



# Barclays Green Bond Framework

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# Introduction

Climate change represents one of the greatest challenges faced by the world today. Banks have an important role to play in ensuring that the world's energy needs are met while helping to limit the threat that climate change poses to people and to the natural environment.

Banks have a direct environmental and social impact through their operational footprint, as well as indirectly in the way that they mobilise capital, advise clients and develop products. Our aim is to help facilitate the transition to less carbon intensive sources of energy, while supporting economic development and growth in society by helping to ensure the world's energy needs are met responsibly. We will continue to keep our approach under review in support of that ambition.

We are focused on three areas of activity at Barclays:

1. Financing the growth of renewable energy sources and proactively supporting the development of businesses aiming to solve the world's environmental challenges;
2. Taking a responsible and sustainable approach to the necessary financing of sources of energy that are more carbon intensive or those with higher environmental impact; and
3. Reducing the carbon footprint of our own operations and supply chain throughout the world.

Barclays reduced its global carbon emissions by 38% by the end of 2018 (against a 2015 baseline) and we have set a carbon reduction target of 80% by 2025 from a 2018 baseline for our operational scope 1 and 2 emissions<sup>1</sup>. This target exceeds the minimum science-based reduction of 37% required to keep a global temperature rise this century below two degrees Celsius above pre-industrial levels. Barclays has also committed to RE100, and will procure 100% of its global operational energy needs from renewable sources by 2030, with an interim target of 90% by 2025.

The Barclays Energy and Climate Change Statement and other environmental, social and governance position statements are available to download at <https://home.barclays/citizenship/statements-and-policy-positions>

<sup>1</sup>Scope 1: Direct combustion of fuels, and company owned vehicles (from UK only).  
Scope 2: Purchased electricity (location based) and steam for own use.

# The Framework

Across the Barclays group, we continue to embed sustainability with local, regional and cross-group bodies in place to drive sustainability initiatives and develop new products. We were the first UK bank to issue a Green Bond backed solely by UK assets in November 2017 and the first major UK high street lender to launch a Green Home Mortgage.

We want to ensure that our customers and clients have access to financing that places green principles at its core and we are committed to putting our beliefs into practice with our Green Bond Framework (the **Framework**). Barclays may, from time to time seek to issue Green Bonds (**Barclays Green Bond**) under this updated Framework<sup>2</sup>.

Barclays has designed the Framework based on feasibility studies conducted by the Carbon Trust. Our aim has been to design a robust framework that is consistent with the Green Bond Principles published in June 2018, as set out by the International Capital Markets Association (**ICMA**), and to ensure this Framework aligns with the United Nations (**UN**) Sustainable Development Goals. Barclays will also seek to review and amend the Framework in line with future EU regulation on sustainable financing, including the EU taxonomy for sustainable activities.

Barclays aims to obtain Climate Bonds Initiative (**CBI**) certification for each issuance.




<sup>2</sup>The November 2017 Green Bond was issued under the Barclays Green Bond Framework – September 2017.

# Use of proceeds

Proceeds from Barclays Green Bonds will be allocated to finance or refinance, loans and/or investments made by Barclays in assets or projects (including Barclays' own operations) that meet the following eligibility criteria.

## The Residential Mortgage Eligibility Criteria

Barclays' significant presence in the UK residential mortgage market allows us to contribute towards the transition to a low carbon economy. This is an important area for improvement given the domestic sector represents 29% of final energy consumption in the UK in 2018<sup>3</sup>.

Category	Residential Mortgage Eligibility Criteria	UN Sustainable Development Goal
Buildings	<p>Proceeds may be allocated towards financing and/or refinancing energy efficient residential properties in England and Wales (the <b>Residential Mortgages</b>) based on Energy Performance Certificate (EPC) data and which are originated within the three years prior to the date of the relevant Barclays Green Bond issuance.</p> <p>A formula is used to estimate the maximum carbon intensity of residential properties which can qualify as Eligible Mortgage Assets (as defined below). The formula was derived using the below components:</p> <ul style="list-style-type: none"><li>• Properties that meet the top 15% carbon intensity threshold in terms of estimated emissions performance in their local market;</li><li>• The UK government's linear target of 'close to zero' emissions by 2050; and</li><li>• The mid-point between issuance date and maturity of the potential Barclays Green Bond.</li></ul> <p>The formula will be updated when a new EPC dataset is released and will be set out in the terms and conditions of each Barclays Green Bond issuance that finances and/or refinances Eligible Mortgage Assets. Please see Appendix 1 for further details.</p>	  








