

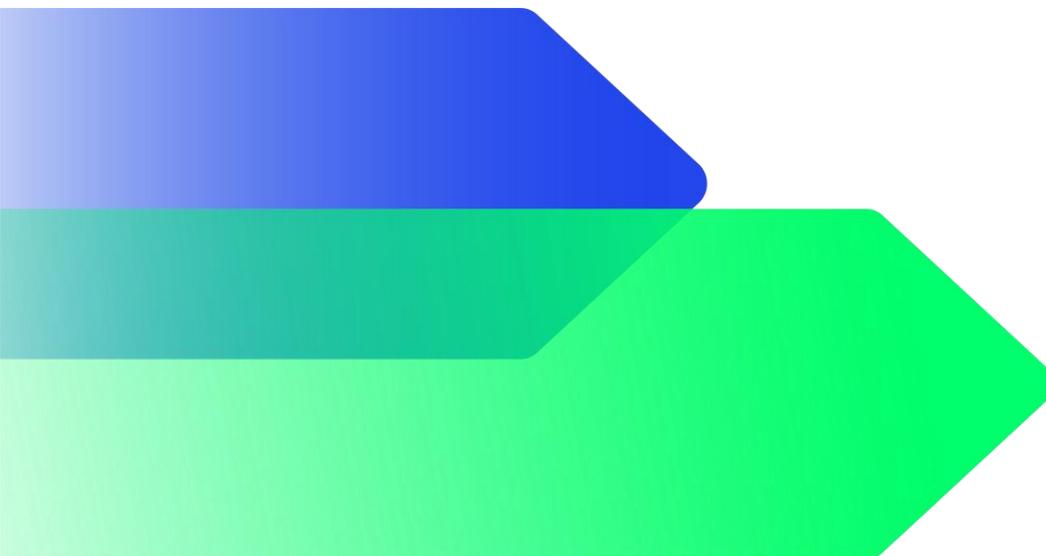
REPORT

Barclays Green Index- Linked Note

Independent Limited Assurance Report to Barclays PLC Group concerning Green Index Selection alignment with the **Barclays Green Index Selection Principles – July 2021:**

MSCI Climate Paris Aligned Indices

23.11.2021



Limited Assurance Conclusion

Based on the work undertaken and the evidence provided by Barclays PLC Group, nothing has come to the Carbon Trust's attention that causes us to believe that the selection of the MSCI Paris-Aligned Indices by Barclays PLC Group as set out in the Basis of the Opinion section, is not consistent with the requirements of the Barclays Green Index Selection Principles – July 2021.

Table 1 Summary assessment results of the MSCI Climate Paris Aligned Indices selection adherence to the Barclays Green Index Selection Principles – July 2021

Barclays Green Index Selection Criteria: Categories of Principles	The Carbon Trust's Assessment Result
1. Environmental Principles	Consistent with the Principles
2. Internal Governance Principles	Consistent with the Principles
3. Structural Principles	Out of Scope
4. External Review Principles	Out of Scope

Summary assessment results

Please find below a summary of Barclays PLC Group's ("Barclays") adherence to the Green Index Selection Criteria outlined in the Barclays Green Index Selection Principles – July 2021 (the "Principles"), in selecting MSCI Climate Paris Aligned Indices, and the Carbon Trust's scoring.

Table 2 Summary assessment details and results of the MSCI Climate Paris Aligned Indices selection adherence to the Barclays Green Index Selection Principles – July 2021 Environmental Principles and Internal Governance Principles

