

Report on Biodiversity risk management by insurers

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OBJECTIVE AND CONTEXT

- **Solvency II requires, since 2022, the identification, assessment, management and monitoring of sustainability risks.** This includes biodiversity risks.
- Biodiversity risks can affect the value of investments, the frequency and intensity of insured losses, and the overall risk profile of portfolios.
- Mandate in Solvency II Directive requires to assess market practices on biodiversity risk management: *“To evaluate whether and to what extent insurance and reinsurance undertakings assess their material exposure to risk related to biodiversity loss as part of the assessment referred to in Article 45(1). [To] subsequently assess which actions should be taken to ensure that insurance and reinsurance undertakings duly consider these risks. EIOPA shall submit a report with its findings to the Commission by 30 June 2025”*
- EIOPA’s report aims to examining the current practices and challenges in the identification, measurement, and management of biodiversity risks by the insurance industry, and their assessment in the Solvency II own risk and solvency assessment (ORSA).

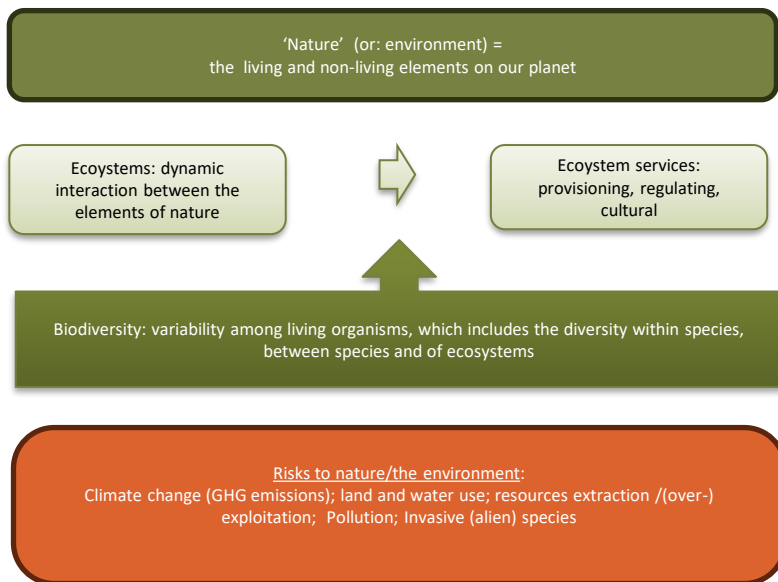
APPROACH

- The report builds on
 - (a) Existing regulatory requirements on ORSA and the identification and management of sustainability risks in the Solvency II Directive and Delegated Regulation.
 - (b) Differences and similarities with the treatment of other sustainability risks, including climate change and social risks, to the extent relevant.
 - (c) Work in progress to structure and consolidate the approach for the management of sustainability risks into 'sustainability risk plans', as per Article 44 of the amended Solvency II Directive.
 - (d) The earlier EIOPA Staff paper on nature-related risks and impacts for insurance (europa.eu) (2023) and EIOPA June FSR 2023.
- The report acknowledges the complexity of the risk (including relation with climate risk) and issues related to the access to and relevance of data sets for financial risk assessment purposes, and availability of scenarios. And takes into consideration work done by the NGFS, OECD, TNFD
- Earlier stakeholder engagement: Questionnaire for supervisors to collect market input on the current integration of biodiversity and nature loss risk in undertakings' ORSAs (Nov. '24) and Stakeholder engagement on biodiversity loss risk for insurers - EIOPA (europa.eu) (10 June 2024)

AREAS ADDRESSED IN THE REPORT

- **Section 1:** Background and rationale.
- **Section 2:** Definition of biodiversity and risk drivers. Transmission into financial risks for insurers. Similarities and differences with climate risk.
- **Section 3:** Current market practices.
- **Section 4:** Biodiversity risk assessment in Solvency II (General framework, Materiality Assessment and Financial Risk Assessment, Targets and Actions).
- **Section 5:** Conclusions.

