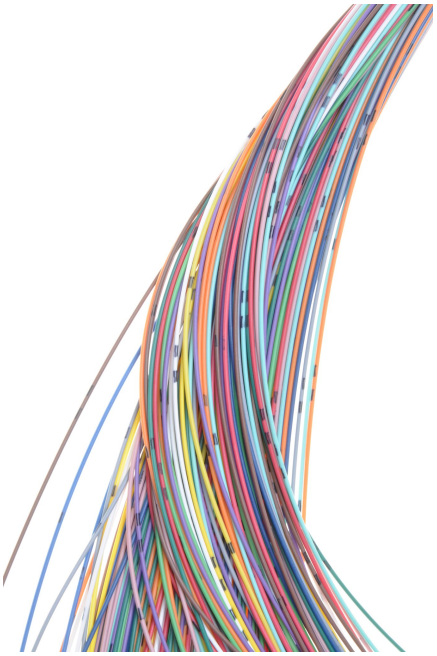

INSURANCE ASSOCIATED EMISSIONS

Recommendation 11/2025

Measuring Insurers and Reinsurers emissions to better assess their contribution to global economy decarbonization

Les Ateliers du Futur

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1. Introduction

Greenhouse gas emissions from insurers represent a major climate impact arising from three areas of business: their investments, which fuel the economy, their insurance coverage, which secures economic activity, and their claims management which influences choices in repair or reconstruction. Measuring these emissions is essential to track their environmental performance.

The UNEP FI's Forum for Insurance Transition (FIT)[1], bringing together major insurance players globally, has confirmed that the transition to net-zero requires a holistic approach where insurers simultaneously use their three levers - underwriting, claims, and investment - to steer the real economy toward practices compatible with limiting warming to 1.5°C.

Australian P&C insurers, within the framework of the Insurance Council of Australia [2](ICA), have revealed that emissions related to compensated claims reach a monetary carbon intensity (Kg CO2-Eq/$ compensated) of 15%. By comparison, that of assets invested by French insurers is around 5%. This highlights the critical importance of this hitherto underestimated lever.

This reality requires the development of a robust and harmonized methodology. While the GHG Protocol covers financial investments [3] and the Partnership for Carbon Accounting Financials (PCAF) proposed in November 2022 an approach for insured emissions [4]centred on underwriting, these frameworks remain incomplete regarding claims management.

This recommendation stems from the research conducted by Les Ateliers du Futur and aims to address these methological gaps. It updates the versions issued in 2024, following in-depth work carried out in collaboration with European consulting and insurance firms.

This recommendation conveys Les Ateliers du Futur's call to insurers and reinsurers to broaden and enhance the management of their impact, in a context where Europe and the rest of the world lag the objectives of the Paris Agreement.

Les Ateliers du Futur is an NGO acting for the climate by mobilizing companies of all sizes and sectors to decarbonize human activities. It drives awareness, challenges business leaders, and provides training on transition issues while contributing to the development of impactful standards and public policies.

[1] https://www.unepfi.org/industries/insurance/un-forum-launches-first-of-its-kind-global-transition-plan-guide-for-insurance-underwriting-portfolios/

[2] https://insurancecouncil.com.au/wp-content/uploads/2024/12/FINAL_ICA_Climate-Change-Roadmap-2024.pdf

[3] https://ghgprotocol.org/corporate-value-chain-scope-3-standard

[4] https://carbonaccountingfinancials.com/files/downloads/pcaf-standard-part-c-insurance-associated-emissions-nov-2022.pdf

2. Lines of business operated by insurance and reinsurance companies

2.1 Life insurance, savings, retirement and protection

Life insurance transforms savings into long-term investments, offering returns and protection guarantees. Its carbon impact comes essentially from asset management representing considerable amounts.

