Net zero insurance: concept, target setting and methodology

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Agenda

- **Introduction and net zero concepts (Jérôme)**
- Summary of NZIA target setting protocol (Ben)
- Summary of PCAF measurement methodology (Pierre)

What is sustainable finance

- Sustainable finance takes into account **longer-term** Environmental, Social and Governance (**ESG**) considerations

Finance = irrigation system of the physical economy

Credit | Investment | Insurance

Raw materials | Manufacturing | Services

- Simplified: financing & insuring sustainable economic activities
- In a climate context: **financing & insuring low-emissions activities**

Swiss policy & regulatory context

October 2017	Switzerland ratifies the 2015 **Paris Agreement**, committing to keep a global temperature rise this century well below 2 degrees above pre-industrial levels.
August 2019	The Federal Council decides that Switzerland would aim to reduce its greenhouse gas (GHG) emissions to **net zero by 2050** and starts drawing up a long-term climate strategy.
June 2021	The **CO2 Act is narrowly rejected** by popular referendum.
November 2021	The Federal Council recommends **financial institutions to join international net zero alliances**.
November 2022	The Federal Council adopts **mandatory climate disclosures for large Swiss companies**, with entry into force in 2024 and binding TCFD implementation.

What does net zero mean?

- Carbon neutral: “*carbon neutrality means purchasing carbon reduction credits equivalent to emissions released. It does not feature an explicit requirement for emissions reduction to have taken place, nor does it always include greenhouse gases other than CO2*”

more requiring

- Net zero: “*the net zero concept goes further than carbon neutrality as it requires **reducing emissions as much as possible before balancing any residual emissions** through carbon removal or carbon offsetting. Net zero also considers greenhouse gas emissions overall and sets a target for **all emissions** in an organisation’s value chain.*”

