

# **Reinvesting Pensions:**

From fossil fuel divestment to reinvestment in the new economy



Austerity cuts have compromised local government's financial stability and capacity to respond to the social, economic and environmental crises facing us today. This report has been produced to assist councillors, local government staff, pension holders and the wider public to understand how we can reinvest to build a new economy.

What if £14 billion, currently in fossil fuels, was re-invested to create environmental, social and economic benefits – as well as a sound financial return? Pension Funds associated with the Environment Agency and Haringey Council are demonstrating that it is possible to divest and reinvest. Others can learn from their example, replicate and improve.

As an important civic institution, local government has a duty to invest in our future.

We advocate for pensions and other funds to divest from fossil fuels and reinvest in economic activities that are low carbon, create good quality local jobs, have demonstrable social benefits, and increase public and democratic control over the economy.

# **SUMMARY**

Austerity cuts have compromised local government's financial stability and capacity to respond to the social, economic and environmental crises facing us today. At the same time, local government pension funds in the UK invest over £14 billion into fossil fuel companies. Instead of guaranteeing the future of 4.6m pension-holders and their families, these investments endanger their future – both by driving climate change and forming an unacceptable long term financial risk.

What if £14 billion was invested strategically to deliver a broad range of environmental, social and economic benefits – as well as a sound financial return? £14 billion could build over 200,000 homes or install solar that could generate more electricity than Scotland uses. Leaders of more than 50 Labour-run councils have pledged that their cities will be run entirely on green energy by 2050. £14 billion can provide crucial capital to support such commitments, even during the politics of austerity.

Fossil fuel divestment presents local government with the opportunity to link up financial investment decisions with strategic objectives for local economic development and climate change mitigation and adaptation.

We advocate for pensions and other funds to divest from fossil fuels and reinvest in economic activities that are low carbon, create good quality local jobs, have demonstrable social benefits, and increase public and democratic control over the economy. We call this *'new economy'* reinvestment. This can also deliver safer pensions for pension holders and their families than oil, gas or coal investments. This report has been produced to assist councillors, local government staff, pension holders and the wider public to understand how we can reinvest to build a new economy. There are a plethora of options for funds that are divesting from fossil fuels. However, many of the most obvious alternative investments are still focused on multinational equities, and are not part of the new economy. Hence this report examines both the current investment possibilities – along with their limitations - and how existing investment strategies can help create groundbreaking new socially useful portfolios.

Fiduciary duty, the legal obligation that requires trustees to act in the best interest of their members, is often held as a barrier to divestment and reinvestment. This duty is not clearly defined in law and the narrow interpretations that favour short term profit over pension fund members' long term interests are increasingly being challenged. Legal opinions that take into account climate risk are presented in section 2.

Some local government pension funds have already recognised the need to decarbonise their portfolios and invest strategically into the local economy. Such investment approaches are often called 'responsible investment' or 'portfolio diversification'. Section 3 explores how certain investment mechanisms, which include the creation of new asset classes, assigning portfolios specific investment mandates, investing directly in socially useful companies, using specialist indices such as low carbon indices, and green bonds provide us with starter reinvestment options. In section 4 and 5, two non-exhaustive lists of responsible investment funds and specialist asset managers are presented. These products and managers are not endorsed or recommended by Community Reinvest or Platform but have been included to illustrate some of the current options available.

Section 6 presents five case studies of local government pension funds' responsible investment strategies to highlight what pension funds are already doing regarding decarbonisation and local economic development.

Section 7 looks at key policy trends. Infrastructure finance is rapidly developing. With pressure from central government, it's important that local government actively shape this emerging agenda to ensure pension funds are utilised appropriately. The policy landscape and pitfalls to be aware of are explored in section 7.1.

In recent years, community energy in the UK grew exponentially - pension funds had begun to invest in this new energy system. However, the government's proposed changes to the Feed in Tariff are making the business model for community renewables unviable. Section 7.2 suggests new local supply models could become community energy 2.0. Commitment to divestment will unlock funds for reinvestment but it cannot be taken for granted that reinvestment will automatically deliver a decarbonised and democratised new economy. The report has been peppered with mini 'health warnings' to highlight concerns and pitfalls to watch out for.

The concluding Section 8 points towards the immediate steps in creating a new economy reinvestment strategy.

We hope that this report makes clear the transformative potential of divestment and reinvestment.

All interested stakeholders - local government (councillors and staff), pension fund members and the broader public - need to take an active role in demanding divestment and shaping reinvestment decisions. We will need to raise our financial and economic literacy so that we are able to scrutinise the advice of asset managers, maximise on available opportunities and actively create new opportunities that democratise and decarbonise our economy. This report is intended to serve as a resource for this important task.

### Contents

1.	Why divest and reinvest?		7
2.	Fiduciary duty		10
	2.1. Pensions: (Climate) change is coming (Statement by Client Earth)	10	
3.	Adapting responsible investment strategies for reinvestment		12
	3.1. New asset categories / portfolios	12	
	3.2. Assigning investment mandates	13	
	3.3. Low carbon indices	14	
	3.4. Low carbon and impact funds	14	
	3.5. Taking direct control of investments	15	
	3.6. Green bonds	15	
4.	Examples of responsible investment funds		17
	4.1. Closed for investment	18	
5.	Examples of specialist asset managers		21
6.	Local authority pension fund case studies		23
	6.1. Environment Agency Pension Fund	23	
	6.2. Greater Manchester Pension Fund	24	
	6.3. Strathclyde Pension Fund	25	
	6.4. Lancashire Pension Fund	25	
	6.5. London Borough of Islington Pension Fund	26	
7.	Key policy trends		28
	7.1. Investing in infrastructure	28	
	7.2. Investing in community energy (contribution by RegenSW)	30	
8.	Developing a new economy reinvestment strategy		31
	8.1. Starting points	31	
	8.2. The road ahead	32	
Appendices			
	Appendix A: Some definitions of responsible investment		33
	Appendix B: List of low carbon indices		34
GI	Glossary		
Endnotes			36

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This report has been produced by Community Reinvest and Platform London.

