPP in the context of climate change risks, supervisors should assess the extent to which climate change risks would affect the undertaking's investments and its ability to meet the obligations towards policyholders, considering impacts on the security, quality, liquidity and profitability of the portfolio. To verify the 'prudence' of the investment portfolio in light of climate change risks, supervisors will need to assess:

- (the materiality of) climate change physical and transition risk to investments; and
- the impact of these risks on the security and/or quality and/or liquidity and/or profitability of the investment portfolio. The fact that these are not necessarily all impacted or impacted at the same time by climate change risks adds to the trade-off between these features, irrespective of climate change considerations.

5.58 Questions to support the supervisor in the assessment of the consideration of climate change risk in undertaking's investment practices[47]:

- Does the (re)insurance undertaking assess that climate change risks are adequately priced in the context of valuation of equities, bonds, or property?
- On the whole, is the (re)insurance undertaking more concerned about physical or transition risks from an investment perspective? Does it differentiate between particular asset classes in this regard?

[47] Reference to SIF, 2020, https://www.sustainableinsuranceforum.org/case-study/question-bank-on-climate-change-risks-to-the-insurance-sector-why-does-sif-have-a-question-bank/ .

- Has the (re)insurance undertaking taken steps to assess exposure of investment portfolios to potential disruptions to capital markets associated by climate change trends or events, such as a rapid fall in valuation of carbon intensive assets?
- Has the (re)insurance undertaking examined the potential impacts of physical events or transition risk factors on liquidity or regulatory capital requirements?
- What are the top-three major risk drivers (i.e. policy, technology change, social movements) most relevant for undertaking's investment portfolio allocations?

5.59 Sustainability risk and climate change risk may affect the investment portfolio's as follows:

Regarding security and quality:

- Changes to regulation and technological advancements (e.g. carbon capture technology) may impact on the value of the asset.
- Emergence of 'new' financial products aiming at financing climate-related investments may involve reputational and legal risk.
- Strong reliance on external ratings and sustainability rating providers, benchmarks or indices requires assurance on the proper integration of sustainability/climate change risks in the rating, based on proven methodology.[48]

Regarding liquidity:

- Potential increased risk of a duration gap between the assets and liabilities as the increasingly frequent losses (e.g. Nat cat insurance) cannot be matched with sufficiently liquid assets.
- Property investments may become less liquid if the property does not comply with the requirements to mitigate or adapt to climate change (e.g. insulation or flood-proofing standards).
- Collateral or other forms of guarantees received and bank lines of credit may suffer as a secondary effect of 'systemic' climate change events from liquidity issues as the economy as a whole would be impacted.
- Investments with a climate adaptation or mitigation objective or characteristics may seek return over a longer time horizon, possibly limiting liquidity of the investment over the short term. Or, on the contrary, due to market preferences, 'sustainable investments' become more liquid.

[48] Reference to EIOPA opinion, on sustainability in Solvency II, 2019, https://www.eiopa.europa.eu/media/news/eiopa-issues-opinion-sustainability-within-solvency-ii_en .

- Nascent/limited market for 'sustainable /climate related investments' may impact on pricing and tradability, of the assets.

Regarding profitability:

- Difficult to predict returns of assets as climate change risk can impact on investor sentiment, invalidate predictions (e.g. due to changes to and difficulties in modelling climate change risks), regulation/policy/technology to achieve climate change mitigation and adaptation objectives can impact on the value of the assets.
- Limited track record of 'sustainable/climate related 'green' investments' performance.

Regarding diversification, localisation and availability:

- Risk of concentration of investments in certain regions, economic sectors or counterparties sensitive to effects of climate change.
- Risk of secondary effect of business disruption due to climate change events in particular economic sectors (e.g. supply chain disruption).
- Risk of economic, political turbulence affecting the transferability of assets, or the functioning of the custodian due to physical damage to infrastructure or ensuing systemic risk development (e.g. cyber-attacks).

<u>Potential long-term impact of investment strategy and decisions on sustainability and climate change factors</u>

5.60 Supervisors should assess how undertakings take into consideration the potential impact of their investment strategy and decisions on sustainability/climate factors.

5.61 Taking into account the potential long-term impact of investment strategy and decisions on sustainability factors does not require forgoing financial return, and it does not require investing exclusively in assets with climate mitigation or adaptation objectives. Nor does it require the exclusion of non-sustainable investments. Within the boundaries of the prudent person principle, the freedom of investment remains.

