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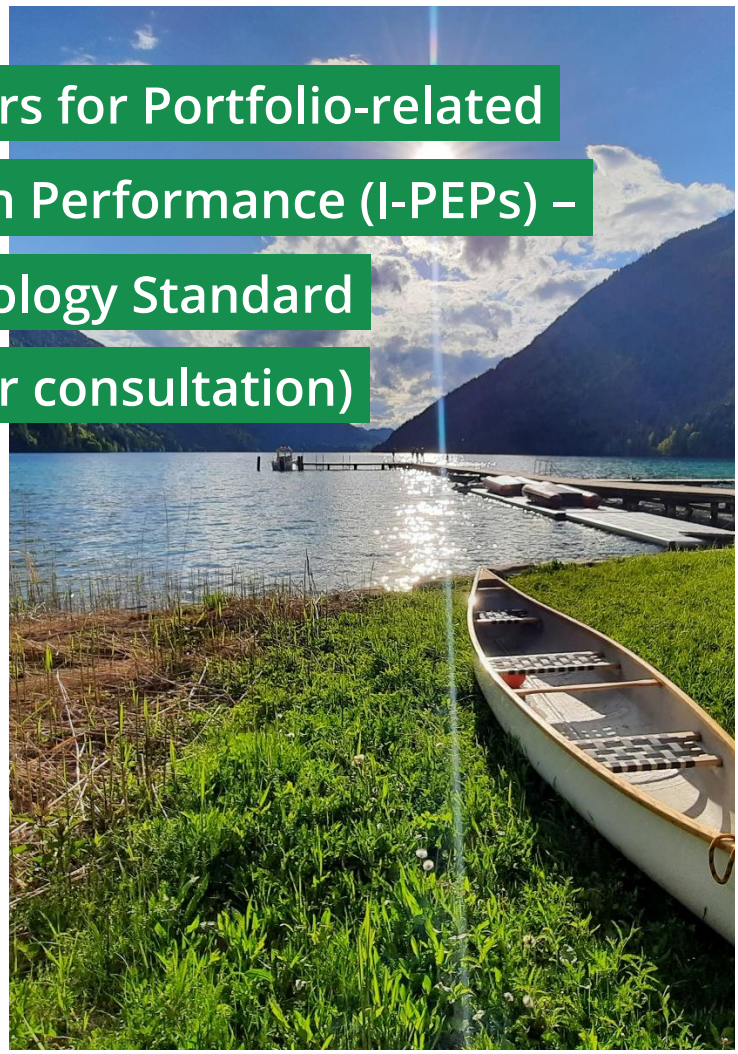
Indicators for Portfolio-related Emission Performance (I-PEPs) – Methodology Standard (draft for consultation)



GREEN FINANCE ALLIANCE

I-PEPs Methodology Standard (draft for consultation)

GREEN FINANCE ALLIANCE

VIENNA 2025

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TABLE OF CONTENTS

SUMMARY

The Indicators for Portfolio-related Emission Performance (I-PEPs) introduce a new generation of key performance indicators (KPIs) that enable financial companies, such as banks and insurance companies, to steer the decarbonisation of their core business. This innovative KPI set covers a broad spectrum of the financial sector, with tailored metrics for both the investment and lending portfolio and insurance activities. Despite its wide scope of application, the underlying methodological approach is standardised. It is characterised by its objective traceability, its robustness against adverse influencing factors, and its potential scalability to other types of financial portfolios.

Within a financial company's overall climate strategy, I-PEPs address the specific aspect of portfolio decarbonisation. Other aspects, such as the expansion of green activities, the phase-out of fossil fuels, and proactive engagement, are to be managed using other metrics.

Target setting based on I-PEPs also rewards active transition support in greenhouse gas-intensive companies in the real economy, as only the greenhouse gas (GHG) emissions trend over time (and not the absolute GHG emissions level) determines the progression of the indicators. The resulting steering signals from the use of these indicators influence both new business (ex-ante evaluation of transition willingness) and existing business (ex-post analysis of transition progress).

At the same time, important synergies can be leveraged with I-PEPs, for example with complementary GHG accounting. The often resource-intensive collection of GHG emission data for the purpose of preparing the GHG emission inventories also serves as the basis for calculating I-PEPs, which means that no additional data collection is necessary.

I-PEPs as an innovative set of indicators were examined in the light of international discussions on portfolio metrics. On the one hand, this was done by analysing I-PEPs with regard to theories of change. These theories discuss the connection between measures taken by financial companies and the actual impact on the real economy. On the other hand, I-PEPs were assessed against the principles of the Science Based Targets initiative (SBTi), as published in SBTi's Metrics and Methods Synthesis Report.

1 INTRODUCTION

1.1 Background to the development of the method

Scope

In recent years, financial companies around the world have begun to integrate climate action into their corporate strategies in order to contribute to limiting global warming. This integration typically also leads to the establishment of other relevant topics, such as the professional management of increasing climate-related risks or the expansion of business areas into new growth segments. This process is guided by various regulatory disclosure requirements. While these requirements bind human and financial resources within financial companies, they also lead to meaningful harmonisation and improved data availability for the financial market.

Choosing KPIs

To integrate climate action into corporate management, financial companies face the challenge of introducing new KPIs for various climate-related objectives (e.g. engagement and expansion of green activities). These indicators must be complementary, meaningful and robust. Financial companies often pursue specific climate targets (such as portfolio decarbonisation) for different core business activities.[1] In such cases, the KPIs should be aligned and based on a common methodological approach. A significant share of financial companies (such as regional banks and smaller pension funds) have very limited human resources, which must be taken into account when selecting indicators, particularly with regard to complexity and practical applicability.

Information

Climate Navigation Cockpit (CNC) of the Green Finance Alliance

In Austria, the Green Finance Alliance (GFA)[2] was launched in 2022 by the BMLUK (formerly BMK)[3]) – it is a climate action initiative for financial companies. Within the initiative, one particular challenge has emerged for its members: defining metrics to manage their climate efforts. For this purpose, the GFA Coordinating Office developed a comprehensive Climate Navigation Cockpit (CNC).[4] This consists of several steering modules and specific KPIs. They are to be used by the GFA members to manage the expansion of green activities, for proactive engagement with portfolio counterparts and for decarbonising their core business. While the steering modules for the expansion of green activities and engagement are based on existing market approaches, a new set of indicators was developed for

[1] For example, insurance companies with underwriting and investment activities.

[2] For more information on the GFA, see website of the Environment Agency Austria.

[3] Since 1 April 2025: Federal Ministry of Agriculture, Forestry, Climate and Environmental Protection, Regions and Water Management (BMLUK).

[4] For more information on the Climate Navigation Cockpit, see Chapter 5.1.1.2 in the GFA – Executive Summary.

the portfolio decarbonisation steering module: the Indicators for Portfolio-related Emission Performance (I-PEPs).

1.2 Development of the method

Consultation process

In 2024, the GFA Coordinating Office developed an initial draft of the I-PEPs methodology in close consultation with the Convening Body and the GFA Advisory Council. The results were documented in a detailed consultation paper and the methodological approach was illustrated with calculation examples in a separate file. These documents were made available for public consultation in in July and August 2024. The stakeholder dialogue during the consultation process was supplemented with a dedicated webinar in August 2024 and several bilateral meetings. The GFA Coordinating Office evaluated the extensive stakeholder feedback in autumn 2024. The insights gained were discussed with the GFA Advisory Council and the results were subsequently presented to the GFA Steering Committee and the GFA members.

Draft methodology standard

The evaluation of the stakeholder feedback formed the basis for the next development step: the creation of this draft methodology standard. As this draft contains substantial developments not included in the initial consultation paper, a second public consultation is scheduled for the period from 12 June to 10 August 2025. To test the practical applicability of the methodology, a pilot phase will be launched in parallel with the consultation. In this pilot phase, financial companies, together with the GFA Coordinating Office, will assess the I-PEPs methodology by applying it to real portfolio data in a practical trial.

1.3 New developments compared to the 2024 consultation document

Approach

Although this methodology standard contains numerous new developments and more detailed explanations compared to the 2024 consultation paper, the core concept and methodological approach remain unchanged:

- The I-PEPs are a KPI set for measuring the portfolio decarbonisation of financial companies' core business.
- The I-PEPs are calculated based on the greenhouse gas (GHG) trend of the portfolio positions.

Changes

The most important changes compared to the initial consultation paper concern the following areas:

Expanded scope of application to include the underwriting portfolio

The insurance-related underwriting portfolio represents the core business of insurance companies. Chapter 3.3 outlines the methodological approach of I-PEPs for this application.

Extended weighting method to include a second General Weighting Factor

During the first consultation phase, an extended weighting method – referred to as "I-PEPs extended" – was introduced. This approach includes an additional, second General Weighting Factor alongside the portfolio weighting to account for the scale of emissions of portfolio positions. This weighting approach was developed in response to feedback from some stakeholders who felt that the original I-PEPs weighting approach did not sufficiently reflect absolute emission levels. This extended weighting logic forms the basis of the weighting approach presented in this methodology standard and is discussed in more detail in the following chapters.[5]

Elaborated approach to define I-PEPs-based decarbonisation trajectories

Chapter 4.6 of the initial consultation paper presented an overview of a step-by-step approach to derive a target decarbonisation trajectory for I-PEPs. Building on this, a more detailed process description has been developed, which is presented in Chapter 4. The process presented also includes guidance for measuring progress over time.

Explanation of how to deal with various influencing factors

A range of factors can affect the results of I-PEPs. Some of these factors need to be adjusted to prevent distortions (e.g. due to methodological inconsistencies in reported GHG emissions across reporting periods). Other factors do not compromise the robustness of the I-PEPs results (so-called drivers of change, such as investment decisions). Analysing these factors can offer valuable insights for interpretation and portfolio management. Chapter 5.1 provides an overview of these influencing factors and outlines recommendations for addressing them.

Contextualisation of I-PEPs within international developments

Numerous international initiatives are currently working on similar topics, which have also informed the development of I-PEPs. The role that I-PEPs can play within these developments and the synergies that can arise from them are described in Chapter 5. The international scientific discussion on the "theories of change", which examines the link between financial sector actions and real-economy impacts, is discussed in Chapter 5.3.

[5] The term "I-PEPs *extended*" is not used in this methodology standard, as the extended weighting approach introduced with this term is now used as the standard weighting approach.

2 GENERAL METHODOLOGY DESCRIPTION

With I-PEPs, a set of KPIs has been developed that allows financial companies to measure progress in portfolio decarbonisation as part of their climate protection efforts and to link this progress to their targets. The I-PEPs were primarily developed for the financial portfolios of banks, insurance companies, asset managers, pension funds and corporate provision funds covering investments, lending and insurance-related underwriting. These types of financial portfolios are typically broken down into sub-portfolios (e.g. by asset class in the case of investment portfolios) and managed at these more granular levels. The methodological structure of I-PEPs allows for flexible application at different levels of granularity, enabling holistic coverage of all relevant sub-portfolios. Despite the highly heterogeneous scope of application, the underlying methodological approach of the I-PEPs remains consistent across all types of financial portfolios and sub-portfolios. This consistency allows (with certain restrictions) for cross-portfolio comparison and aggregation. The data basis for calculating I-PEPs is the same across all areas of application: the GHG data of the portfolio positions.

2.1 Overview of steering indicators

Scope of application

Firstly, the I-PEPs universe can be categorised according to its general scope of application (= action area):

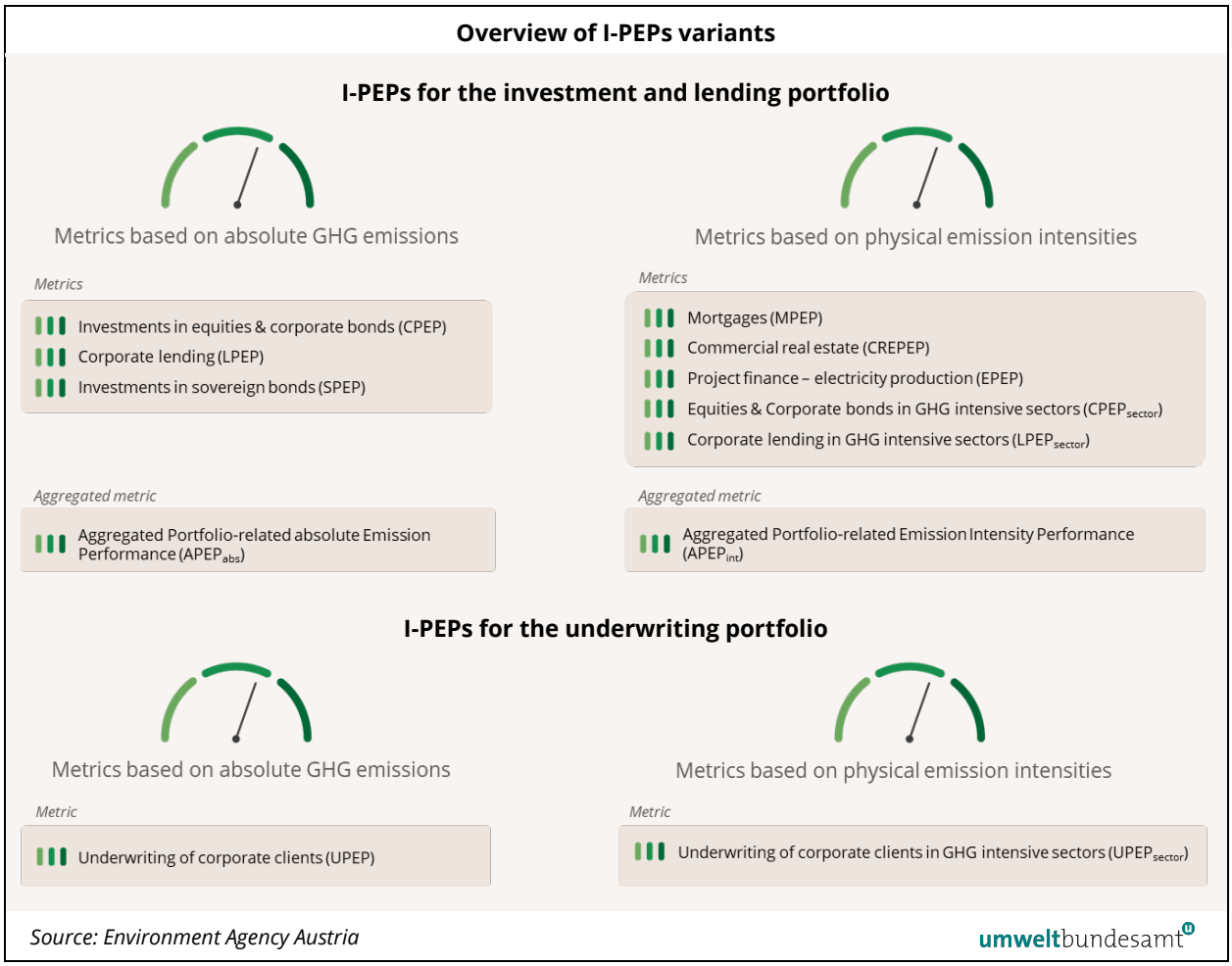
- I-PEPs for the investment and lending portfolio
- I-PEPs for the underwriting portfolio

Secondly, I-PEPs can be considered from two perspectives:

1. Based on the asset classes and business areas covered by each indicator
2. Based on the calculation basis used to determine the emission performance

The figure below shows an overview:

Figure 1: Overview of the I-PEPs KPI set for both action areas



Annex 6.1 provides an overview of the KPI set.

The following sub-chapters deal with I-PEPs based on the two different perspectives mentioned above.

2.1.1 Breakdown by asset class/business area

To manage the decarbonisation of the respective action areas effectively, it is necessary to divide them into homogeneous sub-portfolios. The investment and lending portfolio is therefore broken down by (sub-)asset class. For the underwriting portfolio, only one business area is currently considered:[6]

[6] The extension of the I-PEPs methodology to other underwriting business areas is possible in principle, but is not covered by this version of the methodology standard.

- **Investment portfolio (by asset class)**
  - Equity and corporate bonds
    - Segregated sub-portfolios for GHG-intensive sectors
  - Sovereign bonds
- **Lending portfolio (by asset class)**
  - Corporate lending
    - Segregated sub-portfolios for GHG-intensive sectors
  - Mortgages
  - Commercial real estate
  - Project finance: electricity production
- **Underwriting portfolio**
  - Underwriting of corporate clients
    - Segregated sub-portfolios for GHG-intensive sectors

Segregation

As part of the portfolio management of business activities at companies, I-PEPs envisages segregating portfolio positions that belong to GHG-intensive sectors. Customised I-PEPs are defined for each of these sector-specific portfolios, allowing dedicated steering. Whether such segregation is implemented is up to the financial company to decide, depending on the significance[7] of its sectoral exposure and the availability of required data. The rationale for this approach to segregated steering is discussed in the following chapters.

2.1.2 Breakdown by calculation basis

Data

I-PEPs can be calculated using two different calculation bases: absolute GHG emissions or physical emission intensities of the portfolio positions. In both cases, only reported emission data is used. The use of emission factors (e.g. sectoral/regional averages) is not envisaged, as these do not allow for a meaningful assessment of individual emission performance.

Use of absolute GHG emissions

Absolute GHG emissions of portfolio positions, such as those of a company, include the GHG emission volumes for which it is directly or indirectly responsible. These GHG emissions are categorised into Scope 1, 2 and 3 emissions in accordance with the GHG Protocol.[8] I-PEPs are calculated

[7] Whether a sector-specific portfolio is significant and justifies dedicated steering depends on both the sector-related (absolute and relative) portfolio volume and the quantitative number of sector positions.

[8] The instructions of the GHG Protocol should be used to account for/calculate the relevant GHG emissions (Scope 1, 2 and 3).

separately for Scope 1 and 2 emissions and for Scope 3 emissions. This separation is necessary for several reasons:

- Scope 3 emissions refer to all indirect GHG emissions (not included in Scope 2) that occur in the value chain of the portfolio position, including both upstream and downstream emissions. The sector affiliation of such emission sources will therefore not usually correspond to that of the company under consideration. This can lead to significant challenges when determining the targeted decarbonisation trajectory (see Chapter 4.1.3) on the basis of sector-specific climate scenarios.
- The data availability and quality of Scope 3 emissions is generally much lower and more volatile. Their use can therefore lead to significant, unwanted fluctuations in the I-PEPs results and thus dilute the informative value and the steering effects.
- Even if Scope 3 data is available for individual portfolio positions, this is rarely the case for the entire sub-portfolio. Their inclusion in the I-PEPs calculation would result in inconsistent treatment of the scopes covered and distort the calculation of the Combined Weighting Factors (see Chapter 2.2.2).
- As I-PEPs are intended to provide a basis for engagement in the context of portfolio management, the distinction between Scope 1 and 2 and Scope 3 emissions is essential: while companies in the real economy typically have a direct influence on their Scope 1 and 2 emissions, their (indirect) influence on upstream/downstream Scope 3 emissions is more limited. Separate treatment is therefore appropriate.

