GRESB

EN1 – Energy consumption

*2024 Scoring
methodology examples*

Introduction

This slide deck provides step-by-step examples of the 2024 scoring methodology for the 2024 Final benchmark reports for one of the key metrics in the GRESB Standard—Energy.

It focuses on Indicator EN1 – Energy consumption and breaks down each element that contributes to the indicator's score.

While this deck does not cover them, the same methodology can be applied, with similar logic, to other performance indicators such as GHG, Water, and Waste.

EN1 – 2024 Scoring Methodology

- ## Data coverage

- ## Like-for-Like

  - ### Data availability

  - ### Performance improvement

- ## Renewable energy

  - ### On-site renewable energy

  - ### Off-site renewable energy

  - ### Performance

EN1 - Data coverage
2024 Scoring Methodology

EN1 – Data coverage

Portfolio composition

- Consider a portfolio composed of one property sub-type (Office, Corporate: High-Rise Office) of identical assets with the same Floor area (1.000m^2), GAV and all assets are all fully owned by the entity and located in Sweden

- Each building has been **owned during the entire year**

- The Energy data is reported at the **whole building level** for each asset **covering Maximum Floor Area.**

- Each building is <u>**fully landlord controlled (Tenant controlled area = 0m^2)**</u>

- Every asset has **one energy type: electricity**

Asset #	Property sub-type	Country	Consumption [kWh]	% Floor area covered - Electricity	Data availability [days]
1	Office, Corporate : High-Rise Office	Sweden	100000	100%	365
2	Office, Corporate : High-Rise Office	Sweden	100000	100%	365
3	Office, Corporate : High-Rise Office	Sweden	100000	100%	365
4	Office, Corporate : High-Rise Office	Sweden	300000	100%	365
5	Office, Corporate : High-Rise Office	Sweden	300000	100%	365
6	Office, Corporate : High-Rise Office	Sweden	Not available	0%	0
7	Office, Corporate : High-Rise Office	Sweden	Not available	0%	0
8	Office, Corporate : High-Rise Office	Sweden	Not available	0%	0
9	Office, Corporate : High-Rise Office	Sweden	Not available	0%	0
10	Office, Corporate : High-Rise Office	Sweden	Not available	0%	0

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Step 1: Calculate the % Data coverage (Area)

- The % Data coverage (Area) is based on the area for which data is available.

- When the Energy data is reported at the **Whole Building** level, the %Data coverage (Area) of the asset = 100%.

Asset #	Property sub-type	% Floor area covered - Electricity	Energy Level of reporting	Step 1: % Data coverage (Area)
1	Office, Corporate : High-Rise Office	100%	Whole building	100%
2	Office, Corporate : High-Rise Office	100%	Whole building	100%
3	Office, Corporate : High-Rise Office	100%	Whole building	100%
4	Office, Corporate : High-Rise Office	100%	Whole building	100%
5	Office, Corporate : High-Rise Office	100%	Whole building	100%
6	Office, Corporate : High-Rise Office	0%	Whole building	0%
7	Office, Corporate : High-Rise Office	0%	Whole building	0%
8	Office, Corporate : High-Rise Office	0%	Whole building	0%
9	Office, Corporate : High-Rise Office	0%	Whole building	0%
10	Office, Corporate : High-Rise Office	0%	Whole building	0%

Note: All energy sources are summed during Data coverage scoring

EN1 – Data coverage

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Step 2: Calculate % Data coverage (Time)

- The % Data coverage (Time) is based on the time for which data is available.

$$\% \text{ Data Coverage (Time)} = \frac{\text{Data availability [days]*}}{\text{Ownership Period}}$$

Asset #	Property sub-type	Consumption [kWh]	Data availability [days]	Ownership period	Step 2: % Data coverage (Time)
1	Office, Corporate : High-Rise Office	100000	365	365	100%
2	Office, Corporate : High-Rise Office	100000	365	365	100%
3	Office, Corporate : High-Rise Office	100000	365	365	100%
4	Office, Corporate : High-Rise Office	300000	365	365	100%
5	Office, Corporate : High-Rise Office	300000	365	365	100%
6	Office, Corporate : High-Rise Office	Not available	0	365	0%
7	Office, Corporate : High-Rise Office	Not available	0	365	0%
8	Office, Corporate : High-Rise Office	Not available	0	365	0%
9	Office, Corporate : High-Rise Office	Not available	0	365	0%
10	Office, Corporate : High-Rise Office	Not available	0	365	0%

* If data availability is larger than the ownership period, the Data Coverage (Time) is capped at 100%.
If an asset has >355 days, for an ownership period of 365 days, the % Data coverage (Time) = 100%

EN1 – Data coverage

Step 3: Calculate the Data coverage Area/Time

Data Coverage (Area/Time) = %Data Coverage (Area) x %Data Coverage (Time)

