Sustainable Alternatives

Sustainable Investment Opportunities for Pension Funds in Alternative Asset Classes

UKSIF Sustainable Pensions Project
Contents

Foreword
Summary
Themes
    Climate Change
    Microfinance
Asset Classes
    Private Equity
    Property
    Infrastructure
    Hedge Funds
    ETFs and Structured Products
    Commodities: Carbon and Forestry
Acknowledgements

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Foreword

This paper opens a discussion on the link between two of the most significant investment trends for UK pension funds over the last few years: the increased interest in responsible investment, and the diversification of investment portfolios into alternative asset classes. The confluence of these two developments has resulted in exciting opportunities for pension funds across a wide range of asset classes.

More pension funds are applying responsible investment (RI) strategies across their investments, and in recent years, the scope to achieve those strategies has grown considerably. However, UKSIF’s 2007 survey of responsible investment policies of corporate pension funds (available at www.uksif.org/sustainablepensions) showed that nearly half of the funds with an RI strategy did not apply that policy to their investments in alternative asset classes. While 92% of RI policies covered listed equities, only 54% of pension funds applied their policies to private equities, and just 33% of policies were extended to commodities and infrastructure.

This discussion paper is not aimed solely at pension funds with an active RI policy. The strategies and products listed may create new and diverse sources of return, the overriding concern of all pension funds.

It is published as part of the work of the UKSIF Sustainable Pensions Project. Launched in 2006, the project encourages and assists UK occupational pension funds and local authority pension schemes to adopt more sustainable and responsible investment strategies, with the aim of enhancing long-term shareholder value and financial returns for the scheme beneficiaries.

As David Russell of USS points out in his commentary, looking for sustainable investments across a range of asset classes is just one way of pursuing this goal. It is important that pension funds encourage their alternative asset managers to incorporate environmental, social and governance (ESG) issues into their asset selection and management. Ultimately, a consideration of the long-term impact of ESG issues may contribute to sustainable returns, to the benefit of pension scheme members.

We hope to help pension funds increase their understanding of how they can benefit from sustainable and responsible investment and how an effective approach can be developed across asset classes. I would like to thank all those who have contributed to this effort.

Michael Deakin
Chair
UKSIF Sustainable Pensions Advisory Board
Summary

What is our definition of a sustainable investment opportunity? A sustainable investment opportunity (for the purposes of this paper) is one where environmental or social factors are value drivers for financial returns. It may also deliver social and environmental benefits alongside financial returns.

This paper highlights key developments and trends and demonstrates the breadth of sustainable investment opportunities in alternative asset classes. It begins by identifying two significant environmental and social themes: climate change and microfinance. The second part of the paper outlines opportunities within particular asset classes, such as private equity and property. Throughout the paper, we offer examples and commentaries from leading pension funds and investment consultants.

Pension funds have differing exposures to alternative asset classes and varying levels of experience and expertise. Some asset classes currently offer more of a choice of sustainable investment products than others. For example, a number of pension funds have a relatively long track record of sustainable investments in private equity, whereas interest in commodities such as forestry is more embryonic, with fewer products currently on offer.

Most UK pension funds have only recently begun to explore sustainable investment opportunities. But as interest and demand builds, fund managers and consultants are responding. Therefore, the scale of opportunities is set to grow.

Commentary: Danyelle Guyatt, Mercer

Many alternative assets might be a better fit for a long-term responsible investor than traditional listed equities. Not only do some alternative assets promote a long-term investment horizon, they are also less vulnerable to the short-term vagaries of the market that distort the capital allocation process and often make it difficult for investors to integrate extra financial factors into the investment process.

However, there are challenges that responsible investors face in encouraging fund managers of alternative assets to be more transparent. The governance structure of the funds themselves can be opaque and potentially plagued with conflicts of interest, particularly when investment managers are closely aligned with investment banks in deal sourcing and placement. The notion of responsible investment is also relatively new to many alternative managers and the ‘language of ESG’ might be something that many do not embrace, although there are signs that this is improving.