Only Residential Mortgages that meet the Residential Mortgage Eligibility Criteria and are not used by Barclays as collateral in any transaction will be classified as eligible mortgage assets (**Eligible Mortgage Assets**). Should EPC ratings no longer be available in the future, Barclays will seek to use a suitable alternative metric. Any such updates would be disclosed via an updated Framework.

<sup>3</sup>[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/820843/Energy\\_Consumption\\_in\\_the\\_UK\\_\\_ECUK\\_\\_MASTER\\_COPY.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/820843/Energy_Consumption_in_the_UK__ECUK__MASTER_COPY.pdf)



## The Corporate Loan Eligibility Criteria

Barclays has a strong and longstanding commitment to managing the environmental and social risks associated with lending. Infrastructure and project finance loans and asset finance leases (together the **Corporate Loans**) are categorised below and are intended to be in line with the CBI sector criteria<sup>4</sup>.

Category	Corporate Loan Eligibility Criteria	UN Sustainable Development Goal
Energy	Proceeds may be allocated towards the financing and/or refinancing of sustainable energy activities including, but not limited to, wind, solar, geothermal and marine.	 
Sustainable Transportation	Proceeds may be allocated towards the financing and/or refinancing of low carbon transportation and related infrastructure. This includes, but is not limited to, urban trams, metro systems and bike transport systems and vehicles which are propelled by fully electric engines or hydrogen fuel cells. Transport that is below specified CO <sub>2</sub> emission thresholds may also be eligible.	
Utilities	Proceeds may be allocated towards the financing and/or refinancing of waste management and water infrastructure projects including activities related to recycling and energy recovery of residual waste.	
Green Buildings	Proceeds may be allocated towards the financing and/or refinancing of low carbon buildings. This includes, but is not limited to, commercial or residential buildings or building upgrade projects which achieve a minimum level of carbon reduction.	  



Only Corporate Loans that meet the Corporate Loan Eligibility Criteria and are not used by Barclays as collateral in any transaction will be classified as eligible loan assets (**Eligible Loan Assets**). For the avoidance of doubt, Barclays' policy on conducting enhanced due diligence on Sensitive Energy Sector clients applies to the Corporate Loans, further information can be found on Barclays Energy and Climate Change Statement<sup>5</sup>.

<sup>4</sup><https://www.climatebonds.net/standard/>

<sup>5</sup>[https://home.barclays/content/dam/home-barclays/documents/citizenship/our-reporting-and-policy-positions/policy-positions/BAR\\_9916358.pdf](https://home.barclays/content/dam/home-barclays/documents/citizenship/our-reporting-and-policy-positions/policy-positions/BAR_9916358.pdf)

## The Real Estate Eligibility Criteria

**Barclays Real Estate** is defined as the construction of new buildings or renovation of existing properties which are funded by Barclays and used in its ongoing operations. Funding Eligible Real Estate Assets is a key pillar of Barclays achieving its target of reducing its carbon footprint by 80% by 2025. The Barclays group's location strategy and target carbon reduction is supported through a programme of new buildings and renovations of existing buildings.

Category	Real Estate Eligibility Criteria	UN Sustainable Development Goal
Buildings	<p>Proceeds may be allocated towards financing and/or refinancing Barclays Real Estate which meet the following criteria:</p> <ol style="list-style-type: none"><li>1. Certification for new buildings with a minimum criteria of LEED<sup>6</sup> "Gold", BREEAM<sup>7</sup> "Very Good" or any other comparable certification where available; and</li><li>2. Commercial buildings in the top 15% of low carbon buildings in the relevant country (where benchmarking data is available).</li></ol>	  

Only Barclays Real Estate that meets the Real Estate Eligibility Criteria will be classified as eligible real estate assets (**Eligible Real Estate Assets**).