Application for Scope 3 emissions

Due to better data availability (in terms of quality and coverage), the calculation of I-PEPs is generally planned on the basis of Scope 1 and 2 emissions. Whether financial companies calculate and use I-PEPs based on Scope 3 emissions should primarily depend on the data quality and the degree of coverage of the available Scope 3 emissions. This assessment may vary depending on the sub-portfolio.

Use of physical emission intensities

Physical emission intensities are usually used at the sector level. The GHG emissions of the portfolio position are set in relation to a sector-specific reference value (e.g. steel production in the case of a steel company). This allows for a sector-specific assessment of the GHG emission efficiency, but it requires additional data points.

Data availability

The extent to which absolute GHG emissions or physical emission intensities are used as a calculation basis is partly determined by the sub-portfolio characteristics. For example, for real estate portfolios (commercial real estate or mortgage portfolios), actual annual energy consumption data as a basis for calculating absolute GHG emissions is not available to the lending banks. Physical emission intensities ($kgCO_2eq/m^2$) are therefore used since this information can be gathered from energy performance certificates.

Complementary application

Both calculation bases have strengths and weaknesses in terms of their informative value and steering effect. Therefore, depending on the financial company's portfolio structure (size, composition, data availability) and its strategic objectives, the use of physical emission intensities may or may not be appropriate.

An alternative use of physical emission intensities is possible for corporate investment and lending portfolios and underwriting portfolios. For these portfolios, it may make sense to create sub-portfolios for companies from GHG-intensive sectors and to manage these portfolios using separate I-PEPs (with sector-specific physical emission intensities as a calculation basis). The prerequisites for ring-fencing and managing such sub-portfolios separately are an appropriate portfolio depth (i.e. sufficient portfolio positions in the relevant sectors) and portfolio volume, as well as data availability.

Recommended application

For the following sectors, the I-PEPs Methodology Standard proposes the use of physical emission intensities, using the parameters presented. This indicative list is based on the Financial Institutions Net-Zero Standard consultation draft released by the SBTi (Science Based Targets initiative),[9] on the recommendations of the UN-Convened Net-Zero Asset Owner Alliance[10] for production-based metrics, and on Template 3 of Implementing Regulation (EU) 2022/2453,[11] which requires sectoral disclosure of alignment metrics for the banking book:

Table 1: Example overview of sectors for the use of physical emission intensities

Sector	Sub-sectors	Unit(s)
Construction and real estate	Commercial real estate	$kgCO_2eq/m^2$
	Residential buildings	$kgCO_2eq/m^2$
Energy	Electricity production	tCO_2eq/MWh
Industry	Steel production	tCO_2eq/tonne of output
	Cement production	tCO_2eq/tonne of output
Transport	Automotive (passenger vehicles)	$gCO_2eq/v.km$[12]
	Aviation	gCO_2eq/RPK or gCO_2eq/RTK[13]
	Shipping	gCO_2eq/TKM[14]

[9] SBTi. *"Financial Institutions Net-Zero Standard Consultation Draft V0.1"*. July 2024, sciencebasedtargets.org/net-zero-for-financial-institutions

[10] UNEP FI. *"Target-Setting Protocol Fourth Edition"*. April 2024, unepfi.org/industries/target-setting-protocol-fourth-edition/

[11] EU. *"Commission Implementing Regulation (EU) 2022/2453"*. 19 December 2022, eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX%3A32022R2453

[12] v.km stands for vehicle-kilometre, i.e. the kilometres travelled by a vehicle.

[13] RPK stands for "Revenue Passenger Kilometres" and is based on the number of revenue-generating passengers and the distances travelled. RTK stands for "Revenue Tonne Kilometres" and is based on the revenue-generating tonnes of passengers and freight and the distances travelled. The use of RTK is recommended as it covers transport of freight.

[14] Tonne-Kilometres

2.2 General calculation method

Three steps are defined for the description of the I-PEPs calculation method:

1. Determination of the general weighting approach
2. Calculation of the Combined Weighting Factor (portfolio position level)
3. Calculation of emission performance

2.2.1 Determination of the general weighting approach

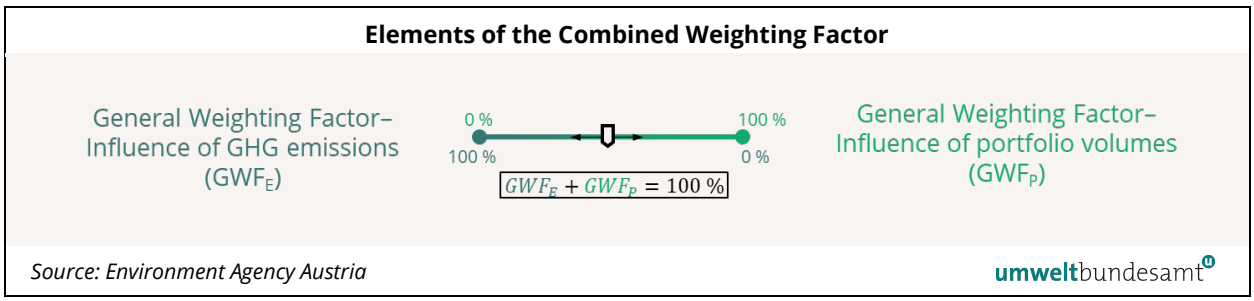
Firstly, an approach for calculating the Combined Weighting Factors (CWF) is determined. The CWF is used to aggregate the individual emission performances of portfolio positions into a steering indicator at portfolio level. It is therefore the weighting factor used to consider the individual emission performance of a portfolio position in the overall result (I-PEPs).

Weighting factors

The CWF is determined by two complementary General Weighting Factors (GWF):

- **General Portfolio Weighting Factor (GWF_P):** This factor determines the influence of the relative portfolio volume on the Combined Weighting Factor. The relative portfolio volume reflects the individual financial exposure of each portfolio position in relation to the portfolio volume.
- **General Emissions Weighting Factor (GWF_E):** This factor determines the influence of the relative level of emissions on the Combined Weighting Factor. This emission share reflects the relationship between individual emission levels and the total emission levels of all portfolio positions.

Figure 2: Schematic illustration of the Combined Weighting Factor



Weighting approaches

The degree to which the portfolio or emission volumes affect the Combined Weighting Factor, and thus the I-PEPs outcome, is determined by the weighting approach selected by the financial company. Three approaches are available:

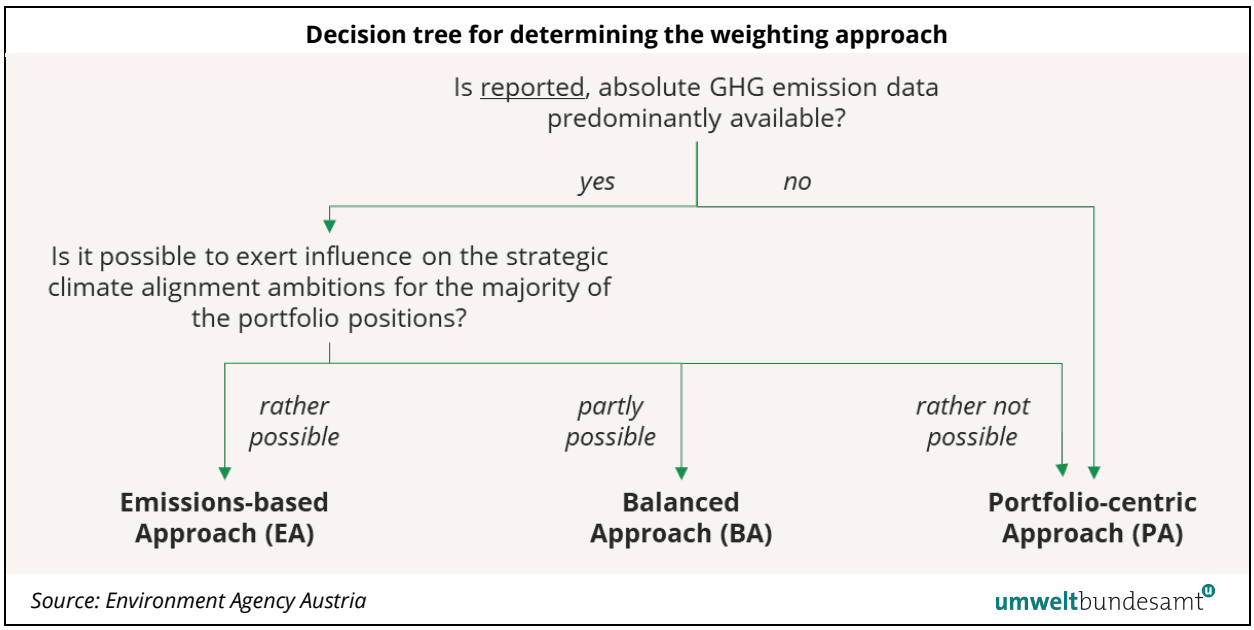
- Balanced Approach (BA)
- Portfolio-centric Approach (PA)
- Emissions-based Approach (EA)

I-PEPs should primarily be used to steer the portfolio decarbonisation. For this use case, two parameters determine which weighting approach should be used:

- The financial company's ability to influence the climate strategy of the portfolio position.
- The availability of annual absolute GHG emission data for the portfolio position.

The following figure outlines the process for determining the appropriate weighting approach:

Figure 3: Determining the weighting approach



Balanced Approach (BA)

- Exertion of influence on climate alignment ambitions: partly possible
- General Weighting Factors: $GWF_P = GWF_E = 50\ \%$

In the Balanced Approach, the portfolio weighting and emissions weighting are given equal consideration in the I-PEPs calculation. This approach is applied when there is the possibility of direct engagement and therefore direct influence, only significantly limited. Examples of typical applications for the Balanced Approach include equity investments (e.g. shareholder engagement at annual general meetings), corporate bond investments (contact as a direct creditor) and corporate lending (contact as a direct lender).

Portfolio-centric Approach (PA)

- Exertion of influence on climate alignment ambitions: rather not possible
- General Weighting Factors: $GWF_P = 100\ \%$; $GWF_E = 0\ \%$

The Portfolio-centric Approach aggregates individual emission performances of portfolio positions using only the portfolio weighting. This approach is used

when direct engagement possibilities are largely absent. This is typically the case with investments in third-party funds where there is unlikely to be any meaningful direct influence on either the fund's investment strategy or the selection of individual securities. Examples include investments in ETFs (Exchange-Traded Funds), mutual funds or funds of funds from third-party providers. In addition, investments in sovereign bonds can be assumed to be associated with a low degree of influence, as financial companies have a very limited influence on the national GHG emission inventory and climate performance (compared to engagement with companies).

Emissions-based Approach (EA)

- Exertion of influence on climate alignment ambitions: rather possible
- General Weighting Factors: GWF_P = 0 %; GWF_E = 100 %

The Emissions-based Approach aggregates individual emission performances using only the emissions weighting. This approach is applied if the financial company can exert significant influence on the climate alignment ambitions of most portfolio positions. As such conditions are rare, this weighting approach is only expected to be used in special cases.

In addition to the potential of financial companies to exert influence on the climate alignment ambitions of portfolio positions, the availability of (reported) absolute GHG emissions must be taken into account. For specific types of project finance (mortgages, commercial real estate and electricity production infrastructure), it is assumed that annual absolute GHG emissions are rarely available. As a result, weighting based on emission volumes is not feasible and the Portfolio-centric Approach must be applied. The table below provides an overview of the different I-PEPs variants and the corresponding weighting approaches.

Table 2: Overview of the I-PEPs variants and corresponding weighting approaches

KPI	Availability of absolute GHG emissions[15]	Influence on climate alignment ambitions	Weighting approach
CPEP and CPEP$_{sector}$	Available	Rather not possible	PA
		Partly possible	BA
		Rather possible	EA
SPEP	Available	Rather not possible	PA
LPEP and LPEP$_{sector}$	Available	Partly possible	BA
CREPEP	Not available	-	PA
MPEP	Not available	-	PA
EPEP	Not available	-	PA
UPEP and UPEP$_{sector}$	Available	Rather not possible	PA

[15] Simplified categorisation into "Available" and "Not available".

If financial companies choose to deviate from the described weighting logic when using I-PEPs, this deviation must be disclosed and justified.

2.2.2 Calculation of the Combined Weighting Factor (portfolio position level)

Once the general weighting approach to be used has been defined in step one, the next step is to determine the weightings of the individual portfolio positions, referred to as Combined Weighting Factors. To do this, the share of each portfolio position in the total portfolio volume and in the summed absolute GHG emissions is calculated.[16] When calculating the share of absolute emissions, it is essential to ensure consistency regarding the emission scopes covered. For example, if Scope 1 and 2 emissions are used as the I-PEPs calculation basis, only these scopes should be used to calculate the emissions weighting.

When calculating the Combined Weighting Factor at portfolio position level, a distinction must be made between the investment and lending portfolio and the underwriting portfolio.

Calculation: investment and lending portfolio

To determine the share in the portfolio volume for each portfolio position, the individual outstanding portfolio volumes (e.g. outstanding lending volume) at the end of the reporting year are considered in relation to the total analysed portfolio volume. The analysed portfolio volume corresponds to the summed portfolio volume of all portfolio positions that are included in the I-PEPs calculation.

Equation 1: Calculation of the portfolio volume shares and emission volume shares for the portfolio positions

$$\omega_{i_P} = \frac{V_i}{V_P}$$

ω_{i_P} ... share in the portfolio volume – portfolio position i
V_i ... outstanding portfolio volume – portfolio position i
V_P ... total analysed portfolio volume

$$\omega_{i_E} = \frac{E_i}{E_P}$$

ω_{i_E} ... share in the emission volume – portfolio position i
E_i ... absolute GHG emissions – portfolio position i
E_P ... sum of absolute GHG emissions from all portfolio positions

Source: Environment Agency Austria

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[16] If the Portfolio-centric Approach is used, only the share of the portfolio volume is relevant. If the Emissions-based Approach is used, only the share of the emission volume is relevant.

The calculated shares of the portfolio volume and the emission volume are then weighted using the two General Weighting Factors and summed to derive the Combined Weighting Factor for the portfolio position.

Equation 2: Calculation of the Combined Weighting Factor (investment and lending portfolio)

$$CWF_i = \omega_{i_E} * GWF_E + \omega_{i_P} * GWF_P$$

CWF_i ... Combined Weighting Factor for portfolio position i

Source: Environment Agency Austria umweltbundesamt

Calculation: underwriting portfolio

The calculation of the Combined Weighting Factor for the corporate underwriting portfolio generally follows the same logic as for the investment and lending portfolio. However, two aspects must be considered for the underwriting portfolio:

- The Portfolio-centric Approach is intended to be used for weighting the underwriting portfolio positions (see Table 2). This means that only the portfolio weighting (ω_{i_P}) is required to calculate the Combined Weighting Factor.
- The annual gross written premiums are used to calculate the portfolio weighting instead of the outstanding investment/lending volume.

This means that to calculate the portfolio weighting (= Combined Weighting Factor) of an insured company in the underwriting portfolio, its share of gross written premiums paid to the insurance company are set in relation to the total gross written premiums received[17] by the insurance company in the reporting year.

Equation 3: Calculation of the Combined Weighting Factor (underwriting portfolio)

$$CWF_i = \omega_{i_P} = \frac{Premium_i}{Premium_P}$$

CWF_i ... Combined Weighting Factor for insured company i (corresponds to its portfolio weight (ω_{i_P})).

$Premium_i$ ... total gross premiums paid by the insured company i to the insurance company in the reporting year

$Premium_P$ ... total gross premiums received by the insurance company in the reporting year

Source: Environment Agency Austria umweltbundesamt

[17] The term "total gross written premiums received" refers to the analysed underwriting portfolio, which only includes the gross written premiums of insured companies that are included in the I-PEPs calculation.

2.2.3 Calculation of the emission performance

Calculation basis

The calculation of the emission performance differs depending on whether absolute GHG emissions or physical emission intensities are used as calculation basis:

- If absolute GHG emissions are used as the calculation basis, the individual emission performance is first calculated at portfolio position level. Individual emission performances of the portfolio positions are then aggregated using their Combined Weighting Factors.
- If physical emission intensities are used as the calculation basis, the individual emission intensities are first aggregated using the Combined Weighting Factors. This is done for both the reporting year and the previous year. The resulting weighted emission intensities are then compared to calculate the emission performance.

Emission performance calculation based on absolute GHG emissions

The individual emission performance for each portfolio position is calculated by comparing its absolute GHG emissions in the reporting year with those of the previous year.

Equation 4: Calculation of portfolio position-specific emission performances (based on absolute GHG emissions)

$$\rho_i = \frac{E_{i,t+1}}{E_{i,t}} - 1$$

E_i ... absolute GHG emissions from portfolio position i in the reporting year (t+1) / previous year (t)

ρ_i ... emission performance from portfolio position i

Source: Environment Agency Austria

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The calculated performance values are then weighted and aggregated using the respective Combined Weighting Factors. This produces the I-PEPs result for the analysed portfolio.

Equation 5: Calculation of the I-PEPs result (based on absolute GHG emissions)

$$\rho_P = \sum_i (CWF_i * \rho_i)$$

ρ_P ... emission performance of the portfolio (I-PEPs)

Source: Environment Agency Austria

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Emission performance calculation based on physical emission intensities

I-PEPs based on physical emission intensities are determined using distinct calculation steps. One of the reasons for this is that the dynamics of the portfolios concerned are often not driven by the individual emission intensity performance of the portfolio positions, but by changes in the composition of

the portfolio. Examples include mortgage portfolios whose emission intensities are largely determined by in- and outflows of portfolio positions. To account for this particularity when calculating I-PEPs, the first step is to calculate the emission intensities for the reporting year and the previous year. To do this, the individual emission intensities are weighted and aggregated using the respective Combined Weighting Factors.

Equation 6: Calculation of emission intensity (portfolio level) in the reporting year and the previous year

$$EI_{P,t+1} = \sum_i (CWF_{i,t+1} * EI_{i,t+1})$$

$EI_{P, t+1}$ ... emission intensity of the portfolio in the reporting year (t+1)
$EI_{i, t+1}$ ... emission intensity of the portfolio position i in the reporting year

$$EI_{P,t} = \sum_i (CWF_{i,t} * EI_{i,t})$$

$EI_{P, t}$ ... emission intensity of the portfolio in the previous year (t)
$EI_{i, t}$ ... emission intensity of the portfolio position i in the previous year

Source: Environment Agency Austria umweltbundesamt

The resulting portfolio-level intensities for the reporting year and the previous year are then compared to calculate the I-PEPs result.