Fiduciaries have a number of options to consider to meet these challenges head on. First, they can develop a clear RI investment policy that takes into account the unique characteristics of the different alternative investments, and communicate (and integrate) that policy to fund managers. Secondly, they can collaborate to promote improved transparency and better governance standards. Finally, fiduciaries might consider direct investment opportunities and investment in themed funds that have a responsible investment flavour. The opportunities for long-term responsible investors in alternative assets are appealing and, whilst challenges prevail in terms of implementation, there are clear steps that fiduciaries can take to overcome these.
Themes

Climate Change

“The transition to a low-emissions global economy will open many new opportunities across a wide range of industries and services.”

*Stern Review on the Economics of Climate Change*

Investors are increasingly aware that climate change can have a financially material impact on their investments. Climate change poses risks to businesses and economies that are only now beginning to be evaluated. Meanwhile, significant investment opportunities have been created from the imperative for climate change mitigation and adaption, particularly in sustainable energy.

The growth in sustainable energy has in part been caused by regulatory shifts, such as the introduction of government targets for reducing CO2 emissions and generating renewable energy. Changing consumer attitudes are also driving demand for energy efficient and other ‘climate friendly’ products. These factors are leading to the rapid development of new technologies and the creation of investment vehicles to fund innovation. Investor recognition of the potential impact of climate change may even have stimulated new asset classes such as carbon.

On the climate change issue, major investment consultants are becoming better equipped to assist pension funds with asset allocation and manager selection. The emergence of specialist managers and research houses, as well as increased capacity within more established asset managers and investment banks means that the range of services has grown dramatically, and will continue to increase.

<table>
<thead>
<tr>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>$64 billion</td>
<td>Value of global carbon market in 2007 (Stern Review)</td>
</tr>
<tr>
<td>$100 billion</td>
<td>Demand for projects generating GHG emissions credits by 2030 (UN)</td>
</tr>
<tr>
<td>$148.4 billion</td>
<td>Estimated total invested in clean energy technologies, companies and projects in 2007 (New Energy Finance)</td>
</tr>
<tr>
<td>$277 billion</td>
<td>Estimated additional investment in global wind market between 2007 to 2012 (GWEC)</td>
</tr>
<tr>
<td>$500 billion</td>
<td>Value of low-carbon energy markets by 2050 (Stern Review)</td>
</tr>
</tbody>
</table>
Commentary: Philip Wolfe, Renewable Energy Association

The days when renewables were written off as an expensive luxury are now long forgotten as energy security provides an increasing driver to locally produced power and heat. The financial case improves too, with costs now more predictable than fossil fuels and the economic cross-over coming ever closer. Meanwhile binding targets are being adopted in Europe, helping these drivers deliver a ten-fold growth in UK renewables in the next decade.

It is now accepted that this will mean a much broader portfolio of support measures, not least because the targets include heat and transport alongside electricity. This will present a wide range of investment opportunities, not just for established technologies like wind, where the targets will be ratcheted up a few more notches, but also for several approaches less familiar in the UK.

Building-integrated renewables, for example, will prove a high growth area, also stimulated by the Government’s new ‘zero carbon buildings’ targets. This will suit approaches like ground and air-source heat pumps, biomass CHP (combined heat and power), solar heating and photovoltaics. Another focus area is bioenergy, especially waste-to-energy techniques, so anaerobic digestion, gasification and advanced biofuels are also likely to be attractive sectors.
Microfinance

Investment propositions are being developed around activities which address social issues or provide solutions to social problems. Most notable is the growth in microfinance investing. Microfinance broadly refers to the provision of credit and other financial services to low-income clients in small increments, with affordable service charges (Forum for the Future, ‘New horizons: creating value, enabling livelihoods’, 2007).

Pension funds gain access primarily through microfinance investment vehicles (MIVs). MIVs are private funds which act as intermediaries between foreign investments and microfinance institutions (MFIs). A CGAP (Consultative Group to Assist the Poor) survey indicated that MIV portfolios grew more than five-fold from $600 million in 2004 to $3 billion in 2007.

