

An investor's guide to net zero by 2050: key takeaways

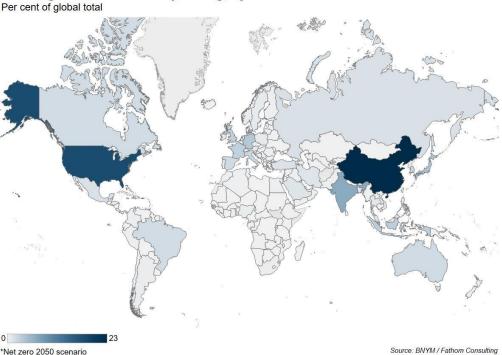
25 October 2022

Brian Davidson



\$100 trillion needs to be invested in specifically 'green' assets for the goal of net zero by 2050 to be achieved, new research by Fathom Consulting and BNY Mellon Investment Management has found – a vast figure, but possible

Global green investment spending, by location*



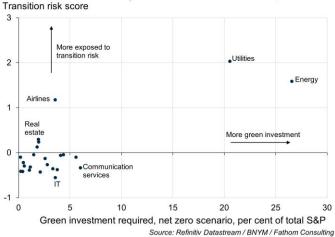
- This figure is not the cost of preventing climate change; in fact, this investment will create enormous opportunities for businesses and investors and in some cases lower costs for the firms and households making those investments²
- Green assets are assets that are not directly responsible for generating greenhouse gas emissions when used but provide the same economic
 function as comparable assets that do generate greenhouse gas emissions when used (electric vehicles or heat pumps instead of petrol-powered
 cars or gas-powered boilers, for example).
- 2. In some cases, the cost of buying and operating green capital is cheaper than running 'dirty' capital. These costs depend on numerous factors which are impossible to predict with certainty. Currently, some green assets are more expensive to run than dirty assets, since the technology is in its infancy or expensive. But these costs are expected to fall over time the speed at which they do will depend on the resources allocated to their development. Assessing these costs was not the objective of this study.

Continued



- The biggest beneficiaries are likely to be the firms and sectors providing the inputs necessary for this investment to happen, such as the makers of intermediate goods, the mining sector and owners of raw materials used in the transition
- There are risks and costs, however, and nearly \$20 trillion of polluting assets will need to be scrapped or retrofitted at a cost before they reach the end of their useful lives; other risks include exposure to carbon taxes and the speed at which decarbonisation will be required
- The utilities and energy sectors are most exposed to these so-called transition risks and are also relatively CO2 intensive; yet nearly half of all corporate sector green investment needs to be done by firms in these sectors

Green investment required and transition risk, S&P 500



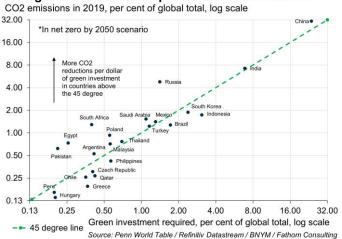
2

- Investing in a manner consistent with the Paris climate accord does not, therefore, require shunning the energy and utilities sectors; instead, investors should seek out companies in those sectors that are willing to make the requisite green investment
- Green investment needs to be scaled up significantly from current levels if the Paris climate goal is to be met, meaning that the boom in ESG and/or climate-related products may have a lot further to run
- More than half of the transition-related investment spending needs to take place in emerging markets, which typically have less access to capital; this creates opportunities, especially investors looking to make a positive impact for climate or ESG purposes

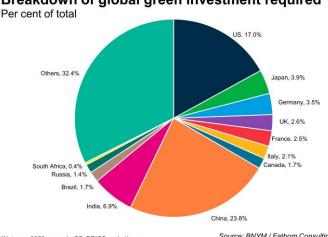
Continued



EMs green investment required* vs CO2 emissions



Breakdown of global green investment required*



*Net zero 2050 scenario G7, BRICS and others

3

Source: BNYM / Fathom Consulting

This is the first in a series of notes which summarises the key findings of Fathom Consulting and BNYM's pioneering, in-depth report An investor's guide to net zero by 2050. Themes outlined here will be developed in more depth in subsequent notes. The report assesses the capital spending requirements associated with the goal of net zero by 2050 and the relevant investment opportunities and risks that would emerge from this investment. The report was written for financial professionals and institutional investors.

An investor's guide to net zero by 2050, by Brian Davidson, Head of Climate Economics at Fathom Consulting, and Shamik Dhar, Chief Economist at BNY Mellon Investment Management, was published on 25 October 2022.

Access the full report

Continued





Further reading:

The bumpy road to climate transition

Allocating the world's carbon budget





This newsletter is a confidential, copyright protected communication intended only for the person to whom it was originally sent. If received in error, please notify the sender and delete immediately. Its intended recipients may not make copies of this newsletter, or distribute it to third parties, without the written consent of Fathom Consulting.

Fathom Consulting is a trading name of Fathom Financial Consulting Limited, a company registered in England & Wales under the Companies Act, company number 04942817, © 2022

Regulatory Disclaimer

FFC LIMITED and all of its affiliates (henceforth FFC) do not conduct "investment research" as defined in the FCA Conduct of Business Sourcebook (COBS) section 12 nor do they provide "advice about securities" as defined in the Regulation of Investment Advisors by the U.S. SEC. FFC is not regulated by the SEC or by the FCA or by any other regulatory body.

This research report has not been prepared in accordance with legal requirements designed to promote the independence of investment research and is not subject to any prohibition on dealing ahead of the dissemination of investment research. Nonetheless, FFC has an internal policy that prohibits "front-running" and that is designed to minimize the risk of receiving or misusing confidential or potentially material non-public information.

The views and conclusions expressed here may be changed without notice. FFC, its partners and employees make no representation about the completeness or accuracy of the data, calculations, information or opinions contained in this report. This report may not be copied, redistributed or reproduced in part or whole without FFC's express permission.

Information contained in this report or relied upon in its construction may previously have been disclosed under a consulting agreement with one or more clients. The prices of securities referred to in the report may rise or fall and past performance and forecasts should not be treated as a reliable indicator of future performance or results. This report is not directed to you if FFC is barred from doing business in your jurisdiction. Nor is it an offer or solicitation to buy or sell securities.

Analyst Certification

I Brian Davidson, the lead analyst, certify that the views expressed herein are mine and are clear, fair and not misleading at the time of publication. They have not been influenced by any relationship, either a personal relationship of mine or a relationship of the firm, to any entity described or referred to herein nor to any client of FFC nor has any inducement been received in relation to those views.

I further certify that in the preparation and publication of this report I have at all times followed all relevant FFC compliance protocols including those reasonably seeking to prevent the receipt or misuse of material non-public information.