Implementation of an attribution analysis for decarbonisation: Allianz

Background

As an active member of the UN-convened Net-Zero Asset Owner Alliance (the "Alliance"), Allianz contributed in 2023 to the Alliance's working group on "Emissions Attribution Analysis". Additionally, we, Allianz, a member of the IIGCC Board, recently presented our experiences of implementing an emissions attribution analysis at an IIGCC Net Zero Surgery in March 2024, "What is driving portfolio decarbonisation?"[1].

This case study, authored and provided by Allianz, delves into these experiences.

Why conduct emission attribution analysis

We recommend that all investors setting a decarbonisation target conduct an emissions attribution analysis. This enables an enhanced understanding of the drivers of decarbonisation within the investment portfolio, in turn allowing for active steering and informing dialogues with management, investment and asset managers, and investee companies. Finally, it provides transparency for public reporting.

The main drivers of investment portfolio decarbonisation include changes in allocation (such as new investments and divestments), changes in coverage, changes in the emissions of investee companies, or changes in the investee companies' EVIC[2].

Methodology

In early 2023 there was limited guidance on how to perform emissions attribution. This prompted the Alliance to launch a working group to discuss various methodologies and options for emissions attribution modelling. The results have been published in the Alliance paper "Understanding the Drivers of Investment Portfolio Decarbonisation"[3], while the appendix of the paper includes all formulas needed for various possible calculations considered in the group discussions.

In parallel, Allianz implemented those calculations for its proprietary corporate bond and listed equity portfolio (scope 1&2) using the simplified approach with sector averages. The results have been published in the Allianz Sustainability Report 2023[4].

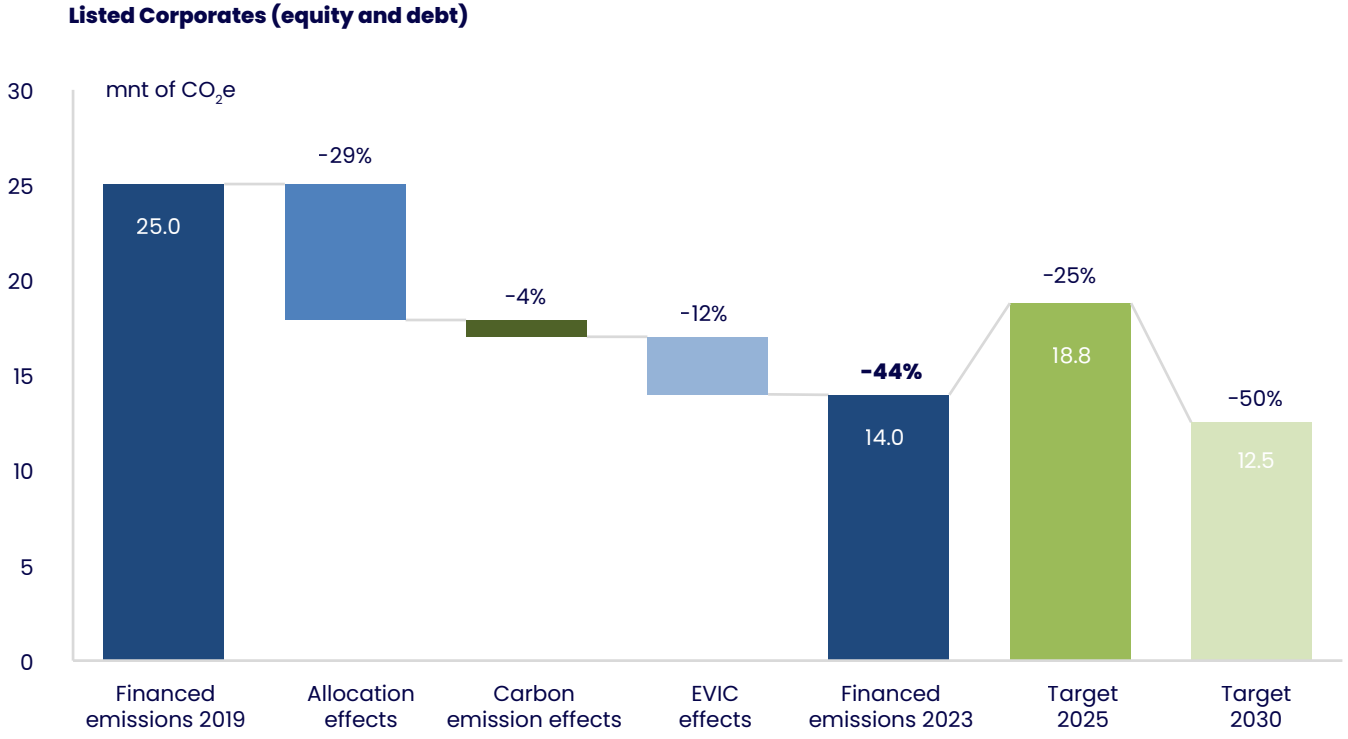
1 iigcc.org/_hcms/mem/login?redirect_url=https%3A%2F%2Fwww.iigcc.org%2Fmember-events%2Fwhat-is-driving-portfolio-decarbonisation-a-net-zero-surgery-mini-series