DEFINITION OF BIODIVERSITY AND RISK DRIVERS

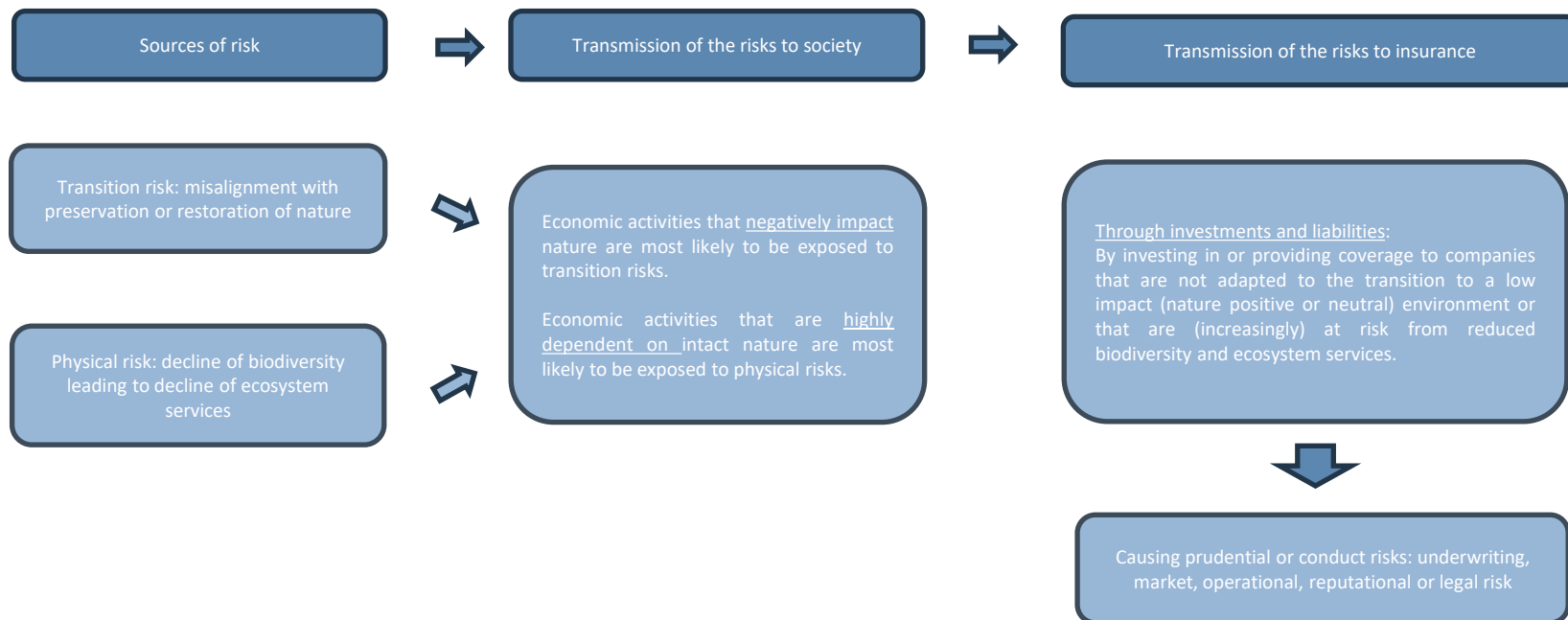


Kunming-Montreal Global Biodiversity Framework 2022

EU Biodiversity Strategy + Nature Restoration Law

EU Taxonomy environmental objectives:
climate change adaptation and mitigation; sustainable use and protection of water and marine resources; the transition to a circular economy including waste prevention and recycling; pollution prevention and control; **protection and restoration of biodiversity and ecosystems**

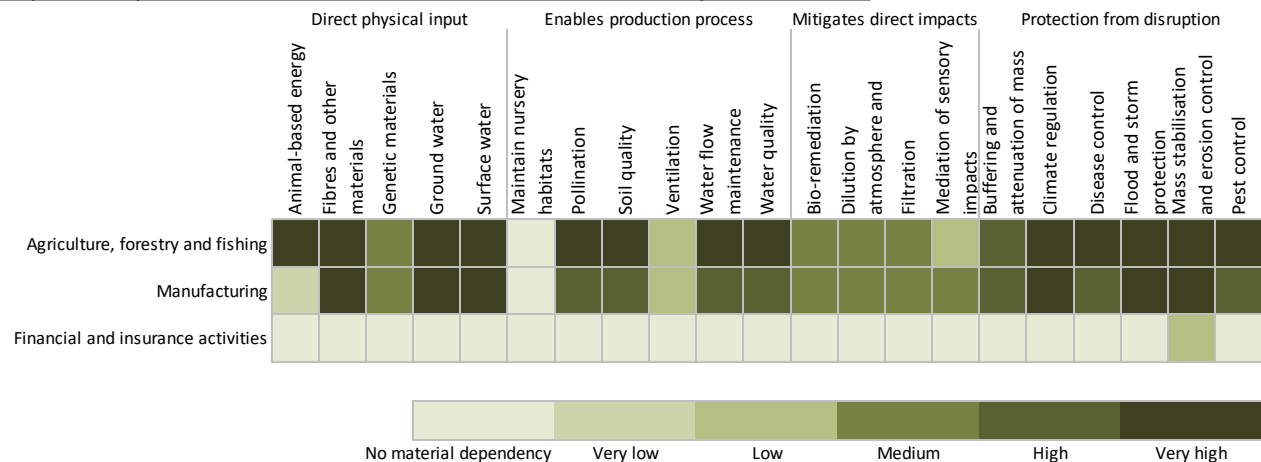
TRANSMISSION OF BIODIVERSITY-RELATED RISKS TO INSURANCE



EXAMPLE: EIOPA'S RISK ASSESSMENT INSURERS' INVESTMENTS ON ECOSYSTEM SERVICES (1/2)

- EIOPA conducted a physical risk assessment in collaboration with ECB via ESRB Project Team Climate based on ENCORE database, which provides a set of materiality scores for the **dependency of economic activities on ecosystem services**. Upstream dependencies (i.e. along the supply chain) are captured via input-output tables.
- The level of **dependency of economic activities on ecosystem services** related to a given asset serves as a **proxy of the assets' vulnerability to changes in the provision** of these services.

