

# Appendix: Operational footprint data

## Restatement of CO<sub>2</sub> emissions data

In 2020, we performed a review of our reporting scope and calculation as follows:

- The sale of ReAssure in 2020 resulted in the removal of three offices in the UK from our reporting scope. As they were a significant source of emissions in the EMEA region, this led to a large reduction in the Group's overall emissions.

- After further analysis of green energy assurances for grid power in the UK, we have changed the calculation method for our offices in this region to using market-based factors for electricity emissions. This caused a sharp drop of 46% in overall emissions per employee (kg/FTE) for power.

- An update to our technical gas calculations now allows us to more accurately track leakages from large tanks and generators, rather than only "charging" emissions at the point of refill. This led to a significant increase in the emissions tracked for technical gases.

	Reported 2019		Restated 2020		Adjustment		Note
	2013 kg/FTE	2019 kg/FTE	2013 kg/FTE	2019 kg/FTE	2013 reported vs restated	2019 reported vs restated	
<b>Scope 2</b>							
Power	824	<b>472</b>	313	<b>137</b>	-62%	<b>-71%</b>	1
<b>Scope 1</b>							
Heating	378	<b>210</b>	396	<b>202</b>	4%	<b>-4%</b>	2
<b>Scope 3</b>							
Business travel	3 713	<b>3 842</b>	3 724	<b>3 849</b>	0%	<b>0%</b>	
Copy paper	40	<b>13</b>	34	<b>10</b>	-15%	<b>-23%</b>	3
Waste	50	<b>28</b>	50	<b>33</b>	0%	<b>18%</b>	4
Water	12	<b>8</b>	13	<b>9</b>	8%	<b>13%</b>	4
Technical gases	27	<b>52</b>	97	<b>98</b>	259%	<b>88%</b>	5
Commuting	1 250	<b>1 000</b>	1 225	<b>926</b>	-2%	<b>-7%</b>	6
<b>Total</b>	<b>6 294</b>	<b>5 627</b>	<b>5 852</b>	<b>5 266</b>	<b>-7%</b>	<b>-6%</b>	7

## Notes:

1. Our three ReAssure offices in the UK were responsible for a substantial part of our CO<sub>2</sub> footprint. In connection with the sale of ReAssure in 2020, we made two significant changes to our emissions reporting scope and calculation. Firstly, we removed the three offices, which included a large data centre, from the scope. Secondly, we switched from conventional to market-based factors because we use renewable energy at our offices in London and Folkestone.
2. Beyond accounting for the removal of our ReAssure offices in the UK, we made corrections concerning locations where we have clarified that we do not consume heating fuels.
3. The ReAssure offices were paper-intensive due to the nature of their consumer-facing insurance business.
4. As the ReAssure offices had a zero-waste policy and low water consumption, their removal from our reporting scope led to an increase of the Group's average figures in these categories.
5. We now include a 5% estimate for losses on all technical gas stores, whereas only actual refills were previously reported.
6. The employees who commuted to our ReAssure offices had higher-than-average usage rates of CO<sub>2</sub>-intensive car travel.
7. Totals are actuals before rounding, rather than the apparent sum of integers.

