



Universal Owner

Missing The Target

Why Asset Managers Have Not Committed to Net Zero

November 2021

Introduction

The Net Zero Asset Managers Initiative (NZAMI) has brought together asset managers with combined holdings worth \$57tn under a framework for achieving net zero by 2050. En route to 2050, members are required to adopt interim decarbonization targets to set them on pace with net zero, beginning with a 2030 target. On November 1st, the opening day of COP26 in Glasgow, the initiative released a report announcing the 2030 targets of 43 of its members.

In this briefing, we break down how these targets are both unambitious and gameable. At best, they put asset managers on track to achieve 40% of the emissions reductions which are necessary by 2030 to keep the world on track with the Paris Climate Agreement. At worst, the initiative allows most asset managers to achieve their 2030 targets by cutting just a few percent of their emissions, while focusing on their portfolio's exposure to emissions, instead of their impact on emissions in the real world. We make four key arguments:

- NZAMI allows members to choose the percentage of their AUM covered by their 2030 targets. In their progress report, the initiative's members set targets covering in between 100% of their AUM and just 0.55%. We combine the percentage of AUM covered by asset managers' targets, with the percentage reduction in emissions they are pledging to achieve across those assets, to reveal that the average effective decarbonization target of the initiative is just **20%**.
- This, however, assumes that the AUM covered by these targets is representative of the emissions profile of their entire AUM. We have no guarantee of that. Asset managers' portfolio emissions are not evenly distributed. A small minority of companies in carbon-intensive sectors account for the vast majority of emissions. We took the equity holdings of BlackRock, Vanguard, State Street, Allianz and LGIM and matched them to emissions data. We found that 10% of their holdings were responsible for 85% of all their portfolio emissions. It follows that even a target covering 90% of AUM could exclude **up to 85% of all emissions**. Only targets covering 100% of AUM escape this loophole, but just 13 of the 43 targets meet this criteria. The rest of the targets cover 80% or less of AUM.
- NZAMI's targets are commitments to reduce 'portfolio emissions', or the emissions of the companies held by asset managers. But this means that whether they are achieved is a function of the emissions that an asset manager is **exposed** to, rather than whether they help change real-world emissions. When it comes to the Paris Agreement, it is irrelevant which companies are exposed to what emissions, all that matters is that real-world emissions are declining on pace for net zero by 2050.
- Asset managers often claim that they cannot divest or screen their fossil fuel holdings because a large proportion of them are locked into index funds. Indeed, this is the rationale many NZAMI members give for only committing to decarbonize a subset of their total AUM. We show that both the rules underlying the indices that these funds track, and the specific basket of securities used to track those indices, involve a huge element of discretion that could be used to green index investing.

The ambition of the targets

NZAMI gives its members latitude over the proportion of their AUM covered by their interim 2030 targets. The targets are to be reviewed at five-year intervals, with a view to ‘ratcheting up’ their scope until they cover 100% of AUM. In practice, this means that members could consistently pledge to decarbonize only a subset of their AUM all the way up until 2050.

The targets released under NZAMI’s progress report on the first day of COP26 display a dearth of ambition. In the report, 43 of the initiative’s members announced targets covering anywhere from 100% of AUM down to a low of just 0.55%. In total, 65% of the assets held by the 43 asset managers were excluded from the remit of the targets. Combining the percentage of AUM covered by asset managers’ targets, with the percentage reduction in emissions they are pledging to achieve across those assets, reveals that the average effective decarbonization target of the initiative is just 20% by 2030. This is far below the 50% reduction in global emissions demanded by IPCC science.

But this figure actually over-states the ambition of the targets, for two reasons. One is that most of these targets are carbon intensity targets (CO₂ per \$ value), which makes them compatible with an absolute increase in emissions. As long as the proportional increase in their low-carbon assets is great enough, asset managers do not necessarily have to do anything about their high-carbon assets. For example, an increase in the value of the tech sector can decrease portfolio carbon-intensity without actually reducing emissions. This is their first and most conspicuous loophole.