Microfinance investments appear in a range of asset classes including private equity, fixed income and structured products (e.g. CDOs). Because the underlying borrowers of credit are relatively unaffected by macroeconomic events, the exposure of these investments to volatility in international markets is low. This makes them attractive in terms of both profitability and diversification. The CGAP data demonstrates the viability of financial returns from the sector based on 40 MIVs surveyed. It looked at both structured finance and commercial investment vehicles, with average annual returns of 5.3% and 4.8% respectively. Other recent estimates have predicted targeted returns from private equity microfinance investments in the 20%-30% range.

Pension fund investing in microfinance remains embryonic. This is partly the result of blockages and structural issues within microfinance. Forum for the Future’s 2007 report ‘New horizons: creating value, enabling livelihoods’ highlighted that ‘the dominant investment model currently involves short-term foreign currency debt to a narrow set of elite microfinance institutions, where foreign exchange risks are borne by the MFI and not hedged effectively’. Investors have also expressed concerns over transparency and the limited availability of performance metrics.

However, in recent years a number of pension funds have allocated significant capital to microfinance for the first time. For example, Dutch pension funds including ABP, PGGM, SPF and GBF have made investments; PGGM in particular has announced an allocation of €200 million with specialist managers over the next few years. Similarly the US pension fund TIAA-CREF has committed $100 million, the first $43 million of which is to be invested in a private equity fund.

The data shows that the potential for growth in microfinance investment opportunities for pension funds is significant. The CGAP survey shows that investments now exceed $33 billion with a 25% annual growth rate. The estimated potential size of the market is $300 billion. There is also convergence between microfinance and mainstream banking. The range of intermediaries is growing, with a number of large mainstream investment banks and ratings agencies launching products and providing research. This will help pension funds identify appropriate investment opportunities and more generally will help tackle issues of liquidity and transparency.

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1 Opportunities on a social theme are appearing in the context of both developed and developing countries. Themes include regeneration and social housing, and are often driven by public policy. The privatisation of social services, the contracting out of social provision and infrastructure public-private partnerships can all generate investment opportunities in a range of asset classes that are both suitable and attractive to pension funds.
A number of UK pension funds have added sustainable private equity investments to their portfolios in recent years, a large portion of which are focused on clean technologies. A range of private equity strategies such as buy-out, venture capital and growth investment in mid and large caps are being applied to sustainable investments. Pension funds have primarily invested as limited partners in co-investment funds and fund of funds.

Commentary: David Russell, Universities Superannuation Scheme (USS)

USS is a recent investor in alternatives, with our allocations in this asset class only really beginning in 2007. In order to assess best RI practice in this area, the fund sponsored Mercer to undertake research into the integration of responsible investment principles by pension funds into alternative assets. The results were disappointing. Whilst a small number of funds were taking action, and there are a large number of niche products available, there was a real lack of evidence that integration of these factors into alternative assets was occurring.

USS has since focused its RI activities in alternatives on Private Equity (PE). Whilst the fund invests some $500+ million in low carbon related assets, and also has significant investments in timber, our main focus has been how we integrate RI into all alternative investments rather than relying on niche allocations. The challenge has been to work out the most effective way in which to do this.

As a result, USS has developed a specific PE RI due diligence process, with the RI and Alternatives teams questioning potential managers (General Partners in the parlance of private equity) prior to investments taking place. It is also clear from the work that we have been doing that many PE managers take these issues into account in their own due diligence and portfolio management processes, but their disclosure is not as institutionalised or developed as that of the quoted sector.

USS is also working with other asset owners and with General Partners to discuss how the UN Principles for Responsible Investment can be applied to PE investments. This is a sensitive process at a time when the PE sector is facing significant challenges, both in terms of operating environment and pressure from stakeholders. We believe, however, that this engagement with PE managers will ultimately lead to better long term and responsible investments in the sector.
## Examples of Investment Opportunities in Private Equity

