

\$100 trillion needed to meet Paris goal – in context

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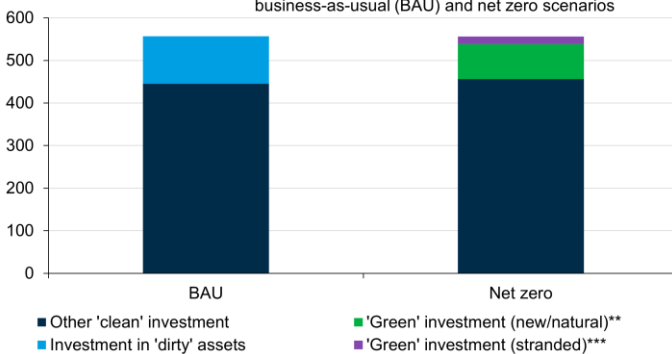


- Earlier this week we published research which concluded that \$100 trillion of investment in non-polluting fixed assets would be needed to reach net zero by 2050 – a colossal figure, but perhaps a lot more attainable than the headline might suggest
- This is not the cost of preventing climate change:¹ it is the sum of investment in non-polluting fixed assets and not too dissimilar to the equivalent investment in polluting assets that would occur in a business-as-usual scenario

Global investment requirements*

USD, trillions

*Cumulative investment between now and 2050 under business-as-usual (BAU) and net zero scenarios



**Green investment replacing naturally depreciated existing dirty capital and supporting new economic growth
***Green investment replacing/retrofitting stranded assets

Source: BNYM / Fathom Consulting

- It also works out to be between 15 and 20% of the total investment needed over this period or 3% of cumulative GDP
- Most of this investment will be used to grow the world's capital stock, supporting future economic growth, or to replace existing 'dirty' capital with clean infrastructure when that capital reaches the end of its useful economic life
- In other words, even in a business-as-usual scenario, most of this investment would be needed anyway; but instead of going into polluting assets and fossil fuels, it will go into green assets
- This investment will have benefits, not least by helping to prevent catastrophic climate change, but it will carry costs too: most notably around \$20 trillion worth of 'stranded' capital will need to be abandoned early or retrofitted
- These figures are best estimates and subject to a huge amount of uncertainty for reasons explained in the paper (accessible via the button below), but they are in the same ballpark as some other forecasters

1. The economic cost of preventing climate change is the subject of much contention and modelling uncertainty and beyond the scope of this paper.

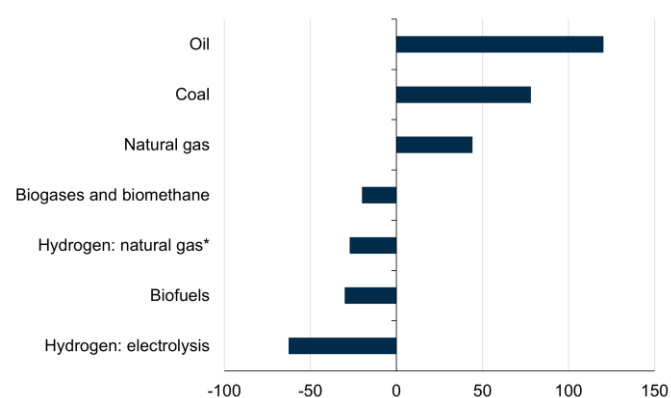




- While recognising this uncertainty, we can confidently conclude that despite the trillions of dollars that have already been committed to align with the Paris goal, the world is still not on track to achieve net zero by 2050
- For that to happen, 'green' investment needs to be scaled up significantly from current levels, pointing to a sustained increase in ESG or climate-related investment opportunities in the years ahead

Over/under investment by fuel supply

2021 vs annual average required in net zero scenario, USD, billions



*With carbon capture, utilisation and storage (CCUS)

Source: BNYM / IEA / Fathom Consulting

This is the second in a series of notes summarising the key findings of Fathom Consulting and BNY Mellon Investment Management's pioneering, in-depth report An investor's guide to net zero by 2050, on the spending on fixed capital to achieve net-zero carbon emissions by 2050

In a report that was aimed primarily at investors, we also assessed the opportunities and risks likely to emerge from what is set to be the largest redeployment of capital in history

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. For more on today's note, see section 1 of the main report.

[Access the full report](#)





Further reading:

[An investor's guide to net zero by 2050: key takeaways](#)

[The bumpy road to climate transition](#)

[Allocating the world's carbon budget](#)



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