Equation 7: Calculation of the I-PEPs result (calculation basis: physical emission intensities)

$$\rho_P = \frac{EI_{P,t+1}}{EI_{P,t}} - 1$$

ρ_P... emission performance of the portfolio (I-PEPs)

Source: Environment Agency Austria umweltbundesamt

Dealing with divergences between the reporting year of the financial company and those of the portfolio positions

When financial companies prepare their GHG inventory for their reporting year, GHG emission data might not yet be available for all portfolio positions (e.g. companies) for that same reporting year. In addition, reporting periods can vary by region and company: while many companies align their financial years with calendar years, there are numerous companies that use other reporting periods.

When determining I-PEPs, the financial company can take into account different reference periods for each portfolio position. However, clear principles must be defined to deal with this potential temporal misalignment between the reporting year of the financial company and the GHG emission reporting years of the portfolio positions:

- Financial companies should use the most recent GHG emission reporting year of its portfolio positions.
- To ensure a minimum level of timeliness, financial companies should define a minimum year that specifies the reference period up to which GHG emission data for portfolio positions is included in the I-PEPs

calculation. If the most recently reported GHG emission date of the portfolio position predates the minimum year, it should be excluded from the I-PEPs calculation. Such a minimum year can, for example, be set at two years prior to the financial company's reporting year.

In order to interpret the I-PEPs results correctly and thus ensure their significance, it is essential that financial companies make appropriate disclosures in their own reporting when different reporting periods are taken into account (e.g. by using the quantified portfolio shares broken down by the reporting years of the underlying GHG emission data).

The following table shows an example of how a financial company that uses I-PEPs can deal with different GHG emission reporting years for its portfolio positions. The financial company's reporting year is assumed to be 2024 and the minimum year is 2022:

Table 3: Example of dealing with different GHG reporting years for portfolio companies

Portfolio company	GHG reporting year (previous year) of the portfolio company	Considerations for the I-PEPs calculation
A	2024 (2023)	The company's reporting year corresponds to that of the financial company.
B	2023 (2022)	The company's reporting year differs, but does not exceed the minimum year and is therefore taken into account. Any deviation must be disclosed in the communication of results at aggregated level.
C	2021 (2020)	The company's reporting year deviates and exceeds the specified minimum year. Exclusion from the calculation is therefore necessary.

Finally, it should be mentioned that the challenge described here is not only relevant for I-PEPs, but affects all GHG emission-based indicators and the accounting of financed emissions.

Information

Explanation of the terms "reporting year" and "previous year"

In this methodology standard, the terms "reporting year" and "previous year" are used to define two different time periods, depending on whether they refer to the financial company or to the portfolio position:

- **Financial company level:** The reporting year refers to the year for which the financial company prepares the reporting and calculates I-PEPs. The previous year refers to the preceding financial year.
- **Portfolio position level:** The reporting year refers to the year of the reported GHG emission data for the portfolio position that is used in the I-PEPs calculation. The previous year refers to the preceding financial year.

3 STEERING INDICATORS IN DETAIL

The steering indicators are used at a granular level for specific (sub-)asset classes and business areas. As described in Chapter 2, different calculation bases and different weighting approaches can be used. Nevertheless, all performance indicators are linked by the same calculation method presented in Chapter 2.2. The following sub-chapters describe how the general calculation methodology is applied to different I-PEPs variants and which methodological aspects need to be considered.

3.1 Investment portfolio

The current methodological standard covers direct and indirect investments in equities, corporate bonds and sovereign bonds. These are navigated using the following key performance indicators:

- Investments in equity and corporate bonds (CPEP)
  - Segregated sub-portfolios for GHG-intensive sectors ($CPEP_{sector}$)
- Investments in sovereign bonds (SPEP)

3.1.1 Steering indicator: CPEP[18]

The CPEP is used to steer investments in equities and corporate bonds. These can be both direct investments and indirect investments (primarily via investment funds). As described in Chapter 2.2, all three weighting approaches can be used to calculate the CPEP, depending on the potential to exert influence on the climate alignment ambitions and the availability of absolute GHG emission data. As influence and data availability might vary amongst portfolio positions within the analysed sub-portfolios, the weighting approach should be selected based on how the **majority** of the portfolio positions are evaluated (see Chapter 2.2.1).[19]

The absolute GHG emissions of the invested companies are used as the basis for calculating the CPEP. The emission scopes that are to be covered are discussed in Chapter 2.1.2.

[18] Abbreviation for "Corporate Investment Portfolio-related Emission Performance".

[19] An alternative option would be to subdivide the sub-portfolio again to obtain homogeneous portfolios in terms of influence and emission data availability. However, as this approach makes I-PEPs more complex and difficult to understand, this subdivision is not recommended.

3.1.2 Steering indicator: $CPEP_{sector}$[20]

Financial companies that want to steer their investments in GHG-intensive sectors with a dedicated KPI can use $CPEP_{sector}$. This indicator uses physical emission intensities as a calculation basis. Each financial company must determine on an individual basis the extent to which such sector-specific sub-portfolios are possible and useful. The following guiding questions should be considered for this decision:

- Does the financial company have sufficient portfolio depth (number of individual securities) and a relevant portfolio volume to justify separate steering?
- Does the financial company have sufficient data to calculate physical emission intensities?

This I-PEPs Methodology Standard proposes a selection of possible GHG-intensive sectors and potential reference metrics for the use of $CPEP_{sector}$ in Chapter 2.1.2.

By using $CPEP_{sector}$, financial companies implicitly determine how they deal with the growth of invested companies: as only the development of physical emission intensities (and not that of absolute GHG emissions) determines the steering indicator, GHG emission changes caused by growing/shrinking business activities do not have a direct influence on the indicator. Therefore, for an invested company's emission performance, it is decisive to determine the extent to which it can improve its emission efficiency regardless of the growth/decline of its business activities.

The use of physical emission intensities also makes it possible to take into account the way sectoral leaders and laggards[21] are handled in the context of target setting. This is made possible by using the convergence approach when determining the target values (see Chapter 4.1.4).

3.1.3 Steering indicator: SPEP[22]

Sovereign bonds are an important asset class, particularly for asset owners such as pension funds and insurance companies. In recent years, initial approaches to assessing climate risks and climate performance of sovereign bonds[23] have been developed, as well as approaches for attributing GHG

[20] Abbreviation for "Corporate Investment Portfolio-related Emission Intensity Performance (sector)".

[21] The terms "leaders" and "laggards" refer to the physical emission intensity of the companies compared to the average sector value.

[22] Abbreviation for "Sovereign Bond Portfolio-related Emission Performance".

[23] See, for example, ASCOR (Assessing Sovereign Climate-related Opportunities and Risks), CCPI (Climate Change Performance Index), Climate Action Tracker.

emissions to financial portfolios, which was introduced as part of the Partnership for Carbon Accounting Financials' (PCAF) updated GHG accounting standard published in December 2022.[24] The basis for this approach is sovereign emissions, i.e. the emissions of a country, for which the scope, calculation method and current limitations are explained in more detail in the PCAF standard.[25]

Information

Categorisation of a country's GHG emissions

There are different accounting approaches for sovereign GHG emissions. The most common approach in the financial sector is the categorisation according to Scope 1, 2 and 3 emissions as defined by PCAF, based on the GHG Protocol:

- **Scope 1:** Domestic GHG emissions from sources located within the country territory.
- **Scope 2:** GHG emissions resulting from the domestic use of grid-supplied electricity, heat, steam and/or cooling which is imported from another territory.
- **Scope 3:** GHG emissions attributable to non-energy imports as a result of activities taking place within the country's territory.

Scope 1 emissions are also referred to as territorial emissions or production-based emissions and correspond to the national GHG inventories according to the United Nations Framework Convention on Climate Change (UNFCCC). GHG emission data collected by countries (especially Annex I countries[26]) are directly accessible via the UNFCCC. Scope 1 emissions can reflect the emission performance of a country's economic activities. Scope 1 emissions from countries can include emissions from Land Use, Land-Use Change and Forestry (LULUCF). These emissions can distort trends in other sectors relevant to decarbonisation efforts. The consideration of LULUCF emissions in the SPEP indicator should be taken into account separately, if they are taken into account at all.

Using exclusively Scope 1 emissions can result in overlooking emissions from carbon leakage, i.e. the shift of production away from countries where goods and services are consumed. This also refers to the relocation of GHG-intensive industries to countries outside the EU in order to circumvent the stricter European requirements for GHG emissions. To avoid this, Scope 2 and Scope 3 emissions or consumption-based GHG emissions can be taken into account, although data availability and quality might be limited.

[24] PCAF. *"The Global GHG Accounting and Reporting Standard for the Financial Industry/Part A"*. December 2022, carbonaccountingfinancials.com/en/standard.

[25] See PCAF Standard, page 109 ff.

[26] For a definition of Annex I countries, see unfccc.int/parties-observers.

Equation 8: Calculation of consumption-based GHG emissions according to PCAF

$$\text{Consumption emissions} = Production\ emissions - Exported\ emissions + Imported\ emissions$$

$$\text{Consumption emissions} = Scope\ 1 + 2 + 3\ emissions - Exported\ emissions$$

Source: PCAF[27]

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Production-based GHG emissions

The method for calculating the emission performance of a sovereign bond portfolio corresponds to the one for corporate portfolios: this means that a country's relative GHG emissions development between the reporting year and the previous year is calculated and reflected in the steering indicator based on the portfolio weighting. However, for SPEP only, the portfolio-centric weighting approach is intended to be used, as the financial company generally has no or only very limited influence on the GHG emissions of a country.

Due to better data quality and availability, production-based GHG emissions are currently used for the SPEP calculation. If financial companies calculate the SPEP using consumption-based GHG emissions, this must be done consistently for all portfolio positions and be explicitly indicated in the reporting.

Link with PCAF standard

The primary use of production-based GHG emissions for SPEP harmonises with the GHG accounting requirements of the PCAF standard, which provides for mandatory disclosure of production-based emissions and optional, recommended disclosure of consumption-based emissions. This ensures that the PCAF-based complementary GHG accounting and the I-PEPs calculation are subject to the same calculation basis.

3.2 Lending portfolio

The current methodology standard provides steering indicators for the following business areas of the lending portfolio:

- Corporate lending
  - Segregated sub-portfolios for GHG-intensive sectors
- Mortgages
- Commercial real estate
- Project finance: electricity productionSteering indicator: LPEP[28]

[27] PCAF. *"The Global GHG Accounting and Reporting Standard for the Financial Industry/Part A"*. December 2022, carbonaccountingfinancials.com/en/standard.

[28] Abbreviation for Lending Portfolio-related Emission Performance

Corporate lending

The LPEP is used to steer the corporate lending part of the portfolio. This steering indicator is similar to the CPEP (corporate investments) as both have the same type of underlying portfolio positions, namely companies. Accordingly, the approach for determining the calculation basis is identical: the absolute GHG emissions of the financed companies are used as the calculation basis, with the option of steering the financing of GHG-intensive sectors with a separate indicator based on physical emission intensities.

Weighting approach

The methodological difference between LPEP and CPEP lies in the applicable weighting approaches: while all three weighting approaches are applicable for calculating CPEP, only the Balanced Approach (BA) is applicable for LPEP (see Chapter 2.2.1, Table 2). This is because in the case of corporate lending, it is generally assumed that it is partly possible to exert influence on the climate alignment ambitions of the financed company.

3.2.1 Steering indicator: $LPEP_{sector}$[29]

GHG-intensive sectors

Financial companies that want to steer their corporate lending in GHG-intensive sectors with a separate steering indicator can use $LPEP_{sector}$. This indicator is based on physical emission intensities. As the methodological approach is identical to that of $CPEP_{sector}$, the explanations described in Chapter 3.1.2 also apply to $LPEP_{sector}$.

3.2.2 Steering indicators: MPEP[30] and CREPEP[31]

Real estate portfolios

Real estate portfolios are typically divided[32] into mortgages and commercial real estate. One reason for this subdivision is the different counterparties and characteristics of the financed buildings. This subdivision is therefore also used in the I-PEPs methodology, following the asset class classification of the PCAF standard, resulting in two separate steering indicators:

- CREPEP: steering indicator for commercial real estate portfolios
- MPEP: steering indicator for mortgage portfolios

Portfolio-centric weighting approach

For both steering indicators, physical emission intensities are used as the calculation basis and the Portfolio-centric Approach is used as the weighting approach. Both choices are due to the very limited or non-existent availability of absolute annual GHG emission data for buildings.

[29] Abbreviation for Lending Portfolio-related Emission Intensity Performance (sector)

[30] Abbreviation for Mortgage Portfolio-related Emission Intensity Performance

[31] Abbreviation for Commercial Real Estate Portfolio-related Emission Intensity Performance

[32] See, for example, the PCAF standard or SBTi standard.

The portfolio dynamics for both steering indicators are primarily driven by changes in the portfolio composition between the reporting year and the previous year. These changes are triggered by repayments of existing real estate loans and new financing being issued. Renovation activities that lead to an improvement in the property-specific emission intensity also lead to improvements in MPEP and CREPEP. Financial companies that use these indicators to steer their real estate portfolios are therefore incentivised to consider the emission intensity of new financings and to offer additional financing for renovation and refurbishments.

3.2.3 Steering indicator: EPEP[33]

Project finance

Project finance refers to financing activities where the use of proceeds is known and serves a clear project-specific purpose. One such project-specific purpose can be the construction and operation of infrastructure for electricity production. The decarbonisation of electricity production is one of the cornerstones for achieving climate targets. For this reason, it should be navigated, if relevant, with its own steering indicator – the EPEP. The following questions in particular should be taken into account to evaluate the relevance of EPEP:

- Does the financial company have sufficient portfolio depth (number of financed projects) and a relevant portfolio volume to justify separate steering?
- Does the financial company have sufficient data to calculate the physical emission intensities of the financed projects?

Physical emission intensity

The physical emission intensity of electricity production, measured as gCO_2eq/kWh or tCO_2eq/MWh, is intended to be used as the calculation basis for the EPEP. These established units are useful indicators for steering the decarbonisation of financed electricity production projects.

Only the portfolio-centric weighting approach is envisaged as the weighting approach for EPEP, since it can be assumed that information on project-specific annual GHG emissions is only available to a very limited extent.

3.3 Underwriting portfolio

Application area

The insurance industry is characterised by a high level of heterogeneity. This is reflected in both the large number of market participants and the diversity of

[33] Abbreviation for Electricity Production Portfolio-related Emission Intensity Performance

business areas.[34] The scope of this methodology standard is limited to steering indicators for the following area of application:

- Target group: primary insurers
- Insurance segment: commercial lines
- Business areas: see PCAF standard (table 5.1) on accounting for insurance-associated emissions

This methodology standard is aimed at primary insurers for steering the climate-related ambitions of their insurance business with commercial customers. The business areas covered are based on those for which PCAF already provides guidance for GHG accounting. This alignment is intended to ensure consistency between I-PEPs-based target setting and the complementary GHG accounting according to PCAF.

3.3.1 Steering indicator: UPEP[35]

Underwriting portfolio

UPEP is intended to be used for steering portfolio decarbonisation of the underwriting business with commercial customers. As with CPEP and LPEP, the underlying portfolio positions are companies and therefore the same calculation basis can be used here, namely the absolute GHG emissions of the (insured) companies. The GHG emission scopes to be covered are presented in Chapter 2.1.2.

Portfolio-centric weighting approach

As the business relationship between the insurance provider and the insured company is generally limited to insurance business, the possibility of influencing climate ambitions is limited. For this reason, the portfolio-centric weighting approach is used, as presented in Chapter 2.2.1. It should be noted that an adapted calculation logic is used for UPEP to determine the Combined Weighting Factor (see Chapter 2.2.2). This is based on gross written premiums instead of investment/lending volumes.

3.3.2 Steering indicator: $UPEP_{sector}$[36]

As for the investment and lending portfolio, insurance companies can navigate their insurance related underwriting portfolio in GHG-intensive sectors by using

[34] As elaborated on in the following references:

PCAF. *"The Global GHG Accounting and Reporting Standard for the Financial Industry/Part C"*. November 2022, carbonaccountingfinancials.com/en/standard.

NZIA. *"Insuring the net-zero transition: Evolving thinking and practices"*. April 2022, unepfi.org/publications/insuring-the-net-zero-transition-evolving-thinking-and-practices/.

[35] Abbreviation for Corporate Underwriting Portfolio-related Emission Performance

[36] Abbreviation for Corporate Underwriting Portfolio-related Emission Intensity Performance (sector)

a separate steering indicator based on physical emission intensities. As the methodological approach is identical to that of the $CPEP_{sector}$, the explanations given in Chapter 3.1.2 also apply to the $UPEP_{sector}$. Please note the adapted calculation logic for determining the Combined Weighting Factor (see Chapter 2.2.2).

3.4 Investment and lending portfolio (aggregated)

As mentioned in the introduction to Chapter 3, portfolio steering using I-PEPs is based on granular KPIs for the respective asset classes/business areas. However, there is a need for an aggregated indicator, particularly for communicating progress to internal and external stakeholders. The two I-PEPs variants $APEP_{abs}$ and $APEP_{int}$ enable this aggregated view for the investment and lending portfolio.

Steering at sub-portfolio level

However, as with most aggregated KPIs, important information regarding the dynamics at sub-portfolio level is lost through the aggregation. Meaningful operational steering based solely on the aggregated KPIs is therefore not possible. Therefore, although the calculation of the aggregated KPIs is described below, **no approach for possible target setting is described** in this methodology standard.

3.4.1 Aggregated steering indicator: $APEP_{abs}$[37]

Composition

$APEP_{abs}$ is the aggregated metric for those I-PEPs variants that use absolute GHG emissions as the calculation basis and cover the investment and lending portfolio. These are:

- CPEP – investments in equity and corporate bonds
- LPEP – corporate lending
- SPEP – investments in sovereign bonds

Depending on the portfolio structure of the financial company, not all three KPIs may be calculated. Calculating the $APEP_{abs}$ only makes sense if at least two of the three KPIs are available.

Weighting approach

To calculate the aggregated KPI, the indicators of the sub-portfolio must be weighted using the Portfolio-centric Approach. Weighting based on emission shares does not lead to a meaningful outcome here due to the heterogeneity of the sub-portfolio positions (countries vs. companies). It is important to note that

[37] Abbreviation for Aggregated Portfolio-related absolute Emission Performance

the application of the Portfolio-centric Approach for the $APEP_{abs}$ is independent of the selected weighting approach at sub-portfolio level.

Equation 9: Calculation of the emission performance for the aggregated investment and lending portfolio ($APEP_{abs}$)

$$\rho_{APEP_{abs}} = \sum_{P} (\rho_P * \frac{V_P}{V_{total}})$$

ρ_P... emission performance of I-PEPs for sub-portfolio P
V_P ... analysed portfolio volume of sub-portfolio P
V_{total} ... analysed total volume of sub-portfolios considered

Source: Environment Agency Austria

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If a financial company intends to present the evolution of $APEP_{abs}$ over multiple accounting periods, the approach described in Chapter 4.2 can be used accordingly.

