

RESIDENTIAL BUILDINGS DE/AT/SE

Eligibility Criteria

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Vonovia SE – Green Bond



Overview eligibility criteria – Residential assets in Germany

		Residential buildings	Single-Family	Multi-Family
New or existing buildings	1	Nearly Zero Energy Building Built 2021 or newer	At least 10% lower than the requirements for the primary energy demand of the “Nearly Zero Energy Building” standard (NZEB). Based on the “Energy Performance of Buildings Directive (EBPD)”, the NZEB standard is implemented in the GEG requirements. NZEB-10% via PED-requirements of KfW-55 or better	
			Indicative reference values: Primary energy demand	
			Small SFH: PED ≤ 63.9 kWh/(m ² a) Large SFH: PED ≤ 37.8 kWh/(m ² a)	Small MFH: PED ≤ 45.9 kWh/(m ² a) Large MFH: PED ≤ 39.6 kWh/(m ² a)
Building Acquisition & Ownership	2	Top 15% Energy performance certificate Built before 31/12/2020	Energy performance label A+, A or B according to GEG 2020 Site energy demand: A+ ≤ 30 A ≤ 50 kWh/(m ² a) B ≤ 75 kWh/(m ² a)	
	3	Top 15% Energy consumption Built before 31/12/2020	Site energy consumption < 70 kWh/(m ² a) leading to Primary energy consumption < 74 kWh/(m ² a) and CO ₂ -emissions < 17 kgCO ₂ /(m ² a) based on building-stock weighted reference intensities	
	4	Top 15% Building energy code Built before 31/12/2020	Primary energy demand requirements of building energy code EnEV 2009 or better	
Renovation	5	Property Upgrade	Major renovation meets cost-optimal minimum energy performance requirements in accordance with the Energy Performance of Buildings Directive (EBPD).	
			Relative improvement in primary energy demand ≥ 30% in comparison to the performance of the building before the renovation.	

SFH: Single-Family-House

MFH: Multi-Family-House

EPC: Energy Performance Certificate (Energieausweis)

PED: Primary Energy demand

Small/Large: 149 m² / 296 m²

Small/Large: 474 m² / 3811 m²

Drees & Sommer low carbon building criteria are based on EU Taxonomy (Delegated Act – July 2021). Criteria are valid for assets located in Germany. Status: October 2021

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Overview benchmarks – Residential assets in Germany

Ø-Reference values: Energy		Ø-Reference values: CO ₂																					
<p>Building stock weighted reference benchmarks:</p> <p>End energy: Ø 146.8 kWh/(m²a)</p> <p>Primary energy factor: Ø 1.052</p> <p>Primary energy: Ø 154 kWh/(m²a)</p>	<table border="1"> <thead> <tr> <th>Label</th> <th>End energy demand</th> </tr> </thead> <tbody> <tr> <td>A+</td> <td>≤ 30 kWh/(m²a)</td> </tr> <tr> <td>A</td> <td>≤ 50 kWh/(m²a)</td> </tr> <tr> <td>B</td> <td>≤ 75 kWh/(m²a)</td> </tr> <tr> <td>C</td> <td>≤ 100 kWh/(m²a)</td> </tr> <tr> <td>D</td> <td>≤ 130 kWh/(m²a)</td> </tr> <tr> <td>E</td> <td>≤ 160 kWh/(m²a)</td> </tr> <tr> <td>F</td> <td>≤ 200 kWh/(m²a)</td> </tr> <tr> <td>G</td> <td>≤ 250 kWh/(m²a)</td> </tr> <tr> <td>H</td> <td>> 250 kWh/(m²a)</td> </tr> </tbody> </table>	Label	End energy demand	A+	≤ 30 kWh/(m ² a)	A	≤ 50 kWh/(m ² a)	B	≤ 75 kWh/(m ² a)	C	≤ 100 kWh/(m ² a)	D	≤ 130 kWh/(m ² a)	E	≤ 160 kWh/(m ² a)	F	≤ 200 kWh/(m ² a)	G	≤ 250 kWh/(m ² a)	H	> 250 kWh/(m ² a)	<p>Building stock weighted reference benchmark: CO₂-Intensity: Ø 0.236 kgCO₂/kWh</p>	<p>Building stock weighted reference benchmark: 34.6 kgCO₂/(m²a)</p>
Label	End energy demand																						
A+	≤ 30 kWh/(m ² a)																						
A	≤ 50 kWh/(m ² a)																						
B	≤ 75 kWh/(m ² a)																						
C	≤ 100 kWh/(m ² a)																						
D	≤ 130 kWh/(m ² a)																						
E	≤ 160 kWh/(m ² a)																						
F	≤ 200 kWh/(m ² a)																						
G	≤ 250 kWh/(m ² a)																						
H	> 250 kWh/(m ² a)																						

