Federal Ministry
Agriculture and Forestry, Climate
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Republic of Austria

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I-PEPs Methodology Standard

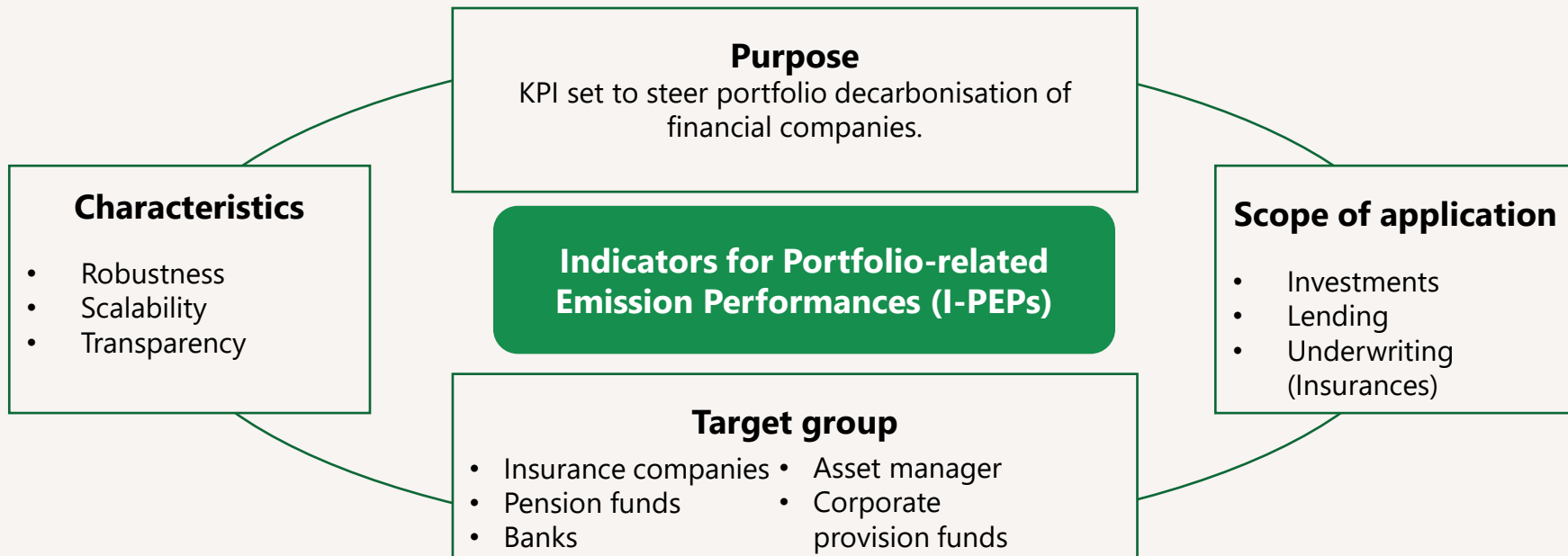*New KPI set to steer the portfolio decarbonisation of financial companies*

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I-PEPs in a nutshell

Purpose
KPI set to steer portfolio decarbonisation of financial companies.

Indicators for Portfolio-related Emission Performances (I-PEPs)

Characteristics

- Robustness
- Scalability
- Transparency

Scope of application

- Investments
- Lending
- Underwriting (Insurances)

Target group

- Insurance companies
- Pension funds
- Banks
- Asset manager
- Corporate provision funds

Note: Detailed information on I-PEPs is provided in the Methodology Standard, which is publicly available on the Green Finance Alliance Coordinating Office website.
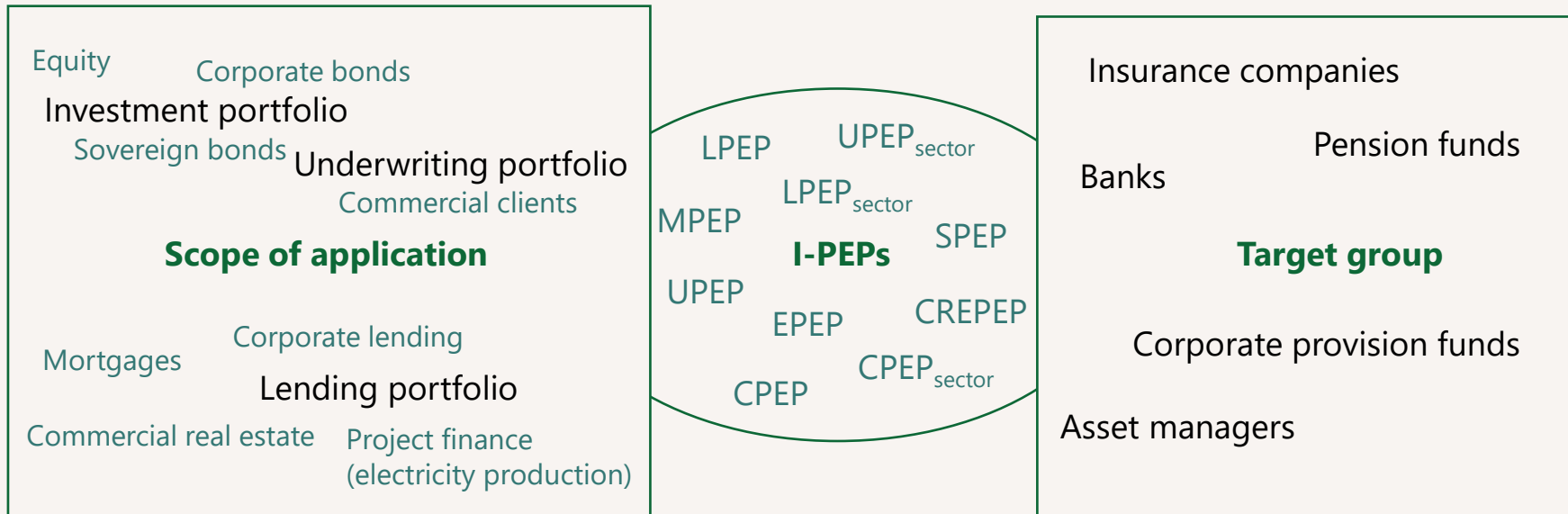
Purpose

To navigate their portfolios towards their climate targets, financial companies need suitable metrics and measures for the various core themes.

