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8 **U.N.-convened Net-Zero Asset Owner Alliance**

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10 **Target Setting Protocol Version 4**

11 **Public Consultation**

12 **August/September 2023**

13

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28 **1. Real Estate**

29 **1.1 Real Estate Debt Funds**

Real Estate Debt Funds	
Definition	Real Estate Debt Funds are real estate loans issued by a lender for commercial property/ properties with mortgage linked securities (such as direct mortgages, secured bonds, credit linked notes, tranches in CMBS and MBS,...) pooled in a fund. All listed funds investing in loan structures are excluded.
Emissions in Scope	<ul style="list-style-type: none"> • Mortgage carbon emissions are based on a “look through” approach where the operational carbon of the underlying asset is taken as base for the mortgage loan calculation. • Operational emissions only • Whole building approach where feasible according to the decision-making authority of the loan. • The lender only accounts for the portion of the annual emissions of the building that are financed through the loan(s).
Key Metrics	<ul style="list-style-type: none"> • Relative: Building emissions intensity (kg CO2e/m²/annum) or tCO2e/sqm/annum • Absolute: Building emission (kg CO2e/ annum) or tCO2e/annum
Data Availability and Sources	<p>Where required data is not available, two different options can be used for members</p> <ul style="list-style-type: none"> • Members disclose the portion of assets where real data is available and establish a time-bound plan to obtain the missing data. • Members use estimates where reliable data is not available and establish a time-bound plan to obtain reliable data to replace estimated data. <p>Members are requested to provide information on the estimation methods which are applied including data sources.</p> <p>For existing funds: Given that the debt fund is a lender and not an owner of the property, full data may not be possible for debt that has already been originated. If this is not possible despite engagement to that effect (bearing in mind that contractual terms are difficult to change), members should explain why not.</p> <p>For new funds: For new origination and new debt funds, the expectation to set time bound plans is appropriate.</p> <p>The estimation options are more detailed in the TSPV3 p55.</p>
Scientific Pathway or Benchmark Sources	The target ambition and the required decarbonisation rate should be based on no or limited overshoot 1.5°C pathways. Members are not required to use a specific pathway but should strive to use pathways specifically designed for the real estate sector. The CRREM Global Pathways are recommended but other pathways might be used if they fall within the IPCC's no or limited overshoot 1.5°C global range of -40% to -60% for 2020–2030. Members using CRREM Global Pathways should start using

	the updated 1.5°CRREM & The SBTi Aligned Decarbonisation Pathway as of 2025.
Reporting	By 2026 Alliance Reporting Cycle, Members should report carbon data to the Alliance, aiming for full coverage and explaining any gaps.
Target Setting	<p>Phasing-in Approach of target-setting:</p> <ul style="list-style-type: none"> • For existing funds: Alliance members should phase in a systematic engagement approach with the asset manager on carbon reporting and net-zero targets from YE2024 • New funds (or existing and new evergreen funds): should begin phasing in targets on new private debt funds (where possible) from YE2024 on. By 2027 Alliance Reporting Cycle members should set and publicly disclose decarbonisation on all new funds.

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1.2 Real Estate Residential Mortgages

Asset Class: Residential Mortgage Real Estate	
Definition	<p>Mortgage finance includes loans granted by a lender for residential occupancy and secured by a mortgage on the underlying property/properties.</p> <p>Residential properties or portfolios of residential properties are fully owned by the borrower. Alternative living types are included.</p> <p>Members decide if Multifamily investments are considered CREL or Residential Mortgages.</p>
Emissions in Scope	<p>Mortgage carbon emissions are based on a “look through” approach. This means that the operational carbon of the underlying asset is taken as base for the calculation relating to each mortgage loan.</p> <p>Whole building approach where feasible according to the decision making authority of the loan.</p> <p>The lender only accounts for the portion of the annual emissions of the building that are financed through the mortgage loan. This portion is determined by the LTV-ratio (Loan-to-Value), this is the outstanding loan amount divided by the value of building.</p>
Key Metrics	<ul style="list-style-type: none"> • Relative: Building emissions intensity (kg CO2e/m²/annum) or tCO2e/sqm/annum • Absolute: Building emission (kg CO2e/ annum) or tCO2e/annum
Data Availability and Sources	<p>Due to the lack of operational control, lenders are usually facing a bigger challenge of collecting the data needed yet this should not preclude trying to obtain data or the use of estimates or proxies.</p> <p>Where required data is not available, two different options can be used for members</p> <ul style="list-style-type: none"> • Members disclose the portion of assets where real data is available and establish a time-bound plan to obtain the missing data.

