

Systemic Risk Reduction Funds: Why Impact Investing Needs To Get Selfish

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Key Findings

Asset owners are increasingly concerned by systemic risk, which modern portfolio theory remains fundamentally ill-equipped to address.

IEEFA proposes the establishment of "systemic risk reduction" funds, designed to support the long-term health of investors' wider portfolios instead of short-term returns at the fund level.

Legal discourse of fiduciary duty is already evolving. The door has opened for funds targeting systemic risk reduction to proliferate as part of broader investor strategies.

Systemic risk reduction funds represent a potentially significant growth market and business opportunity for asset managers while also providing a stepping stone to system-level investing.



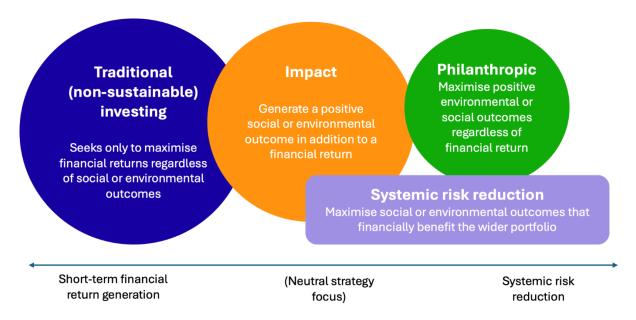
Executive Summary

While modern portfolio theory (MPT) provides a framework for managing idiosyncratic risk, diversification remains largely powerless to combat systemic risk. Long-term portfolio values are under threat. Unlike the models upon which their investments are built, asset owners are not blind to systemic risks. Rather the opposite – market intelligence shows growing consternation. And while climate change remains the most pressing concern for asset owners, nature loss, geopolitical instability, social issues and technological disruption are increasingly seen as interconnected, escalating threats. In Europe, pension funds have already begun to pull mandates from managers failing to take these concerns seriously.

Forced to look beyond MPT, investors have traditionally relied on corporate engagement to combat systemic risk, but questions are being asked as to how meaningful such activity has been. IEEFA firmly believes that financial market participants are not bystanders. However, with modern investment architecture built almost entirely around MPT, financial product development itself is part of the problem. Strict short-term performance objectives severely restrict existing approaches from meaningfully targeting sources of systemic risk. In response, IEEFA proposes the establishment of "systemic risk reduction" (SRR) funds, a new breed of impact vehicle that would sit outside traditional strategic asset allocation.

Whereas an impact product is designed as a standalone proposition that broadly seeks fund-level financial returns alongside positive social or environmental outcomes, an SRR vehicle should specifically target impact outcomes that support the health of an investor's wider portfolio. So that systemic goals might be more aggressively pursued, such funds must adopt only very long-term fund-level performance objectives (over periods of *at least* 10 years). Despite foregoing near-term return expectations, investing for SRR is more self-serving a philosophy than standard impact investing. This is because an SRR vehicle should focus on impact outcomes that are likely to be most financially beneficial to the universal owner's wider portfolio, as opposed to those that might be most societally beneficial. Impact outcomes are quite clearly a means to an end, rather than the ultimate goal. This distinction matters. SRR funds should not be confused with philanthropy, even if fund-level return targets were to be removed entirely. Rather, they should be seen as a pragmatic part of a broader investment strategy – one that aims to reduce an asset owner's wider exposure to escalating threats.

Investment Strategies on a Financial Return vs. System Benefit Scale



Source: IEEFA.

Two methods for building SRR products are proposed with a focus on climate change. One approach targets system-wide decarbonisation through aggressive impact investments selected as a hedge to other parts of a wider portfolio. The other seeks decarbonisation through unconstrained, forceful engagement of outsized systemic risk contributors. IEEFA argues that the two are not mutually exclusive – in fact, clear synergies mean that a combined approach could be far stronger than the sum of its parts.

Once a potential roadblock, recent legal interventions on fiduciary duty are increasingly supportive, opening the door for products without short-term fund-level return goals to proliferate as part of wider investor strategies. For active asset managers, SRR funds represent a timely strategic opportunity. As asset owners are expecting more from their managers on systemic risk, first movers will not only help address some of the most pressing threats facing global markets but will also gain a competitive, commercial edge in what may become a major growth area for institutional capital – system-level investing.

Modern Portfolio Theory's Blindspot

For decades, modern portfolio theory (MPT) has been the bedrock of the asset management industry, encouraging asset owners to diversify their investments in pursuit of enhanced risk-adjusted returns. Dating back to 1952 and measuring risk simply in terms of price volatility, the now-ubiquitous model defines risk as either:

- Idiosyncratic specific to an individual asset or group of assets with shared characteristics (also referred to as specific risk)
- Systematic inherent to the market as a whole and largely unavoidable

According to MPT, these two together represent the sum of all risk. While systematic risk is considered inescapable, an investor can minimise idiosyncratic risk by spreading wealth out across assets with imperfectly correlated returns profiles. The benefits of diversification can be proven mathematically using efficient frontier analysis. Figure 1 displays the annualised risk and return of two indexes, calculated using performance data up to December 2024 (represented by the red and green dots). Combining the monthly return series of these two indexes in varying proportions allows us to simulate different levels of diversification, for which we can also plot the risk/return outcomes. Crucially, the result is non-linear. This pronounced curve demonstrates that through fund diversification, expected risk (volatility) can be reduced by proportionally more than expected return.

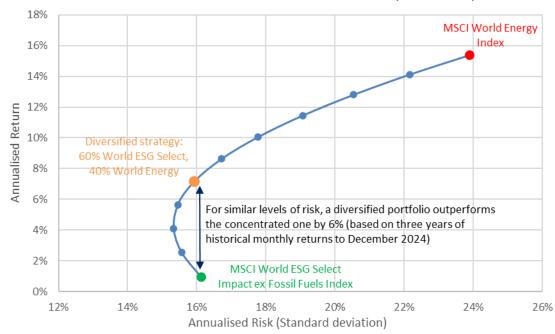


Figure 1: The Benefits of Diversification – the Efficient Frontier (Three Year)

Source: MSCI, IEEFA.

