

Property Upgrade Climate Bonds

Certification methodology

Low Carbon Buildings Technical Working Group

Version 1.0

ABSTRACT

This paper sets out guidance by the Low Carbon Buildings Technical Working Group on the certification methodology for Property Upgrade Climate Bonds.

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Definitions

Climate Bonds Initiative: An investor-focused not-for-profit organisation, promoting large-scale investments that will deliver a global low carbon and climate resilient economy. The Initiative seeks to develop mechanisms to better align the interests of investors, industry and government so as to catalyse investments at a speed and scale sufficient to avoid dangerous climate change.

Climate Bond: A bond that is certified by the Climate Bonds Standard Board as meeting the requirements of this Climate Bonds Standard.

Climate Bonds Standard: eligibility criteria for Climate Bond Certification, based on the current version as published on the [Climate Bonds Initiative website](#).

Climate Bonds Standard Board: a board of independent members that considers applications for Certification of a bond under the Climate Bonds Standard.

Note: The Climate Bonds Standard Board is constituted, appointed and supported in line with the governance arrangements and processes as published on the Climate Bonds Initiative website.

Climate Bond Certification: allows the issuer to use the Climate Bond Certification Mark in relation to that bond. Climate Bond Certification is provided once the independent Climate Bonds Standard Board is satisfied the bond conforms with the Climate Bonds Standard.

Commercial Property: A building that is intended to generate a profit, either from capital gain or rental income. There are sub-categories of Commercial Property such as offices, shopping centres, hotels, etc.

Residential Property: A building that is used or suitable for use as a dwelling.

Technical Working Group: A group of key experts from academia, international agencies, industry and NGOs that develop Sector-Specific Criteria, which are detailed technical criteria for the eligibility of projects and assets as well as guidance on the tracking of eligibility status during the term of the bond.

1. Executive Summary

Objective

Define a methodology that enables property upgrade (or energy efficiency) projects to be certified as Climate Bonds.

Goals

Provide a complimentary framework for Climate Bonds that:

1. Offers the greatest opportunity for directing finance to property upgrade (or energy efficiency) projects
2. Maintains integrity of the Climate Bonds Initiative brand without onerous monitoring and verification requirements

Guiding Principles

The following principles underpin the guidance presented in this paper:

1. **Simple aggregation of individual assets:** to create bonds of sufficient size that attract institutional investors.
2. **Low cost of application:** to ensure that compliance costs do not undermine the attractiveness of certification and allow application to assets in developing countries.
3. **Use of climate-relevant metrics:** to achieve compatibility with international frameworks for financing¹, relevance to corporate reporting frameworks², and relevance to emerging city greenhouse gas abatement policies³
4. **Transparency of approach and methodology:** to support market transparency and improve management of energy/carbon performance risk at the property level

Structure of this paper

The guidance provided by the Low Carbon Buildings Technical Working Group is organised into the following sections:

1. Carbon reduction target
2. Methodology implementation

¹ Such as the Kyoto protocol clean development mechanisms and its successor.

² Examples include reporting frameworks developed by the [Carbon Disclosure Project](#), [Global Reporting Initiative](#), and [Sustainability Accounting Standards Board](#).

³ Examples include cities such as New York, Tokyo, London, and other [C40 cities](#).

2. Summary of Guidance

The Low Carbon Buildings Technical Working Group has provided the following guidance on the certification methodology for Property Upgrade Climate Bonds:

1. The certification methodology for Property Upgrades is different from Commercial Property and Residential Property. It requires a minimum carbon reduction target, which is adjusted according to the term of the bond.
2. For a 30-year bond, a carbon reduction target of at least 50% is required to meet the ambition of Climate Bonds Initiative. For a 5-year bond, the carbon reduction target is at least 30%.
3. Carbon reduction targets for different term bonds can be derived using a linear equation based on a 50% target for a 30-year bond and a 30% target for a 5-year bond.
4. Property upgrade contracts specifying a percentage carbon abatement (relative to a business-as-usual baseline) that meets the minimum carbon reduction target (e.g. 50% for a 30-year bond) will qualify for Climate Bonds Certification.
5. Property upgrade contracts that do not specify a percentage carbon abatement (relative to a business-as-usual baseline) can qualify for Climate Bonds Certification as long as the percentage carbon abatement can be quantified (e.g. through modelling).
6. Property upgrade contracts that are unable to demonstrate or quantify the benefits of the upgrade(s) are not eligible for Climate Bonds Certification.
7. Climate Bonds Certification under the Property Upgrades methodology is available for any project that seeks energy performance improvement through the application of energy efficiency measures and technologies that relate to the built environment. Eligible projects are not limited to improvements that are attached to buildings.
8. There are no additional monitoring and verification requirements beyond those required by the performance contract or upgrade agreement.
9. There are annual reporting requirements for commercial property assets, in accordance with the terms of the performance contract or upgrade agreement of the relevant scheme. This is aligned with the Low Carbon Buildings Criteria for Commercial Property.
10. There are no ongoing reporting and verification requirements for residential property assets. This is aligned with the Low Carbon Buildings Criteria for Residential Property.
11. Property assets that individually meet the minimum carbon reduction target may be aggregated into a larger combined asset.