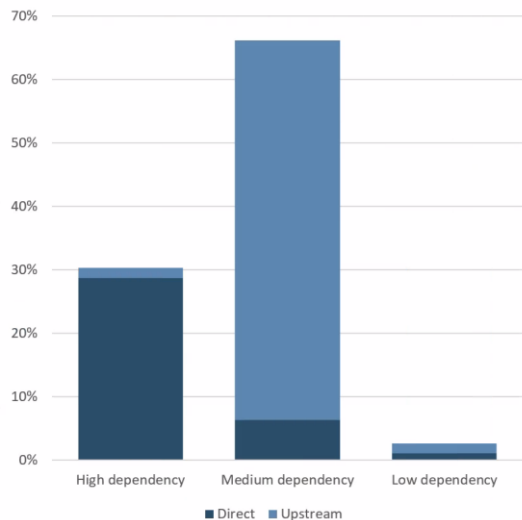
Dependency scores of selected economic activities on ecosystem services



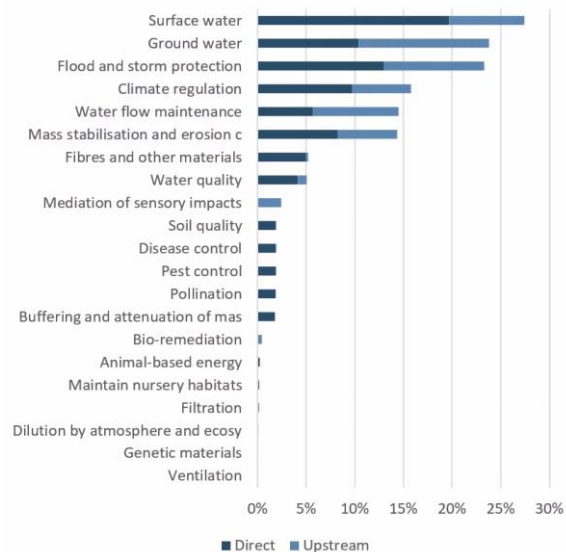
DEPENDENCY OF INSURERS' INVESTMENTS ON ECOSYSTEM SERVICES (2/2)

Conclusions of the analysis: Approximately 31% of EEA insurers' investments in corporate bonds and equity are towards economic activities that highly depend on at least one ecosystem service. The major vulnerabilities are towards surface and ground water, as well as flood and storm protection.

Maximum direct and indirect dependency on ecosystem services of insurers' corporate bond and equity portfolio



Ecosystem services for exposures with at least high dependency



SIMILARITIES AND DIFFERENCES WITH CLIMATE RISK

Similarities to climate risk

Translated via existing prudential and conduct risks

Uncertainty about timing and severity, non-linearity, systemic nature, tipping points causing irreversibility of damage

Requires forward-looking risk assessment + scenarios for risk prevention

Issues to insurability, also due to interrelation of risks

Differences with climate risk

Even more multi-dimensional, targets difficult to capture in one metric (e.g. such as reduction of GHG emissions)

Risk restoration and conservation require more intricate action, often at regional level

Risk data more difficult to collect and model (multiplicity of pathways)

Nature losses are not easily connected with single events

Possibly more intensified risk concentration (local ecological processes); possibly wider systemic impacts of loss of systemically biomes (e.g. Amazon Rainforest)

OBSERVED MARKET PRACTICES

Biodiversity risk identification, measurement and management by insurers is at an early stage. There is limited to no evidence so far of inclusion of material biodiversity risks in ORSA. The risk is mostly seen as a 'megatrend' impacting on investments, or potentially causing reputational risk. A few market practices include exposure assessment to agro-forestry health related economic activity.

Challenges noted by industry include

- **Absence of a clear boundary with climate change risks.** The nexus between climate change and biodiversity loss potentially limits the risk assessment of specific biodiversity risks on asset classes or lines of business and introduces the risk of double counting.
- **Limited risk assessment capacity.** Lack of access to public and corporate data on local biodiversity risks hampers assessment. Incoming disclosures on biodiversity impacts under CSRD should help, but there is still limited access to geo-spatial data. Many biodiversity pressures are not yet modelled, and existing tools lack regional specificity.
- **Local biodiversity complexities.** Global models and metrics struggle to capture local biodiversity risks. Specific regional scenarios are needed for certain portfolios and regions.