Expansion of green activities

Proactive engagement

Portfolio decarbonisation

Fossil fuel phase-out

Other strategic climate targets

I-PEPs cover the aspect of portfolio decarbonisation as part of a comprehensive climate strategy.

Scope of application

The I-PEPs KPI set enables different financial companies to use customised metrics for numerous asset classes and business areas.

Equity Corporate bonds

Investment portfolio

Sovereign bonds Underwriting portfolio

Commercial clients

Scope of application

Mortgages Corporate lending

Lending portfolio

Commercial real estate Project finance (electricity production)

LPEP $UPEP_{sector}$

$LPEP_{sector}$

MPEP

I-PEPs SPEP

UPEP

EPEP CREPEP

$CPEP_{sector}$

CPEP

Insurance companies

Pension funds

Banks

Target group

Corporate provision funds

Asset managers

I-PEPs KPI set

Metrics based on absolute GHG emissions

Metrics

- ▌▌▌ Investments in equities & corporate bonds (CPEP)
- ▌▌▌ Corporate lending (LPEP)
- ▌▌▌ Investments in sovereign bonds (SPEP)

Aggregated metric

- ▌▌▌ Aggregated Portfolio-related absolute Emission Performance ($APEP_{abs}$)

Metric

- ▌▌▌ Underwriting of corporate clients (UPEP)

Investment & lending portfolio

Underwriting portfolio

Metrics based on physical emission intensities

Metrics

- ▌▌▌ Mortgages (MPEP)
- ▌▌▌ Commercial real estate (CREPEP)
- ▌▌▌ Project finance – Electricity production (EPEP)
- ▌▌▌ Equities & corporate bonds in GHG intensive sectors ($CPEP_{sector}$)
- ▌▌▌ Corporate lending in GHG intensive sectors ($LPEP_{sector}$)

Aggregated metric

- ▌▌▌ Aggregated Portfolio-related Emission Intensity Performance ($APEP_{int}$)
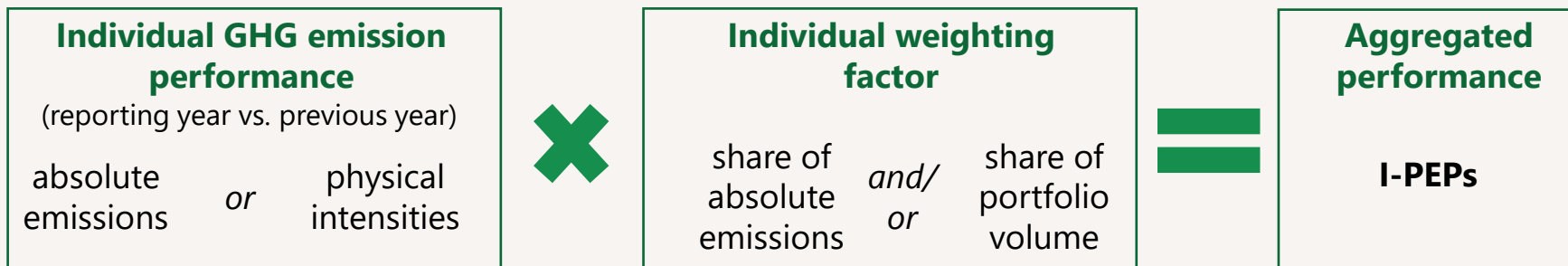
Metric

- ▌▌▌ Underwriting of corporate clients in GHG intensive sectors ($UPEP_{sector}$)

I-PEPs: Method in detail

Methodology in a nutshell

Calculation outline

| **Individual GHG emission performance** (reporting year vs. previous year) absolute emissions *or* physical intensities	✖	**Individual weighting factor** share of absolute emissions *and/ or* share of portfolio volume	═	**Aggregated performance** **I-PEPs**

- The methodological approach provides a standardised framework for all I-PEPs.
- Adaptation to the characteristics of the respective application area is achieved by:
  - o Determination of the calculation basis for the emission performance.
  - o Determination of the weighting approach to define weighting factors.

The significance of the emission performance is ensured by using only **reported GHG emissions** to calculate I-PEPs. The use of estimated values is not intended, as this would lead to result distortions!