**Community Reinvest** works with the fossil free divestment movement, civic institutions such as local authorities, community energy organisations, and NGOs to facilitate divestment from fossil fuels and reinvestment into local economic activities that have clear social and environmental benefits. w: www.communityreinvest.org.uk t: @comm\_reinvest

Platform London seeks to build a fairer, cleaner and more democratic energy and finance system, including through research on the potential of divesting and reinvesting public sector pensions. For 20 years we have engaged with public bodies and social movements to challenge the injustices of fossil fuel extraction. w: www.platformlondon.org t: @platformlondon

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### Why divest and reinvest?

We are facing high youth unemployment, housing shortfalls, increasing inequalities, significant cuts to health and education services, and growing risks associated with climate change, worsened by a lack of investment in low carbon infrastructure and cuts to renewable energy support.

Just when civic leadership is needed most, austerity cuts have compromised local government's capacity to respond in a joined up fashion. Since the 2010 Spending Review, funding to local government in the form of grants will have been cut by approximately 64%<sup>1</sup>. In order to cope, councils have slashed staff numbers, shedding long-term strategic capacity in areas including planning, policy and environment. Cuts to funding have gone so far that the National Audit Office has warned 50% of councils may fail by 2020<sup>2</sup> and DCLG, the department responsible for managing them, has no way of tracking their financial health.

Against the backdrop of long term austerity politics, proposed policy changes such as business rate retention and curtailing local government's decision making autonomy in procurement<sup>3</sup> and other services further threaten local government's financial stability and capacity.

For example, Chancellor George Osborne recently announced that from 2019/2020, local authorities will retain 100% of the income

"Committing to divest will unlock funds. How do we ensure reinvestment delivers a decarbonised and democratised new economy?" gained from business rates<sup>4</sup>. Currently this money is sent to the Treasury to be recirculated according to the Barnett formula. This means that money from wealthy boroughs is redistributed to areas with greater social deprivation and need. However, business rate retention coupled with competition regarding council tax levels creates conditions in which wealthy boroughs are free to slash business rates to attract investment whereas poorer boroughs, which tend to have higher debts, face falling revenue and a race to the bottom.

Local government needs to find a way to navigate these policy changes and build capacity and financial stability to effectively respond to the many co-linked economic, social and environmental crises facing us today.

At the same time, local government pension funds are heavily invested into fossil fuels – totalling over £14 billion of oil, gas and coal shareholdings. Some council pension funds have over £400 per resident invested in fossil fuels.

But a safe future is threatened by fossil fuels, and we are entering an era of increased climate action. At least 80% of the world's oil, coal and gas reserves need to stay in the ground, to prevent catastrophic climate change. A greater proportion will need to be left un-extracted if we are to limit warming to 1.5 degrees, the target set in the COP21 Paris climate accord. This means that in the medium to long-term, oil, gas and coal reserves will not be worth their current share value. Workers' pensions will likely be better protected by divesting funds from fossil fuels, before it is too late.

Fossil fuel investment is already becoming a risky bet – in just 18 months, local government pension funds lost hundreds of millions of pounds, as the value of the world's biggest coal mining companies crashed.<sup>5</sup>

## "Workers' pensions will likely be better protected by divesting funds from fossil fuels, before it is too late."

In September 2015, a coalition of civil society groups released detailed data on local government pension fund investments<sup>6</sup>. Within weeks, the Environment Agency Pension Fund announced it would decarbonise its equity portfolio by reducing coal assets by 90% and oil and gas stocks by 50% by 2020. In November 2015, South Yorkshire Pension Fund committed to divesting from coal and tar sands companies. The decision acknowledged that "there should be a long term tilt towards a low carbon economy within its portfolios."<sup>7</sup> The decision follows divestment commitments from Oxford City Council and Bristol City Council made earlier in 2015.

Local residents and pension fund members across the UK are calling for their councils to commit to immediately freezing any new investment in fossil fuel companies and divest all direct shares within 5 years. The calls will only get louder.

# What divestment offers local government

By divesting fossil fuel holdings, local government will free up capital that can be invested more usefully, boost local economies, and provide public benefit while potentially generating a higher return than fossil fuels will over the next generation.

Pensions can be harnessed to drive the energy transition, create local jobs and support local innovation. Pensions can be more effectively put to work by creating and retaining value in local economies, while establishing new community ownership models. The longterm nature of pension investments allows for the support of infrastructure essential in reducing inequality and meeting climate commitments.

Instead of investing in the fossil fuel industry, what if £14 billion was invested in the new economy in a manner that reaps a broad range of environmental, social and economic benefits? **£14 billion could build over 200,000 homes or install renewables that generate more electricity than Scotland uses.** Leaders of more than 50 Labour-run councils have pledged their cities will be run entirely on green energy by 2050.<sup>8</sup> £14 billion provides the capital to make such commitments possible, even during a politics of austerity.

By divesting and reinvesting £14 billion into renewable energy, public transport and social housing, local government could create jobs, boost local economies and future proof against climate change while protecting pensions.