	<ul style="list-style-type: none"> Members use estimates where reliable data is not available and establish a time-bound plan to obtain reliable data to replace estimated data. <p>Members are requested to provide information the estimation methods applied including data sources.</p> <p>For existing funds: Given that the debt fund is a lender and not an owner of the property, full data may not be possible for debt that has already been originated. If this is not possible despite engagement to that effect (bearing in mind that contractual terms are difficult to change), members should explain why not.</p> <p>For new funds: For new origination and new debt funds, the expectation to set time bound plans is appropriate.</p> <p>The estimation options are more detailed in the TSPV3 p55.</p>
Scientific Pathway or Benchmark Sources	<p>The target ambition and the required decarbonisation rate shall be based on no or limited overshoot 1.5°C pathways. Members are not required to use a specific pathway but should strive to use pathways specifically designed for the real estate sector. The CRREM Global Pathways are recommended but other pathways might be used if they fall within the IPCC's no or limited overshoot 1.5°C global range of -40% to -60% for 2020–2030. Members using CRREM Global Pathways are expected to start using the updated 1.5°CRREM & The SBTi Aligned Decarbonisation Pathway as of 2025.</p>
Reporting	<p>Alliance members should track emissions related to Residential mortgages as of 2025. Reporting on a consolidated basis is currently not expected and more information on potential targets and applicable timelines will be issued with the following TSP update. The intention is to increasingly align with key market initiatives (e.g. aligning with NZBA's approach).</p>
Target Setting	<p>Not included in this TSP update, do note that this might evolve in future updates in line with key developments in the market.</p>

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1.3 Energy efficiency

<p>Operational Energy Efficiency: only applicable to Directly-held real estate (TSP 3 p49.)</p>	
Definition	<p>Energy Intensity refers to the total amount of direct and indirect energy used by renewable and non-renewable sources in a building over a full reporting year, normalised by an appropriate denominator.</p>
Key Metrics	<p>Members shall use the following intensity metric:</p> <ul style="list-style-type: none"> kWh per square meter on whole building annual energy use <p>Members should follow the EPRA guidance and apply the following standards:</p> <ul style="list-style-type: none"> Energy Intensity should be calculated (based on GRI Standard 302-3) as the sum of energy consumption reported for Total electricity consumption, Total district heating & cooling consumption, total fuel consumption and potentially, other energy. Total electricity consumption

	<ul style="list-style-type: none"> • Distinguishing 1) total electricity consumption 2) the proportion of electricity consumption from purchased and self-generated renewable sources. • Total district heating & cooling consumption: refers to the total amount of indirect energy consumed from district heating or cooling systems over a full reporting year • Total fuel consumption: refers to the total amount of fuel used from direct (renewable and non-renewable) sources (direct meaning that the fuel is combusted on site) over a full reporting year. • Floor area (see TSP V3 page 54)
<p>Data Availability and Sources</p>	<p>Reported asset-level data is preferred. When this data is not available, two different options exist for members in their target setting (more detailed in the TSPV3 p55.).</p> <ul style="list-style-type: none"> • Members disclose the portion of assets where real data is available and establish a time-bound plan to obtain the missing data. • Members use estimates where reliable data is not available and establish a time-bound plan to obtain reliable data to replace estimated data. <p>Members are requested to provide information regarding the estimation methods applied including data sources.</p>
<p>Target including Scientific Pathway or Benchmark Sources</p>	<p><u>CRREM</u> 1.5°C pathways are recommended as benchmark and, to the extent possible should be used in such way that it creates an appropriate reflection of the portfolio assets' geographic and building type specific distribution.</p> <p>Other pathways may be used and if so, the pathway shall meet the overall Alliance criteria of being a science-based 1.5°C pathway with no or limited overshoot. Members shall disclose which benchmark is being used.</p>
<p>Reporting (incl. Timeline)</p>	<p>From the start of 2025 Alliance members should track the share of the portfolio that is covered and the estimation methods used (if applicable).</p> <p>By the 2026 Alliance Reporting Cycle, members should report energy efficiency data.</p>
<p>Target (incl. Timeline)</p>	<p>Members are encouraged but not expected to start including energy efficiency in their target-setting approaches in addition to ones on carbon emission reduction.</p>

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1.4 Embodied Carbon

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Note: only for new construction and major renovations and scope = direct investments.

