SCIENCE BASED TARGETS

DRIVING AMBITIOUS CORPORATE CLIMATE ACTION

INDUSTRY BRIEF FOR THE SBTi FINANCIAL INSTITUTIONS NET-ZERO INSURANCE STANDARD (UNDERWRITING PORTFOLIOS)

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EXECUTIVE SUMMARY

The scientific community has consistently warned that we must decarbonize the global economy in line with the Paris Agreement to limit the global temperature rise to 1.5°C above pre-industrial levels and reach net-zero CO_2 emissions[1] by mid-century to avoid catastrophic climate impacts.

Re/insurers hold a significant share of the world's assets and liabilities within their balance sheets with about US$6.8 trillion in world premium volume (Swiss Re Institute, 2023) and over US$35 trillion in global assets under management in 2022 (TheCityUK, 2023). This puts them in a position to foster transformation and to support the transition to a net-zero economy by applying their influence as risk managers, risk carriers, and institutional investors to reduce greenhouse gas (GHG) emissions in line with the temperature goals of the Paris Agreement.

While a substantial amount of work has been done to develop metrics and target-setting methods for the financial sector's investment and lending activities, limited work currently exists for insurance underwriting portfolios. This makes it more challenging for re/insurers to set science-based emissions reduction targets for their underwriting portfolios.

The Science Based Targets Initiative (SBTi), in partnership with the UN Environment Programme (UNEP), developed this industry brief to provide the initial foundations for re/insurers to set science-based targets that align their insurance underwriting portfolios with a 1.5°C pathway.

This paper will be the foundation to explore the development of a future SBTi standard on this topic. The paper aims to provide a background on approaches and potential methods for setting a science based target (SBT) to disclose, reduce, and transition activities contributing to an re/insurer's underwriting portfolio and claims-related emissions, further referred to in this paper as "insured emissions". It also outlines the process that SBTi intends to follow to develop the Standard.

This paper is **not** a proposal for SBTi criteria; it is based on previous work by the SBTi and the wider ecosystem and intends to:

- Explain the rationale for developing the *SBTi Financial Institutions Net-Zero Insurance Standard (Underwriting Portfolios)* ("the Standard") applicable to insurance underwriting portfolios;
- Provide information on the SBTi and clarify how the Standard will fit within SBTi's target-setting framework;
- Give an overview of existing work around net zero for insurance underwriting portfolios;
- Clarify key re/insurance concepts, which will inform target setting in the context of underwriting portfolios;
- Provide an overview of SBTi's existing target-setting methods and how these methods could serve as a starting point for SBTi's target-setting framework in the context of insurance underwriting portfolios;

[1] Most scenarios achieve non-CO_2 net-zero after 2050 (Levin, Fransen, Schumer, Davis, & Boehm, 2023).

- Describe principles for setting a science-based target for insurance underwriting portfolios;
- Outline next steps in the development process that the SBTi will undertake to develop a standard for insured emissions.

1. Background

1.1 Role of Financial Institutions (FIs) in the Net-Zero Transition

Recent climate data shows that the global average temperature has risen approximately 1.2°C above pre-industrial levels (Copernicus, 2023). Furthermore, according to the World Meteorological Organization (WMO), there is a 66% probability that the global average temperature will transiently exceed 1.5°C within the 2023-27 timeframe (WMO, 2023).

To decarbonize the global economy in alignment with the temperature goals of the Paris Agreement, all actors in the "real economy" need to reduce their GHG emissions at a rate sufficient to remain aligned with the emissions pathways established by climate science. The central enabling role of the finance sector is recognized in the Paris Agreement, which contains language in Article 2.1(c) on "making finance flows consistent with a pathway towards low GHG emissions and climate-resilient development" (UNFCCC, 2015).

Rather than exercising direct control over any major sources of GHG emissions, financial institutions, including re/insurance companies, have a role in that they provide services such as financial capacity, risk management, and risk transfer to other actors of the economy (companies, households, individuals, and the public sector). Thus, it is critical for FIs, including re/insurers, to help drive Paris-aligned systemic decarbonization by leveraging their shared connections and responsibility for aligning incentives and eliminating barriers to emission reductions (SBTi, 2022a).

Without the systemic decarbonization of insurance underwriting portfolios, climate change fundamentally threatens the insurance industry. According to *The World Property and Casualty Insurance Report 2022,* only 8% of property and casualty (P&C) re/insurers are adequately prepared for its impacts by having climate resilience embedded into their business model. The same report said that the economic losses from climate change have seen an increase of 250% over the last three decades and that these losses are strongly driven by natural catastrophes and strengthened by climate change. Natural catastrophe events have led to a 360% increase in insured losses and a 200% increase in uninsured losses over the last 30 years (Capgemini & Efma, 2022).

Within this context, more than 80 FIs, including re/insurance companies, have set SBTs on their investment and lending activities. This trend has grown rapidly in recent years, however, FI SBTs do not cover insurance underwriting portfolios and net-zero targets of FIs are not easily compared due to the lack of consistent definitions, principles, metrics, methods, and evidence-based strategies. The lack of standardization also potentially limits the ability of FIs to effectively encourage decarbonization in the real economy (SBTi, 2022a).

The SBTi is developing its *Financial Institutions Net-Zero (FINZ) Standard* for financial institutions, including re/insurance companies, to set credible and robust science-based net-zero targets.

1.2 Purpose of This Paper

Re/insurance, as a mechanism originally developed to absorb financial shocks, has historically been associated with climate change adaptation and resilience rather than climate change mitigation and decarbonization of the economy. As a result, the transition to net-zero emissions has been primarily addressed from the perspective of investment and lending portfolios, and not insurance underwriting portfolios. While there has been a considerable amount of work to develop relevant metrics, target-setting methods, and strategies to reduce emissions for investment and lending portfolios, work relevant to insurance underwriting portfolios is quite limited and relatively new (UNEP, 2022).

Several initiatives have proposed approaches to leverage the role of re/insurers to accelerate corporate and client actions that support emissions reduction in the real economy. The Net-Zero Insurance Alliance (NZIA) convened by UN Environment Programme's (UNEP) was created in 2021 to help re/insurers unilaterally and independently transition their respective insurance underwriting portfolios to net-zero emissions by 2050. It created the concept of "net-zero insurance" and developed an associated theory of change to illustrate possible approaches to net zero for re/insurers.

The NZIA also supported the Partnership for Carbon Accounting Financials (PCAF) in developing a global standard to measure emissions associated with re/insurance contracts and policies ("insurance-associated emissions") (PCAF, 2022b), which was published in November 2022. Subsequently, the NZIA published a target-setting protocol in January 2023 to propose a first set of methods and approaches to target setting for insurance underwriting portfolios (UNEP, 2023a).

In parallel, the SBTi developed the *Financial Sector Science-Based Targets Guidance Version 1.0 (*FI Near-Term Guidance*)* (SBTi, 2020a) in 2020, which was updated to *Version 1.1* in 2022 (SBTi, 2022b), and a consultation draft of the *Financial Institutions Net-Zero (FINZ) Standard* in June 2023 (SBTi, 2023a) to enable FIs to set science-based targets for their own operations, as well as their lending and investment portfolios, in alignment with the temperature goals of the Paris Agreement.

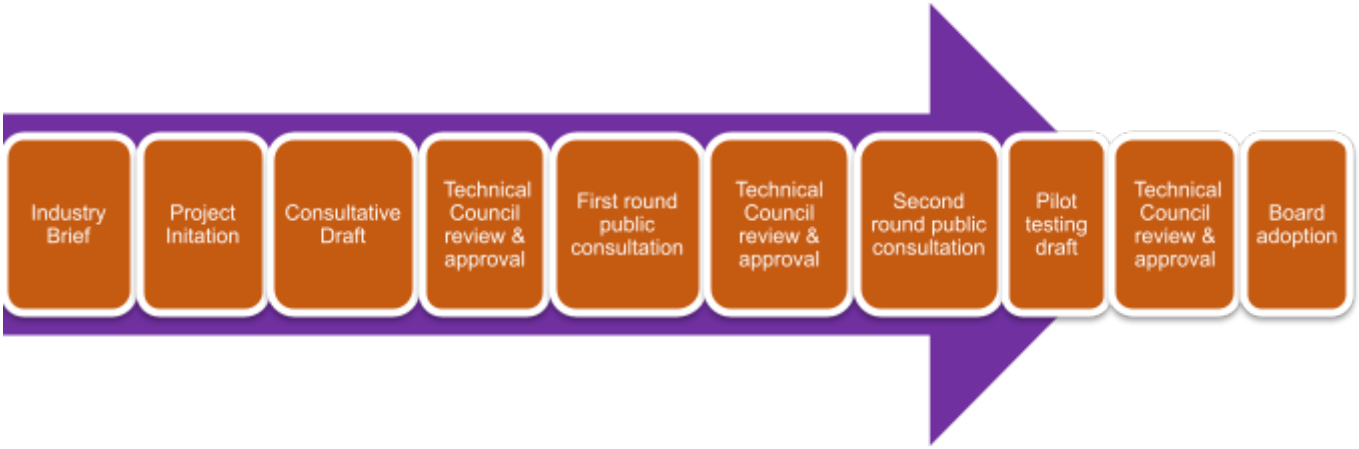
The SBTi is exploring the development of a net-zero standard specific to insurance underwriting portfolios to facilitate target setting and, more generally, to help re/insurers understand how to position their insurance underwriting portfolios in line with a 1.5°C trajectory and a long-term net-zero ambition. The work to produce the Standard is subject to SBTi's standard-setting procedures and overall governance processes.

This industry brief aims to establish the technical foundations, including approaches and methods for setting an SBT to **disclose, reduce, and transition** insured emissions. It also lays out the next steps that SBTi intends to take to advance the development of the Standard and provides an overview of the SBTi's future work on insurance.

1.3 Developing a Net Zero Insurance Standard

The development of the *SBTi Financial Institutions Net-Zero Insurance Standard (Underwriting Portfolios)* is subject to SBTi's standard-setting procedures illustrated in Figure 1 below.

Figure 1: Roadmap from Industry Brief to Standard



Source: Authors

Description of the Development Process

This brief provides the technical foundations for the development of a Standard and was informed by stakeholders who reviewed and provided feedback on this paper.

Following the publication of this paper, SBTi will embark on the formal standard development process, which will be developed following SBTi standard-setting procedures.

After completing the project initiation and scoping phase, SBTi will develop an initial draft, informed by this paper, and supplementary research that may be needed. Once completed, the Consultation Draft will be submitted to SBTi's Technical Council (TC) for an initial review.

After the TC has reviewed the Consultation Draft and approved it for public consultation, it will be published and its content subject to a first round of public consultation. The feedback from the first round of public consultation will then be synthesized into a consultation report that will also be published.

Key input identified during the public consultation will inform potential revisions to be made to the original Consultation Draft. The Technical Council will review and approve the revised Consultation Draft that will go out for a second round of public consultation. A second public consultation report will be published synthesizing findings. Pilot testing will be conducted after the second public consultation feedback has been incorporated at this phase to test the robustness and useability of the standard.