We advocate that local authorities utilise the opportunity presented by the fossil free divestment movement to link up financial investment decisions with strategic objectives for local economic development and climate change mitigation and adaptation. Local economic development should include plans for developing local industrial manufacturing capacity in low carbon sectors. Pensions in general and divested funds in particular are a significant source of capital for local governments to effectively respond to the many co-linked crises, including investing in the infrastructure and socially beneficial economic activities necessary for a job rich and democratic low carbon transition.

# Developing a 'new economy' reinvestment strategy

Some local government pension funds have already recognised the need to decarbonise their portfolios and invest strategically into the local economy. These investment approaches, often described as 'responsible investment' or 'portfolio diversification' provide us with a starting point upon which to create a reinvestment strategy for funds that commit to divestment.

However, we go further and assert that democratising our economy is as crucial as decarbonising our economy.

This means investing in economic activities that are not only low carbon but also create good quality local jobs, have demonstrable social and environmental benefits, and are carried out by entities that have democratic governance structures. Democratic oversight is crucial to ensuring our wealth is invested appropriately, and workers and the wider public are treated with respect. We call such an economy 'the new economy'. We recognise that many of the reinvestment options available and documented in this report cannot be described as new economy reinvestment. Many low carbon funds invest in multinational corporations with problematic human rights, environmental and social impacts. However, the diversification of pension fund portfolios from business as usual to some form of 'responsible' investment show us how portfolios can be guided towards new economy reinvestment.

### **Fiduciary duty**

Fiduciary duty is a legal obligation that requires trustees to act in the best interest of their members. These duties, however, aren't clearly defined in law and has led to some pension funds interpreting their duties in a very restrictive way, focussing often on short term profits rather than longer term considerations such as how climate change will impact members' retirements.

Narrow interpretations also do not give any room for pension fund members' ethical views<sup>9</sup> or local development considerations, and are often used as a reason to prevent divestment and new economy reinvestment.

Such limited interpretations are increasingly being challenged. In November 2015, Christopher McCall QC a pre-eminent legal expert on fiduciary duty raised the prospect that charities may be legally required to reevaluate their approach to carbon intensive investments. Helena Morrissey, CEO of Newton and chairman of the Investment Management Association, recently warned that the impact of climate policy is still not high enough on the agenda of most investment managers and has warned her peers that "We slept walked into the financial crisis and we have no excuse for sleepwalking into a climate crisis."<sup>10</sup>

"Leading funds are beginning to face the fact that climate change poses material financial risks to their investment portfolios." Client Earth, an environmental law firm based in London, Brussels and Warsaw, have prepared a statement on the duty of local authority pension fund members to consider the material financial risks posed by climate change, supporting the case for divestment and reinvestment. This statement is given below.

#### 2.1. Pensions: (Climate) change is coming (statement by Client Earth)

There is change afoot in the pensions industry. Leading funds are beginning to face the fact that climate change poses material financial risks to their investment portfolios.

In a move that showed great leadership, the Environment Agency Pension Fund (EAPF) recently announced that it would develop mechanisms to align its portfolio to keep within a 2 degree world. To do this, EAPF has committed to, among other things, decarbonise its equity portfolio by reducing its coal assets by 90% and its oil and gas stocks by 50% by 2020.

According to EAPF, ignoring the risks posed by climate change would be a breach of the fund's legal duty to act in the best, long-term interests of its members. We think this is the first time a pension fund has explicitly acknowledged owing a legal duty to consider climate risks on behalf of its members. EAPF demonstrates a clear understanding of the law and others would fare well in following its footsteps. Governor of the Bank of England Mark Carney, in a landmark speech given at Lloyd's of London in September, warned that climate change poses huge risks to the stability of the financial sector.

Since the traditional 'horizons' of most political and financial actors do not extend beyond 2-3 years (a decade at most), *"once climate change becomes a defining issue for financial stability, it may already be too late"*.

The financial and legal reasons for considering climate risks during the investment decisionmaking process are closely linked. As EAPF correctly points out, pension funds have legal duties to act in the best, long-term interests of their members, and this requires funds to adequately measure and manage material financial risks to their investment portfolios.

Substantiating this is the requirement on funds to treat members 'fairly as between them'. If funds ignore climate risks, they are effectively preferring the short-term interests of older members to the long-term detriment of younger members. This, we believe, is contrary to the law. As the preceding paragraphs demonstrate, the consensus around climate risks and the potential impact on financial stability is growing. In the context of pension funds, it is now becoming widely accepted that climate change poses material financial risks<sup>11</sup> to investment portfolios.

If the experts<sup>12</sup> are correct, then our reading of the law strongly suggests that such risks should be mandatory considerations for pension funds when they are exercising their investment powers.

When you consider the scale of the pensions industry and what it represents to the future wellbeing of millions of people, it is difficult to comprehend why many within that industry continue to ignore climate risks.

At ClientEarth, we believe there is sufficient and growing expert evidence to substantiate the view that climate risks should be mandatory considerations for trustees and fund managers when making investment decisions. **Those** who continue to ignore these risks, thereby jeopardising the pension pots of savers, may find themselves facing legal challenges.



# Adapting responsible investment strategies for reinvestment

A significant number of pension funds have already committed to responsible investment practices. These approaches have been tried and tested and can be adapted for divest:reinvest purposes.

While the responsible investment standards tend to be quite weak, these existing strategies provide us with some immediate options for reinvesting divested funds and a platform upon which to build a long term reinvestment strategy.

Responsible investment is defined by the United Nations Principles of Responsible Investment (UNPRI) as "an approach to investment that explicitly acknowledges the relevance to the investor of environmental, social and governance factors, and of the long term health and stability of the market as a whole. It recognises that the generation of long term sustainable returns is dependent on stable, well functioning and well governed social, environmental and economic systems"<sup>13</sup>.