	Categories of Principles	Criteria	Summary of the Carbon Trust Evaluation	Carbon Trust Assessment Scale
1	Environmental Principles	The index construction principles are consistent with at least one of the UN Sustainable Development Goals	Index construction objectives are aligned with the United Nation Sustainable Development Goal 13, Climate Action as the index as the underlying portfolio of companies is selected to have greenhouse gas (GHG) emissions aligned with the long term global warming target of the Paris Climate Agreement	<p>Not aligned with Principles</p> <p>Consistent with Principles</p> <p>Exceed the Principles</p>
2	Environmental Principles	The index construction principles are consistent with at least one of the six environmental objectives in the EU Taxonomy for Sustainable Activities and/or any equivalent UK taxonomy	Index construction principles are compatible with the climate change mitigation objectives of the Regulation (EU) 2020/852 on the establishment of a framework to facilitate sustainable investment (Taxonomy Regulation) ¹ . The index family is labelled as "Paris-Aligned Benchmarks" explicitly in adherence with EU Taxonomy Climate Change Mitigation principle.	<p>Not aligned with Principles</p> <p>Consistent with Principles</p> <p>Exceed the Principles</p>

¹ Regulation as published online at:

<https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32020R0852&from=EN>

3	Environmental Principles	<p>The index can be categorised into one or more of the below approaches to green index construction. An index might utilise one or more of these approaches simultaneously:</p> <ul style="list-style-type: none"> i. Exclusionary screening ii. Best-in-class iii. Thematic iv. Temperature alignment 	<p>The Index is a combination of i) exclusionary screening and iv) temperature alignment.</p>	<p>Not aligned with Principles</p> <p>Consistent with Principles</p> <p>Exceed the Principles</p>
4	Internal Governance Principles	<p>The index must be approved by the Issuer's Green Bond Committee ("GBC") with a positive recommendation by the Issuer's Green Bond Index Subcommittee ("GBI")</p>	<p>Internal governance principles of index selection and approval are coherent with the Principles.</p>	<p>Not aligned with Principles</p> <p>Consistent with Principles</p> <p>Exceed the Principles</p>
5	Internal Governance Principles	<p>The index must be reassessed by the GBI, with a positive recommendation by the GBI concerning each index for use in a Green Index-Linked Note, and having made a thorough review, and thereafter the GBC must review and, if appropriate, approve each Green Index at least annually.</p>	<p>Internal governance principles of index selection and approval are coherent with the Principles.</p>	<p>Not aligned with Principles</p> <p>Consistent with Principles</p> <p>Exceed the Principles</p>

This Opinion statement shall be read in the context of the 'Basis of the Opinion' and this statement's intended use.



Hugh Jones, Managing Director,
Carbon Trust Assurance Limited

23.11.2021

Carbon Trust Assurance Limited, London
Email: info@carbontrust.com

This Opinion statement (the "Opinion") is given by Carbon Trust Assurance Limited ("CTA") and is addressed solely to the Barclays PLC Group ("Barclays") in accordance with the terms of the engagement contract between us and Barclays. We have not considered the interest of any other party in the Opinion. To the fullest extent permitted by law, we accept no responsibility and deny any liability

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Basis of the Opinion

Scope of the engagement

The Carbon Trust's ("we", "our") objective is to assess and provide independent pre-issuance limited assurance that opines on Barclays PLC Groups' ("Barclays") adherence to the Barclays Green Index Selection Criteria as outlined in the Issuer's Green Index Selection Principles (the "Principles") concerning Barclays' selection of the MSCI Climate Paris Aligned Indices in respect of a prospective Green Index-Linked Note issuance.

Assurance standard applied

We performed our work in accordance with Carbon Trust's assurance methodology, which is based on the International Standard on Assurance Engagements 3000 Assurance Engagements other than Audits or Reviews of Historical Information.

Management Responsibilities

Barclays are responsible for developing and maintaining the Barclays Green Index Selection Criteria as outlined in the Barclays Green Index Selection Principles – July 2021; for the procedures described there and in the Barclays Green Issuance Framework (July 2021); for designing, implementing and maintaining internal controls relevant to the Index with respect to the Green Index-Linked Note issuance, that are free from material misstatement, whether due to fraud or error; and for reporting relevant information concerning the Green Index-Linked Note issuance.