Asset #	Property sub-type	Consumption [kWh]	Data availability [days]	Ownership period	Data coverage (Area)	Data coverage (Time)	Step 3: Data Coverage Area/Time
1	Office, Corporate : High-Rise Office	100000	365	365	100%	100%	**100%**
2	Office, Corporate : High-Rise Office	100000	365	365	100%	100%	**100%**
3	Office, Corporate : High-Rise Office	100000	365	365	100%	100%	**100%**
4	Office, Corporate : High-Rise Office	300000	365	365	100%	100%	**100%**
5	Office, Corporate : High-Rise Office	300000	365	365	100%	100%	**100%**
6	Office, Corporate : High-Rise Office	Not available	0	365	0%	0%	**0%**
7	Office, Corporate : High-Rise Office	Not available	0	365	0%	0%	**0%**
8	Office, Corporate : High-Rise Office	Not available	0	365	0%	0%	**0%**
9	Office, Corporate : High-Rise Office	Not available	0	365	0%	0%	**0%**
10	Office, Corporate : High-Rise Office	Not available	0	365	0%	0%	**0%**

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Step 4: Benchmark the Data coverage Area/Time

The Data Coverage Area/Time is compared against the relevant Benchmark at the Property Sub-Type and Country cross-section level.

Asset #	Property sub-type	Step 3: Data Coverage Area/Time	Step 4: Data coverage Area/Time Score (Benchmark)*
1	Office, Corporate : High-Rise Office	100%	100%
2	Office, Corporate : High-Rise Office	100%	100%
3	Office, Corporate : High-Rise Office	100%	100%
4	Office, Corporate : High-Rise Office	100%	100%
5	Office, Corporate : High-Rise Office	100%	100%
6	Office, Corporate : High-Rise Office	0%	0%
7	Office, Corporate : High-Rise Office	0%	0%
8	Office, Corporate : High-Rise Office	0%	0%
9	Office, Corporate : High-Rise Office	0%	0%
10	Office, Corporate : High-Rise Office	0%	0%

* The Benchmark score of the Data coverage Area/Time is determined by comparing the Data Coverage Area/Time of the asset to the mean of the Benchmark group (which includes assets with a Data Coverage Area/Time of 0% of the Property Sub-Type and Country cross-section).

•   If Data Coverage Area/Time = 100%, the benchmark score is automatically 100%.

•   If Data Coverage Area/Time = 0%, the benchmark score is automatically 0%.

•   If 0% < Data Coverage Area/Time < 100%, the benchmark score is a function of the mean of the Data Coverage Area/Time of the benchmark group.

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Step 5: Calculate the Data Coverage Asset Score

- If the assets are 100% Landlord controlled (Tenant controlled area = $0m^2$):

  Data coverage Asset Score = Data coverage Area/Time score (Benchmark).

Asset #	Property sub-type	Step 3: Data Coverage Area/Time	Step 4: Data coverage Area/Time Score (Benchmark)	Step 5: Data Coverage Asset Score
1	Office, Corporate : High-Rise Office	100%	100%	100%
2	Office, Corporate : High-Rise Office	100%	100%	100%
3	Office, Corporate : High-Rise Office	100%	100%	100%
4	Office, Corporate : High-Rise Office	100%	100%	100%
5	Office, Corporate : High-Rise Office	100%	100%	100%
6	Office, Corporate : High-Rise Office	0%	0%	0%
7	Office, Corporate : High-Rise Office	0%	0%	0%
8	Office, Corporate : High-Rise Office	0%	0%	0%
9	Office, Corporate : High-Rise Office	0%	0%	0%
10	Office, Corporate : High-Rise Office	0%	0%	0%

If the Tenant controlled area is $>0m^2$:

- A Data Coverage Asset Score is calculated per asset per type of controlled area separately: Landlord controlled - LC and Tenant controlled – TC. Steps 1 to 5 are done separately for both the Tenant and Landlord controlled areas.

- The per controlled (LC, TC) scores at the asset level are then aggregated to a single score for which base building has a static weight of 40% and tenant space has a static weight of 60%. As tenant space can be both landlord and tenant controlled, the 60% weight has to be shared between the two which is done based on relative floor area.

EN1 − Data coverage

Step 6: Aggregate the Data coverage Area/Time score at [Property sub-type & Country] level

- Asset scores are aggregated at the Property Sub-Type and Country level cross-section using **Floor Area** and **Percentage of Ownership** as weighting factors.

Score property sub-type & country **= 8.5 points** x Sum (Asset score x GFA x %Ownership) **/** Sum (GFA x %Ownership)

Asset #	Property sub-type	Step 5: Data coverage Asset Score	Calculation Step I Asset score* GFA*%Ownership		Calculation Step II GFA*%Ownership		Step 5: Score Data coverage property sub-type & country
1	Office, Corporate : High-Rise Office	100%	1000		1000		
2	Office, Corporate : High-Rise Office	100%	1000		1000		
3	Office, Corporate : High-Rise Office	100%	1000		1000		
4	Office, Corporate : High-Rise Office	100%	1000		1000		
5	Office, Corporate : High-Rise Office	100%	1000	5000	1000	10000	4.25 pts
6	Office, Corporate : High-Rise Office	0%	0		1000		
7	Office, Corporate : High-Rise Office	0%	0		1000		
8	Office, Corporate : High-Rise Office	0%	0		1000		
9	Office, Corporate : High-Rise Office	0%	0		1000		
10	Office, Corporate : High-Rise Office	0%	0		1000		

8.5pts x 5000/10000 = 4.25 p

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Step 7: Calculate the data coverage score at Portfolio level

- Property Sub-Type and Country Data coverage Scores are aggregated to Portfolio level using the Percentage of GAV as weighting factor.