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<tr>
<th>Name</th>
<th>Characteristics</th>
<th>Contact</th>
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| Blue Orchard Private Equity Fund                                      | • Acquires minority stakes in microfinance organisations  
  • Structured as a traditional private equity vehicle                                         | www.blueorchard.org                      |
| Bridges CDV Funds I and II                                            | • Venture capital firm providing opportunities to invest in regeneration business in deprived areas of the UK  
  • Also provides opportunities to invest in sustainable businesses in sectors such as healthcare, environment and ethical businesses  
  • Fund II closed in summer 2007, having raised £75 million after setting a target of £60 million | www.bridgesventures.com                  |
| Catalyst Fund I                                                      | • Invests in successful businesses that also generate social returns  
  • Currently concentrating on 'ethical consumerism' as well as education, health, alternative energy and the environment | www.catfund.org                          |
| Climate Change Capital Private Equity Fund (CPE)                     | • €200 million fund investing expansion capital into later stage companies  
  • Finances management buy-outs in a number of high-growth clean technology areas           | www.climatechangecapital.co.uk           |
| Climate Solutions Fund                                               | • $683 million ‘cross-over’ fund managed by Generation Investment Management  
  • Invests in private and public companies in a number of sectors for which sustainable development will be a significant driver of industrial and economic development | www.generationim.com                    |
| Fortis Clean Energy Fund                                             | • Seeks to raise €400 million to invest mostly at project level with particular focus on wind, small hydro, solar and biomass sectors | www.investments.fortis.com              |
| Man ECO                                                              | • Focused on environmental assets such as renewable energy, plant and infrastructure projects, and emissions credits | www.mangroupplc.com                     |
| HgCapital Renewable Power Partners                                    | • Invests in a range of renewable technologies and provides capital at all stages, from development and pre-construction to operation  
  • Has provided capital support of €1.3 billion in renewable power projects                  | www.hgcapital.co.uk                     |
| Wheb Ventures                                                        | • Clean technology venture capital firm investing in early stage and more advanced stage businesses in Europe | www.whebventures.co.uk                  |
Property investors are increasingly exploring sustainability issues in their portfolio management. Investors can address how properties are built, how they are owned and leased, and how they are occupied and used.

Currently there are only a relatively small number of specific sustainable investment opportunities available to pension funds. Rather, the business case for environmentally sustainable property tends to focus on risk reduction. This has been driven in part by increasing government regulation and the adoption of green targets. Zero carbon targets within the residential sector on all new builds are already in place, and may be rolled out to commercial property. Thus differentiating funds specifically on environmental themes may become more difficult. Pension funds have also addressed social themes, for example regeneration and social housing, in investments through property use and occupation.

### Examples of Investment Opportunities in Property

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<tr>
<th>Name</th>
<th>Characteristics</th>
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| Affordable Property Trust   | • Tribal Treasury Services is currently developing a fund which will purchase existing and fund new social (residential) housing which will be managed by Registered Social Landlords  
                              • Returns for investors derive from acquisition values and contracted revenue streams | www.tribalgroup.co.uk |
Commentary: Jane Goodland, Watson Wyatt

Increasingly institutional investors are diversifying their investments by allocating capital to alternative asset classes. Watson Wyatt’s Global Alternatives survey found a 40 per cent increase in alternative assets under management on behalf of pension funds between 2007 and 2008, within which real estate accounts for a large proportion. Investment returns from this asset class are a function of rental income and capital value, both of which in our view could be influenced by regulatory developments, rising energy prices and changes in tenant preferences relating to sustainability.

The introduction of energy performance certificates for UK commercial property will create greater transparency for prospective tenants and investors about the energy demands of individual buildings and could influence decision-making. Buildings which are more sustainable and energy efficient than comparable peers may prove to be more competitive over the long-term; trading at a rental premium to the market, experiencing shorter vacant periods and reduced obsolescence, slower depreciation and ultimately commanding higher capital values.

Long-term investors seeking to benefit from these developments could choose to invest in one of a small but growing number of funds which invest exclusively in sustainable buildings. Alternatively, they could assess the sustainability performance of existing real estate assets and consider these factors in acquisition, management and disposal decisions with a view to improving the overall sustainability performance of the portfolio and mitigating risks to future returns.