Note: Gross US\$ three years of monthly returns to December 2024.

Through this principle, and as testament to the success of MPT (as well as, subsequently, strategic asset allocation), the investor marketplace is today chiefly composed of "universal owners". This is to say, investors holding such broad economic exposures and long-term investment horizons that they effectively own a small but representative slice of the global economy.

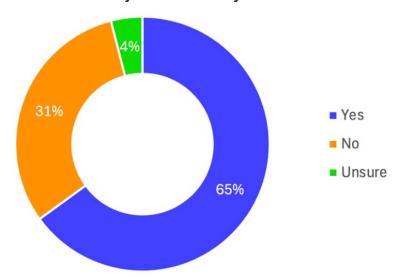


Figure 2: Global Asset Owner Survey: Do You Identify as a Universal Owner?

Source: Thinking Ahead Institute. July 2024.

Note: Survey of globally important asset owners with collective assets under management of more than US\$6 trillion.

Naturally, universal owners have a vested interest in the long-term health of global capital markets because, through diversification, their own returns closely mirror those of the markets in which they invest. Indeed, investor wealth relies on market performance far more than it does alpha (excess return versus a benchmark). Decompositions of absolute return typically show that even the most successful active managers (able to beat a benchmark with regularity) might realistically expect to derive just 10-15% of long-term capital appreciation from outperformance. The importance of beta (returns attributable to wider market performance) is perhaps most obvious to passive investors, to whom success is otherwise measured in single basis point tracking errors.

The problem for universal owners is that idiosyncratic and systematic risk fails to tell the whole story and that a third category – "systemic risk" – not only exists but threatens to permanently suppress beta over time. Systemic risk was once a term reserved for contagion associated with financial sector stress (particularly weakness in the banking system). But the COVID-19 pandemic underlined how both stimuli and transmission mechanisms for systemic risk can be much further reaching.

¹ Russell Investments. Excess returns or excess expectations? 2020.

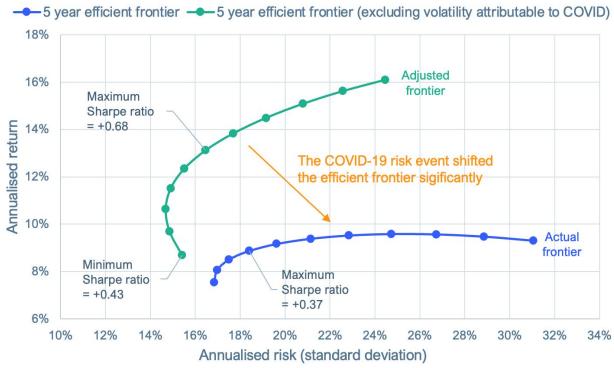
² Morningstar. What's Behind Your Fund Returns? 13 August 2015.

Systemic risk

Risk associated with localised stimuli, but which through complex interdependencies and compounding effects can impact entire systems and even threaten system collapse. Systemic risk cannot be mitigated through diversification, but neither is it simply inherent to a normal functioning market. Systemic risk *can* be mitigated by identifying potential stimuli and minimising contributing factors.

Efficient frontier analysis helps illustrate why diversification and strategic asset allocation alone cannot adequately protect investor wealth from systemic risks. Below, we repeat the analysis from Figure 1 using data for a five-year period to include the impact of a systemic risk event, the COVID-19 pandemic. By then removing two months of significant downside volatility at the outbreak (February and March 2020), as well as the market rebound following successful vaccine trials (November 2020), we can visually compare efficient frontiers – one including the systemic risk event and another without.

Figure 3: The Limitations of Diversification – Adjusted Efficient Frontier (Five Year)



Source: MSCI, IEEFA.

Note: Gross US\$ five years of monthly returns to December 2024. Efficient frontier shown for MSCI World Energy vs. MSCI World ESG Select (ex fossil fuels). Risk-free rate = US Ten Year Treasury.

Predictably, the systemic risk event markedly shifts the efficient frontier, even after wider markets largely recover. Simplifying assumptions have obviously been made, but Figure 3 provides a stark warning to investors. No level of strategic asset allocation can match the risk-adjusted returns that could have been possible, absent the systemic risk event. Indeed, the maximum Sharpe ratio found along the actual (blue) frontier is +0.37, lower than a minimum of +0.43 (the non-diversified outcome) that could have been achieved had systemic risk been mitigated before manifesting in capital markets (green). Limitations to MPT crystallise when viewed through this lens. Diversification is powerless to combat systemic risk-induced frontier shifts. Far from accepting risk is systematic and unavoidable, investors must go beyond MPT to protect risk-adjusted *absolute* returns. This means identifying and mitigating stimuli (financial, social, political, technological, environmental) before they impact capital markets. Often this will require owners address the risk contributions made by their own investments.

The above illustration relates to risk that largely went unnoticed by financial actors before the event itself, a characteristic often associated with systemic risk. Acute risk events like a pandemic produce damaging shocks, but resilient markets typically bounce back with few lasting scars, and controls can be put in place to prevent repeat. In theory, the curve snaps back to where it was pre-COVID. Yet other forms of systemic risk are far more problematic to investors because they slowly but permanently degrade efficient frontier curves. Climate change, for example, is now widely regarded as the most dangerous systemic risk given the financial implications are not only significant but effectively irreversible.

Rising Asset Owner Concerns Over Systemic Risk

Unlike the models upon which they have come to rely, investors are not blind to systemic risks. Thanks in no small part to global risk events including the subprime debt-induced financial crisis (GFC, 2007-2009) and more recently the COVID-19 pandemic (2020-2021), discourse of systemic risks has moved from the margins to the mainstream.