Asset #	Property sub-type	Country	Data coverage %	Step 4: Score Data coverage property sub-type & country	%GAV	Step 5: Score Data coverage Portfolio
1	Office, Corporate : High-Rise Office	Sweden	100%	4.25	100%	4.25 pts
2	Office, Corporate : High-Rise Office	Sweden	100%			
3	Office, Corporate : High-Rise Office	Sweden	100%			
4	Office, Corporate : High-Rise Office	Sweden	100%			
5	Office, Corporate : High-Rise Office	Sweden	100%			
6	Office, Corporate : High-Rise Office	Sweden	-			
7	Office, Corporate : High-Rise Office	Sweden	-			
8	Office, Corporate : High-Rise Office	Sweden	-			
9	Office, Corporate : High-Rise Office	Sweden	-			
10	Office, Corporate : High-Rise Office	Sweden	-			

If *Office, Corporate : High-Rise Office* only represents part of the total GAV of an entity (e.g. 50%) with a score of 4.25p and the other part of the Portfolio (GAV 50%) has a score of 0p:

- The portfolio-level score received by the entity is: 50% * 4.25p + 50% * 0p = 2.13p

EN1 - Like-for-Like
2024 Scoring Methodology

EN1 – Like-for-Like

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Portfolio composition

- Consider a portfolio composed of one property sub-type (Office, Corporate: High-Rise Office) of identical assets with the same Floor area (1.000m^2), GAV and all assets are all fully owned by the entity and located in Sweden

- Each building has been **owned during the entire year**

- The Energy data is reported at the **whole building level** for each asset

- Each building is **fully landlord controlled**

- Every asset has **one energy type: fuel**

- They are **standing investments for both years**

Asset #	Property sub-type	Country	2023 Consumption [kWh]	2022 Consumption [kWh]	2023 % Floor area covered	2022 % Floor area covered	Data availability 2023 [days]
1	Office, Corporate : High-Rise Office	Sweden	100000	200000	100%	100%	365
2	Office, Corporate : High-Rise Office	Sweden	100000	200000	100%	100%	365
3	Office, Corporate : High-Rise Office	Sweden	100000	200000	100%	100%	365
4	Office, Corporate : High-Rise Office	Sweden	300000	200000	100%	100%	365
5	Office, Corporate : High-Rise Office	Sweden	300000	200000	100%	100%	365
6	Office, Corporate : High-Rise Office	Sweden	100000	Not available	100%	0%	365
7	Office, Corporate : High-Rise Office	Sweden	100000	Not available	100%	0%	365
8	Office, Corporate : High-Rise Office	Sweden	100000	Not available	100%	0%	365
9	Office, Corporate : High-Rise Office	Sweden	100000	Not available	100%	0%	365
10	Office, Corporate : High-Rise Office	Sweden	100000	Not available	100%	0%	365

EN1 − Like-for-Like − Data availability

Step 1: Calculate Like-for-Like data availability asset score

- Like-for-Like (LFL) only includes comparable data points from two consecutive reporting periods.

- Only assets that meet all of the following criteria, for both current and previous reporting years, are eligible for inclusion in the LFL calculations:

1. Data Availability covers the full year (> 355 days)
2. Data Coverage is positive
3. Data Coverage is the same (within 1% error threshold)
4. The asset is classified as Standing Investment

- If an asset meet the LFL requirements, it receives a LFL Data availability asset score of 100%.

- Assets that do not meet the LFL eligibility criteria (e.g. having two consecutive years of data) are excluded from the aggregation, such that they do not influence the score received by the entity. They are treated as "not applicable" and do not receive any score.

Asset #	Property sub-type	Country	Consumption 2023 [kWh]	Consumption 2022 [kWh]	%Floor area covered 2023	%Floor area covered 2022	Does the Asset meet LFL requirements?	Step 1: LFL Data availability asset score
1	Office, Corporate : High-Rise Office	Sweden	100000	200000	100%	100%	Yes	**100%**
2	Office, Corporate : High-Rise Office	Sweden	100000	200000	100%	100%	Yes	**100%**
3	Office, Corporate : High-Rise Office	Sweden	100000	200000	100%	100%	Yes	**100%**
4	Office, Corporate : High-Rise Office	Sweden	300000	200000	100%	100%	Yes	**100%**
5	Office, Corporate : High-Rise Office	Sweden	300000	200000	100%	100%	Yes	**100%**
6	Office, Corporate : High-Rise Office	Sweden	100000	Not available	100%	0%	No	**NA**
7	Office, Corporate : High-Rise Office	Sweden	100000	Not available	100%	0%	No	**NA**
8	Office, Corporate : High-Rise Office	Sweden	100000	Not available	100%	0%	No	**NA**
9	Office, Corporate : High-Rise Office	Sweden	100000	Not available	100%	0%	No	**NA**
10	Office, Corporate : High-Rise Office	Sweden	100000	Not available	100%	0%	No	**NA**

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EN1 − Like-for-Like − Data availability

Step 2: Aggregate the Like-for-Like data availability score at [Property sub-type & Country] level

- Asset scores are aggregated at the Property Sub-Type and Country level cross-section using **Floor Area** and **Percentage of Ownership** as weighting factors.