3.4.2 Aggregated steering indicator: $APEP_{int}$[38]

Composition

$APEP_{int}$ covers those I-PEPs variants that are based on physical emission intensities and are used to steer the investment and lending portfolio. These are:

- MPEP – mortgages
- CREPEP – commercial real estate
- EPEP – project finance: electricity production
- $CPEP_{sector}$ – equity and corporate bonds in GHG-intensive sectors
- $LPEP_{sector}$ – corporate lending in GHG-intensive sectors

Financial companies will typically not use all of these KPIs. Determining the $APEP_{int}$ only makes sense if at least two of the five above-mentioned KPIs are determined.

For the weighting approach, the calculation of emission performance and evolution over multiple accounting periods, please refer to the explanations provided for $APEP_{abs}$ in Chapter 3.4.1.

[38] Abbreviation for Aggregated Portfolio-related Emission Intensity Performance

4 TARGET SETTING AND DEFINITION OF DECARBONISATION TRAJECTORIES

I-PEPs are a KPI set that financial companies can use as a basis for a sub-section of their climate-related targets. Unlike PCAF-based target setting, their use is not intended to implement GHG emission reduction targets based on a GHG inventory of Scope 3 Category 15 emissions. Instead, the emission trend of portfolio positions is used directly as the basis for calculating performance (see explanations in Chapter 5.2).

The aim of this methodology standard is to explain the function and application of I-PEPs with regard to indicator calculation and target setting. As far as target setting is concerned, the necessary steps are outlined in the following chapter, assuming that these targets are science-based and aligned with a climate scenario.[39]

4.1 Target setting using I-PEPs

The following sub-chapters describe the necessary steps for target setting.

4.1.1 Definition of the base year

Note

The base year is the year used as a reference point for target setting. The following aspects, amongst others, should be considered when defining the base year:

- **Data availability:** Sufficient and meaningful GHG emission data for the portfolio positions should be available for the base year.
- **Representativeness:** The GHG emission data for the base year should provide a realistic basis (negative example: 2021 may be unsuitable due to temporary COVID-related GHG emission reductions).[40]
- **Regulatory requirements:** Depending on the region and type of financial company, there may be regulatory requirements containing provisions for selecting the base year that must be taken into account.

[39] It should be mentioned at this point that financial companies can, in principle, also use bases other than climate scenarios for determining targets. If this is the case, the financial company must provide a corresponding justification and description of the target value determination in their report.

[40] Theoretically, a reference period over multiple years, e.g. a three-year average, can also be used as a basis in order to increase the informative value of the base value.

- **Recency:** the definition of the base year needs to consider the recency of the selected reference period. This is important for mirroring the latest portfolio structure in the base line.

4.1.2 Definition of the target year

To ensure the best possible operationalisation of the climate targets, a short- to medium-term time horizon should be covered when determining target years. The exact target years should be selected considering the following aspects:

- **Regulatory requirements:** Depending on the region and type of financial company, there may be regulatory requirements containing provisions for selecting target years that must be taken into account.
- **Consistency:** I-PEPs-based targets are one of several steering elements in navigating a financial company's climate targets. These in turn are embedded in other environmental and non-environmental (e.g. financial) targets of the financial company. To enable effective target steering with I-PEPs, the determination of target years should be harmonised with the financial company's other targets in a meaningful way.
- **Maturity:** To have real steering effects, the targets should cover a strategically relevant time period. The focus should therefore be on the short- to medium-term time horizon (e.g. three to a maximum of 15 years).
- **Data availability:** Since the use of climate scenarios is generally assumed as the basis for I-PEPs-based target setting, the corresponding GHG emission data availability is important. While some climate scenarios publish GHG emission data for 10-year periods, others do so on a recurring basis for a period of five years. Granularity can also vary within a climate scenario (depending on the sectoral/regional granularity level). The target years should therefore be determined in close coordination with the selected climate scenario.

4.1.3 Selection of the climate scenario

I-PEPs require decarbonisation trajectories, which should reflect the climate ambition of the financial company. The decarbonisation trajectory is derived from the GHG emission estimates of the selected climate scenario for the base year and target year.

I-PEPs are generally climate scenario agnostic, whereby the following general aspects should be considered when selecting the climate scenario:

- **Adequacy of granularity:** As described in Chapter 2, I-PEPs should be used for different portfolios and sub-portfolio levels (e.g. sectors). To make it possible to derive adequate decarbonisation targets from the

climate scenario, these should have an appropriate level of granularity with regard to GHG emission estimates. This also applies to regionally exposed portfolios (e.g. lending portfolios with a focus on one region), for which the best possible congruence with the GHG emission estimates in the climate scenario should be ensured.

- **Coherence of ambition:** Financial companies often publish voluntary commitments that refer to long-term climate targets, which must then be translated as effectively as possible into operationally feasible short- and medium-term targets and measures. When selecting the climate scenario, such long-term commitments – such as climate neutrality goals or committed alignment with a specific temperature pathway – must be taken into account. Best possible coherence needs to be ensured and the following key question is to be considered: can the short- and medium-term target values derived from the climate scenario place the financial company on a realistic target trajectory towards achieving its long-term commitment?
- **Consistency (when using multiple climate scenarios):** Financial companies with heterogeneous sub-portfolios often use multiple climate scenarios. This is usually necessary if climate scenarios do not have the necessary granularity for all sub-portfolios and therefore complementary climate scenarios are required. This may also be necessary when using I-PEPs. If financial companies use several climate scenarios for the different I-PEPs, the best possible consistency between different climate scenario assumptions should be ensured. This includes the macroeconomic parameters on which the climate scenarios are based, the assumptions regarding the expansion and use of Carbon Dioxide Removal (CDR) and the assumed residual budget of GHG emissions.

4.1.4 Determination of the decarbonisation trajectory

When determining the base and target values, it must be distinguished whether I-PEPs are calculated based on absolute GHG emissions or physical emission intensities.

Determination of the decarbonisation trajectory (I-PEPs based on absolute GHG emissions)

To derive the decarbonisation trajectory, the GHG emission value from the climate scenario for the target year is compared with the GHG emission value for the base year. To calculate the annual reduction, a geometric progression is applied for the target period. The resulting percentage corresponds to the average annual reduction in absolute GHG emissions that the financial company is aiming to achieve, and thus represents the target value.

Equation 10: Calculation of the decarbonisation trajectory based on absolute GHG emissions

$$Decarbonisation\ trajectory_P = \sqrt[\Delta t_{ty-by}]{\frac{GHG\ emissions_{scenario,t(ty)}}{GHG\ emissions_{scenario,t(by)}}} - 1$$

t_{by} ... base year
t_{ty} ... target year
$\Delta t_{ty\text{-}by}$ ... target period

Source: Environment Agency Austria

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This approach corresponds to the rate of reduction approach presented in I-PEPs based on physical emission intensities.

Information

Disaggregation of GHG budgets

When deriving target trajectories based on absolute GHG emission data from climate scenarios, it is implicitly assumed that all companies within the region/sector covered by the climate scenario must achieve the same percentage reduction in emissions. While this approach has the advantage of being easy to understand and user-friendly, it overlooks several factors:

- No differentiation is made between leaders and laggards. This means that companies that have already implemented effective climate protection measures in the past are subject to the same targets as those that have not yet taken any action.
- Organic company growth is not taken into account. Companies that are successful, gain market share and thus grow disproportionately are still required to meet the same percentage reduction targets as shrinking companies.

The I-PEPs Methodology Standard offers two possible solutions for this:

1. Since I-PEPs are used at portfolio level and not at company level, financial companies may argue that the ratio between leaders and laggards, as well as growing and shrinking companies within the portfolio, reflects the broader market. Therefore, it is adequate to apply target trajectories for the broader market to the financial portfolio.
2. The financial company uses physical emission intensities (see Chapter 2.1.2) rather than absolute GHG emissions as the basis for the performance calculation.

Another challenge is how to handle green technology companies, which often operate in fast-growing industries. In cases of sufficient data availability, using physical emission intensities as a performance calculation basis would offer one way to steer the desired growth and GHG efficiency. However, generally speaking, such companies should not be navigated using I-PEPs, but with other KPIs intended to steer the expansion of green activities (see Chapter 5.3).

Determination of the decarbonisation trajectory (I-PEPs based on physical emission intensities)

Options for target setting

For I-PEPs based on physical emission intensities (see Chapter 2.1.2), there are two options for determining the target value. The choice between these two approaches depends on whether the financial company assumes that it is disproportionately exposed to leaders or laggards and wants to account for this portfolio characteristic in the target setting process.

1. Rate of reduction approach

In this approach, it is assumed that the portfolio structure reflects the corresponding reference market and that the relevant emission reduction rates that are derived from the climate scenario are therefore applicable. To this end, the estimated physical emission intensities of the climate scenario for the target year and the base year must be set in relation to each other. The resulting percentage reduction is converted into a geometric annual reduction rate to determine the decarbonisation trajectory.

Equation 11: Calculation of the decarbonisation trajectory based on physical emission intensities (rate of reduction approach)

$$Decarbonisation\ trajectory_P = \sqrt[\Delta t_{ty-by}]{\frac{EI_{scenario,t(ty)}}{EI_{scenario,t(by)}}} - 1$$

EI ... emission intensity
t_{by} ... base year
t_{ty} ... target year
$\Delta t_{ty\text{-}by}$ ... target period

Source: Environment Agency Austria

2. Convergence approach

With this approach, the financial company assumes that it is disproportionately invested in leaders or laggards and intends to take this into account when setting targets. For this purpose, the average portfolio-related physical emission intensity must be calculated for the base year using the following formula:

Equation 12: Calculation of the portfolio-related physical emission intensity in the base year

$$EI_{P,t_{by}} = \sum_i (CWF_{i,t_{by}} * EI_{i,t_{by}})$$

t_{by} ... base year
$EI_{P,\,t_{by}}$ ... portfolio-related emission intensity
$EI_{i,\,t_{by}}$ ... emission intensity of portfolio position i
$CWF_{i,\,t_{by}}$ ... Combined Weighting Factor of portfolio position i

Source: Environment Agency Austria

The portfolio-related emission intensity reflects the emission efficiency of the portfolio in the base year. To calculate the decarbonisation trajectory, the estimated emission intensity in the target year derived from the climate scenario is set in relation to the portfolio-related emission intensity in the base year. The result of this is used as an adjusted basis for determining the decarbonisation trajectory, and therefore the target value.

Equation 13: Calculation of the decarbonisation trajectory based on physical emission intensities (convergence approach)

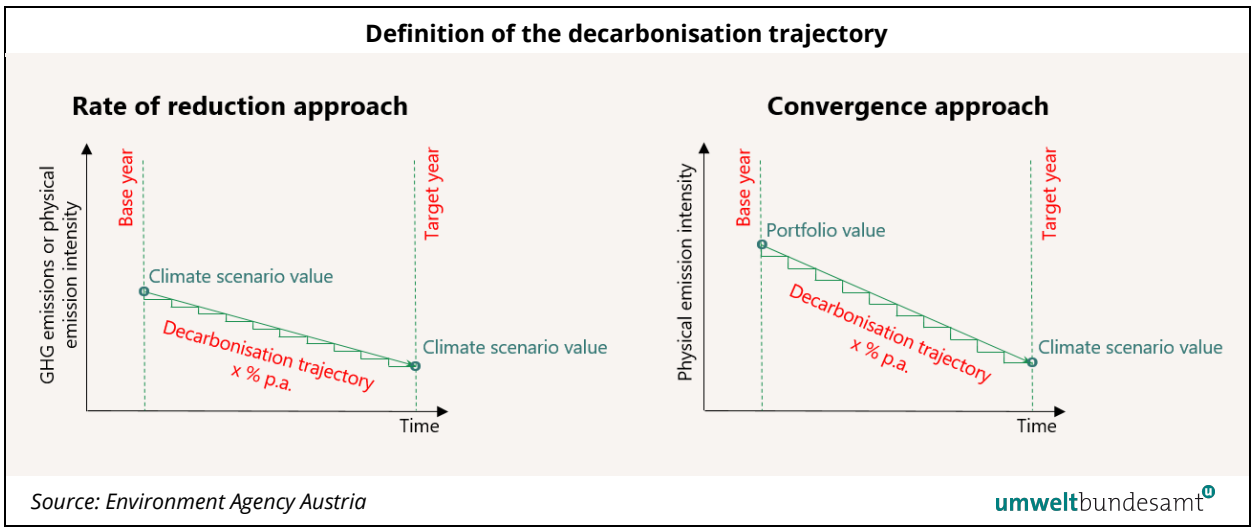
$$Decarbonisation\ trajectory_P = \sqrt[\Delta t_{ty-by}]{\frac{EI_{scenario,t(ty)}}{EI_{P,t(by)}}} - 1$$

Source: Environment Agency Austria

As a result, the convergence approach takes into account the implemented sector strategy of the financial company and its portfolio structure when determining the decarbonisation trajectory.

The figure below visualises the determination of the decarbonisation trajectory and thus the annual I-PEPs target value for both approaches.

Figure 4: Simplified illustration of calculating the decarbonisation trajectory for the rate of reduction approach and convergence approach



Source: Environment Agency Austria

4.2 Tracking progress using I-PEPs

Aim

The aim of tracking progress is to compare the annual, period-specific I-PEPs developments with the annual reduction target defined by the decarbonisation trajectory. The financial company thus seeks to determine the extent to which the portfolio's decarbonisation development across multiple accounting periods aligns with the targeted decarbonisation trajectory. To perform this comparison, the following values are analysed in the reporting year:

- Annual I-PEPs values since the base year
- Arithmetic average of annual I-PEPs since the base year
- Annual reduction target according to the decarbonisation trajectory

Base year/target year comparison

The annual reduction target defined by the decarbonisation trajectory (see Chapter 4.1.4) specifies the target value that the I-PEPs development should achieve **on average.** This means that the average I-PEPs values between the base year and the target year should correspond to the annual reduction target of the decarbonisation trajectory. To perform this comparison, the arithmetic average of the annual I-PEPs since the base year is required (see Equation 14).

Equation 14: Calculation of the arithmetic average of the annual I-PEPs since the base year

$$\emptyset\, I - PEPs = \frac{\sum_i I - PEPs_i}{\Delta t_{ry-by}}$$

ØI-PEPs ... arithmetic average of I-PEPs

$\Delta t_{ry\text{-}by}$ ... number of years between reporting and base year

Source: Environment Agency Austria

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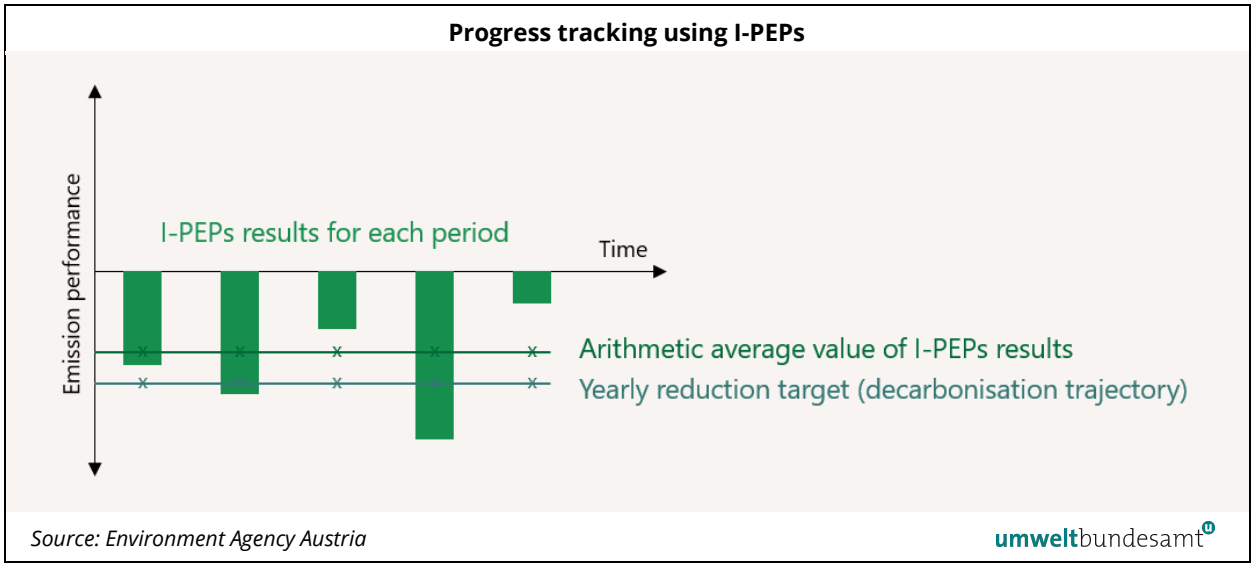
Calculating the arithmetic average value determines the financial company's average annual performance, thereby enabling a comparison with the decarbonisation trajectory across multiple accounting periods, as illustrated in the figure below.

Figure 5: Schematic illustration of tracking progress using I-PEPs



Information

Sample calculation

Chapter 6.3.4 in the Annex contains a sample calculation for tracking progress using I-PEPs along with a graphical illustration.

Target coverage

When reporting progress in yearly disclosures, it is important to disclose the target coverage – i.e. the portfolio share of the analysed portfolio volume in relation to the total volume of the respective sub-portfolio. The degree of coverage can vary significantly depending on the sub-portfolio and the availability of reported emission data.

5 INTERPRETATION AND CATEGORISATION OF I-PEPS

Significance as a performance indicator

I-PEPs belong to the category of performance indicators used to quantify the progress of a financial company across multiple accounting periods. They focus on the progress made in decarbonising core business activities. The indicators compare the evolution of GHG emissions (absolute or intensities) from portfolio positions over two accounting periods and reflect this development as a percentage change.

To understand the role and significance of I-PEPs, they need to be analysed and discussed more holistically as one of several instruments that financial companies can deploy to realise their climate strategies.

5.1 Influencing factors and their significance for I-PEPs

To steer portfolio decarbonisation using I-PEPs in a meaningful way, it is important to understand the possible direct and indirect factors influencing the result. These influencing factors affect I-PEPs on two levels:

1. Calculation of individual emission performances
2. Calculation of Combined Weighting Factors

The factors influencing these two levels are described in more detail below.

5.1.1 Influencing factor: calculation of individual emission performances

Consistency across periods

As described in Chapter 2.1.2, the emission performance of I-PEPs can be determined using two calculation bases: the individual, absolute GHG emissions of the portfolio positions or their physical emission intensities. For the performance calculation to be meaningful, consistency of GHG emission data across accounting periods is essential for both calculation bases. GHG emission data is considered consistent between the reporting year and the previous year if there is meaningful comparability. This means that any changes in the emission values are exclusively due to the actual emission performance. The following examples show where influencing factors can lead to inconsistencies.