2.2 Non-life insurance and health

These lines cover the risks of individuals, professionals and businesses - property damage, civil liability, personal protection, securing the exercise of economic activities. They provide the insured party:

- Compliance with an insurance obligation and/or the peace of mind linked to a risk transfer enabling or facilitating ownership and/or use of insured property and the exercise of insured activities, and
- In the event of a claim, compensation for damage suffered or caused accompanied, most often, by a service, for example assistance, facilitating the management of this circumstance.

Beyond compensation, they include repair services directly influencing client choices.

2.3 Reinsurance

Reinsurance, by transferring part of the risks underwritten by primary insurers to specialized actors, multiplies the carbon influence levers of the sector while complexifying the attribution of emissions between ceding companies and reinsurers, requiring distribution mechanisms that faithfully reflect the economic sharing of risks and investment decisions.

3. Activities covered by this recommendation

This standard covers the two major activities of insurers and reinsurers feeding their downstream scope 3:

Underwriting (underwritten emissions)

Coverage securing economic activities, the insurer and reinsurer becoming stakeholders in their carbon footprint during the guarantee period.

Claims (compensated emissions)

Management determining repair and replacement modalities, critical moment for steering toward low-carbon solutions.

Note: Consulting, distribution and other functions that are neither technical nor financial, internal or outsourced, which fall under the classic GHG Protocol standards are not addressed here.

4. Classification of emissions according to the GHG Protocol

Classification table

Type of emissions	Description	GHG Protocol Category	Character
Underwritten emissions	Insurance coverage	Category 11	Variable*
Compensated emissions	Claims management	Category 11	Mandatory

*Mandatory for emissive sectors and certain lines

5. Fundamental principles

5.1 Temporal coherence

Emissions are attributed to the reporting period in which the related revenues and expenses are recognized: for in the exercise:

- Underwriting emissions: Linked to premiums earned in the period;
- Claims emissions: Linked to claims recognized during the period (payments and reserves for incurred and late-reported claims).

5.2 Insurer/reinsurer distribution

The sharing of emissions follows the economic share of risk.

6. Insurance-related emissions

6.1 Underwriting emissions

The PCAF approach consists of attributing to the non-life insurer a portion of the operating emissions (scopes 1&2) of insured goods or activities, an approach consistent with the guidelines defined by the NZIA. Ateliers du Futur have adopted this approach, considering that

the company's "natural" sphere of impact has as its boundary its economic interest, regardless of its capacity for influence5, while limiting its scope of application:

6.1.1 Mandatory reporting

Large companies (>500 employees) from 10 emissive sectors:

- Coal
- Oil and gas
- Automotive
- Steel
- Commercial buildings
- Agriculture and agrobusiness
- Maritime transport
- Air transport
- Cement
- Chemistry

6.1.2 Optional reporting

- SME comprehensive insurance
- Comprehensive/Professional and agricultural property damage
- Agricultural production insurance: crops and livestock
- Home/Private property damage insurance
- Automobile insurance (except for large corporations above)

6.1.3 Excluded lines (no significant lever - cost/benefit trade-off)

- Savings, retirement
- Health and protection
- Travel assistance (marginal impact)

6.1.4 Emission factors

In accordance with PCAF requirements, the attribution factor is based upon

Insurance premium / **Revenue (companies, agricultural) or total cost of ownership (individuals),**

[5] https://lesateliersdufutur.org/wp-content/uploads/2024/09/ADF-Sphere-impact-VF.pdf

applied to scopes 1&2 emissions over the coverage period.

As regards retail lines of business, the preference would go to market ratios to facilitate comparability over time and among players.

6.2 Claims-related emissions

6.2.1 Mandatory reporting

Mandatory calculation for:

- Motor: Vehicle damage and property liability, roadside assistance
- Damage to private and professional real estate including equipment
- Non-automobile civil liability insurance, for material damage only

6.2.2 Optional reporting

- Damage to movable property

6.2.3 Exclusions

- Savings, retirement
- Health, protection
- Business interruption (as emissions decrease, not significant)
- Non-motor liability insurance, for bodily or immaterial damage

6.2.4 Partial claims with repair

Only upstream scope 3 emissions ("cradle to gate") are accounted for: raw material extraction, manufacturing/transport of parts, craftsmen intervention. The use of reused parts and bio-based materials represents the main lever.