Why the targets are gameable

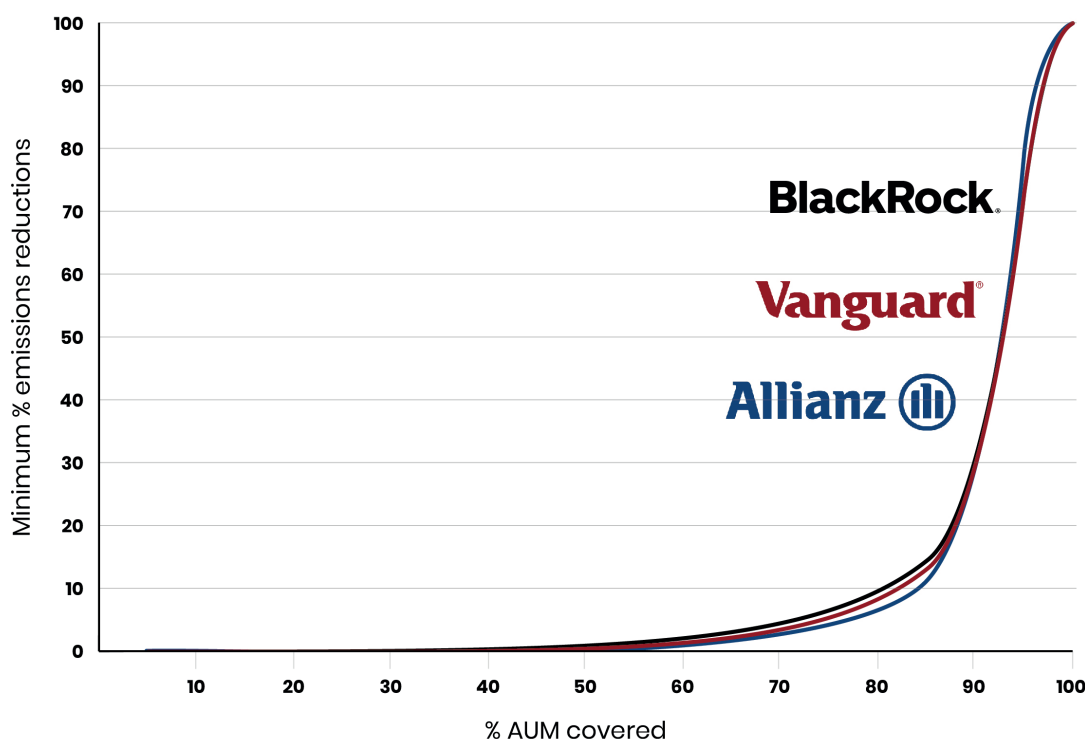
But there is a second, deeper reason why this 20% decarbonisation target over-states the ambition of the initiative. For this assumes that the AUM covered by these targets is representative of the emissions profile of their entire holdings. In reality asset managers can choose which subset of their AUM to include in their target. Asset managers’ portfolio emissions are far from evenly distributed. Rather, they follow an extreme ‘Pareto distribution’ in which a small minority of companies in carbon-intensive sectors like energy, utilities and materials account for the vast majority of their emissions. As an example, a software company will contribute significantly less to an asset manager’s portfolio emissions than an automotive manufacturer for the same dollar invested. We analyzed this relationship by taking the listed equity holdings of five of the largest NZAMI members, BlackRock, Vanguard, State Street, Allianz, and LGIM, and matching it to company emissions data. Given the size of their holdings and the extent of their reliance on market-tracking index funds, we believe these conclusions can, broadly speaking, be generalized to nearly all members of NZAMI.¹

The results are stark. Across these five asset managers, 10% of their equity AUM account for 85% of all portfolio emissions. This means that any target covering 90% or less of AUM could exclude up to 85% of emissions. Given that the average AUM covered by these targets is just 59%, this suggests that the initiative could achieve its targets while reducing just a fraction of its existing emissions. Only targets covering 100% of AUM escape this loophole, but just 13 of the 43 targets released meet this criteria.

One can imagine two strategies by which asset managers could exploit this loophole to game their targets. First, they could rely upon those companies which are either closest to Paris-alignment already, or which have set Paris-aligned targets. This would minimize their need to actively change the business models of

¹ The emissions of some other asset classes, notably sovereign bonds, likely show a different distribution. This is an important question for future research, especially as asset managers begin to extend targets to sovereign bonds.