Based on the findings from the second consultation and pilot testing, final edits will be made to the Standard before being submitted to the Technical Council for final approval and then to the SBTi's Board for adoption and publication as version 1.0 of the *SBTi Financial Institutions Net-Zero Insurance Standard (Underwriting Portfolios)*. The Standard is intended to fit within SBTi's instruments for FIs as a complement to the *SBTi Financial Institutions Net-Zero (FINZ) Standard*.

1.4 Introduction to the Insurance Industry

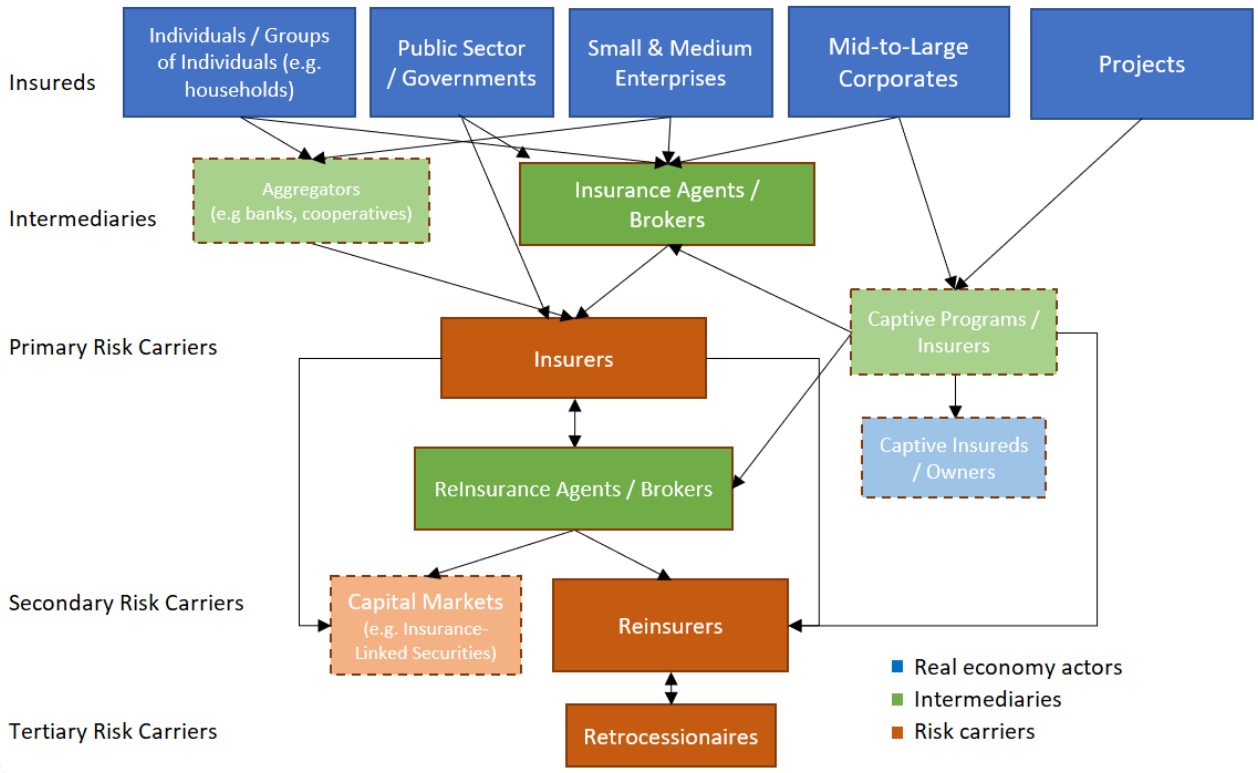
The insurance industry is one of the largest global industries with about US$6.8 trillion in world premium volume (with non-life business accounting for about 60%) (Swiss Re Institute, 2023) and over US$35 trillion in global assets under management in 2022 (TheCityUK, 2023).

Insurance is an arrangement by which a company or the state undertakes to provide a "guarantee" of compensation for specified loss, damage, illness, or death in return for payment of a specified premium (Oxford Languages, 2023). However, it is important to understand that insurance is not only a risk transfer mechanism to compensate for financial losses, but also a risk management mechanism because insurers support their clients in carrying out risk reduction and loss prevention measures in conducting their business (UNEP, 2022).

Risk Pooling in the Insurance Industry

Since certain risks are too large to be borne by an individual insurer, these risks are often spread in a complex risk-sharing system comprising many players. Historically, the underlying principle of "sharing the risks of the few among the many" through insurance underwriting, has supported societal and economic resilience. This is still true today. Figure 2 illustrates the different players that spread risks within the insurance industry through insurance, reinsurance ("insurance of an insurance"), retrocession ("reinsurance of a reinsurance"), and the capital markets (UNEP, 2022).

Figure 2: How Risks are Spread in the Insurance Industry



Source: Authors

Real economy actors, such as individuals, groups of individuals, governments, SMEs, and mid-to-large corporates are known as the **insured** and pay premiums for the transference of risk to the re/insurer. However, the list is not exhaustive and can include private-public partnerships (PPP) and special project vehicles (SPV) amongst others.

Insurers, reinsurers, and retrocessionaires are all known as **risk carriers** as they are the ones who put capital at risk and ultimately pay claims. Insurance agents and insurance brokers provide services to insureds and insurers, with agents representing insurers and brokers representing insureds. Similarly, reinsurance brokers and reinsurance underwriting agents provide services to insurers, reinsurers, and retrocessionaires. The common denominator for agents and brokers in the system is that they are all **intermediaries** who act as channels in spreading risks (UNEP, 2022).

The amount of fees and commissions received by intermediaries from sales of insurance products are estimated to reach US$450 billion in 2023, corresponding to a growth rate of 8.4% from 2022 (The Business Research Company, 2023).

The Role of the Insurance Industry in Climate Change Adaptation and Mitigation

Re/insurers are in an ideal position to build climate resilience and support the net-zero transition, as their spheres of influence span three key roles:

- As **risk managers**, re/insurers help communities understand, prevent, and reduce climate change-related risks through their expertise in risk research and analytics, natural catastrophe risk models, and loss prevention measures. Re/insurers can also advocate for improved policy from legislators and regulators which supports risk reduction in both the areas of climate adaptation and GHG mitigation. Examples include more effective land-use planning, zoning and building codes, ecosystem-based disaster risk reduction, and disaster preparedness (UNEP, 2022).

- As **risk carriers**, re/insurers protect households, businesses, public entities, and governments by absorbing the economic shocks related to severe weather-related risks such as cyclones, floods, extreme heat, wildfires, and droughts, thereby building physical and economic resilience. Risk-based insurance pricing can also provide risk signals and can incentivize risk reduction measures (e.g. usage-based or pay-as-you-drive motor insurance). Insurers also have the opportunity to engage with their clients in risk-based discussions on their decarbonization pathways and support the technological and business model risks associated with the transition to a net-zero economy (UNEP, 2022).

- As **institutional investors**, re/insurers can and do engage with their investee companies, some of whom may also be insurance clients, on their decarbonization pathways. In addition, re/insurers' investments in zero- and low-emission infrastructure, technologies and transportation, sustainable water management, sustainable agriculture, and climate and disaster-resilient infrastructure support the transition to a resilient, net-zero emissions economy (UNEP, 2022).

Re/insurance intermediaries, as conduits of risk capital flows between re/insureds and re/insurers, are key actors in both climate resilience and the net-zero transition.

Given its role in the global economy, but also to preserve its own viability and protect the interest of customers, the insurance industry needs to develop net-zero strategies to leverage its connections and incentivize real economy decarbonization approaches across its spheres of influence.

1.5 Types of Portfolio Emissions Across the Activities of Financial Institutions

The activities of financial institutions, including re/insurance companies, are wide-ranging and include traditional financing activities such as lending and investment, as well as the broader scope of facilitation and other activities that FIs regularly engage in. These other activities include third-party asset management, capital market activities, and insurance underwriting and broking. Reducing portfolio emissions for FIs requires addressing emissions across all these activities.

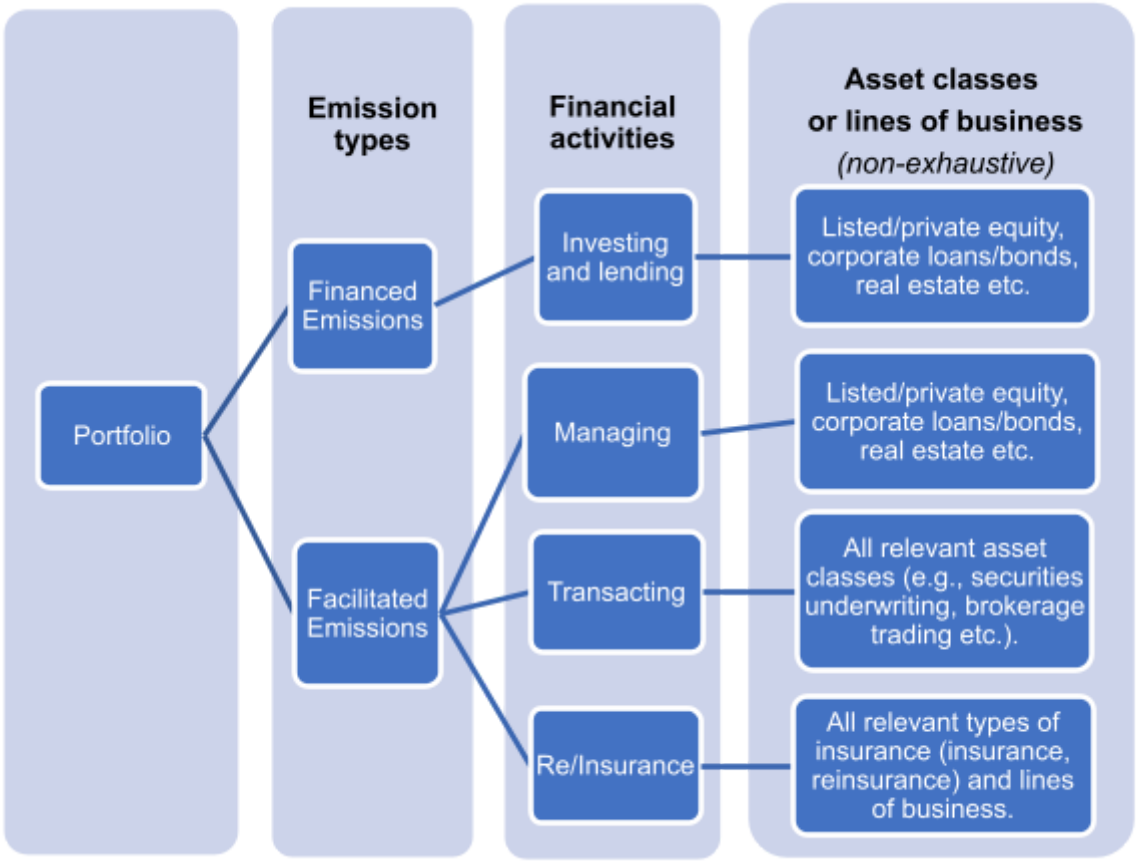
To decarbonize their activities, re/insurers have to reduce emissions from their own operations (Scopes 1 and 2), as well as emissions from their value chain (Scope 3), which includes emissions embedded in their investment and insurance underwriting portfolios (insured emissions). In general, the largest source of re/insurers' emissions come from their investment and insurance underwriting portfolios, and not their Scope 1, Scope 2, or Scope 3 category 1-14 emissions (CDP, 2023).