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<tr>
<th>Fund Name</th>
<th>Description</th>
<th>Website</th>
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| Igloo Regeneration Fund    | • Invests in mixed-use urban regeneration projects in UK towns and cities  
  • Fund was established in 2002 and the completed development value of its portfolio of projects is around £2.5 billion  
  • Jointly managed by Aviva Investors and Igloo Regeneration                                                                                                               | www.avivainvestors.com          |
| Palmer Green Property Fund | • Launched in 2007 to fund the building of environmentally sustainable office, industrial and distribution buildings  
  • Developed by Palmer Capital Partners with consultancy from Sancroft and Upstream Sustainability Services  
  • Investments must fulfill the requirements of the Palmer Sustainability Benchmark (sustainable building criteria developed for the fund) | www.palmercapital.co.uk         |
| Sustento                   | • Launched in 2007 as a partnership between DTZ, Kenmore and Forum for the Future  
  • Focused on pan-European office investment and includes both new builds and refurbishment  
  • All investments must meet the fund’s environmental criteria                                                                                                              | www.kenmore.co.uk               |
Infrastructure

For pension funds, infrastructure investments are distinctive and attractive because they are capital intensive and usually play out over a longer period. Pension funds can invest long-term capital that requires less liquidity, and is therefore less sensitive to inflation and other economic fluctuations. There are only a few specific sustainability themed infrastructure funds available to UK pension funds. However, pension funds can also gain exposure to these opportunities through private equity funds and PPP/PFI investments.

Infrastructure can arguably be understood as a sustainability-focused asset class because capital is used to help provide essential services to society and communities. Social infrastructure investment often helps to finance education and health. Economic infrastructure investment has the potential to reduce carbon emissions, build clean energy capacity and catalyse socio-economic development.

Commentary: Michael Taylor, London Pensions Fund Authority

The London Pensions Fund Authority (LPFA) wishes to be a long term responsible investor promoting best practice in corporate governance in all the companies in which we invest, with a strategy that prioritises reduction of carbon emissions and supports sustainable development. The trustees’ investment beliefs are that global equities will outperform bonds and cash and that diversification in alternative assets will increase returns and reduce risk.

The £2.3bn LPFA active fund’s investment strategy has allocated 55% to global equities and 45% to diversifying, or alternative assets.

Our definition of diversifying assets is any asset class which is not well correlated with global equities and for this purpose includes absolute return funds, global property, private equity, infrastructure, commodities and active currency management. Our long term philosophy means that we are prepared to accept premiums for illiquidity in the alternative asset classes and our desire to pursue Environmental, Social and Governance (ESG) issues has led us to make significant allocations to clean tech venture funds and a fund investing in sustainable forestry. Our infrastructure investments are broadly equally matched between economic, social and renewable energy infrastructure, the latter class including solar power and other new energy initiatives.
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<th>Name</th>
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<tr>
<td>3i Infrastructure</td>
<td>• Invests across the asset life cycle and has significant investments in water, PFI, education and renewable energy</td>
<td><a href="http://www.3i-infrastructure.com">www.3i-infrastructure.com</a></td>
</tr>
<tr>
<td>Actis Infrastructure</td>
<td>• Invests in infrastructure projects in Africa, China, Latin America and South and South East Asia with a focus on power and transport • Applies sustainability analysis and principals across its portfolio and asks business partners to adhere to this practice</td>
<td><a href="http://www.act.is">www.act.is</a></td>
</tr>
<tr>
<td>Aqua Resources Fund</td>
<td>• Managed by FourWinds capital, this fund invests in water related companies and projects • Listed for secondary trading on the London Stock Exchange</td>
<td><a href="http://www.fourwindscm.com">www.fourwindscm.com</a></td>
</tr>
<tr>
<td>Babcock &amp; Brown</td>
<td>• Raises wholesale infrastructure funds with a strong focus on renewable fuels and power</td>
<td><a href="http://www.babcockandbrown.co.au">www.babcockandbrown.co.au</a></td>
</tr>
<tr>
<td>Capital Elements</td>
<td>• A specialist investment house which is assembling infrastructure and other funds to invest in global sustainable energy and environmental opportunities • Infrastructure fund has an initial focus on European and CEE and Carbon opportunities</td>
<td><a href="http://www.enercap.com">www.enercap.com</a></td>
</tr>
<tr>
<td>Impax New Energy Investors LP</td>
<td>• Targets projects in the renewable energy and related sectors in Western Europe • Invests in construction and operating assets • Reached its target size of €125 million in August 2006</td>
<td><a href="http://www.impax.co.uk">www.impax.co.uk</a></td>
</tr>
<tr>
<td>Partnership for Renewables</td>
<td>• Managed by HSBC in partnership with the Carbon Trust • Aims to build wind turbines on public sector property in the UK</td>
<td><a href="http://www.pfr.co.uk">www.pfr.co.uk</a></td>
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Hedge Funds