Launched in 2006, UN PRI developed six principles for responsible investment that 297 asset owners, 930 investment managers and 194 professional service partners have signed up to, indicating that the industry has been, for some time now, developing responsible investment strategies.<sup>14</sup>

Since responsible investment necessitates changes in funds allocation, pension fund managers are using a number of strategies to diversify their current investments. These involve:

 creating new types of asset categories or portfolios that enable investment into 'non traditional' assets

- instructing specialist asset managers to
   focus on specific types of investment
   (known as assigning investment mandates)
- investing in pooled funds that track indices that meet responsible investment goals (e.g. low carbon indices)
- investing in specialist funds or small and medium enterprises that meet responsible investment goals (e.g. low carbon and impact funds)
- making investment decisions directly instead of outsourcing to asset managers, thus retaining oversight and control over investment decisions
- investing in specialist bonds (e.g. green bonds, infrastructure bonds) that finance projects that have a clear positive environmental and social impact

These approaches have been tried and tested and can be adapted for divest:reinvest purposes, and in particular for developing new economy reinvestment strategies. The following sections explore this.

# 3.1. New asset categories / portfolios

A pension fund's total investment holdings tend to be allocated to a number of different portfolios - often focused on a particular type of asset category. Examples of asset categories include equities, bonds, foreign currency, property, infrastructure - often with a geographical focus (e.g. UK, US, Global). Traditionally, the largest portfolios of local authority pension funds have been equities and fixed income bonds.

A pension fund's portfolios are not fixed and can be changed by pension fund committees. Committees have the authority to remove or add different types of portfolios, including asset categories such as private equity, property, infrastructure, and specialist portfolios that focus on specific types of assets, for example renewable energy, social housing or sustainable infrastructure. Such additions can be part of a risk-diversifying strategy. Conventional investment advisors such as Mercer support portfolio diversification and investment in alternative asset categories<sup>15</sup>. Divested funds can provide the means to create new types of portfolios.

Portfolio diversification into renewables and social housing has been adopted by several pension funds. For example, Islington Pension Fund has allocated 15% of total investment to new infrastructure and social housing, Strathclyde Pension Fund's New Opportunities Portfolio (NOP) has been created to invest 5% of its total fund on 'new opportunities', which mainly include offshore and onshore wind and community scale renewable energy generation. The Greater Manchester Pension Fund has allocated 1% of holdings for investments with a clear positive social impact, such as social housing and community scale renewables (see section 6).

**Health warning**: The creation of new portfolios does not inevitably lead to investment in the new economy. A private equity investment could finance clean tech, loan shark lending or mining. Depending on how standards are set, 'clean tech' itself could include multinationals building on stolen land, or controversial biofuels plants. Infrastructure investment could finance airports or pipelines for fracking. Therefore, it is important to set clear parameters to guide investments into new asset classes, and for local government, pension fund members, local residents and campaigners to take an active role in shaping the priorities for new portfolios.

# 3.2. Assigning investment mandates

Pension funds are managed by a mix of different 'mandates' (instructions) given to asset managers and in-house managers. The pension fund committee can create mandates that specifically ask asset managers to develop a sustainable and responsible investment strategy which may or may not include new portfolio creations. The micromanagement of portfolios is often undertaken by asset managers, creating a degree of separation between the pension fund committee and actual investments. However, the committee can use the process of giving detailed instructions and setting special mandates to shape reinvestment.

The Environmental Agency Pension Fund (EAPF) is a pioneer in using this type of responsible investment strategy. In 2005 EAPF assigned its first sustainable private equity mandate to Robeco. In 2015, EAPF awarded £250m of its portfolio to new asset managers that have shown strong credentials in linking performance in environmental, social and governance (ESG) criteria to financial success. The EAPF has published several documents detailing lessons learned from their selections processes, which other local authority pension funds can use.<sup>16</sup>

**Health warning:** While creating an investment mandate based on responsible investment criteria is an effective way of reducing the carbon exposure of a fund, the mandate needs clear guidelines to ensure that it leads to reinvestment into the new economy. If the mandate is not specific enough, the asset managers might still mostly invest in conventional companies, for example Unilever, which has a comparably strong Environmental Social and Governance (ESG) rating.

#### 3.3. Low carbon indices

Mandates given to asset managers can track a specialist index, such as a low carbon index. Traditionally, many UK equity mandates have tracked the FTSE 100 index, with the S&P 500 and Dow Jones Industrial Average guiding many US-based equity investments.<sup>17</sup>

Low carbon indices exist which either track companies with comparatively smaller carbon footprints, or exclude fossil fuel companies completely. Low carbon indices have the advantage that they can also reduce exposure to other carbon intensive industries, such as monoculture industrial agriculture.

Mercer, advisor to Islington Pension Fund and EAPF, has stated that reducing the carbon exposure of a portfolio is essential to managing systemic risks properly<sup>18</sup>. The EAPF has decided to transition its passively managed global equities worth £280m to be run against the new MSCI Low Carbon Target Index. This index provides a substantial reduction in climate risk, 75-80% in terms of exposure to greenhouse gas emissions, and 85-90% in exposure to fossil fuel reserves.

Low carbon indices can play an important role in ensuring funds are reinvested into parts of the economy that are less carbon intensive. See Appendix B for a list of low carbon indices.