What is the minimum emissions reduction an asset manager could implement for a given % AUM target?



their investee companies, including recalcitrant heavy emitters. In the International Energy Agency's Net Zero scenario, for example, emissions from electricity generation drop 60% by 2030.²

The Japanese asset manager Nomura's lacklustre 2030 target [reveals](#) the first strategy. Nomura appears to have calculated the percentage of its AUM with Paris-aligned targets and applied its target to that subset (55%) of its AUM. It has taken the least-effort route, abdicating the need actually to do anything to drive decarbonization. Second, an asset manager could achieve the greatest emissions reductions by exiting from their most carbon-intensive holdings, while foregoing the need to drive decarbonization across its portfolio. They might, for example, depend for their emissions reductions on the tapering of the coal industry over the next ten years – which may occur independently of the efforts of any one asset manager.

The point is not that asset managers are bad-faith actors who will maximally exploit any possible loophole. It is that the 'Pareto distribution' of emissions in their holdings, and the fact that NZAMI allows them to set the percent of their AUM covered by targets, makes the framework eminently gameable. Targets are supposed to signal to the market that institutions are binding themselves to specific courses of action, which they can then be held to account to. A target with loopholes fails to do this. NZAMI gives its members the space to claim alignment with a 1.5C trajectory while reducing just a few percent of their existing emissions. What is more, by allowing for this possibility, it actively incentivizes it: for it is the lowest cost route consistent with the initiative. The NZAMI 'ratchet mechanism', which gives members the freedom to choose the percentage of their AUM to be managed in line with the Paris Agreement all the way up to 2050, is fundamentally unfit for purpose.

2: International Energy Agency, 2021, Net Zero by 2050: A Roadmap for the Global Energy Sector, p.54.

The ratchet mechanism runs up against another limitation. The idea of a ‘ratcheting up’ mechanism implies that when companies are aligned with a 1.5C trajectory does not matter, as long as they eventually converge with that scenario. But if an asset manager waits until the 2030s to try and align a massive fraction of its AUM, it will inevitably face the problem that investment decisions made over the preceding decade have locked-in assets with lifetime emissions incongruent with a 1.5C decarbonization trajectory. Indeed, [many](#) climate-critical assets have an average lifetime of over 30 years, such that if new investments are not aligned until after 2030, there is no reason to expect their emissions to fall in line with net zero by 2050. For example, on average, gas-fired power plants have a 30-year lifetime, cement plants a 40 year lifetime, steel plants a 25-year lifetime, ships have a 28-year lifetime, and buildings an 80-year lifetime. There is therefore a real risk that by the time asset managers ratchet up their targets to cover the whole of their AUM, emissions will already have been locked in, and overshooting the Paris Agreement will be a *fait accompli*.

Mistargeting: Exposure is not impact

NZAMI’s headline objective is to ‘help deliver the goals of the Paris Agreement’. The mechanism by which it means to do this is by binding members to setting portfolio decarbonization targets. Members are supposed to achieve a 50% reduction in portfolio emissions by 2030 for the fraction of their AUM to which they choose to apply the target. But while decarbonization goals are needed, they are not by themselves an especially effective means to align with the science of climate change. This is because an asset manager’s exposure to emissions is not a good proxy for their impact on emissions.³

Exposure is a question of the emissions of the companies held in a portfolio, either as a gross figure or per unit of value. By dropping brown assets and buying green assets, an investor can reduce their portfolio emissions. But this is simply a question of who holds which assets, and does necessarily involve any change in the emissions of the underlying assets. Consider two examples. An investment fund that only buys up renewable equity in liquid secondary markets will have little material impact on real-world emissions, even though 100% of its assets could be net zero. This is because the underlying companies have already been financed by their stock issuance on the primary markets, and the investment fund is simply engaging in trades for these stock with other investors on the secondary markets. Similarly, there is a growing trend of public companies selling carbon-intensive assets to private equity and state-owned companies who, not subject to the same transparency and accountability, will have less incentive to reduce emissions than the original owner would have.⁴ In this case, asset managers would witness a fall in their portfolio emissions without having done anything to curtail real-world emissions.