5.62 The supervisor will need to assess whether the undertaking fulfills its fiduciary duty towards the policyholder in considering the impact of its investment on climate change factors. For this, following questions can be considered:

- How does the undertaking balance climate adaptation or mitigation considerations with safety, quality and liquidity of the portfolio? Are the sustainability considerations instrumental (i.e. in support of financial goals) or 'ultimate ends' (pursued in their own right)?

- What is the undertaking's strategy in deciding on the best interest of the policyholder where is a trade-off between climate change objectives and profitability?
- How does the (re)insurance undertakings perceive the potential for reputational risks arising from its investment decisions in climate change relevant sectors (i.e. high carbon assets)?
- Stewardship approach in the investment strategy – does the undertaking engage with investees to support transition towards more sustainable business activity? If so, how does the engagement improve on the investment risk? If not, what are the main obstacles in doing so? Does the undertaking monitor a transition plan based on KPI's?

<u>Implementation of policyholders and beneficiaries' sustainability preferences in the investment strategy and decisions</u>

5.63 Where an insurance product implements sustainability preferences of policyholders and beneficiaries in the product design and distribution, e.g. preference for investments related to climate change adaptation or mitigation objectives, supervisors are recommended to form a view on the (1) transparency, reliability and effective integration of sustainability preferences in the investment strategy and (2) whether conflicts of interest are properly managed.

<u>(1) The effective implementation of the sustainability preferences in the investment strategy and decisions</u>

5.64 In offering products with sustainability characteristics or objectives to a certain target market and not investing accordingly, insurers could expose themselves to reputational or, potentially, legal risks.

5.65 To note that it is not required that ESG preferences of policyholders and beneficiaries are systematically collected for all insurance products – only where relevant, i.e. where sustainability preferences are expressed as part of product oversight and governance arrangements.

<u>(2) potential conflicts of interest relating to the investment which can be to the detriment of the policyholder</u>

5.66 The undertaking should have adequate processes in place to identify, manage and control conflicts of interest that may damage the interests of the policyholder if the interests between the undertaking, intermediary, asset manager, shareholders on the one hand and the policyholder on the other hand are not aligned. The supervisor should assess whether governance procedures are in place to address conflicts of interest.

5.67 When implementing sustainable investment choices, the investment strategy may be driven to some extent by 'stakeholder views' as expressed by civil society (e.g. non-governmental organisations) or voluntary compliance with industry-led initiatives, partly for reputational purposes, reflecting also a (temporary) absence of a regulatory framework (e.g. adherence to net-zero underwriting practices). This may create uncertainty for policyholders on the strategy that is being followed, on the profitability of the investment strategy or on the actual potential impact on sustainability factors.

5.68 Conflicts of interest in light of sustainability considerations can arise between:

- the undertaking/asset manager and the policyholder or beneficiary: The policyholder's interest can be broader than a financial objective, and include sustainability-related interests when investing its money in a financial instrument.
- the undertaking's investment strategy for the customer's assets and the exercise of shareholder rights in companies in which the customer's assets with ESG preferences are invested, where these are not aligned.
- the intermediary and the policyholder or beneficiary: existence of different remuneration structures for an intermediary selling IBIPs, where kick-backs would incentivise selling certain products with no proven risk-reward or sustainability benefit
- different cohorts of policyholders: in case of pooled investments when defining investment objectives for customers with different investment or sustainability preferences.

5.69 Conflicts can also arise due to the customer's own diverging interests – this should be part of the insurance intermediary's assessment requiring that the different objectives and interests of the customers are taken into account when recommending and insurance product that is suitable for the customer ('suitability assessment').