The GHG Protocol's Scope 3 Category 15 defines financed emissions as emissions attributed to "equity investments, debt investments, project finance, and managed investments and client services". *Managed investments and client services* include, within other activities, "insurance contracts" (or insurance underwriting portfolios). Reporting for these activities is optional in the GHG Protocol as accounting guidance is tailored towards equity investments, debt investments, and project finance. (WBCSD & WRI, 2011).

Financed emissions and facilitated emissions differ from each other in that facilitated emissions are off-balance sheet (e.g., insurance underwriting, capital markets underwriting, brokerage, mandated asset management), whereas financed emissions are derived from on-balance sheet exposure (representing direct financing) (PCAF, 2022a). Insured emissions are considered as a type of facilitated emissions.

For the purpose of this paper, insured emissions are defined as "emissions associated with the insurance industry's underwriting portfolios, including claims. This paper is focused on insured emissions". The financed emissions side of an FI's portfolio are currently covered by the SBTi FI Near-Term Guidance (SBTi, 2022b) for near-term targets and are expected to be covered by the *Financial Institutions Net-Zero (FINZ) Standard* (SBTi, 2023a) for net-zero targets, which is currently under development.

Figure 3: Financed vs. Facilitated Emissions, as per SBTi Terminology



Source: (SBTi, 2023a)

2. PROJECT CONTEXT

2.1 What is the Science Based Targets Initiative (SBTi)?

The Science Based Targets initiative (SBTi) drives ambitious corporate climate action by enabling businesses and financial institutions globally to set science-based greenhouse gas emissions reduction targets.

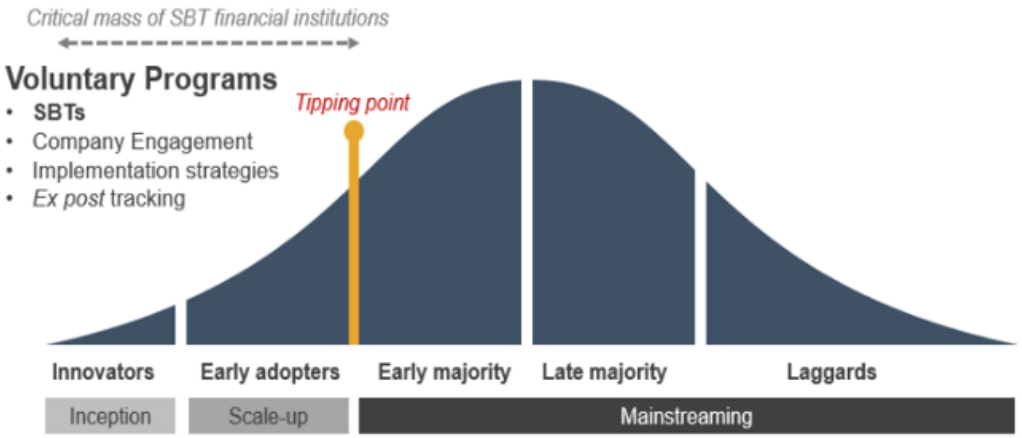
It was formed as a collaboration between CDP, the United Nations Global Compact, World Resources Institute (WRI), the World Wide Fund for Nature (WWF) and the We Mean Business Coalition. The SBTi's goal is to enable companies worldwide to do what climate science requires of the global economy: to halve emissions by 2030 and achieve net-zero before 2050.

We develop criteria and provide tools and guidance to enable businesses and financial institutions to set GHG emissions reduction targets in line with what science tells us is needed to keep global heating below 1.5°C. www.sciencebasedtargets.org @sciencetargets

2.1.1 The SBTi Theory of Change

The intended outcome of the SBTi theory of change is to generate a critical mass of companies and financial institutions setting SBTs, and thereby catalyze broader private sector emissions reductions. In a wider context, the tipping point aspect of this theory is referred to as "technology adoption lifecycle or diffusion of innovation" (Rogers, 2003), in which new processes or innovations are taken up by consumers or companies until a critical mass is achieved organically via market forces.

Figure 4: The SBTi Theory of Change



Source: (SBTi, 2020b)

2.1.2 What are Science-Based Targets (SBTs)?

Targets adopted by companies to reduce GHG emissions are considered "science-based" if they are aligned with what the latest climate science says is necessary to meet the temperature goals of the Paris Agreement.

Since its launch in 2015, the SBTi has established itself as a leader in the corporate climate action arena. Among companies globally, there is a growing momentum for SBT setting through the SBTi. At the end of 2022, 4,230 companies and FIs, representing more than a third of the world's market capitalization (US$38 trillion), had officially committed to setting an SBT, and 2,079 companies and FIs had their targets officially approved (SBTi, 2023b). As of December 2023, the number of approved SBTs has grown to more than 4,000 companies and FIs (SBTi, 2023c).[2]

2.1.3 SBTs for FIs

The SBTi launched its first SBT setting framework for FIs in October 2020 (SBTi, 2020a), including methods and criteria for FIs to align their lending and investment portfolios with the level of ambition required by science. In June 2023, the SBTi launched three consultative drafts to expand its

[2] For more detailed information on how a company can set an SBT through the SBTi and its target validation service for companies, please refer to the SBTi Corporate Manual (SBTi, 2023d).

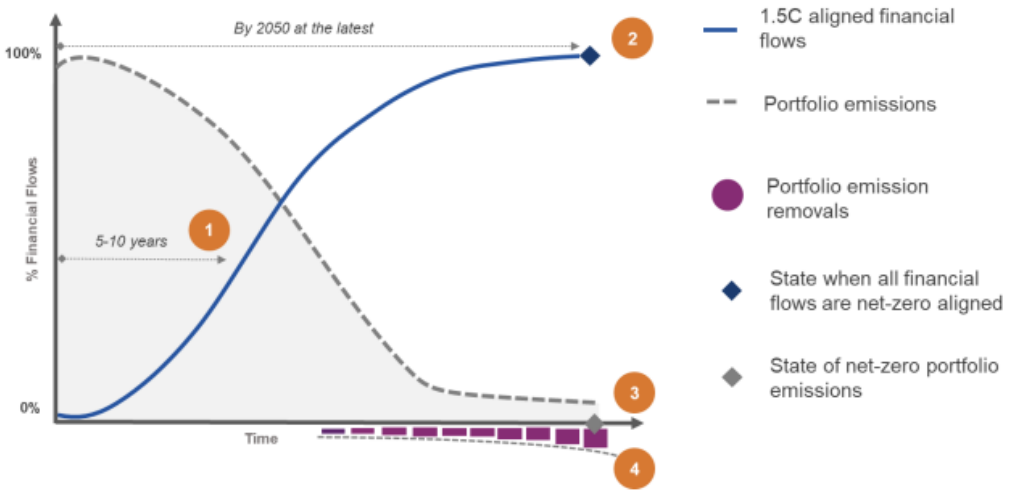
guidance for financial institutions, update its FI Near-Term Guidance to align with the latest climate science, and enable FIs to set mid- and long-term net-zero targets on a broader range of emissions: *Financial Institution Net-Zero (*FINZ*) Standard Conceptual Framework and Initial Criteria for Financial Institutions* (SBTi, 2023a), *Fossil Fuel Finance Position Paper* (SBTi, 2023e), *Near-Term Financial Sector Science Based Targets Guidance Version 2.0* (SBTi, 2023f).

As of December 2023, 240 global FIs have publicly committed to setting SBTs and 85 FIs have had their targets approved (SBTi, 2023c). The criteria and methods set out in the *SBTi FI Near-Term Guidance* (SBTi, 2022b) serve as a foundation for the *SBTi Financial Institutions Net-Zero Insurance Standard* development process.

2.1.4 The SBTi FI Net-Zero Target-Setting Conceptual Framework

The SBTi is developing a target-setting framework for FIs to help them set science-based net-zero targets to align their activities with a 1.5°C future with no or limited overshoot. The conceptual framework identifies four key elements that make up a net-zero target for an FI as depicted in Figure 5 below. These elements only refer to SBTs that cover an FI's financed emissions (SBTi, 2023a).

Figure 5: Elements of Net-Zero Target Setting for FIs



Source: (SBTi, 2023a)

1. **Set near-term SBTs:** FIs set 5-10 year alignment targets, to increase the share of financial flows that are aligned to 1.5°C pathways. Near-term targets must be consistent with the milestones required in the real economy and focus on increasing the alignment of all financial flows over time in a manner consistent with 1.5°C ambition.

2. **Set long-term SBTs:** Targets to reach a point where all financial flows are net-zero aligned by no later than 2050. These targets drive long-term business planning and show the extent to which portfolios must be net-zero aligned to be consistent with the global goal of reaching net-zero emissions by 2050 or sooner.

3. **Reduce portfolio emissions to residual levels:** Achieving long-term net-zero alignment targets will mean that portfolio emissions are brought down to near zero levels by 2050. As a result of near- and long-term alignment targets, portfolio emissions need to be reduced over time to a residual level.

4. **Neutralize residual portfolio emissions:** Residual GHGs released into the atmosphere when the FIs have achieved their long-term targets must be counterbalanced through the permanent removal and storage of carbon from the atmosphere. FIs must ensure that these residual emissions are neutralized to reach net-zero emissions at the portfolio level and to achieve a state of zero impact on the climate from GHG emissions.

2.2 The UN-convened Net-Zero Insurance Alliance

Recognizing that re/insurers have an important role to play in the transition to a net-zero global economy, the Net-Zero Insurance Alliance (NZIA) convened by the UN Environment Programme (UNEP) pioneered the concept of "net-zero insurance".

The NZIA was founded in July 2021 to help re/insurers unilaterally and independently transition their respective insurance and reinsurance underwriting portfolios to net-zero emissions by 2050 consistent with a maximum temperature rise of 1.5°C above pre-industrial levels by 2100 in order to contribute to the implementation of the Paris Agreement.

The NZIA has outlined possible approaches that a re/insurer can take to support the net-zero transition, including but not limited to (UNEP, 2021):

- Independently set underwriting criteria and guidelines for activities where a re/insurer has, or can have, the most significant impact, particularly the most GHG-intensive and GHG-emitting activities within its underwriting portfolios, in order to be aligned with a 1.5°C net-zero transition pathway;
- Engaging with clients and potential clients, particularly those with the most GHG-intensive and GHG-emitting activities, on their decarbonization strategies and net-zero transition pathways;
- Developing and offering insurance and reinsurance products, solutions, and arrangements for low-emission and zero-emission technologies and nature-based solutions that are key to the net-zero transition;
- Improving claims management in an environmentally sustainable manner to promote a net-zero economy;
- Integrating independently-determined, company-specific net-zero and decarbonizations-related risk criteria into risk management frameworks (e.g. ESG/sustainability risk management frameworks) applicable to underwriting portfolios and promoting human rights, including the right to Free, Prior, and Informed Consent (FPIC);
- Advocating for and engaging in governmental policies for a science-based and socially just transition of economic sectors to net zero.