6.2.5 Serious claims with replacement

For total losses (vehicle, heating/air conditioning system), the insurer accounts for:

- Upstream scope 3 emissions above
- Usage emissions of the replaced asset over the residual lifespan
- Weighting by the compensation/replacement value ratio
- Recommendation: 10 years for a vehicle, adapted duration for real estate

6.2.6 Vehicle wreck processing

The carbon balance should include transport of the wreck to the recycler site and its end-of-life:

- If the vehicle is stripped, transport emissions of recycled parts and waste only

- If the vehicle is put back into circulation after repair, integration of insurer scope 3 of emissions related to vehicle use over its lifespan

6.2.7 Partial or total claim recovery

Anti-double counting mechanism: the damage insurer retains emissions net of recovery, the recovered portion being transferred to the liability insurer according to the liability scale.

Focus: Insurer's influence capacity during property damage claims

Green clauses: Some household or professional insurance contract include a clause by which insurers contribute to financing partly energy efficiency equipments following a large claim (isolation, PV panels, Heat pump)

About 60% of property damage claims are managed directly by mutual agreement. Training needed for claims managers on virtuous solutions.

About 40% of claims assessed by experts (variable intervention thresholds, generally a few k€) allow insurers to channel adequate decarbonisation messages

Network intervention: Approved networks (repairers, assistants) constitute a major operational lever. Their training and environmental assessment condition effectiveness.

Focus: Insurer's influence capacity during roadside assistance claim

Services generating direct emissions (breakdown) and indirect emissions (temporary solutions). The choice of electric loan vehicles constitutes an immediate lever.

Insurer's help to financing electric breakdown trucks, more costly at acquisition but less during use phase, could represent a valuable leverage in the medium term.

Focus: Insurer's influence capacity during a total loss motor claim

Wreck management: Repairing the vehicle by the wrecker to sell it for circulating again generates new emissions over the remaining lifespan of the vehicle. Converting the vehicle into recyclable waste after removing spare parts promotes the circular economy. The insurer can negotiate a reduction or elimination of these recirculation cases in return for financial compensation.

Green clauses: Helping client to opt for a Battery Electric Vehicle in replacement of a lost thermal one by paying part of the difference allows the insurer to influence his choice.

7. Reinsurance-related emissions

This approach adapts to all forms of reinsurance (quota share, excess of loss, aggregate).

7.1 Underwriting emissions

Application of the risk principle: reinsurer share of emissions = share of transferred risk.

Premium parameter includes claims, management and capital costs.

Emissions attribution factor:

Ceded premium / **Insurer's gross premium for the risk or set of risks considered**

applicable to underwriting emissions.

7.2 Claims-related emissions

Application of the principle of claims sharing: Reinsurer's share of emissions = share of ceded claims.

Emissions attribution factor:

Ceded claims cost / **Gross claims cost for the applicable reinsurance contract**

Applicable to insurer claims-related emissions.

Non-double counting rule: The ceding company should deduct from its emissions the shares ceded to reinsurers.

8. Conclusion

This standard establishes a complete methodological framework for carbon accounting in the insurance/reinsurance sector. Its progressive deployment, prioritized on high-impact lines, will enable an orderly transformation toward low-carbon insurance.

Success depends on the coordinated mobilization of insurers, reinsurers and the claims management ecosystem. Beyond measurement, it is the sector's capacity for influence to steer the economy toward carbon neutrality that constitutes the central challenge.

We are aware of the obstacles related to the availability and quality of data to achieve a precise calculation of all these emissions.

As such, the choice is left to insurers between an "in concreto" approach relating to their own compensation activity and a flat-rate approach based on parameters generally accepted by national agencies in charge of decarbonization or from studies conducted by insurance federations. A few hints in this domain are provided in appendix.