ANNEX 1: EIOPA ANALYSIS AND ADVICE ON SUSTAINABLE FINANCE DELIVERED 2018-2021

1.	Draft Application guidance on running climate change materiality assessment and using climate change scenarios in the ORSA	Dec. ’21 (under consultation till 10 February ’22)
2.	Financial stability dashboard includes ESG risks	Oct. ‘21
3.	Final Report with draft Regulatory Technical Standards (RTS) on product-related taxonomy disclosures	Oct. ‘21
4.	Methodological paper on potential inclusion of climate change in the natural catastrophe standard formula	July 2021
5.	Report on-life underwriting and pricing in light of climate change	July 2021
6.	Advice on RTS on the content, methodologies and presentation of disclosures under the EU Regulation on sustainability-related disclosures in the financial services sector	Feb. 2021
7.	Advice on RTS on taxonomy-related product disclosures,	Sept. (tbc) 2021
8.	Advice on KPI for environmentally sustainable activities by insurers or pension funds under Article 8 of the taxonomy regulation	Feb. 2021
9.	Contribution to SIF application paper on the supervision of climate related risks in the insurance sector	June 2021
10.	Opinion on the supervision of the use of climate change risk scenarios in ORSA	March 2021
11.	Thematic article on climate change, catastrophes and the macro-economic benefits for insurance	EIOPA Financial Stability Report, July 2021
12.	Prudent Person Rule chapter of the IORPs’ Supervisory Handbook includes some good practices on the supervision of IORPs incorporating ESG factors in their investment policy	March 2021
13.	Advice regarding Article 8 of the Taxonomy Regulation	Feb. 2021

14.	Staff paper on measures to improve the insurability of business interruption risk in light of pandemics	Feb. 2021
15.	Issues paper on shared resilience solutions for pandemics	July 2020
16.	Pilot dashboard on insurance protection gap for natural catastrophes	Dec. 2020
17.	Report on the sensitivity analysis of climate-change transition risks	Dec. 2020
18.	Thematic article on the EU sustainable finance taxonomy from the perspective of the (re)insurance sector	EIOPA Financial Stability Report, July 2020
19.	Second discussion paper on methodological principles of insurance stress testing	June 2020
20.	IORP stress test report addresses IORPs' ESG and greenhouse gas exposures	Dec. 2019
21.	Advice to EC on potential undue short-term pressures from financial markets	Dec. 2019
22.	Thematic article on climate Risk Assessment of the sovereign bond portfolio of European insurers	EIOPA Financial Stability Report Dec. 2019
23.	Thematic article on impact of Green Bond Policies on Insurers: Evidence from the European Equity Market	EIOPA Financial Stability Report June 2019
24.	Opinion on sustainability within Solvency II	Sept. 2019
25.	Discussion paper on protection gap for natural catastrophe risks	Sept. 2019
26.	Opinion on the supervision of the management of ESG risks faced by IORPs	June 2019
27.	Technical advice to EC on the integration of sustainability risks and factors in Solvency II and in the Insurance Distribution Directive	April 2019
28.	Analysis on climate related exposures in insurers' investment portfolios	EIOPA Financial Stability Report Dec. 2018

ANNEX 2: EXTERNAL REFERENCES TO SUSTAINABLE FINANCE

The Sustainable Insurance Forum – Question bank on climate change risks to the insurance sector, Dec. 2020, https://www.sustainableinsuranceforum.org/publication/question-bank-on-climate-change-risks-to-the-insurance-sector/

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IAIS, Application paper on the supervision of climate related risk in the insurance sector, May 2021, https://www.iaisweb.org/page/supervisory-material/application-papers/file/97146/application-paper-on-the-supervision-of-climate-related-risks-in-the-insurance-sector

EBA, Report on ESG risks management and supervision, June 2021, https://www.eba.europa.eu/eba-publishes-its-report-management-and-supervision-esg-risks-credit-institutions-and-investment.

Bank of England, Supervisory statement SS3/19. Enhancing banks' and insurers' approaches to managing the financial risks from climate change, April 2019 https://www.bankofengland.co.uk/-/media/boe/files/prudential-regulation/supervisory-statement/2019/ss319.pdf?la=en&hash=7BA9824BAC5FB313F42C00889D4E3A6104881C44

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Monetary Authority of Singapore, Guidelines on environmental risk management (insurers), Dec. 2020 https://www.mas.gov.sg/-/media/MAS/Regulations-and-Financial-Stability/Regulations-Guidance-and-Licensing/Insurance/Regulations-Guidance-and-Licensing/Guidelines/Guidelines-on-Environmental-Risk-Management-Insurers.pdf

Net Zero Insurance Alliance, https://www.unepfi.org/net-zero-insurance/

Net Zero Asset Managers Initiative https://www.netzeroassetmanagers.org/#

AIG sustainability report 2020

Allianz Group sustainability report 2020

AXA sustainability report 2020

What is climate change? - Willis Towers Watson

Task Force on Climate related Financial Disclosures, Implementing the Recommendations of the Task Force on Climate related Financial Disclosures, October 2021 link