Carbon Trust's Responsibilities

The Carbon Trust's responsibility is to plan and perform work to form an opinion on whether the two categories of principles of 'Environmental Principles' and 'Internal Governance Principles', in the Green Index Selection Criteria, have been applied in a manner that is clear, correct, and robust with regards the selection of MSCI Climate Paris Aligned Indices, for the purpose of their upcoming Green Index-Linked Note issuance.

Furthermore, to report to Barclays in the form of a Limited Assurance Conclusion based on the work undertaken and the evidence obtained.

Carbon Trust has not performed any work and does not express any conclusion regarding the ongoing effectiveness of the application of the Management's procedures or internal controls. The Limited Assurance Conclusion is based on information provided to us by Barclays and we have relied on the accuracy of that information and does not include an audit or other verification that the information provided by Barclays is correct or accurate.

Procedures performed

The Carbon Trust planned and performed its work to obtain all the information and explanations deemed necessary to provide a basis for an impartial and informed limited assurance conclusion, reported in this

Independent Limited Assurance Report to the Barclays PLC Group (the “Report”). The procedures we performed were based on our professional judgement and work included, but was not restricted to:

- Conducting an assurance engagement, to a limited level of assurance, to confirm the extent to which the criteria detailed under the two categories of principles of ‘**Environmental Principles**’ and ‘**Internal Governance Principles**’, in the Green Index Selection Criteria, have been applied in a manner that is clear, correct, and robust.
- Reviewing the relevance and materiality of selected key performance measures identified by Barclays, as well as the anticipated reliability of assessment and reporting approaches reported by Barclays.
- Evaluating the sustainability features of the family of indices and conformance to criteria set out in the Principles, and the minimum standards, methodology requirements and relevant criteria set out concerning Paris-Aligned Benchmarks defined in Delegated Regulation (EU) 2020/1818 and Regulation (EU) 2019/2089 for EU Paris-Aligned benchmark indices.
- Testing on sample basis evidence of the family of indices construction methodology and index alignment with the EU Sustainable Finance Taxonomy.
- Testing Barclays governance and management processes and systems for transparency and alignment with the Principles.
- Interviewing relevant Barclays personnel to understand the key related processes, systems, controls, both current and committed, and related documentation.
- Interviewing relevant Barclays personnel to assess compliance with the Principles and the implementation of associated policies and procedures.
- Inspected documentation to corroborate the statements of Barclays personnel in our interviews.
- Preparing our Independent Limited Assurance Report, incorporating the findings, conclusions and relevant information gathered during the assurance process.

For the purpose of Barclays’ upcoming Green Index-Linked Note’ issuance, the index under review is:

- MSCI Climate Paris Aligned Indices ²

Carbon Trust’s competence, independence, and quality assurance

The Carbon Trust maintains our independence from our clients and objectivity with regards to engagements, by maintaining, and adhering to appropriate governance processes that reflect industry best practice for assurance and independent review services. We evaluate potential conflicts and threats

² For more information, including the complete methodology document and benchmark statement, please consult: <https://www.msci.com/documents/10199/76257ac0-9b25-68b3-ea5c-6c040d8dd1b2>

to our independence and objectivity, introduce suitable mitigants where these are relevant, and represent to client management concerning these issues.

Our commitment to impartiality and quality assurance is established in our policies, procedures and management structure and reflect international standards for quality management. As a result, the conclusions in this report reflect an impartial undertaking of the scope of the engagement.

The Carbon Trust evaluates our competency and suitability to perform the assurance engagement, given the objective, scope of the work and the particulars of the subject matter. We ensure the selection of appropriately qualified individuals based on their qualifications, training, and experience. The outcome of all verification, certification and assurance engagements is internally reviewed by senior management to ensure that the approach is rigorous and transparent.