Score property sub-type & country **= 0.5 points** x Sum (Asset score x GFA x %Ownership) **/** Sum (GFA x % Ownership)

Asset #	Property sub-type	Step 1: LFL Data availability Asset Score	Calculation Step I Asset score* GFA*%Ownership		Calculation Step II GFA*%Ownership		Step 2: Score LFL Data availability property sub-type & country
1	Office, Corporate : High-Rise Office	100%	1000		1000		
2	Office, Corporate : High-Rise Office	100%	1000		1000		
3	Office, Corporate : High-Rise Office	100%	1000		1000		
4	Office, Corporate : High-Rise Office	100%	1000		1000		
5	Office, Corporate : High-Rise Office	100%	1000	5000	1000	5000	0.5 pts
6	Office, Corporate : High-Rise Office	NA	NA		NA		
7	Office, Corporate : High-Rise Office	NA	NA		NA		
8	Office, Corporate : High-Rise Office	NA	NA		NA		
9	Office, Corporate : High-Rise Office	NA	NA		NA		
10	Office, Corporate : High-Rise Office	NA	NA		NA		

0.5 p x 5000/5000 = 0.5 p

EN1 – Like-for-Like – Data availability

Step 3: Calculate the Like-for-Like Data availability score at Portfolio level

- Property Sub-Type and Country Data coverage Scores are aggregated to Portfolio level using the Percentage of GAV as weighting factor.

Asset #	Property sub-type	Country	Step 2: Score LFL Data availability property sub-type & country	%GAV	Step 3: Score LFL Data availability Portfolio
1	Office, Corporate : High-Rise Office	Sweden			
2	Office, Corporate : High-Rise Office	Sweden			
3	Office, Corporate : High-Rise Office	Sweden			
4	Office, Corporate : High-Rise Office	Sweden			
5	Office, Corporate : High-Rise Office	Sweden	0.5 pts	100%	0.5 pts
6	Office, Corporate : High-Rise Office	Sweden			
7	Office, Corporate : High-Rise Office	Sweden			
8	Office, Corporate : High-Rise Office	Sweden			
9	Office, Corporate : High-Rise Office	Sweden			
10	Office, Corporate : High-Rise Office	Sweden			

If *Office, Corporate : High-Rise Office* only represents part of the total GAV of an entity (e.g. 50%) with a score of 0.5 p and the other part of the Portfolio (GAV 50%) has a score of 0p:

- The portfolio-level score received by the entity is: 50% * 0.5p + 50% * 0p = 0.25p

EN1 − Like-for-Like − Performance improvement

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Step 1: Calculate the Like for Like Performance improvement

- Calculate the percentage change in consumption/emission from last year (LY) to current year (CY).

$$\text{LFL Performance improvement} = \frac{(\text{Consumption 2023} - \text{Consumption 2022})}{\text{Consumption 2022}}$$

Asset #	Property sub-type	Country	Consumption 2023 [kWh]	Consumption 2022 [kWh]	Consumption 2022– Consumption 2023	Step 1: LFL Performance improvement
1	Office, Corporate : High-Rise Office	Sweden	100000	200000	-100000	**-50%**
2	Office, Corporate : High-Rise Office	Sweden	100000	200000	-100000	**-50%**
3	Office, Corporate : High-Rise Office	Sweden	100000	200000	-100000	**-50%**
4	Office, Corporate : High-Rise Office	Sweden	300000	200000	+100000	**+50%**
5	Office, Corporate : High-Rise Office	Sweden	300000	200000	+100000	**+50%**
6	Office, Corporate : High-Rise Office	Sweden	100000	Not available	NA	**NA**
7	Office, Corporate : High-Rise Office	Sweden	100000	Not available	NA	**NA**
8	Office, Corporate : High-Rise Office	Sweden	100000	Not available	NA	**NA**
9	Office, Corporate : High-Rise Office	Sweden	100000	Not available	NA	**NA**
10	Office, Corporate : High-Rise Office	Sweden	100000	Not available	NA	**NA**

EN1 − Like-for-Like − Performance improvement

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Step 2: Benchmark the Like-for-Like Performance improvement

- The LFL Performance improvement is compared against the relevant Benchmark at the Property Sub-Type and Country cross-section level.

- Assets presenting an increase (positive LFL Change value) in energy consumption automatically receive a score of 0.

Asset #	Property sub-type	Country	Consumption 2023 [kWh]	Consumption 2022 [kWh]	Step 1: LFL Performance improvement	Step 2: LFL Performance improvement (Benchmark)
1	Office, Corporate : High-Rise Office	Sweden	100000	200000	-50%	90%*
2	Office, Corporate : High-Rise Office	Sweden	100000	200000	-50%	90%*
3	Office, Corporate : High-Rise Office	Sweden	100000	200000	-50%	90%*
4	Office, Corporate : High-Rise Office	Sweden	300000	200000	+50%	0%
5	Office, Corporate : High-Rise Office	Sweden	300000	200000	+50%	0%
6	Office, Corporate : High-Rise Office	Sweden	100000	Not available	NA	NA
7	Office, Corporate : High-Rise Office	Sweden	100000	Not available	NA	NA
8	Office, Corporate : High-Rise Office	Sweden	100000	Not available	NA	NA
9	Office, Corporate : High-Rise Office	Sweden	100000	Not available	NA	NA
10	Office, Corporate : High-Rise Office	Sweden	100000	Not available	NA	NA

* The Benchmark score of the Improvement is determined by comparing the Improvement of the asset to the mean of the Benchmark group (which includes assets with an Improvement of 0% of the Property Sub-Type and Country cross-section). The benchmark score is a function of the mean of the Improvement of the benchmark.