Embodied carbon: Only applicable to Directly-held real estate as defined in <u>TSP 3 p49</u> .	
Definition	<p>The 'Embodied Carbon' emissions of an asset are the total GHG emissions and removals associated with materials and construction processes throughout the whole life cycle of an asset (Modules A1-A5, B1-B5, C1-C4, <u>see p3</u>). In addition, a differentiation can be made between the more narrow 'Upfront Carbon'.</p> <p>'Upfront Carbon' emissions are the GHG emissions associated with materials and construction processes up to practical completion (Modules A1-A5). Upfront carbon excludes the biogenic carbon sequestered in the installed products at practical completion.</p>
Accounting Approach	<p>Alliance members should carry out a carbon lifecycle analysis (LCA), according to the following methodological frame <u>EN 15978</u> where available for new constructions and major renovations. Different categories of construction products cover all components of a building, and members should consider the following allotment:</p> <ul style="list-style-type: none"> - Frame & shell (e.g. structural frame, façade, roof, ...) - Site & external (e.g. foundations, landscaping, utilities, ...) - Partitions & finishes (e.g. fittings, furnishings, ...) - Technical & services (e.g. sanitary systems, energy systems, ventilation systems, ...) <p>Other national methodological frames might be used but this should be disclosed in the respective reporting.</p> <p>Members should use reference area according to IPMS3, and to consider a building lifespan of 50 years.</p>
Key Metrics	<ul style="list-style-type: none"> • kgCO2e/m² or tCO2e/m² • Differentiate between Upfront Carbon and Embodied Carbon
Data Availability and Sources	<p>LCA calculation that includes preferred Environmental Product Declarations (<u>EPD</u>) and hierarchy between specific and generic data, country adjusted or not.</p>
Scientific Pathway or Benchmark Sources	<p>Currently not yet identified on Global Level. In the absence of guidance, extrapolate based on mandatory limits (e.g. Denmark, France) or regional benchmarks (e.g. <u>LETI, LCBI</u> , LCA tools database,...)</p>
Reporting (incl. Timeline)	<p>Alliance members should track embodied carbon where possible (and or differentiate with/between <i>Upfront Carbon</i>) for new constructions and major refurbishments from the start of 2025. Reporting on a consolidated basis is currently not expected.</p>
Target (incl. Timeline)	<p>Despite the current constraints and limitations, members are encouraged but not expected to start including embodied carbon in their target-setting approaches. Yet all members should minimize the Embodied Carbon emissions of their new development and major renovation projects.</p>

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Questions for Public Consultation:

1. Real Estate Debt Funds

- Do you agree with this approach? (Yes/No)
- If not, please comment.

2. Residential Mortgage

- Do you agree with this approach? (Yes/No)
- If not, please comment.

3. Energy Efficiency

- Do you agree with this approach? (Yes/No)
- If not, please comment.

4. Embodied Carbon

- Do you agree with this approach? (Yes/No)
- If not, please comment.

5. General question on Real Estate

- Are there any target areas of those mentioned here that you believe should be made mandatory by 2025 that are currently optional for that timeframe? (Yes/No)
- If yes, please comment.

38 **2. Private Debt Funds**

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Private Debt Funds	
Definition	<p>Private (corporate) debt = not listed debt instruments into corporations</p> <p>Funds = investments in vehicles and structures</p> <ul style="list-style-type: none"> • where the asset allocation is done by an external asset manager and the investment is not consolidated on the asset owners IFRS (or similar) balance sheet and / or • in a “blind pool”, where the asset owner commits a certain amount into the vehicles investment strategy not knowing the individual investments at time of commitment (page 38 of the TSP).
Reporting (incl. Timeline)	By 2026 Alliance Reporting Cycle, Members shall report carbon data to the Alliance, aiming for full coverage and explaining any gaps.
Target (incl. Timeline)	<ul style="list-style-type: none"> • For existing funds: Alliance members shall phase in a systematic engagement approach with the asset manager on carbon reporting and net-zero targets throughout 2025 in line with the Call to Action, and report on engagement actions by 2026 Alliance Reporting Cycle. • New funds (or existing and new evergreen funds): shall begin phasing in targets on new private debt funds (where possible) from start of 2025 and by 2027 Alliance Reporting Cycle members shall set and publicly disclose decarbonisation on all new funds (where possible) • Review of Net Zero Investment Framework Component for the Private Equity Industry

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Questions for Public Consultation:

6. Private Debt Funds

- Do you agree with this approach? (Yes/No)
- If not, please comment.