Changes in the covered, reported GHG emission sources due to data quantity/quality

Reasons for inconsistency

Companies' GHG accounting has developed significantly in recent years, with regard to both the quantity and the quality of the GHG emission sources reported and included in the GHG emission inventories. However, this dynamic is a challenge for financial companies, as these changes make it difficult to compare the GHG emission data for the reporting year and the previous year. This particularly affects the data on Scope 3 emissions, as the GHG emission sources along the value chain (upstream and downstream) are varied and often complex to determine.

Changes in the covered, reported GHG emission sources due to amendments in company boundaries

Changes in company boundaries in the reporting year can have various causes, such as mergers and acquisitions or changes in reporting boundaries. These can have a significant influence on the company's reported absolute GHG emissions and physical emission intensities, which reduces the informative value of the emission performance.

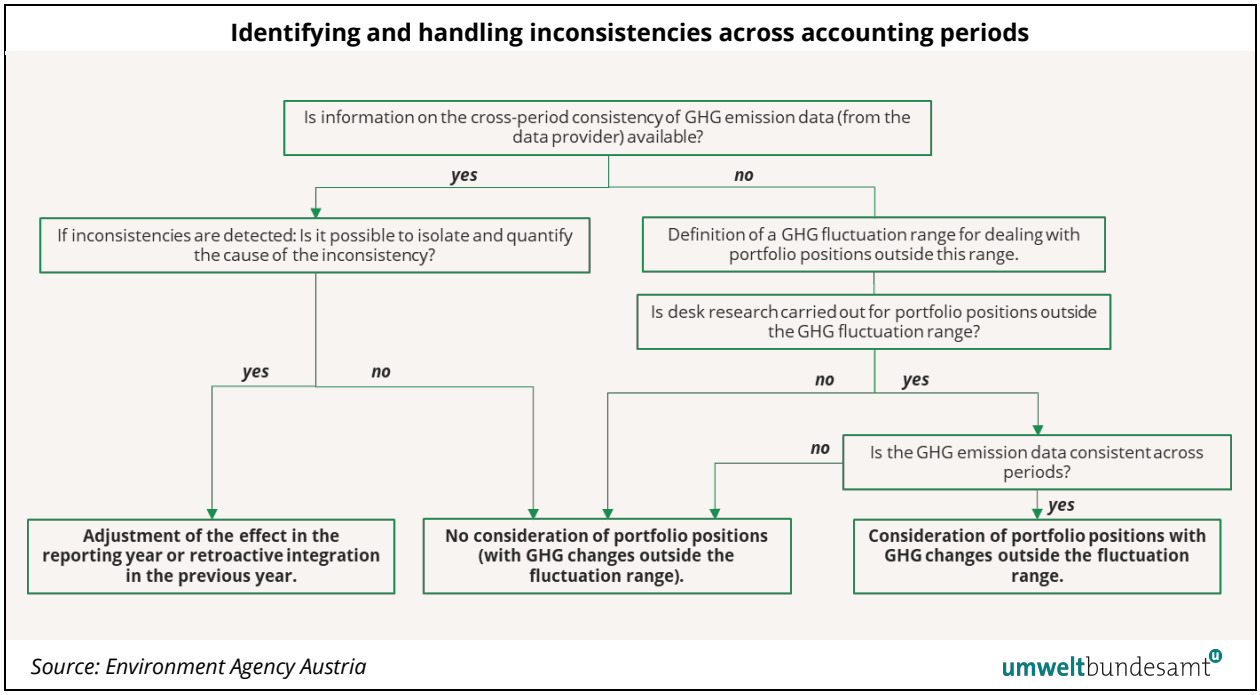
Changes to the GHG accounting methodology

Often, companies can use different methods to determine their GHG emission inventories. For example, a company may use a market-based or a location-based approach to calculate Scope 2 emissions. If companies make changes to their methodology, this can lead to significant changes in their reported GHG emissions, making it difficult to compare them with the previous year (unless a respective adjustment is made).

Another challenge for financial companies is how to identify such changes in the first place. If the financial company obtains GHG emission data from a data provider, a time-efficient option would be to retrieve and take into account any additional information to identify such changes. If this is not possible, financial companies can – alternatively – define a fluctuation range for the change in reported GHG emissions. In this case, all portfolio positions that lie outside this fluctuation range must be analysed individually or excluded from the calculation.

The following decision tree is intended to help I-PEPs users deal with such challenges.

Figure 6: Decision tree for dealing with influencing factors affecting individual emission performance



Source: Environment Agency Austria

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Adjusted calculations In an ideal scenario, changes that lead to an inconsistency across different periods would be labelled as such by the company (or sovereign) or data provider and adjusted GHG emission values would be provided for the previous year. Alternatively, the effect could also be segregated and eliminated in the reporting year to ensure consistency. After such an adjustment, financial companies can determine the individual emission performance and include it in the I-PEPs calculation.

Range It is more challenging when such data is not available. To avoid distorted I-PEPs results due to extreme outliers, it makes sense to use a GHG fluctuation range. Portfolio positions whose individual emission performance lies outside this range should be analysed more closely. Depending on the financial company's resources, desk research is part of a bottom-up analysis. This is used to evaluate whether there is coherence across periods despite GHG emission changes exceeding the fluctuation range. If desk research is not possible due to limited resources, individual portfolio positions can be excluded from the I-PEPs calculation.

Please note the following:

- **Transparency:** Both the GHG fluctuation range and the number of portfolio positions affected by the exclusion, and their corresponding portfolio share, must be disclosed.
- **Consistency:** The GHG fluctuation range used should be defined once and only adjusted in justified exceptional cases.

Note

I-PEPs in an overall climate strategy context

Influencing factors and uncertainties regarding the reliability of reported emissions for portfolio positions are not only a challenge for I-PEPs, but affect all emission-based performance indicators.

In addition to a clearly defined approach on how to deal with these influencing factors (see Figure 6), it is important for financial companies to use complementary indicators besides emission-based indicators for climate-steering their core business. The GFA's Climate Navigation Cockpit (CNC) provides an overview of possible additional indicators (see GFA – Executive Summary).

5.1.2 Influencing factor: calculation of Combined Weighting Factors

The result of I-PEPs can be driven not only by individual emission performances, but also by changes in the Combined Weighting Factors. Depending on whether the weighting approach used (see Chapter 2.2.1) is based solely on the portfolio share and/or the emission share, the influencing factors may differ.

Figure 7: Overview of possible influencing factors affecting the calculation of Combined Weighting Factors

Influencing factors affecting the calculation of Combined Weighting Factors

Portfolio position existent/considered?			Impact on the Combined Weighting Factor?		
Previous year	Reporting year	Possible influencing factors	Emissions-based Approach	Balanced Approach	Portfolio-centric Approach
x	✓	New business (lending), new investments, inclusion in the I-PEPs calculation	yes	yes	yes
✓	x	Matured business, divestments, exclusion from the I-PEPs calculation	yes	yes	yes
✓	✓	Change in relative portfolio share (driven by dynamics in the individual or total portfolio volume)	no	yes	yes
✓	✓	Change in relative emission share (driven by dynamics in the individual or total GHG emissions)	yes	yes	no

Source: Environment Agency Austria

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To categorise the possible influencing factors affecting the Combined Weighting Factor of a portfolio position, a distinction is made in Figure 7 as to whether the portfolio position was in the portfolio on the reporting dates in the reporting and previous year or whether it was included in the I-PEPs calculation in these years.

Influencing factors: new additions to or new inclusions in the calculation

This category of influencing factors concerns portfolio positions that were not included in the I-PEPs calculation in the previous year. This may refer to actual new activities, such as new financing or investments. However, this category also includes portfolio positions that were already in the portfolio in the previous year but were not included in the I-PEPs calculation (e.g. due to a lack of data). This category of influencing factors has an impact on the calculation of emission shares and portfolio shares and therefore on all three weighting approaches.

Influencing factors: portfolio exclusion or exclusion from the calculation

This category of influencing factors concerns portfolio positions that were part of the I-PEPs calculation in the previous year but are no longer part of it in the reporting year. The reasons for this are primarily expiring loans, divestments or the termination of insurance contracts. When calculating I-PEPs, however, existing portfolio positions may also be excluded from the calculation, for example due to lacking consistency in GHG data (see Chapter 5.1.1). This category of influencing factors has an impact on the calculation of emission shares and portfolio shares and therefore on all three weighting approaches.

Influencing factors: changes in portfolio volumes

The relative portfolio share of portfolio positions is determined by the dynamics of the individual and total portfolio volume. For example, the share of a portfolio position with a constant volume decreases when the total volume grows at the same time. As these changes only affect the portfolio shares and not the emission shares, their relevance is limited to the Balanced Approach and Portfolio-centric Approach.

Influencing factors: changes in GHG emission volumes

The relative emission share of a portfolio position depends on its absolute emission volume and the summed total emissions of all analysed portfolio positions. For example, despite decreasing GHG emissions, the individual emission share of a portfolio position increases if the aggregated GHG emissions of all other portfolio positions decrease even more. The impact of this influencing factor category is limited to the emission shares and therefore to the Balanced Approach and the Emissions-based Approach.

Attribution analysis: decomposition of the factors influencing the I-PEPs result

In an attribution analysis, the impact of individual influencing factors on the I-PEPs result is isolated and quantified. This provides the financial company with valuable insights into the main drivers of the I-PEPs result. This knowledge can be used for the interpretation of results and for portfolio management.

It is important to note that this is solely a **granular analysis aimed at gaining a better understanding of the result drivers and not a required result adjustment**. The use of an attribution analysis is therefore useful and recommended, but not mandatory.

5.2 Comparison with GHG accounting according to PCAF

The Partnership for Carbon Accounting Financials (PCAF) was founded in 2015 by 14 Dutch financial institutions. The aim was to develop a transparent, harmonised methodology to measure and report financed GHG emissions from investments and loans in conformance with the requirements of the GHG Protocol (Scope 3, Category 15). The basic idea behind the PCAF standard[41] is to allocate GHG emissions from the real economy (e.g. from companies) to a portfolio using an attribution factor. This is intended to quantify the responsibility of financial companies with regard to the emissions generated in the real economy. Various financed emissions metrics can be calculated based on the PCAF methodology. These include, for example, the absolute financed emissions and different types of emission intensities.

5.2.1 Methodological comparison with the metric "absolute financed emissions"

The best-known metric in the area of GHG accounting for Scope 3 Category 15 emissions from financial companies relating to the investment and lending portfolio is the calculation of absolute financed emissions based on the PCAF standard (Part A). PCAF has currently defined seven asset classes whose attribution logic follows a common pattern: the outstanding financial portfolio volume (e.g. lending volume) in the asset is set in relation to its asset value. For listed companies and the respective asset classes (listed equity, corporate bonds and business loans) the Enterprise Value Including Cash (EVIC) is used as the asset value. In the case of mortgages and commercial real estate, the property value at origination is considered. The evolution of this metric over the years is therefore also substantially characterised by the dynamics of this attribution factor. As I-PEPs are not weighted using the attribution of financed emissions, the results of I-PEPs and the evolution of absolute financed emissions can differ significantly.

[41] PCAF. *"The Global GHG Accounting and Reporting Standard for the Financial Industry/Part A"*. December 2022, carbonaccountingfinancials.com/en/standard.

Note

Sample calculation: comparison of I-PEPs versus evolution of PCAF-based financed emissions

In the Annex (Chapter 6.3.2), an exemplary lending portfolio is used to compare the results of the CPEP calculation and the performance measurement based on the evolution of PCAF-based financed emissions.

5.2.2 Methodological comparison with physical emission intensity indicators

Sector-specific statements

Physical emission intensities are typically used at sector level. The GHG emissions are compared with a sector-specific reference value (such as steel production volumes of a steel company). They therefore enable a sector-specific assessment of GHG emission efficiency. However, they require additional data points. Currently, the PCAF standard is typically used as the basis for calculating physical emission intensities at a portfolio level. In accordance with the PCAF attribution logic, the absolute financed GHG emissions are calculated and then set in relation to the attributed activity data (e.g. steel production volume).

Differences in data basis

I-PEPs provide the possibility of using physical emission intensities for the sector-specific I-PEPs and for certain asset classes/business areas (see Chapter 2.1). In contrast to the PCAF-based calculation, emission intensities from the portfolio companies are directly used, weighted and aggregated in the I-PEPs results.

The different calculation approaches of I-PEPs and PCAF lead to divergent results for similar reasons as those mentioned in Chapter 5.2.1.

Note

Sample calculation: comparison of I-PEPs based on physical emission intensities and PCAF-based intensity metrics

The sample calculation in the Annex (Chapter 6.3.2) of a sector-specific electricity production portfolio simulates the influence of changing input parameters on the physical emission intensities calculated according to the PCAF standard and the $CPEP_{sector}$.

5.2.3 Comparison of the effects of using the EVIC (PCAF) versus avoiding it (I-PEPs)

For listed equity and corporate bonds, for example, the attribution calculation is based on a company's EVIC, which is an established financial indicator. However, its value can be subject to significant fluctuations due to various

influencing factors (such as the share price), which in turn affect the attribution factor.[42] While these fluctuations can potentially be ignored for reporting date-related analyses and statements regarding the GHG inventory, this is a major problem in the context of analyses of climate-related portfolio development across accounting periods. With I-PEPs, the challenge of emission attribution is avoided by using the relative GHG emission trend (= emission performance) of companies and aggregating them according to their weighting factor. There is therefore no need to use EVIC.

5.2.4 Discussion

Supplementary application areas

In contrast to PCAF, I-PEPs focus exclusively on calculating performance. While the primary PCAF result is the **financed emission inventory**, the result of I-PEPs reflects the **weighted trend** of the **real economy GHG emissions** of the underlying business activities. Accounting metrics and performance indicators typically fulfil different purposes. For example, a GHG inventory enables a period-specific analysis of the financed emissions in the reporting year and thus, for example, the identification of hot spots and key areas for engagement. Performance indicators such as **I-PEPs cover multiple accounting periods** and therefore represent the **trend in GHG emissions** from the portfolio positions over time. Such indicators are used for **target setting and steering decarbonisation** efforts. This results in complementary areas of application for both types of metrics.

Suitability across accounting periods

It remains to be seen to what extent PCAF-based metrics are suitable for use as performance indicators across accounting periods without extensive corrective measures. These concerns relate to influencing factors that determine the denominator of the attribution factor and therefore have a significant impact on the financed emissions. As these influencing factors change over time, their changes, in addition to the actual GHG emission development of the financed/invested company, also have an influence on the absolute financed emissions of the financial company. Some financial market players have already developed approaches to isolate and quantify these influencing factors.[43] However, applying these adjustments is time-consuming and technical expertise is required to implement them, along with a solid understanding of the underlying content. With PCAF-based metrics, the possibility of making a statement on the real emission dynamics of the positions underlying the

[42] See the discussion in the PCAF standard (p. 61).

[43] See the following publications as examples:

UN-convened Net-Zero Asset Owner Alliance. *"Understanding the Drivers of Investment Portfolio Decarbonisation"*. December 2023, unepfi.org/industries/understanding-the-drivers-of-investment-portfolio-decarbonisation/.

Bouchet, V. *"Decomposition of Greenhouse Gas Emissions Associated With an Equity Portfolio"*. May 2023, scientificportfolio.com/knowledge-centre/.

portfolio is therefore significantly limited without performing such an in-depth attribution analysis.

I-PEPs, by contrast – beyond their intended purpose of measuring decarbonisation progress – do not make any additional claim to serve as a reporting-date-specific accounting metric. Nor do they aim to quantify the responsibility of financial companies for the induced GHG emissions.

5.2.5 Conclusion

PCAF vs. I-PEPs

The use of the PCAF standard for GHG accounting of financial companies enables these financial companies to report on their date-specific financed emission inventory. However, financial companies are faced with challenges when using PCAF-based metrics to **track emission development over time** in order to disclose statements on real-economy decarbonisation progress. This is because financed emission metrics are subject to influencing factors, which need to be quantified and segregated before making conclusions on the real-economy impact. I-PEPs results do not require such extensive adjustments before conclusions regarding portfolio decarbonisation progress can be derived from them. They are therefore proposed as a **complementary KPI set to steer the portfolio decarbonisation** alongside PCAF-based GHG accounting metrics.

Finally, it should be noted that financed emissions according to PCAF and I-PEPs are based on the same underlying data, namely the GHG emissions of the portfolio positions. This results in 1) synergies in data collection (the data required for I-PEPs is also required for a robust GHG inventory) and 2) consistent scope between the GHG inventory and the decarbonisation target (deviations from this scope may still occur due to limited data availability and quality).

5.3 Classification of I-PEPs in the theories of change

Analysis of impact

In the field of sustainable development, the focus is on achieving real-world impact. Non-profit organisations, initiatives and supranational institutions[44] have therefore long been engaged in a holistic, critical analysis of sustainable initiatives and their activities in terms of actual impact. This involves a holistic approach that analyses the entire impact chain (inputs-actions-outputs-outcomes-impact) and the underlying assumptions.

[44] Examples include the United Nations and its numerous sustainability programmes and initiatives.

Real economy changes

International financial market initiatives in the area of climate action are also increasingly turning to theories of change.[45] Central to these is the question of the extent to which actions at the financial market level actually have an impact in the real economy and thus contribute to a reduction in GHG emissions. In other words: which measures taken by financial companies actually drive changes in the real economy? In particular, the following two approaches are being discussed on a scientific basis:

Two approaches

- Divestments from and avoidance of GHG-intensive industries and fossil fuel sectors: what are the effects on the cost of capital for affected companies? Does redirecting capital drive actual changes in the business strategy of the affected companies?
- Engagement: to what extent does regular, structured dialogue with invested and financed companies drive changes in their climate-related business strategy?

Three steering modules

To better position I-PEPs in these international discussions, it is useful to look at them from the perspective of theories of change. However, applying these theories to I-PEPs in isolation is not meaningful, as this KPI set was developed within the GFA as a steering module of a multidimensional Climate Navigation Cockpit (CNC). This consists of three steering modules: portfolio decarbonisation, impact engagement and expansion of green activities. Each of the three steering modules consists of multiple indicators that are intended to be used together to steer the climate efforts of a financial company. I-PEPs is one element of this, under the portfolio decarbonisation module.[46] This means that financial companies that use I-PEPs to steer their decarbonisation efforts should simultaneously use complementary indicators for proactive engagement and the expansion of green activities.[47] Financial companies that use the CNC have the following mission:

> **Expansion of business activities in innovative, green growth markets and simultaneous transition support for existing, future-proof industries towards sustainable business models.**

Impact

While the indicators from the CNC steering module "Expansion of Green Activities" are intended to support the strategic expansion of a growing green portfolio, I-PEPs aim to support the transition (and thus decarbonisation) of

[45] Examples include the UN-convened Net-Zero Asset Owner Alliance, UNEP FI Principles for Responsible Banking and the Science Based Targets initiative.

[46] For more information on the Climate Navigation Cockpit (CNC), see chapter 5.1.1.2 in the GFA – Executive Summary.