In this example, the benchmark values are estimated. For instance, the benchmark group's mean LFL Performance improvement might be 30%. The function used to calculate the score could assign a value of 90% when an asset shows a 50% LFL Performance improvement, as the asset outperforms the benchmark value.

EN1 − Like-for-Like − Performance improvement

Step 3: Calculate the Like-for-Like Performance improvement Asset score

- If the assets are 100% Landlord controlled (Tenant controlled area = 0m^2):

  LFL Performance improvement Asset Score = LFL Performance improvement score (Benchmark).

Asset #	Property sub-type	Step 1: LFL Performance improvement	Step 2: LFL Performance improvement (Benchmark)	Step 3: LFL Performance improvement Asset Score
1	Office, Corporate : High-Rise Office	-50%	90%	**90%**
2	Office, Corporate : High-Rise Office	-50%	90%	**90%**
3	Office, Corporate : High-Rise Office	-50%	90%	**90%**
4	Office, Corporate : High-Rise Office	+50%	0%	**0%**
5	Office, Corporate : High-Rise Office	+50%	0%	**0%**
6	Office, Corporate : High-Rise Office	NA	NA	**NA**
7	Office, Corporate : High-Rise Office	NA	NA	**NA**
8	Office, Corporate : High-Rise Office	NA	NA	**NA**
9	Office, Corporate : High-Rise Office	NA	NA	**NA**
10	Office, Corporate : High-Rise Office	NA	NA	**NA**

If the Tenant controlled area is >0m^2:

- A Performance improvement Asset Score is calculated per asset per type of controlled area separately: Landlord controlled - LC and Tenant controlled – TC. Steps 1 to 3 are done separately for both the Tenant and Landlord controlled areas.

- The per controlled (LC, TC) scores at the asset level are then aggregated to a single score for which base building has a static weight of 40% and tenant space has a static weight of 60%. As tenant space can be both landlord and tenant controlled, the 60% weight has to be shared between the two which is done based on last year consumption.

Step 2: Calculate Like for Like performance improvement score at the [Sub-property type & Country] level

- Asset scores are aggregated at the Property Sub-Type and Country level cross-section using **Floor Area** and **Percentage of Ownership** as weighting factors.

Score property sub-type & country **= 2 points** x Sum (Asset score x GFA x %Ownership) **/** Sum (GFA x % Ownership)

Asset #	Property sub-type	Country	Consumption 2023 [kWh]	Consumption 2022 [kWh]	Step 3: LFL Performance improvement Asset Score	Calculation Step I Asset score* GFA*%Ownership		Calculation Step II GFA*%Ownership		Step 2: LFL change Sub-property & country
1	Office, Corporate : High-Rise Office	Sweden	100000	200000	90%	900		1000		
2	Office, Corporate : High-Rise Office	Sweden	100000	200000	90%	900		1000		
3	Office, Corporate : High-Rise Office	Sweden	100000	200000	90%	900		1000		
4	Office, Corporate : High-Rise Office	Sweden	300000	200000	0%	0		1000		
5	Office, Corporate : High-Rise Office	Sweden	300000	200000	0%	0	2700	1000	5000	1.08
6	Office, Corporate : High-Rise Office	Sweden	100000	Not available	NA	NA		NA		
7	Office, Corporate : High-Rise Office	Sweden	100000	Not available	NA	NA		NA		
8	Office, Corporate : High-Rise Office	Sweden	100000	Not available	NA	NA		NA		
9	Office, Corporate : High-Rise Office	Sweden	100000	Not available	NA	NA		NA		
10	Office, Corporate : High-Rise Office	Sweden	100000	Not available	NA	NA		NA		

2pts x 2700/5000 = 1.08 p

EN1 − Like-for-Like − Performance improvement

Step 3: Calculate Like for Like performance improvement score at the Portfolio level

- Property Sub-Type and Country Scores are aggregated to Portfolio level using the Percentage of GAV as weighting factor.

Asset #	Property sub-type	Country	Consumption 2023 [kWh]	Consumption 2022 [kWh]	Step 2: LFL change Sub-property & country	%GAV	Step 3: LFL change Portfolio
1	Office, Corporate : High-Rise Office	Sweden	100000	200000			
2	Office, Corporate : High-Rise Office	Sweden	100000	200000			
3	Office, Corporate : High-Rise Office	Sweden	100000	200000			
4	Office, Corporate : High-Rise Office	Sweden	300000	200000			
5	Office, Corporate : High-Rise Office	Sweden	300000	200000	1.08	100%	**1.08**
6	Office, Corporate : High-Rise Office	Sweden	100000	Not available			
7	Office, Corporate : High-Rise Office	Sweden	100000	Not available			
8	Office, Corporate : High-Rise Office	Sweden	100000	Not available			
9	Office, Corporate : High-Rise Office	Sweden	100000	Not available			
10	Office, Corporate : High-Rise Office	Sweden	100000	Not available			