Criteria used as the basis of reporting

The Barclays Framework

As outlined in Barclays Green Issuance Framework (July 2021) (the “Framework”), Barclays continues to embed sustainability across the bank with local, regional, and cross-group bodies in place to drive sustainability initiatives and develop new green financing products. Barclays was the first UK bank to issue a Green Bond backed by UK assets in November 2017, and the first major UK high street lender to launch a Green Home Mortgage.

Barclays wants to ensure that their retail customers and corporate clients have access to financing that places green principles at its core, and they are committed to putting this into practice underpinned by their Framework. Barclays may, from time to time seek to issue Green Bonds, Green Covered Bonds, Green Structured Notes, Green Index-Linked Notes and Green Commercial Paper (collectively, “Green Issuance”), underpinned and defined by this Framework.

Barclays’ aim has been to design a robust framework that is consistent with the Green Bond Principles, as set out by the International Capital Markets Association (ICMA), and to ensure the 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 and/or UK regulation on sustainable financing, including the EU Taxonomy for Sustainable Activities and any proposed UK-equivalent regulation.

Barclays aims to obtain Climate Bonds Initiative (CBI) or EU Green Bond Standard certification for each Barclays Green Issuance.

The Green Index-Linked Note Issuance

As outlined in Barclays documentation, the Barclays Green Structured Note Programs (G SNP) combines an equities derivative style pay-off with cash proceeds from investors. This is managed by Barclays in line with the Bank’s Framework. The main objective of the G SNP is the ability to offer investors a green investment opportunity whereby both the embedded derivative and use of proceeds of the bond are green.

Barclays has defined high-level principles (“Barclays Green Index Selection Principles - July 2021” or the “Principles”) by which each index is assessed on a case-by-case basis, with the intention of creating a diverse and inclusive platform that can be tailored to the needs of their clients. This aims to provide a clear rationale for the choice of any particular index.

The Principles include four categories of principles:

1. **Environmental Principles**
2. **Internal Governance Principles**
3. **Structural Principles**
4. **External Review Principles**

Barclays commits to adhering to their Green Index Selection Principles for each Green Index utilised in a Green Index-Linked Note.

Assessment rating system

To support the analysis, the Carbon Trust applies a rating system to assess each of the Categories of Principles:

Table 3 Scale of assessment of index alignment with the Categories of Principles

	Out of Scope
	Not aligned with the Principles
	Consistent with the Principles
	Exceeds the Principles

Carbon Trust Assessment

MSCI Climate Paris Aligned Indices

Table 4 Summary assessment against Environmental Principles Criteria 1

Criteria 1	The index construction principles are consistent with at least one of the UN Sustainable Development Goals	
Carbon Trust comment		
Sustainable Development Goal (SDG) Alignment	<p>SDG 13 - Climate Action</p> 	
Evaluation	<p>The Sustainable Development Goals (SDGs) are a collection of 17 interlinked goals set by the United Nations General Assembly for achievement by countries, organisations, and citizens by 2030.</p> <p>Among the 17 goals, the construction principles of the selected index are deemed to be consistent with the United Nation Sustainable Development Goal 13: "Climate Action". More specifically, the index is aligned with UN SDG 13, which consists of taking urgent action to combat climate change and its impacts. Contribution to this goal can be achieved through targets defined by the UN SDG 13, including reducing GHG emissions.</p> <p>Considering the proposed index is part of the Paris-Aligned Benchmark (PAB) index families (i.e., index methodology meets the minimum requirements of the EU Paris Aligned Benchmark), the index construction objectives are consistent with UN SGD 13, as the underlying portfolio of companies is selected to have greenhouse gas (GHG) emissions aligned with the long term global warming target of the Paris Climate Agreement (well below 2°C above pre industrial temperatures) and also exclude assets that harm ESG objectives.</p>	
Carbon Trust's assessment		
Consistent with the Principles		

Table 5 Summary assessment against Environmental Principles Criteria 2

Criteria 2	The index construction principles are consistent with at least one of the six environmental objectives in the EU Taxonomy for Sustainable Activities and/or any equivalent UK taxonomy	
Carbon Trust comment		
Evaluation	The MSCI Climate Paris Aligned family of indices, tracks a portfolio of large/mid cap companies across developed markets and has a decarbonisation pathway	

to deliver the well below 2°C increase targeted by the Paris Agreement. It also incorporates the Task Force on Climate related Financial Disclosures (TCFD).