In the span of 18 months since its launch, the NZIA achieved three milestones:

1. Publication in April 2022 of *Insuring the Net-Zero Transition: Evolving thinking and practices*, a white paper that articulates what net zero means in the context of insurance and reinsurance underwriting portfolios (UNEP, 2022);

2. Publication in November 2022 of the first-ever *Global GHG Accounting and Reporting Standard* to measure GHG emissions associated with insurance underwriting portfolios ("insurance-associated emissions"), developed by the Partnership for Carbon Accounting Financials (PCAF) in collaboration with the NZIA (PCAF, 2022b); and

3. Publication in January 2023 of the *UN-convened NZIA Target-Setting Protocol* (Target-Setting Protocol), the first ever target-setting guidance for the global insurance industry (UNEP, 2023a).

Through the milestones mentioned above, the NZIA and its partners have delivered the foundational net-zero insurance concepts, metrics, methods, and frameworks that enable re/insurers across the globe to individually start or propel their respective net-zero insurance journeys and take urgent and ambitious individual and unilateral climate action.

UNEP reaffirms its conviction ever since it initiated, convened, and launched the NZIA that in order to successfully tackle the climate emergency, there is a fundamental and urgent need for collaboration, not just individual action (UNEP, 2023b). To speed up and scale up net-zero insurance thinking and practices globally, priorities include advancing net-zero insurance frameworks, net-zero transition planning by re/insurers, real economy engagement by re/insurers, and tackling barriers to re/insuring the net-zero transition.

Building on the NZIA's foundational work and on SBTi's science-based target setting expertise, the SBTi, in partnership with UNEP, is now developing the *SBTi Financial Institutions Net-Zero Insurance Standard (Underwriting Portfolios).* The methods proposed in the NZIA Target-Setting Protocol, SBTi's existing target-setting methods for financial institutions, and potentially other methods will be evaluated in the development of the Standard to ensure that they are practical, appropriate in the context of insurance underwriting, scientifically rigorous, and align with the latest science available to meet the temperature goals of the Paris Agreement. Eventually, the Standard is intended to enable re/insurers to set credible targets using science-based methods that are recognized and can be validated by the SBTi.

2.3 World Wide Fund (WWF) for Nature's Insurance Underwriting Call to Action

In September 2023, WWF, in partnership with Deloitte, published the *Underwriting Our Planet* report (Deloitte & WWF, 2023). The report explores the links between insurance underwriting activities and key drivers of climate change and biodiversity loss. It highlights the role of insurance in the transition to a sustainable economy and provides a list of recommendations on how actors in the insurance industry can improve their biodiversity and climate footprints and contribute to global climate and biodiversity goals. It also focuses on the interplay of people, nature, and climate change and provides recommendations on nature-focused net-zero products, claims management procedures, and entire life-cycle development in line with the International Energy Agency (IEA)'s pathways to net zero by 2050.

Specifically, WWF and Deloitte identify 11 levers within insurance underwriting across three categories that re/insurers can use to contribute to global climate and biodiversity goals.

Figure 6: Levers of Insurance Underwriting to Support Global Climate and Biodiversity Goals

Source: (Deloitte & WWF, 2023)

The activities that an insurer chooses to underwrite or not: Freight shipping would not take place in the same way as it does today without insurance coverage, for example, while renewable energy needs special insurance coverage to flourish. The identified levers in this category are:

1. New insurance products supporting the green, fast, and fair transition;
2. Specific products to insure natural assets, including nature-based solutions;
3. surety for restoration;
4. exclusion and phase-out policies.

Product design and claims management: The incentives created by insurance products are important and can be used to decrease moral hazard as well as incentivizing green business practices and behavior. Levers identified are:

5. Preventing moral hazard in environmental liability insurance;
6. Promoting green choices and the transition by commercial and private clients;
7. Repair over replace;
8. Build back better.

The supportive activities that insurers engage in: Insurers are important stakeholders for companies and public authorities. They can leverage that position for the following levers:

9. Engagement with clients, peers and policymakers;
10. Research and data sharing;
11. Finance projects to directly protect and restore nature.

The report provides a useful framework for re/insurers to define the strategy approaches to meet their climate targets and it reviews a broad range of possible net-zero and nature-positive practices for re/insurers, with detailed approaches for the most relevant insurance lines of business (P&C lines of businesses).

The *Underwriting Our Planet* report is a helpful input for understanding and advancement of net-zero insurance thinking and practices.[3]

[3] *WWF is a founding member of the SBTi but has no operational day-to-day decision-making power over the SBTi and does not influence the development of the SBTI's Financial Institutions Net-Zero Insurance Standard (Underwriting Portfolios).*

2.4 Mapping of Selected Initiatives

Table 1 below summarizes an illustrative range of climate-related initiatives relevant to insurance underwriting portfolios. The initiatives have been color coded to reflect their areas of activity. The "X" indicates the main focus of the initiative. A short description of the initiatives is available in Annex 3.

Table 1: Relevant Initiatives That Support Re/insurers' Climate Actions

Focus on **insurance underwriting portfolios**
Focus on **investment portfolios and insurance underwriting portfolios**
Focus on **financial and insurance underwriting portfolios**
Focus on **financial portfolios** with application to insurance underwriting portfolios
Focus on **real economy actors** with application to insurance underwriting portfolios

	High-level Commitment to Act	Measurement of Insured Emissions	Scenario Analysis	Target Setting	Transition Plans	Insuring the Transition	Regulatory Reporting	Enhancing Accountability
UN Secretary-General's High-Level Expert Group on Net-Zero Emissions Commitments of Non-State Entities (HLEG)	X							
UN Framework Convention on Climate Change (UNFCCC) Recognition and Accountability Framework for Non-State/Party Stakeholder Climate Action	X							
UN Race to Zero campaign	X							

	High-level Commitment to Act	Measurement of Insured Emissions	Scenario Analysis	Target Setting	Transition Plans	Insuring the Transition	Regulatory Reporting	Enhancing Accountability
UN Global Compact: Business Ambition for 1.5°C	X							
Glasgow Financial Alliance for Net Zero (GFANZ)	X							
Net-Zero Insurance Alliance (NZIA)	X							
Poseidon Principles for Maritime Insurance	X							
Chief Risk Officers (CRO) Forum		X						
Partnership for Carbon Accounting Financials (PCAF) – Insurance- Associated Emissions (IAE) Standard		X						
Network for Greening the Financial System (NGFS)			X					
Transition Pathway Initiative (TPI)			X					
Carbon Risk Real Estate Monitor (CRREM)			X					

	High-level Commitment to Act	Measurement of Insured Emissions	Scenario Analysis	Target Setting	Transition Plans	Insuring the Transition	Regulatory Reporting	Enhancing Accountability
Intergovernmental Panel on Climate Change (IPCC)			X					
Science Based Targets Initiative (SBTi) – Insurance Underwriting Portfolios * *preliminary*				X				
Transition Plan Taskforce (TPT)					X			
ClimateWise						X		
Lloyd's Sustainable Markets Initiative (SMI) Insurance Task Force (ITF)						X		
International Association of Insurance Supervisors (IAIS)							X	
UNDP-convened Sustainable Insurance Forum (SIF)							X	
International Sustainability Standards Board (ISSB)							X	
Task Force on Climate-related Financial Disclosures (TCFD)							X	
Assessing Low Carbon Transition (ACT) Initiative								X

	High-level Commitment to Act	Measurement of Insured Emissions	Scenario Analysis	Target Setting	Transition Plans	Insuring the Transition	Regulatory Reporting	Enhancing Accountability
Insure Our Future Global								X
Willis Tower Watson – Climate Transition Pathways (CTP)								X
Rocky Mountain Institute (RMI) Climate Finance								X

Source: Authors

High-level commitment to act: The first climate change mitigation step for many re/insurers is a high-level commitment to act through an international initiative such as those listed above.

Measurement of insured emissions: Re/insurers calculate their insured emissions to measure their carbon footprint, assess how well they are performing against a net-zero pathway, and set science-based emission reduction targets.

Scenario analysis: Re/insurers use forward-looking scenario analysis to evaluate impacts of climatic events, develop strategic plans, and set SBTs in line with 1.5°C pathways by 2050.

Target setting: Re/insurers work with organizations that develop target-setting methods to set net-zero targets to align their underwriting portfolios to 1.5°C by 2050.

Transition plans: These initiatives help re/insurers build clear, credible, and evidence-based transition plans (including metrics and targets) that support them in their journey towards net zero.

Re/insuring the transition: In addition to emissions reductions, portfolio alignment and engagement, re/insurers can address the impacts of climate change by offering re/insurance solutions that avoid, reduce, or remove emissions, or that help cope with the negative impacts of climate change.

Regulatory reporting: An important body of work exists to advance climate-related reporting from corporates and financial institutions, including advocating for regulatory reporting and proposing standardized reporting frameworks to enhance transparency and accountability.

Enhancing accountability: To avoid greenwashing, a number of initiatives are working to ensure that re/insurers are held accountable for the targets they set and the claims they make with respect to their climate engagement. Tools are developed to assess the levels of climate ambition, underwriting policies, or compare companies between themselves (e.g., scorecards). These initiatives are all part of the net-zero target-setting value chain and the framework will be taken into account in the development of the *SBTi Financial Institutions Net-Zero Insurance Standard (*Underwriting Portfolios).

3. TARGET SETTING IN THE CONTEXT OF INSURANCE UNDERWRITING PORTFOLIOS

Target setting in the context of climate action, is the process of defining objective, proportionate, specific, measurable, relevant, and time-bound goals that are aligned to the objectives of the Paris Agreement. Setting targets for the insurance industry requires taking into account the activities and processes involved.

3.1 The Insurance Underwriting Context

Insurance supports economic expansion or individual welfare by ensuring, in exchange for a premium, that financial shocks can be absorbed by businesses and/or individuals. As such, insurance facilitates economic growth, but re/insurers, as underwriters, do not have a capital interest

on clients' activities or assets. This difference is key to appreciating the levers and levels of influence that re/insurers have on real economy actors or individuals.

The table below proposes some differences to reflect on and integrate in target setting considerations.