**Health warning:** Tracking investments against low carbon indices reduces the exposure to carbon, but does not necessary lead to reinvestment into the new economy or even investment in top sustainable companies. Investments can be into companies like Vodafone<sup>19</sup>, Google<sup>20</sup>, Amazon<sup>21</sup>, or Barclays<sup>22</sup> - all criticised for avoiding taxes and hence undermining the economy. Some low carbon indices include the lowest emitting companies in any sector – including fossil fuels. Furthermore, these indices only include companies traded on stock markets and do not include direct investment in renewable infrastructure or social housing. However, low carbon indices can be a useful medium step and form part of a wider, more diverse reinvestment strategy.

#### 3.4. Low carbon and impact funds

Specialist asset managers offer a variety of funds in different asset categories (e.g. bonds, equities, property) aimed at certain sectors. Asset managers can assess companies according to social and environmental impact criteria or actively choose to work with enterprises fitting their categories.

For example: Waltham Forest Pension Fund helped seed a £20.8m Impact Ventures UK fund, which provides finance to social enterprises; EAPF (£15m) and Clywd Pension Fund (£5m) invested in the Low Carbon Workplace, a property fund that enables the retrofitting of commercial property to improve energy efficiency and decrease energy demand (see section 6.1.); and Strathclyde Pension Fund committed £50m to a Green Investment Offshore Wind fund (see section 6.3.).

The 'Investing 4 Growth' initiative (see section 6.2.) found that impact investment opportunities with commercial returns are readily available but pension fund managers are not aware of these opportunities. Pension fund managers have a responsibility to improve their knowledge. Some pension funds may need to change their portfolio allocation to include these alternatives.

**Health warning:** Although asset managers exist that specialise in responsible investment, we should continue to raise our collective financial literacy so we are able to scrutinise external advice and ensure the funds invest in the best available opportunities. For example, some low carbon investments can also be driving gentrification, or supporting real estate developers in a manner that has negative social impact.

## 3.5. Taking direct control of investments

Instead of appointing asset managers to invest on behalf of the pension fund, the pension fund administration could make these investment decisions itself. This would give the fund greater control over its investments and enable funds to invest in innovative schemes that generalist asset managers don't make it their business to investigate. For example, Lancashire County Pension Fund's (LCPF) £12m investment in Westmill Solar Cooperative was possible due to the pension fund making the decision directly.

Investing directly also increases transparency and democratic accountability to pension holders and local authority stakeholders. There is a more direct relationship to the investment – in itself a social good in a financialised landscape.

LCPF has proved that in-house management can be a significantly better way of handling pension fund assets and they have been awarded several awards for their approach. However, in-house management and such types of direct investments are currently only feasible if the pension fund is large enough. Smaller pension funds can overcome scale issues through pooling their assets, for example through, Collective Investment Vehicles (CIV), discussed in section 6.5. However, CIVs have their own pitfalls that need to be considered. If CIVs become too large, individual pension funds might lose control over decision making.

There are also legitimate concerns over the costs of direct investment – it increases the work of internal assessments, and many local authority pension fund boards have limited financial expertise – so there are risks involved. However, greater transparency and public engagement – democratisation – of local authority pension funds can resolve some of these concerns, through increased scrutiny.

**Health warning**: Essential for innovative direct investments is the existence of an inhouse management team that has sufficient expertise. This can also ensure that social goods and positive benefit for the community are maximised. Considering the urgent need to transition to a low carbon economy, developing these skills makes sense and will turn out to be vital in the near future.

#### 3.6. Green bonds

Green bonds are 'thematic' bonds, that is, they function exactly as regular bonds but are specifically designed to mobilise capital for the low carbon transition. The market is growing but unregulated. Green bonds are generally self labelled rather than certified by an independent organisation and there are concerns regarding transparency. Organisations such as the Climate Bonds Initiative (CBI) and International Capital Market Association (ICMA) are developing definitions and standards to create a common framework. CBI has developed a Climate Bonds Taxonomy to encourage common definitions across the green bond market and a Climate Bond Standards and Certification Scheme<sup>23</sup>. The ICMA has developed Green Bond Principles, a voluntary process guidelines that recommend transparency and disclosure<sup>24</sup>.

CBI estimates that the global labelled green bond market is valued at \$65.9bn with a further \$531.8bn in unlabelled climate-aligned bonds. 'Labelled' means that 100% of the proceeds from the bond sale are invested in projects or assets that fit within CBI's Climate Bonds Taxonomy. The unlabelled climatealigned bonds are issued by companies who derive 95%+ of their revenues from climatealigned assets, as defined in the taxonomy. Within this universe, rail bonds issued by governments are the largest type of bonds followed by energy bonds<sup>25</sup>.

Network Rail has issued \$44.1bn of unlabelled climate-aligned bonds and Transport for

London has issued \$400m of bonds as green<sup>26</sup>. Although not labelled 'green', public infrastructure bonds such as Warrington Borough Council's recent £150m bond issue<sup>27</sup> to fund the building of new homes is also a suitable option for reinvestment. Warrington is the first local authority outside London to issue a bond in recent times. But as more councils follow Warrington's lead, there will be greater opportunities for public sector pensions to support public infrastructure bonds.

**Health warning:** As with all types of investments, green bonds don't automatically guarantee new economy reinvestment. Since green bonds are generally self-labelled, thorough scrutiny is required to ensure that the bonds are being used for investment into the new economy. For example, the European Investment Bank and the European Bank for Reconstruction and Development have been issuers of green bonds – with the former issuing €10bn of green bonds.<sup>28</sup> However, both banks have been criticised for driving a politics of privatisation, and subsidising carbon intensive and fossil fuel infrastructure.

Green bonds - if chosen with thorough consideration - can form an important part of a reinvestment strategy and support local jobs and infrastructure while delivering a solid return.

# Examples of existing responsible investment funds

The following list is not exhaustive and is presented only as a taster of existing options.