[47] To ensure comprehensive climate navigation, financial companies should manage the phase-out of fossil fuels in addition to pursuing proactive engagement and the expansion of green activities. In the Green Finance Alliance, this is done in line with predefined phase-out criteria for coal, oil and natural gas (see annex in the GFA – Executive Summary).

other sectors of the economy. However, this transition can only be achieved through active engagement with corporate clients, which is facilitated by the use of steering indicators from the CNC steering module "Impact Engagement". It should be noted that, in exceptional cases, the steering signals from the "Expansion of Green Activities" steering module and those from I-PEPs may diverge, specifically in the case of green technology companies:

Dealing with companies in green technology sectors

Dealing with target conflicts

Corporates that primarily offer solutions for the green transition can only be steered to a very limited extent using decarbonisation metrics. The reason for this is that their solutions (e.g. wind turbines) are the foundation of a green transition and their success depends on rapid and significant expansion. Despite their substantial contribution to a low-carbon future, this production growth is generally accompanied with rising GHG emissions from the companies concerned. Portfolio steering using I-PEPs would, however, aim to decarbonise such companies, while the objectives under the steering module "Expansion of Green Activities" would implicitly have the opposite effect. To avoid this conflict, it is recommended that such companies are excluded from the application of the "Portfolio Decarbonisation" steering module and are controlled using the module on expansion of green activities. Such segregations should be actively communicated to the public in the climate strategy and in annual reports.

Dealing with companies in the oil and gas and thermal coal sectors

Global exit

At the other end of the spectrum from green companies are those in the fossil fuel sector. From a science-based climate perspective, a timely and gradual phase-out of their core activities is envisaged for oil, gas and coal companies. Unlike other GHG-intensive sectors (e.g. steel or cement), a global phase-out is therefore envisaged rather than technological transition support towards sustainable solutions within their core business.

Possible solution

In contrast to other GHG-intensive sectors, the use of physical emission intensities as the basis for calculating I-PEPs is not expedient. This is because, despite improvements in this indicator, fossil fuel production and therefore GHG emissions can increase. The use of absolute GHG emissions based on reported Scope 1 and 2 emissions from those companies would, in turn, not take into account the significant Scope 3 emissions from the fossil fuel sector. As described in Chapter 2.1.2 , financial companies have the option to use an additional I-PEPs variant for Scope 3 emissions from the sub-portfolio. The challenge here would be that Scope 3 emissions from a wide range of sectors would be mixed and aggregated with those from the fossil fuel sector and therefore the significance of the latter might not be adequately reflected. One solution would therefore be to use a segregated I-PEPs variant for the oil, gas and coal sectors, based on absolute Scope 3 emissions, and to use the corresponding sector pathways for target setting. However, such a separate analysis would require its own indicators and sufficient human resources to manage them. It is therefore only a sensible option for financial companies with

significant portfolio exposures in the fossil industry. An alternative solution for dealing with fossil fuel companies is to use criteria (such as the one from the GFA) for a gradual phase-out of fossil fuels. Additional management by means of I-PEPs is superfluous in this case.

Information

Case example: Green Finance Alliance (GFA) fossil fuel phase-out criteria

The GFA has defined transparent and science-based phase-out criteria for the coal, oil and gas sectors. These criteria apply to projects and companies throughout the vertical fossil fuel value chain and support GFA members in implementing their phase-out from the fossil fuel industry.[48] Therefore, GFA-members steer fossil fuel exposures not with I-PEPs but separately with dedicated phase-out requirements.

5.4 Comparison of I-PEPs with the consultation draft of the FINZ Standard from SBTi

Partners and targets

SBTi is a corporate climate action organisation, incorporated as a UK charity. Its partner organisations are CDP, the United Nations Global Compact, the We Mean Business Coalition, the World Resources Institute (WRI) and the World Wide Fund for Nature (WWF). The initiative aims to mobilise the private sector to take climate action. It supports companies in setting science-based emission reduction targets. To this end, SBTi develops and publishes sector-specific guidelines that companies can use as a basis for developing their own science-based targets. In July 2024, SBTi published a consultation draft[49] of its Financial Institutions Net-Zero (FINZ) Standard. This consultation draft is structured around five key outcomes that translate into a range of requirements and recommendations which, when implemented, support financial institutions in reaching a net-zero end state. Two of these key outcomes define requirements and recommendations for portfolio-related targets. Since I-PEPs is a KPI set for portfolio decarbonisation that must be embedded in a comprehensive climate strategy, the following analysis is limited exclusively to relevant aspects within these two key outcomes

Key elements

- Portfolio Climate-Alignment Targets
- Emissions-intensive Sectors Targets

[48] See annex in the GFA – Executive Summary.

[49] SBTi. *"Financial Institutions Net-Zero Standard Consultation Draft V0.1"*. July 2024, sciencebasedtargets.org/net-zero-for-financial-institutions.

Note: According to SBTi, a final version of the standard will be published in the course of 2025.

The consultation draft of the FINZ Standard was used as the basis for the analysis.

Note

The consultation draft of the FINZ Standard was used as the basis for the analysis and only selected aspects were compared with the I-PEPs Methodology Standard. It is planned to carry out an extended, updated comparison with the GFA's Climate Navigation Cockpit (including I-PEPs) once the final version of the FINZ Standard has been published.

Requirements for target ambition

As ambition level, the FINZ Standard (with its requirements 3.2.1 and 4.3.2) requires targets to be aligned with a relevant 1.5 °C benchmark. Although I-PEPs is climate scenario-agnostic (see Chapter 4.1.3), it defines certain requirements with regard to the characteristics of decarbonisation pathways used. Therefore, the climate scenario-related requirements of the FINZ Standard can also be used to determine the target decarbonisation trajectory using I-PEPs. Only the ambition-level requirements were analysed, and not the specific metrics that the FINZ Standard defines for target validation.

Requirement for deriving the target trajectory for emission-intensive activities

According to requirement 4.3.2 in the FINZ Standard, the convergence approach, specifically the Linear Intercept Approach (LIA), is to be used for emission-intensive sectors. The I-PEPs Methodology Standard offers two alternative approaches for defining the target values in accordance with Chapter 4.1.4, including the LIA.

Requirements for the target years

Depending on the segment,[50] the FINZ Standard requires different target years, which include the years 2030, 2035, 2040 and 2050. I-PEPs does not specify a particular target year, but requires the short- to medium-term time horizon to be covered, which is congruent with the time period focused on by the SBTi requirements. Furthermore, Chapter 4.1.2 specifies various aspects that should be used to determine the target years.

Requirements regarding the use of physical emission intensities

In requirement 4.1.1 and the referenced Table 11, the FINZ Standard defines a list of emissions-intensive sectors and activities that is to be used to identify the exposure to key emissions-intensive sectors (also referred to as "in-scope emissions-intensive activities"). For most of the emissions-intensive sectors,

[50] The FINZ Standard defines segments according to the level of influence (reasonable vs. limited) and the climate impact (higher vs. lower) of the financial activity.

requirement 4.2.1 specifies the use of physical emission intensities, with sector-specific eligible metrics being listed in Table 17 of the FINZ Standard. The use of the linear intercept approach to derive the target trajectory is also specified. The comparison with the I-PEPs Methodology Standard shows a high degree of alignment:

FINZ/I-PEPs comparison

- The GHG-intensive sectors listed in Table 1 of this standard largely correspond to those of the FINZ Standard for the use of physical emission intensities.[51]
- The units specified in Table 1 for the GHG-intensive sectors listed generally correspond to those in the FINZ Standard.
- The I-PEPs Methodology Standard specifies the relevant portfolio depth, portfolio volume and data availability as decisive factors for the segregation of sectoral sub-portfolios (see Chapter 2.1.2). In the FINZ Standard, requirement 4.3.1 specifies the required coverage of the target. This should cover at least 95 percent of the in-scope "reasonable influence – higher climate impact" financial activities.
- To derive the target trajectory, the FINZ Standard specifies the convergence-based LIA approach, which is also stated as one of two alternatives for determining the decarbonisation trajectory for I-PEPs (see Chapter 4.1.4).

5.5 Comparison of I-PEPs with the metrics and methods synthesis report from SBTi

In parallel with the publication of the consultation document on the FINZ Standard, SBTi published a synthesis report on metrics and methods for financial institutions.[52] The aim of this analysis was to evaluate existing metrics and methods in the financial sector with regard to their suitability for credible, science-based target setting. In order to carry out this suitability test, an evaluation process was presented in the synthesis report that helps to assess metrics and methods in terms of their consistency with the SBTi principles.

[51] In contrast to the I-PEPs Methodology Standard, the FINZ Standard lists the absolute GHG emissions (in tCO_2eq, using the absolute contraction approach) or the physical emission intensity (in tCO_2eq/MJ, using the linear intercept approach) as eligible indicators for sectors along the fossil fuel value chain. For I-PEPs, no segregated steering of the fossil fuel sector is planned. Instead, separate phase-out targets are recommended (see Chapter 5.3).

[52] SBTi. *"Financial Institutions Metrics and Methods Synthesis"*. July 2024, sciencebasedtargets.org/net-zero-for-financial-institutions.

Classification of I-PEPs within the metric categories

The SBTi synthesis report defines three metric categories:

- Impact-based metrics
- Outcome-based metrics
- Process-based metrics

The focus of the SBTi analysis was on the first two categories. In order to assign I-PEPs correctly to one of the three categories, the SBTi definitions of these terms are crucial.

Table 4: SBTi definitions used for metric categories

Metric category	Description according to SBTi synthesis report
Impact	Measures the actual effects or results of an organisation's activities on the climate, e.g. GHG emissions released into the atmosphere. In terms of the time horizon, impact refers to the long-term effects. Examples: metrics based on absolute GHG emissions or emission intensities.
Outcome	Measures the extent to which an organisation's strategies, operations and business model are in line with global climate goals. In terms of the time horizon, outcome refers to the near- to medium-term effects. Example: share of electricity from carbon-free sources.
Process	Measures controllable actions that an organisation can undertake to help achieve a change in the outcome metric and ultimately the impact metric. Example: number of engagements with a portfolio company.

The aforementioned metric categories should be viewed as complementary dimensions. In this way, long-term impact can be created by achieving defined short- and medium-term goals via outcome metrics.

Process metrics, on the other hand, can be used for internal structuring and to support the achievement of targets. It should be noted that I-PEPs are not intended for such process-orientated objectives, as other metrics are more suitable for this purpose.

Note

Outcome and process metrics and their use in the Green Finance Alliance (GFA)

The GFA's list of criteria and the Climate Navigation Cockpit (CNC) define multiple outcome and process requirements and metrics. In accordance with the GFA list of criteria, members are obliged to publish guidelines on the use of fossil fuels, define engagement targets and publish an annual progress report.

Several outcome metrics are specified in the CNC in the "Expansion of Green Activities" and "Impact Engagement" steering modules, for example:

- Taxonomy alignment ("Expansion of EU taxonomy-aligned investments" in the CNC steering module "Expansion of Green Activities")
- SBT portfolio coverage ("Share of companies with validated climate targets" in the CNC steering module "Impact Engagement")

As I-PEPs are indicators based on GHG emissions, they can best be categorised as impact metrics. While SBTi associates impact metrics exclusively with target setting for a long-term time horizon, I-PEPs were primarily developed for short- and medium-term portfolio steering and target setting.

In the SBTi synthesis report, each of the three metric categories was evaluated using four principles (each divided into two assessment criteria[53]). Within the metric categories, a further differentiation was made between different types of metrics. The results in the SBTi synthesis report for the impact metrics "absolute emissions" and "weighted average physical intensity" are used for comparison with I-PEPs. These correspond most closely to the I-PEPs KPI set and they have certain characteristics in common that are highlighted by SBTi (e.g. the focus on past performance). However, some other arguments mentioned in the SBTi synthesis report for impact metrics do not apply to I-PEPs. These include the fact that these metrics provide a reduced incentive to finance GHG-intensive activities that are in transition. Since I-PEPs only use the individual emission performance of portfolio positions (and not absolute emission values), I-PEPs results are not negatively impacted by new investments in GHG-intensive sectors as long as these companies are transitioning. On the contrary, financial companies that use I-PEPs have an incentive to increasingly support business activities of companies willing to transition, as this leads to an improvement in I-PEPs results.

Result of the comparison: as I-PEPs are based on GHG emissions, they are best classified as an impact metric. However, their primary focus on short- to medium-term target horizons – along with other distinct characteristics – marks a notable difference from SBTi's definition of impact metrics.

The assessment results from SBTi and the evaluation of I-PEPs (self-assessment) based on the SBTi principles is presented in following table:

[53] Table 9 of the SBTi synthesis report provides a detailed description of the assessment criteria and the respective scoring rubric.

Table 5: Assessment results for impact metrics (from the SBTi synthesis report) and I-PEPS (self-assessment)

Principle	Criteria	Absolute emissions	Weighted average physical intensity	I-PEPs
Ambition	Linked to delivery of emissions	Low	Medium	High
	Transition and green	Medium	Medium	Medium
Transparency	Easy to replicate	High	High	High
	Easy to understand	High	High	High
Robust	Limited volatility	Low	High	Medium
	Scalable/widely applicable	High	Medium	Medium
Actionable	Easy to measure with limited assumptions	Medium	Medium	High
	Responsive to counterparty actions	Medium	High	High

More details on the rationales behind the self-assessment are presented in Chapter 0.

Consideration of the I-PEPs weighting approach with regard to relevant explanations in the SBTi synthesis report

The SBTi synthesis report lists types of GHG emission-based metrics and explains their underlying calculation method in general terms. This includes metrics based on absolute GHG emissions for entire (sub-)portfolios as well as physical emission intensity metrics for sector portfolios. In both cases, SBTi is open to different aggregation approaches in the synthesis report and justifies this with the different approaches with which "responsibility" can be measured.[54]

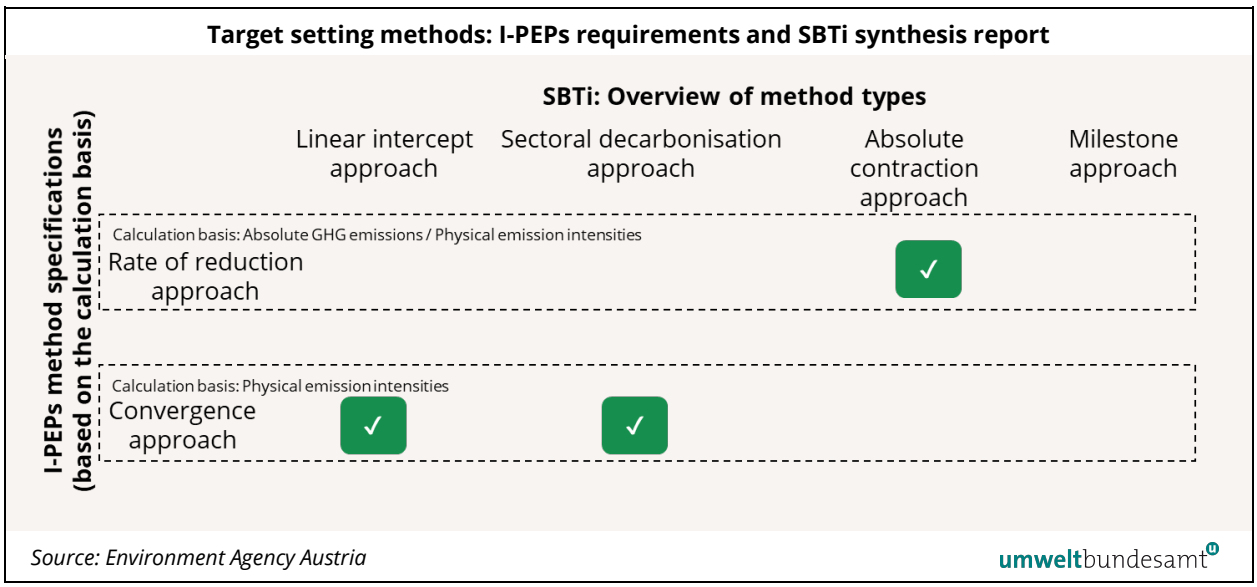
Result of the comparison: as the SBTi synthesis report is agnostic towards weighting approaches for measuring "responsibility", there is no contradiction with the I-PEPS weighting approaches.

Comparison of target setting methods

Different methods can be used to determine the target trajectory, depending on the metric type. The synthesis report provides an overview of the different approaches and their characteristics. For I-PEPs, the predefined target setting approaches are presented in Chapter 4.1.4 and can be matched to the ones highlighted in the SBTi synthesis report (see Figure 8).

[54] See footnotes 5 and 6 in the SBTi synthesis report.

Figure 8: Assignment of the target setting methods of I-PEPs to the method types according to the SBTi synthesis report



The rate of reduction approach used in I-PEPs as the basis for calculating the target when absolute GHG emissions are used corresponds to the absolute contraction approach in the SBTi synthesis report. When using physical emission intensities, users of I-PEPs can alternatively set the target using the convergence approach, which corresponds to the linear intercept approach and the sectoral decarbonisation approach of SBTi.[55]

Result of the comparison: the different target setting approaches for I-PEPs correspond to the linear intercept approach, the sectoral decarbonisation approach or the absolute contraction approach of the SBTi synthesis report.

[55] Both SBTi approaches, the linear intercept approach and the sectoral decarbonisation approach, are based on the convergence principle, in which the decarbonisation trajectory converges towards a climate scenario. The linear intercept approach is a simpler application of the convergence principle, whereby the convergence is linear between the portfolio value in the base year and the climate scenario value in the target year. This corresponds to the application of the convergence approach for target setting with I-PEPs as described in Chapter 4.1.4. With the sectoral decarbonisation approach, SBTi requires a longer-term convergence by 2050, whereby the decarbonisation trajectory must be calculated individually. The SBTi synthesis report provides a more detailed description of the two SBTi approaches, both of which are theoretically applicable in the context of I-PEPs.

6 ANNEX

6.1 Overview of steering indicators (I-PEPs)

The following table provides an overview of the steering indicators presented in the I-PEPs KPI set.

