

Berlin

ELIGIBLE COMMERCIAL & RESIDENTIAL BUILDINGS GERMANY

Low Carbon Buildings Criteria under the Climate Bonds Standard



What are the Low Carbon Buildings Criteria?

They are the technical standards that buildings (or a portfolio of buildings)

must satisfy to be eligible as nominated use of proceeds in a Certified Climate Bond. Any bond being certified must also meet the reporting and transparency requirements of the overarching [Climate Bonds Standard](#).

This brochure outlines the Buildings Criteria for all buildings in Germany. For full details on the methodology and requirements, see the detailed [Criteria document](#).

When is a German building eligible for certification?

It is eligible for certification if it meets the following Climate Bonds requirements:

- It meets the low carbon emissions trajectory OR approved proxy

- It has or will undergo an upgrade or retrofit which reduces its emissions intensity by 30-50% (depending on the tenor of the bond).

What do the low carbon emissions trajectories or proxy represent?

They represent rapid decarbonisation trajectories aligned with the goals of the Paris Agreement to limit global warming to no more than 2 degrees above pre-industrial levels, and ideally no more than 1.5 degrees. Trajectories are expressed as an emission intensity metric: kg CO₂ e/m² while proxies are expressed using a range of building codes and rating scheme including build year or post occupancy performance rating and standards.

How have trajectories and proxies been established?

Trajectories have been established by taking the emissions intensity of the top 15% of buildings in that city and drawing a linear

pathway down to zero carbon in 2050. They are location specific to reflect a number of factors which vary significantly by region. Proxies use differing techniques to measure the correlation between an established code or rating scheme and its ability to produce emissions reductions in-line with the Criteria & rapid decarbonisation.

Where can issuers go to find more information to check compliance?

The trajectory & proxy(s) for Germany are illustrated in the boxes below. More information about compliance for Germany can be found on the [Low Carbon Building's page](#).

Want more information?

Contact Cory.Nestor@ClimateBonds.net regarding the Low Carbon Building Criteria;

Contact Matteo.Bigoni@ClimateBonds.net regarding portfolio/asset certification.

German Residential Proxy

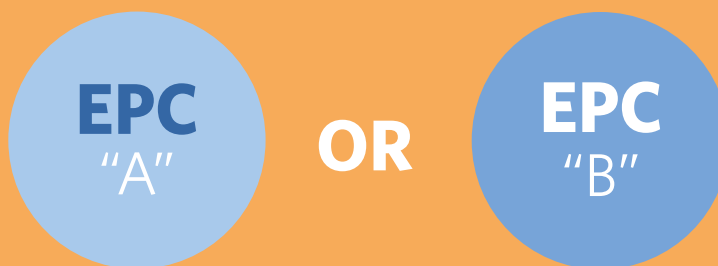
Residential buildings are eligible for certification if the asset meets the approved market proxy

The proxy diagram (**Figure 1**) shows the established low carbon buildings trajectory for residential buildings in Germany. Any building is eligible if it meets the this pre-approved market proxy.

For example, for a 10-year bond issued in 2018, the assets included in the issuance must achieve an EPC rating of "B" or above.

This proxy was established using data from the Energieausweis database provided by Germany Energy Agency.

Figure 1 . Low carbon residential proxy requirements for Germany



Note: Residential buildings must demonstrate compliance with the German EPC rating system, **Energieausweis** (EPC), achieving a rating of "A" OR "B".

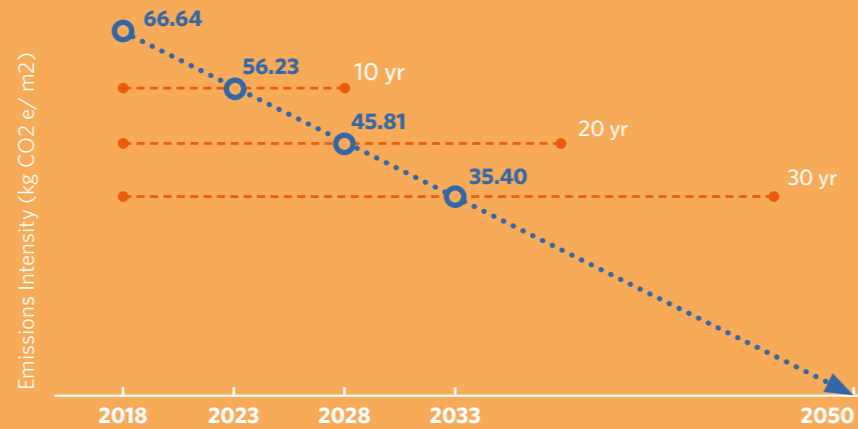
German Commercial Trajectory

Commercial buildings are eligible for certification if the asset's emissions intensity lies below the established trajectory

The trajectory chart (Figure 1) shows the established low carbon buildings trajectory for commercial buildings in Berlin. Any commercial building is eligible if it meets the emissions intensity target for the mid-point of their bond.