ANNEX 3: CLIMATE CHANGE RISKS IN THE CONTEXT OF (RE)INSURANCE ACTIVITY

EXAMPLES OF THE IMPACT ON ASSETS AND LIABILITIES CAUSED BY PHYSICAL OR TRANSITION RISK

<table>
<tr><td colspan="3">Examples of how physical, transition and liability risk can impact on the assets and liabilities of non-life and life (re)insurers[49]</td></tr>
<tr><td></td><td>Life (re)insurance</td><td>Non-life (re)insurance</td></tr>
<tr><td rowspan="2">Climate change-related impact on assets (changes to asset valuation impacting on market risk, operational risk, counterparty default risk)</td><td colspan="2"><u>Physical risk, acute/chronic:</u> value of real estate portfolios decline due to properties being located in areas highly sensitive to increases in extreme weather events/highly impacted by increase in chronic physical risks, e.g. coastal urban areas vulnerable to sea level rise.</td></tr>
<tr><td colspan="2"><u>Transition risk - policy</u>[50]: energy efficiency regulation for commercial and residential property reduces value of investments in non-complying property. <u>Transition risk – technology</u>: progress in clean energy technology leads to depressed value for investment in carbon-based energy production.</td></tr>
<tr><td rowspan="2">Climate change-related impact on liabilities (changes to valuation of technical provisions impacting on underwriting risk)</td><td colspan="2"><u>Physical risk, acute/chronic:</u> Potential increase in frequency and severity of claims impacted by natural disasters</td></tr>
<tr><td><u>Physical risk, acute/chronic</u>: higher life and health insurance claims due to higher mortality or morbidity rates caused by increase in frequency and severity of extreme weather events such as heat waves (Health CAT).</td><td><u>Physical risk, acute/chronic:</u> higher claims due to increased frequency and severity of wildfires, storms, flooding events damaging property or causing business interruption (affecting e.g. fire and other damage to property insurance, credit insurance or</td></tr>
</table>

[49] Reference to EIOPA opinion on supervision of use of climate change risk scenarios annex 3 and 4, https://www.eiopa.europa.eu/media/news/eiopa-issues-opinion-supervision-of-use-of-climate-change-risk-scenarios-orsa_en , See also ORSA application guidance, https://www.eiopa.europa.eu/media/news/eiopa-consults-application-guidance-climate-change-risk-scenarios-orsa_en .

[50] In particular, the risk might be generataed by new policy and regulation (for example, as a result of energy efficiency requirements, carbon-pricing mechanisms which increase the price of fossil fuels, or policies to encourage sustainable land use), the emergence of new technology (for example if a technology with a less damaging impact on the climate replaces a technology that is more damaging to the climate) or business models, shifting sentiment and societal preferences for sustainable investments and economic activity, or the evolving evidence, frameworks and legal interpretations due to the transition towards a low carbon economy.

	Higher claims where climate change poses job-related risk of injury, illness, and death (workers compensation insurance, e.g. increased for exposure to UV radiation for outdoor workers).[51]	insurance for miscellaneous financial losses). Increase in crop insurance claims for revenue losses due to negative impact of temperature increase on productivity of crop farming (crop insurance). Increased droughts paired with more severe rainfall leading to increased subsidence claims (subsidence insurance). Increased claims for delays in transport due to extreme weather events (marine, aviation and transport insurance) or for damage to motor vehicles (other motor insurance).
	Transition risk – policy: Following changes in the extent of funding of health and social care services as a result of slow onset climate change-related events, increase or decrease in demand for coverage due to health prevention requirements following climate-change related increase in morbidity or mortality (Health insurance). Transition risk - technology: Uncertainty in the valuation of life or health insurance resulting from the development of new medical treatments of pharmaceutical products dealing with climate-change related mortality or morbidity.	Transition risk – policy: increase or decrease in demand for coverage of certain economic activities or risks. For example, ability to offer surety and credit insurance to carbon-intensive economic activity may be impacted by policy to reduce carbon emissions. Transition risk - technology: Risk of underpricing of insurance coverage of new 'green' technologies, or new medical treatments for climate related diseases. Transition risk, legal: Increase in claims following people or businesses seeking compensation for losses they may have suffered due to the insureds' failure to mitigate, adapt or disclose sustainability risks (Directors and Officers or Environmental Liability, Legal Expenses insurance). Increase in claims following redundancies resulting from transition to low carbon economy ((Income Protection insurance).