Table 6: Overview of I-PEPs by portfolio, (sub-)asset class or business area

Abbreviation	Name	Portfolio / (sub-) asset class / business area	Calculation basis
$APEP_{abs}$	Aggregated Portfolio-related absolute Emission Performance	Total analysed investment and lending portfolio	Absolute GHG emissions
$APEP_{int}$	Aggregated Portfolio-related Emission Intensity Performance	Investment and lending portfolio: project finance (commercial real estate, mortgages, electricity production), equities, corporate bonds and corporate lending in material, emission-intensive sectors	Physical emission intensities
CPEP	Corporate Investment Portfolio-related Emission Performance	Investment portfolio: equities and corporate bonds	Absolute GHG emissions
$CPEP_{sector}$	Corporate Investment Portfolio-related Emission Intensity Performance (sector)	Investment portfolio: equities and corporate bonds in material, emission-intensive sectors	Physical emission intensities
LPEP	Lending Portfolio-related Emission Performance	Lending portfolio: corporate lending	Absolute GHG emissions
$LPEP_{sector}$	Lending Portfolio-related Emission Intensity Performance (sector)	Lending portfolio: corporate lending in material, emission-intensive sectors	Physical emission intensities
SPEP	Sovereign Bond Portfolio-related Emission Performance	Investment portfolio: sovereign bonds	Absolute GHG emissions
CREPEP	Commercial Real Estate Portfolio-related Emission Intensity Performance	Lending portfolio: commercial real estate	Physical emission intensities
EPEP	Electricity Production Portfolio-related Emission Intensity Performance	Lending portfolio: project finance – electricity production	Physical emission intensities
MPEP	Mortgage Portfolio-related Emission Intensity Performance	Lending portfolio: mortgages	Physical emission intensities
UPEP	Corporate Underwriting Portfolio-related Emission Performance	Underwriting portfolio: corporate clients	Absolute GHG emissions
$UPEP_{sector}$	Corporate Underwriting Portfolio-related Emission Intensity Performance (sector)	Underwriting portfolio: corporate clients in material, emission-intensive sectors	Physical emission intensities

6.2 Evaluation of I-PEPs using the SBTi assessment grid

In Chapter 5.5, a self-assessment of I-PEPs was carried out using the SBTi assessment grid for metrics. SBTi's set of four principles, each principle being associated with two assessment criteria, has been published in the SBTi synthesis report and is used as a basis for the self-assessment. In this chapter, the self-assessment presented in Chapter 5.5 is explained and justified in more detail.

The following table shows the SBTi assessment criteria.

Table 7: SBTi assessment grid for metric types

Principle	Criteria	Description of the criterion
Ambitious	Delivery consistent with 1.5°C	The degree to which the metric reflects the delivery of real world emissions reductions, i.e. represent over time the actual delivery of reductions in the real economy and not just stated ambition.
	Transition and green	The degree to which the metric addresses both "transition" and "green" finance to ensure that financial institutions are incentivised to support the activities' needs for a net-zero economy.
Transparency	Easily replicated with all assumptions public	The degree to which the metric can be replicated, based on publicly available documentation required for its calculation.
	Easily understood and granular	The degree to which the metric is easily understood by a wide range of audiences, and cannot be easily misinterpreted.
Robust	Limited volatility over time	The degree to which changes to metric value reflect improved performance and avoid volatility from attributing / normalising emissions based on non-physical attributes.
	Scalable and widely applicable across financial activities	The degree to which the metric can be applied across a range of financial activities and sectors.
Actionable	Objective	The degree to which the metric is easily measurable based on widely available data, relying on a limited set of assumptions.
	Responsive to counterparty actions	The degree to which the metric can detect change resulting from an intervention.

Source: SBTi – Financial Institutions Metrics and Methods Synthesis V1

The SBTi assessment grid shown in Table 7 was used as part of a self-assessment for I-PEPs. The results of this evaluation and the underlying rationale are summarised in Table 8.

Table 8: Evaluation results of I-PEPs (self-assessment), based on the SBTi assessment grid

Principle	Criterion	Assess-ment	Rationale
Ambitious	Delivery consistent with 1.5°C	High	I-PEPs are solely dependent on the GHG trend of the portfolio positions (as well as the portfolio composition, see Chapter 5.1.2). Therefore, there is a clear correlation with actual, real economic GHG reductions.
	Transition and green	Medium	Improvements in the I-PEPs results are derived exclusively from GHG reductions in the portfolio positions. Financial companies that use I-PEPs are therefore incentivised to conduct an ex-ante evaluation of the transition readiness of potential new portfolio positions and regularly analyse the progress of the transition ex-post (especially for liquid portfolio positions). I-PEPs are not intended to be used to steer the expansion of green activities. The use of complementary indicators is recommended (see Chapter 5.3). I-PEPs therefore provide neither clear incentives nor disincentives regarding green activities.
Trans-parency	Easily replicated with all assumptions public	High	The I-PEPs calculation is not based on any subjective assumptions or estimates. Only reported GHG emission data and portfolio volumes are required. The I-PEPs calculation method is publicly available to all stakeholders free of charge, making the methodological approach understandable and comprehensible.
	Easily understood and granular	High	Simple concept for calculating metrics. No complex methodological approach, which favours a broad range of users and a better understanding amongst stakeholders.
Robust	Limited volatility over time	Medium	Unwanted influencing factors (which would require adjusting results) are limited in the I-PEPs calculation. Factors that are independent of the GHG emission trends of portfolio positions exist when calculating the Combined Weighting Factor. Although these influencing factors do not have to be adjusted, they can be analysed by conducting an attribution analysis (see chapter 5.1.2).
	Scalable and widely applicable across financial activities	Medium	The I-PEPs methodology can be applied to various portfolios, asset classes and sectors. A lack of emission data quality and quantity may currently limit the area of application to some extent.
Actionable	Objective	High	I-PEPs are calculated without using estimations, since they are solely based on reported GHG emission data. This ensures the objectivity of the I-PEPs results.
	Responsive to counterparty actions	High	Actions by counterparties that lead to changes in their GHG emissions have a direct impact on their emission performance and therefore on the I-PEPs result.

6.3 Sample portfolio simulations

In the following sample calculations, the methodological approach of I-PEPs is illustrated using simplified sample portfolios.

6.3.1 Application of the calculation method

The application of the I-PEPs calculation methodology is illustrated using a sample investment portfolio with an investment volume of EUR 10 million, spread across investments in four companies. Two of these companies belong to the GHG-intensive electricity production sector. For the purpose of simplification, it is assumed that the investment volumes at reporting dates in the reporting year and the previous year are identical.

Table 9: Sample calculation – investment portfolio data

	Sector	Investment volume Previous year	Investment volume Reporting year
Company A	Non-GHG-intensive sector	EUR 3 million	EUR 3 million
Company B	Non-GHG-intensive sector	EUR 3 million	EUR 3 million
Company C	Electricity production	EUR 2 million	EUR 2 million
Company D	Electricity production	EUR 2 million	EUR 2 million
Total		EUR 10 million	EUR 10 million

As described in Chapter 2.1.2, I-PEPs can be calculated using two calculation bases: absolute GHG emissions or physical emission intensities. The latter calculation basis is only intended for certain GHG-intensive sectors, such as electricity production. Therefore, two I-PEPs variants can be calculated using this sample portfolio:

- CPEP: calculation based on absolute GHG emissions for the entire investment portfolio.
- $CPEP_{electricity}$: calculation based on physical emission intensities for a sub-portfolio consisting of the two utility companies.[56]

[56] When segregating GHG-intensive sector exposures to create a distinct sub-portfolio, the companies concerned are no longer included in the calculation of CPEP in order to avoid double counting. In this simplified sample calculation, however, the segregated titles are also taken into account when calculating CPEP.

Sample calculation: CPEP

The reported absolute Scope 1 and 2 emissions of the portfolio companies for the reporting year and the previous year are required to calculate CPEP. These are shown in the following table:

Table 10: Sample calculation – GHG emissions of the portfolio companies

	Scope 1+2 emissions in tCO_2eq Previous year	Scope 1+2 emissions in tCO_2eq Reporting year
Company A	50,000	40,000
Company B	80,000	60,000
Company C	12,000,000	12,000,000
Company D	600,000	750,000
Total	12,730,000	12,850,000

CPEP is calculated using the general calculation method described in Chapter 2.2. In the **first step**, the general weighting approach is selected. For this sample calculation, the Balanced Approach (BA) is used as this is typically most relevant for investment portfolios consisting of equities and corporate bonds based on the decision tree (see Figure 3, Chapter 2.2.1). With the Balanced Approach, the General Portfolio Weighting Factor and the General Emissions Weighting Factor are equally weighted (GWF_P = GWF_E = 50 percent).

In the **second step**, the Combined Weighting Factors (CWF) of the portfolio companies are calculated. To do this, the share of the portfolio volume and the emission volume in the reporting year are determined for each portfolio company. In accordance with the Balanced Approach, these two shares are aggregated using equal weighting to form the Combined Weighting Factor.

Table 11: Sample calculation – Combined Weighting Factors (CWF)

	Share of portfolio volume	Share of emission volume	CWF
Company A	30 %	0.3 %	15.2 %
Company B	30 %	0.5 %	15.2 %
Company C	20 %	93.4 %	56.7 %
Company D	20 %	5.8 %	12.9 %
Total	100 %	100 %	100 %

The emission performance is then calculated in the **third step**. To do this, the emission performance of the individual portfolio companies is calculated by

comparing their absolute GHG emissions (see Table 10) in the reporting year with those of the previous year. The CPEP, i.e. the emission performance of the investment portfolio, is determined by weighting and aggregating the emission performance of the portfolio companies with their Combined Weighting Factor.

Table 12: Sample calculation – emission performances of portfolio companies and CPEP

	Emission performance
Company A	-20.0 %
Company B	-25.0 %
Company C	0.0 %
Company D	+25.0 %
Portfolio (CPEP)	-3.6 %

The following points summarise the key findings from the results:

- **Companies A and B** have a positive impact on the CPEP, as they each have a good emission performance (-20 percent and -25 percent respectively) and together account for 60 percent of the portfolio volume. However, their influence on the CPEP result is limited as the balanced weighting approach is used and their share of emissions is relatively low (less than one percent).
- **Company C** has by far the largest emission share (over 90 percent) and a significant portfolio share (20 percent). This results in the highest Combined Weighting Factor (56.7 percent) and therefore the greatest influence on the CPEP, which is closest to the emission performance of company C.
- **Company D** has the lowest weighting in the CPEP calculation, despite having the second largest share of emissions. Nevertheless, its poor emission performance (+25 percent) has a notable impact and minimises the positive influence of companies A and B.
- The results indicate a **need for action at company C** (highest CWF and a poor emission performance) and **company D** (CWF over 10 percent and an even poorer emission performance).

Sample calculation: $CPEP_{electricity}$

For the sample calculation of the $CPEP_{electricity}$, the two portfolio companies in the electricity production sector from Table 9 are considered (companies C and D). The reported physical emission intensities of the two companies in the reporting year and the previous year are used as the calculation basis for $CPEP_{electricity}$.

Table 13: Sample calculation (electricity sub-portfolio) – physical emission intensities of portfolio companies

	Emission intensity in tCO_2eq/MWh Previous year	Emission intensity in tCO_2eq/MWh Reporting year
Company C	0.80	0.80
Company D	0.20	0.25

As with the CPEP, the **first step** for calculating $CPEP_{electricity}$ is to define the general weighting approach. For this sample calculation, the Balanced Approach is applied.

In the **second step**, the Combined Weighting Factors for the two electricity producers are calculated. In contrast to the CPEP, the Combined Weighting Factors for the $CPEP_{electricity}$ must be determined for both the reporting year and the previous year.

Table 14: Sample calculation (electricity sub-portfolio) – weighting factors of the portfolio companies

	Previous year			Reporting year		
	Portfolio share	**Emission share**	**CWF**	**Portfolio share**	**Emission share**	**CWF**
Company C	50.0 %	95.2 %	72.6 %	50.0 %	94.1 %	72.1 %
Company D	50.0 %	4.8 %	27.4 %	50.0 %	5.9 %	27.9 %

In the **third step**, the emission performance is determined. To do this, the weighted physical emission intensity for the sub-portfolio is first calculated for the reporting year and the previous year by multiplying the emission intensities of the companies (Table 13) with the corresponding Combined Weighting Factors (Table 14). The physical emission intensities of the sub-portfolio for the two years are then compared with each other. The result is the $CPEP_{electricity}$.

Table 15: Sample calculation (electricity sub-portfolio) – physical emission intensities of the sub-portfolio and $CPEP_{sector}$

	Emission intensity in tCO_2eq/MWh Previous year	Emission intensity in tCO_2eq/MWh Reporting year
Sub-portfolio (electricity production)	0.64	0.65
$CPEP_{electricity}$	-	+1.7 %

The results can be interpreted as follows:

- The increased emission intensity of **company D** leads to a slight increase in the portfolio-level emission intensity, which is reflected in the

$CPEP_{electricity}$ of +1.7 percent. However, the high weighting of **company C** and its stable emission intensity mitigate the increase in portfolio-level emission intensity.

- As a result of the increased emission intensity and stable electricity production output, the absolute GHG emissions of **company D** increase. Consequently, the relative emission share in the sub-portfolio increases as well. This in turn leads to a slight increase in the Combined Weighting Factor of **company D** from 27.4 percent to 27.9 percent.

6.3.2 Comparison with PCAF-based metrics

In the following sample calculations, I-PEPs results are compared with PCAF-based emission metric developments. The results for the following metrics are compared with each other:

1. CPEP and the development of PCAF-based financed emissions
2. $CPEP_{electricity}$ and the development of PCAF-based emission intensity

Both comparative calculations are based on the sample portfolio and its portfolio data from Chapter 6.3.1. The data presented in Chapter 6.3.1 is expanded to include data required to calculate PCAF-based metrics.

It should be stressed that the PCAF standard is primarily intended for GHG accounting of Scope 3 Category 15 emissions. However, as financial companies also use PCAF to calculate emission performance indicators, a comparison with the I-PEPs method makes sense.

Comparison: CPEP and the development of PCAF-based financed emissions

For this comparison, CPEP is compared with the development of financed emissions based on the PCAF standard. The PCAF standard defines formulas calculating financed emissions, which differ depending on the asset class. The formula shown in Equation 15 is defined for listed equities and corporate bonds. It allocates corporate emissions to the financial company according to an attribution factor and aggregates emissions for all portfolio companies. The attribution factor is determined by the ratio between the outstanding amount in the portfolio company and its Enterprise Value Including Cash (EVIC).[57]

[57] PCAF. *"The Global GHG Accounting and Reporting Standard for the Financial Industry/Part A"*. December 2022, carbonaccountingfinancials.com/en/standard.

Equation 15: Calculation of financed emissions for listed equities and corporate bonds based on the PCA standard

Formula to calculate financed emissions

$$\text{Financed emissions} = \sum_i \frac{Outstanding\ amount_i}{EVIC_i} \times Company\ emissions_i$$

Source: PCAF

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In addition to the absolute GHG emissions of the portfolio companies already stated in Chapter 6.3.1, the EVIC of the portfolio companies is required for the reporting year and the previous year to calculate the financed emissions. This information is summarised in Table 16.

Table 16: Sample calculation – company data (EVIC and absolute GHG emissions)

	EVIC (in EUR)			Absolute GHG emissions (in tCO_2eq)		
Company	**Previous year**	**Reporting year**	**Change (relative)**	**Previous year**	**Reporting year**	**Change (relative)**
A	50 million	50 million	0.0 %	50,000	40,000	-20.0 %
B	10 million	10 million	0.0 %	80,000	60,000	-25.0 %
C	110 million	150 million	+36.4 %	12,000,000	12,000,000	0.0 %
D	35 million	35 million	0.0 %	600,000	750,000	+25.0 %

Development The company data presented in Table 16 shows the following trends:

- **Development of absolute GHG emissions:** companies A and B reduced their absolute GHG emissions, while company D's emissions increased. Company C's emissions have remained constant.
- **Development of EVIC:** with the exception of company C, all companies have a constant EVIC. The EVIC of company C has increased by 36.4 percent. This increase is based, for example, on a higher share price and does not correlate directly with actual company growth or production output.

CPEP comparison In the next step, the results of the CPEP and the development of financed emissions are calculated and compared. As the company data has remained unchanged compared to the sample calculation in Chapter 6.3.1, the same CPEP result (-3.6 percent) is used. The formula in Equation 15 is applied to calculate the financed emissions for the reporting year and the previous year. In both cases, the absolute GHG emissions of the portfolio companies are weighted and aggregated based on their respective attribution factors (share of the outstanding amount in EVIC). The information required for this is taken from

Table 9 (outstanding amount) and Table 16 (EVIC and absolute GHG emissions). The results are shown in Table 17.

Table 17: Sample calculation – comparison of CPEP and the development of financed emissions

	Previous year	Reporting year	Development
CPEP	-	-	-3.6 %
PCAF-based financed emissions (in tCO_2eq)	279,468	223,257	-20.1 %

The comparison shows a clear difference between the CPEP and the development of the PCAF-based financed emissions:

- The CPEP's emission performance of -3.6 percent is a direct result of the portfolio companies' GHG emission trends and their relative portfolio and emission shares.
- The greater reduction in financed emissions (-20.1 percent) is mainly due to the increased share price of company C. This explains the increase in EVIC, which leads to a smaller attribution factor for company C and thus to reduced financed emissions, assuming the investment volume remains constant.[58]

Attribution analysis

As regards the financed emission development, a granular attribution analysis would be needed to draw correct conclusions from the result and understand the actual contribution to real economy decarbonisation. Such an analysis would assess the influencing factors that impact the financed emission development and facilitate a better interpretation of the result.

Comparison: $CPEP_{electricity}$ and the development of PCAF-based physical emission intensity

For this comparison, the $CPEP_{electricity}$ is compared with the development of the portfolio-level physical emission intensity based on PCAF. The PCAF standard[59] uses the formula presented in Equation 16. For this calculation, the financed emissions are set in relation to the total attributed activity data. Depending on the sector, this activity can be, for example, the amount of produced electricity (kWh), the production output (e.g. tonnes of steel) or another physical unit.

[58] In this example, the outstanding volume does not correlate with the change in share price. This would be possible with an investment in corporate bonds, for example.

[59] PCAF. *"The Global GHG Accounting and Reporting Standard for the Financial Industry/Part A"*. December 2022, carbonaccountingfinancials.com/en/standard.

Equation 16: Calculation of the physical emission intensity based on the PCAF standard

$$Physical\ emission\ intensity = \frac{\sum financed\ emissions}{\sum total\ attributed\ activity}$$

Source: PCAF

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Formation sub-portfolio

For the comparative calculation, a sub-portfolio is formed with the two electricity-producing companies from Table 9. All data relevant for the calculation is summarised in Table 18.

Table 18: Sample calculation (electricity sub-portfolio) – company data

	Company C			Company D		
	Previous year	**Reporting year**	**Change**	**Previous year**	**Reporting year**	**Change**
EVIC (in EUR)	110 million	150 million	+36%	35 million	35 million	0%
Absolute GHG emissions (tCO_2eq)	12,000,000	12,000,000	0%	600,000	750,000	+25%
Electricity production (MWh)	15,000,000	15,000,000	0%	3,000,000	3,000,000	0%
GHG intensity (tCO_2eq/MWh)	0.80	0.80	0%	0.20	0.25	+25%
Portfolio volume (in EUR)	2 million	2 million	0%	2 million	2 million	0%

The following information can be taken from the company data:

- **Company C:** electricity production, emission intensity, and consequently absolute GHG emissions, have remained constant. However, the EVIC has increased by 36 percent, for example due to an increased share price.
- **Company D:** the EVIC and electricity production have remained constant. However, the absolute GHG emissions have increased by 25 percent due to an increased emission intensity (e.g. due to a change in the electricity mix).
- The outstanding amount in both companies remains constant over time at EUR 2 million.