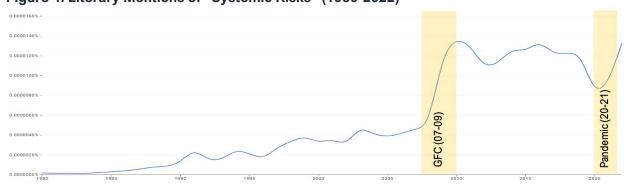


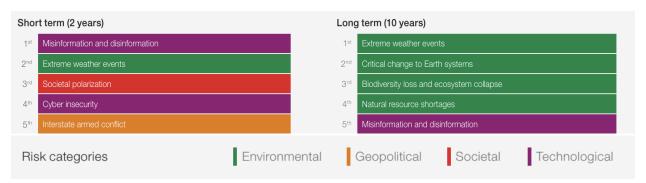
Figure 4: Literary Mentions of "Systemic Risks" (1980-2022)

Source: Google Ngram. Note: Data as of April 2025. As climate modelling advances and the impact of planetary warming weighs more obviously on financial returns, asset owner concern on systemic risk is on the rise. Last year's *Global Asset Owner Peer Study Report* from the Thinking Ahead Institute found that 88% of asset owners surveyed (with over US\$6 trillion in assets under management) believe global systemic risk will grow in both incidence and size over the next 10 years.³

Indeed, asset owners are emerging as the most vocal and consistent advocates for addressing systemic risks, even as other financial actors retreat from their commitments. Earlier this year, a joint statement issued by a predominantly UK-based asset owner coalition promised to hold managers to account for failings on climate stewardship. The opening line read simply: "Climate change presents a systemic and material risk to economies and financial markets." The People's Pension made good on those promises just a month later, terminating a longstanding relationship with State Street on grounds of misalignment over climate stewardship. Shortly thereafter, Akademiker Pension followed suit. With similar warnings being made by asset owners outside of Europe, managers would do well to take growing asset owner concerns seriously.

It is worth also noting that although investors remain most concerned by environmental risks over the long term (10 years), short-term (two-year) forward risk concerns are varied. Moreover, asset owners increasingly view climate and nature, geopolitical instability, societal issues and technological disruption as interconnected, escalating threats.⁶

Figure 5: Global Systemic Risks, Ranked by Severity



Source: World Economic Forum. Global Risks Perception Survey. 2024.

³ Thinking Ahead Institute. Global Asset Owner Peer Study Report 2024. July 2024.

⁴ People's Partnership. <u>Asset Owner Statement on Climate Stewardship</u>. March 2025.

⁵ Financial Times. New York pension funds put asset managers on notice over climate plans. 22 April 2025.

⁶ World Economic Forum. The Global Risks Report 2024. January 2024.

Combatting Systemic Risk as an Investor

Focusing on climate change, recent IEEFA research into universal ownership explores how active owners have almost exclusively relied on corporate engagement to drive down the systemic risk contributions of investee companies.⁷ Yet investors are increasingly questioning whether they can move the needle through discourse and voting.⁸ This is particularly true as it relates to engagement with the fossil fuel industry, the single largest contributor to climate change as a systemic risk. As the limitations of corporate engagement become increasingly apparent, so too do the realities of the hostile conditions in which stewardship teams operate. The weaponisation of antitrust rhetoric in the US, coupled with aggressive silencing tactics from investee companies, underscores the need for universal owners to be more pragmatic in their approaches.

In previous research, IEEFA proposed that universal owners supplement active ownership strategies to encourage systemic de-risking through several key actions that can be incorporated into active ownership frameworks:

- Integrate "systemically adjusted" valuation techniques
- Collaborate with sovereign stakeholders
- Endorse carbon markets (as a climate change-specific measure)
- Expose and stymy hypocritical corporate lobbying
- Leverage relationships with banks
- Keep divestment options open

For discussion of these topics, please see IEEFA's earlier research. 9,10 Although discourse is put forward in terms of combatting climate risk stimuli, the recommendations can largely be transposed onto any known source of systemic risk. That same research further argues that despite growing asset owner concern, action on "systemic risk reduction" (SRR) is being constrained by traditional product development and far too narrow fund-level interpretations of fiduciary duty, both of which remain shaped entirely by MPT.

In perhaps the largest departure from existing active ownership frameworks, IEEFA recommends the establishment of **systemic risk reduction funds** to explicitly target aggressive decarbonisation (or indeed other systemic risk factors) above the need for short-term return maximisation. This report returns to the topic to refine some of the concepts raised.

⁷ IEEFA. Universal ownership: Decarbonisation in a hostile engagement environment. 26 September 2024.

⁸ PGIM. <u>Great Expectations: Is engagement living up to its promise?</u> 21 March 2024.

⁹ IEEFA. Universal ownership: A call for practical implementation. 8 May 2024.

¹⁰ IEEFA. Universal ownership: Decarbonisation in a hostile engagement environment. 26 September 2024.

What Is Systemic Risk Reduction Investing?

Investing for SRR can be considered a subset of impact. Whereas an impact product is designed as a standalone proposition that broadly seeks fund-level financial returns alongside positive social or environmental outcomes, an SRR vehicle should be designed specifically to target impact outcomes that support the health of an investor's wider portfolio. To effectively target SRR, such products must adopt only very long-term fund-level performance objectives, over periods of *at least* 10 years, but ideally longer. Despite foregoing near-term return expectations, investing for SRR is more self-serving a philosophy than typical impact investing. This is because an SRR vehicle should focus on impact outcomes that are most financially beneficial to the universal owner's wider portfolio, as opposed to those that might be most societally beneficial. Impact outcomes are quite clearly a means to an end, rather than the ultimate goal. Because of this inherent selfishness, SRR investments should not be confused with philanthropy, even if fund-level return targets were removed entirely.

Philanthropic Traditional Impact Maximise positive (non-sustainable) environmental or Generate a positive investing social outcomes social or environmental regardless of outcome in addition to a Seeks only to maximise financial return financial returns regardless of social or environmental outcomes Systemic risk reduction Maximise social or environmental outcomes that financially benefit the wider portfolio Short-term financial (Neutral strategy Systemic risk return generation focus) reduction

Figure 6: Investment Strategies on a Financial Return vs. System Benefit Scale

Source: IEEFA.