Three steps to calculate I-PEPs

Step 1
Determine weighting approach

Step 2
Calculate Combined Weighting Factor

Step 3
Calculate emission performance
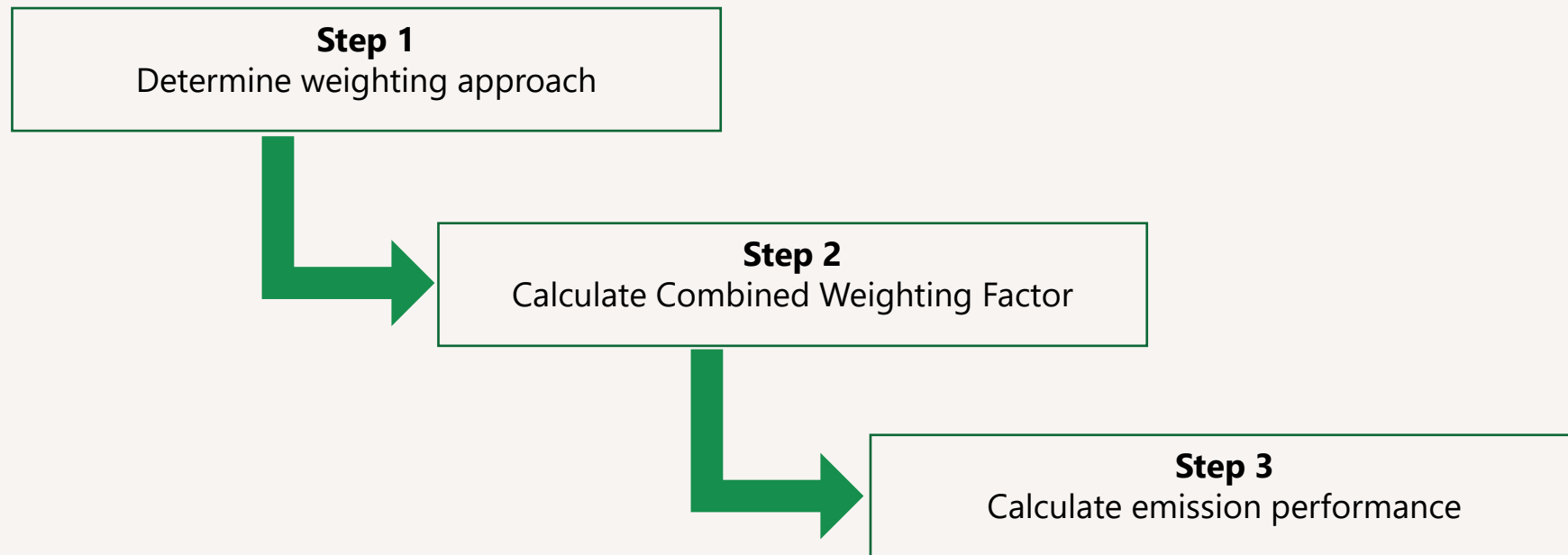
Step 1: Overview of the three weighting approaches

What influence should the relative level of emissions have on the weighting?

What influence should the relative portfolio volumes have on the weighting?

General Emissions Weighting Factor (GWF$_E$)

General Portfolio Weighting Factor (GWF$_P$)

0 %   100 %
100 %   0 %

$$GWF_E + GWF_P = 100\%$$

Emissions-based Approach (EA)

0 %   100 %
100 %   0 %

$$GWF_E = 100\%;\ GWF_P = 0\%$$

Balanced Approach (BA)

0 %   100 %
100 %   0 %

$$GWF_E = 50\%;\ GWF_P = 50\%$$

Portfolio-centric Approach (PA)

0 %   100 %
100 %   0 %

$$GWF_E = 0\%;\ GWF_P = 100\%$$

Step 1: Determination of the weighting approach

Is <u>reported</u>, absolute GHG emission data predominantly available?

yes   *no*

Is it possible to influence the strategic climate orientation for the majority of the portfolio positions?

rather possible   *partly possible*   *rather not possible*

Emissions-based Approach (EA)

Balanced Approach (BA)

Portfolio-centric Approach (PA)

Application example:

- rather for exceptional cases
- e.g. inhouse impact funds

- Equities
- Corporate bonds
- Corporate lending

- Mortgage portfolio
- Third party funds
- Sovereign bonds

Assignment of KPIs to weighting approaches

Metric	Availability of absolute GHG emissions*	Impact potential	Weighting approach
CPEP und $CPEP_{sector}$	available	rather not possible partly possible rather possible	PA BA EA
SPEP	available	rather not possible	PA
LPEP und $LPEP_{sector}$	available	partly possible	BA
CREPEP	not available	-	PA
MPEP	not available	-	PA
EPEP	not available	-	PA
UPEP und $UPEP_{sector}$	available	rather not possible	PA

*Simplified categorisation in „available" and „not available".

Step 2: Weighting of the portfolio positions

1. Calculation of shares in the portfolio volume* and in the emission volume for each portfolio position

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

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

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

Note: „V" refers to the monetary portfolio volume (e.g. in Euro)

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

Note: „E" refers to the emission volume in weight units (e.g. kg or tonnes)