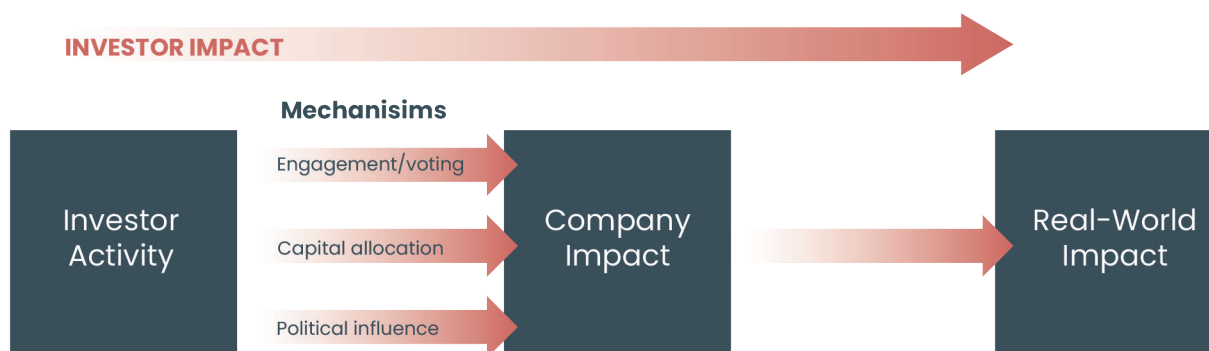
Impact is the change an investor brings about in a company to reduce their emissions. It is a measure of the effect additional to the baseline scenario, of whether the investor actually made a difference. As a matter of analysis, it can be calculated from how far a company changes, and what share of responsibility an investor has for that outcome. It is this, and only this, that will contribute to achieving the Paris Agreement and averting catastrophic climate change. As a recent literature review concluded, there is little reliable evidence to suggest that reducing exposure to emissions by exchanging capital in the

3: On this point, see 2 Degrees Investing Initiative, 2020, ‘Science Based Targets’ for Financial Institutions: Position Deck; 2 Degrees Investing Initiative, 2019, Climate Impact: What it is and how to achieve it.

4: For one conspicuous example, see Common Wealth’s [research](#) on who now owns the UK licenses to search and extract oil and gas from the North Sea.

secondary markets has a significant impact on real-world emissions.⁵

In light of this, it is commendable that the NZAMI commitments include a pledge to ‘prioritize the achievement of real economy emissions reductions within the sectors and companies in which we invest’.



But this is an open-ended pledge that can be interpreted in whatever way is most convenient by any given member, not a quantifiable target or specific policy commitment that can be tracked.

Accordingly, it is crucial that individual members issue commitments about how they will actually achieve real-world impact, for this will require a different and more ambitious menu of policies than simply reducing exposure to emissions. This is essential if the initiative is to make good on its commitment to ‘help deliver the goals of the Paris Agreement’.

Excuses: Index funds can be greened

Asset managers have ridden the wave of the passive revolution. Index funds are diversified baskets of securities designed to track the performance of market indexes to capture beta growth, promising higher risk-adjusted returns than the average investors attempt to beat the market. But because an intrinsic feature of an index fund is that it passively tracks the market, there is the danger that asset managers have locked themselves into auto-financing fossil fuel companies. A recent analysis of 35 of the largest American exchange-traded corporate bond funds (>\$500m AUM) revealed that, between 2015 and 2020, 14% of all the new bonds purchased by these funds were issued by carbon-intensive companies in the oil and gas, utilities and coal mining sectors.⁶ This passive dynamic is often an excuse for inaction.