This philosophy is not radical. In fact, examples are commonplace. For instance, professional football teams often invest in local communities, grassroots programmes and anti-discrimination campaigns to sustain the sport's broader appeal. Such initiatives don't benefit teams in the same way a star player might, but what does on-pitch success matter if a sport's popularity fades? Social benefit may result from a club's actions, but those actions are unlikely to be entirely philanthropic. Similarly, an SRR philosophy seeks not to generate short-term returns at the level of the investment but to allow an investor's wider portfolio to continue effectively doing so. And just as the success of a football club's social initiatives wouldn't be measured by on-pitch results, SRR vehicles would logically sit outside of traditional strategic asset allocation models.

A Gap in the Market

Either through outdated product development that continues to be built entirely around satisfying MPT, or simply due to inherent limitations, existing impact offerings are broadly ill-suited to the genuinely forceful reduction of systemic risk. Below we touch on some of the factors that underscore why new products are required and why it is that so far neither existing active nor passive approaches result in vehicles properly equipped to counter significant tail risks posed to wider investment portfolios.

Active Investing's Short-Term Performance Blinkers

Given one is a subset of the other, differences between IEEFA's proposed SRR investing and impact investing are nuanced, yet they are meaningful. To perhaps best illustrate this, the vast majority of existing active impact products still interpret the financial half of their mandate as maximising risk-adjusted returns, just with the caveat that investments must additionally pass a minimum social or environmental bar. This remains most obvious where alpha (excess return versus a benchmark) appears as an investment objective.

Figure 7: Example Impact Fund Investment Objectives



 The Fund also aims to contribute to a more sustainable and inclusive world through investing in companies whose products and/or services contribute to impact themes addressing critical social and/or environmental challenges, measured over at least a five-year period.



Source: Baillie Gifford, M&G, Aviva, Abrdn.

M&G Climate Solutions Fund

a sub-fund of M&G Investment Funds (10) Sterling Class A – Accumulation shares ISIN no. Managed by M&G Securities Limited

Objective and investment policy

Objective:

The fund aims to

 provide a combination of capital growth and income to deliver a return net of the Ongoing Charges Figure that is higher than the MSCI World Index over any fiveyear period; and

 invest in companies that aim to deliver solutions to the challenge of climate change.

Aviva Investors Climate Transition Global Equity Fund, Class 2, Accum Investors Investment Funds ICVC (ISIN: GB00BLNQ1978). The Fund is managed t

OBJECTIVES AND INVESTMENT POLICY

Objective: The Fund aims to grow your investment and provide an average annual net return greater than the MSCI® All Country World Index (the "Index") over a 5 year rolling period by investing in shares of global companies responding to climate change by orientating their business models to be resilient in a warmer climate and a lower carbon economy; or providing solutions to mitigate climate change or help communities adapt to the adverse impacts of climate change.

Even where the financial objectives of impact products are more ambiguous, they normally mirror those of "non-impact" counterparts offered by the same manager. This suggests that in the vast majority of cases, return expectations of impact funds do not materially differ from those of standard investment vehicles.

Figure 8: Spot the Difference? Impact vs. Non-Impact Fund Objectives

Impact product Non-impact product Pictet - Emerging Markets Pictet - Global Environmental Opportunities **OBJECTIVES AND INVESTMENT POLICY OBJECTIVES AND INVESTMENT POLICY** Objective To increase the value of your investment. To increase the value of your investment while seeking to achieve a positive environmental and/or social impact. Reference Index MSCI EM (USD), an index that does not take into account Reference Index environmental, social and governance (ESG) factors. Used for MSCI AC World (EUR), an index that does not take into account environmental, social and governance (ESG) factors. Used for risk monitoring, portfolio composition, risk monitoring, performance objective and performance objective and performance measurement. performance measurement.

Source: Pictet Asset Management.

Short-term performance objectives are a holdover from standard active product development, where they have matured for good reason – asset owners have traditionally demanded them to prevent giving their investment managers too much rope for fiduciary underachievement (as viewed through MPT and strategic asset allocation). The investment management industry has responded in kind by offering products and investment processes built to outperform over these time horizons. Put simply, until now, asset managers have been heavily incentivised to focus on fund-level return generation over a handful of years because that is what asset owners have judged them on.

The problem, particularly as it relates to impact products, is that this process constrains the potential system-level benefit. Again, using climate change as an exemplar of systemic risk, it is quite likely that the greatest decarbonisation opportunities are less attractive on a risk-adjusted, five-year forward-looking basis. They may be early-stage technologies some way from commercial readiness, or perhaps success is contingent on governments (or other market participants) providing the enabling environment. Technologies like electric vehicles, heat pumps, alternative proteins and electric arc furnaces are expected to begin outcompeting incumbents over the next five years, but timelines for other technologies are less immediate (see Figure 9 below).

In the case of transition-focused funds, investors may need to encourage carbon-intensive companies to make business decisions that are idiosyncratically damaging in the short term. How aggressively investors are willing to pursue transition goals, while still needing to outperform over the short term, is difficult to say. Realistically, by setting the performance bar as above-market return over periods sometimes as short as three years, significant and potentially transformative decarbonisation opportunities are likely being systematically overlooked.



Figure 9: Expected Commercial Tipping Points for Various Climate Technologies

Source: UBS Sustainability and Impact Institute. October 2024.

Note: Tipping point is defined as the time at which technologies begin to rapidly outcompete incumbents.

This rather blinkered approach to product development understandably proliferated while looming systemic risks were poorly recognised and MPT was seen as the only game in town. But it appears increasingly anachronistic now that asset owners with long-term investment horizons better understand the dangers of ignoring systemic risks. By starting from a base of only very long-term return expectations, a systemically minded investment process not only better aligns with the average horizon of your typical asset owner but can more aggressively allocate and engage to achieve maximum system-wide benefit. Presupposing that the investments most likely to generate wider portfolio benefit are less likely to generate short-term return is perhaps overly pessimistic, but such an investment strategy can clearly go further than traditional impact investing because it needs not cherry-pick only the most immediately profitable opportunities.