2. Calculation of the Combined Weighting Factors for each portfolio position

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

CWF_i ... Combined Weighting Factor for portfolio position i

→ It always applies: $GWF_P + GWF_E = 100\%$

*For the two underwriting portfolio metrics UPEP und UPEP$_{sector}$, the analysed gross written premium in the reporting year is used instead of portfolio volumes.
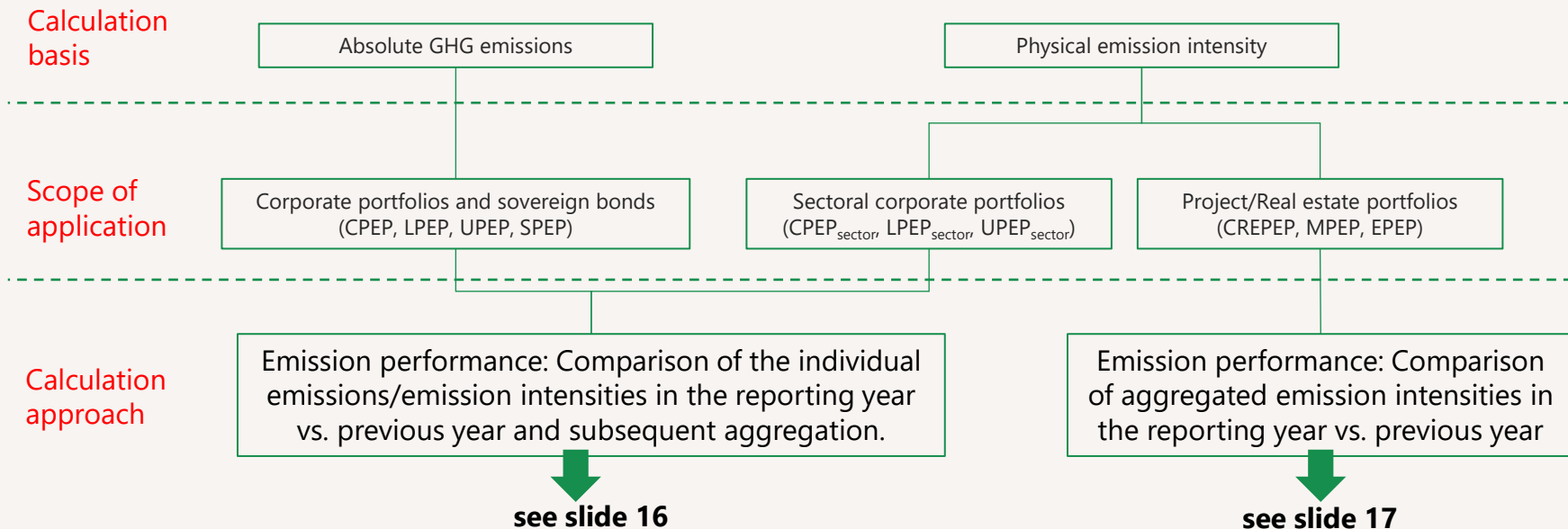
Step 3: Calculation of the emission performance

I-PEPs differentiates between two calculation approaches, depending on the calculation basis and the portfolio type.

Calculation basis	Portfolio type	
	(Sectoral) corporate portfolio	Project-/Real estate portfolio
Absolute emissions	Calculation: Emission performance on the portfolio constituents level and subsequent aggregation. *Application: CPEP, SPEP, LPEP, UPEP*	Not applicable.
Physical emission intensities	As a rule*: Calculation of the emission performance on the portfolio constituents level and subsequent aggregation. *Application: CPEP$_{sector}$, LPEP$_{sector}$, UPEP$_{sector}$*	As a rule*: Calculation of the emission performance by comparing the aggregated emission intensities in the reporting year vs. previous year. *Application: CREPEP, MPEP, EPEP*

*see chapter 2.2.3 of the I-PEPs Methodology Standard for the exception.

Calculation approaches: Emission performance

Depending on the calculation basis and the scope of application, I-PEPs distinguishes between two calculation approaches:
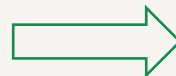
Calculation basis

Absolute GHG emissions	Physical emission intensity

Scope of application

Corporate portfolios and sovereign bonds (CPEP, LPEP, UPEP, SPEP)	Sectoral corporate portfolios (CPEP$_{sector}$, LPEP$_{sector}$, UPEP$_{sector}$)	Project/Real estate portfolios (CREPEP, MPEP, EPEP)

Calculation approach

Emission performance: Comparison of the individual emissions/emission intensities in the reporting year vs. previous year and subsequent aggregation.	Emission performance: Comparison of aggregated emission intensities in the reporting year vs. previous year

see slide 16

see slide 17

Calculation approach: Emission performance
Scope of application: (sectoral) corporate portfolios and sovereign bonds

Step 1: Calculation of the portfolio position-specific emission performance*

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

E_i … absolute emissions – portfolio position i in the reporting(t+1) / previous(t) year

ρ_i … emission performance of portfolio position i

I-PEPs are determined by …

… calculating the emission performance per portfolio position and…

Step 2: Calculation of I-PEPs

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

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

… aggregating the results obtained by multiplying them with the corresponding Combined Weighting Factors.

*for sectoral corporate portfolios, physical emission intensity is used in the formula instead of absolute emissions to calculate the emission performance specific to each portfolio component.

Calculation approach: Emission performance
Scope of application: Project/Real estate portfolios

Step 1: Calculation of emission intensities (portfolio level)
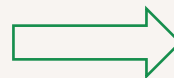
Reporting year:
(t+1):

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

Previous year:
(t)

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

EI_P ... emission intensity of the portfolio
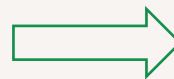
EI_i ... emission intensity of portfolio position i

Step 2: Calculation of I-PEPs

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

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

I-PEPs are determined by...

... calculating the portfolio-related emission intensity for the previous and the reporting year ...