These funds are not endorsed or recommended by Community Reinvest or Platform. We have not done an investigation of these funds assessing them for human rights or social impacts. The order does not imply a ranking.

Funds usually only list their top 10-20 holdings in their annual reports or factsheets. Based on the publicly available information, these funds appear not to be exposed to fossil fuels.

**Health warning:** Even if focusing on renewable energy and low carbon infrastructure, there is a strong chance of investing into large corporations with little democratic benefits for local people, whether in the UK or elsewhere.

- Bridges Ventures Funds A number of funds provide investment and support to charities and social enterprises in the areas of health, education, sustainable living and disadvantaged communities. Some of these funds might be closed<sup>29</sup>.
- Impax Environmental Markets The fund invests in "technology-based systems, products or services in environmental markets, particularly those of alternative energy and energy efficiency, water treatment and pollution control, and waste technology and resource management (which includes sustainable food agriculture and forestry)"<sup>30</sup>.
- Impax Climate Property Fund LP Part funded by the European Investment Bank, the private equity fund intends to invest in existing buildings that need rehabilitation

and energy efficiency upgrading.The projects financed by the fund are expected to be owned by private companies. We believe this fund will open soon for investments, however, we have been unable to confirm whether this is an existing or forthcoming fund. Asset managers are Impax Asset Management Group<sup>31</sup>.

- 4. Low Carbon Workplace Fund The fund, a partnership between the Carbon Trust, fund manager Columbia Threadneedle Investments and property developer Stanhope, is aimed at retrofitting UK's commercial building stock while paying investors a competitive return<sup>32</sup>. See section 6.1. for more information.
- 5. Threadneedle UK Social Bond Fund The Fund invests in fixed income securities that support socially positive outcomes in areas such as affordable housing, employment, education, transport and health. Top 20 investments include European Investment Bank Green Bonds and Transport for London. A significant proportion of investments is in the UK<sup>33</sup>.
- Triodos Renewables Europe Fund The fund invests in unlisted small to medium sized solar and wind producers mainly in Western Europe.
- Triodos Sustainable Equity Fund The fund invests in worldwide equities issued by listed companies that deliver social, environmental and financial returns. The types of companies invested in are similar

to companies invested by the Triodos Sustainable Pioneer Fund<sup>34</sup>.

8. Triodos Sustainable Pioneer Fund -

The fund invests in worldwide equities issued by listed companies that derive over 50% of their revenues from sustainable energy, medical technology, environmental technology and water and corporate social responsibility activities.One main difference between the Sustainable Pioneer Fund and Sustainable Equity Fund is that the Sustainable Equity Fund has higher investments in the UK<sup>35</sup>.

9. WHEB Sustainability Fund - The fund invests in international and UK equities in those sectors identified by the asset manager as providing solutions to the challenges of sustainability. Sectors include resource efficiency, health, water, cleaner energy, environmental services, sustainable transport, and safety<sup>36</sup>. The FP WHEB Sustainability Fund is listed on ImpactBase, the online directory of impact investment funds and products.

The following fund is not fossil free but has a focus on low carbon transitions or renewable energy:

 RobecoSAM Smart Energy - Fund invests in renewable energy, energy efficiency and distributed energy systems. However this fund is not fossil free, as it also invests in natural gas.

The following fund is not fossil free. It closely follows the FTSE All-Share Index:

2. Legal & General Investment Management UK Equity Carbon Optimised Index Fund -The fund is designed for pensions investors concerned about carbon risk and aims to achieve returns close to the FTSE All-Share index while reducing exposure to financial risk from the transition to a low carbon economy and rising energy costs. The fund is sector neutral weighted compared to the FTSE All-Share but is around 20% less carbon intensive. The Fund has been developed by Legal & General Investment Management using a custom index created by FTSE Group based on carbon data provided by Trucost.

#### 4.1. Closed for investment

We have provided information for some funds that no longer are taking investments if they are interesting examples of positive investments. We have not investigated these funds fully. The fund structures and aims can be replicated to create new funds.

- 1. FSE Group Community Generation Fund -The Community Generation Fund, now closed for investments, was a national pilot fund created to catalyse the development of community-owned renewable energy infrastructure. The Fund was designed to assist communities seeking to develop renewable energy generation infrastructure which will create renewable energy, social engagement and a long term income source to be recycled by the community into relevant social impact initiatives. The FSE group are open to creating another similar fund for interested pension fund investors. Investments need not be limited to community owned renewable energy generation, particularly given the current policy climate.
- 2. Aviva Investors Pensions Infrastructure Platform (PIP) Solar PV Limited Partnership -

PIP's first solar photovoltaics fund with Aviva Investors as the fund manager. The fund aims to deliver predictable, long-term inflation-linked cash flows through investing in small-scale solar PV installations in the UK. The return objective is materially to outperform inflation-linked government bonds, with the fund expected to generate quarterly income for pension fund investors. Launched in Feb 2015, the fund closed in June 2015 with £131m of commitments from four UK pension schemes, including £20m from Strathclyde Pension Fund.

- 3. Invest Ventures UK The fund invests in social enterprises that have a positive impact on disadvantaged communities in the UK. Investors include Big Society Capital, European Investment Fund, University of Northampton and Waltham Forest Pension Fund.
- 4. Global Energy Efficiency and Renewable Energy Fund (GEEREF) - A 'Fund-of-Funds' that invests in private equity funds which focus on renewable energy infrastructure and energy efficiency projects in emerging markets.

