

Integrating climate risk into listed infrastructure

CASE STUDY

February 2023

“As an asset class, listed infrastructure has a number of attractive investment characteristics, but it’s often carbon-intensive.”

“We wanted to find a way to help our clients access the asset class while pursuing a climate transition pathway.”

– INDIRA SABITOVA, PORTFOLIO MANAGER, MERCER

Listed infrastructure benefits come at a carbon cost

As an asset class, listed infrastructure has in the past demonstrated a number of attractive investment characteristics, examples from FTSE Russell research include:

- Greater **inflation sensitivity** than conventional equities¹
- **Defensive qualities and resilience** during market downturns²
- Possible **yield enhancement**³

However, these benefits often come at a cost in terms of carbon emissions. According to a 2021 study by UNOPS, UNEP and the University of Oxford⁴, infrastructure is responsible for 79 per cent of all greenhouse gas emissions and 88 per cent of all adaptation costs. For example, the greenhouse gas emission

¹ FTSE Russell, page 10, [Practical Considerations for Listed Infrastructure](#)

² FTSE Russell, page 8, [Practical Considerations for Listed Infrastructure](#)

³ FTSE Russell, page 7, [Practical Considerations for Listed Infrastructure](#)

⁴ Source: October 2021, page 1, <https://www.unep.org/resources/report/infrastructure-climate-action>

intensity of electricity-producing utility companies is often higher than necessary to meet climate change goals.

Mercer asked FTSE Russell to research whether it would be possible to create an equity portfolio that retained the core investment characteristics of infrastructure, while committing to a climate transition pathway.

The FTSE Global Core Infrastructure TPI Climate Transition Index

The FTSE Global Core Infrastructure TPI Climate Transition index takes the stocks from three core infrastructure sectors (transportation, energy and telecommunications) and adjusts stock weights to account for the risks and opportunities associated with the transition to a low-carbon economy

Four climate change considerations are used to determine the index's constituent weights: **fossil fuel reserves**, **carbon emission intensity**, **climate governance** and **carbon performance**. Companies involved in controversial activities are removed from the index.



Fossil fuel reserves

- Underweight companies with fossil fuel reserves



Carbon emissions

- Over or underweight companies according to their greenhouse gas emissions
- Sector neutrality



Management quality

- Over or underweight companies according to their climate governance activities – aligned with the Taskforce on Climate-related Financial Disclosures' recommendations
- Regional industry neutrality



Carbon performance

- Over or underweight companies according to their forward-thinking commitments to carbon emissions pathways – aligned to Paris Agreement and 2DC/below 2DC warming scenarios

Source: FTSE Russell.

The index combines FTSE Russell's expertise in climate data and sustainable investment index design with the Transition Pathway Initiative's (TPI) analysis of how the world's largest and most carbon-exposed/carbon-intensive public companies are managing the climate transition.

The index serves as the underlying performance measurement target of a passive equity portfolio.

Adjusting infrastructure index weights for the low carbon transition

The FTSE Global Core Infrastructure TPI Climate Transition Index measures the performance of equities in three core infrastructure sectors (transportation, energy and telecommunications). Constituent weights are adjusted to account for the risks and opportunities associated with

Additional information

For more information on the FTSE TPI Climate Transition Index Series, [visit our website](#).

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