... and then comparing the results with each other.
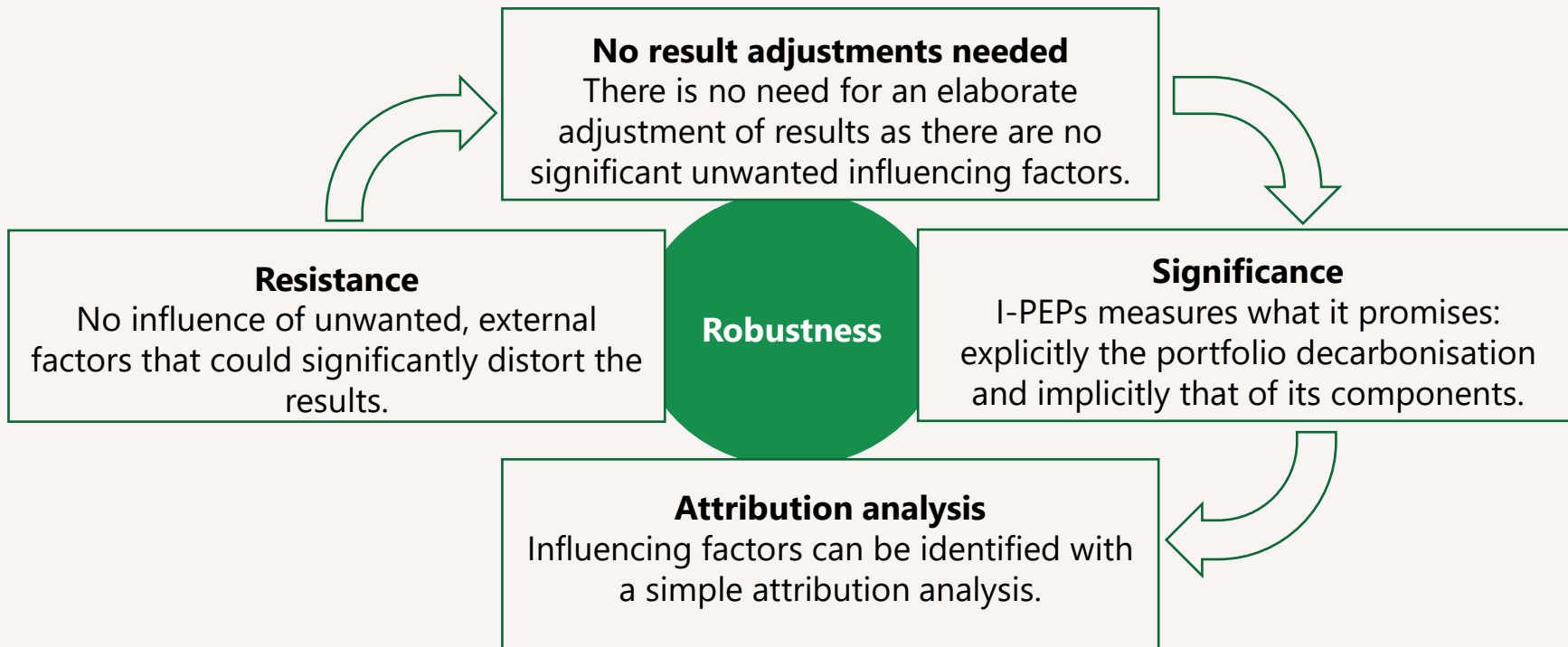
I-PEPs: Main characteristics (1/3)

No result adjustments needed
There is no need for an elaborate adjustment of results as there are no significant unwanted influencing factors.

Resistance
No influence of unwanted, external factors that could significantly distort the results.

Robustness

Significance
I-PEPs measures what it promises: explicitly the portfolio decarbonisation and implicitly that of its components.

Attribution analysis
Influencing factors can be identified with a simple attribution analysis.

I-PEPs: Main characteristics (2/3)

Comparability
Performance comparisons can be carried out both within and across financial companies.

Consistency
Despite the very different areas of application, the methodological approach is standardised.

Scalability

Expansion of scope
It is possible to extend the I-PEPs application scope to other financial activities.

I-PEPs: Main characteristics (3/3)

Clarity
The applied weighting approach is determined in advance, which gives the stakeholders clarity.

Transparency

Objectivity
Calculation basis are solely reported emission data → no use of estimated values!

Comprehensibility
Results can be better understood due to the high level of transparency.

I-PEPs: Target setting

Three steps to setting targets

Step 1
Define target period

Step 2
Define decarbonisation reference trajectory

Step 3
Define decarbonisation trajectory
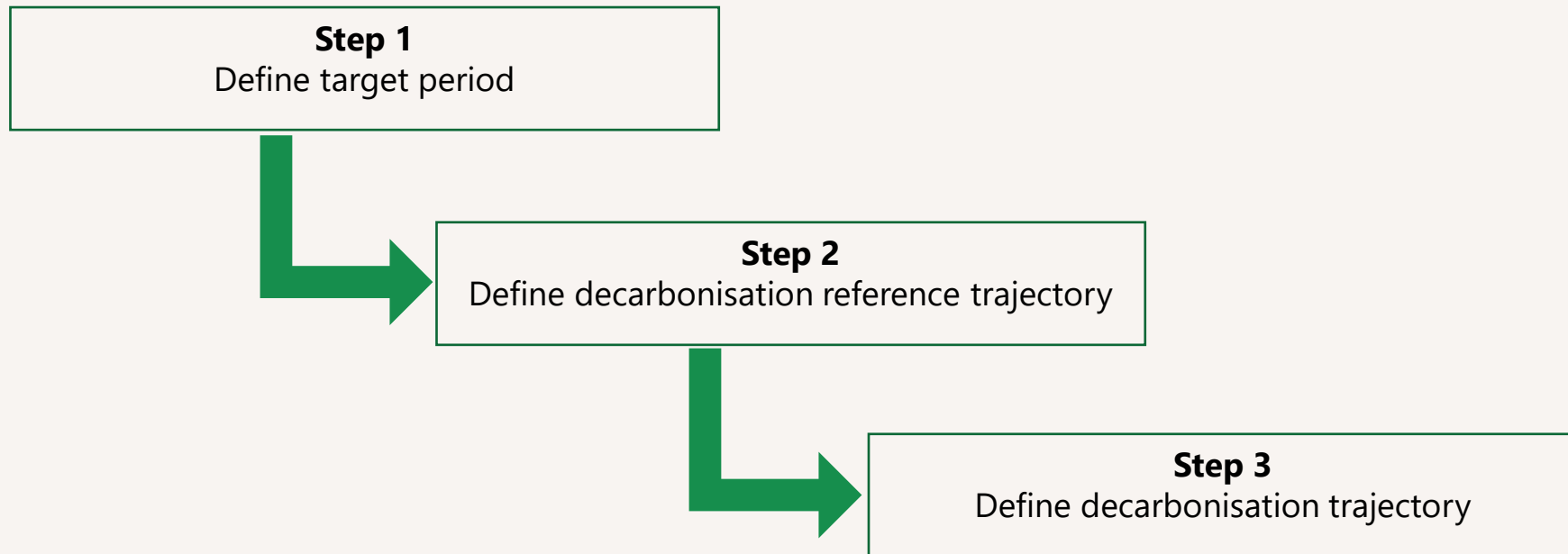
Terminologies and steps for target setting