Calculation indicators

In the next step, the indicators are calculated. As the underlying data matches the sample calculation in Chapter 6.3.1, the result from Table 15 (+1.7 percent) can be used for the $CPEP_{electricity}$. To calculate the physical emission intensities according to PCAF, the formula in Equation 16 is used with the data from Table 18. The results of the two indicators are summarised in Table 19. A significant difference in performance is shown:

- The $CPEP_{electricity}$ reflects a poor emission performance, with an increase of +1.7 percent.
- However, the PCAF-based emission intensity (financed emissions per unit of attributed physical activity) has decreased by -3.9 percent.

Table 19: Sample calculation – Comparison of $CPEP_{electricity}$ and development of PCAF-based emission intensities

	Previous year	Reporting year	Development
$CPEP_{electricity}$	-	-	+1.7 %
PCAF-based emission intensity (in tCO_2eq/MWh)	0.57	0.55	-3.9 %

Interpretation of results

The comparison shows that the performance calculations for the $CPEP_{electricity}$ and the PCAF approach differ significantly:

- The $CPEP_{electricity}$ result shows a deterioration in physical emission intensity of +1.7 percent. This is determined by the development of company D, whose GHG intensity is increasing. The Combined Weighting Factors of the two electricity producers changed marginally between the reporting year and the previous year. Although the outstanding amounts have remained constant, the absolute emission volume of company D has increased. As the balanced weighting approach was used to calculate the $CPEP_{electricity}$, the Combined Weighting Factor of company D increases slightly compared to company C (see Table 14).
- The PCAF-based physical emission intensity decreased by -3.9 percent from the previous year to the reporting year. The most important influencing factor for this development is the increased EVIC of company C. Due to the constant investment volume, this causes a decrease in the corresponding attribution factor. At the same time, the attribution factor for company D remains constant. As the emission intensity of company C is significantly higher than that of company D, this change leads to a decrease in the overall physical emission intensity. To correctly interpret the PCAF result and determine the actual emission intensity development, a granular attribution analysis is therefore necessary.

6.3.3 Dealing with inconsistent emission performances

In the sample calculations in Chapters 6.3.1 and 6.3.2 , it was assumed that no inconsistency across accounting periods influenced the quality of the emission data. In Chapter 5.1.1 (Figure 6), a decision tree was presented that enables financial companies to detect and correct such inconsistencies. The following

example shows how the decision tree can be applied in practice using three scenarios:

- Scenario 1: **required information** on the consistency of GHG emission data across accounting periods **is available**.
- Scenario 2: **required information** on the consistency of GHG emission data across accounting periods **is not available**.
- Scenario 3: **required information** on the consistency of GHG emission data across accounting periods is **individually collected using desk research**.

To illustrate the scenarios, the data from Chapter 6.3.1 is used and extended to include company E.

Table 20: Sample calculation – portfolio data and company emission data

	Investment volume, reporting year (in EUR)	GHG emissions (tCO_2eq), previous year	GHG emissions (tCO_2eq), reporting year
Company A	3 million	50,000	40,000
Company B	3 million	80,000	60,000
Company C	2 million	12,000,000	12,000,000
Company D	2 million	600,000	750,000
Company E	2 million	1,500,000	100,000
Total	12 million	14,230,000	12,950,000

Without a more detailed analysis regarding the consistency of the emission data and using the Balanced Approach to weight portfolio companies, the calculations yield the Combined Weighting Factors shown in Table 21 and a CPEP of -11.0 percent.

Table 21: Sample calculation – CWFs and emission performances of companies and CPEP without adjustment for inconsistencies

	CWF	Emission performance
Company A	12.7 %	-20.0 %
Company B	12.7 %	-25.0 %
Company C	54.7 %	0.0 %
Company D	11.2 %	+25.0 %
Company E	8.7 %	-93.3 %
Portfolio (CPEP)	100.0 %	-11.0 %

Scenario 1: use of information on the consistency of GHG emission data

Information on GHG emission data consistency for individual portfolio positions can often be obtained from external data providers. As an example, relevant data points are disclosed in the CDP questionnaire.[60] This includes data points on the changes in Scope 1 and 2 emissions due to various influencing factors (in tCO_2eq):

Table 22: Influencing factors covered in the CDP questionnaire (simplified illustration) and their consideration in the I-PEPs calculation

Factors influencing Scope 1 + 2 emissions from the CDP questionnaire	Impacts on I-PEPs to be adjusted?
Emission reduction measures and change in renewable energy consumption	No
Changes in production volumes, e.g. due to organic growth	No
Structural changes, e.g. acquisitions, disposals and mergers	Yes
Methodological changes, e.g. calculation methodology and company boundaries	Yes
Other influencing factors, e.g. errors in previous emission values	Yes

The following additional data points, based on the CDP questionnaire, are assumed for this sample calculation:

Table 23: Sample calculation – influencing factors causing changes in emissions based on the CDP questionnaire

Company	Influencing factors and changes in absolute emissions (tCO_2eq)					
	Reduction measures	Change in production	Structural changes	Change in methodology	Other influencing factors	Total
A	-10.000	0	0	0	0	-10.000
B	-20.000	0	0	0	0	-20.000
C	0	0	0	0	0	0
D	+150.000	0	0	0	0	+150.000
E	-25.000	0	-800.000	-575.000	0	-1.400.000
Total	+95.000	0	-800.000	-575.000	0	-1.280.000

[60] CDP. *"Full Corporate Questionnaire – Module 7"*. April 2025, cdp.net/en/disclosure-2025.

The following can be concluded from the data presented in Table 23:

- The trends in GHG emissions from companies A to C are the result of emission reduction activities or an increased GHG intensity in the case of company D. The emission trends for these companies are therefore not distorted by any unwanted influencing factors and the emission performance does not require adjustment.
- While company E achieves part of the total emission reductions through reduction activities, the majority of the emission reductions are based on structural or methodological changes. These influences distort the calculated emission performance and must be adjusted.

Adjustment of results

To adjust the emission performance of company E, the absolute emissions from the previous year are adjusted by accounting for the changes in emissions caused by structural and methodological changes. This results in emission values for company E of 125,000 tCO_2eq in the previous year and 100,000 tCO_2eq in the reporting year – resulting in an emission performance of -20.0 percent. The CPEP changes from -11.0 percent (without adjustment) to -4.7 percent (with adjustment).

Table 24: Sample calculation – CWFs and emission performances of portfolio companies and CPEP with adjustment for inconsistencies (scenario 1)

	CWF	Emission performance
Company A	12.7 %	-20.0 %
Company B	12.7 %	-25.0 %
Company C	54.7 %	0.0 %
Company D	11.2 %	+25.0 %
Company E	8.7 %	-20.0 %
Portfolio (CPEP)	100.0 %	-4.7 %

Scenario 2: definition of a GHG fluctuation range

If the information used in scenario 1 is not available, distortions in the I-PEPs calculation can be mitigated using a GHG fluctuation range. In general, there are different statistical approaches for identifying outliers and, at the same time, taking account of the considerations in Chapter 5.1.1 on transparency and consistency.

In this example, an upper limit of +75 percent and a lower limit of -75 percent are defined. Emission performance values of portfolio companies that exceed these limits are considered outliers and excluded from the I-PEPs calculation. In this sample calculation, this leads to the exclusion of company E. The combined Weighting Factors for companies A to D must therefore be recalculated. The result is a CPEP of -3.6 percent, which corresponds to the result of the sample calculation before the introduction of company E in Chapter 6.3.1.

Table 25: Sample calculation – CWFs and emission performances of portfolio companies and CPEP with adjustment for inconsistencies (scenario 2)

	CWF	Emission performance
Company A	15.2 %	-20.0 %
Company B	15.2 %	-25.0 %
Company C	56.7 %	0.0 %
Company D	12.9 %	+25.0 %
Company E[61]	-	-
Portfolio (CPEP)	100.0 %	-3.6 %

Scenario 3: hybrid approach – definition of a fluctuation range and desk research to collect the required data

As in scenario 2, scenario 3 corresponds to the case where no information on possible inconsistencies in the emission data is available. Consequently, a GHG fluctuation range is introduced. However, instead of categorically excluding portfolio positions exceeding the limits, desk research is carried out to identify the drivers behind the high volatility in emissions. To further reduce the workload, users can focus their desk research on companies with a high Combined Weighting Factor.

6.3.4 Tracking progress

When tracking progress, the annual, period-specific I-PEPs results are compared with a defined decarbonisation trajectory. The period under review is the period between the base year and the reporting year of the financial company.

For this sample calculation, examples of annual CPEP results are considered. As described in Chapter 3.1.1, the development of absolute GHG emissions is used as the basis for calculating the CPEP. As described in Chapter 4.2, the rate of reduction approach is used to determine the decarbonisation trajectory for I-PEPs based on absolute GHG emissions. A theoretical example of a reference climate scenario that covers the period up to 2050 (net-zero) is used to derive the decarbonisation trajectory. The decarbonisation trajectory covers part of this period, namely the period between the base year and the target year, and is derived from the emission values of the reference climate scenario for the two years.

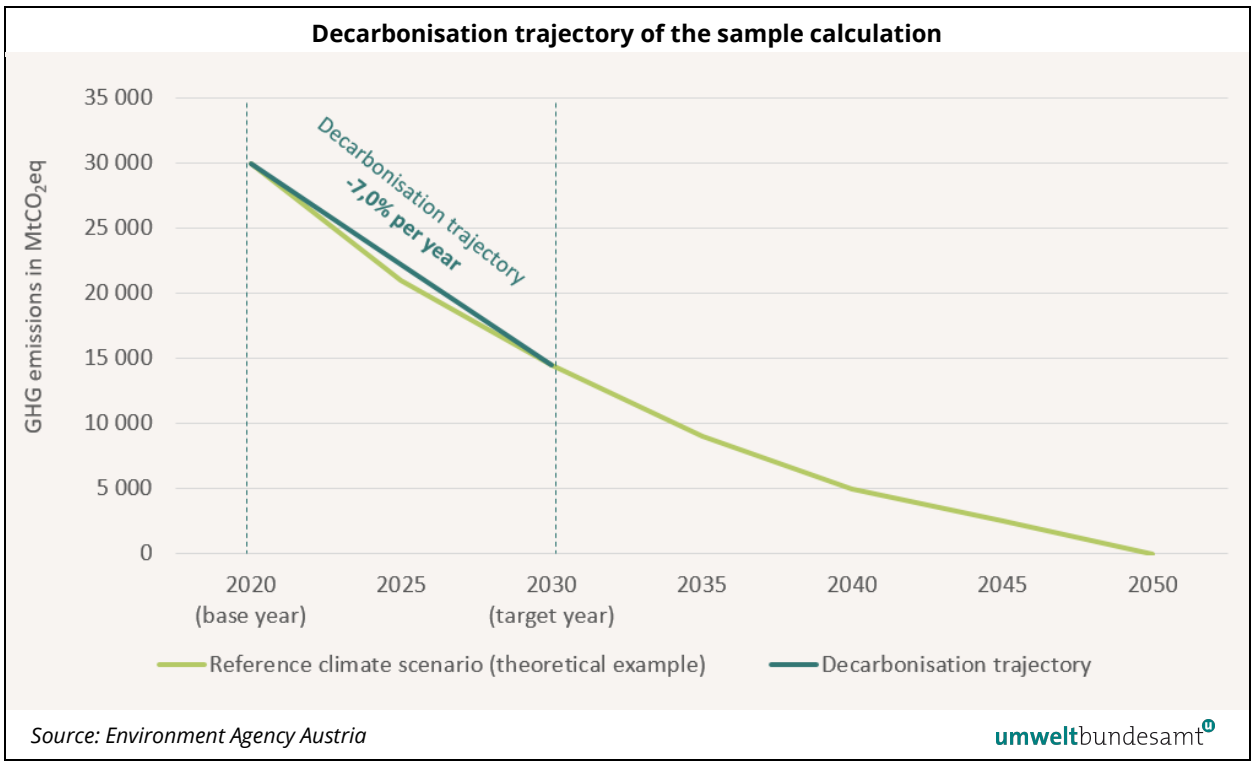
[61] Excluded from the calculation due to breach of the lower limit.

To measure progress, the base year, the target year and the reference climate scenario must be defined. The following data is assumed for this sample calculation:

- Base year: 2020
- Target year: 2030
- Reporting year: 2025
- Reference climate scenario (theoretical example): emission path based on a net-zero emissions by 2050 scenario
- CPEP results: exemplary values for the period from 2020 to 2025 (see Table 26)

The following figure shows the underlying information for the sample calculation, as well as the decarbonisation trajectory.

Figure 9: Illustration of the emission path from the reference climate scenario (theoretical example) and the derived decarbonisation trajectory



The values of the climate scenario in the base and target year yield an annual reduction target of -7.0 percent. This annual reduction target specifies the decarbonisation trajectory and thus corresponds to the targeted arithmetic average of the I-PEPs results over the target period.

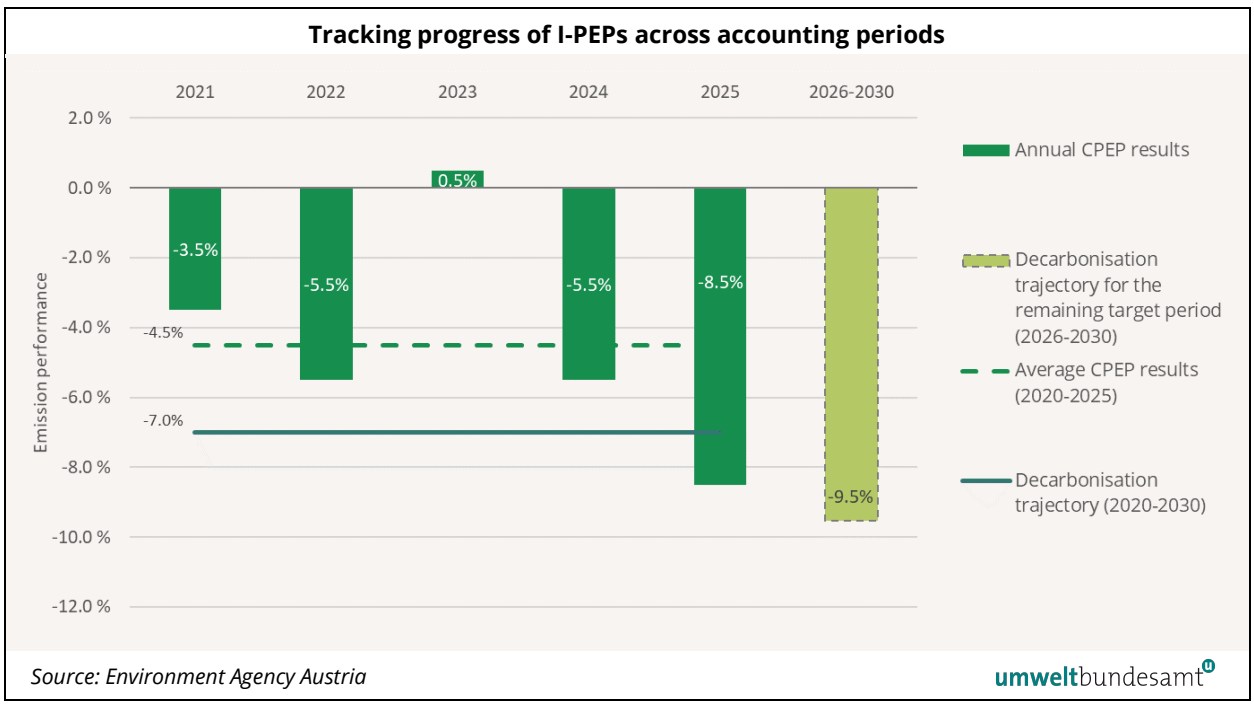
The following values are assumed for the annual, period-specific CPEP results:

Table 26: Annual, period-specific CPEP results of the sample calculation

	2021	2022	2023	2024	2025
CPEP results	-3.5 %	-5.5 %	+0.5 %	-5.5 %	-8.5 %

Over the period from the base year to the reporting year, the arithmetic average value for CPEP is **-4.5 percent**. The target value of -7.0 percent will therefore not be achieved over this period. In order to successfully achieve the target, the original target value of -7.0 percent must be exceeded over the remaining target period (i.e. the period from the reporting year to the target year). This means that the financial company needs an average I-PEPs result of **-9.5 percent** in the period from 2025 to 2030 to achieve the initial target value of -7.0 percent over the entire target period (2020–2030).

Figure 10: Comparison of the CPEP results achieved and the decarbonisation trajectory



This sample calculation illustrates how I-PEPs can be used to measure progress against science-based targets. It also shows how necessary emission reduction measures need to be adapted depending on the progress made in order to achieve the desired targets.

LIST OF TABLES

LIST OF FIGURES

LIST OF EQUATIONS

LIST OF ABBREVIATIONS

$APEP_{abs}$	Aggregated Portfolio-related absolute Emission Performance
$APEP_{int}$	Aggregated Portfolio-related Emission Intensity Performance
BA	Balanced Approach
BMLUK	Bundesministerium für Land- und Forstwirtschaft, Klima- und Umweltschutz, Regionen und Wasserwirtschaft (Federal Ministry of Agriculture and Forestry, Climate and Environmental Protection, Regions and Water Management)
CNC	Climate Navigation Cockpit
CPEP	Corporate Investment Portfolio-related Emission Performance
$CPEP_{sector}$	Corporate Investment Portfolio-related Emission Intensity Performance (sector)
CREPEP	Commercial Real Estate Portfolio-related Emission Intensity Performance
CWF	Combined Weighting Factor
EA	Emissions-based Approach
EPEP	Electricity Production Portfolio-related Emission Intensity Performance
ETF	Exchange-Traded Fund
EVIC	Enterprise Value Including Cash
FINZ	Financial Institutions Net-Zero Standard
GFA	Green Finance Alliance
GHG ProtocolGreenhouse Gas Protocol	
GWF_E	General Emissions Weighting Factor
GWF_P	General Portfolio Weighting Factor
I-PEPs	Indicators for Portfolio-related Emission Performance
LIA	Linear Intercept Approach
LPEP	Lending Portfolio-related Emission Performance

$LPEP_{sector}$	Lending Portfolio-related Emission Intensity Performance (sector)
MPEP	Mortgage Portfolio-related Emission Intensity Performance
NZAOA	Net-Zero Asset Owner Alliance
UPEP	Corporate Underwriting Portfolio-related Emission Performance
$UPEP_{sector}$	Corporate Underwriting Portfolio-related Emission Intensity Performance (sector)
PA	Portfolio-centric Approach
PCAF	Partnership for Carbon Accounting Financials
SBTi	Science Based Targets initiative
SPEP	Sovereign Bond Portfolio-related Emission Performance
WRI	World Resources Institute
WWF	World Wide Fund for Nature

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