Table 2: Financial (Investment and Lending) Activities vs Insurance Underwriting Activities

	Institutional Investment and Lending	Insurance Underwriting	Implications
Services offered	Services provided have a key role in capital allocation, liquidity management, and facilitating transactions.	Coverage for various risks, with the aim of protecting clients' assets and activities from unforeseen events. Coverage plays a key role in securing investments, financial planning, risk management practices and more generally shaping the modern industrial economy.	The nature of services offered effects when and on what clients engage with investors, lenders, and re/insurers. This affects the timing, nature of interactions with clients, and access to data.
Nature of relationship / "ownership"	**Investors** hold capital interest in the client's operations (direct/indirect "ownership"). Investors can influence the composition of the board or management and influence the business strategy. In most cases, **investors** decide on their investees. **Lenders** may not hold "ownership" interest in the case of unsecured lending.	**Re/insurers** have no ownership (direct/indirect) in client's operations. The re/insurer does not usually seek out the client, the client usually seeks out the re/insurers to choose from. However, as for **lenders** re/insurers have direct and trusted relationships with their clients.	Insurance companies as underwriters have no direct influence on the composition of the board or the management and cannot directly influence the business strategy. As investors, they can. Re/insurers, as for lenders, can have a direct and trusted relationship with their clients, which offer the possibility for them to influence the client to mitigate their emissions impact. Insurers, similarly to lenders, face a free-rider problem. If

	Lenders do not usually seek out the client, the client usually seeks out the lender (e.g. homeowners shop around for the best mortgage terms; Companies shop around to find the best credit terms). However, lenders have direct client relationships with their clients and can impose conditions (covenants) to the loan they give.		an insurer or a lender requires ambitious climate mitigation action, the client might choose a less demanding service provider. On the other hand, some client operations and economic activities can only proceed if there is re/insurance in place. This gives the re/insurer significant influence over the imminent materiality of the facilitated activity. Insurance companies can also use terms and conditions to shape client incentives and clients' behavior (e.g., requirement for environmental and safety standards).
Length of contractual relationship	**Investment** in publicly traded companies and government bonds can usually be sold daily; They can also remain in investors' portfolios for long periods of time, depending on the investment strategy. **Loans** usually have a multi-year duration.	Often yearly contract in Property & Casualty business (with tacit renewal). However, long-term client relationships are usually the case. Project policies are written for the duration of the project (e.g., construction). Life & Health contracts have both short-term or long-term durations.	Usually, the longer the relationship with a client, the greater the possibility to influence the client to mitigate their emissions impacts. Depending on the mix of business, re/insurance portfolios may demonstrate more or less volatility.
Mandatory activities	N/A	Some jurisdictions require mandatory insurance for certain lines of business (e.g., motor third party liability, public liability, health, employer's liability, workers' compensation).	The terms and conditions of mandatory insurance policies may be specified by law or regulations. This can limit the scope of levers for some mandatory coverages. However, insurers can engage with regulators and supervisors to require climate-related criteria for

			mandatory insurance coverage.
Mix of portfolio companies	**Institutional investors' portfolios** are generally weighted towards large corporates. **Many corporate banks** typically serve large corporates, but also have SMEs in their portfolio.	Certain global re/insurers' portfolios can be more weighted with larger corporates, while others with SMEs.	Both banks and insurance companies serve large Fis and SMEs. For SME the data availability and reliability may lag behind large corporations.
Market concentration	Low market concentration.	Higher market concentration, especially in the reinsurance and brokers' market.[4]	Re/insurers may have more influence as actions from a limited number of re/insurers can have significant impact, as it can influence access to re/insurance capacity (e.g., for high-emitting activities).
Frequency of interactions	**Investors** have the possibility to interact in quarterly investor calls and at AGM. **For lenders,** a yearly interaction with clients is usual.	Re/insurers usually interact with clients during policy issuance, yearly renewal, and claims stages. Moreover, there are often on-site inspections for risk management standards.	Usually, the greater the frequency of interactions, the greater the possibility to influence the client. The frequency of interactions can be an important lever of influence by the insurers.
Risk Management	Traditionally, **investors and lenders** select investment opportunities or clients' creditworthiness based on financial indicators.	Insurance underwriters are used to setting specific criteria to mitigate risks, including climate risks.	Since managing risk is their core business, re/insurance companies have experience in requiring standard setting and incentives to steer client behaviors.

Source: Authors

Investing and lending are two different activities that are aggregated in the same column in Table 2 above for discussion purposes as a contrast to insurance underwriting.

In the development of the Standard, the SBTi will consider the differences between financial activities (investment and lending) and insurance underwriting activities and how these differences affect the levels and levers of influence that re/insurers have over their portfolio companies.

[4] The top 25 underwriters control 69% of the fossil fuel insurance market (Scott, 2023).

3.2 The Insurance Value Chain

The insurance value chain describes the various activities that are undertaken by a specific actor in the insurance industry. The activities, spanning from product development to the settlement of claims and corporate risk management, are all potential entry points to engage with the re/insureds or other stakeholders and influence how emissions in portfolio clients' operations or behaviors are addressed.

Figure 7: The Insurance Value Chain

Source: Authors

The value chain is therefore useful to identify possible **net-zero metrics and criteria** for the core business activities identified along the chain, as illustrated above for insurers. Value chains specific to certain categories of insurance actors can be used to determine the levers these actors have to influence emissions and, consequently, the appropriate targets to consider for these actors. This work can be explored at a later stage.

The claims management process: Recognizing the high potential for reducing emissions within the claims management process, especially for some P&C lines of business, there is an opportunity to develop relevant methods, criteria, and tools to quantify the climate impact of these practices.

Further work will assess the feasibility of setting targets against claims management.

3.3 Lines/Classes of Insurance and Reinsurance Business

This section provides an overview of established lines or classes of insurance and reinsurance business which are used by re/insurers to classify their business and record premiums.

Insurance lines can be split into two main categories:

- **Property & Casualty (P&C) insurance (also known as non-life insurance or general insurance):** P&C insurance can be further split between commercial and personal/retail lines. P&C policies are usually written for a duration of one year.
- **Life & Health (L&H) insurance:** L&H insurance is further split between group/commercial and individual/personal/retail lines. Life insurance policies usually have durations greater than one year.

Reinsurance can also be split according to the insurance lines mentioned above, but there are two distinct types of reinsurance:

- **Facultative reinsurance:** Reinsurance for individual risks/policies on an offer-and-acceptance basis, where the insurer has the option to cede the risk/policy and the reinsurer has the option to either accept or reject the offer.
- **Treaty reinsurance:** Reinsurance that covers broad groups of risks/policies (e.g. all of an insurer's motor, home, marine, aviation, life, or health business) on an automatic or obligatory basis. Once the treaty reinsurance arrangement is finalized, including the categories of risks/policies covered, the insurer must cede all risks/policies that fall within the terms and conditions of the treaty, and the reinsurer must accept all of them.

These two types of reinsurance induce two different levels of influence for the reinsurer over the insurer and on corporate and retail clients within underwriting portfolios.

Insurance lines or classes are usually defined in relation to the nature of the risk but are not always explicit about the underlying sector of economic activity, and consequently, about the materiality of underlying emissions. There is an open question around whether insureds' emissions should apply equally to all lines of underwriting business.

Emissions data and climate pathways are widely available by sector activity. Within re/insurance, lines of business are necessary references, defining the basis for the relationship between the insurer and insured, the reinsurer, and the reinsured, and the data available to assess and address emissions.

The bulk of emissions in a re/insurer's underwriting portfolio is largely dependent on the lines of business that it writes. For example, it is likely that a P&C portfolio mainly composed of commercial lines business will derive the bulk of its insured emissions from such lines of business. Meanwhile, emissions for individual insureds' high-emitting activities can be addressed when dealing with P&C personal lines such as personal motor or homeowners insurance. However, insured emissions in the context of the life & health business have not yet been studied and assessed comprehensively.

As most GHG-emitting and GHG-intensive activities are directly linked to P&C lines of business, a potential starting point is emissions footprinting and target-setting efforts on commercial and personal lines of P&C business, particularly where data is more easily accessible.

When re/insurers do a hotspot portfolio analysis to identify where emissions exist in their portfolios, they can start by identifying the re/insureds in their portfolio associated with the most GHG-emitting and most GHG-intensive sectors and activities and access corresponding emissions data. Re/insurers can also understand their own exposure to these emissions and can build on that by calculating their "fair share" of these emissions via an attribution methodology such as PCAF (see Section 3.4).

3.4 Insured Emissions Accounting

Foundational work to develop a carbon footprinting methodology for insurance underwriting portfolios was published in 2020 by the Chief Risk Officers (CRO) Forum (CRO Forum, 2020). The proposed methods were intensity-based, at the level of portfolios and key sectors.

In 2021, the Poseidon Principles for Marine Insurance launched the first sector standard for assessing and disclosing the climate alignment of re/insurers' hull and machinery portfolios (Poseidon Principles for Marine Insurance, 2021). Re/insurers can calculate the carbon intensity of their hull and machinery portfolios and their climate alignment with decarbonization trajectories, representing an initial baseline to inform decarbonization decisions.

Through the Poseidon Principles, marine insurance became the first line of business to use a sector-specific methodology to set climate targets. The framework was updated in May 2023, and the group announced that it will rely on a trajectory in line with net-zero commitments by 2050 once available (e.g., from the SBTi) (Poseidon Principles for Marine Insurance, 2023).

In 2022, PCAF published the first insurance-associated emissions (IAE)[5] accounting standard (PCAF, 2022b) developed in collaboration with the NZIA, enabling re/insurers to calculate their IAE for a range of P&C commercial lines and personal motor insurance. Lines currently not covered, although with potentially high emissions embedded, include treaty reinsurance, project-based engineering lines of business (e.g. construction all-risk, erection all-risk), and homeowners insurance. The PCAF standard covers both primary insurance and facultative reinsurance.

For commercial lines, PCAF's attribution factors are currently the same for all lines of business covered. For a specific company in a sector, IAE can be aggregated across commercial lines of business to derive the total IAE for this company. Emissions for all companies in a specific sector can be aggregated to derive the insurer's portfolio emissions corresponding to that sector. These sector portfolio emissions can then be associated with a sectoral climate pathway.

It is expected that the scope of lines with relevant methodologies covered by PCAF will expand over time. Target boundaries for target-setting methods relying on IAE will be dependent on the evolving scope of these methods. For lines of business in-scope for setting targets, full emissions inventories of insurance related activities, potentially including attributional translations, will be required to define the targets' boundaries.

As methods are developed and as their scope expands, there is a need to better understand how to measure and account for the emissions stemming from actions of other actors in the insurance value chain such as brokers, as well as actions associated with other insurance processes and activities such as claims management.

[5] Definition of insurance-associated emissions: "GHG emissions in the real economy, which are associated with specific re/insurance policies aggregated in the re/insurance portfolio" (PCAF, 2022b). IAE refers to emissions derived as per PCAF's methodology.

Table 3: Overview of Lines of Insurance and Reinsurance Business and the Availability or Non-Availability of Attribution Factor Methodologies[6]

(Where the line of business is grayed out, no accounting methodology[7] *currently exists).*

Lines of Business	
Commercial insurance (directly insured and facultative reinsurance covers)	**Property** (e.g. Fire, Multi-Peril) **Liability/Casualty** (e.g. General Liability, Product Liability, Product Recall, Environmental Liability) **Commercial Motor** (all lines) **Marine** (liability and hull)
	Aviation (liability and hull)
	Agriculture (excluding government schemes/arrangements)
	Trade credit (insurance of credit risk for sold goods) and political risk – primary insurance only
	Structured trade credit (insurance of credit risk for bank loans, mortgages, or other financial instruments)
	Surety
	Engineering lines: Construction all-risk, erection all-risk only
	All other engineering lines (e.g. machinery breakdown & electronic equipment)
	Corporate Life and Pensions, Personal Accident
	Other / Special Lines (e.g. Financial Lines [e.g. professional indemnity, D&O], workers compensation)
Statutory lines of business *(subject to applicable laws, rules, and regulations)*	
Public entities	Insurance contracts purchased by public entities (e.g. government agencies, municipalities)
Personal lines	**Motor** (all lines)
	Liability

[6] *This table is based on the scope of PCAF's IAE Accounting Standard and is provided for reference purposes only.*

[7] A method to calculate the share of the total annual GHG emissions from insured assets, activities, and companies that can be associated with re/insurance underwriting portfolios (PCAF, 2022b).