Exemplary illustration
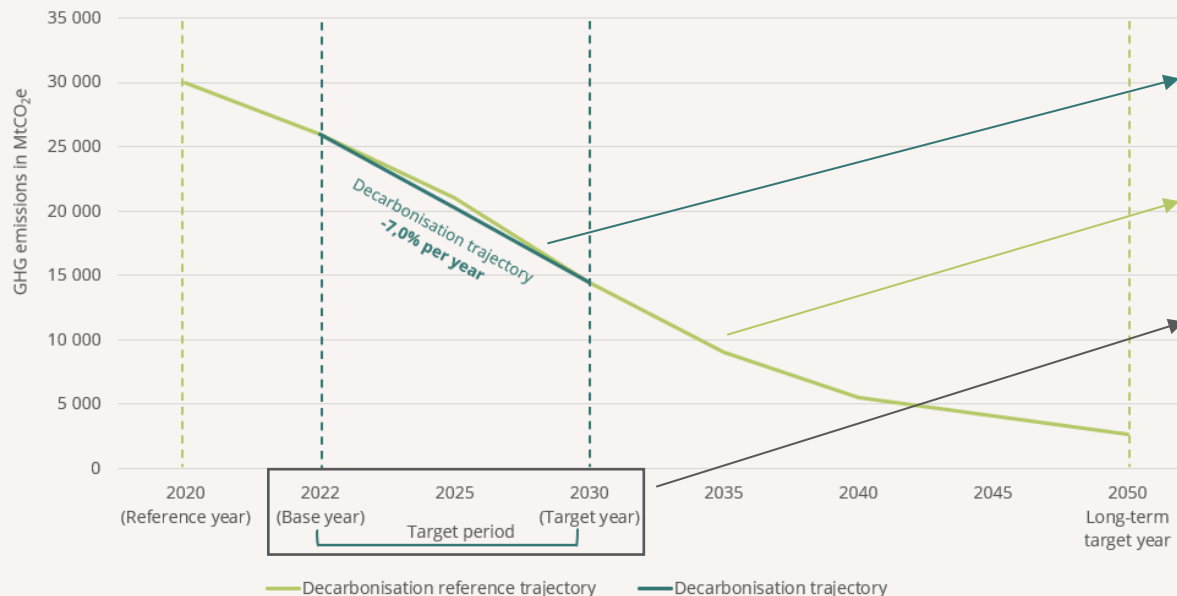
Step 3: Define decarbonisation trajectory

Step 2: Define decarbonisation reference trajectory

Step 1: Define target period

Step 1: Define target period

The target period covers a short to medium-term period and is the period for which the financial company defines its decarbonisation trajectory. This period is limited by the base year and the target year.

Important aspects to be considered:

Target period	**Base year**
Regulation Consideration of regulatory requirements	**Data availability** Sufficient availability of meaningful GHG data
Homogeneity Consistency with other corporate targets	**Representativeness** GHG data should reflect reality (neg. example: 2021)
Maturity Coverage of strategically important period (3-15y)	**Recency** Base year to be as recent as possible

Step 2: Define decarbonisation reference trajectory

- The basis for determining the financial company's specific decarbonisation trajectory is the selection or definition of an appropriate decarbonisation reference trajectory.

- This usually covers a longer period of time and is limited by a past reference year and a long-term target year.

- Climate scenarios are typically used as a reference, including emission values for the reference year and emission estimates for the long-term target year.

- However, apart from climate scenarios, other sources can also be used to derive the decarbonisation reference trajectory, such as:
  - national or international climate targets
  - long-term climate commitments made as part of membership in climate initiatives.

Step 2: Define decarbonisation reference trajectory

Despite the flexibility offered by the I-PEPs Methodology Standard in the selection of the reference source and its level of ambition, certain minimum requirements are nevertheless defined:

| **Adequacy of granularity**	**Coherence of ambition**	**Consistency**
Best possible congruence between portfolio structure (e.g. regional exposure) and the granularity of the reference source.	Best possible congruence between own ambition level (=commitment) and the assumptions of the reference source.	If multiple climate scenarios are used for different, heterogeneous sub-portfolios, the different scenario assumptions (e.g. macroeconomic parameters) should be as consistent as possible.

Step 3: Determine decarbonisation trajectory
Exemplary illustration based on a climate scenario