Passive Investing's Negativity Problem

Inherent limitations in passive investing as an approach constrain its ability to combat systemic risk. To understand why, we need only look at how the marketplace for passive climate-related products has developed. Today, European investors dominate ownership, with the region accounting for about 85-90% of assets under management (AUM) in Morningstar's "climate fund" universe. 11 Within Europe, the last few years have seen explosive growth in "climate transition" products. As seen in the growth of both yellow and purple bars in Figure 10 below, the passive climate fund market is now dominated by products tracking Paris-aligned and climate transition benchmarks or that otherwise negatively screen standard indexes based on carbon emissions.

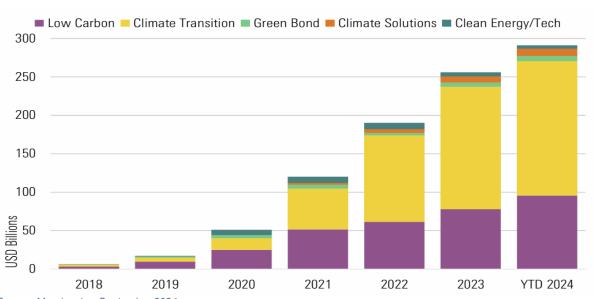


Figure 10: Assets in European Passive Climate Funds

Source: Morningstar. September 2024.

Negative screening in the climate space has understandably risen to prominence because the drivers of environmental damage are broadly quantifiable through emissions. EU regulation has further legitimised approaches through the standardisation of index construction. This means that carving out the worst climate offenders from a standard benchmark is at least somewhat objective. Conversely, assessing the enablers of decarbonisation (companies likely to contribute a wider positive benefit) remains subjective. As such, solutions that might achieve more meaningful systemic de-risking remain largely the domain of active investing. This is not to say that impact indexes don't exist, but that patently active decisions are made in their construction. Indeed, passive climate

¹¹ Morningstar. Investing in Times of Climate Change: 2023 in Review. April 2024.

products might better be understood as quantitative active strategies, with investment processes decided by index providers.

This tendency towards negative screening means that, first and foremost, passive approaches in the climate space present an opportunity for investors to reduce idiosyncratic transition risk. By tracking climate indexes, an asset owner reduces exposure to companies facing grim prospects in a low-carbon future. IEEFA would argue that this is persuasive enough reason for many investors to consider adopting them not only for the immediate financial benefits but because de-risking passive investment portfolios *can* bring wider long-term benefit. With that said, it is perhaps unlikely to stimulate the immediate and transformative market shifts that some investors will feel are urgently required. Continuing the climate example, reducing exposure to carbon-intensive industry does not, for example, specifically channel capital into the development of solutions or necessitate more forceful corporate engagement. Some will take the view that a more purposeful approach is required, therefore, to combat climate-related systemic risk with greater urgency.

Fiduciary Duty and Systemic Risk Reduction

That typical universal owners such as pension funds have thus far been slow to move away from short-term returns as part of impact strategies is not entirely surprising. Such investors operate within the constraints of legally binding fiduciary duty, meaning they are obliged to prioritise risk-adjusted returns on behalf of their beneficiaries. The question preoccupying them is whether including social and environmental outcomes could contravene a core tenet of their role if there is a chance doing so could negatively affect their ability to generate returns over any time period.

Even if there is a clear consensus that averting systemic risks like climate change will significantly improve long-term economic prospects and financial returns, data cannot confidently quantify this benefit with any specificity. With the time distribution of damages related to systemic risks uncertain, should social or environmental considerations be integrated if it could mean reducing opportunity sets or the possibility of short-term financial pain? Fiduciaries must also consider the prisoner's dilemma. If all investors acted to limit systemic risks, there may be some short-term financial sacrifice during a transition, but all investors would stand to gain significantly over time. But what if just one investor is willing to act? They alone may experience headwinds, while the inaction of peers would mean systemic risk remains unchecked. How much risk can be reduced by the actions of a single fiduciary?

Indeed, such uncertainty might have been a barrier to investing for SRR, which quite pointedly overlooks the need for short-term return generation at a fund level. Increasingly, however, legal discourse clarifying the legal relationship with sustainable investing is tipping the scales.

The Freshfield report *A legal framework for impact* began clearing up ambiguity when it found across most jurisdictions surveyed:

"...an asset owner would, if one or more sustainability factors posed a material risk to meeting its investment objective over the timeframe that is relevant to it, be **legally obliged** to consider what steps it can take to mitigate the risk".¹²

More recently, the Net Zero Lawyers Alliance secretariat endorsed this view, outlining how even under current law, fiduciaries:

"...not only have a right, but a duty to integrate climate risks in investment decisions". 13

If the question is no longer whether, but *how* sustainability must be incorporated in the decision-making of investors serving beneficiaries, a Financial Markets Law Committee (FMLC) report from February 2024 helped bring what is permissible into sharper focus:

"It may be necessary to consider whether a strategy should **reject shorter-term gains** because they create identifiable risks to the longer-term sustainability of investment returns in the fund." ¹⁴

That same report also confirms that so long as due process is followed and climate change considered through a financial lens, there is no reason environmental considerations would not be taken in the context of an asset owner's portfolio "as a whole". 15

Even if the prisoner's dilemma stubbornly remains, where environmental or social outcomes can reasonably be expected to negatively impact financial goals, a pension fund has a legal obligation to seek out solutions. Furthermore, committing a portion of assets to investments that might overlook short-term risk-adjusted return expectations (in order to achieve those solutions) is entirely permissible. Assuming a balance is struck at the universal owner level and due process followed, there is no reason that even concessionary products cannot form part of broader investor strategies to combat long-term financially material risks. The FMLC's recent intervention has cemented the acceptance of sustainability as a fiduciary necessity, at least in the UK (and perhaps to an extent in Europe, where legal and regulatory requirements of fiduciaries remain for the most part aligned). Whether legal counsel outside Europe will ultimately come to the same conclusion is another matter. The US will be of particular interest given its outsized importance to capital market ownership, often fragmented regulatory environment and the politicisation of ESG – divergence might be expected.