If *Office, Corporate : High-Rise Office* only represents part of the total GAV of an entity (e.g. 50%) with a score of 1.08 p and the other part of the Portfolio (GAV 50%) has a score of 0p:

- The portfolio-level score received by the entity is: 50% * 1.08p + 50% * 0p = 0.54p

Renewable

2024 Scoring methodology

EN1 – Renewable Energy

Portfolio composition

- Consider a portfolio composed of one property sub-type (Office, Corporate: High-Rise Office) of identical assets with the same Floor area (1.000m^2), GAV and all assets are all fully owned by the entity and located in Sweden

- Each building has been owned during the entire year

Asset #	Property sub-type	Country	Consumption 2022 [kWh]	Consumption 2023 [kWh]	Renewable generated on-site in 2023?	On-site Renewable energy 2023 [kWh]	On-site Renewable energy 2022 [kWh]	Off-site Renewable procured in 2023?	Off-site Renewable energy 2023 [kWh]	Off-site Renewable energy 2022 [kWh]
1	Office, Corporate : High-Rise Office	Sweden	1000	1000	Yes	100	50	Yes	10	5
2	Office, Corporate : High-Rise Office	Sweden	1000	1000	Yes	100	50	Yes	10	5
3	Office, Corporate : High-Rise Office	Sweden	1000	1000	Yes	100	50	Yes	10	5
4	Office, Corporate : High-Rise Office	Sweden	1000	1000	Yes	100	50	Yes	10	5
5	Office, Corporate : High-Rise Office	Sweden	1000	1000	Yes	100	50	Yes	10	5
6	Office, Corporate : High-Rise Office	Sweden	1000	1000	No	-	-	No	-	-
7	Office, Corporate : High-Rise Office	Sweden	1000	1000	No	-	-	No	-	-
8	Office, Corporate : High-Rise Office	Sweden	1000	1000	No	-	-	No	-	-
9	Office, Corporate : High-Rise Office	Sweden	1000	1000	No	-	-	Yes	10	5
10	Office, Corporate : High-Rise Office	Sweden	1000	1000	No	-	-	Yes	10	5

EN1 – Renewable Energy – On-site

GRESB

Step 1: Calculate the On-site renewable energy asset score

- **On-site renewable energy** = max.1 point

- The max. 1 point is achieved if any on-site renewable energy was generated in the current year.

Asset #	Property sub-type	Country	Consumption 2023 [kWh]	On-site Renewable energy 2023 [kWh]	On-site Renewable energy 2022 [kWh]	Renewable generated on-site in 2023?	Step 1: On-site renewable energy score
1	Office, Corporate : High-Rise Office	Sweden	1000	100	50	Yes	**1**
2	Office, Corporate : High-Rise Office	Sweden	1000	100	50	Yes	**1**
3	Office, Corporate : High-Rise Office	Sweden	1000	100	50	Yes	**1**
4	Office, Corporate : High-Rise Office	Sweden	1000	100	50	Yes	**1**
5	Office, Corporate : High-Rise Office	Sweden	1000	100	50	Yes	**1**
6	Office, Corporate : High-Rise Office	Sweden	1000	-	-	No	**0**
7	Office, Corporate : High-Rise Office	Sweden	1000	-	-	No	**0**
8	Office, Corporate : High-Rise Office	Sweden	1000	-	-	No	**0**
9	Office, Corporate : High-Rise Office	Sweden	1000	-	-	No	**0**
10	Office, Corporate : High-Rise Office	Sweden	1000	-	-	No	**0**

EN1 − Renewable Energy − On-site

Step 2: Calculate the On-site renewable energy score at the [Sub-property type & Country] level

- Asset scores are aggregated at the Property Sub-Type and Country level cross-section using **Floor Area** and **Percentage of Ownership** as weighting factors.

Asset #	Property sub-type	Country	Step 1: On-site renewable energy score	Calculation Step I Asset score* GFA*%Ownership		Calculation Step II GFA*%Ownership		Step 2: On-site renewable energy score Sub-property type & Country
1	Office, Corporate : High-Rise Office	Sweden	1	1000		1000		
2	Office, Corporate : High-Rise Office	Sweden	1	1000		1000		
3	Office, Corporate : High-Rise Office	Sweden	1	1000		1000		
4	Office, Corporate : High-Rise Office	Sweden	1	1000		1000		
5	Office, Corporate : High-Rise Office	Sweden	1	1000	5000	1000	10000	0.5
6	Office, Corporate : High-Rise Office	Sweden	0	0		1000		
7	Office, Corporate : High-Rise Office	Sweden	0	0		1000		
8	Office, Corporate : High-Rise Office	Sweden	0	0		1000		
9	Office, Corporate : High-Rise Office	Sweden	0	0		1000		
10	Office, Corporate : High-Rise Office	Sweden	0	0		1000		

5000/10000 = 0.5 p

EN1 – Renewable Energy – On-site

GRESB

Step 3: Calculate the On-site renewable energy score at the Portfolio level

- Property Sub-Type and Country Renewable Energy Scores are aggregated to Portfolio level using the Percentage of GAV as weighting factor.

