



# Barclays Green Bond Framework

September 2017

## Introduction

*'In one way or another, finance when delivered with transparency and integrity makes a fundamental difference to everyone's lives. The profession of finance is absolutely integral to the successful running and growth of healthy economies, and in giving everyone access to a more prosperous future'*

Jes Staley, Barclays Group Chief Executive

Barclays' success and prosperity is closely linked to the success and prosperity of the communities in which we live and work. This principle guides the way we do business and drives our commitment to play a leading role in the transition towards a sustainable environment and low carbon global economy. In order to deliver long-term sustainable value, we consider that when customers and clients do well, so do we. When the communities we live and work in thrive, we do too. And when society prospers, we all do – it's not one, or the other.

Climate change and resource scarcity are acknowledged as two of the greatest global challenges facing our society today. As a global institution, we support our clients and communities as they adopt measures to mitigate and adapt to climate change such as clean technologies and disaster resilience. Within this area, we continue to support global partnerships.

We acknowledge the validity of climate science and support the efforts of governments and non-governmental organisations (NGOs) around the world aiming to limit global temperature rise to two degrees Celsius above pre-industrial levels.

Barclays has a strong and longstanding commitment to managing the environmental and social risks associated with lending. Our approach to environmental and social risk management is based on a combination of policy, standards and guidance. This enables us to adopt a robust approach, while maintaining the flexibility to consider potential clients and transactions on their respective merits. Barclays has a dedicated Environmental Risk Management team in place to advise on client transactions that have associated environmental or climate related risks.

Barclays also manages its own operational carbon emissions and has committed to a target to reduce global carbon emissions by 30% by end 2018, compared to a 2015 baseline. We plan to achieve this by investing in low carbon technology and improving the energy efficiency of our operations.

At Barclays, we want to ensure that our customers and clients have access to financing that places green principles at its core and are committed to put our beliefs into practice with the launch of our Green Bond Framework (the **Framework**). The Framework supports our approach to Green Finance and enables increased engagement and discussion with investors about our shared approach to global environmental sustainability. In other capacities, we have already made significant undertakings within the Green Bond market, for example we have a dedicated Green Bond Investment Fund, which forms part of Barclays liquidity pool (the **Liquidity Pool**). We have also launched Green Loan products to support smaller and medium sized enterprises and established a Green Banking Council to further develop innovative Green Finance products and services to support our customers and clients.

Barclays has designed the Framework based on a feasibility study conducted by the Carbon Trust. Our aim has been to design a robust framework that is consistent with the current “Green Bond Principles”, as set out by the International Capital Markets Association (**ICMA**). Barclays also aims to obtain Climate Bonds Initiative (**CBI**) certification for each issuance.

Barclays is considering the issuance of Green Bonds under this Framework (**Barclays Green Bond**), as described herein subject to market conditions.

## Use of Proceeds

The fundamental element of Green Bonds is the use of proceeds. An amount of funding which represents the proceeds from Barclays Green Bonds will be allocated by Barclays to the financing and refinancing of energy efficient residential properties in England and Wales based on Energy Performance Certificate (**EPC**) data. Barclays has chosen to allocate funding towards this specific product as the domestic sector represents a significant proportion of final energy consumption in the UK<sup>1</sup>. Given Barclays’ significant presence in the UK residential mortgage market, this Barclays Green Bond Framework is a clear demonstration of our broader commitment in managing the environmental risks associated with lending.

EPCs are widely recognized as one of the best existing, 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 items in a building, such as windows, loft insulation and heating system, to determine the potential energy and environmental performance of the building.

An EPC is valid for 10 years and produces a number of details and data. For example, an “Energy Efficiency Rating” is produced which is 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

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<sup>1</sup> Source: Energy Consumption in the UK (ECUK) 2017, National Statistics, Department for Business, Energy & Industrial Strategy

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.

Barclays intends to allocate funding which represents the Barclays Green Bond proceeds to finance/refinance mortgages on residential properties situated in England and Wales based on the carbon intensity of the underlying residential property, as estimated in the publicly available EPC data. Using carbon intensity as the core metric 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.

While home improvements are encouraged to improve energy efficiency, Barclays to date has not found a robust data methodology that captures this improvement. In the future, Barclays may look at including energy efficiency improvements into the Eligibility Criteria (as set out below).

In 2017, the Department for Communities and Local Government (**DCLG**) released data relating to all EPCs reported in England and Wales until December 2016, comprising around 16 million records. This comprehensive data set has allowed Barclays to identify and map EPC data against properties in Barclays’ mortgage portfolio.