Definitions sourced from the International Actuarial Association glossary

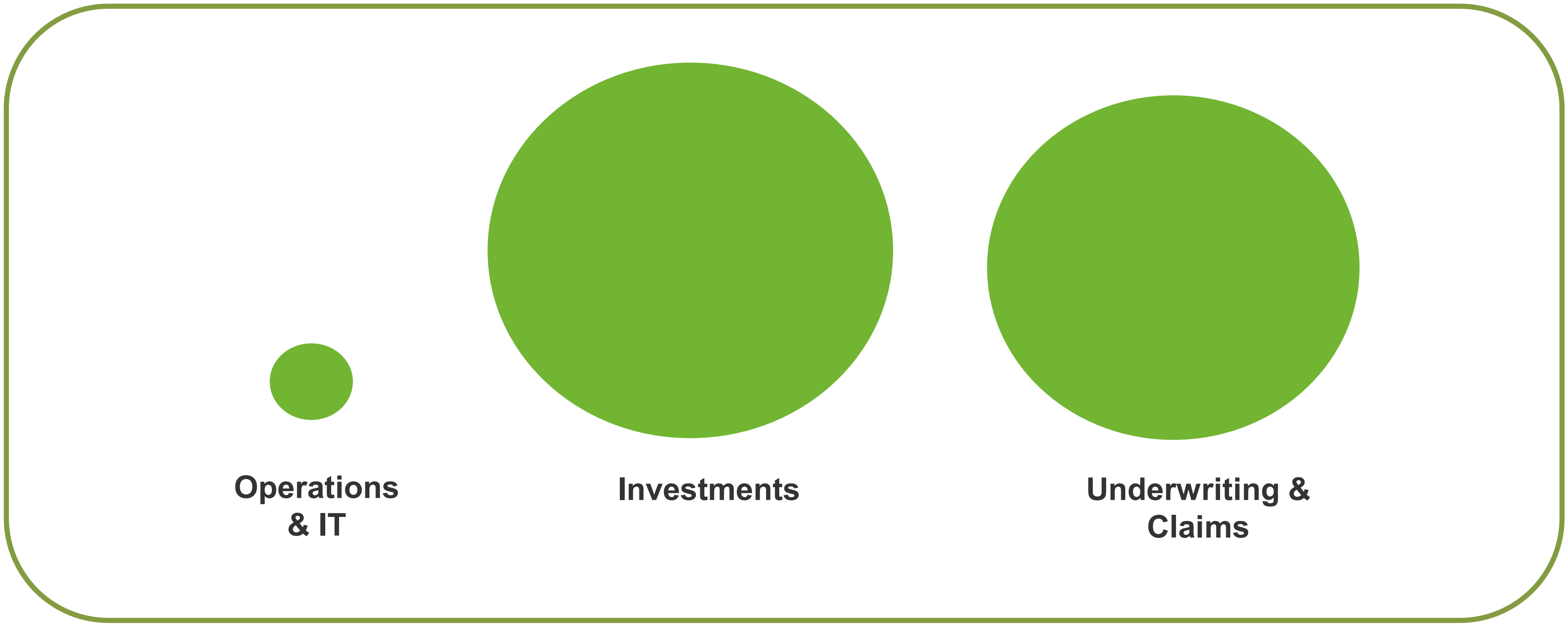
Scopes for greenhouse gas emissions

- Emission categories according to GREENHOUSE GAS PROTOCOL

Category	Type of emissions	Examples
Scope 1	Direct emissions from own operations or controlled sources	Company facilities, company vehicles
Scope 2	Owned indirect emissions from the generation of purchased electricity, steam, heating and cooling for own use	Purchased electricity
Scope 3	All other indirect emissions that occur upstream and downstream in the value chain (15 sub-categories)	• Category 1: Purchased goods and services • Category 4 & 9: Transport and distribution • Category 5: Waste generated • Category 6: Business travel • Category 15: investments • Category 15: insurance contracts (*optional*)

Insurers and greenhouse gas emissions

- For financial companies (banks, insurers, asset managers, pension funds…), own operations are only a fraction of their total greenhouse gas emissions
- Scope 3 GHG emissions, especially category 15 (**what they finance & insure**), are by far the largest part of the total GHG emissions they facilitate



Net zero initiatives from the financial sector

- Increasing awareness from regulators and supervisors
  - Mandatory sustainability reports and climate **disclosures (**e.g., TCFD)
  - Recommendations to voluntarily exit coal (e.g., California, France)

- Several net zero alliances under the umbrella of GFANZ Glasgow Financial Alliance for Net Zero
  - Member companies pledge to decarbonize their investments and/or insurance portfolios and reach net zero by 2050 or earlier
  - Net Zero Asset Owners Alliance (2019)
  - **Net Zero Insurance Alliance** (2021)

Fossil fuel policies & exclusions

- An increasing number of companies have started phasing out financing and insurance for the dirtiest fossil fuels (e.g., coal, tar sand, arctic drilling etc.)
- Such exclusions are **one aspect** of an overall net zero strategies

