Robeco solutions for insurers

Factor-based sustainable multi-asset solutions

- Insurers face increasing return and regulatory challenges
- Sustainable, factor-based portfolios are a natural solution
- These portfolios can be tailored to insurer's objectives and constraints

Multi-asset products have enjoyed growing popularity over the past decade, with assets under management in these strategies rising by almost 250% to a total of EUR 6.4 trillion.[1] Demand for these products has been particularly strong among insurers. Yet few products live up to expectations and the insurance industry is increasingly faced with several pressing challenges:

- Traditional equity and bond allocations have difficulty generating satisfactory returns, while many forms of active management fail to deliver consistent performance.
- Insurers face rising regulatory pressure for more transparency, the inclusion of sustainability aspects in investment processes and explicit risk control.
- Regulatory capital buffers have been increased.

Factor-based multi-asset solutions that efficiently integrate sustainability criteria are a natural solution to address these challenges. They offer active returns, low costs and sustainable investment profiles. Furthermore, they come with tight risk control, and transparency. Robeco is a world-class pioneer in both factor-based and sustainability investing, managing over EUR 56bln in factor-based solutions and EUR 100bln in strategies with sustainability integration.[2] In this article we summarize the basics of factor and sustainability investing. We then show how multi-asset solutions can be tailored to meet insurer's objectives and risk or capital constraints. Further explanations can be found in the accompanying white paper, 'Multi asset solutions for insurers'.

[1] Source: Broadridge, as of October 2018.
[2] Source: Robeco, per end of December 2018.

Article
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Factor investing: a cost-efficient way to exploit proven drivers of returns

Traditionally, insurers have focused on harvesting risk premiums offered by asset classes and allocating to strategies that provide alpha on top of these premiums. Yet, over 50 years of academic research reveal the existence of additional premiums, so-called 'factor premiums', that can be harvested systematically. Well-known examples are the value premium in equities, the momentum premium in equities and the carry premium in foreign exchange. There is strong evidence that factor premiums are consistently present across all major asset classes; from single stocks (Blitz, 2012, 2015, Fama and French, 2015), to corporate bonds (Houweling and Van Zundert, 2018), to tactical allocation across markets like equity indices, bond indices, and currencies (Baltussen, Swinkels and Van Vliet, 2019).

Nowadays, factor investing has been embraced as a third investment style by many of the world's largest institutional investors, as well as by many other types of investors. Factor investing systematically captures factor premiums in a risk-balanced manner. It shares the benefits of passive investing – transparency, rules-based and low-cost, with benefits of active investing – additional returns from non-passive investing. As such, factor investing offers:

- Additional returns
- Diversification relative to traditional investment strategies and asset classes
- Strong risk-controlled investment processes
- Transparency
- Low cost

Factor strategies work basically as follows. First, securities in the investable universe are ranked based on their factor characteristics using various measures. Second, a portfolio is built with good exposure to these measures, while managing all risk and other considerations (like sustainability criteria). For example, an equity factor strategy systematically ranks all the stocks in the universe in order of attractiveness based on their factor measures and buys those that are top-ranked while at the same time scoring well on sustainability dimensions and fitting in the risk limits and profile of the portfolio. Attractiveness is assessed with clear and understandable metrics, such as the volatility of a stock, past returns, book-to-market ratios, profitability and others. Similarly, in fixed income one can consider duration, past returns, spreads, ratings, quality of the issuing company, and so on.

Due to its systematic nature, this process is very scalable and transparent, so that a very large investment universe can be efficiently evaluated. Instead of buying the whole market with index weights (as in passive strategies), or a small subset of the investment universe (as commonly holds for fundamental active portfolios), factor strategies can screen the whole universe and over- or underweight hundreds to thousands of instruments simultaneously. At the same time, they eliminate human or emotional biases that might at times drive investment decisions.

To illustrate the benefits of factor investing, we show two common multi-asset portfolios to which we add factor allocation. A typical approach to asset allocation for insurance companies within multi-asset portfolios focuses on a strategic asset allocation. Figure 2 illustrates how implementing factor investing in a multi-asset portfolio (from bottom-up stock and bond selection to top-down tactical allocation) adds value relative to passive 30/70 or 60/40 equity/bond allocations. We consider the 2002-2018 period and expected factors returns.