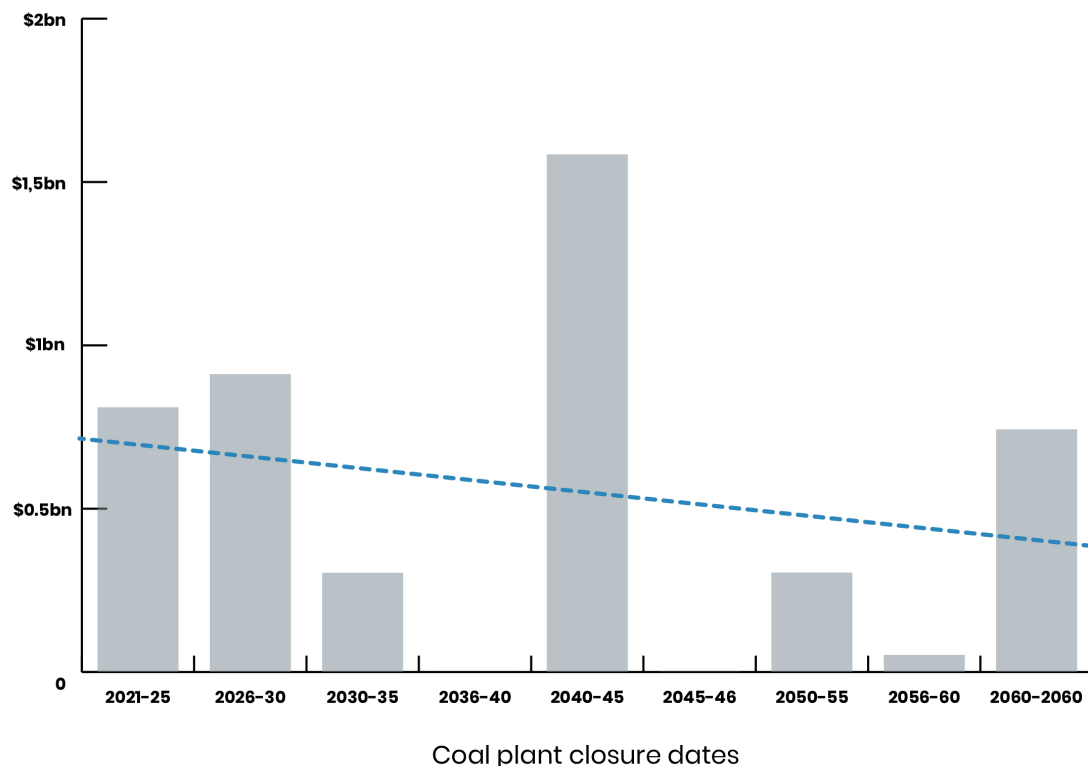
In 2018, BlackRock attempted to [rationalize](#) findings of the vast scale of its thermal coal holdings in the pages of the Financial Times by claiming that because most of its holding were invested via index funds, it was not within its power to divest from them. Two years later, when BlackRock [announced](#) that it would exclude companies that generated >25% of their revenue from thermal coal from its holdings, it applied this policy exclusively to its active funds. The majority of its investments therefore fail to screen for thermal coal. In 2021 it still held some [\\$85bn](#) in the coal sector via its index funds.

We give an up-to-date snapshot of BlackRock’s coal holdings by looking at its iShares bond funds, the majority of which are invested passively. We combine these iShares bonds with data on global coal plant retirement dates. This allows us to calculate the value of iShares bonds held in companies which intend

5: Julian F. Kolbel et al, 2020, Can Sustainable Investing Save the World? Reviewing the Mechanisms of Investor Impact, Organization & Environment, 33(4), p.562. See also Ellen Quigley, 2020, Universal Ownership in Practice: A Practical Investment Framework for Asset Owners.

6: Christian Wilson & Ben Caldecott, 2021, Breaking the Bond: Primary Markets and Carbon-Intensive Financing, Oxford Sustainable Finance Programme Working Paper No.21-05.

iShares bonds holdings in coal producing companies



to run coal-fired plants well past the date compatible with the Paris Agreement. For context, in the IEA Net Zero scenario, emissions from electricity generation drop to zero in advanced economies by 2035 and globally by 2040.⁷ Yet iShares funds currently hold \$2.4bn in bonds issued by companies that intend to continue coal generation past 2040. It is that BlackRock gives coal free reign in its passive funds that allows this.⁸

We are now seeing a pattern play out on a larger scale. Perhaps the most common reason NZAMI members have given for the limited coverage of their targets, is that they can only reallocate the capital within their active funds. But this is a myth invented to excuse inaction. Greening index funds may be difficult, but it is well within the power of the financial system. Index funds can be greened at one of two levels: by changing the underlying indices, or changing how index funds track those indices. Contrary to widespread belief, neither of these operations are the passive playing-out of mechanical rules.

Indices are constructed by private companies like S&P Global and FTSE Russell according to self-created methodologies for including and excluding companies.⁹ It involves the selection and weighting of financial criteria, of company size, industry, volatility, liquidity, dividends and so on. These criteria are stated with varying levels of determinacy. The S&P 500, for example, defines certain thresholds that companies have to meet to be eligible for inclusion, but some of these thresholds are stated in the equivocal language of what 'should' be rather than what must be. There are over 600 companies that meet these thresholds –

7: International Energy Agency, 2021, Net Zero by 2050: A Roadmap for the Global Energy Sector, p.117.

8: The company-level coal production data was provided by [Global Energy Monitor](#).