41 **3. Sovereign Debt**

42 Understanding the climate alignment of a given asset class requires both an accounting approach
43 (to identify and account for the carbon associated with the investment), and an assessment
44 approach (to understand the difference between where the asset's issuer currently is with respect
45 to climate alignment and where it should be once aligned) before it can be determined whether a
46 target setting approach (how to set targets on the alignment of an asset) can be developed.

47 With respect to the Sovereign Debt asset class, the Alliance consulted on an the accounting
48 approach in October 2022. This year's 2023 public consultation covers an assessment approach.

49 As a third step, the potential structure for target setting will be explored subsequently in line with
50 future TSP consultations.

51 **3.1 The role of Sovereign Debt in portfolios**

52 The role of sovereigns in an asset owner portfolio is multifaceted:

- 53 • As a store of liquidity or for prudential/regulatory reasons or as a tool to manage portfolio
54 duration or exposure to interest rates. Most commonly this holding will be the bonds of the
55 sovereign in which the company is domiciled e.g. a UK insurance company is likely to need
56 to maintain a significant gilt holding. Multinational enterprises will have liquidity portfolios
57 comprising the bonds of many sovereigns.
- 58 • For the purpose of seeking a return just as they do with their corporate bonds or equities.

59 The Alliance recognises this distinction and the fact that the holdings may be managed very
60 differently. In this context, Alliance members may treat these sub-portfolios differently with regards
61 to sovereign climate assessment. The sub-portfolios are defined as follows:

- 62 1. The Liquidity Sub-Portfolio – This sub-portfolio comprises the sovereign bonds whose
63 presence in the portfolio is dictated by regulatory or liquidity management requirement or are
64 used for purely financial functions such as duration management. The member is
65 constrained against wholesale selling of these bonds. Typically, this sub-portfolio will
66 contain issuance by the sovereign or sovereigns in which the member entities are domiciled
67 (e.g., gilts in the UK and Treasuries in the US). The proposal would be for individual members
68 to define the Liquidity Sub-Portfolio that best suits their fiduciary and risk management
69 circumstances.
- 70 2. The Return Seeking Sub-Portfolio – This sub-portfolio comprises all other sovereign bonds.

71 **3.2 The Importance of assessing Sovereigns Debt**

72 The Alliance believes it to be important that members assess their sovereign portfolios, particularly
73 the Return Seeking Sub-Portfolio. This is because emissions tallied at the sovereign level represent
74 all emissions no matter how they are financed or whether they are generated by corporations,
75 individuals, or other enterprises there domiciled.

76 Sovereigns often make up a substantial portion of asset owner portfolios and while many of these
77 holdings may be required as part of prudent liquidity management it should nevertheless at least be
78 incumbent on Alliance members to understand the associated climate risks.

79 In making their portfolio allocations in the context of net-zero commitments, asset owners wish to
80 understand the climate alignment of the countries they invest in as an indicator of their portfolio's
81 contribution to climate change, fully reflecting the climate performance of the sovereigns to which
82 they lend.

83 Also, in cases where debt holdings may be a precursor to investment in specific enterprises
84 domiciled within the sovereign's jurisdiction, understanding the country's climate alignment may be
85 prudent as an indicator of the sovereign's actions in creating an environment to support and fund
86 transitional projects whether they be for new clean energy, decarbonisation of existing industry or
87 other innovations such as direct carbon capture.

88 Sovereign governments rely on asset owners to invest in their countries and are often interested to
89 find ways to create a conducive environment. This represents an obvious introductory opportunity
90 for Alliance members to engage with sovereigns and creates the potential for a broader
91 conversation. The Alliance recommends that members disclose either the number or fraction of the
92 sovereigns represented in their portfolios with whom they have conducted some form of
93 engagement be it collective or bilateral.