Figure 2 | Multi-factor multi-asset performance

Source: Robeco. Data for the period 01/2002 – 12/2018. 30/70 and 60/40 refer to X% MSCI All Country World Index (Net Return) & 1-X% Bloomberg Barclays Global Aggregate (hedged into EUR) reference indexes. Figures of the Robeco solutions are based on the targets outperformance. All figures in EUR, gross of fees. In reality, management fees and other costs are charged. These have a negative effect on the returns shown. The value of your investments may fluctuate. Results obtained in the past are no guarantee for the future.

Adding factor allocation across the major asset classes generates significantly higher risk-adjusted returns compared to purely passive strategies in all asset classes. In summary, factor investing offers attractive and diversifying returns that come at a low cost for investors.

Building customized solutions

Insurers often have very specific objectives and constraints for (segments of) their investment portfolios and therefore require tailored solutions that align their investments to the stated goals. Robeco's factor-based approach lends itself especially well for these types of situations. As the starting point, we determine the strategy's investment objectives, such as the targeted return on capital for example. These objectives must be consistent with the client's needs and constraints. Then, we rely on customization within three different pillars to build a solution in line with the investment objectives. These pillars are: 'risk & capital' considerations, the investment 'building blocks', and 'sustainability' integration. The final investment solution is derived from the combination of the investment objectives and the three tailored pillars.

Investment objectives

This is not just about finding an optimal risk-return profile. Typically, different portfolios will have different investment objectives, such as delivering consistent returns over time, maximizing the return on capital or achieving specific sustainability targets, for example.

Consistent returns. Insurers often prefer modest but consistent returns that protect from negative surprises, rather than higher but more volatile performance. This can be the case for their unit-linked business where investment results are directly reflected in the capital gains or losses of the (retail) end-client. This can also be the case for products with significant guarantees. Insurers will aim to minimize the chance of triggering the guarantees.

Return on capital. Some insurers prefer to maximize return on capital. Participating insurance policies and annuities, for example, have very long liability durations resulting in high capital charges. They are challenged by the low-rate environment. Inherently, low-risk assets that yield an attractive return on capital are very sought-after solutions.

Sustainability integration. Improving the sustainability profile of portfolios is also a key objective for insurers. Unit-linked or with profit savings types of products, where the end-client has ample insight into the investment portfolio, will likely favor higher sustainability standards. Furthermore, depending on local regulations and standard practice, ESG considerations are becoming more and more relevant for general account holdings.

Risk & capital considerations
The first pillar of customization of multi-asset factor solutions involves the risk and capital considerations.

Risk. The most frequently used measure of risk is volatility. Volatility is typically defined as the mean variance of total return. Another common choice is to consider relative risk and to look at the tracking error against a benchmark. These are typically highly relevant for unit-linked and with-profit savings businesses. A third common concept is Value at Risk (VaR), where the focus is on downside potential. These are typically relevant for insurance products which include guarantees on for instance return levels, or for investments where, for instance, surplus cash needs to be safely set aside. Furthermore, liability risk can be applicable and, therefore, cashflow or duration matching might be needed.

Regulatory capital. Capital charges often constrain balance sheet investments. For a portfolio of developed market stocks, for example, a European insurance company will need to hold capital equal to 39% of the equity holdings, as well as a symmetric adjuster that varies over time, depending on the size of the investment. Capital requirements are specific to the product offering and the sourcing of equity capital. Capital from a life insurer, a pension insurer, or a unit-linked type of offering can be subject to very different capital regimes.

Risk-controlled process. By nature, factor-based portfolios are designed to follow strong risk-controlled processes that embed different levels of risk constraints. Examples include portfolio constraints on ex-ante and ex-post volatility, tracking error, leverage, hedging, and/or VaR. To mitigate risks, factor-based solutions should ensure minimal levels of diversification over instruments and return drivers, for example, across factors, asset classes, but also positions per instrument, region, country, etc.

Investment building blocks
The second pillar has to do with the selection of the strategy's return drivers. These include asset class premiums and factor premiums. The Robeco investment building blocks include three high-level asset class building blocks: equities, fixed income and allocation, and six key factor premiums that can be harvested in these asset-class building blocks.

Equities. Within equities, exposures to both developed and emerging markets can be obtained, with an investable universe covering approximately 4,500 small, mid and large-cap stocks across regions, countries, sectors and industry groups. This includes exposure to real assets, such as real estate and infrastructure, through positions in dedicated listed companies. Additional returns can be generated through the factor-based, bottom-up selection of stocks.