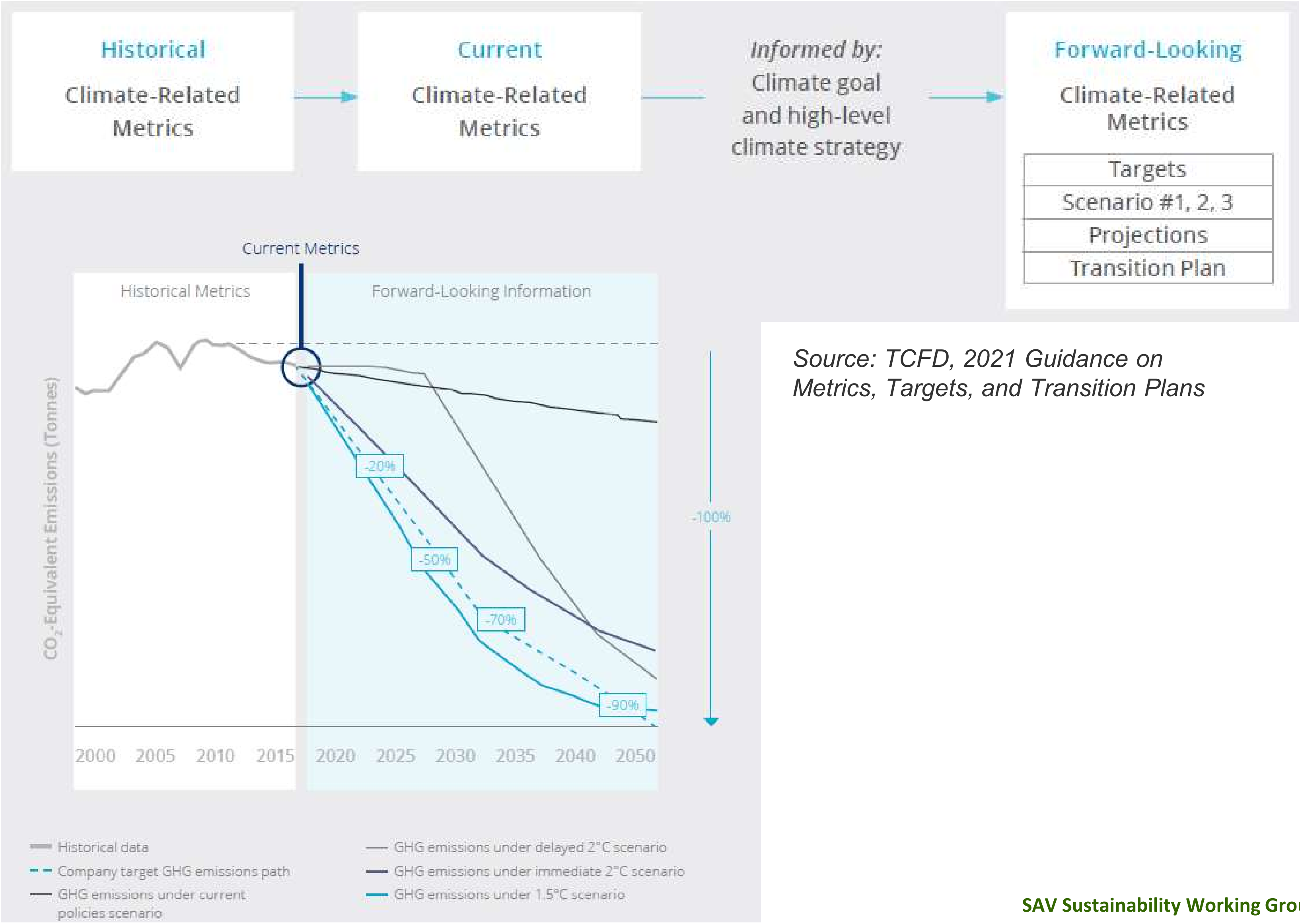
source: Insure Our Future, 2022 scorecard

Taskforce for Climate-related Financial Disclosures (TCFD)

- 2015 – TCFD founded by G20, central banks and Financial Stability Board to "*develop voluntary climate-related financial disclosures useful to investors and others to better assess the impact of climate-change on a company*"
- 2017 – TCFD initial framework release and recommendations
- 2021 – Consultation + 4th annual report including detailed guidance
- TCFD-aligned disclosure requirements already adopted in an increasing number of countries (including Switzerland)
- Four-pillar structure:

Governance	Strategy	Risk Management	Metrics and Targets
Disclose the company's governance around climate-related risks and opportunities.	Disclose the actual and potential impacts of climate-related risks and opportunities on the company's businesses, strategy, and financial planning where such information is material.	Disclose how the company identifies, assesses, and manages climate-related risks.	Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material.

Metrics, targets and transition plans



Source: TCFD, 2021 Guidance on Metrics, Targets, and Transition Plans

In practice

- Committing to net zero?
- Setting specific measurable goals?
- Measuring progress?

➢ Net zero alliance membership
➢ Net zero target-setting protocols
➢ Carbon accounting standards

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NZIA: Net zero Insurance Alliance

The NZIA is an initiative to establish a methodology which encompasses a broad scope of re/insurance portfolios with decarbonisation targets to net zero by 2050.

Through a science-based pathway the global warming should be limited according to the Paris Agreement.