Asset #	Property sub-type	Country	Step 2: On-site renewable energy score Sub-property type & Country	%GAV	Step 2: On-site renewable energy score Portfolio
1	Office, Corporate : High-Rise Office	Sweden			
2	Office, Corporate : High-Rise Office	Sweden			
3	Office, Corporate : High-Rise Office	Sweden			
4	Office, Corporate : High-Rise Office	Sweden			
5	Office, Corporate : High-Rise Office	Sweden	0.5	100%	0.5
6	Office, Corporate : High-Rise Office	Sweden			
7	Office, Corporate : High-Rise Office	Sweden			
8	Office, Corporate : High-Rise Office	Sweden			
9	Office, Corporate : High-Rise Office	Sweden			
10	Office, Corporate : High-Rise Office	Sweden			

If *Office, Corporate : High-Rise Office* only represents part of the total GAV of an entity (e.g. 50%) with a score of 0.5 p and the other part of the Portfolio (GAV 50%) has a score of 0p:

- The portfolio-level score received by the entity is: 50% * 0.5p + 50% * 0p = 0.25p

EN1 − Renewable Energy − Off-site

Step 1: Calculate the Off-site renewable energy asset score

- Off-site renewable energy = max. 0.5 points

- If no renewable energy was consumed and/or generated on site, but some off-site renewable energy was procured in the current year, then score = 0.5 points.

- If both on-site and off-site renewable energy are reported, the combined asset score of on-site and off-site renewable energy is capped at 1.0 point. As a result, the off-site score is set to 0 points.

Asset #	Property sub-type	Country	On-site renewable energy score	Renewable procured off-site in 2023?	Step 1: Off-site renewable energy score (total asset score cap at 1p)
1	Office, Corporate : High-Rise Office	Sweden	1	Yes	0*
2	Office, Corporate : High-Rise Office	Sweden	1	Yes	0*
3	Office, Corporate : High-Rise Office	Sweden	1	Yes	0*
4	Office, Corporate : High-Rise Office	Sweden	1	Yes	0*
5	Office, Corporate : High-Rise Office	Sweden	1	Yes	0*
6	Office, Corporate : High-Rise Office	Sweden	0	No	0
7	Office, Corporate : High-Rise Office	Sweden	0	No	0
8	Office, Corporate : High-Rise Office	Sweden	0	No	0
9	Office, Corporate : High-Rise Office	Sweden	0	Yes	0.5
10	Office, Corporate : High-Rise Office	Sweden	0	Yes	0.5

* Off-site renewable energy score set to 0p as the asset also had on-site renewable energy generated (1p).

EN1 − Renewable Energy − Off-site

GRESB

Step 2: Calculate the Off-site score at the [Sub-property type & Country] level

- Asset scores are aggregated at the Property Sub-Type and Country level cross-section using **Floor Area** and **Percentage of Ownership** as weighting factors.

Asset #	Property sub-type	Country	Step 2: Off-site renewable energy scores	Calculation Step I Asset score* GFA*%Ownership		Calculation Step II GFA*%Ownership		Step 2: On-site score Sub-property type & Country
1	Office, Corporate : High-Rise Office	Sweden	0	0		1000		
2	Office, Corporate : High-Rise Office	Sweden	0	0		1000		
3	Office, Corporate : High-Rise Office	Sweden	0	0		1000		
4	Office, Corporate : High-Rise Office	Sweden	0	0		1000		
5	Office, Corporate : High-Rise Office	Sweden	0	0	1000	1000	10000	**0.1**
6	Office, Corporate : High-Rise Office	Sweden	0	0		1000		
7	Office, Corporate : High-Rise Office	Sweden	0	0		1000		
8	Office, Corporate : High-Rise Office	Sweden	0	0		1000		
9	Office, Corporate : High-Rise Office	Sweden	0.5	500		1000		
10	Office, Corporate : High-Rise Office	Sweden	0.5	500		1000		

1000/10000 = 0.1 p

EN1 – Renewable Energy - Performance

GRESB

Step 1: Calculate the Improvement asset score

- The improvement is based on the difference of percentage of renewable energy in the current year and the previous year.
- The Improvement is compared against the relevant Benchmark at the Property Sub-Type and Country cross-section level.

Asset #	Property sub-type	Country	On-site and Off-site Renewable energy 2023 [kWh]	Percentage of renewable energy 2023 [%]	On-site and off-site Renewable energy 2022 [kWh]	Percentage of renewable energy 2022 [%]	Improvement 2023-2022	Step 1: Improvement score (benchmark)*
1	Office, Corporate : High-Rise Office	Sweden	110	11%	55	5.5%	5.5%	**60%**
2	Office, Corporate : High-Rise Office	Sweden	110	11%	55	5.5%	5.5%	**60%**
3	Office, Corporate : High-Rise Office	Sweden	110	11%	55	5.5%	5.5%	**60%**
4	Office, Corporate : High-Rise Office	Sweden	110	11%	55	5.5%	5.5%	**60%**
5	Office, Corporate : High-Rise Office	Sweden	110	11%	55	5.5%	5.5%	**60%**
6	Office, Corporate : High-Rise Office	Sweden	-	-	-	-	0%	**0%**
7	Office, Corporate : High-Rise Office	Sweden	-	-	-	-	0%	**0%**
8	Office, Corporate : High-Rise Office	Sweden	-	-	-	-	0%	**0%**
9	Office, Corporate : High-Rise Office	Sweden	10	1%	5	0.5%	0.5%	**5%**
10	Office, Corporate : High-Rise Office	Sweden	10	1%	5	0.5%	0.5%	**5%**

* The Benchmark score of the Improvement is determined by comparing the Improvement of the asset to the mean of the Benchmark group (which includes assets with an Improvement of 0% of the Property Sub-Type and Country cross-section). The benchmark score is a function of the mean of the Improvement of the benchmark.