Fixed income. Within fixed income, exposures to core fixed income markets (developed government bonds and investment grade corporates), as well as to higher yielding markets, such as developed market high yield and other yield enhancing instruments, can be obtained. Additional returns can be generated through the factor-based, bottom-up selection of bonds, with factors spanning wide investment universes of over 18,000 different bonds from over 3,000 issuers across government, investment grade and high yield bonds.

Allocation. Allocation refers to the tactical asset allocation, that exploits opportunities between markets. For example, anticipating the temporary attractiveness of the equity and the bond market. To implement factor-based views efficiently and at low costs, positions are typically taken in liquid derivatives on equity indices, government bond indices, credit indices, currencies and others.

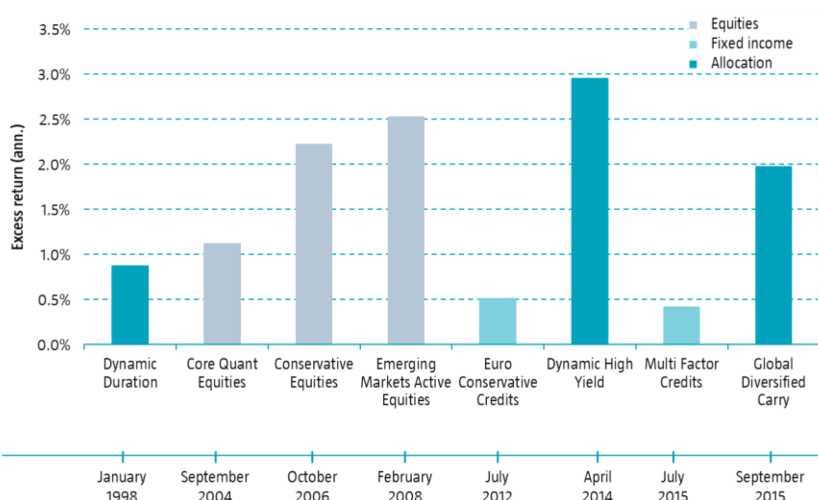
Moreover, because capital considerations can result in a different optimal portfolio design, it can therefore be desirable to integrate capital requirements directly into the portfolio building blocks. For example, in a recent article, we looked at the return on capital for a credit portfolio, showing that factor-based credit portfolios provide a higher return on capital than passive portfolios. We also showed that return on capital can be further improved by integrating Solvency II capital requirements directly into factor strategies.[3]

Another example is the low risk factor in equities, which depending on the jurisdiction and internal capital modelling, can offer capital relief. It offers equity-like returns while maintaining a substantial lower (about 30%) exposure to equity market risk. For an example, US life companies may translate this lower market risk into a lower capital charge under the guidelines of the National Association of Insurance Commissioners (NAIC).

[3] Houweling, P. and Muskens, F. (2018). "Solvency II integration in factor credit strategies", Robeco Article.

To illustrate that factor-based strategies not only show strong research results, but also achieve strong live performances, we summarize the realized outperformance since inception for our flagship strategies in Figure 3. The grey bars indicate the live outperformances for equity factor products, the light blue bars for fixed income products, and the turquoise bars for allocation factor-based products. Any combination of these proven strategies to form a multi-asset solution is possible.

Figure 3 | Live performance flagship strategies



Source: Robeco. Grey bars represent equities strategies; light blue bars fixed income; dark blue bars allocation strategies. Data since inception until end of December 2018. The timeline represents the inception dates of each flagship strategy. Data until end of December 2018. Dynamic Duration based on the Robeco QI Global Dynamic Duration EUR DH-share; Core Quant Equities on Robeco QI Institutional Global Developed Enhanced Indexing Equities fund; Conservative Equities on Robeco QI Institutional Global Developed Conservative Equities fund, Emerging Markets Active Equities on Emerging Markets Active Equities (EUR) I share; Euro Conservative Credits on a representative segregated account; Dynamic High Yield on Robeco QI Dynamic High Yield (EUR) IH share; Multi Factor Credits on Robeco QI Global Multi-Factor Credits (EUR) IH-share; Global Diversified Carry on Robeco QI Global Diversified Carry (EUR) Z-share. All figures in EUR, gross of fees. In reality, management fees and other costs are charged. These have a negative effect on the returns shown. The value of your investments may fluctuate. Results obtained in the past are no guarantee for the future.