<sup>6</sup><https://new.usgbc.org/leed>

<sup>7</sup><https://www.breeam.com/>

## Process for project evaluation and selection

Eligible Mortgage Assets, Eligible Loan Assets and Eligible Real Estate Assets (together, the **Eligible Assets**) are selected based on the relevant eligibility criteria.

All Barclays residential mortgages will be cross matched on a monthly basis against the latest publically available EPC data release to determine eligibility. This is achieved by mapping Barclays mortgage property names/numbers, street names and postcodes against the properties within the database. Once properties in the EPC dataset have been matched to properties in Barclays' residential mortgage book, additional filtering will be undertaken to take into account target carbon intensity levels and encumbrance. Eligible Mortgage Assets will then be randomly selected to produce the allocated portfolio of Eligible Mortgage Assets.

All Eligible Loan Assets will be reviewed by the Green Bond Asset Review Committee (which consists of senior representatives from environmental risk, sustainability, asset/portfolio management and treasury teams among others) prior to them being selected as Eligible Assets for a Green Bond either pre- or post-issuance.

During the build phase for Eligible Real Estate Assets, second party reviews will be carried out to ensure that the relevant building certification criteria will be met.



## Management of proceeds

Barclays PLC will lend the proceeds from each Barclays Green Bond issuance to an operating subsidiary (such as Barclays Bank PLC or Barclays Bank UK PLC) which will use those proceeds to finance and/or refinance Eligible Assets.

Barclays will monitor the allocation of proceeds on a monthly basis and will record each Eligible Asset allocated to a Barclays Green Bond issuance to ensure that it is not used by Barclays as collateral in other transactions. Eligible Assets may be added or removed from the portfolio as necessary (for example, if they mature/are redeemed or if they cease to meet relevant eligibility criteria).

Barclays will seek to invest all of the proceeds from an issuance of Green Bonds in Eligible Assets as soon as reasonably practicable. However, if it is unable to, any shortfall will be invested (at Barclays' own discretion) in cash and short-term and liquid investments in accordance with its liquidity policy until additional Eligible Assets are available.

Where a Barclays Green Bond is issued to finance Eligible Real Estate Assets, the amount of Eligible Assets so allocated will be determined by reference to the expected costs of the project. However, where funding is raised in advance of the completion of building works, expenditure may not yet have been incurred.

# Reporting

Barclays PLC will publish a Green Bond Investor Report annually for each Barclays Green Bond on the Barclays Investor Relations website<sup>8</sup>. Each report will contain details including, but not limited to:

## Allocation reporting

- Confirmation that the use of proceeds from the relevant Barclays Green Bond issuance conforms with the Framework;
- The size of the outstanding issuance and the equivalent allocated portfolio of Eligible Mortgage Assets, Eligible Loan Assets, or Eligible Real Estate Assets;
- High level stratification tables based on CBI criteria; and
- The balance of equivalent net unallocated proceeds (if any) and the categories of investments made in temporary investment instruments that are cash, or cash equivalent instruments.

## Impact reporting

- A quantitative environmental impact assessment:
  - For Eligible Mortgage Assets, a comparison of the average estimated carbon intensity of the allocated portfolio of Eligible Mortgage Assets against a comparable domestic baseline (for example the average of the latest MHCLG (as defined below) dataset used for cross matching);
  - For Eligible Loan Assets, an estimate of the carbon emissions generated made on a loan by loan basis compared with relevant industry benchmarks;
  - For Eligible Mortgage and Loan Assets, a calculation of estimated carbon emissions avoided per GBP 1 million of proceeds allocated; and
  - For Eligible Real Estate Assets, a comparison of the average carbon generated by the Eligible Real Estate Assets against comparable benchmarks.

<sup>8</sup><https://home.barclays/investor-relations/fixed-income-investors/funding-and-liquidity/green-bonds/>

## External review

The Carbon Trust, who are an approved CBI verifier, will be requested to provide a second party opinion to confirm that the Framework meets the 2018 ICMA Green Bond Principles.