In this example, the benchmark values are estimated. For instance, the benchmark group's mean Improvement might be 3%. The function used to calculate the score could assign a value of 60% when an asset shows a 5% improvement, as the asset outperforms the benchmark value.

EN1 – Renewable Energy - Performance

Step 2: Calculate the Performance asset score

$$\text{Performance Score} = [(100 + p) / 200] * (p / 100) + [(100 - p) / 200]* i$$

- *p* is the percentage renewable energy
- *i* is the improvement score

Asset #	Property sub-type	Country	On-site and off-site Renewable energy 2023 [kWh]	Percentage of renewable energy 2023 [%] **= p**	Step 1: Improvement score (benchmark) **= i**	Step 2: Performance Score
1	Office, Corporate : High-Rise Office	Sweden	110	11%	60%	32.80%*
2	Office, Corporate : High-Rise Office	Sweden	110	11%	60%	32.80%*
3	Office, Corporate : High-Rise Office	Sweden	110	11%	60%	32.80%*
4	Office, Corporate : High-Rise Office	Sweden	110	11%	60%	32.80%*
5	Office, Corporate : High-Rise Office	Sweden	110	11%	60%	32.80%*
6	Office, Corporate : High-Rise Office	Sweden	-	-	0%	0%
7	Office, Corporate : High-Rise Office	Sweden	-	-	0%	0%
8	Office, Corporate : High-Rise Office	Sweden	-	-	0%	0%
9	Office, Corporate : High-Rise Office	Sweden	10	1%	5%	2.98%**
10	Office, Corporate : High-Rise Office	Sweden	10	1%	5%	2.98%**

* Score = [(100+11)/200] * (11/100) + [(100-11)/200]*0.6 = 0.555*0.11 + (89/200)*0.6=0.06105+0.267=0.32805

** Score = [(100+1)/200] * (1/100) + [(100-1)/200]*0.05 = 0.505*0.01 + (99/200)*0.05=0.00505+0.02475=0.0298

GRESB

Step 3: Calculate Performance score at the [Sub-property type & Country] level

- Asset scores are aggregated at the Property Sub-Type and Country level cross-section using **Floor Area** and **Percentage of Ownership** as weighting factors.

Score property sub-type & country **= 2 points** x Sum (Asset score x GFA x %Ownership) **/** Sum (GFA x % Ownership)

Asset #	Property sub-type	Country	On-site and off-site Renewable energy 2023 [kWh]	Step 2: Performance Score	Calculation Step I Asset score* GFA*%Ownership		Calculation Step II GFA*%Ownership		Step 3: Performance score sub-property & Country
1	Office, Corporate : High-Rise Office	Sweden	100	32.8%	328		1000		
2	Office, Corporate : High-Rise Office	Sweden	100	32.8%	328		1000		
3	Office, Corporate : High-Rise Office	Sweden	100	32.8%	328		1000		
4	Office, Corporate : High-Rise Office	Sweden	100	32.8%	328		1000		
5	Office, Corporate : High-Rise Office	Sweden	100	32.8%	328	1699.6	1000	10000	**0.3399**
6	Office, Corporate : High-Rise Office	Sweden	-	0%	0		1000		
7	Office, Corporate : High-Rise Office	Sweden	-	0%	0		1000		
8	Office, Corporate : High-Rise Office	Sweden	-	0%	0		1000		
9	Office, Corporate : High-Rise Office	Sweden	10	2.98%	29.8		1000		
10	Office, Corporate : High-Rise Office	Sweden	10	2.98%	29.8		1000		

$2 * 1699.6/10000 = 0.3399 \text{ p}$

EN1 – Renewable Energy - Performance

GRESB

Step 4: Calculate Performance score at the Portfolio level

• Property Sub-Type and Country Scores are aggregated to Portfolio level using the Percentage of GAV as weighting factor.

Asset #	Property sub-type	Country	On-site Renewable energy 2023 [kWh]	Step 3: Performance score sub-property & Country	%GAV	Step 4: Performance score Portfolio
1	Office, Corporate : High-Rise Office	Sweden	100			
2	Office, Corporate : High-Rise Office	Sweden	100			
3	Office, Corporate : High-Rise Office	Sweden	100			
4	Office, Corporate : High-Rise Office	Sweden	100			
5	Office, Corporate : High-Rise Office	Sweden	100	0.3399	100%	**0.3399**
6	Office, Corporate : High-Rise Office	Sweden	-			
7	Office, Corporate : High-Rise Office	Sweden	-			
8	Office, Corporate : High-Rise Office	Sweden	-			
9	Office, Corporate : High-Rise Office	Sweden	-			
10	Office, Corporate : High-Rise Office	Sweden	-			