9: In the following we draw heavily on Adriana Robertson's research. See Adriana Z Robertson, 2020, The (Mis)Uses of the S&P 500 (working paper); Adriana Z Robertson, 2019, Passive in Name Only: Delegated Management and "Index" Investing, Yale Journal of Regulation, 36(2). See also Johannes Petry et al., 2019, Steering capital: the growing private authority of index providers in the age of passive management, Review of International Political Economy, 28(1), pp.152-176.

leaving it to the discretion of the Index Committee to elect the 500 to make it into the listing. But these are only thresholds for inclusion, not exclusion. If a constituent sinks below this water level, it 'is not deleted unless ongoing conditions warrant an index change'. In other words, the decision is entirely discretionary. While the best-known example, the S&P 500 is far from the most extreme case. Some indices treat their methodologies as proprietary information, or contain only the most abbreviated methodologies. The NASDAQ U.S. Dividend Achievers Select Index's methodology is all of 40-words, for example, despite serving as the underlying index for funds worth about \$39 billion.

What is more, these rules are not fixed in place. The methodology for the S&P 500 changed over eight times between January 1st 2015 and April 30th 2018, while the Russell U.S. Equity indices were modified four times between July 2017 and May 2018. In view of all of this, it is incorrect to say that index funds are 'passively' managed. The truth is that their management is delegated to indices providers. Asset managers could use their market power to push indices to progressively screen carbon-intensive companies along a trajectory commensurate with a 1.5C scenario, and help to push for policy to mandate this. There is also the possibility of asset managers self-indexing, or creating their own greened indices.¹⁰ But the liquidity of established indices generates 'network effects' drawing in investors, while asset managers face profound conflict of interest problems self-indexing (e.g., if BlackRock were to create its own indices including companies in which it has major holdings elsewhere).¹¹

Asset managers can also green their index funds by changing how they track indices. It is not the case that they simply buy up securities exactly matching the composition of indices. Rather, they use stratified sampling to create a representative basket of securities that is liquid and keeps transaction costs down, while minimizing 'tracking-error'.¹² The number of companies whose securities are held by a fund can be significantly lower than the number of constituents of the indices being tracked. This gives space for the introduction of screening criteria. Indeed, market practitioners at Amundi were able to replicate the tracking-error of a mainstream bond index fund while selecting against carbon-intensive companies, resulting in a 50% reduction in fund emissions.¹³ This suggests that asset managers can do a great deal without even modifying the underlying indices they track. Asset managers could either tweak their existing fund products, or replace their conventional index funds with green alternatives, and elevate them into their default offering for clients.

10: Patrick Jahnke, 2019, Holders of Last Resort: The Role of Index Funds and Index Providers in Divestment and Climate Change (working paper), pp.20–21.

11: Established indices are not immune to this problem. See Kun Li et al., 2021, Is Stock Index Membership for Sale?, National Bureau of Economic Research, Working Paper 29365.

12: See, for a basic description, State Street, 2021, Fixed Income ETF Mechanics: Understanding the Processes of Creation, Redemption and Baskets.

13: Marielle de Jong & Anne Nguyen, 2018, Weathered for Climate Risk: A Bond Investment Proposition, Financial Analysts Journal, 72(3), pp.34–39.