Hedge Funds still represent a relatively small allocation for pension funds. There are a growing number of sustainable investment opportunities emerging which adopt multiple strategies (e.g. long/short, leverage, fund of funds and short term momentum growth). Many opportunities are focused on environmental themes — clean tech, water funds, renewable energy credit trading — but a number of funds with wider sustainability themes have also recently been launched.

Note: At the time of publication, the Financial Services Authority has implemented a temporary prohibition of the active creation or increase of net short positions in publicly quoted financial companies.

Examples of Investment Opportunities in Hedge Funds

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<tr>
<th>Name</th>
<th>Characteristics</th>
<th>Contact</th>
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<tbody>
<tr>
<td>BelAir Sustainable Alternative SRI Fund</td>
<td>• Global fund of hedge fund product launched by Harcourt&lt;br&gt;• Provides exposure across markets and hedge fund strategies&lt;br&gt;• All underlying funds must adhere to SRI framework</td>
<td><a href="http://www.harcourt.ch">www.harcourt.ch</a></td>
</tr>
<tr>
<td>Climate Change Capital Hedge Funds</td>
<td>• Identifies strategic environmental drivers and exploits related market failures</td>
<td><a href="http://www.climatechangecapital.com">www.climatechangecapital.com</a></td>
</tr>
<tr>
<td>Aviva Investors SRI Long/Short</td>
<td>• Two long/short hedge funds (one of which is pan-European) that draw on Aviva Investors' thematic sustainability research</td>
<td><a href="http://www.avivainvestors.com">www.avivainvestors.com</a></td>
</tr>
<tr>
<td>RMF Environmental Opportunities Fund</td>
<td>• Global fund of hedge funds investing purely in environmental industries and strategies</td>
<td><a href="http://www.rmf.ch">www.rmf.ch</a></td>
</tr>
<tr>
<td>SAR Environmental Fund</td>
<td>• Fund of environmental hedge funds which focuses on clean tech, renewables, water and carbon emissions</td>
<td><a href="http://www.sar-ag.ch">www.sar-ag.ch</a></td>
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</table>
Exchange Traded Funds and Structured Products

Exchange Traded Funds (ETFs) and structured products have been more popular with European and North American pension funds than with their UK peers. Consequently, there is a more developed range of sustainable investment products on offer in these markets. However, there are a range of opportunities available which provide pension funds with exposure to various sustainability themes.

Examples of Investment Opportunities in ETFs and Structured Products

<table>
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<tr>
<th>Name</th>
<th>Characteristics</th>
<th>Contact</th>
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</table>
| Exchange Traded Funds               | • Available in renewable energy, forestry and water from providers including iShares, Lyxor and Powershare  
• Funds are based on a range of underlying indices from both mainstream and specialist providers (eg KLD and Wilderhill)  
• EasyETF Low Carbon 100 Europe has recently been launched by BNP Paribas — the underlying index is the Low Carbon 100 Europe Index, developed by Crédit Agricole Cheuvreux and Trucost, which identifies European companies with a low carbon footprint |
| ABN Amro Sustainable Eco Note       | • Seven-year issuance linked to the Kenmar Global Eco Fund                                                                                                                                                     | www.eco-markets.com   |
| Adequity New Energy Protected Fund  | • Developed by SocGen  
• Provides capital protected exposure to the World Alternative Energy Index (WAEX) which is compiled by SAM Group                                                                                             | www.adequity.co.uk    |
| Blue Orchard Loans Development (BOLD 2) | • CDO launched by BlueOrchard and Morgan Stanley  
• Finances non-guaranteed loans to a diversified portfolio of microfinance institutions  
• Includes several types of bonds, with the senior bonds rated by S&P                                                                                   | www.blueorchard.org   |
| EcoSecurities Certified Emissions Reductions | • Holds the rights to credits from a range of Clean Development Mechanism (CDM) projects  
• Developed jointly with Credit Suisse                                                                                                               | www.ecosecurities.com |
| MicroFinance Securities XXEB        | • CDO with debt and equity tranches, arranged by Developing World Markets  
• Fund closed in 2006 and was the first microfinance CDO to be rated                                                                                   | www.dwmarkets.com     |
Commodities: Carbon and Forestry

Carbon and sustainable forestry are emerging commodity types which are attracting interest from pension funds and other investors.