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¹² Freshfield Bruckhaus Deringer. A Legal Framework for Impact. July 2021.

¹³ Andreas Wildner and Maurits Dolmans. Sustainable Fiduciary Duties for investors. Revised 21 April 2025.

¹⁴ FMLC. Decision-making in the context of Sustainability and the subject of Climate Change. 6 February 2024.

¹⁵ Ibid.

How to Build Systemic Risk Reduction Products

IEEFA puts forward the case for two potentially complementary approaches to building active SRR funds with a focus on climate change. One is a more traditional approach, targeting system decarbonisation through aggressive impact investments. The other seeks decarbonisation through the unconstrained, forceful engagement of companies contributing significantly to systemic risk. While the examples might centre on climate change, there is no reason why other known sources of systemic risk could not be treated similarly. The only prerequisite is for a fiduciary to believe risks could have a substantial future impact on the long-term health of capital markets (and ultimately its own wider portfolio). Indeed, with growing recognition that systemic risks are interconnected, there is a strong case for SRR products to incorporate more than just real economy decarbonisation.

The Universal Owner's Insurance Policy

Despite scepticism as to how forcefully universal owners should seek decarbonisation goals, Tom Gosling, professor in practice at the London School of Economics and executive fellow at the European Corporate Governance Institute, posits that there is a case to be had for asset owners to make "modest" allocations that protect against potentially catastrophic tail risks, at the cost of lower near-term return expectations. ^{16,17} In effect, he proposes a type of insurance policy, where a premium is paid to protect against downside risk events. This work is self-described as early stage, but Gosling suggests that allocations of up to 5% of total assets under management might be a reasonable level of investment. Even a modest 5%, if widely adopted by asset owners, would today represent over a US\$5 trillion market. According to Gosling, such products should be constructed by carefully selecting investments with certain characteristics (edited and abridged below): ¹⁸

- Investments should have the prospect of delivering an "acceptable" return over the short to medium term, to limit any fund-level underperformance resulting from such allocations.
 This could mean such products use "benchmark -X%" as a minimum performance objective or an absolute return objective denoted as concessionary.
- Investments should focus on the biggest and most scalable problems such that the
 potential marginal climate benefit is maximised for the marginal impact investment.
 Investment might therefore be concentrated where breakthroughs are required to create
 scalable technologies and where the potential climate gains are great.
- Impact investments **must provide a hedge** to other parts of the universal owner's portfolio. For example, an asset owner invested in oil and gas companies faces downside risk if environmental policy progresses more rapidly than expected, yet these would be the exact conditions where investments in innovative solutions might deliver the highest returns.

¹⁶ Tom Gosling. Universal Owners and Climate Change. 2 February 2024.

¹⁷ Tom Gosling. A fiduciary argument for impact investing? 14 June 2024.

¹⁸ Ibid.

Firstly, the characterisation that such investments provide a hedge to assets held in a wider portfolio is crucial. Looking beyond the fund level in this way, free-rider issues and the prisoner's dilemma are greatly diminished. By trading short-term return expectations at the fund level, an investor can expect to receive significant payoffs if fringe climate scenarios play out. For example, an asset owner invested in carbon-intensive industry faces significant downside risk should mandatory carbon markets rapidly expand. Similarly, should climate damages accelerate, valuation erosion of the wider portfolio will likely lead to more acute demand for climate solutions. In both instances, innovative solutions might deliver the highest returns, offsetting losses elsewhere.

Gosling argues that applying limits to concessionary short-term fund-level return expectations can make products more palatable, but these returns can feasibly be relegated in favour of *long-term* outperformance targets. Financial products with long-term performance objectives would be a more natural fit for universal owners while still being an entirely viable safety net. As shown in Figure 9, commercial tipping points for new climate technologies remain beyond 2035 in many cases, but significantly scaling up investment would almost certainly bring those expectations forward. Preferably, fund-level performance objectives would be set at 20 years to ensure they do not clash with SRR goals, but even 10 years would double the typical (explicit) performance objective.

To maximise the systemic benefit per marginal dollar invested, IEEFA would encourage "universal owner insurance" products to seek out climate technologies advancing beyond pre-commercial demonstration. A recent UBS Sustainability and Impact Institute report found that a funding gap exists at this stage of technological development, whereby capex-intensive climate technologies, crucial to decarbonising high-emitting sectors, have struggled to attract sufficient financing.¹⁹

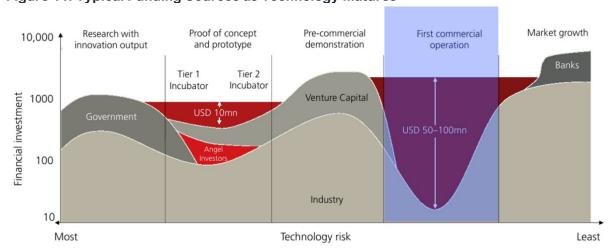


Figure 11: Typical Funding Sources as Technology Matures

Source: UBS Sustainability and Impact Institute. October 2024.

¹⁹ UBS Sustainability and Impact Institute. Green hockey sticks. October 2024.

Whereas immature climate technologies have little trouble attracting small pools of risk-tolerant venture capital, those looking to begin commercial operation need more significant investment. The size of investment required is better suited to institutional investors, yet the risks involved are ordinarily too high – the technology is unproven at scale and future demand uncertain. As the UBS report highlights: "For example, green steel is more expensive today than conventional steel – to reduce its costs, more factories need to be built to induce learning effects. At the same time, new green steel plants are too high risk for institutional investors and too long-dated and capital-intensive for venture capital firms."²⁰

With far higher tolerance for short-term risk-adjusted return, a universal owner insurance fund might look to step in, providing deeper pools of more risk-tolerant funding to help technologies cross the divide and reach commercial tipping points. In short, this is where the greatest bang for the buck might be had because it provides critical funding for technologies looking to scale, where funding might otherwise not be available. Opportunities in emerging markets might also attract higher levels of attention for similar reasons.