References

1. United Nations Environment Program's Forum for Insurance Transition to Net Zero: Underwriting the Transition (07/2025): https://www.unepfi.org/industries/insurance/un-forum-launches-first-of-its-kind-global-transition-plan-guide-for-insurance-underwriting-portfolios/

2. Insurance Council of Australia - Climate Reporting Framework: https://insurancecouncil.com.au/wp-content/uploads/2024/12/FINAL_ICA_Climate-Change-Roadmap-2024.pdf

3. GHG Protocol Corporate Value Chain (Scope 3) Standard : https://ghgprotocol.org/corporate-value-chain-scope-3-standard

4. PCAF Standard Part C - Insurance-Associated Emissions (2022) : https://carbonaccountingfinancials.com/files/downloads/pcaf-standard-part-c-insurance-associated-emissions-nov-2022.pdf

5. Recommendations of the Ateliers du Futur: https://lesateliersdufutur.org/wp-content/uploads/2024/12/EN-V122024-ReInsurance-Scope-3-downwards.pdf

6. Crédit Agricole Assurances White book: https://www.ca-assurances.com/publication/mesurer-les-emissions-de-co%E2%82%82-de-la-gestion-des-sinistres-automobiles/

Appendix: Methodological Proposals

1. “In concreto” vs. “Flat rate” Methodology

Principle: Two levels of accuracy depending on data maturity and materiality of items.

Flat-rate approach

Application of national average emission factors by business line ($kgCO_2eq$/€ paid).

Examples of flat-rate factors:

- **Automobile:** 0.15 $kgCO_2eq$/€ paid (ICA)
- **Property:** 0.20–0.25 $kgCO_2eq$/€ paid (carbon intensity of construction materials)

Use case: Items representing less than 5% of total claims payments or during an initial implementation phase.

For example, an insurer compensating €100 million in property damage would apply an average factor of 0.20 $kgCO_2eq$/€, resulting in 20,000 tCO_2eq.

In concreto approach

Quantification based on actual claims data.

Examples by business line :

- **Automobile:** Use of specific measurement tools for automobile claims. For total loss vehicles, end-of-life vehicle traceability via **BSVHU**.

Property: Use of specific measurement tools for property claims through low-carbon reporting sheets specifying the materials used (drawing on **FEDEA/INIES** databases).

Use case: For an automobile portfolio, the insurer quantifies total emissions associated with claims payments and collects emissions data from total loss vehicles through traceability systems.

Maturity pathway

1. **Phase 1 (Year 1):** Flat-rate approach across all business lines
2. **Phase 2 (Years 2–3):** In concreto for material branches (automobile), flat-rate for others
3. **Phase 3 (Year 4+):** Generalized in concreto approach with **A–B scoring** by business line

2. Data Quality Scoring System

A **A–B–C–D grid** enables insurers to qualify their data and report even with imperfect information. It highlights good practices and tracks progress toward greater precision.

Qualification principle

Each emission item receives a data quality score according to the nature of the data used. This score reflects the level of confidence in the result and enables:

- Reporting emissions at all levels of maturity
- Identifying priority areas for improvement
- Communicating transparently about calculation reliability

Scoring grid

Score	Qualification	Data source	Confidence interval	Example
A	Complete primary data	100% individual traceability of claims with specific emission factors	±10%	Motor: 100% calculated via dedicated tool + traceability of recovered materials
B	Partial primary data	Representative sampling (>30%) + extrapolation	±20%	Property: Low-carbon reporting sheets on 50% of repair sites
C	Average sectoral data	National emission factors by business line	±40%	Motor: Average EF 0.15 $kgCO_2eq/€$ applied to claims payments
D	Macroeconomic estimates	Global average carbon intensity	±70%	All LOB: Average EF 0.18 $kgCO_2eq/€$ across business lines