## Extended operational footprint data

<b>Carbon emission intensity</b>	Unit	2013 (baseline)	2018	2019	<b>2020</b>	% vs 2013
Carbon emissions per employee	CO <sub>2e</sub> kg/FTE	5 852	5 433	5 266	<b>2 363</b>	-60%
of which from building facilities	CO <sub>2e</sub> kg/FTE	934	588	524	<b>303</b>	-68%
of which from business travel	CO <sub>2e</sub> kg/FTE	3 724	3 899	3 849	<b>1 626</b>	-56%
of which from commuting	CO <sub>2e</sub> kg/FTE	1 225	979	926	<b>454</b>	-63%
<b>Carbon emissions (Scopes 1 – 3)</b>	Unit	2013 (baseline)	2018	2019	<b>2020</b>	% vs 2013
Absolute carbon emissions total	CO <sub>2e</sub> tonnes	74 972	82 944	83 361	<b>33 735</b>	-55%
Scope 1 emissions	CO <sub>2e</sub> tonnes	5 156	4 246	4 322	<b>2 962</b>	-43%
Scope 2 emissions (location-based)	CO <sub>2e</sub> tonnes	17 260	15 541	14 827	<b>11 327</b>	-34%
Scope 2 emissions (market-based)	CO <sub>2e</sub> tonnes	3 330	2 386	1 833	<b>709</b>	-79%
Scope 3	CO <sub>2e</sub> tonnes	66 486	76 312	77 207	<b>30 065</b>	-55%
of which from business travel	CO <sub>2e</sub> tonnes	50 266	61 188	62 915	<b>22 926</b>	-54%
of which from commuting	CO <sub>2e</sub> tonnes	14 030	13 601	13 058	<b>6 486</b>	-54%
of which from other	CO <sub>2e</sub> tonnes	2 191	1 523	1 234	<b>652</b>	-70%
Carbon certificate amount	CO <sub>2e</sub> tonnes	60 942	69 343	70 303	<b>27 249</b>	
<b>Energy consumption</b>	Unit	2013 (baseline)	2018	2019	<b>2020</b>	% vs 2013
Absolute energy consumption	MWh	77 354	63 140	55 070	<b>44 928</b>	-42%
of which electricity	MWh	54 010	47 133	41 253	<b>33 045</b>	-39%
non-renewable electricity	MWh	3 172	2 936	2 909	<b>0</b>	-100%
renewable electricity	MWh	50 838	44 196	38 344	<b>33 045</b>	-35%
of which heating	MWh	23 344	16 007	13 817	<b>11 883</b>	-49%
Percent renewable electricity out of total	%	94%	94%	93%	<b>100%</b>	6%
Energy consumption per employee	kWh/FTE	6 753	4 547	3 906	<b>3 146</b>	-53%
of which electricity	kWh/FTE	4 715	3 394	2 926	<b>2 314</b>	-51%
of which heating	kWh/FTE	2 038	1 153	980	<b>832</b>	-59%
<b>Business travel</b>	Unit	2013 (baseline)	2018	2019	<b>2020</b>	% vs 2013
Distance travelled per employee	km/FTE	13 581	14 348	14 271	<b>6 020</b>	-56%
Distance travelled	1 000 km	155 562	199 244	201 232	<b>85 970</b>	-45%
Absolute business travel emissions	CO <sub>2e</sub> tonnes	50 266	61 188	62 915	<b>22 926</b>	-54%
of which air travel	CO <sub>2e</sub> tonnes	49 926	60 921	62 657	<b>22 826</b>	-54%
of which ground travel	CO <sub>2e</sub> tonnes	339	266	258	<b>100</b>	-71%
Total business travel emissions per employee	CO <sub>2e</sub> kg/FTE	3 724	3 899	3 849	<b>1 626</b>	-56%
<b>Commuting</b>	Unit	2013 (baseline)	2018	2019	<b>2020</b>	% vs 2013
Distance travelled per employee	km/FTE	8 489	7 774	7 752	<b>3 893</b>	-54%
Absolute carbon emissions	CO <sub>2e</sub> tonnes	14 030	13 601	13 058	<b>6 486</b>	-54%
Carbon emissions per employee	CO <sub>2e</sub> kg/FTE	1 225	979	926	<b>454</b>	-63%
<b>Paper, waste, water</b>	Unit	2013 (baseline)	2018	2019	<b>2020</b>	% vs 2013
Water	m <sup>3</sup>	202 488	210 523	170 896	<b>124 636</b>	-38%
Total paper	t	328	151	121	<b>67</b>	-80%
Total waste	t	2 131	1 854	1 675	<b>985</b>	-54%
Percent recycled waste out of total	%	52%	49%	50%	<b>54%</b>	5%