Carbon trading is a market mechanism which provides economic incentives for reducing carbon dioxide emissions. The market has been created through legislation and targets which seek to cap the volume of emissions from industries and the domestic sector under the Kyoto Treaty. The underlying ‘commodity’ is a dematerialised allowance certificate, as opposed to a physical commodity. The trading of the certificate occurs in the same way other commodities are traded. Pension funds primarily access investment opportunities through investment in carbon funds. Carbon markets are in their infancy but are rapidly growing. An estimate by Point Carbon indicates a potential market size exceeding $550 billion.

Pension funds can invest in sustainable forestry either through segregated accounts or a co-investment fund. Forestry can be considered a good portfolio diversifier as an asset class because it is less exposed to macroeconomic impacts and volatile international markets. Sustainable forestry investment are best defined as investments in forests which manage environmental and social issues, which for example could lead to Forest Stewardship Council (FSC) certification. Attention to environmental and social issues may also deliver carbon credits and other sustainability opportunities.

Examples of Investment Opportunities in Carbon

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<tr>
<th>Name</th>
<th>Characteristics</th>
<th>Contact</th>
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<tbody>
<tr>
<td>Barclays Capital Global Carbon Index</td>
<td>• Index tracking the performance of credits issues through major carbon trading schemes</td>
<td><a href="http://www.barcap.com">www.barcap.com</a></td>
</tr>
<tr>
<td></td>
<td>• Provides a benchmark for investment</td>
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<tr>
<td>Carbon Assets Fund</td>
<td>• Invests in a diversified portfolio of projects which qualify as Clean Development Mechanisms and Joint Implementation (JI) projects under Kyoto</td>
<td><a href="http://www.caf-ccm.com">www.caf-ccm.com</a></td>
</tr>
<tr>
<td></td>
<td>• Initial investments have been in landfill gas utilisation</td>
<td></td>
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<tr>
<td>Climate Change Capital Carbon Fund</td>
<td>• Consists of two funds with over €800 million under management</td>
<td><a href="http://www.climatechangecapital.com">www.climatechangecapital.com</a></td>
</tr>
<tr>
<td></td>
<td>• Invests in emissions reduction projects in emerging markets</td>
<td></td>
</tr>
<tr>
<td>European Carbon Fund</td>
<td>• Managed by Natixis</td>
<td><a href="http://www.europeancarbonfund.com">www.europeancarbonfund.com</a></td>
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<tr>
<td></td>
<td>• Finances the carbon components of environmentally friendly projects and provides liquidity in the European carbon market</td>
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Examples of Investment Opportunities in Forestry

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<th>Name</th>
<th>Characteristics</th>
<th>Contact</th>
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<tbody>
<tr>
<td>Phaunos Timber Fund</td>
<td>• Managed by FourWinds Capital</td>
<td><a href="http://www.phaunostimber.com">www.phaunostimber.com</a></td>
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<tr>
<td></td>
<td>• Invests in a diversified portfolio of timberland properties and related</td>
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<td></td>
<td>• investments through a research-led sustainable investment process</td>
<td></td>
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<tr>
<td>GMO Long Horizons Forest Fund</td>
<td>• Invests primarily in forestry projects that qualify for FSC certification</td>
<td><a href="http://www.gmo.com">www.gmo.com</a></td>
</tr>
<tr>
<td></td>
<td>• Focuses on North and South America and the Asia/Pacific region</td>
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<td>Global Environment Fund</td>
<td>• Makes direct investments in mid-sized, sustainable forest management</td>
<td><a href="http://www.globalenvironmentfund.com">www.globalenvironmentfund.com</a></td>
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<td></td>
<td>companies in the Southern Hemisphere</td>
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Sustainable Alternatives:
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