Although the opportunity set is out there, by institutional investor standards, it is likely to be relatively small and illiquid, with alternatives, small-to-micro-caps and emerging markets a significant portion of it. Although not of immediate concern, were all institutional asset owners to allocate 5% of assets in such a manner, capacity problems may become more apparent and opportunities extremely crowded. Exacerbating this issue, IEEFA would also suggest that for investments to be most systemically beneficial, they should be selected carefully and avoid "solutions" that ultimately delay the phase-out of fossil fuels. For example, IEEFA has been a longstanding critic of carbon capture and storage, owing to its demonstrable track record of failure and propensity to distract attention and capital away from cheaper, proven decarbonisation technologies.

The Aggressive Engagement Vehicle

At IEEFA's 2024 London Climate Action Week event, Australasian Centre for Corporate Responsibility executive director Brynn O'Brien offered an alternative approach to SRR funds, based on the influential advocacy group's existing engagement model. Rather than investing in potentially significant enablers of decarbonisation, her strategy would negatively screen for companies expected to contribute significantly to systemic risk, in which it would purposefully invest with the intention of decarbonising operations and supply chains through intensive engagement. In terms of the characteristics of potential investment targets, these would likely be publicly listed companies with large carbon emission profiles, have the propensity to decarbonise and be judged as receptive to engagement.

²⁰ UBS Sustainability and Impact Institute. <u>Green hockey sticks</u>. October 2024.

The advent of split voting in most jurisdictions opens the door for asset managers to create aggressive engagement funds and to act more forcefully on behalf of smaller portions of their investment base. But for this approach to achieve results, significant positions in major carbon polluters would likely need to be built. SRR fund ownership may need to account for a significant portion of voting rights to provide a platform, not only to persuade company management to enact decarbonisation proposals but to give gravitas to discussions with other, less systemically minded investors. Decarbonisation proposals would position a company favourably over the long term but may be less beneficial to tactical, short-term owners. This means that "win-win" scenarios (where SRR goals align with shorter-term financial goals) might still need to be skilfully crafted.

Sceptics might also point to the fact that some investors do already push for SRR goals without much success and question whether it is possible to build sufficient positions in industry heavyweights like Exxon, for example, where even the 10th-largest investor might require an investment of at least US\$5 billion. As a counter, a strategy unencumbered by short-term performance objectives would have a far stronger mandate to press for rapid decarbonisation. It is also worth noting that some studies suggest changes in corporate performance tend to be driven by a small number of leaders, often without significant stakes.²¹ More concretely, there are numerous examples of hedge funds taking small but influential positions in companies to successfully exert pressure on company direction – Elliot Investment Management recently building a stake in BP is a case in point.²²

The main issue with gathering sizeable ownership stakes is significantly elevated specific risk, which when viewed through MPT might render doing so unsuitable for a typical impact fund. But to an investment strategy where systemic risk is the priority and short-term risk-adjusted return secondary, such positions *are* possible. Leveraging these stakes to better position companies for long-term success, rather than boosting short-term profitability to quickly sell (as in the recent Elliot/BP example), could have a significant positive impact on systemic risk contributions.

A final consideration for such an approach is where the off-ramp is set. Assuming an aggressive engagement approach is successful, should the fund immediately divest in order to select and decarbonise another target? To do so might be sensible in terms of SRR but may be to the detriment of long-term capital accumulation. Much will depend on how markets react to successful decarbonisation outcomes, but competitive benefits of achieving decarbonisation are unlikely to be immediately apparent in a company's financials. Such a fund might ultimately have to work out where to draw the line and accept significantly discounted fund-level financial goals, if it is to truly leverage assets for maximum systemic benefit. To do so might test legal definitions of fiduciary duty, but as we have discussed, proponents can be emboldened by recent legal intervention.²³

²¹ Ceccarelli et al. Which institutional investors drive corporate sustainability? January 2022.

²² The Guardian. Activist hedge fund reportedly amasses £3.8bn stake in BP. 13 February 2025.

²³ Financial Markets Law Committee. Pension Fund Trustees and Fiduciary Duties – Decision-making in the context of Sustainability and the subject of Climate Change. 6 February 2024.

Benefits of a Combined Approach

Given the approaches' relative strengths and weaknesses, perhaps the most practical route to creating an SRR vehicle might be to combine the two. A combination method would immediately allow for competing theories of change to find representation in product offerings, leading to a more diverse opportunity set for asset owners. More than that, however, if built to complement one another, clear synergies mean the two together are more than the sum of their parts.

Lending itself to investment in large-cap companies on strong financial footing, an aggressive engagement fund is unlikely to suffer from some of the liquidity issues that may befall the universal owner insurance fund and might ease concerns in that regard. But not only does the aggressive engagement fund significantly expand the opportunity set into more liquid markets, including laggards grants access to an otherwise problematic opportunity set: potentially systemic risk-mitigating parts of otherwise highly carbon-intensive businesses. For example, a universal owner insurance fund could not legitimately invest in Exxon, even if its "Low Carbon Solutions" business might actually be quite well placed to develop beneficial technologies or advance climate-positive industrial processes. Currently, low-carbon business units of fossil fuel majors are focused quite squarely on "solutions" that allow the companies to continue business as usual – but that is not to say they are not among the best placed to actually develop real solutions, especially if strongly encouraged to do so.