For example, for a 10-year bond issued in 2018, the emissions intensity at the time of issuance for a building in Berlin must be at or below 56.23kg/CO₂e.

Figure 1. Low carbon trajectory for Berlin



Note: Examples have been included for three different bond tenors, 10 yr, 20 yr, and 30 yr showing how the desired tenor of the issuer effects the emissions intensity target of the bond.

German Commercial Proxy

Commercial buildings are eligible for certification if the asset meets the approved market proxy

The proxy diagram (Figure 1) shows the established low carbon buildings trajectory for commercial buildings in Germany. Any building is eligible if it meets the this pre-approved market proxy.

For example, for a 10-year bond issued in 2018, the assets included in the issuance must be a part of an existing MBS pool undergoing refinancing, be built after 2008, and hold an EPC rating.

This proxy was established using data from the German building code and German Energy Agency.

Figure 1. Low carbon commercial proxy requirements for Germany



Note: Commercial buildings must demonstrate compliance with all three of the above criteria to qualify for certification under the proxy route, otherwise, issuers must demonstrate compliance with the German low-carbon trajectory (above).

How is an emissions performance trajectory established?

Steps for developing a trajectory

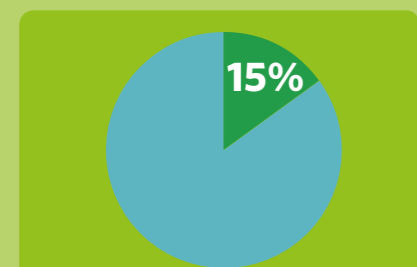
Each trajectory uses the same approach, making global reporting more harmonised, allowing issuers and investors to compare across markets. The following steps highlight the fundamentals.



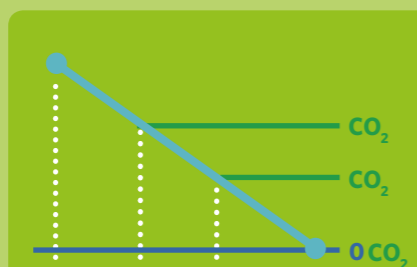
Trajectories are established for specific building types (offices, hotels, shopping centers) on a city/region or country basis where data is available.



Trajectories are used to derive emissions performance targets that bond issuers must achieve to gain Climate Bond Certification.



The start of the trajectory is the top 15% most emission efficient buildings in a city given as the carbon intensity metric kg CO₂/m².



Trajectories are linear and aim for zero emissions in 2050. This means emissions performance targets for bond issuers become more demanding over time.



The Climate Bonds CO₂ Target Calculator automatically calculates the emissions performance targets for an issuer based on city, building type, bond issuance year and bond term.

How is a market proxy established?

Steps for developing a proxy

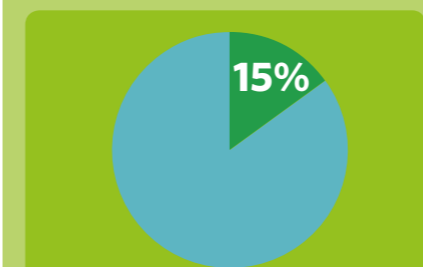
Each proxy uses the a similar approach, making global reporting more harmonised, allowing issuers and investors to compare across markets. The following steps highlight the fundamentals.



Proxies are established for specific building types (offices, hotels, shopping centers) on a city basis where data is available.



Proxies are used to derive currently best available building code or rating scheme that bond issuers must achieve to gain Climate Bond Certification.



Proxies are representative of the top 15% most emission efficient buildings in a particular market.



Proxies are placeholders until more data becomes available. This means proxies expire or are reassessed on an ongoing basis.

Country	Proxy	PDF

An issuer can find a list of available proxies for residential [here](#) and commercial [here](#).

Climate Bonds INITIATIVE

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