Rate of reduction approach
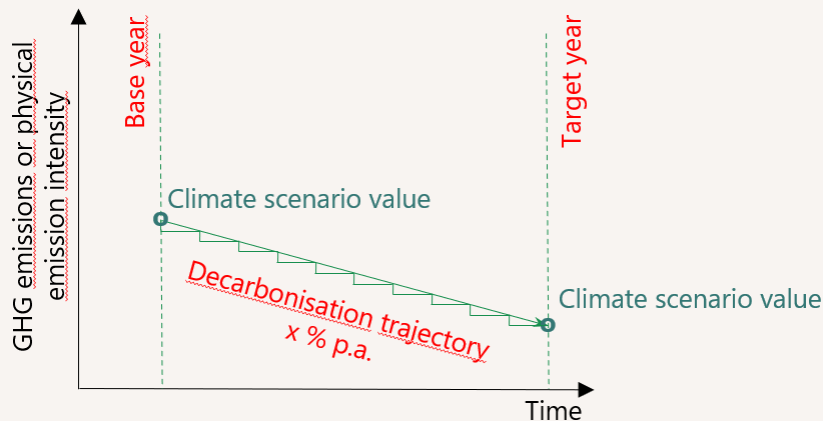
Convergence approach
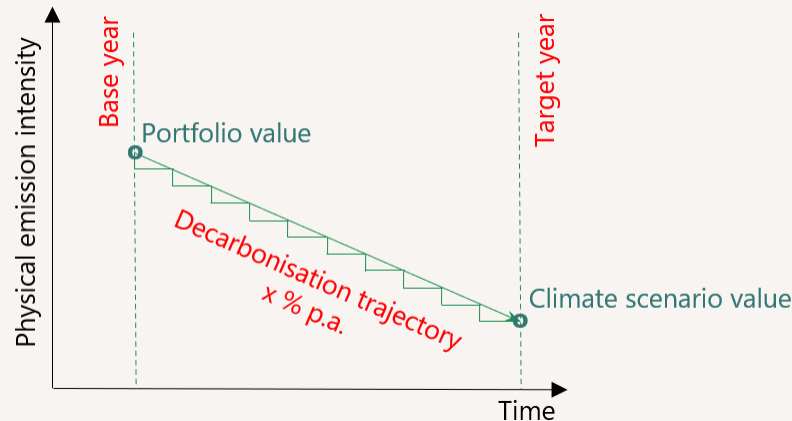
Determination of decarbonisation trajectory (=yearly reduction target)

- Using GHG emission values of reference climate scenario for base year and target year.
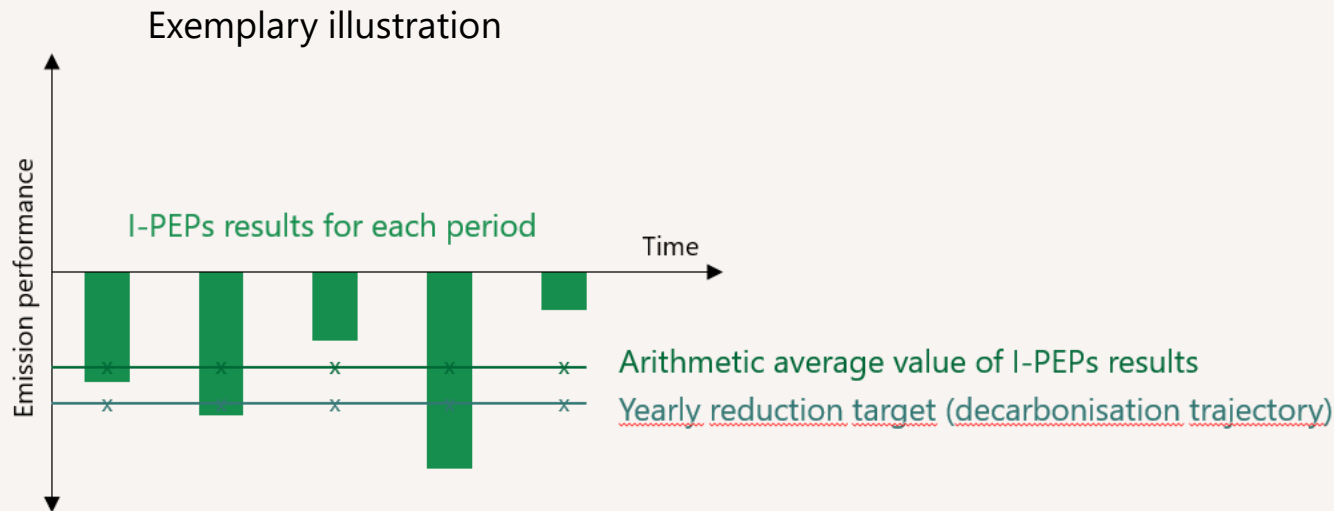
- Using GHG emission values of reference climate scenario for target year and of portfolio for base year.

Scope of application according to calculation basis

- ✓ absolute GHG emissions/physical emission intensity
- ✓ physical emission intensity

Tracking annual progress with I-PEPs

Exemplary illustration

I-PEPs results for each period

Time

Emission performance

Arithmetic average value of I-PEPs results

Yearly reduction target (decarbonisation trajectory)

The financial company´s aim is to achieve an average I-PEPs development that corresponds to at least the yearly reduction target of the decarbonisation trajectory.

I-PEPs: Influencing factors

Influencing factors and their relevance for I-PEPs

Influencing factors affect I-PEPs on two levels

Individual emission performance
(reporting vs. previous year)

absolute emissions *or* physical intensity

×

Individual weighting factor

share of absolute emissions *and/or* share of portfolio volume

=

Aggregated performance

I-PEPs

Influencing factors on the individual emission performance

Change in reported GHG emissions covered due to changes in
- data quality and quantity
- company boundaries