[51] Scientists Look to Protect Workers From Climate Change - Risk & Insurance : Risk & Insurance (riskandinsurance.com), Workers Among Most Vulnerable to Climate Change | Georgetown Environmental Law Review | Georgetown Law

EXAMPLES OF EXISTING PRACTICES AMONG (RE)INSURERS FOR INCORPORATING CLIMATE CHANGE RISKS INTO UNDERWRITING POLICY

- **Re-pricing of risks**

This occurs traditionally for non-life short term business, annual repricing takes place based on claims experience over the past 12 months. With extreme weather events becoming more frequent and more severe, there is a risk over the medium-to-long that insurance will become unaffordable. The approach is not forward-looking and is often only based on historic data. This approach is insufficient to capture the climate change developments.

- **Integrating ESG into the underwriting standards and guidelines of the undertaking**

This includes establishing guidelines, supported in some cases by ESG experts, to help underwriters take appropriately into account ESG risks. In this regard, reference to the development of the UN Principles for sustainable insurance on “Underwriting environmental, social and governance risks in non-life insurance business” can be made. Such guidelines can provide screening criteria for underwriting “sensitive business” (e.g. agriculture, hydroelectric power, infrastructure, oil & gas, mining…) or specify risk assessment tools for major infrastructure projects. These guidelines may furthermore integrate ESG factors in client/project assessment and approval as part of insurance underwriting processes and decisions. The guidelines may also require disclosure of certain parameters by corporate clients (e.g. GHG emissions). The conclusion of the screening may lead to the exclusion of cover for certain sectors (e.g. oil & gas exploration and production activities, tar sands and associated pipelines as well as underground mining activities) or activities (e.g. geographical exclusions aiming at reducing company exposure in certain countries with high risk exposures or because of international sanctions), or the inclusion of certain “green” activities.

For example recently the insurance industry supported the creation of a UN-convened 'Net-Zero Insurance Alliance’[52] that would see member companies from across the insurance sector align their business activities with the 1.5C warming pathway required under the Paris Agreement, similar to the Net Zero Asset Owners Alliance and the Net Zero Asset Managers Initiative. The primary focus of the net-zero underwriting concept is on the emissions of the insured objects and the wider climate change mitigation objective, thus providing a different perspective from the EU Taxonomy. It might involve not only the selection of the insured risks based on environmental criteria, but also the engagement with risk cedents to incentivise them to transition towards meeting these environmental criteria.[53]

[52] Reference to Net Zero Alliance, https://www.unepfi.org/climate-change/un-convened-net-zero-insurance-alliance/

[53] Reference to EIOPA impact underwriting report, https://www.eiopa.europa.eu/document-library/report/report-non-life-underwriting-and-pricing-light-of-climate-change_en .

- **Product development taking into account the impact on climate change**[54]

While premiums need to remain risk-based, and reflect the risks insurers and consumers or business are exposed to, (re)insurers, as risk managers, can also contribute to reducing the risks caused by climate change. Some insurers are already doing so in multiple ways, e.g. by providing services to policyholders. They have the possibility to make policyholders change their behavior, consequently contributing to climate change adaptation or climate change mitigation. For example, insurance products and services that encourage renewable energy infrastructure, by covering the risks linked with such new industries (e.g. covering equipment for the generation of renewable energy, or to cover profits lost due to interrupted or reduced electricity generation); new concepts for cover for the agriculture sector or homeowners insurance to automatically include claims related to green infrastructure used for private purposes. For example, insurance products and operations that encourage 'green' consumption behavior, such as products that use pricing mechanisms that favor low-carbon emissions (e.g. motor insurance products encouraging vehicles with low environmental impact, using pricing models based on mileage or car type; home insurance with environmental home appliances upgrades in case of damage or loss; SME insurance packages favoring "green" buildings or car fleets.; discount rates to companies that fulfil certain standards; discount for agricultural liability insurance to organic farmers and mountain farmers; units of account offered by life insurers with an ESG label on saving contracts). For example, insurance products that cover "sensitive" sectors (e.g. fossil fuel) for costs for the recovery of environmental damage or ESG related improvements. (e.g. policies for financial losses resulting from damage caused by pollution; third-party liability policies for pollution, covering the reimbursement of costs for emergency or temporary measures to prevent or limit indemnifiable damage; insurance products that support fossil fuel companies with insurance cover for unconventional extraction methods and costs for the recovery of environmental damage; agriculture insurance to address the increased frequency of heatwaves and ensuing risk of droughts).