	Property
	Other Personal lines (e.g. travel assistance, legal assistance, pet)
	Life and Health
Treaty reinsurance	**All lines of business**

Source: (PCAF, 2022b)

4. REVIEW OF TARGET-SETTING METHODS

Re/insurance companies setting science-based net-zero targets are expected to reduce value-chain emissions in alignment with scenarios that limit warming to 1.5°C with no or limited overshoot. Reducing emissions should not lead re/insurers to simply manipulate portfolios to reduce their absolute exposure to GHG emissions. Targets should incentivize engagement with portfolio companies to reduce their own emissions in line with relevant 1.5°C pathways by setting science-based net-zero targets. Targets should also encourage re/insurers (and intermediaries) to leverage their ability to understand and actively mitigate risks associated with new business models to support the scaling up of low-carbon approaches.

4.1 Existing SBTi Target-Setting Methods

The SBTi recognizes two types of targets:

- Emissions-based targets: Targets based on metrics tracking sub portfolios' exposure to emissions and alignment with emissions trajectories; and
- Portfolio alignment targets: Targets tracking alignment with accepted climate ambition of companies or activities in portfolio.

In approaching near-term target setting, the SBTi currently recognizes three methods that link FIs' investment and lending portfolios with the objectives of the Paris Agreement (SBTi, 2022b):

Emissions-based targets:

- Sectoral Decarbonization Approach (SDA)

Portfolio alignment targets:

- Portfolio Coverage Approach (PCA)
- Temperature Rating Approach (TRA)

These methods have gone through a robust road-testing process led by SBTi with 18 FIs in 2019 and have been widely adopted since then.

These three methods are required at different levels of coverage across asset classes in the *SBTi FI Near-Term Guidance* (SBTi, 2022b) FIs' investment and lending portfolios are linked to net-zero

sectoral pathways at an asset class level. This approach takes into consideration the different degrees of data availability, market liquidity, and levels of ownership of different asset classes.

In the case of insurance, asset classes can be replaced by **lines of business** (P&C and L&H insurance business) and **types of coverage** (insurance or reinsurance).

- Lines of business and types of coverage are not associated with levels of ownership but can be associated with different **levels of influence** linked to the nature of the risk and the duration of the contract, among other factors.

- Liquidity for investment or lending products could be mirrored by the **duration of the contract** in the case of re/insurance. For example, the duration of an insurance policy/contract can vary depending on the line of business and the policy terms and conditions. In this context, contract duration describes the period through which a policy is effective or in force in the re/insurer's portfolio,

- **Data availability** (e.g., emissions or company revenue) can be linked to the line of business but could also be a criteria to differentiate between insurance and reinsurance, facultative and treaty reinsurance, or activity-based and project-based insurance.

The three methods mentioned above will be reviewed to see if and how they could be starting points for SBTi's target-setting framework in the context of insurance underwriting portfolios.

It is worthwhile to note that P&C insurance contracts generally have an annual duration with tacit renewal. More work is needed to understand the average duration of contracts in a portfolio, (depending on the type of coverage and/or lines of business considered), to appreciate potential timeframes for an insurer to engage with insureds.

In its target-setting guidance, the SBTi sets criteria to be met for FIs' targets to be recognized by the initiative. For each method below, a brief overview of how the main criteria could be adapted for insurance underwriting portfolios has been provided.

4.1.1 Sectoral Decarbonization Approach (SDA)

Description:

The SDA is a sector-specific intensity convergence method. It is available for a limited but increasing number of sectors for which the SBTi has developed guidance. It is applicable for corporate instrument asset classes.

The SDA uses a physical intensity metric, defined by a reduction in emissions relative to a specific business metric, such as the production output of the company (e.g., metric tonne CO_2e per tonne product produced). It is used to set targets for specific sectors represented in FIs' portfolios. Emissions intensity targets should converge to align with a 1.5°C decarbonization pathway by 2050.

To use the SDA, FIs select attribution factors (AFs) for the calculation of sector physical intensities. Clients' emissions and physical output data are the values attributed to the FI through the application of the AFs.

How to derive the target:

1. Access or measure absolute GHG emissions (Scopes 1, 2 and, where possible Scope 3 emissions) of portfolio companies affiliated to a specific sector and asset class and apply to each value, the respective AF as defined for the asset class.
   Specific sector guidance is available to understand if and which Scope 3 emissions are to be included.
2. Access or measure the corresponding activity data of all companies associated with the specific sector and asset class and apply to each value, the respective AF as defined for the asset class.
3. Divide the sum of attributed emissions by the sum of attributed activity data.
4. Select a decarbonization pathway and set the SBT.

Where AFs are deemed uncertain or inappropriate (e.g., due to a strong volatility of underlying economic data, or unreliable or inaccessible data to compute AFs), an alternative methodology can be used. As an example, AFs can be replaced by amounts invested by the FI in the respective companies. The new emission intensity for a specific sector will reflect the distribution of investments of the FI in that sector.

How could the method apply to insurance underwriting portfolios?
Method applicability:

- **Affiliation to sectors:** For commercial lines of business, data is usually available to link insurance underwriting portfolio companies to specific sectors of economic activities. Lines of business can be allocated to sectors at client level. The opportunity to use an SDA target for personal lines of business such as personal motor and homeowners insurance could be explored. These lines potentially embed a significant level of emissions and could be closely associated with individual transportation and real estate sectors, respectively.[8]

- **Sector aggregation:** For investment and lending activities, aggregation of emissions for a specific sector is currently done, and targets set at the asset class level. In the context of re/insurance, the aggregation of emissions may be more relevant at sector level and across lines of business. It is facilitated by the fact that the methodology used for attribution factors is currently the same for all commercial lines of business. Asset classes operate in different capital flows and have different structures. Attribution factors may differ between asset classes. Still, more work will be necessary

[8] For reference, in SBTi's FI Near-Term Guidance, the SDA is optional for residential mortgages and not available for motor vehicle loans.

to assess if all the lines of business (with an acceptable AF) underwritten by a company should be allocated to a particular sector.

- **Deriving the target:** To reflect the method used for FIs, sector-level emissions intensity could be derived using insured emissions (and insured physical outputs). Nonetheless, accounting methods for insurance underwriting portfolios are relatively recent, and depending on the comfort of the re/insurers in using AFs, a method based on amounts of premiums may be preferred, to circumvent the use of AFs.

Materiality:

- Targets should be set for activities where the re/insurer, and other actors in the re/insurance value chain (e.g. intermediaries), can exercise direct or indirect influence over underlying emissions. Levers that insurers can use to influence portfolio clients have been described in separate publications (e.g., NZIA and WWF). (see sections 2.2 and 2.3).
- Value chains for other actors vary in terms of emissions impact. Intermediaries, such as brokers, could play a key role in incentivizing their clients to reduce their emissions and produce credible net-zero transition plans. The potential to set targets on these actors, or to involve these actors in target setting merits further review.

The influence of actors may also be dependent on the lines of business considered. For instance, even if emissions can potentially be attributed to insurers on statutory/mandatory lines of business, their influence on emissions reductions may be limited. For treaty reinsurance, the terms and conditions, as well as the structure, of reinsurance treaties are material to the reinsurers' capacity to influence real economy emissions reductions.

Example of potential SDA: The re/insurer commits to reduce GHG emissions from the steel sector within its insurance underwriting portfolio, across commercial lines of business, by 40% per ton of steel by 2030 from a 2021 base year.

Conclusion:

As with all emissions-based metrics/methods, the ultimate goal of this method is to reveal the climate performance of selected emitting sectors, in this case, the physical emissions intensity of the activities insured within the sector.

Reductions in the physical emissions intensity of sector-based portfolios over time can reflect clients' efficiency improvements and/or a shift of risk capacity to lower-emitting companies within a sector of their portfolio, independent of business growth or decline.

The SDA method could support the decision-making process of re/insurers in relation to sector-based emissions reduction strategies when aligned with their lines of business.

4.1.2 Portfolio Coverage Approach (PCA)

Description:

The PCA is a portfolio alignment method, focused on portfolio companies' setting of SBTs. Targets can be set by sector for certain high emitting sectors within an asset class where applicable, or per asset class (sector-agnostic).

With this method, sector-agnostic engagement targets are set to have a proportion of portfolio companies establish their own SBTi-validated targets such that the proportion is on a linear path to 100% portfolio coverage by 2040. By using this method, FIs commit to engaging with their portfolio companies to drive the adoption of SBTs. The 2040 timeline is maintained to allow clients enough time to implement their target to ultimately achieve an economy-wide transition to net zero by 2050.

To define the coverage of the portfolio coverage target, financial institutions must use one of the weighting approaches described in the *SBTi FI Near-Term Guidance* (SBTi, 2022b).

This method does not require the measurement of portfolio companies' emissions attributed to the FI, on an asset class level, unless the weighting approach used is based on these emissions (most relevant weighting method).

How to derive the target:

1. Within a defined portfolio target boundary, FIs identify portfolio companies with valid SBTs (validated by SBTi).
2. The FI selects a weighting method within the seven methods proposed by SBTi to calculate the percentage of the FI portfolio covered by the target.
3. This percentage is the baseline for setting the target.
4. The target is set so that the percentage is on a linear path to 100% portfolio coverage by 2040.

How could the method apply to insurance underwriting portfolios?

Method applicability:

- This method appears to be directly applicable to commercial lines of business for insureds with the ability to set SBTs.
- Weighting methods would need to be adapted to the re/insurance context (e.g., using insured emissions or premiums, as appropriate).
- If a weighting method based on attributed emissions is selected, the portfolio boundary can be limited to commercial lines of business for which an attribution factor exists.

Materiality:

- This method is relevant to insurers and reinsurers as well as intermediaries such as brokers. Insurers and insurance brokers (compared to reinsurers and reinsurance brokers) have an added influence as they usually have direct contact with real economy companies, and therefore have direct influence to drive the adoption of SBTs.

Example of a portfolio coverage target: The re/insurer commits to screen 100% of emissions of commercial lines portfolio companies and will engage with companies emitting 30% of its underwriting portfolio emissions to set SBTi validated targets during the target period of 2023 to 2028.

Conclusion:

The SDA method is well suited to be implemented on portfolios with a relatively stable client base, as the increase in the proportion of companies with SBTs is the result of engagement with portfolio companies. Engagement with portfolio companies and the timeframe for these companies to get their SBTs validated can take at least a couple of years. High portfolio volatility can limit medium- to long-term engagement strategies.

The method is useful to scale up adoption of validated science-based emissions reduction targets in the wider economy, particularly given the global nature of value chains. Its key benefits include the simplicity of implementation, the easy monitoring of the performance against the target, and the possibility of aggregation across sectors and (sub)portfolios.

4.1.3 Temperature Rating Approach (TRA)

Description:

The TRA, as with the PCA, is a portfolio alignment method. Targets can be set by sector for certain high emitting sectors within an asset class where applicable, or per asset class (sector-agnostic).

For lending and investment, the TRA is used to determine the current temperature score of a portfolio based on the public emissions reduction targets of the borrower and/or investee companies. The method enables FIs to set targets to align their base year portfolio temperature score to a long-term temperature goal by engaging with portfolio companies to set ambitious targets.