The next section provides further details and explains the rationale behind the above guidance.

3. Details of Guidance

3.1. Carbon reduction target

A. Distinct approach from Commercial Property and Residential Property	
Guidance	Explanation
<p>Property assets entering into performance contracts or upgrade agreements where the carbon reduction targets are considered significant enough to provide environmental additionality are eligible for Climate Bonds Certification.</p> <p>The certification methodology for Property Upgrades remains distinct from the methodologies defined for Commercial Property and Residential Property.</p>	<p>Climate Bonds has identified a need to recognise property assets that are currently unable to comply with the eligibility criteria applied to Commercial Property and Residential Property but are endeavouring significant carbon reduction through energy efficiency upgrades. As such, a methodology has been designed to provide Climate Bond Certification of such assets.</p> <p>The methodology is intended for use by Energy Service/Saving Companies (ESCOs) and legislated financing schemes such as Green Deal (UK), Property Assessed Clean Energy (USA), and Environmental Upgrade Agreements (Australia).</p>
B. Minimum target	
Guidance	Explanation
<p>A carbon reduction target of at least 50% for a 30-year bond and 30% for a 5-year bond are required to meet the ambition of Climate Bonds Initiative.</p> <p>The 50% target has been derived from analysis of data in the Australian cities of Sydney and Melbourne, along with consideration of local rating tools in both Australia and the USA. The target is consistent with repositioning a property asset in the bottom 15% of the market to the top quartile of the market in both Sydney and Melbourne. The target is also equivalent to moving an asset at the median performance level to the top 5%.</p> <p>The 30% target has been agreed by the Technical Working Group to be acceptable for bonds with a term of 5 years.</p>	<p>A minimum carbon reduction target is necessary to ensure that the property upgrade is providing a level of environmental additionality that is consistent with the ambition of Climate Bonds Initiative.</p> <p>When tested against local rating tools for typical office buildings, the 50% carbon reduction target appears to set the appropriate level of ambition. In Australia, a carbon reduction of approximately 50% is required to move from a 2-star NABERS rating (below average performance) to a 4.5-star NABERS rating (very good performance). Similarly, Energy Star (based on whole building data) requires a 51% carbon reduction to move from the bottom 15th percentile to top quartile and a 53% carbon reduction to move from median performance to top 5th percentile.</p> <p>The 30% target for 5-year bonds is based on industry practice for ESCO contracts, where best practice tends towards a 30% performance improvement.</p>
C. Adjusting target for different term bonds	
Guidance	Explanation
<p>The target will be adjusted for bonds with terms different from 5 years and 30 years. This adjustment will be made using a linear equation between 30% for a 5-year term and 50% for a 30-year term.</p> <p>Appendix 1 illustrates how targets are derived for different bond terms.</p>	<p>The carbon reduction target of at least 50% has been proposed to set the appropriate level of ambition for a 30-year bond. Shorter-term bonds may however have difficulty achieving this carbon reduction target. As such, the carbon reduction target will be adjusted according to the term of the bond.</p>