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Overview eligibility criteria – Residential buildings in Austria

		Residential buildings	Single-Family	Multi-Family
New construction or Existing buildings	1	Nearly Zero Energy Building Built after 31 st December 2020	The primary energy demand is at least 10% lower then the “Nearly Zero Energy Building”-Standard (NZEB)’s threshold. Based on „Energy Performance of Buildings Directive (EPBD)”, the NZEB is set in “OIB-RL6”-“Nationaler Plan” (OIB-330.6-005/18)	
			New Construction: NZEB-10%: Primary energy $PED_{H,n.ren.} \leq 36.9 \text{ kWh/m}^2_{GFA} \text{ a}$ Major Renovation: NZEB-10%: Primary energy $PED_{H,n.ren.} \leq 39.6 \text{ kWh/m}^2_{GFA} \text{ a}$	
Existing buildings built before 2021	2	Energy performance certificate (EPC)	Energy performance certificate with energy efficiency rating of A or better, complying with: - heating demand $HWB_{Ref,SK}$ of $25 \text{ kWh/m}^2_{GFA} \text{ a}$ or less, or - energy efficiency factor $f_{GEE,SK}$ of 0.85 or less	
	3a	Top 15% Primary energy demand (PED)	$PED_{tot} \leq 190 \text{ kWh/m}^2_{GFA} \text{ a}$	
	3b	Top 15% Building energy code based on PED	All counties: OIB-R6-2007 (OIB-300.6-038/07) with stringency of 01.01.2010	Burgenland, Vorarlberg: OIB-R6-2011 (OIB-330.6-094/11) All other counties: OIB-R6-2007 with string. of 01.01.2010
	3c	Top 15% Year of construction (permit) based on PED	Salzburg: 2012 All other counties: 2010	Burgenland, Vorarlberg: 2013 Salzburg: 2012 All other counties: 2010
Renovation of Existing buildings	4	Major renovation	Major renovation meets cost-optimal minimum energy performance requirements in accordance with the Energy Performance of Buildings Directive (EPBD). Requirements for total energy efficiency as referenced in “OIB-RL6:2015” (OIB-330.6-009/15) or newer.	
			Relative improvement in primary energy demand $\geq 30\%$ in comparison to the performance of the building before the renovation.	

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Overview benchmarks – Residential assets in Austria

	Ø-Reference values: Energy		Ø-Reference values: CO ₂ -equivalent	
Single family houses	weighted reference Primary energy factor 1.246	Building area-weighted reference benchmark per heated gross floor area: Site energy demand = 309.3 kWh/m ² _{GFA} a Primary energy demand = 385.4 kWh/m ² _{GFA} a	weighted reference CO ₂ emission intensity 0.175 kgCO ₂ /kWh	Building area-weighted reference benchmark per heated gross floor area: 54.1 kgCO ₂ /m ² _{GFA} a
Multi family houses		Building area-weighted reference benchmark per heated gross floor area: Site energy demand = 195.4 kWh/m ² _{GFA} a Primary energy demand = 243.5 kWh/m ² _{GFA} a		Building area-weighted reference benchmark per heated gross floor area: 34.2 kgCO ₂ /m ² _{GFA} a

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Overview eligibility criteria – Residential assets in Sweden