The TRA can be thought of as an expansion of the PCA. It expands its scope by enabling FIs to assess the ambition of portfolio companies based on their public GHG reduction targets, as compared to only approved SBTs. Since PCA targets do not need to be validated by SBTi, this method allows for a broader engagement approach.

As for the PCA, the 2040 timeline is maintained to allow clients enough time to implement their target to ultimately align with a 1.5° pathway.

There is a range of methods available to calculate temperature rating. However, the SBTi currently only recognizes the temperature rating methodology co-developed by WWF and CDP for target submission. The future use of the TRA method is subject to SBTi review.

How to derive the target:

1. The first step is to collect targets from all portfolio companies with public targets.
2. A temperature score is then assigned for each disclosed target.
3. A company-level temperature score is then generated based on the temperature scores of the company's targets.
4. Where data is not available, a company would be given a default score of 3.2°C in the absence of an existing valid emissions reduction target.
5. Company temperature scores are aggregated using one of seven applicable weighting methods to derive the FI's portfolio temperature score.
6. Targets are set to align base year temperature score to the desired temperature outcome of 1.5°C for Scopes 1 and 2, and well below 2°C for Scopes 1, 2, and 3.
7. Base year temperature scores are produced at Scopes 1 and 2 levels, and at Scopes 1, 2, and 3 levels.
8. FIs will also calculate:
   - The percentage of portfolio emissions that are covered by targets and the percentage of portfolio emissions that are assessed using the default score; and/or
   - The percentage of assets that is covered by targets and the percentage of assets assessed using default scores.

How could the method apply to insurance underwriting portfolios?

The TRA is an extension of the PCA and may be applicable to insurance underwriting portfolios.

Example of a temperature rating target in the shipping sector: The re/insurer commits to align its Scopes 1 and 2, and Scopes 1, 2, and 3 portfolio temperature score from the shipping sector within its insurance underwriting portfolio from 3.2°C in 2021 to 2.3°C by 2030.

Additional information provided: 30% of the underwriting portfolio's GHG emissions (or premiums) are covered with valid targets, with the remaining 70% scored using default scores from insured companies with no valid targets.

Conclusion:

Since portfolio companies' TRA targets do not need to be validated by SBTi, this method can allow for a broader engagement approach.

Given that the method aggregates the temperature alignment of all companies into one overall portfolio temperature rating, it can also allow FIs to identify the biggest contributors on

a company/country/sector basis, as well as the calculation of forward-looking assessments such as the impact of potential portfolio changes.

The suitability of these approaches to insurance underwriting will be reviewed more in subsequent work.

4.2 Exploring Avenues for Additional and/or Alternative Methods

The previous sections briefly explored the applicability of the three established SBTi financial institution target-setting methods to insurance underwriting portfolios.

If deemed relevant after a more comprehensive review process, these methods could be adapted to insurance underwriting portfolios and integrated into SBTi's target-setting framework within a reasonable time frame so that re/insurers can use them for setting underwriting portfolio targets.

Separately, the SBTi is developing meta-criteria in another workstream to assess a wider spectrum of target-setting metrics and methods that could potentially be used to set near-, mid-, and/or long-term SBTs. In anticipation of the meta-criteria and given the peculiarities of insurance underwriting portfolios discussed above, additional and/or alternative methods and metrics that could potentially be used for insurance underwriting portfolios to complement the existing SBTi methods are briefly discussed below.

- **Methods on Climate-friendly Claims Management**:
  On balance, claims management has not been the primary focus of sustainability assessments of insurance business processes that could mitigate or avoid GHG emissions.

Some reasons for this could be:

  - There is limited knowledge on the potential impact of the claims management process in reducing emissions;

  - In many jurisdictions, re/insurers have a contractual obligation to put the policyholder back in the position they were before the claim happened, implying a limit of indemnity that cannot be exceeded, potentially limiting the use of climate-friendly claims settlement options (e.g., sustainable/green repairs or replacements) which may or may not be more costly;

  - Addressing emissions at claims management level could imply dealing with avoided emissions or "compared emissions" for which accounting methods are in early stages (Russel, 2019).

  However, the rapidly evolving environment shows that the costs of low-carbon or energy-efficient technologies and materials are decreasing, while knowledge around emissions associated with claims management is improving. Accordingly, there is an increasing number of re/insurers who are seeking ways to support climate change mitigation through the claims management process. Among others, these efforts have spanned across home insurance, commercial property insurance, and motor insurance, which all have great

potential in mitigating or avoiding emissions (Baranov, et al., 2023; Cline, Kamalapurkar, Sharma, & Canaan, 2023).

Potential methods and metric(s): Given the nascency of avoided emissions and emissions removals accounting methods (Russel, 2019; PCAF, 2022b) informing the materiality of claims management activities, a possible metric that could be considered for target setting may include the emissions profile of claims settled with a defined climate-relevant component. A taxonomy of climate-friendly claims management practices would likely need to be vetted to define acceptable climate-relevant components.

The vetting of such a taxonomy could potentially support the development of a method which quantifies the applicable attribution of emissions associated with claims management-related practices.

- **Metrics and Methods to Account for Climate Solutions:**
  As previously outlined, the insurance industry has an important role to play in scaling up re/insurance for climate solutions which support the development or the transfer of capital towards low- or zero-carbon or carbon-negative solutions. These include renewable or no-carbon energy, sustainable mobility, and nature-based solutions that secure and enhance carbon sinks. Many of these activities are not captured under emissions-based metrics, though they may be included in forthcoming portfolio alignment work.

  One challenge for implementing such a method is the uncertainty around the definition and quantification of ambition regarding climate solutions. SBTi's existing methods rely on science-based ambition defined in terms of emissions reduction (materialized by emission reduction pathways). This method would additionally require for ambition to be defined as the rate of change of deployment of re/insurance for climate solutions.

Potential metric(s): Metrics to assess the rate of change where re/insurers aim to increase either the revenue from climate-friendly product portfolios, or the proportion of products offering a positive emissions impact. Such measurement could be based on a taxonomy of climate-friendly re/insurance products.

Another metric could measure the emissions that are not emitted thanks to a selected set of activities. The main challenge here is the lack of an established accounting system for avoided emissions.

The SBTi expects to address these alternative and/or additional methods as part of the *SBTi Financial Institutions Net-Zero Insurance Standard (Underwriting Portfolios)* development process.

5. NEXT STEPS

Previous sections of this document outlined context and foundational concepts useful for the development of a future *SBTi Financial Institutions Net-Zero Insurance Standard (Underwriting Portfolios)*. This document provides a basis for discussion with re/insurance practitioners and other key stakeholders (e.g., insurance/financial regulators and supervisors, scientific and academic

community, civil society, and environmental organizations) interested in providing input to the future Standard, and more generally, interested in enhancing the insurance industry's efforts to support the transition to a net-zero emissions economy.

As a next step, the SBTi intends to review the applicability of existing internal target-setting methods for insurance underwriting portfolios. The SBTi's consultative and multi-stakeholder process to develop the Standard is expected to identify and assess alternative and/or additional methods which may complement or replace these existing methods.

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7. ANNEXES

Annex 1: Glossary

Asset class	A grouping of financial instruments that exhibit similar financial characteristics.
Attribution	In the context of this document, the share of total GHG emissions from insured companies that can be associated with insurance underwriting portfolios.
Avoided emissions	Emission reductions that the financed project produces versus what would have been emitted in the absence of the project (the counterfactual baseline emissions); avoided emissions are currently not included in SBTs.
Book	A book of business, in the context of insurance, is a database or "book" that lists all of the insurance policies the insurance company has written. As a client relations management tool, it helps insurers keep track of all of their policyholders, their subsequent coverage obligations, and make relevant business decisions.
Class	The classification of a set of similar risks or operations specifying the activity an insurance company may carry out under a license.
Commercial lines	Commercial lines insurance refers to insurance cover for businesses that protects them from potential losses that they cannot afford to cover. Commercial lines thereby allow businesses to operate when it otherwise might be too risky. Commercial lines include premise and motor insurance as well as potential business risks such as professional negligence, director and officers' liability, etc.
Facilitated emissions	Emissions associated with activities that in some way assist in the financing of companies, projects, or other actors or activities that result in emissions, e.g., insurance or reinsurance services, providing access to financing through the capital markets, or provide other financial services to mitigate operational risk and/or make a corporate venture economically feasible. These are emissions that may not be directly connected to an investment/loan that is on the balance sheet of the FI.
Facultative reinsurance	Reinsurance for individual risks/policies on an offer-and-acceptance basis, where the insurer has the option to cede the risk/policy and the reinsurer has the option to either accept or reject the offer.
Financed emissions	Emissions associated with an FI's financial flows that use its own funds for lending or investing, such that the loans or investments are accounted for as an asset on its balance sheet.

Financial Institution	The SBTi defines FIs as companies whose business involves the dealing of financial and monetary transactions, including deposits, loans, investments, and currency exchange. If 5% or more of a company's revenue or assets comes from activities such as those described above, they are considered to be FIs. Development FIs are currently out of project scope.
Greenhouse gas (GHG) emissions	The seven gasses covered by the United Nations Framework Convention on Climate Change (UNFCCC) – carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF_6), and nitrogen trifluoride (NF_3).
Insurance agent	Agents act as intermediaries, providing potential buyers with information from the insurance company or companies that they represent. They have contracts with insurers that specify what policies they are allowed to sell and how much money they can expect to make from selling these policies. ○ Captive agents work for one insurance company either full-time or as independent contractors. They may receive operational support such as an office or an administrative staff from the insurance company that hires them. They often get referrals and leads on potential clients from the insurer as well. ○ Independent agents work with a number of insurers and since they are not tied down to just one company, they are often able to offer a wider range of insurance products. This means that they are able to offer a wider distribution network for insurance companies than captive agents.
Insurance broker	Insurance brokers are intermediaries who negotiate insurance on behalf of clients in exchange for a fee to help the clients find the insurance policy that best suits their needs. Brokers represent the clients in the negotiations and can therefore not bind coverage on behalf of insurers.
Insurance carrier	An insurance carrier is a company that creates and manages insurance policies and is typically the financial resource behind them. It is the re/insurance company that carries the insurance.
Insurance service provider	An insurance service provider is a downstream provider of services to insurance carriers. They can include motor assessors, insurance investigators, loss adjusters, insurance surveyors, risk managers, CPAs, actuarial companies, claims settling agents, and others.
Insured emissions	Emissions associated with the insurance industry's underwriting portfolios, including claims.