94 3.3 Data sources

95 In search of a broad range of indicators on sovereign debt, the Alliance has participated in a
96 consultation initiated by the Assessing Sovereign Climate-related Opportunities and Risks ([ASCOR](#))
97 Project—established to create a database on sovereign exposure to climate risk & opportunities and
98 on how governments plan to transition to a low carbon economy.

99 ASCOR's work is not complete but having consulted with the project, the Alliance believes that to
100 avoid a proliferation of standards and to make the data gathering requirements on members as
101 unburdensome as possible, it is sensible to base the assessment on data that will be available in the
102 ASCOR database. The ASCOR database will allow investors to assess governments' climate-related
103 commitments, their climate-relevant policy frameworks and the actions they are taking to ensure
104 that the benefits of both a low carbon transition and of climate adaptation are shared amongst their
105 citizens.

106 The framework is composed of three pillars containing different themes and sub-categories, each
107 of which includes 'Yes' or 'No' indicators and, where relevant, complementary quantitative metrics.

- 108 1. Emission pathways: This pillar considers historical emission trends and the alignment of
109 forward-looking national emission reduction targets with international climate goals.
- 110 2. Climate policies: This pillar considers national policymaking efforts to mitigate emissions,
111 adapt to climate change, and ensure a just transition.
- 112 3. Opportunities to finance the transition: This pillar considers the financing countries may need
113 to implement climate goals. These indicators are critical given that many countries facing
114 the greatest climate-related risks currently have insufficient access to financing.

115 The free online ASCOR database, and the assessments of the first 25 countries will be published by
116 the end of 2023. From 2024 onwards, the ASCOR Project aims to annually update the database with
117 assessments of sovereign-debt-issuing countries, expand the country coverage, and make the
118 assessments publicly available online.

119 For more detailed data relating to sovereign emissions, it is recommended that members consider
120 the following sources:

- 121 • [PRIMAP by Potsdam Institute \(PIK\)](#)
- 122 • [Climate Change Performance Index](#)
- 123 • [Climate Action Tracker](#)
- 124 • [Climate NDC Policy tool](#)
- 125 • [Climate Watch](#)
- 126 • [OECD Climate Action Dashboard](#)
- 127 • [Global Carbon project](#)
- 128

129 **3.4 Sovereign Debt Assessment**

130 The existing version of the protocol, [TSP V3](#), elaborates on accounting and reporting requirements
 131 for members in regard to their investments in sovereign debt. As outlined on page 72 of the TSP V3,
 132 the Alliance follows the methodology of the Partnership for Carbon Accounting Financials (PCAF).
 133 In addition to the requirements currently set out in the Protocol, further alignment with PCAF is
 134 sought through the addition of the following sentence: Members **should** report on consumption-
 135 based emissions. In TSP V4, this quantitative approach should be supplemented by a more
 136 qualitative step by way of a scorecard assessment of sovereign debt.

137 While members may use emissions data (including carbon intensities and financed emissions) as
 138 part of the assessments mentioned above, the Alliance believes that the ASCOR database will gather
 139 additional information that will lend itself to creation of a scorecard, which will be useful for
 140 assessing features not represented on a continuum. Asset owners may find such a scoring
 141 methodology helpful in assessing progress made by emerging economies, in light of unique
 142 emission reduction challenges and opportunities in these markets. Monitoring certain elements of
 143 the scorecard could also promote avenues for engagement with governments, such as in the area
 144 of "climate solution" infrastructure projects.

145 To develop a comprehensive scorecard, the Alliance has provisionally selected a few indicators for
 146 which data is expected to be available in the ASCOR database. Out of this list a few indicators will
 147 be selected, considering the feedback of this public consultation. Once this choice has been
 148 finalised, Alliance members should use these indicators to conduct a performance assessment of
 149 their sovereign debt holdings. There is no requirement that the data should be sourced from ASCOR,
 150 Members may choose equivalent indicators from other sources.

151 For their Return Seeking Sub-Portfolio, Members **should** initiate the scorecard assessment during
 152 2024 (for at least the initial 25 countries covered by ASCOR) and **should** report on the initial
 153 outcomes of the assessment in the 2025 Alliance reporting cycle. This timeline reflects the Alliance
 154 members' willingness to move forward with the development of this section of the protocol in
 155 parallel with ASCOR's work.