		Residential buildings	Single-Family	Multi-Family
New or existing buildings	1	Nearly Zero Energy Building Built 2021 or newer	At least 10% lower than the requirements for the primary energy demand of the “Nearly Zero Energy Building” standard (NZEB). Based on the “Energy Performance of Buildings Directive (EBPD)”, the NZEB standard is implemented in the BFS 2011:6 with BBR 29 requirements.	
			NZEB-10%: Small SFH: PED ≤ 90 kWh/(m ² a) Medium SFH: PED ≤ 86 kWh/(m ² a) Large SFH: PED ≤ 81 kWh/(m ² a)	NZEB-10%: MFH: PED ≤ 67 kWh/(m ² a)
Building Acquisition & Ownership	2	Nearly Zero Energy Building Built before 2021 or older	Small SFH: PED ≤ 100 kWh/(m ² a) Medium SFH: PED ≤ 95 kWh/(m ² a) Large SFH: PED ≤ 90 kWh/(m ² a)	MFH: PED ≤ 75 kWh/(m ² a)
	3	Energy performance certificate Built before 2021 or older	Energy performance class A	
	4	Top 15% Energy performance certificate Built before 2021 or older	Energy performance class A, B or C A ≤ 50% B > 50% ≤ 75% C > 75% ≤ 100% of the notional building’s energy demand	
	5	Top 15% Building energy code Built before 2021 or older	Primary energy demand requirements of building energy code BBR 12:2006 or better	
Renovation of existing buildings	6	Major Renovation	Major renovation meets cost-optimal minimum energy performance requirements in accordance with the Energy Performance of Buildings Directive (EBPD).	
		Property Upgrade	Relative improvement in primary energy demand ≥ 30% in comparison to the performance of the building before the renovation.	

SFH: Single-Family-House
MFH: Multi-Family-House

EPC: Energy Performance Certificate (Energieausweis)

PED: Primary Energy demand

Small/Medium/Large: >50-90 m² / >90-130 m² / >130 m²
no further specifications

Drees & Sommer low carbon building criteria are based on EU Taxonomy (Delegated Act – July 2021). Criteria are valid for assets located in Sweden. Status: December 2021

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Overview benchmarks- Residential assets in Sweden

Ø-Reference values: Energy		Ø-Reference values: CO ₂																	
<p>Building stock weighted reference benchmarks:</p> <p>End energy: Ø 123.2 kWh/(m²a)</p> <p>Primary energy factor: Ø 1.040</p> <p>Primary energy: Ø 128 kWh/(m²a)</p>	<table border="1"> <thead> <tr> <th>Label</th> <th>End energy demand</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>≤ 50 %</td> </tr> <tr> <td>B</td> <td>> 50 - ≤ 75 %</td> </tr> <tr> <td>C</td> <td>> 75 - ≤ 100 %</td> </tr> <tr> <td>D</td> <td>> 100 - ≤ 135 %</td> </tr> <tr> <td>E</td> <td>> 135 - ≤ 180 %</td> </tr> <tr> <td>F</td> <td>> 180 - ≤ 235 %</td> </tr> <tr> <td>G</td> <td>> 235 %</td> </tr> </tbody> </table> <p>% of the notional building's primary energy demand</p>	Label	End energy demand	A	≤ 50 %	B	> 50 - ≤ 75 %	C	> 75 - ≤ 100 %	D	> 100 - ≤ 135 %	E	> 135 - ≤ 180 %	F	> 180 - ≤ 235 %	G	> 235 %	<p>Building stock weighted reference benchmark: CO₂-Intensity: Ø 0.054 kgCO₂/kWh</p>	<p>Building stock weighted reference benchmark: 6.7 kgCO₂/(m²a)</p>
Label	End energy demand																		
A	≤ 50 %																		
B	> 50 - ≤ 75 %																		
C	> 75 - ≤ 100 %																		
D	> 100 - ≤ 135 %																		
E	> 135 - ≤ 180 %																		
F	> 180 - ≤ 235 %																		
G	> 235 %																		