1. Pension Funds can invest into public transport 2. Westmill Solar Co-operative - funded by Lancashire Council Pension Fund 3. Bro Dyfi Community Renewables 4. New council homes built in Dunbar, Scotland 5. Community Energy South 6. Brixton Energy Solar 3









### **Examples of asset managers**

# The following list is not exhaustive and is presented only as a taster of existing options.

These are some of the asset managers available to provide specialist advice.

These managers do not necessarily specialize in fossil free products, and are not endorsed or recommended by Community Reinvest or Platform. We have not done an investigation of these asset managers assessing them for human rights or social impacts. The order does not imply a ranking.

- Bridges Ventures Owned by Bridges Charitable Trust, Bridges Ventures focus investment in the areas of health, education, sustainable living and disadvantaged communities. The Bridges team donates the equivalent of 10% of their profits to the Trust's philanthropic activities. <u>http://bridgesventures.com/</u>
- 2. Environmental Technologies Fund -Supported by the European Communities Growth and Employment Initiative, the fund managers focus on investment in clean tech European growth companies such as wind, solar and marine power companies. <u>http://www.etf.eu.com</u>
- FIM Services Limited An alternative investment manager specialising in real asset investments, specifically forestry and renewable energy. <u>http://www.fimltd.co.uk/</u>
- Rathbone Greenbank Ethical investment management services for private clients, trusts, pensions, and charities. <u>http://www.rathbonegreenbank.com/</u>
- Foresight Group Institutional investment manager of renewable infrastructure and private equity assets. <u>http://www.foresightgroup.eu/institutional</u>

- FSE Group The group invests in small and medium-sized enterprises (SMEs) and provides a number of social impact funds which focus on scalable social enterprises and community-based renewable energy projects. <u>http://www.thefsegroup.com</u>
- 7. Hermes Investment Management - Specialist in private equity and infrastructure, manages Dorset County Pension Fund's £40m infrastructure mandate and recently appointed by the Environment Agency Pension Fund for its sustainable equity mandate. Ranked no 4 in ShareActions' Responsible Investment Performance of UK Asset Manager Survey 2015. <u>https://www.hermes-investment.com</u>
- Impax Asset Management Group plc

   Awarded the The Queen's Award for Enterprise: Sustainable Development 2014, the asset management group is a specialist in environmental markets focussing on resource efficiency, water and waste. Since 2008, Impax Asset Management has managed the Environment Agency Pension Fund's global equity portfolio's environmental markets mandate. <u>http://www.impaxam.com/</u>
- 9. LGT Capital partners LGT Capital Partners is a global asset manager and parent of LGT Venture Philanthropy, an impact investor supporting organisations with social and environmental impact. <u>https://www.lgtcp.com/en/</u>
- Triodos Investment Management A wholly owned subsidiary of Triodos Bank, the asset managers invest in renewable energy, microfinance, arts and culture,

organic farming and sustainable real estate. Most funds are categorised as impact investment funds – direct investments into companies or projects that deliver social or environmental benefits. <u>https://www.</u> <u>triodos.com/en/investment-management/</u>

- 11. WHEB Asset Management The asset managers focus on the opportunities created by the global transition to more sustainable, resource efficient and energy efficient economies. None of WHEB's funds have direct holdings in fossil fuel companies.
- 12. Nesta Investment Management LLP The firm is the fund management arm of Nesta and invests in ventures with inclusive and scalable innovations that are run by entrepreneurs and is currently seeking innovations that tackle the major challenges faced by older people, children and communities in the UK. <u>https://nestainvestments.org.uk/</u>
- 13. Resonance Resonance manage impact investment funds and currently have over £40m under management across three funds focused on community led projects and social enterprises. <u>http://www.resonance.ltd.uk/</u>
- 14. RobecoSam An investment specialist focused exclusively on 'sustainability investing'. The four themes of investment are water, climate change, impact investing and environmental and social governance. <u>http://www.robecosam.com</u>
- 15. Social and Sustainable Capital The organization is a partner of the Social Investment Business, backed by Big Society Capital and the Social Investment Business Foundation, and a fund manager and social enterprise providing finance to charities and social enterprises. <u>http://socialandsustainable.com/</u>

- 16. Temporis Capital An investment management firm which specialises in the renewable energy and clean technology sectors across multiple asset classes. Strathclyde Pension Fund invests in Temporis' Onshore Wind Fund LP. <u>http://www.temporiscapital.com/</u>
- 17. Aviva Investors A global asset manager group that chairs the The Institutional Investors Group on Climate Change, a forum for collaboration on climate change for investors. Asset managers of Pensions Infrastructure Platform's solar fund. Ranked no 2 in ShareActions' Responsible Investment Performance of UK Asset Manager Survey 2015. <u>https://uk.avivainvestors.com/</u>
- 18. Threadneedle Asset Management Global asset management group that provides some social impact funds such as the Low Carbon WorkPlace fund and the Threadneedle UK Social Bond Fund with Big Issue Invest. Ranked no 1 in ShareActions' Responsible Investment Performance of UK Asset Manager Survey 2015. <u>http://www.columbiathreadneedle.com</u>
- 19. Jupiter Asset Management Primarily focussed on managing equity investments in the UK and abroad. Ranked no 3 in ShareActions' Responsible Investment Performance of UK Asset Manager Survey 2015. <u>http://www.jupiteram.com</u>
- 20. Legal & General Investment Management -A global asset manager group offering low carbon funds. Ranked no 5 in ShareActions' Responsible Investment Performance of UK Asset Manager Survey 2015. <u>http://www.legalandgeneral.com</u>

# Responsible investment local authority pension fund case studies

These case studies highlight what some pension funds are already doing regarding decarbonisation and local economic development.