### Notes on methodology:

- The unit “tonnes” represents metric tons.
- “Scope 1” includes operational road travel, heating oil/gas, technical gas.
- “Technical gas” is reported as Scope 1 as Swiss Re has direct control over the majority of its fugitive emissions. Also included is a smaller amount with indirect control.
- “Scope 2 emissions (market-based)” UK data series corrected in 2020 to include renewable CO<sub>2</sub> factors (previously assumed UK government kept green credentials).
- “Renewable electricity” figures include green electricity, self-produced (solar) as well as locally-sourced renewable energy certificates.
- “Commuting” figures obtained by means of biannual survey have considerable measurement uncertainty.
- “Other Scope 3” includes energy transmission, technical gas, paper, waste and water.
- “Business travel” figures include air travel, rental cars and rail, and exclude operational shuttle bus.
- “Carbon certificate offset” covers total absolute CO<sub>2</sub> emissions (less commuting).
- Dataset rebaselined in 2020 to remove ReAssure after its sale.
- Reporting year is on a hydrological calendar year basis (ie 1 October 2019 until 30 September 2020).

# Independent Assurance Report on the Swiss Re Sustainability Report 2020

We have been engaged to perform assurance procedures to provide limited assurance on the consolidated CO<sub>2</sub> emissions reporting and Sustainability topics and sections disclosed with the Swiss Re Sustainability Report 2020 ("Sustainability Report 2020") as well as with the Swiss Re Financial Report 2020 ("Financial Report 2020").

## Scope and subject matter

Our engagement focused on the following data and information for the financial year ended 31 December 2020 disclosed in the Sustainability Report 2020 and Financial Report 2020 of Swiss Re and its consolidated subsidiaries:

- The management and reporting processes with respect to the consolidated sustainability reporting as well as the control environment in relation to the aggregation of data and information;
- The organisational measures and internal key controls in place at the corporate level regarding aggregation of information obtained from the subsidiaries and reporting functions;
- The consolidated data and information disclosed in the Sustainability Report 2020 in the sections "Our approach to sustainability" on pages 8–23, "Creating solutions for sustainability" on pages 24–35, "Extending our risk intelligence" on pages 36–43, "Being a responsible investor" on pages 44–51, "Engaging in dialogue with our stakeholders" on pages 52–59, "Driving sustainable operations" on pages 60–69, "Engaging our people" on pages 70–79 and "Ensuring good corporate governance and compliance" on pages 80–86;
- The consolidated CO<sub>2</sub> emissions 2020 (Scope 1, 2 and 3 in adherence with the Greenhouse Gas Protocol) and environmental data 2020 in the tables of the Sustainability Report 2020 entitled "CO<sub>2</sub> emissions per employee (full-time equivalent, FTE), Swiss Re Group" on page 65, "Underlying environmental data, Swiss Re Group" on page 65, "Operational footprint data" on pages 90–91;
- The retirement of 27 250 tonnes of CO<sub>2</sub>e (CO<sub>2</sub> equivalents) described on page 67 of the Sustainability Report 2020;

- The consolidated data and information disclosed in the Financial Report 2020 in the chapter "Climate-related financial disclosures (TCFD)" in the sections "Overview" on page 150, "Climate governance" on page 151, "Climate strategy" on pages 152–167, "Climate risk management" on pages 168–171, and "Climate metrics and targets" on pages 172–179.

## Criteria

The management reporting processes with respect to the sustainability reporting 2020 were assessed against the internal and external policies and procedures as set forth in the following:

- "Internal Environmental Performance Indicators for the Financial Industry" published by the Verein für Umweltmanagement in Banken, Sparkassen und Versicherungen e.V. (VfU) published in 1997 and 2011;
- "The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)" published in 2004 by the World Resources Institute and the World Business Council for Sustainable Development;
- DEFRA Guidelines to DEFRA/DECC's GHG Conversion Factors for Company Reporting. AEA for the Department of Energy and Climate Change (DECC) and the Department for Environment, Food and Rural Affairs (DEFRA);
- The framework document "Environmental Performance Indicators (EPI) Reporting at Swiss Re", version 1.1 from December 2015 including Annex; and
- The defined internal guidelines, by which sustainability data and information are internally gathered, collated and aggregated.