Similarly, an aggressive engagement approach suffers from greater free-rider concerns given even long-term returns might be, at best, in line with wider markets (depending on where the divestment off-ramp is set). A universal owner insurance fund on the other hand is designed to ease such concerns, but as part of that requires it be a hedge to an asset owner's wider holdings. By purposefully investing in companies that are the hedge and controlling allocations to them, a combined vehicle operates as a standalone product, rather than needing to be rebalanced based on a fluctuating wider portfolio, one that is likely to be outside of the investment manager's hands. This process of rebalancing might otherwise involve considerable coordination across institutions, lead to untimely, suboptimal decision-making and create additional expense. In effect, by combining the two, a cost-efficient standalone vehicle can be created, reducing the need for bespoke solutions.

Table 1: Synergies of a Combined Approach

	Universal owner insurance fund	Aggressive engagement fund	Combined approach (synergies)
Theory of change/brief description	Solutions Targets only high-impact solutions to systemic risk as a hedge to investments in an asset owner's broader portfolio. Unlike traditional impact, prioritises the most financially beneficial impact outcomes (as opposed to seeking societally beneficial outcomes alongside short-term fund-level returns).	Transition Builds strategic stakes in key risk-contributing companies to drive deep operational change. Uses long-horizon mandates to prioritise systemic goals over short-term gains.	Mixed goals Competing theories of change can find representation in more diverse product offerings.
Opportunity set	Varied small cap Technologies and solutions advancing beyond pre- commercial demonstration. Emerging and frontier markets, alternatives, micro- caps. Product differentiation possible through allocation.	Limited large cap Region agnostic but likely limited to a subset of large, publicly traded companies that contribute most negatively to systemic risks. Product differentiation may come through engagement methods rather than allocation.	Expansive Widest opportunity set (including potential solutions at systemic risk laggards).
Fiduciary concern: Liquidity	Illiquid	Highly liquid	Mixed
Fiduciary concern: Fund-level returns	Low to moderate Long-term fund-level outperformance expected. Short-term return concerns and prisoner's dilemma are minimised when constructed as a hedge to other parts of the asset owner's wider portfolio.	High Likely permissible under modern interpretations of fiduciary duty but may need to accept discounted short- and long-term fund-level returns. Raises questions around prisoner's dilemma.	Low In effect, by combining two opportunity sets with inversely correlated (relative) returns, a market-neutral strategy is built.
Fiduciary concern: Running costs	High As a hedge to other parts of the asset owner's wider portfolio, will need to be rebalanced regularly around allocations made outside of the manager's control. Potential for untimely, suboptimal decision-making and higher running costs.	Low Long-term buy and hold strategy that can be rebalanced as the manager deems necessary, based on engagement outcomes.	Low By investing in both solutions and the hedge, a manager controls allocations through a self-contained vehicle without having to manage in line with decisions made outside of their control. Costs kept in line with traditional, active impact funds.

Source: IEEFA.

A Product-Based Approach as a Foothold for System-Level Investing

Given a dearth of investment opportunities that seek to selfishly maximise SRR, IEEFA proposes that asset owners now urgently need access to investment products that definitively place systembenefitting targets ahead of short-term financial returns. With that said, committing small allocations to systemically minded products (a product-based approach) is likely not the most optimal solution. By committing small allocations, marginal benefit might still be expected. It would of course be preferable that universal owners are encouraged to take a strong house view on systemic risk and then apply that view across their entire investment portfolio, rather than allocating a small proportion to products designed to aggressively redress MPT-induced de-prioritisation of systemic risk. Indeed, it is critical that SRR products are not seen as an excuse to lower standards in a universal owner's other investments.



System-level investing is best understood as a holistic, long-term investment orientation that embeds systemic risk management and value creation at the core of investment strategy.

A truly holistic model would incorporate what the Principles for Responsible Investment (PRI) and others describe as "system-level investing",²⁴ an approach that considers how capital allocation decisions impact (and in turn are impacted by) broader environmental, social and financial systems. Rather than viewing investments in isolation, this approach seeks to align portfolios with the long-term health and stability of interconnected systems upon which financial returns rely. In essence, an investor should invest (and subsequently steward) with the health of wider systems paramount across their *entire* asset base. This philosophy, advocated by thought leaders such as Jon Lukomnik and James Hawley,²⁵ and now championed by the PRI, is gaining momentum as investors increasingly see the need to support the systems their portfolios depend on. Rather than a narrow component of strategic asset allocation, system-level investing is best understood as a holistic, long-term investment orientation that embeds systemic risk management and value creation at the core of investment strategy.

For all the benefits, there are obvious challenges. Fully embracing a system-level approach will involve substantial organisational and governance shifts by investors, in a vein similar to that outlined in industry discourse of a "total portfolio approach". Dramatic shifts are of course entirely achievable, but a product-based approach remains a more immediately accessible method for

²⁴ Principles for Responsible Investment. What is system-level investing? 3 October 2024.

²⁵ Jon Lukomnik and James Hawley. Moving Beyond Modern Portfolio Theory: Investing That Matters. April 2021.

²⁶ Schroders. Practical considerations for a 'total portfolio approach'. August 2024.

combatting the intrinsic de-prioritisation of systemic risk, given an incumbent investment landscape built around strategic asset allocation. Even if system-level investing becomes mainstream, many asset owners will have difficulty moving away from the siloed accountability offered by strategic asset allocation.

Should system-level investing continue to gain traction, holding established SRR funds positions a manager to tap into another potential growth market. Even if a product-based approach is ultimately superseded by system-level investing, a manager can point to a demonstrable track record of identifying systemically beneficial investments. Perhaps more importantly, this means they will have already built relationships with asset owners likely to be first movers in this potentially burgeoning space. Should system-level investing proliferate, SRR funds might similarly change to reflect this shift. This might mean over time switching away from aggressively seeking opportunities to reduce systemic risk (by pinpointing asset-level investments), to greater emphasis on investing entirely in and advocating for healthy systems. Systemic funds provide a solid platform from which to build.

About IEEFA

The Institute for Energy Economics and Financial Analysis (IEEFA) examines issues related to energy markets, trends and policies. The Institute's mission is to accelerate the transition to a diverse, sustainable and profitable energy economy. www.ieefa.org

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