EXAMPLES OF EXISTING PRACTICES AMONG (RE)INSURERS FOR INCORPORATING SUSTAINABILITY RISKS INTO INVESTMENT POLICY

- **Limiting investment in non-sustainable activities/companies:**

(i) the exclusion of any company belonging to a sector detrimental to environmental or social considerations is the most radical approach. These include usually companies producing controversial weapons, tobacco, or with revenues from coal exceeding a certain percentage of total investment. Usually the threshold for investment in these sectors is set to decline over time.
(ii) the Best-in-Class strategy consists in selecting companies engaged in the reduction of their carbon footprint, regardless of the sector which they belong to. Such an approach allows companies

[54] Reference to EIOPA impact underwriting report, https://www.eiopa.europa.eu/document-library/report/report-non-life-underwriting-and-pricing-light-of-climate-change_en .

to finance their transition to a more environmentally sustainable economy. Also norms-based screening can lead an undertaking to consider divesting from certain sectors.
For example recently the financial industry supported the creation of a UN-convened 'Net-Zero Asset Managers Initiative'[55] - an international group of asset managers committed to supporting the goal of net zero greenhouse gas emissions by 2050 or sooner, in line with global efforts to limit warming to 1.5 degrees Celsius; and to supporting investing aligned with net zero emissions by 2050 or sooner. One of the obligations of the member organisations is to publish TCFD disclosures, including a climate action plan, annually, and submit them to the Investor Agenda via its partner organisations for review to ensure the approach applied is based on a robust methodology, consistent with the UN Race to Zero criteria, and action is being taken in line with the commitments made.

- **Stewardship and impact investing**

(i) inclusion investment strategy, i.e. investments directed at economic activities aiming to achieve social and/or environmental goals (e.g. through sustainability-themed investments, best-in-class investment selection, norm-based screening, impact investing), is expressed either in terms of amount of investments by a given timeframe or as a percentage of the total investments. It often refers to highly certified real estate, to lower carbon infrastructures or to green bonds.
(ii) Engagement and voting on sustainability matters can be a way to influence undertakings of which (re)insurers are shareholders towards a more sustainable strategy. Such a strategy can evolve over time, where disinvestment is a measure of last resort upon lack of the investee's commitment.

- **Introduction of ESG criteria in the investment decision:**

An ESG rating can be considered together with the financial criteria usually taken into account in an investment decision. Such a rating can be developed internally (based on information publically available but also possibly through questionnaires sent to the investees) or externally (by ESG ratings agencies, standards or assets managers).

THE FUNCTION OF THE SUSTAINABILITY RISK OFFICER/ OFFICE

A sustainability officer (often referred to as a 'CSO', or chief sustainability officer, hereafter: 'sustainability function') is someone who will analyze and predict a company or institution's future outlook, present stability, and environmental impact.[56]
Some areas of supervisory attention:

[55] Reference to Net Zero Asset managers, https://www.netzeroassetmanagers.org/ ,

[56] www.careerexplorer.com/careers/sustainability-officer

- Allocation of responsibilities: Often a sustainability function will be part of a corporate/legal/communications office. Supervisors are recommended to verify whether this guarantees sufficient integration of sustainability risk analysis throughout the other key functions, and how the function operates vis-à-vis risk management. It may be challenging to identify the role of a sustainability officer, varying between promoting institutional culture or supporting risk assessment/ management across the businesses. Where the function's responsibility is defined in very broad terms (e.g. 'addressing sustainability matters'), or covered mainly by non-executives who meet only sporadically, and no clear link with the risk management is made, supervisors may question the effectiveness of the organizational structure in this regard.
- Reporting to the AMSB: if it is ascertained that the sustainability function reports directly to the risk management function or the AMSB, this supports the assessment that the undertaking considers sustainability risk of strategic relevance. Too many intermediate reporting lines may risk diluting the reporting on relevant risks. It is also from key importance that the undertaking doesn't allow a fragmentation of responsibilities / reporting lines which sometimes may increase the risk that (sustainability) risks can no longer be presented correctly in a relevant manner (for instance with a view of the overall risk profile). However, it has to be kept in mind that the reporting of at least all material risks is (and stays) within the responsibility of risk management function.

Responsibilities typically allocated to a 'sustainability function':

- informing the risk management function or the AMSB of sustainability and climate change risks (periodically, when relevant,…)
- oversee and review undertaking's strategy and approach to managing sustainability and climate change risks
- coordinate cross-functional teams and working groups, consisting of representatives from the Sustainability Office and every major business unit and functional area to align risk management initiatives.

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