Sustainability integration

The third pillar of customization is sustainability criteria. At Robeco, we believe in the added value of systematically integrating sustainability in investment processes, as it leads to better-informed investment decisions and benefits society. Robeco has been at the forefront of sustainable investing for over a decade. We currently manage over 100 billion euros[4] in ESG integrated strategies. We closely cooperate with our sister company RobecoSAM, a sustainability investing boutique founded in 1995 and one of the leading providers of sustainability information. Both companies have been recognized by the industry with awards such as Impact Manager of the Year (Robeco) or SRI Provider of the Year (RobecoSAM), as well as A+ ratings for all modules by PRI.

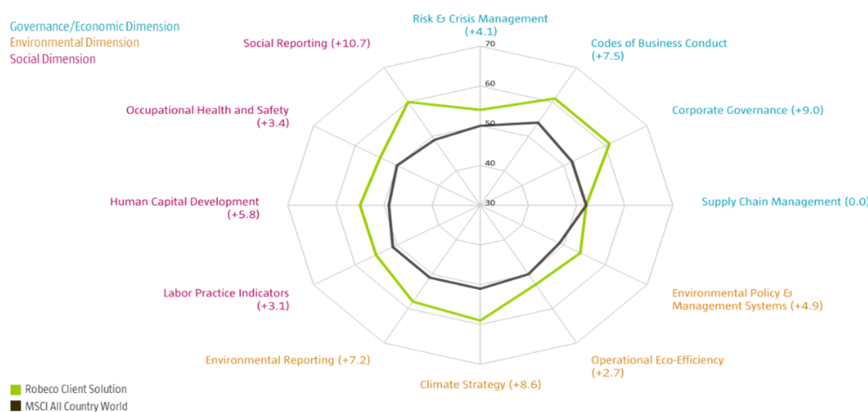
In order to have a broad, comprehensive capture of sustainability, we integrate sustainability across three core dimensions: 'Exclusions', 'ESG integration' and 'Impact investing'.

Exclusions. The first dimension of sustainability investing is to apply exclusions lists, in order to avoid investing in companies with poor practices from a sustainability perspective. As a starting point, Robeco has defined a general exclusion policy. This policy entails the exclusion of companies that do not comply with broadly accepted international treaties, in particular treaties on controversial weapons, and the exclusion of countries against which the UN Security Council has issued a resolution. An extended exclusions list, that includes companies involved in firearms manufacturing, military contracting, child labor exploitation and thermal coal, for example, is applied to our sustainable solutions. We can also adjust exclusions to specific requirements. For example, we can adhere to custom exclusions lists provided by clients. We can also implement bespoke topic- or industry-level exclusions.

[4] Source: Robeco, as of end of December 2018.

ESG integration. The second dimension is the integration of Environmental, Social and Governance (ESG) scores, based on Robeco's sister company RobecoSAM's Corporate Sustainability Assessment (CSA), an annual ESG analysis of approximately 5,200 listed companies. We ensure all our portfolios score at least better than their reference index, but the level of ESG improvement can be further increased depending upon clients' request. For example, we can increase this scoring requirement on an aggregate ESG level and/or on an E, S, G subdimension level, for example, requiring the portfolio to score at least 20% better on ESG than the market or requiring the 'E-score', specifically, to be 30% better than the market. As an example, we present the ESG profile of a client portfolio that targets a 20% better ESG score of the portfolio relative to the reference index (MSCI All Country World) in Figure 4 below. The reference index ESG score (black line) is around 50, while the portfolio (green line) scores up to 10.7 points better on the different E, S and G scores.

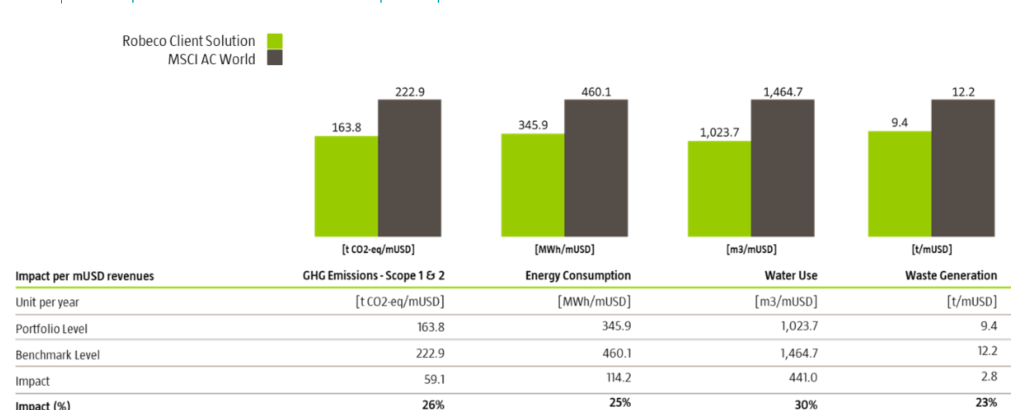
Figure 4 | Example sustainability profile