## Inherent limitations

The accuracy and completeness of environmental indicators are subject to inherent limitations given their nature and methods for determining, calculating and estimating such data. GHG quantification is subject to inherent uncertainty, because of the incomplete scientific knowledge used to determine emissions factors and the values needed to combine emissions of different gases. Our assurance report should therefore be read in connection with Swiss Re's reporting criteria (including guidelines, definitions and procedures on the reporting of its sustainability performance).

## Swiss Re's responsibility

The Executive Management of Swiss Re is responsible for both the subject matter and the criteria as well as for selection, preparation and presentation of the selected information in accordance with the criteria. This responsibility includes the design, implementation and maintenance of related internal control relevant to this reporting process that is free from material misstatement, whether due to fraud or error.

## Our independence and quality controls

We are independent of Swiss Re in accordance with the International Code of Ethics for Professional Accountants (including International Independence Standards) issued by the International Ethics Standards Board for Accountants (IESBA Code). We have fulfilled our other ethical responsibilities in accordance with the IESBA Code, which is founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behavior.

PricewaterhouseCoopers AG applies International Standard on Quality Control 1 and accordingly maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

## Our responsibility

Our responsibility is to perform a limited assurance engagement to express a conclusion on the sustainability indicators.

We planned and performed our procedures in accordance with the International Standard on Assurance Engagements (ISAE 3000) (Revised), 'Assurance Engagements other than Audits or Reviews of Historical Financial Information', and, in respect of greenhouse gas emissions, with the International Standard on Assurance Engagements (ISAE 3410), 'Assurance Engagements on Greenhouse Gas Statements', issued by the International Auditing and Assurance Standards Board. These standards require that we plan and perform this engagement to obtain limited assurance on the identified sustainability indicators, in all material aspects, in accordance with Swiss Re's policies and procedures.

A limited assurance engagement under ISAE 3000 (Revised) and ISAE 3410 is substantially less in scope than a reasonable assurance engagement in relation to both the risk assessment procedures, including an understanding of internal control, and the procedures performed in response to the assessed risks. Consequently, the nature, timing and extent of procedures for gathering sufficient appropriate evidence are deliberately limited relative to a reasonable assurance engagement and therefore less assurance is obtained with a limited assurance engagement than for a reasonable assurance engagement. The procedures selected depend on the assurance practitioner's judgement.

## Summary of the work performed

Our assurance procedures included, amongst others, the following work:

- **Evaluation of the application of Swiss Re's sustainability reporting guidelines**  
Assessing whether the methodology applied by Swiss Re is in line with the reporting criteria;
- **Interviews and management inquiry**  
Evaluating the sustainability reporting and underlying performance indicators by performing analytical procedures and interviewing selected key contacts to assess whether the internal Environmental Performance Indicators Reporting guidelines and sustainability guidance were consistently applied by the selected locations;  
Performing inquiries of personnel responsible for internal sustainability reporting and data collection at the Swiss Re corporate level to evaluate the reporting and aggregation process and to assess its appropriateness;
- **Reconciliation of CO<sub>2</sub> emissions data**  
Reconciling the CO<sub>2</sub> emissions data for energy consumption, business travel, copy paper, waste, water, technical gases and commuting and sustainability data and information to the data used for the internal sustainability reporting of the selected locations;
- **Assessment of the key figures**  
Performing tests on a sample basis of evidence supporting selected sustainability data and information (natural catastrophes and climate change, the commitment to the United Nations, the commitment with Women's World Banking, decarbonising the business model, the sustainable business risk framework, emerging risks, responsible investments, engagement with stakeholders, CO<sub>2</sub> emissions and reductions, energy consumption for heating and electricity, business travel data, sustainable supply chain data, the CO<sub>you2</sub> subsidies, HR data and information, diversity and inclusion, employee health data) to assess their completeness, accuracy, adequacy and consistency;

## • Review of the documentation

Reviewing the relevant documentation on a sample basis, including Swiss Re's sustainability-related policies, the management of reporting structures, the documentation and systems used to collect, analyse and aggregate reported sustainability data and information;

## • Assessment of the processes and data consolidation

Reviewing the appropriateness of the management and reporting processes for sustainability reporting; and assessing the processing and consolidation of data at Swiss Re's Group level; and

## • Review of certified emission reductions

Reviewing the retirement of 27 250 tonnes of CO<sub>2e</sub>:

8 478 voluntary emission reductions (VERs) with additional Gold Standard label, 19 026 certified emission reductions (CERs) from the Community Development Carbon Fund (CDCF).