Commitments by members:

- Publish individual near-term targets (no later than 2030), within 6 months of protocol publication (July 2023) or joining of NZIA.
- Independent annual public reporting on progress.
- Publish interim targets every 5 years in 2035, 2040, and 2045.

Science Based Target Initiative (SBTi)

The objectives of NZIA's Target-Setting Protocol are complementary to the work of the Science Based Target Initiative (SBTi).

Since October 2022 SBTi and NZIA are partnering to co-develop target setting methods suitable for re/insurance underwriting.

This protocol (January 2023) is a first step in an iterative process and will be refined in the future (e.g. target setting validation through third-party).

The Target Setting Protocol

Key elements of the Protocol

- Non-binding guidance to NZIA members on how to set science based targets.
- Structuring the targets into three main categories (emission reduction, engagement, other).
- Guidance on what is mandatory, expected and optional.
  - **Shall:** mandatory
  - **Should:** strongly recommended
  - **May:** optional
- Give time-line structure on reporting.

by 2023: at least one target type
by 2024: at least one in each category

General scope of the Protocol

Emissions in scope

- all relevant types of **Greenhouse gases (GHGs)**
- **Re/insurer's emissions:** Scope 3 insurance-associated emissions (IAE), underwriting.
- **Re/insured's emissions:** Scope 1, 2 and **should** also cover Scope 3 of insured (clients) emissions.
- **Emission accounting:** use recognised IAE accounting approach (e.g. PCAF).

General scope of the Protocol

Lines of Business (LoBs) in scope

Segment	Lines of business (LoB)	In /out of "General scope"
Commercial insurance (directly insured and facultative reinsurance covers)	**Property** (e.g. Fire, Multi-peril)	In scope
	Liability/Casualty (e.g. General liability, Product liability, Product recall, Environmental	In scope
	Commercial motor (all lines)	In scope
	Marine (liability and hull)	In scope
	Aviation (liability and hull)	In scope
	Agriculture (excluding government schemes/arrangements)	In scope
	Trade credit (insurance of credit risk for sold goods) and political risk-primary insurance only	In scope
	Structured trade credit (insurance of credit risk for bank loans, mortgages or other financial	Currently out of scope
	Surety	Currently out of scope
	Engineering lines: Construction all-risks, Erection all-risks only	Currently out of scope
	All other Engineering lines (e.g. Machinery breakdown, Electronic equipment)	In scope
	Corporate life and pensions, Personal accident	Currently out of scope
	Other/Special lines (e.g. Financial lines D&O, Workers' comp.)	In scope
Statutory lines of business		In scope (subject to applicable laws, rules and regulations)
Public entities	Insurance contracts purchased by public entities (e.g. government agencies, municipalities, government insurance arrangements)	Currently out of scope
Personal lines	**Motor** (all lines)	In scope
	Liability	Currently out of scope
	Property	Currently out of scope
	Other personal lines (e.g. Travel assistance, Legal assistance, Pet)	Currently out of scope
	Life and Health	Currently out of scope
Treaty reinsurance	**All LoBs**	Currently out of scope

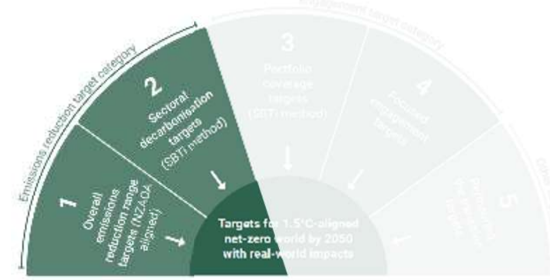
Limitations

Data quality & availability limiting the scope

- Treaty reinsurance is currently excluded
- Some commercial lines with high complexity are currently excluded, even though they may be linked to material emissions (e.g. construction)
- All personal lines except motor are currently excluded (questionable, given that commercial property and liability lines are included).

It is expected that in a later version of the protocol more lines of business will be included.

Target types (Emission reduction)



Members are free to select target category.

Overall emission reduction

Using a global/economy-wide proxy to guide ambition level e.g. IPCC AR6 pathway (34-60% from 2019 to 2030).