Considering the nature of the Index, by exclusion, the index construction principles would only be compatible and aligned (among the six environmental objectives set forth in the European taxonomy) with the climate change mitigation objective of the EU Taxonomy (Regulation 2020/852):

The Regulation (EU) 2020/852 clause (24) on the establishment of a framework to facilitate sustainable investment (Taxonomy Regulation) specifically clarifies the scope of an economic activity that pursues the environmental objective of climate change mitigation as to:

- i. Contribute substantially to the stabilisation of greenhouse gas emissions by avoiding or reducing them or by enhancing greenhouse gas removals.
- ii. Be consistent with the long-term temperature goal of the Paris Agreement.

Also;

- Article (2) of the Regulation, defines 'climate change' as "the process of holding the increase in the global average temperature to well below 2°C and pursuing efforts to limit it to 1.5°C above pre-industrial levels".

Given that the selected index is labelled 'Paris Aligned Benchmarks', the index methodology should be "based on science-based decarbonisation trajectories or on an overall alignment with the objectives of the Paris Agreement" (Regulation (EU) 2019/2089, Clause 21). More specifically;

As set under Article 7, Chapter II, "Minimum standards for the design of the benchmark methodology" of the Delegated Regulation (EU) 2020/1818³, the issuers of the constituent securities shall have reduced their GHG intensity or, where applicable, their absolute GHG emissions, including Scope 1, 2 and 3 GHG emissions, by at least 7% on average per annum to meet the reference temperature scenario set in the Special Report on Global Warming of 1,5 °C from the Intergovernmental Panel on Climate Change (IPCC).

The MSCI Climate Paris Aligned family of indices selects securities aligned with a 1.5°C temperature rise threshold via a decarbonization rate of 10% each year based on the forward-looking MSCI Climate Value-at-Risk⁴ (The index is designed to reduce its GHG intensity by 10% every year; achieved through re-weighting and selection of companies during rebalancing. As required by the EU PAB standards, the weight of high-climate impact sector is set to equal its weight

³ Regulation as published online at:

<https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32020R1818>

⁴ For more information please visit:

<https://www.msci.com/documents/1296102/16985724/MSCI-ClimateVaR-Introduction-Feb2020.pdf>

	<p>in the underlying index to avoid reducing carbon intensity purely through divestment. This 10% self-decarbonization significantly exceeds the minimum standards for the EU Paris-aligned Benchmark of at least 7%).</p> <p>The index construction criteria appear to contribute substantially to the stabilisation of greenhouse gas emissions and the index composition, and the underlying methodology, appear consistent with the long-term temperature goal of the Paris Agreement.</p>
Carbon Trust's assessment	
Consistent with the Principles	

Table 6 Summary assessment against Environmental Principles Criteria 3

Criteria 3	<p>The index can be categorised into one or more of the below approaches to green index construction. An index might utilise one or more of these approaches simultaneously:</p> <ol style="list-style-type: none"> 1. Exclusionary screening – these are exclusion filters applied to the base universe of stocks which exclude companies displaying certain adverse traits, for example companies which have primary operations in thermal coal. 2. Best-in-class – these filters select for the best companies in each category, for example lowest carbon emissions per unit of revenue / gross value add. 3. Thematic – these indices are selected based on a specific, distinct theme which contributes towards Environmental goals which could relate to a specific Environmental theme, area or sector, for example clean energy or carbon capture. 4. Temperature alignment – these are indices with a specific target of selecting companies with carbon emissions reductions compatible with a target temperature goal. Note that Green Indices selected under this approach do not necessarily have to meet the EU Paris-aligned Benchmark or EU Climate Transition Benchmark standards.
Carbon Trust comment	
Evaluation	<p>To construct the eligible universe, MSCI removes securities of companies based on the following exclusion criteria and ESG scores (aligned to UN Global Compact).</p> <ul style="list-style-type: none"> • Controversial Weapons • ESG Controversies • Tobacco • Environmental Harm