156 For each individual sovereign, the score would be defined as the fraction of all elements with a
 157 positive indication. Aligned with the approach applied to other sectors in the protocol, the
 158 recommended disclosure would be a portfolio average score weighted by the market value of each
 159 investee sovereign. However, it should be noted that weighting by nominal value removes the
 160 influence of market interest rates on the result, but we note that it would be out of step with PCAF's
 161 recommended weightings for other metrics. As part of its work over the coming year, the Alliance
 162 aims to set boundary scores that demarcate portfolios that are assessed to be climate lagging,
 163 neutral or leading.

164 As a preliminary suggestion, the binary elements highlighted **in yellow** in the tables¹ below could be
 165 incorporated in the scorecard. The final selection of indicators will be informed by the ASCOR
 166 project's advances, and the input received in the consultation. As previously mentioned, to ease the
 167 process no indicator will be used for which data is unavailable in the ASCOR database.

168 Once the final methodology and set of indicators is published by ASCOR in Q4 2023, a reference
 169 system will be applied, and a code will be added to each of these indicators to ensure easy reference
 170 to the respective indicator in the ASCOR database. It is recognised that some of the indicators below
 171 primarily provide contextual insights (especially Pillar 3) and are unlikely to change from year to
 172 year; this will be considered in the development of the final recommendation. Indicators highlighted
 173 **in red** are known to be still under consideration by ASCOR and are not yet finalised.

¹ Indicators referenced in this document are taken from the ASCOR consultation report from February 2023. Please note that those indicators will be subject to change.

Pillar 1: Emission pathways (EP)			
Theme	Sub-themes, indicators and metrics	Answer type	Countries assessed³
1. Emission trends	EP 1.1. ABSOLUTE EMISSIONS		
	a. Have the country's absolute GHG emissions decreased over the past 5 years?	Y/N	All
	i) What is the average annual percentage change over the past 5 years?	%	
	ii) What is the annual percentage change over the past year?	%	
	b. Is the average annual percentage change over the past 5 years aligned with the reductions needed to meet the country's 2030 target?	Y/N	All
	EP 1.2. EMISSION INTENSITIES		
	a. Has the country's PPP-adjusted GDP emission intensity decreased over the past 5 years?	Y/N	All
	i) What is the average annual percentage change over the past 5 years?	%	
b. Has the country's per capita emission intensity decreased over the past 5 years?	Y/N	All	
i) What is the average annual percentage change over the past 5 years?	%		
2. 2030 targets	EP 2.1. TRANSPARENCY OF 2030 TARGETS		
	a. Has the country set a 2030 emission reduction target?	Y/N	All
	i) What is the target reduction relative to absolute 2020 emissions?	%	
	b. Is the 2030 target enshrined in a national framework climate law?	Y/N	All
	c. Does the target cover CO₂ and methane, and all high-emitting sectors?	Y/N	All
	i) What percentage of national GHG emissions is covered by the target?	%	
	d. Does the country specify whether the target will rely on offsetting?	Y/N	All
	i) What percentage of the target will be met using offsets?	%	
EP 2.2. ALIGNMENT WITH NATIONAL BENCHMARK			
a. Is the country's target aligned with its national 1.5°C-aligned GHG benchmark?	Y/N	All	
i) What is the degree of alignment (% above/below the benchmark)?	%		
EP 2.3. ALIGNMENT WITH NATIONAL FAIR SHARE			

	a. Is the country's target aligned with its fair share 1.5°C-aligned GHG allocation? i) What is the degree of alignment (% above/below the allocation)?	Y/N %	All
3. Net zero targets	EP 3.1. NET ZERO TARGET TRANSPARENCY		
	a. Has the country set a net zero target? i) In what year is the net zero target set?	Y/N Year	All
	b. Is the net zero target enshrined in a national framework climate law?	Y/N	All
	c. Does the target cover CO ₂ and all high-emitting sectors? i) What percentage of national emissions is covered by the target?	Y/N %	All
	d. Does the country specify whether the target will rely on offsetting? i) What percentage of the target will be met using offsets?	Y/N %	All
	EP 3.2. ALIGNMENT WITH GLOBAL NET ZERO		
	a. Is the country's net zero CO₂ target set for 2050 or earlier? i) If not, by how many years is the target lagging?	Y/N No. Of years	HI
	EP 3.3. ALIGNMENT WITH ACCELERATED NET ZERO		
	a. Is the country's net zero CO ₂ target set for 2045 or earlier? i) If not, by how many years is the target lagging?	Y/N No. Of years	HI