(leaves flexibility, not as precise)

Sectoral decarbonisation approach (SDA)

Define a decarbonisation pathway of re/insurance portfolio on a sector level.

(Demands more specific data (client and external organisations), more accurate)

Target types (Engagement)

It is vital for re/insurers to engage with clients on their net zero transition to advance their own net zero transformation.

Portfolio coverage approach (PCA)

Aims to increase the number of clients with own SBTs in line with ultimate target of 100% by 2040.

(suitable for commercial client portfolios)

Focused engagement

With specific clients regarding their decarbonisation plans.

(suitable for commercial or personal lines)

Target types (Other) and Disclosure

Other / Insure the transition

This target type is introduced to address the opportunities of the net zero transition.

Re/insurers are motivated to engage actively in avoiding, reducing or removing emissions (e.g. sustainable claims options, usage-based coverage, negative-emission tech., etc.).

Public disclosure

Individual public disclosure of targets and boundaries along side with rationale.

Starting in 2024 an aggregated progress report will be produced.

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Financing vs. insuring

- **Re/insurance proceeds ≠ investment or loan:** the right to proceeds is contingent on the occurrence of a re/insured event. Specific claims payments are intended for recovery, and not expansion.

- **Re/insurance creates no ownership or transfer of equity/loan** and results in no financial or direct operational control.

- **The client chooses the re/insurer** (often introduced through an intermediary such as a broker/agent) while investors choose the company in which to make an investment.

Financed & insured emissions

Financial activities which contribute to emissions under the GHG Protocol's definition:

- **Lending activities,** most relevant to banking and lending sectors
- **Investment activities,** most relevant to insurance, fund management and asset-owning sectors, as well as some banks
- **Underwriting activities,** most relevant to the insurance sector

Assets
Part of scope 3

Enabled business, reported as supplementary note in Scope 3 emissions

PCAF: Partnership for Carbon Accounting Financials

- Until recently, there was no globally accepted standard for measuring and reporting emissions associated with re/insurance.
- PCAF (a Dutch-based industry-led partnership) developed the Global GHG Accounting and Reporting Standard for Insurance-Associated Emissions.