Individual emission performance
(reporting vs. previous year)
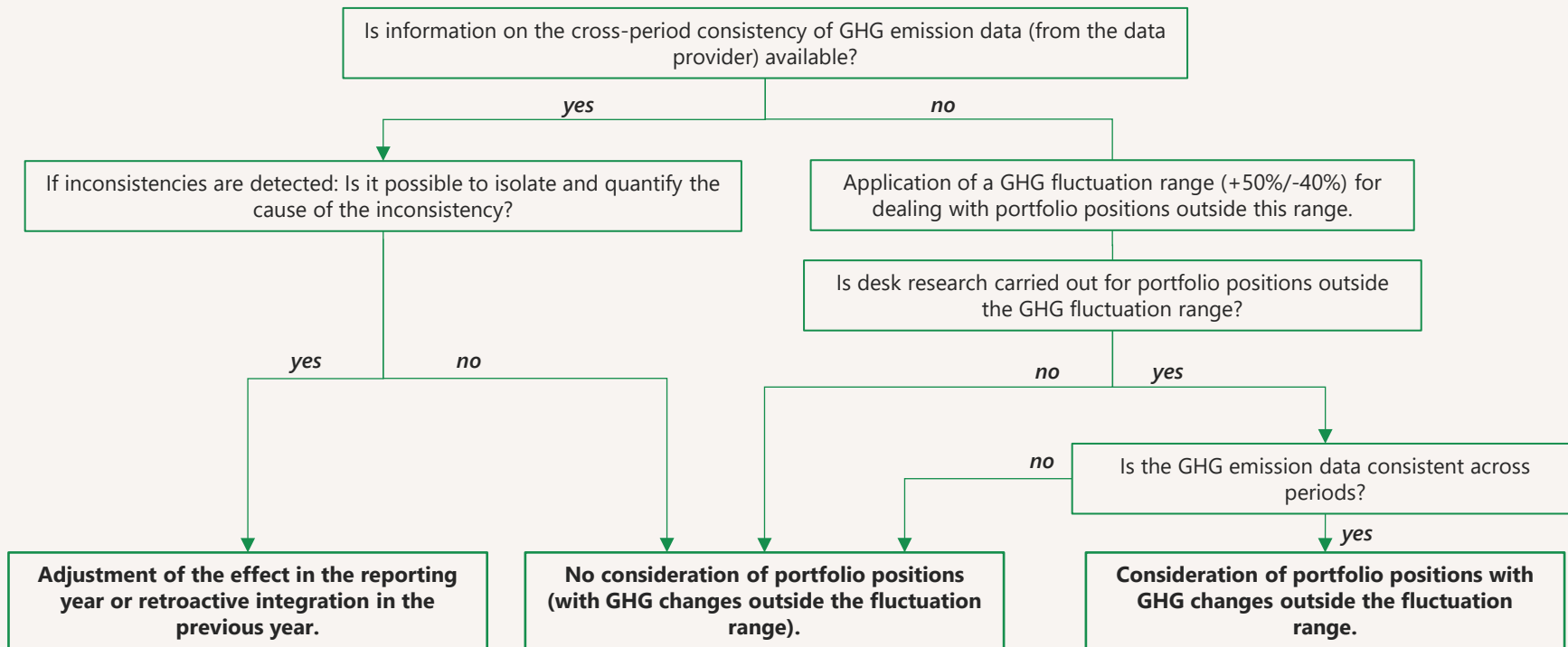
absolute emissions *or* physical intensity
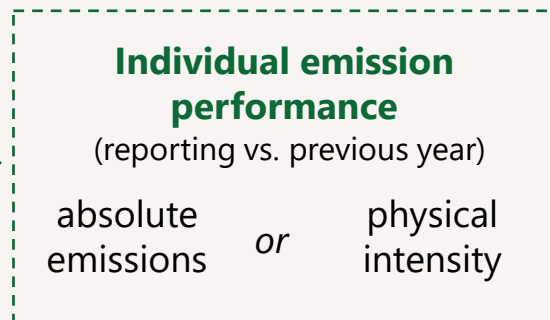
Changes in the GHG accounting methodology

For a meaningful performance assessment, coherency of GHG emission data across periods is crucial!

Note: Influencing factors and uncertainties regarding the reliability of reported emission data of portfolio positions affect **all emission-based performance** indicators, not just the I-PEPs methodology.

Decision tree: Handling of influencing factors

Is information on the cross-period consistency of GHG emission data (from the data provider) available?

yes   *no*

If inconsistencies are detected: Is it possible to isolate and quantify the cause of the inconsistency?

Application of a GHG fluctuation range (+50%/-40%) for dealing with portfolio positions outside this range.

Is desk research carried out for portfolio positions outside the GHG fluctuation range?

yes   *no*   *no*   *yes*

Is the GHG emission data consistent across periods?

no

yes

Adjustment of the effect in the reporting year or retroactive integration in the previous year.

No consideration of portfolio positions (with GHG changes outside the fluctuation range).

Consideration of portfolio positions with GHG changes outside the fluctuation range.

Influencing factors on the individual weighting factor

Change in the considered portfolio positions:
- New positions
- New inclusions in the calculation
- Portfolio exits
- Exclusions from calculations

⇒

Individual weighting factors

share of absolute emissions   *and/ or*   share of portfolio volume

⇐

Changes in
- Portfolio volume
- GHG emission volume

An attribution analysis can be used to decompose the factors influencing the I-PEPs result.

Note: An attribution analysis is only used to better understand the influencing factors. Therefore, although the use of an attribution analysis is useful and recommended, it is **not a mandatory requirement**.

Overview of influencing factors

Portfolio position existent/considered?		Possible influencing factors	Impact on the Combined Weighting Factor?		
Previous year	Reporting year		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

List of abbreviations

$APEP_{abs}$ — Aggregated Portfolio-related absolute Emission Performance

$APEP_{int}$ — Aggregated Portfolio-related Emission Intensity Performance

BA — Balanced Approach

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

GWF_E — General Emissions Weighting Factor

GWF_P — General Portfolio Weighting Factor

I-PEPs — Indicators for Portfolio-related Emission Performance

LPEP — Lending Portfolio-related Emission Performance

$LPEP_{sector}$ — Lending Portfolio-related Emission Intensity Performance (sector)

MPEP — Mortgage Portfolio-related Emission Intensity Performance

UPEP — Corporate Underwriting Portfolio-related Emission Performance

$UPEP_{sector}$ — Corporate Underwriting Portfolio-related Emission Intensity Performance (sector)

PA — Portfolio-centric Approach

SPEP — Sovereign Bond Portfolio-related Emission Performance

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