We have not conducted any work on data other than outlined in the subject matter as defined above. We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our assurance conclusions.

## Conclusion

Based on our work described in this report, nothing has come to our attention that causes us to believe that the sustainability data and information outlined in the scope and subject matter section has not been prepared, in all material aspects, in accordance with suitable criteria.

Zurich, 18 March 2021  
PricewaterhouseCoopers AG

Paul de Jong      Konstantin Meier

# Memberships, commitments and index listings

Listed here is a selection of Swiss Re's most important memberships, commitments and index listings with regard to sustainability.

## Memberships and commitments

### CDP

CDP is a not-for-profit charity that runs a global disclosure system for investors, companies, cities, states and regions to manage their environmental impacts.

[www.cdp.net](http://www.cdp.net)

### Chief Risk Officer (CRO) Forum

The CRO Forum is a group of professional risk managers from the insurance industry that focuses on developing and promoting industry best practices in risk management. The forum consists of Chief Risk Officers from large multinational insurance companies. Swiss Re is a member of the sustainability working group.

[www.thecroforum.org](http://www.thecroforum.org)

### ClimateWise

ClimateWise helps the insurance industry to better communicate, disclose and respond to the risks and opportunities associated with the climate-risk protection gap. This is the growing divide between total economic and insured losses attributed to climate change.

[www.cisl.cam.ac.uk/business-action/sustainable-finance/climatewise](http://www.cisl.cam.ac.uk/business-action/sustainable-finance/climatewise)

### European Commission's Technical Expert Group on Sustainable Finance (TEG)

The TEG assists the European Commission in the development of a unified classification system for sustainable economic activities, an EU green bond standard, methodologies for low-carbon indices and metrics for climate-related disclosure.

[https://ec.europa.eu/info/publications/sustainable-finance-technical-expert-group\\_en](https://ec.europa.eu/info/publications/sustainable-finance-technical-expert-group_en)

### FSB Task Force on Climate-related Financial Disclosures (TCFD)

The Financial Stability Board (FSB) is an international body that monitors and makes recommendations about the global financial

system. Its Task Force on Climate-related Financial Disclosures has developed voluntary, consistent climate-related financial disclosures.

[www.fsb-tcfd.org](http://www.fsb-tcfd.org)

### Insurance Development Forum (IDF)

The IDF is a public-private partnership led by the insurance industry and supported by international organisations. It aims to optimise and extend the use of insurance and its related risk management capabilities to build greater resilience and protection for people, communities, businesses, and public institutions that are vulnerable to disasters and their associated economic shocks.

[www.insdevforum.org](http://www.insdevforum.org)

### Klimastiftung Schweiz (Swiss Climate Foundation)

The Swiss Climate Foundation is a voluntary initiative by business for business. The Foundation's mission is to promote climate protection and strengthen Switzerland and Liechtenstein as business locations. Swiss Re is one of the foundation's members and is sponsoring its managing director.

[www.klimastiftung.ch/en/](http://www.klimastiftung.ch/en/)

### Net-Zero Asset Owner Alliance

The Net-Zero Asset Owner Alliance is an international group of institutional investors delivering on the commitment to transition their investment portfolios to net-zero GHG emissions by 2050, showing united investor action to align portfolios with a 1.5°C scenario. Swiss Re is a co-founder of the Alliance.

[www.unepfi.org/net-zero-alliance/](http://www.unepfi.org/net-zero-alliance/)

### Paris Pledge for Action

By joining the Paris Pledge for Action, businesses, cities, civil society groups, investors, regions, trade unions and other signatories have promised to ensure that the ambition set out by the Paris Agreement is met or exceeded to limit the global temperature rise to less than 2°C.