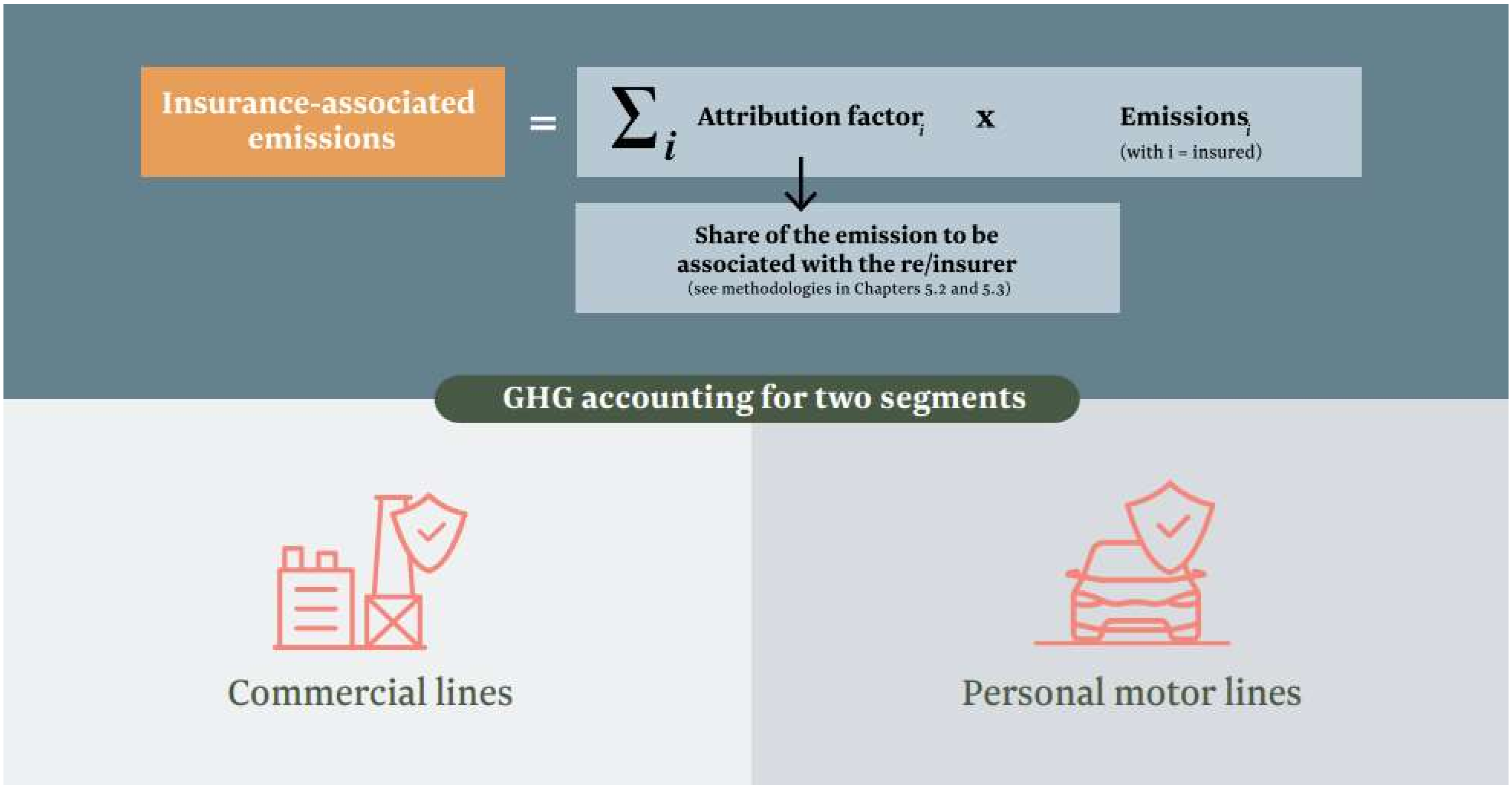
- The November 2022 “Insurance-Associated Emissions” standard is the first version of the Standard, providing methodological guidance for the measurement and disclosure of GHG emissions.
- Like NZIA, this first iteration currently excludes certain lines of business, such as treaty reinsurance and construction.

Summary of PCAF methodology

Financed emissions	Insurance-associated emissions
$\begin{matrix} Emissions\ of \\ the\ issuer \end{matrix} \times \frac{Invested\ amount}{Enterprise\ Value}$ Investors should account for emissions proportionally to their share of financing the company	$\begin{matrix} Emissions\ of \\ insured\ client\ or\ assets \end{matrix} \times \begin{matrix} Attribution \\ factor \end{matrix}$ Insurers should account for emissions they enable and influence through the insurance contract