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Pillar 2: Climate policies (CP)			
Theme	Sub-themes, indicators and metrics	Answer type	Countries assessed
1. Mitigation	CONTEXTUAL METRIC: Emissions per capita	tCO ₂ e/cap	All
	CONTEXTUAL METRIC: Energy intensity of the economy	MJ/GDP	All
	CP 1.1. DISCLOSURE OF DATA AND DOCUMENTS		
	a. Has the country submitted national emissions data to the UNFCCC?	Y/N	All
	b. Has the country submitted a second NDC that is more ambitious than its first?	Y/N	All
	c. Has the country published a Long-Term Climate Strategy?	Y/N	All
	d. Has the country estimated and published its consumption-based emissions?	Y/N	HI
	e. Does the country require corporate climate-related disclosures (e.g. TCFD)?	Y/N	HI
	CP 1.2. FRAMEWORK LEGISLATION		
	a. Does the country have a framework climate law or equivalent?	Y/N	All
	b. Does the framework climate law specify key accountability elements?	Y/N	All
	CP 1.3. CARBON PRICING		

	a. Does the country have one or more carbon pricing systems?	Y/N	HI, MI
	b. Do the carbon pricing mechanisms together cover at least 50% of national GHG emissions? i) What percentage of national GHG emissions is covered?	Y/N %	HI, MI HI, MI
	c. Is the price of the carbon pricing mechanism with the highest GHG coverage at least 67 International (I) US\$/tCO ₂ ? i) What has been the average annual carbon price of this mechanism in the last year?	Y/N US\$/tCO ₂	HI HI
	CP 1.4. SELECTED EMISSION SOURCES		
	a. FOSSIL FUELS: Has the country committed to phase out fossil fuel subsidies? i) How much is spent on direct fossil fuel subsidies as a percentage of GDP?	Y/N %	HI, MI HI, MI
	b. COAL: Has the country committed not to approve new thermal coal mines?	Y/N	HI, MI
	c. ELECTRICITY: Has the country set a net zero target for the electricity sector?	Y/N	HI, MI
	d. ELECTRICITY: Is the net zero electricity target set for 2035 (HI)/2040 (MI)? i) What percentage of the country's electricity is from fossil fuels?	Y/N %	HI, MI HI, MI
	e. TRANSPORT: Has the country set a combustion-engine vehicle phase-out by 2035? i) What percentage of vehicle sales are currently low-carbon vehicles?	Y/N %	HI HI
	f. BUILDINGS: Has the country set a national mandatory building energy code?	Y/N	HI
	g. LAND USE: Has the percentage of forested land increased in the past 5 years? i) What is the change in percentage of forested land in the past 5 years?	Y/N %	HI, MI HI, MI
	CONTEXTUAL METRIC: ND GAIN Adaptive Capacity, Sensitivity and Readiness scores	0 to 1	HI, MI, LI
	CP 2.1. ADAPTATION PLANNING		
2. Adaptation	a. Has the country published a National Adaptation Plan (NAP) or equivalent?	Y/N	All
	b. Does the country publish national climate risk assessments at least every 5 years?	Y/N	All
	c. Does the country have a framework climate law that includes specific provisions on adaptation or a dedicated national adaptation law?	Y/N	All