Line of business	An insurance line is a type of insurance business that is grouped according to the reporting categories used when filing an insurer's statutory reports.
Managing general agent	A managing general agent (MGA) is a specialized type of insurance agent/broker that, unlike traditional agents/brokers, is vested with underwriting authority from an insurer.
Marketplaces	Insurance marketplaces, such as Lloyd's of London, consist of members who operate as syndicates to provide insurance coverage for businesses, organizations, and individuals. The syndicates specialize in different types of risks, and each syndicate decides which risks to insure. The main purpose of an insurance marketplace is to facilitate transactions between insurance buyers and sellers.
Meta-criteria	Rules that determine the eligibility of methods and minimum requirements for their construction and inclusion for SBTi applications. The meta-criteria will be used to identify and create a list of eligible methods that can be incorporated for different applications in the FINZ Standard.
Method	Approach determining how a metric should change to be consistent with a given temperature outcome, and can be aggregated across different levels for FIs. Used to determine the ambition levels for how specific financial flows need to change over time (e.g., Sectoral Decarbonization Approach for lending to high emitting sectors).
Metrics	Measurable data points that indicate an organization's impact on climate. Can be based on current/historic or future projections. Metrics are used to track and report the progress of an FI's overall portfolio alignment and portfolio emissions, e.g. to track the % of investments that are 1.5°C aligned.
Net-zero emissions	Net-zero emissions are achieved when anthropogenic emissions of greenhouse gasses to the atmosphere are balanced by anthropogenic removals over a specified period.
Net-zero for financial institutions	SBTi proposes that being compatible with the global goal of achieving a state of net-zero emissions consistent with warming to 1.5°C involves two conditions for financial institutions: 1) Align all financing with pathways that limit warming to 1.5°C with no or limited overshoot, and 2) Neutralize residual emissions through the financing of activities that permanently remove an equivalent amount of atmospheric carbon dioxide.

Personal lines	Personal lines insurance refers to any kind of insurance that covers individuals against loss that results from death, injury, or loss of property. Personal insurance lines generally protect people and their families from losses that they couldn't afford to cover on their own. These insurance lines make it possible to drive a car and own a home, etc., without risking a financial ruin.
Pooling of risks	Combining individual risks in such a way that the aggregate risk is reduced.
Portfolio	The entirety of the insurance contracts of one or different insurance classes concluded by one insurer.
Portfolio target boundary	A portfolio target boundary includes all "in scope" Scope 3 Category 15+ emissions (see definition further below). Scopes 1 and 2 and (if appropriate) Scope 3 Categories 1-14 in the Operational Boundary of the organization are to be covered by the *SBTi Corporate Net-Zero Standard*.
Retrocession	The process by which a reinsurance company purchases an insurance scheme from another reinsurance company to cover its risks.
Science-based reduction target	Targets adopted by companies to reduce greenhouse gas emissions are considered "science-based" if they are in line with what the latest climate science says is necessary to meet the goals of the Paris Agreement to limit global warming to well below 2°C above pre-industrial levels and pursue efforts to limit warming to 1.5°C.
Scope 1 emissions	Emissions from operations that are owned or controlled by the reporting company.
Scope 2 emissions	Emissions from the generation of purchased or acquired electricity, steam, heating, or cooling consumed by the reporting company.
Scope 3 emissions	All indirect emissions (not included in Scope 2) that occur in the value chain of the reporting company, including both upstream and downstream emissions.
Scope 3 Category 15 (investments) emissions	This category includes Scope 3 emissions associated with the reporting company's loans and investments in the reporting year, not already included in Scope 1 or Scope 2.
Securitization	A financial technique which consists of transferring insurance risks to investors operating on the international financial markets. This transfer is carried out by gathering these risks and turning them into debt securities on the capital markets.
Treaty reinsurance	Reinsurance that covers broad groups of risks/policies on an automatic or obligatory basis. Once the treaty reinsurance arrangement is finalized, including the categories of risks/policies covered, the insurer must cede all

	risks/policies that fall within the terms and conditions of the treaty, and the reinsurer must accept all of them.

Annex 2: Acknowledgements and List of Reviewers and United Nations Environment Programme (UNEP) Contributors

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Annex 3: Description of Selected Initiatives

The SBTi recognizes that the initiatives highlighted in this paper are EU and North America centric and that initiatives may exist in other parts of the world which may not be highlighted. We welcome additional collaboration.

Initiative	Description
UN Secretary-General's High-Level Expert Group on Net-Zero Emissions Commitments of	High-Level Expert Group (HLEG) was created to develop stronger and clearer standards for net-zero emissions pledges by non-State entities. Ten recommendations for credible pledges are laid out in the report "Integrity Matters: Net-zero Commitments by Business,

Non-State Entities (HLEG)	Financial Institutions, Cities and Regions". The HLEG standard now supersedes RTZ criteria, which will feature best practices.
UN Framework Convention on Climate Change (UNFCCC) Recognition and Accountability Framework for Non-State/Party Stakeholder Climate Action	The UNFCCC Secretariat Recognition and Accountability Framework was launched with the aim to recognize and celebrate voluntary non-Party stakeholder contributions and progress toward the goals of the Paris Agreement. The framework sets the principles of engagement, governance, and data management to achieve the aim of recognizing leadership and ensuring greater accountability. The scope of this framework covers individual entities as well as voluntary alliances, coalitions, and initiatives and their members.
UN Race to Zero campaign	Race To Zero is a global campaign to rally leadership and support from businesses, cities, regions, and investors for a healthy, resilient, zero carbon recovery that prevents future threats, creates decent jobs, and unlocks inclusive, sustainable growth. The objective of the campaign is to build momentum around the shift to a decarbonized economy, where governments must strengthen their contributions to the Paris Agreement.
UN Global Compact: Business Ambition for 1.5°C	Aims to raise the ambition on climate action and push companies to set science-based targets aligned with 1.5°C as opposed to 2°C or well-below 2°C. The campaign successfully helped bring on many signatories to the SBTi and will effectively merge into the SDG Movements Campaign (name TBC) that will be launched during the UN High-Level Political Forum in mid-July 2023.
Glasgow Financial Alliance for Net Zero (GFANZ)	Global coalition of leading financial institutions committed to accelerating the decarbonization of the economy. GFANZ has worked to develop the tools and methodologies needed to turn financial institutions' net-zero commitments into action.
Net-Zero Insurance Alliance (NZIA)	The NZIA was founded to help re/insurers unilaterally and independently transition their respective insurance and reinsurance underwriting portfolios to net-zero emissions by 2050 in order to contribute to the implementation of the Paris Agreement. The NZIA has delivered the foundational net-zero insurance concepts, metrics, methods, and frameworks with its partners (e.g. NZIA white paper on net-zero insurance, NZIA-supported PCAF Insurance-Associated Emissions Standard, NZIA Target-Setting Protocol).
Poseidon Principles for Maritime Insurance	Global framework for assessing and disclosing the climate alignment of insurers' hull and machinery portfolios.

Chief Risk Officers (CRO) Forum	A group of Chief Risk Officers from the insurance industry that focuses on developing and promoting industry best practices in risk management. The publication "Carbon footprinting methodology for underwriting portfolios" is an industry-wide effort to summarize options, challenges and opportunities that re/insurance companies face in the process of assessing the carbon footprint of their liability portfolios.
Partnership for Carbon Accounting Financials (PCAF) – Insurance-Associated Emissions (IAE) Standard	A Global GHG Accounting and Reporting Standard for measuring and disclosing emissions associated with financial activities e.g. insurance underwriting portfolios (i,e., Insurance-Associated Emissions Standard).
Network for Greening the Financial System (NGFS)	A group of Central Banks and prudential supervisory authorities contributing to the development of environment and climate risk management in the financial sector, and to mobilizing mainstream finance to support the transition toward a sustainable economy. Developed the NGFS Climate Scenarios and publishes a stock-take on transition plans.
Transition Pathway Initiative (TPI)	An independent, authoritative source of research and data on the progress of the financial and corporate world in transitioning to a low-carbon economy.
Carbon Risk Real Estate Monitor (CRREM)	EU-funded research project that aims at developing a tool that allows investors and asset owners to assess the exposition of their assets to stranding risk based on energy and emission data and the analysis of regulatory requirements.
Intergovernmental Panel on Climate Change (IPCC)	UN's body for assessing the science related to climate change. The IPCC provides regular assessments of the scientific basis of climate change, its impacts and future risks, and options for adaptation and mitigation.
Science Based Targets Initiative (SBTi) - Insurance Underwriting Portfolios * *preliminary*	Currently developing the SBTi *Financial Institutions Net-Zero Insurance Standard* (Underwriting Portfolios) to help FIs set SBTs to transition their insurance underwriting portfolios to net-zero by 2050.
Transition Plan Taskforce (TPT)	Establishing the best practice for private sector transition plans and developing related guidelines and templates setting out generic/sector-specific disclosures and metrics. The taskforce should inform the implementation of the UK's Sustainability Disclosure Requirements and influence international standard setting by establishing robust criteria and expectations for

	science-based transition plans. TPT has established a sandbox in which users can pilot and evaluate their transition plans and the related templates, recommendations, and metrics.
ClimateWise	Growing global network of leading insurance industry organizations which supports the insurance industry to better communicate, disclose, and respond to the risks and opportunities associated with the climate risk protection gap.
Lloyd's Sustainable Markets Initiative (SMI) Insurance Task Force (ITF)	Committed to supporting the global transition towards a more resilient and sustainable future through five key initiatives: Driving insurance product and services innovation; Implementing sustainable processes across the insurance supply chain; Establishing a public-private disaster resilience, response, and recovery framework; Developing a framework for accelerating and scaling sustainable investment.
International Association of Insurance Supervisors (IAIS)	The global standard-setting body responsible for developing and assisting in the implementation of principles, standards and guidance as well as supporting material for the supervision of the insurance sector.
UNDP-convened Sustainable Insurance Forum (SIF)	SIF is the platform for insurance supervisors and regulators who want to address sustainability issues impacting consumers, firms and markets in their jurisdictions, and who have an interest in collaborating with their peers to share knowledge and identify best practices.
International Sustainability Standards Board (ISSB)	Standard-setting body established under the IFRS Foundation, whose mandate is the creation and development of sustainability-related financial reporting standards to meet investors' needs for sustainability reporting. IFRS S1: General Requirements for Disclosure of Sustainability-related Financial Information. IRFS S2: Climate-related Disclosures.
Task Force on Climate-related Financial Disclosures (TCFD)	Develops recommendations on the types of information that companies should disclose to support investors, lenders, and insurance underwriters in appropriately assessing and pricing and set of risks – related to climate change.
Assessing Low Carbon Transition (ACT) Initiative	Provides a forward-looking integrated framework that supports companies to align their transition strategies with low-carbon pathways and enables benchmarking against advanced, science-based metrics. SBTi only assesses targets whereas ACT is a comprehensive assessment of all aspects of a company's transition to low-carbon readiness. ACT's target indicators are conceptually aligned with SBTi approaches.

Insure Our Future Global	Global campaign of NGOs and social movements that hold the insurance industry accountable for its role in the climate crisis. Developed an annual scorecard on insurance, fossil fuel, and climate change in which they analyze 30 leading primary insurers and reinsurers, assess their policies on insurance and investing in coal, oil, and gas.
Willis Tower Watson - Climate Transition Pathways (CTP)	Developed an accreditation framework that provides insurance companies and financial institutions with a consistent approach to identifying which organizations have robust transition plans aligned to the Paris Agreement.
Rocky Mountain Institute (RMI) Climate Finance	Helping the financial sector turn its climate commitments come into reality through 3 market levers: 1) Policy: Enabling regulators to send clear and robust signals to the financial sector, 2) Technology: Accelerating commercial-scale financing of new low-carbon technologies, and 3) data Transparency: Provide decision-useful information to and about the financial sector.