Conclusions and Recommendations

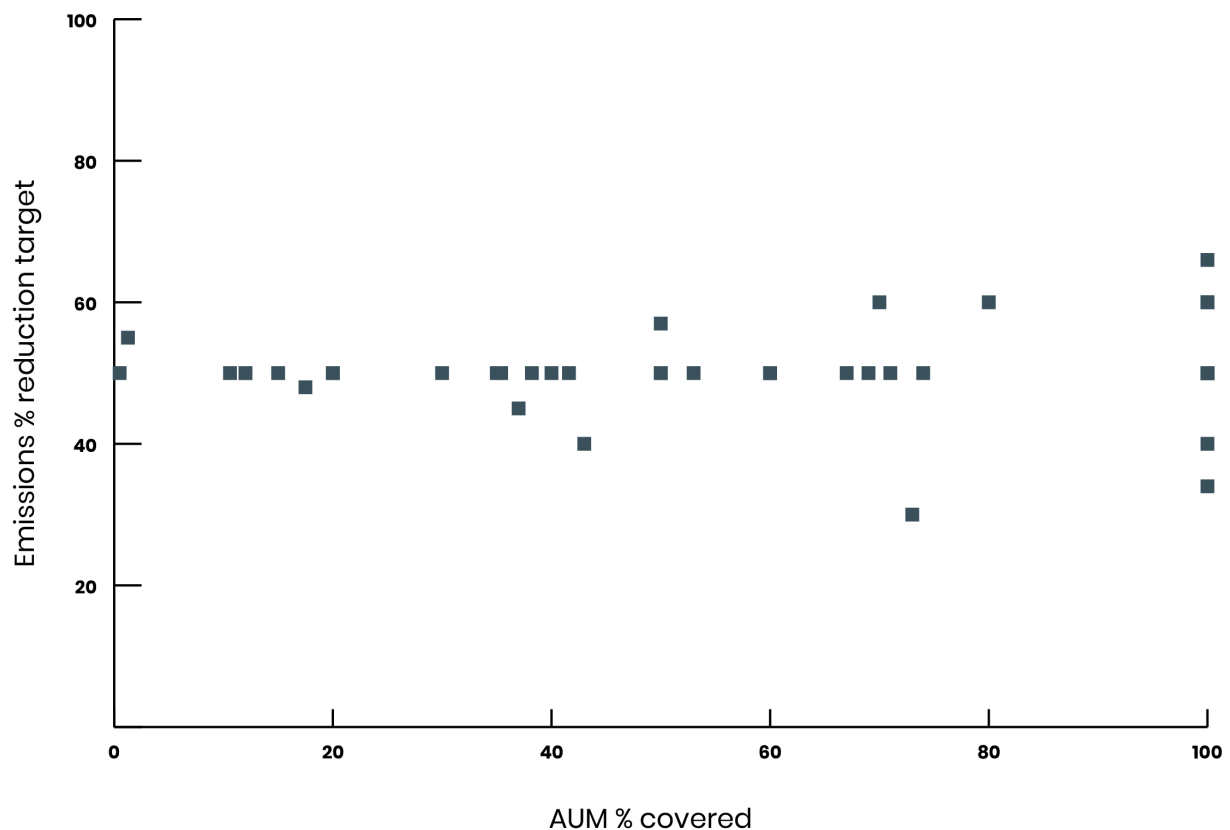
- The initiative's emphasis upon portfolio emissions is misplaced and should be dropped. How exposed an asset manager is to emissions is a poor proxy for their effect on real-world emissions. By claiming that portfolio emissions targets contribute to delivering the Paris Agreement, the initiative risks industry-wide greenwashing.
- The NZAMI is an attempt to align asset managers with the science of climate change. Its logical starting point should therefore be how it can help transition companies across the market, not how it can rebalance its holdings.
- The initiative's *raison d'être* should be monitoring and achieving real-world impact. It could monitor companies' internal investment decisions, commit members to taper the buying of bonds and other sources of primary financing to misaligned companies and engage in forceful stewardship with escalating sanctions against laggards.
- NZAMI should work towards an industry-standard operationalization of what an asset manager's 'fair share' contribution to real-world decarbonization looks like. For this framework and the commitments adopted under it to be reliable and legitimate, it should be reviewed by expert third parties from civil society, public policy and climate science. Institutions should then be regularly reviewed according to whether they are meeting this standard.
- One of the highest-impact steps the initiative could take would be to launch a joint program to rewire index investing. It could issue a joint 'Statement of Expectations', demanding that index operators screen their holdings commensurate with a Paris-aligned trajectory. It should also make clear that, if indices providers can or will not meet this demand, asset managers will support political regulation to mandate it. NZAMI members could, in the meantime, make Paris-aligned index funds its default offering to clients.

Appendix 1 – NZAMI targets

In the following graph we plot the two key dimensions of the NZAMI targets released at COP26 2021.

The X axis shows the percentage AUM covered by the targets. As we argue, which specific assets are included in this coverage is all-important. The Y axis shows the percentage reduction in emissions asset managers pledge to achieve across those covered assets. The standard expectation is 50%, but there is some variation above and below this mark. The graph does not distinguish between absolute and intensity targets. Intensity targets are more lax. Asset managers can reduce their emissions intensity while increasing their absolute emissions, as long as they are increasing their low-carbon holdings at a greater rate than their high-carbon holdings.