To comply with the CBI’s Climate Bonds Standards, only properties that meet the top 15% carbon intensity threshold in terms of estimated emissions performance in their local market are considered to qualify. Analysis by the Carbon Trust at the time of writing shows that the top 15% carbon intensity threshold for properties within the DCLG’s dataset was found to be equivalent to a performance of 28 kgCO<sub>2</sub>/m<sup>2</sup>/year. Taking this, and the UK government’s linear target of ‘close to zero’ emissions by 2050 and the mid-point of a potential green bond maturity needing to coincide with the top 15% carbon intensity projection into account, the Carbon Trust have derived a formula which estimates the maximum carbon intensity for Green bonds from the March 2017 DCLG data release<sup>2</sup>:

$$y = -0.8235x + 1688.24$$

Where x = year of mid-point bond maturity and y = carbon intensity, kgCO<sub>2</sub>/m<sup>2</sup>/year

As an example, a Green Bond issued in 2017 using the above formula, with a 10-year maturity, i.e. with a mid-point in 2022, equates to a maximum carbon intensity of 23.1 kgCO<sub>2</sub>/m<sup>2</sup>/year for a property in England or Wales to feature in the top 15% of the lowest carbon intensive properties. This is also in line with the Climate Bonds Standard Low Carbon Buildings Criteria.

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<sup>2</sup> The CBI reserves the right to review this formula.

Barclays intends that it will allocate funding that represents the Barclays Green Bond proceeds only to finance/refinance mortgages on residential properties in England and Wales that (i) have been originated within the last 3 years prior to the date of a Barclays Green Bond issuance and (ii) are in the top 15% of the lowest carbon intensive properties based on the above formula (the **Eligibility Criteria**)<sup>3</sup>.

Only mortgages that meet the Eligibility Criteria and are not used by Barclays as collateral in any transaction will be classified as eligible mortgage assets (**Eligible Mortgage Assets**).

Barclays will endeavour to ensure that there are sufficient Eligible Mortgage Assets to be at least equal to the sterling equivalent net proceeds of a Barclays Green Bond at issuance. However, in the event that any portion of the equivalent net proceeds of a Barclays Green Bond issuance cannot be applied to finance Eligible Mortgage Assets, the funding that represents the shortfall in the Barclays Green Bond proceeds may be invested in the Liquidity Pool. The Liquidity Pool is comprised of assets held in temporary investment instruments that are cash, or cash equivalent instruments, within our Treasury function.

Barclays issues the majority of its term senior unsecured liabilities from Barclays PLC (the Group's Holding Company) under its commitment to transition to a single point of entry capital and funding model. Barclays Green Bonds issued under this Framework will be senior unsecured liabilities issued by Barclays PLC. Barclays PLC will allocate an equivalent amount of the Barclays Green Bond proceeds to Barclays UK (or its successor), so that this division can provide funding for Eligible Mortgage Assets in accordance with the Eligibility Criteria described above.

## Process for Project Evaluation and Selection

All Barclays residential mortgages have been and will be originated in line with Barclays credit risk policies and will be cross matched on an annual 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.

Should EPC ratings not be available in the future, Barclays will seek to use a suitable alternative metric. Any such updates would be disclosed via an updated framework.

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<sup>3</sup> The calculation of the top 15% is a point in time assessment and may change from the formula in this framework.

## Management of Proceeds

The intention is for the allocated portfolio of Eligible Mortgage Assets to be at least equal to the sterling equivalent net proceeds of the Barclays Green Bond at issuance. Eligible Mortgage Assets in the allocated portfolio will be identified in Barclays' internal systems to ensure that they are not used as collateral by Barclays in any transactions and are assigned to the equivalent amount of the Barclays Green Bond issuance proceeds.

Barclays will monitor the size of the allocated portfolio of Eligible Mortgage Assets on a monthly basis. Mortgages that have been redeemed in full or where the EPC certificate is no longer valid or fails to qualify against the 15% carbon intensity threshold set at issuance will be replaced with other Eligible Mortgage Assets.

If at the end of the month there is a shortfall between the allocated portfolio of Eligible Mortgage Assets and the Barclays Green Bond issuance proceeds, Barclays will invest an amount equivalent to that shortfall in the Liquidity Pool.

All Barclays Eligible Mortgage Assets will be evaluated annually against the latest EPC release (or relevant successor) to ensure that they are compliant with the Eligibility Criteria.

Barclays will maintain a set of internal procedures for the management of proceeds.

## Reporting

Barclays PLC will publish an investor report annually for each issuance in line with annual results. Each report will contain details including, but not limited to:

- Size of the outstanding issuance and the equivalent allocated portfolio of Eligible Mortgage Assets
- High level stratification tables
- The balance of equivalent net unallocated issuance proceeds (if any) and the categories of investments made in the Liquidity Pool.
- A quantitative environmental impact assessment. 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 DCLG data set used for cross matching).

Barclays Green Bond annual reports will be made available on the Barclays Investor Relations website.

## External Review

The Carbon Trust, who are a qualified and approved CBI verifier, will be requested to provide a second party opinion to confirm that the Framework meets the 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 Mortgage 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 Mortgage 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 reporting date to check the viability of Barclays' cross matching process and asset selection criteria.

These reports will be published on the Barclays Investor Relations website alongside the Barclays annual investor report.

# Disclaimer

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