2 Enterprise Value including Cash

3 Understanding the Drivers of Investment Portfolio Decarbonisation – United Nations Environment – Finance Initiative (unepfi.org)

4 Sustainability Report 2023 Allianz Group, page 77

Implementing emissions attribution analysis



Allianz set an absolute decarbonisation target for its proprietary listed equities and corporate bond portfolio based on 2019 financed emissions data. The baseline was 25 million tons of e (scope 1&2), roughly one-third of the total proprietary investment portfolio. As of December 31, 2023, this sub-portfolio had decarbonised by 44% to 14.0 million tons of e, thereby meeting the 2025 target (18.8 million tons of e (scope 1&2)).

Most of the decarbonisation of 44% resulted from allocation effects (29%). The most favourable driver, decarbonization of investees, contributed only with 4%. The rest, EVIC change, which may had been driven by organic growth or by price effects, accounted for 12%. This reflects, as reported in many other publications, that the decarbonisation of the real-economy is not happening fast enough.

In September 2023, Allianz set a decarbonisation target of 50% emissions reduction by 2030, in line with a 1.5°C low-overshoot ambition level. This is equal to financed emissions of 12.5 million tons of e (scope 1&2) by 2030 for the proprietary listed equity and corporate bond investment portfolio.

Internally, Allianz now runs an analysis that drills down to sector, sub-sector, and single constituent level. Monitoring sector and sub-sector analysis is highly relevant to prevent unintended shifts in sector allocation. The sector analysis reports on carbon intensities at NACE sector levels and splits into inter-sectoral allocations (changes in sector weights) and intra-sectoral effects (changes in carbon intensities). Further down, re-allocations and emission changes within one sector can be analysed to the constituent level. Changes in carbon intensity are further analysed by splitting into the drivers of emissions, investments in green bonds and changes in EVIC.

Conclusion

The results of this analysis provide a deep understanding of drivers of emissions performance in very high granularity. It thereby informs our senior management and our investment managers for more efficient investment portfolio steering with respect to our climate targets.

Key challenges

While looking into the results and reviewing existing standards, such as "The Global GHG Accounting and Reporting Standard" by PCAF[5] and the "Platform on Sustainable Finance's Recommendations on Data and Usability"[6], several discussion topics were raised, including:

1. **How to deal with large market value fluctuations, including FX effects?**

   Carbon accounting can be significantly impacted by price fluctuations, particularly emissions intensity[7]. The desire to neutralise price fluctuations in order to avoid diluting the measure of decarbonisation is understandable.

   In theory it may be possible, but it can lead to new, and possibly major, issues. Adjustments lead to values that no longer match carbon accounting. They are not transparent and require equal price adjustments in both the investment (numerator) and EVIC (denominator). However, the sources are usually different, making it very likely that price adjustments won't align.

   Furthermore, PCAF's and the EU PSF's guidance suggest adjusting EVIC only, distorting the ownership share. Comparisons to indices or peers would nearly become impossible. Therefore, Allianz tends to keep the original values and analyse and comment on the respective drivers.

   Related to this discussion, the sensitivity of the metrics discussed above from price fluctuations is one reason why the NZAOA recommends setting sector decarbonization targets, in addition to financed emissions and/or carbon footprint target setting. The respective metric is production-based per sector and therefore not impacted by economic price effects.

2. **Analysing one-year versus multi-year emissions attribution analysis**

   The emissions analysis is a single-period model which can be applied over multiple years. As management needs to be informed of year-on-year developments, a split into single years may be necessary. However, combining single-year analyses will not yield the same results as a single-period emissions analysis for the same period, because the allocation results and the weightings of the various drivers will differ.

   So far, we have not found a perfect solution for linking single-year calculations to a multi-year analysis. Consequently, we tend to use the single-period calculation for multiple years and explain year-by-year changes in this analysis, adding a one-year analysis on top.

5 The Global GHG Accounting and Reporting Standard for the Financial Industry (carbonaccountingfinancials.com)

6 Platform on Sustainable Finance's recommendations on data and usability of the EU taxonomy (europa.eu)

7 For financed emissions, market price is reflected in the numerator and denominator. For carbon intensity, the price effect shows up again, in the denominator, the total investment portfolio.