



# Net Zero Investing: Sovereign Alignment

June 2026

At Columbia Threadneedle Investments, we use our Responsible Investment expertise to provide ESG funds and approaches that meet the varying needs of our clients. These include our Net Zero methodologies, developed over a range of asset classes.

We continue to seek opportunities to expand the asset class coverage of our Net Zero methodologies as and when sufficient high-quality data becomes available. This paper focuses on our approach for sovereign debt and sets out the methodological choices we have made, building upon our existing methodology for listed equities and corporate bonds.

## Why sovereigns matter for net zero

While many asset managers have focussed significant attention on corporate decarbonisation in recent years, sovereign bonds have often been overlooked. Sovereigns

represent a crucial component of the market, constituting 45% of the global bond market<sup>1</sup>, and their importance extends to corporate issuers as well, since governments define the policy environments that enable or constrain the broader transition to a low-carbon economy.

Despite their significance, development and uptake of methodologies for assessing sovereign alignment with Net Zero pathways have been slower than for corporates. This stems from several complex challenges, including the difficulty of measuring and attributing national emissions, and the varying capabilities and responsibilities of different nations.

<sup>1</sup> Bond Market Size ICMA



Our development of a sovereign Net Zero methodology responds to these challenges while supporting our clients' growing needs for comprehensive approaches. It complements our existing framework for listed equity and corporate bonds, enabling a more complete assessment of portfolio alignment with climate objectives.

### The unique nature of sovereign assessment

Our approach builds upon the principles of our existing net zero methodologies while considering certain factors specific to sovereign analysis.

#### Scope of assessment

Sovereigns set the direction for the economy of their entire jurisdiction through regulation, fiscal policy and other signals. Therefore, when assessing the net zero alignment of a sovereign, investors must consider the potential emissions trajectory of an entire economy. This is very different from assessing alignment for corporates, where one is focused more narrowly on the trajectory of an individual company and its interactions with the value chain.

#### Stakeholder Management and Investor Engagement

Sovereigns must respond to a much wider range of stakeholders compared with corporates. They have responsibilities to their citizens and to other countries through multilateral agreements. Sovereign bondholders' priorities may not always align with other stakeholder groups, so engagement requires a careful approach. Investors can

approach sovereign engagement through a variety of channels, including direct dialogue with policymakers, as well as more indirect mechanisms such as participation in consultations and regulatory feedback processes.

#### Emerging market considerations

High income countries have contributed roughly 62% of cumulative greenhouse gas emissions<sup>2</sup>. This is a significant factor behind the principle of "Common but Differentiated Responsibilities" in the UN Framework Convention on Climate Change, which states countries' contributions to climate change mitigation should consider their differing responsibilities for climate change and their respective abilities to act.

Looking forward, some emerging markets may need longer than more developed nations to reach peak emissions, with many needing to balance climate goals with other constraints:

- **Access to capital:** emerging markets often face more challenges in accessing low-cost capital meaning they have fewer resources to fund the transition. Emerging markets outside of China are expected to need \$2.6 trillion annually to align with Net Zero goals, over 2.5x currently levels.<sup>3</sup>
- **Energy security and infrastructure constraints:** many of these markets are still reliant on coal and other fossil fuels for electricity generation and grid infrastructure can be underdeveloped. This makes integration of renewable energy more challenging and is expected to slow the speed of transition in the power sector and industry.
- **Other sustainable development goals:** the speed of the energy transition must also be balanced with other sustainable development priorities including poverty reduction, job creation and industrial development to prevent potential unintended societal consequences.

<sup>2</sup> Cumulative CO<sub>2</sub> emissions

<sup>3</sup> Emerging Markets | BloombergNEF



## Sovereign-level alignment assessment

In line with our existing Net Zero methodologies, our focus on real-economy reductions leads us to measure sovereign alignment with a forward-looking Net Zero pathway. Our methodology focuses solely on national government issuers to ensure internal consistency and sufficient levels of data coverage.

### Data and metrics

The assessment of sovereign alignment with Net Zero pathways requires a robust and comprehensive data framework. At Columbia Threadneedle Investments, we utilize multiple data

sources to ensure a thorough evaluation while maintaining transparency and consistency in our methodology. Recognising that data may be imperfect, and that new governmental policies and actions will take time to show in the data, we also have the ability to override the model ratings where there is publicly available evidence of changes in policy. Combining multiple data sources to create our own bespoke methodology also enables us to more accurately interrogate the underlying data and compare sovereigns. This is particularly useful in understanding how performance across each metric may differ for those sovereigns with the same overall alignment rating.

### Data sources for sovereign alignment assessment

**Bloomberg:** Bloomberg's Government Climate Scores provide us with granular information appraising each government's long-term Net Zero pledge and Nationally Determined Contributions. It also provides us with a forward-looking outlook on the level of government support for clean energy investment and the projected rates of decarbonisation of each country's power sector.

**Kilmalog NDC Explorer:** This tool provides us with information on the type of target each government has in place through its NDCs, whether this be an absolute target, peaking target, comparative target or intensity target. It was developed by the African Centre for Technology Studies (ACTS), the Stockholm Environment Institute (SEI), supported by the Federal Ministry for Economic Cooperation and Development (BMZ), the German Institute

of Development and Sustainability (IDOS), in cooperation with the UNFCCC secretariat.