Analogy

Insurance-Associated Emissions calculation



Insurance-Associated Emissions calculation

Commercial lines	Personal motor lines

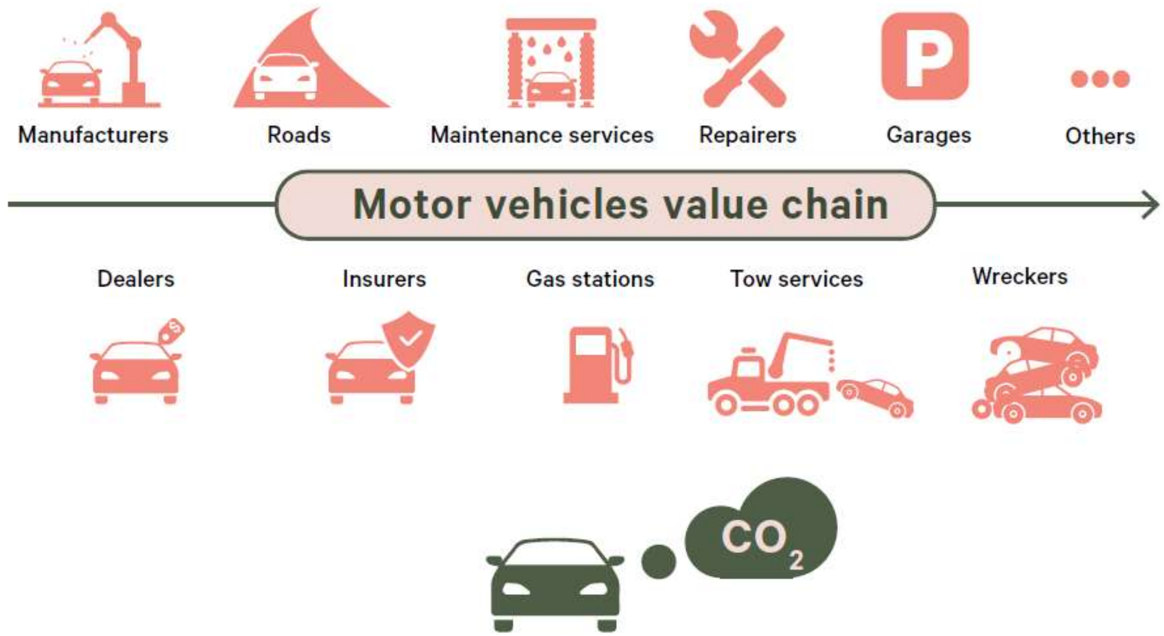
$$\text{Attribution factor}_i = \frac{\text{Re/Insurance premium}_i}{\text{Customer revenue}_i}$$

$$\text{(Industry) Attribution factor}_p = \frac{\text{Insurance industry's total premium from the motor line of business}}{\text{Total costs associated with vehicle ownership of all vehicles}}$$

or (for cases where risk carriers are unable to use the industry attribution factor above)

$$\text{(Individual) Attribution factor}_p = \frac{\text{Insurer specific premium from the motor line of business}}{\text{Total costs associated with vehicle ownership of the portfolio P vehicles}}$$

Deep Dive: Personal Motor



Insurance-associated emissions = Attribution factor of portfolio × Emissions of insured vehicles within portfolio P

$$(Industry)\ Attribution\ factor_p = \frac{Insurance\ industry's\ total\ premium\ from\ the\ motor\ line\ of\ business}{Total\ costs\ associated\ with\ vehicle\ ownership\ of\ all\ vehicles}$$

Deep Dive: Personal Motor

Emissions of insured vehicles:

- Option 1: actual vehicle-specific emissions
- Option 2: estimated vehicle-specific emissions and local distance driven averages
- Option 3: estimated vehicle-unspecific emissions and continental distance driven averages, when make and model are unknown

Limitations

- **Double counting insurance and asset management activities**
- **Double counting across emission scopes** e.g. scope 1 & 2 when insuring both power-generating companies and their clients
- **Double counting between different primary insurers &/or reinsurers** - can be addressed by adjusting the attribution factor
- **Market cycles** (volatility in the attribution factor)
- Only two **lines of business in scope** (same as NZIA)

Future improvements

Scope: the 2nd version of the Standard aims to include treaty reinsurance.

Data: The Climate Data Steering Committee recommends that the foundational data needed to facilitate and scale the transition be made openly available to all. This database (**Net Zero Data Public Utility**) should include in its first phase of development:

- Company and financial institution-level data for CO2e emissions
- Transparently reported net-zero targets that also detail the specific actions intended to reach net zero
- Openly accessible statistical classification information and an accessible user interface.

In conclusion – Benefits of IAE measurement

Business Goal 1	Business Goal 2	Business Goal 3	Business Goal 4
Create transparency for stakeholders	Manage climate-related transition risks	Develop climate-friendly products	Develop and set climate targets

Measurement of insurance-associated emissions

- Disclosure may become mandatory in the future
- Gives investors & management a better picture of business impact on climate

- Anticipation: introduction of carbon prices and regulations may impact the business
- Mitigate reputational risk

- Re/insurers are equipped with a metric that can help track absolute emissions year over year
- PCAF Financed Emissions Standard aligns with the Science Based Targets initiative's

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Thank you for your attention

Any question?