CONCLUSIONS

In line with existing Solvency II requirements, the report aims to provide a convergent structure to promote convergence to ensure the risks are duly taken into account. The aim is not to introduce additional requirements.

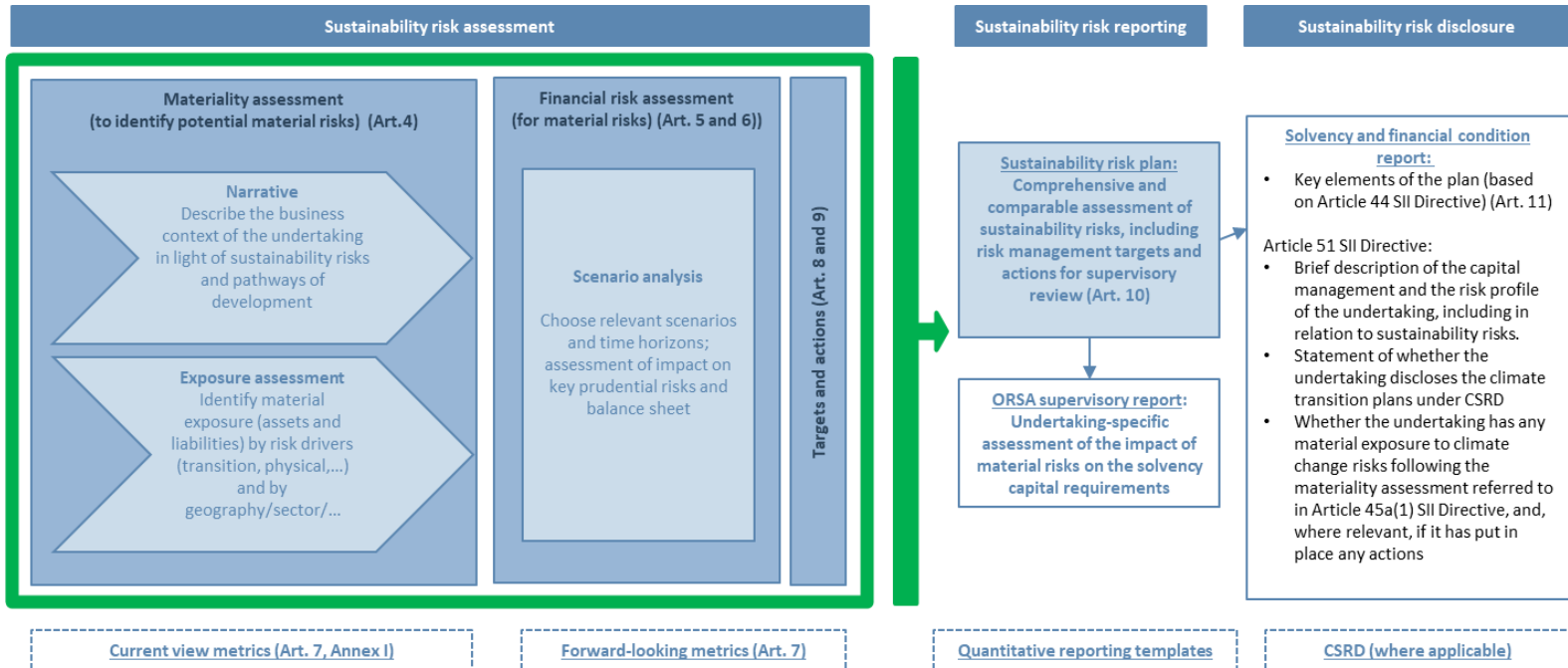
The Report includes practices for the performance of biodiversity risk assessments in Solvency II, with the aim to engage supervisors and the insurance sector in identifying the potential relevance of the risk.

Some observations are being made in the report, based on the observed market practices:

- **Move beyond reputational risk.** Conducting biodiversity risk assessment under Solvency II would require moving beyond treating the risk as a mere potential reputational risk. This requires materiality assessments to be performed with adequate resources.
- **Separate climate and biodiversity where relevant.** Depends on the underwriting or investment portfolio. Example of natural catastrophes – mutually reinforcing effects. Alternative: integrated scenario analysis.
- **Risk-based approach to engagement and nature-based solutions.** When investing or underwriting with nature-positive objectives, undertakings should also consider using a risk-based approach to monitor the mitigating effects of these measures.

A STRUCTURE FOR SUSTAINABILITY RISK ASSESSMENT IN SOLVENCY II

Consultation on the proposal for Regulatory Technical Standards on management of sustainability risks including sustainability risk plans - Solvency II Review - EIOPA





THANK YOU!

For more information visit:
<https://www.eiopa.europa.eu>