**Transition Pathway Initiative (TPI):** The TPI's Assessing Sovereign Climate-related Opportunities and Risks (ASCOR) framework is composed of indicators for the transparent assessment of the progress made by countries in managing the low-carbon transition and the impacts of climate change. ASCOR aims to inform, support and facilitate investors' decision-making on sovereign bonds and enable a more explicit consideration of climate change. TPI is a global initiative led by asset owners and supported by asset managers.

**MSCI ESG:** We use MSCI's emissions data to assess government disclosure of national emissions inventories.



Our methodology draws upon 4 primary data sources and evaluates 8 distinct metrics to create a comprehensive view of sovereign Net Zero alignment. This allows us to capture different aspects of a country's emissions progress and Net Zero commitments. We then roll up the underlying criteria to determine an overall alignment rating for each sovereign issuer.

The 8 metrics we use are broadly consistent with the criteria set out in NZIF 2.0, although with some differences. We include an indicator on Climate Risk, which is not part of the core NZIF 2.0 criteria, to assess whether a sovereign provides disclosures on adaptation planning. In line with our listed equity and corporate bonds methodology, we split the interim target assessment criteria out into two separate criteria, one focussed on the presence of short- and medium-term targets, and the other appraising consistency with a 1.5C pathway. Our decisions on which indicators to cover have been based on a combination of the availability of data and the maturity of assessment methodologies.

### How we assess emerging markets

A key aspect of our methodology entails a difference in our approach to rating emerging and developed markets, for the reasons explained above. This classification enables us to divide countries into two groups, where we set higher minimum standards for alignment ratings for developed markets. For example, this includes explicit considerations in how we assess a country's Net Zero ambition and Nationally Determined Contributions (NDCs).

While achieving Aligned status in our model requires developed markets to reach Net Zero by 2050, emerging markets may have Net Zero targets extending to 2070. We also implement different expectations when assessing each country's 2030 NDCs. To score highly, we expected developed markets to commit to absolute emissions targets with higher levels of ambition. On the other hand, we allow emerging markets to utilise peaking targets and have lower expectations on the level of targeted reductions by 2030. This ensures our methodology does not unfairly disadvantage emerging markets and takes into account the principle of "Common but Differentiated Responsibilities".

### We use 4 data sources

**Bloomberg**

**KLIMA-LOG**

**Transition Pathway Initiative**

**MSCI**

### To appraise companies against 8 Metrics

- 1 **Ambition**
- 2 **Targets – Interim targets set**
- 3 **Targets – Targets aligned**
- 4 **Emissions Performance**
- 5 **Disclosure**
- 6 **Strategy**
- 7 **Capital allocation alignment**
- 8 **Climate risk**

### To give them each a rating

-  **Achieved**  
Already achieve net zero
-  **Aligned**  
Meets expectations in all categories
-  **Aligning**  
Meets core expectations
-  **Committed**  
Has committed to net zero
-  **Not aligned**  
Does not meet expectations
-  **Not assessed**  
Does not disclose sufficient data



### Alignment ratings for sovereigns

Based on the data across these 8 metrics, our model gives sovereigns an overall alignment rating based on how many of the above expectations it meets:

- **Achieved:** Already achieved Net Zero
- **Aligned:** Meets expectations highly in all relevant categories
- **Aligning:** Meets core expectations around ambition, disclosure, setting targets and strategy
- **Committed:** Has committed to Net Zero
- **Not aligned:** Does not meet expectations, and has not committed to Net Zero
- **Not assessed:** Insufficient data is available to provide an overall rating

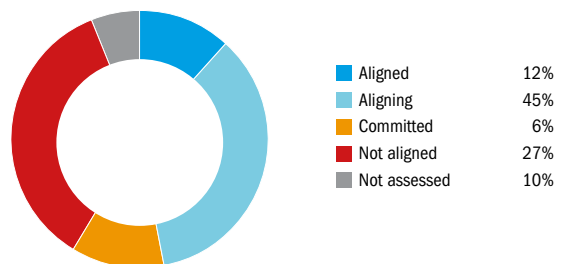
### Portfolio analysis

Once we have established sovereign alignment statuses, we can analyse how these aggregate to the portfolio level through combining them with sovereign carbon emissions data. When calculating sovereign carbon metrics, we use production-based emissions data. This is the most commonly used accounting methodology, counting the emissions physically produced within a country's borders. However, this does not account for exports, meaning it tends to penalise countries that export carbon-intensive products and reward countries that outsource this production. Consumption-based emissions accounting corrects for this by allowing for trade patterns, and estimates emissions associated with domestic consumption. This can be argued to be a fairer representation of each country's impact, but data is limited

and heavily dependent upon assumptions. For this reason, we have chosen to adopt production-based emissions accounting until more robust consumption-based data is made available.

The pie chart below shows a representative breakdown of the exposure to sovereigns in each alignment rating, calculated as a percentage of sovereign emissions for the fund.


#### Example of net zero alignment analysis, as a percentage of portfolio emissions




Source: Columbia Threadneedle Investments. Numbers are for illustrative purposes only.

The portfolio-level outputs we produce are aimed at supporting our portfolio managers who invest in sovereign debt to identify which countries are leading or lagging on the energy transition, providing a starting point for the appraisal of potential transition risks or opportunities relevant to the portfolio. It also gives us the ability to provide clients with disclosures to help them understand how well their sovereign investments align with their own climate goals. Given the nascent nature of sovereign carbon methodologies and the data limitations discussed, we are not at this stage setting targets for sovereign alignment ratings for our Net Zero portfolios. As with all our Net Zero methodologies, we will continue to refine our approach as data availability improves and best practices evolve.

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