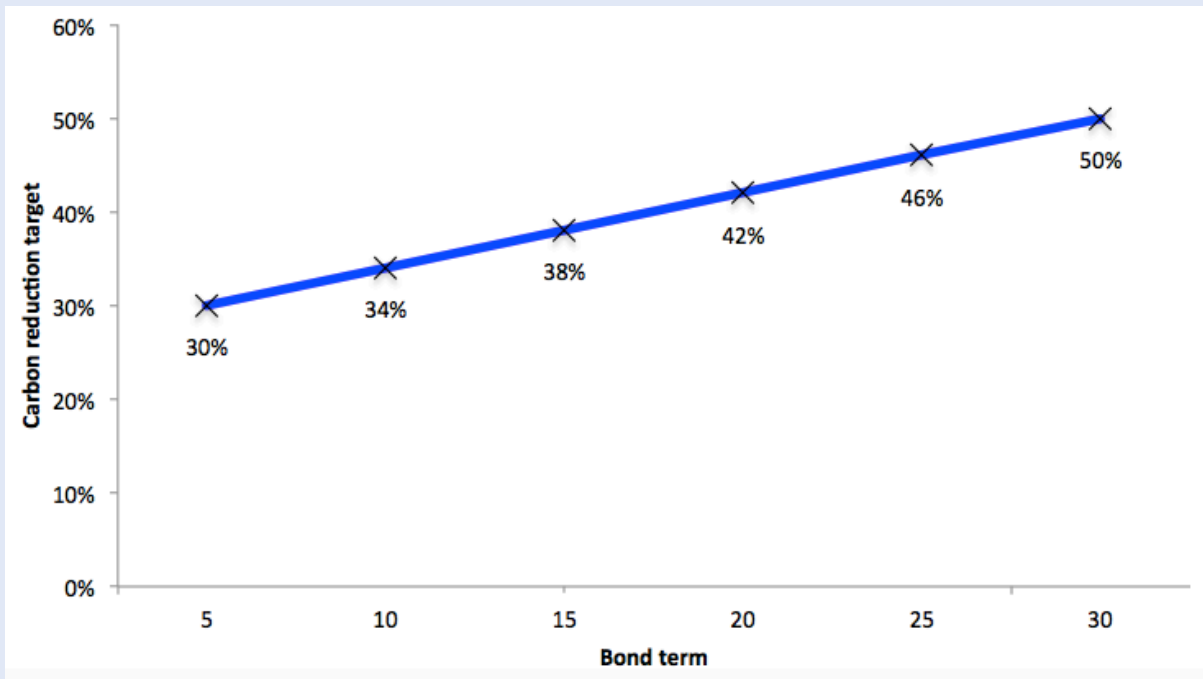
D. Alignment of property upgrade with target

Guidance	Explanation
<p>Where the contract for the property upgrade specifies a percentage carbon abatement relative to a business-as-usual baseline and this meets the minimum performance target (e.g. 50% for a 30-year bond), the project will qualify for Climate Bonds Certification.</p> <p>Where the contract for the property upgrade does not specify a percentage carbon abatement relative to a business-as-usual baseline, but the percentage carbon abatement can be quantified (e.g. through modelling), the project will qualify if the demonstrated abatement meets the minimum performance target.</p> <p>For instance, if upgrades for an office building currently emitting 795tCO²/year have been modelled to show a 180tCO² saving from lighting energy consumption and a 220tCO² saving from HVAC energy consumption, it can be demonstrated that the resulting percentage carbon abatement will be 50% and the project qualifies for Climate Bonds Certification.</p> <p>Where the property upgrade contract does not specify a percentage carbon abatement and the benefit of the upgrade cannot be demonstrated or quantified, the project is not eligible for Climate Bonds Certification.</p>	<p>To be certified against the Low Carbon Buildings Criteria, property upgrades will need to demonstrate that the percentage carbon abatement resulting from the upgrades will meet the minimum carbon reduction target applicable to the term of the bond.</p>

3.2. Methodology implementation

A. Scope of projects covered	
Guidance	Explanation
<p>The upgrades criteria apply to any project that seeks energy performance improvement through the application of energy efficiency measures and technologies that relate to the built environment (e.g. LED lights, heat pumps, micro combined heat and power, renewable micro-generation, etc.).</p>	<p>Eligible projects are not limited to improvements that are attached to buildings. As long as the project leads to energy performance improvement through the application of energy efficiency measures and technologies that relating to the built environment, they can qualify for Climate Bonds Certification.</p>
B. Monitoring & Verification	
Guidance	Explanation
<p>There will not be any additional monitoring and verification requirements beyond those required by the performance contract or upgrade agreement.</p> <p>Annual reporting will be required for commercial property assets, in accordance with the terms of the performance contract or upgrade agreement of the relevant scheme. This is aligned with the Low Carbon Buildings Criteria for Commercial Property.</p> <p>Ongoing reporting and verification will not be required for residential property assets. This is aligned with the Low Carbon Criteria for Residential Property.</p>	<p>Performance contracts and upgrade agreements require annual reporting of energy performance for the duration of the contract or agreement. Climate Bonds Initiative will not impose monitoring and verification requirements on top of these requirements.</p> <p>Ongoing reporting and verification is considered unsuitable for residential property assets because they are impractical and challenging for homeowners to satisfy. As such, they will not be required for residential property assets.</p>
C. Aggregation of assets	
Guidance	Explanation
<p>Property assets that individually meet the minimum carbon reduction target may be aggregated into a larger combined asset.</p>	<p>There is a need to enable aggregation of property assets to create the commercial scale necessary to attract bond investors.</p>

Appendix 1 – Deriving targets for shorter-term bonds



1. The carbon reduction target for a 5-year bond and 30-year bond has been determined by Climate Bonds Initiative as 30% and 50% respectively.
2. A straight line can be plotted between these two points or carbon reduction targets to derive the relevant target for bonds with alternative terms.