	<ul style="list-style-type: none"> • Thermal Coal Mining • Oil & Gas • Power Generation (Thermal Coal, Liquid Fuel, Natural Gas) <p>Secondly, the MSCI Climate Value-at-Risk (CVaR) methodology assesses financial sensitivity of instruments to the impact of different climate scenarios by estimating the net present value impact on security pricing. The CVaR calculation methodology uses an AIM/CGE model which is one of the Shared Socioeconomic Pathways (SSPs) utilised in the IPCC 6th assessment report specifically the global 1.5°C target, and carbon prices are used. In addition, Scope 1, 2 and 3 emissions are utilised for the modelling. Finally, CVaR on a company level can then be translated into a portfolio level 'warming potential' which therefore provides an exact temperature value that can be compared against warming scenarios which the portfolio is aligned with.</p> <p>To note, the Index selected under this approach does comply with the voluntary EU Paris-Aligned Benchmark Regulation.</p>
Carbon Trust's assessment	
Consistent with the Principles	

Table 7 Summary assessment against Internal Governance Principles Criteria 4

Criteria 4	<p>The index must be approved by Issuer's Green Bond Committee ("GBC") with a positive recommendation by the Issuer's Green Bond Index Subcommittee ("GBI").</p> <ol style="list-style-type: none"> 1. The GBI is a subcommittee set up to assess and make a recommendation on each index for use in a Green Index-Linked Note. 2. The GBI consists of a diverse pool of subject matter experts with expertise in equities index creation and sustainability. These include, but are not limited to, representatives from Quantitative Investment Strategies, Equities Structuring, Platform Development, Principal Structuring, Climate Risk, Sustainability, Legal and Compliance. 3. The GBI will make a recommendation for each index based on a thorough review of the index's governance process, construction methodology, data usage as well as any other supporting information such as peer reviews, citations and use in research material. 4. The Issuer's Green Bond Committee will review and, if appropriate, approve each Green Index based on the GBI's recommendations and the Environmental Principles set out above.
Carbon Trust comment	

Evaluation	<ul style="list-style-type: none"> • As part of the Green Structured Note governance process, the GBI has been established with the objective to provide and make recommendation on the suitability of the index to be utilised in a Green Index-Linked Note. • The governance structure leverages the existing knowledge and expertise. • Barclays has set up an internal process where overall the GBI will make a recommendation of whether the index meets the Green Index Selection Principles and therefore whether it is fit for use in a Green Index-Linked Note issuance. • GBC reviews and approves assets and indices for use in Green Index-Linked Note.
Carbon Trust's assessment	
Consistent with the Principles	

Table 8 Summary assessment against Internal Governance Principles Criteria 4

Criteria 5	<p>The index must be reassessed by the GBI and approved by the GBC at least annually. For avoidance of doubt, if an index is no longer considered to meet the Principles set out in this document, structured notes referencing this index will no longer be considered as a Green Index-Linked Note by Barclays. Note this does not constitute a termination event for such note; though Barclays will not continue to sell the security nor upsize any existing notes outstanding.</p>
Carbon Trust comment	
Evaluation	<p>Barclays provided evidence the GBI has considered relevant industry benchmarks, market practices and standards (EU Paris-Aligned Benchmark). The governance structure is coherent and aligned with the Principles. The GBI to reassess at least annually the index appropriateness and to be further approved by the GBC.</p>
Carbon Trust's assessment	
Consistent with the Principles	

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+44 (0) 20 7170 7000

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