[www.parispledgeforaction.org](http://www.parispledgeforaction.org)

### Powering Past Coal Alliance (PPCA)

The PPCA is a coalition of national and sub-national governments, businesses and organisations working to advance the transition from unabated coal power generation to clean energy.

[www.poweringpastcoal.org](http://www.poweringpastcoal.org)

### Principles for Responsible Investment (PRI)

The PRI is the world's leading proponent of responsible investment. It works to understand the investment implications of ESG factors and to support its international network of investor signatories in incorporating these factors into their investment and ownership decisions.

Swiss Re's PRI assessment is available [here](#).

[www.unpri.org](http://www.unpri.org)

### Principles for Sustainable Insurance (PSI)

The UNEP FI Principles for Sustainable Insurance (PSI) serve as a global framework for the insurance industry to address environmental, social and governance risks and opportunities. We are a member of both the PSI and the UNEP Finance Initiative (UNEP FI), a partnership between UNEP and the global financial sector to mobilise private sector finance for sustainable development.

[www.unepfi.org/psi/](http://www.unepfi.org/psi/)

### RE100 and EP100

Led by The Climate Group, a non-profit organization that works with business and government leaders around the world to address climate change, and in partnership with CDP, RE100 is a global corporate leadership initiative bringing together influential businesses committed to 100% renewable electricity.

[www.theRE100.org/](http://www.theRE100.org/)

In partnership with the Alliance to Save Energy, The Climate Group's EP100 initiative brings together a growing group of energy-smart companies committed to improving their energy productivity and doing more with less.

[www.theclimategroup.org/project/ep100](http://www.theclimategroup.org/project/ep100)

### swisscleantech

swisscleantech is a Swiss cleantech business association. Its mission is to bring companies together that are in favour of environmentally responsible business practices.

[www.swisscleantech.ch](http://www.swisscleantech.ch)

### Swiss Sustainable Finance (SSF)

By shaping and informing on best practice and creating supportive frameworks and tools, SSF supports its members and cooperates with other actors in order for the Swiss financial centre to achieve a leading position in sustainable finance.

[www.sustainablefinance.ch](http://www.sustainablefinance.ch)

### UN Global Compact

The UN Global Compact helps companies to do business responsibly by aligning their strategies and operations with its ten principles on human rights, labour, environment and anti-corruption; and it also helps them to take strategic actions to advance broader societal goals, such as the UN Sustainable Development Goals. In 2019, we signed the UN Global Compact Business Ambition for 1.5°C.

[www.unglobalcompact.org](http://www.unglobalcompact.org)

### WEF Alliance of CEO Climate Leaders

The Alliance of CEO Climate Leaders is a global network of chief executive officers who see the business benefits of bold and proactive action to ensure a smooth transition to a low-carbon and climate-resilient economy. Swiss Re's CEO Christian Mumenthaler has been Co-Chair of the Alliance since 2020. Furthermore, Swiss Re is an active member of the "WEF CEO Action Group for the European Green Deal".

[www.weforum.org/projects/alliance-of-ceo-climate-leaders](http://www.weforum.org/projects/alliance-of-ceo-climate-leaders)

### World Business Council for Sustainable Development (WBCSD)

The WBCSD is a global, CEO-led organization of over 250 leading businesses working together to accelerate the transition to a sustainable world.

[www.wbcd.org](http://www.wbcd.org)

## Selected index listings and ratings

**MSCI AAA rating, member of MSCI World ESG Leaders Index and MSCI World SRI Index**



**Dow Jones Sustainability Indices, member of DJSI World Index, DJSI Europe Index**

**Sustainability Award**

Silver Class 2021

**S&P Global**

**Bloomberg Gender-Equality Index**



**Member of the CDP A list**



**Ethibel Sustainability Index (ESI), Excellence Global**



**Euronext Vigeo Eiris indices, Europe 120**



**FTSE4Good Index Series**



**FTSE4Good**

**ISS QualityScore, Environmental, Social & Governance**



**ISS ESG Prime**



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