Source: Robeco, RobecoSAM. Data as at the end of December 2018.

Impact investing. The third dimension of sustainability is impact investing or investing with a specific sustainability impact in mind. We engage in impact investing in two ways. First, we conduct proxy voting and active engagement with companies, on behalf of our clients, to improve their behavior in terms of ESG aspects. Robeco's dedicated active ownership team voted on more than 5,200 shareholder meetings in 2018. Second, we closely monitor the environmental footprint of our portfolios and can target a reduction on four key metrics, such as greenhouse gas emissions, energy consumption, water use, and waste generation. Figure 5 below illustrates this concept with an example of a client solution, where we target an environmental footprint reduction of at least 20% as compared to the reference index. In the example, greenhouse gas (GHG) emissions are 26% lower than the benchmark (MSCI All Country World Index), energy consumption of our holdings is 25% lower, water usage is 30% lower, and waste generation is 23% lower. We therefore, tilt investments towards companies that have a 'greener' environment impact.

Figure 5 | Example environmental footprint profile



Impact per mUSD revenues	GHG Emissions - Scope 1 & 2	Energy Consumption	Water Use	Waste Generation
Unit per year	[t CO2-eq/mUSD]	[MWh/mUSD]	[m3/mUSD]	[t/mUSD]
Portfolio Level	163.8	345.9	1,023.7	9.4
Benchmark Level	222.9	460.1	1,464.7	12.2
Impact	59.1	114.2	441.0	2.8
Impact (%)	**26%**	**25%**	**30%**	**23%**

Source: Robeco, RobecoSAM. Data as at the end of December 2018.

Case studies

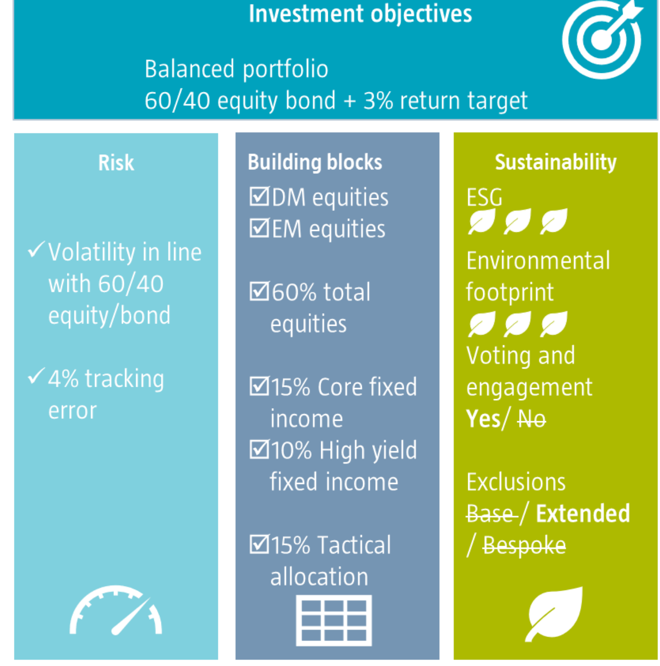
In this we provide two concrete examples of factor-based sustainable multi-asset solutions. We refer to our the more extensive version of this white paper, entitled 'Multi asset solutions for insurers', for further client cases.

Case 1: Defensive multi-asset portfolio

Consider an insurer looking for a defensive portfolio for its own book investments, that would also prove efficient in terms of regulatory capital. The objective is to achieve balanced returns with limited downside risk. The customized solution has a defensive risk profile, similar to a 30/70 equity/bond portfolio, and achieves additional returns by exploiting the low-risk factor in equities and credits. These elements are combined with factor-based tactical allocation.