Barclays also intends to obtain certification from the CBI for each issuance, which will confirm that the allocated portfolio of Eligible Assets are selected based on the independent standards developed by the CBI in conjunction with investors and NGOs. As part of this process, a suitably qualified verifier will undertake agreed-upon-procedures and verification testing against the Climate Bonds Standard in order to provide a factual finding regarding Barclays' Eligible Asset evaluation and selection processes.

In order to ensure compliance with this Framework, a suitably qualified assurance provider will perform verification testing on an annual basis before the date of reporting to check the viability of Barclays' cross matching process and asset selection criteria.

Each of these reports will be published on the Barclays Investor Relations website.

## Appendix 1 – EPC dataset and formula for Residential Mortgages

EPCs are widely recognised as one of the best available data sources in the UK for energy efficiency ratings of properties. EPCs are produced by a Domestic Energy Assessor who examines a large number of aspects of a building, such as windows, loft insulation and heating systems to determine the potential energy and environmental performance of the building.

An EPC is valid for 10 years and produces measurable outputs. For example, an Energy Efficiency Rating is produced based on an estimated measure of the overall efficiency of the property (properties are assigned a rating which ranges from A (most efficient) to G (least efficient)). An important piece of data in this rating is carbon intensity – this is a measure of the estimated carbon emission of properties per unit floor area per year.

Using carbon intensity as the core metric for determining energy efficiency has three principal advantages:

1. It measures the estimated carbon emissions of properties per unit floor area;
2. It is a standardised method of measuring a building's estimated carbon footprint; and
3. It is independent of potential changes to the EPC Energy Efficiency Rating methodology of a property.

To comply with the CBI's Climate Bonds Standard, only properties that meet the top 15% carbon intensity threshold in terms of estimated emissions performance in their local market are considered to qualify. In July 2019 the Ministry of Housing, Communities & Local Government (MHCLG) released a new set of EPC data, providing the first update since the original 2017 release. This updated snapshot of energy performance for residential properties constructed, sold, or let in England and Wales since 2008, allows for a recalculation of the top 15% carbon intensity threshold.

Taking this, the UK government's linear target of 'close to zero' emissions by 2050 and the mid-point of a potential Barclays Green Bond maturity needing to coincide with the top 15% carbon intensity projection into account, the Carbon Trust have derived a new formula which estimates the maximum carbon intensity for Eligible Mortgage Assets from the July 2019 MHCLG data release<sup>9</sup>.

The MHCLG documentation expects that the domestic EPC dataset will be updated on a regular basis starting from 2019. This will, in turn, enable a regular recalculation of the top 15% carbon intensity threshold, as well as the target carbon intensity of Eligible Mortgage Assets in the future.

<sup>9</sup>The CBI reserves the right to review this formula.

The formula to determine the carbon intensity of a property in the midpoint of the bond tenure is given by:

$$y = ax + b$$

Where  $x$  is the year of the bond tenure midpoint,  $y$  is the resulting target carbon intensity of the property in  $\text{kgCO}_2/\text{m}^2/\text{year}$ , and  $a$  and  $b$  are coefficients of an equation of a line cutting both the  $x$  axis at the year 2050 and passing through the top 15% carbon intensity threshold at a given year.

Using the July 2019 data release the updated value for top 15% carbon intensity threshold for properties within the dataset is  $26 \text{ kgCO}_2/\text{m}^2/\text{year}$ . Accordingly, the new formula to determine the carbon intensity of a property in the midpoint for a potential Barclays Green Bond is:

$$y = -0.8387x + 1719.4$$

Where  $x$  is the year of the bond midpoint, and  $y$  is the resulting target carbon intensity of the property in  $\text{kgCO}_2/\text{m}^2/\text{year}$ .

For any Barclays Green Bonds issued in 2019, the target carbon intensity therefore is:

- 5-year bond (mid-point of 2021) –  $24.4 \text{ kgCO}_2/\text{m}^2/\text{year}$
- 10-year bond (mid-point of 2024) –  $21.9 \text{ kgCO}_2/\text{m}^2/\text{year}$

## Disclaimer

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