	d. Has the country published a Monitoring & Evaluation report on the progress of its NAP implementation?	Y/N	All
	CP 2.2. DISASTER RISK REDUCTION (DRR)		
	a. Does the country adopt and implement DRR strategies (UNDRR E1 score >0.5)?	Y/N	All
	i) What has been the country's highest UNDRR E1 score over the past 5 years?	0 to 1	All
	b. Does the country have a multi-hazard early warning system?	Y/N	All
	c. Is the country part of a sovereign catastrophe risk pool?	Y/N	MI, LI
	CONTEXTUAL METRIC: World Bank Voice and Accountability score	-2.5 to 2.5	HI, MI, LI
	CP 3.1. JUST TRANSITION LENS ON CLIMATE POLICY		
	a. Does the country have a just transition strategy that involves social dialogue with workers and engagement with affected communities?	Y/N	All
	b. Does the country have a national Just Transition Commission or equivalent?	Y/N	All
	c. Does the country assess and, if necessary, plan to address the regressive effects of carbon pricing/subsidy reform?	Y/N or n/a	HI, MI
	CP 3.2. INTERNATIONAL CLIMATE FINANCE		
	a. Does the country contribute 0.22% of its GDP to international climate finance?	Y/N	
	i) What is the country's 3-year average climate finance contributions?	% GDP	UNFCCC Annex II Parties
	ii) What percentage of climate finance contributions are dedicated to adaptation?	%	
3. Just transition			

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Pillar 3: Opportunities to finance the transition (OFT)		
Theme and metrics	Units	Countries assessed
OFT 1. Financing mitigation		
CONTEXTUAL METRIC: Funding capability	GDP/capita	All
a. What is the funding required to meet the country's conditional NDC?	Billion US\$	All countries with a conditional NDC
b. What is the country's exposure to the low-carbon transition as measured by the IMF?	0 to 1	All
OFT 2. Financing adaptation		
CONTEXTUAL METRIC: Funding capability	GDP/capita	All
a. What is the funding required to implement adaptation plans?	Billion US\$	All
b. What is the impact of climate change on the country as measured by economic estimates of future GDP loss due to climate change?	% GDP	All

c. What is the country's World Risk Index score?	0 to 100	All
OFT 3. Financing transition opportunities		
CONTEXTUAL METRICS: Funding capability		
Resource Governance, Corruption Perceptions, Regulatory Quality, Education Index, World Press Freedom, Civil Liberties	GDP/capita Six indices	All All
a. SOLAR: What is the potential of the country's solar resources as measured by the specific photovoltaic power output of the 10% sunniest areas in the country?	kWh/kWp	All
b. WIND: What is the potential of the country's wind resources as measured by the wind mean power density of the 10% windiest areas in the country?	W/m ²	All
c. HYDRO: What is the country's exploitable hydropower potential, excluding potential projects in current protected areas?	tWh	All
d. GEOTHERMAL: What is the potential of the country's geothermal resources? [No assessment methodology yet identified]	N/A	All
e. MINERALS: What is the potential of the country's mineral resources as measured by the 'copper equivalent' tonnage of its reserves of 11 key energy transition minerals?	Tonnes of copper equivalent	All
f. NATURE: What is the country's potential for nature-based solutions as measured by the area of potential forested land?	Hectares	All

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Questions for Public Consultation:**Data Sources**

7. If you are aware of any more data sources, please share the links or name.
8. If you believe any of the listed sources to be unreliable, please name them.

Sovereign Debt Assessment

9. Alliance members should conduct a performance assessment of their sovereign debt portfolio that is not only based on emissions metrics but a broader set of indicators.
Do you agree with this approach as described? (Yes/No)
If not, please comment.
10. Do you agree with the idea of combining the chosen indicators into a scorecard for each sovereign thus allowing for a weighted average portfolio score to be computed? (Yes/No)
If not, please comment.
11. Do you agree with the idea that the Alliance should work to produce a set of boundary scores that demarcate sovereign portfolios that can be described as climate leading, climate neutral and climate lagging? (Yes/No)
If not, please comment.
12. Do you agree that Alliance members can additionally disclose separately the scores for their liquidity sub-portfolio and their return-seeking sub-portfolio where that distinction is made at the discretion of the member? (Yes/No)
If not, please comment.
13. Do you agree that Alliance members should disclose either the number or the fraction of the sovereigns whose debt they own with whom they have conducted some form of engagement whether it be collective or bilateral? (Yes/No)
If not, please comment.
14. Would you reject the use of any of the indicators highlighted in yellow under Pillar 1? (Yes/No)
If Yes, which ones?
15. Would you reject the use of any of the indicators highlighted in yellow under Pillar 2? (Yes/No)
If Yes, which ones?
16. Would you reject the use of any of the indicators highlighted in yellow under Pillar 3? (Yes/No)
If Yes, which ones?
17. Do you have any recommendations or suggested approach for incorporating reference to green bonds and transition bonds in sovereign bond portfolio climate assessment?