Strategically, the portfolio consists of a 50% investment in a low-risk equity strategy, a 35% investment in a low risk credit strategy and a 15% cash and derivatives pool for a tactical allocation positioning consistent with a defensive risk profile. The solution avoids the usual overexposure to fixed income that is common in defensive multi-asset portfolios. As is implicit in low-risk credits, we have incorporated efficient regulatory capital treatment. We integrate sustainability by ensuring the portfolio scores at least 20% better than the reference index on ESG and environmental footprint. We also conduct voting and engagement and apply an extensive exclusion list. Furthermore, the solution is risk-controlled at various levels like ex-ante volatility, asset class, country and sector exposures.

Case 2: Balanced multi-asset portfolio



Consider an insurer looking for a return-enhanced proposition for its balanced unit-linked offering. The objective is to achieve attractive returns and an advanced sustainability profile, with balanced risks. Regulatory capital aspects are not relevant and a significant tracking error is allowed. The end client's total return is to come first. We built a solution with a 60/40 equity/bond risk profile, that optimizes the risk contributions across the full range of our capabilities, across asset classes and factors.

Strategically, the portfolio consists of a 60% investment in an equity factor strategy in developed and emerging markets, a 15% investment in a core fixed income factor strategy, a 10% investment in a high yield factor strategy, and a 15% cash and derivatives pool for factor-based tactical allocation positioning. We incorporate sustainability by ensuring the portfolio scores at least 20% better than reference index on ESG and environmental footprint. We also conduct voting and engagement and apply an extensive exclusion list. Furthermore, the solution is risk-controlled at various levels, such as ex-ante volatility, asset class, country and sector exposures.

Summary

The current low-yield environment, rising pressure from clients and regulators for increased transparency and cost efficiency, as well as soaring demand for sustainability integration, represent key challenges for insurers. Factor-based multi-asset solutions can effectively help address these challenges. Backed by decades of academic research, they offer attractive and uncorrelated sources of return, as well as high levels of risk control and transparency, at relatively low cost. They can also efficiently integrate sustainability.

Robeco has been very active in the field of sustainability and factor-based investing for over 20 years, having designed over 150 factor-based client solutions. Our approach translates our factor-based investment building blocks and sustainability integration into efficient risk-controlled solutions, that can be tailored to best suit a specific insurer's needs and priorities. All these combined elements result in customized factor-based sustainable multi-asset solutions, that effectively deal with the challenges faced by insurers today.

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Some Funds referred to in this marketing material have been registered with the UAE Securities and Commodities Authority (the Authority). Details of all Registered Funds can be found on the Authority's website. The Authority assumes no liability for the accuracy of the information set out in this material/document, nor for the failure of any persons engaged in the investment Fund in performing their duties and responsibilities.

Additional Information for investors with residence or seat in the United Kingdom

Robeco is subject to limited regulation in the UK by the Financial Conduct Authority. Details about the extent of our regulation by the Financial Conduct Authority are available from us on request.

Additional Information for investors with residence or seat in Uruguay

The sale of the Fund qualifies as a private placement pursuant to section 2 of Uruguayan law 18,627. The Fund must not be offered or sold to the public in Uruguay, except in circumstances which do not constitute a public offering or distribution under Uruguayan laws and regulations. The Fund is not and will not be registered with the Financial Services Superintendency of the Central Bank of Uruguay. The Fund corresponds to investment funds that are not investment funds regulated by Uruguayan law 16,774 dated September 27, 1996, as amended.

Additional Information concerning RobecoSAM Collective Investment Schemes

The RobecoSAM collective investment schemes ("RobecoSAM Funds") in scope are ub-Funds under the Undertakings for Collective Investment in Transferable Securities (UCITS) of MULTIPARTNER SICAV, managed by GAM (Luxembourg) S.A., ("Multipartner"). Multipartner SICAV is incorporated as a Société d'Investissement à Capital Variable which is governed by Luxembourg law. The custodian is State Street Bank Luxembourg S.C.A., 49, Avenue J. F. Kennedy, L-1855 Luxembourg. The prospectus, the Key Investor Information Documents (KIIDs), the articles of association, the annual and semi-annual reports of the RobecoSAM Funds, as well as the list of the purchases and sales which the RobecoSAM Fund(s) has undertaken during the financial year, may be obtained, on simple request and free of charge, via the website www.robecosam.com or www.funds.gam.com.

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