NZAMI targets: % assets covered,
% decarbonization pledged



Appendix 2 – Emissions and AUM

The following table compares the % emissions that could be excluded from a given % AUM alignment target. The research is based on an analysis of the financial institutions equity portfolios. While there is the potential for disclosure gaps, we believe this is a representative sample based on available data. The table is not a critique or comment on any one asset manager. Instead, we are showing how asset managers that reflect the market's composition could, in theory, game alignment targets. The table represents the 'perfect game'. The perfect game is achieved by organizing each of the security holdings from the highest to lowest emissions per \$ value held. We then remove (i.e., divest from) securities one-by-one, starting with the most emissions-intensive securities and going down to the least intensive. This demonstrates the potential for asset managers to game their alignment targets by allowing the targets to cover a large % of their AUM but not including their most emissions-intensive holdings in this coverage.

Target % \$AUM committed	Allianz	BlackRock	LGIM	State Street	Vanguard
\$ equity analyzed →	\$160bn	\$3.8bn	\$0.3bn	\$1.5bn	\$3.6bn
95%	79%	73%	70%	70%	73%
90%	12%	15%	17%	14%	15%
80%	6%	8%	8%	8%	7%
70%	1.9%	2%	2%	2%	2%
60%	0.8%	1.2%	1.2%	1.2%	1%
50%	0.4%	0.6%	0.6%	0.7%	0.5%
40%	0.3%	0.3%	0.4%	0.3%	0.3%
30%	0.2%	0.2%	0.3%	0.3%	0.2%
20%	0.1%	0.1%	0.2%	0.2%	0.1%
10%	0%	0.1%	0.1%	0.1%	0.05%

Appendix 3 – Targets and commitments

Target setting NZAMI firm	AUM committed (\$bn)	% AUM committed	2030 GHG emissions reductions target
Anaxis Asset Management	0.538	100	Intensity
Arisaig Partners (Asia) Pte Ltd	5	100	Intensity
ATLAS Infrastructure	2	100	Intensity
Cardano	45	100	Intensity
DigitalBridge	32	100	Absolute
FAMA Investimentos	0.45	100	Absolute
Generation Investment Management	36	100	Absolute
Handelsbanken Fonder AB	87	100	Intensity
Nykredit Asset Management	78.7	100	Intensity
Storebrand Asset Management	120	100	Absolute (2025)
Terra Alpha Investments LLC	0.12	100	Absolute
Van Lanschot Kempen	123.8	100	Absolute
WHEB Asset Management	2.03	100	Absolute
Rathbone Greenbank Investments	2.3	80	Intensity
Inherent Group, LP	0.742	74	Intensity
Capricorn Investment Group	7.519	73	Absolute
Sarasin & Partners	19.93	71	Intensity
Aviva Investors	346	70	Intensity
Calvert Research and Management	24.88	69	Intensity
Swedbank Robur Fonder AB	146	67	Intensity
Schroders plc	396	60	NA ¹⁴
a.s.r. Asset Management	36	60	Intensity
Trillium Asset Management	3	60	Absolute
Asset Management One Co. Ltd.	273	53	Absolute
Maitri Asset Management (Maitri)	NA	50	Intensity
CCLA Investment Management	19.3	50	Intensity
La Financière de l'Echiquier	17.4	50	Intensity
IFM Investors Pty Ltd	55.9	43	Absolute
Jupiter Asset Management	81.8	41	Intensity
Robeco	87.3	40	Intensity
Legal & General Investment Management (LGIM)	688	38	Intensity

14: The 2030 target type is not clear from the NZAMI's [Progress Report](#), pp.68

NN Investment Partners	133.5	37	Intensity
DWS Group	344	35	Intensity
Fidelity International (FIL)	151	35 ¹⁵	Intensity
abrdn	233	30	Intensity
UBS Asset Management	235	20	Intensity
M&G Investments	80	20	Intensity
Nordea Asset Management (NAM)	55.4	17	Intensity
AXA Investment Managers	159.3	15	Absolute
BMO Global Asset Management (EMEA)	16.3	12	Intensity
J. Safra Sarasin Sustainable Asset Management	4	12	Absolute
Wellington Management Company	146	10	Intensity
GIB Asset Management	0.16	1	Absolute
BMO Global Asset Management (Canada)	0.7	0.5	Intensity

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About Universal Owner

Universal Owner is a London and Edinburgh-based think tank that aims to systemically transform the financial sector around climate change and biodiversity through data-driven analysis. It provides consultancy services to asset owners, asset managers, and philanthropic organizations.

More information can be found here: <https://www.universalowner.org/>



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¹⁵: Fidelity International (FIL) set a target covering 30% of its AUM, at the same time as declaring a firm-wide 50% emissions reduction goal.