#### 6.1. Environment Agency Pension Fund (EAPF)

Fund Size: £2.3 billion

In October 2015, EAPF made a landmark announcement that it would manage its assets in accordance with the UN's principle of limiting global temperatures from rising by over 2C. The decision entails the pension fund cutting its coal exposure by 90% and reducing its exposure to oil and gas by 50%<sup>37</sup>. This announcement is the first of its kind for a UK local government pension fund. In the past, the EAPF was awarded by the LAPFF as "Best Approach to Responsible Investment". EAPF has also reduced its carbon footprint by 44% since 2008.

EAPF's main approach to responsible investment has involved hiring a specialist asset manager and providing them with a special mandate. In 2005, Robeco was awarded the "Sustainable Private Equity Mandate", which as of March 2015, was valued at £77m. According to Robeco "private equity is often focused on companies with innovative technologies and new business concepts. The vast majority of fast growing companies with exciting new sustainable technologies are too small to be listed on stock exchanges. Therefore, the only way to invest in these companies that can offer highly attractive investment returns and at the same time contribute to sustainability is through investing in private equity."38

Since 2008, Impax Asset Management has managed EAPF's global equity portfolio's environmental markets mandate. As of March 2015, the investments were valued at £230m. In 2014, EAPF earmarked up to £250m for a new 'evergreen' equity mandate. A year after the announcement, Union Ownership Capital were awarded a £90m sustainable equity mandate each, and Mirova Asset Management and Hermes Investment Management were awarded similar mandates but without an amount specified. In 2015, the fund transitioned its portfolio of passively managed global equities (£280m) to a new fund managed by Legal & General and run against the new MSCI Low Carbon Target Index<sup>39</sup>.

As of March 2015, EAPF had £18m invested in the Low Carbon Workplace Fund. The fund, a partnership between the Carbon Trust, fund manager Columbia Threadneedle Investments and property developer Stanhope, is aimed at retrofitting UK's commercial building stock while paying investors a competitive return. To do so, the fund acquires and refurbishes redundant, vacant or short-term let commercial buildings to achieve an Energy Performance Certificate rating of B or better, and rents these buildings. The buildings are attractive due to their high energy efficiency performance and the fund has a good track record in securing tenants. The fund also provides support to occupiers to maintain the energy efficiency standards.

The fund combines development and investment risk and opportunity. Launched in 2010, the fund currently manages £170m and

is open to further investments, especially from pension funds. Clywd Pension Fund is also an investor. Retrofitting the UK's current office stock is essential to meeting UK 80% carbon reduction plans for 2050 and such funds have the potential to enable significant investment in energy efficiency measures. Bruno Gardner, Managing Director of Low Carbon Workplace described it as "proof that high quality low carbon property refurbishments offer a compelling investment case. Lower energy costs mean properties are resistant to functional and environmental obsolescence."

#### 6.2. Greater Manchester Pension Fund (GMPF)

#### Fund size: £13 billion

GMPF has sought to invest according to ESG criteria via the Investing 4 Growth initiative. Investing 4 Growth is a joint initiative between six local government pension funds, including GMPF, "who seek investments that have an economic impact as well as positive social and environmental outcomes in the UK." The initiative intends to invest £157 million in total.<sup>40</sup>

Following this announcement, GMPF established a specialist internal portfolio called 'Impact Portfolio' and allocated 1% of its total fund for this new portfolio."

Under the new portfolio GMPF allocated £10m to UK renewable energy developer Albion Community Power (ACP) to develop community scale energy. The investment is in partnership with the UK Green Investment Bank (GIB) and Glasgow's Strathclyde Pension Fund (SPF). As of August 2015, ACP had raised £70m of a targeted £100m to fund community-scale renewable energy projects. The first project is a £3.3m hydropower plant in the Scottish Highlands that will generate enough electricity to supply approximately 550 homes.

In addition to its impact portfolio, GMPF has a "special opportunities portfolio", which enables funds to be allocated to "alternative" investments, for example, infrastructure. Via this portfolio, GMPF has committed to investing \$50 million in TIAA-CREF Asset Management's timber investment firm Global Timber Resources LLC<sup>41</sup>. There is no guarantee that this investment will have a positive social and environmental impact and available information is very limited. However, it shows that such a portfolio could also be used to direct investment towards infrastructure and asset classes like renewable energy and social housing.

While not a social housing project, GMPF formed a partnership with Manchester City Council and the Homes and Communities Agency to increase home-building in Manchester. Matrix Homes is a residential development company overseeing the construction of 121 properties for sale and 119 for rent across 5 sites at Chorlton, Gorton and Wythenshawe.

In January 2015, GMPF announced a £500m infrastructure investment partnership with the London Pension Fund Authority. In October 2015, the partnership revealed the vehicle will fund renewable energy projects in the UK. £9m will fund Leeming Biogas, a Yorkshire based plant that processes an average of 80,000 tonnes of food waste and providing 600m3 of biomethane gas per hour into the grid, and the remaining capital will fund a further 5-10 UK bioenergy infrastructure projects. The capital will fund the projects from planning consent to construction and will own the plants through their operational life.<sup>42</sup>

**Health warning**: Albion Community Power is not a community energy group. ACP is a private organisation whose parent company is a venture capitalist firm, Albion Ventures LLP. While this is not an investment in community owned energy (i.e. ACP is not a local community organisation or co-operative), the investment suggests that local authority pension funds do have mechanisms that enable pension fund investment in energy projects that are of similar scale to most community owned renewables. However, these mechanisms might change given threats to the Feed-in-Tariff policy.

#### 6.3. Strathclyde Pension Fund (SPF)

#### Fund size: £14 billion

In 2009, SPF established a "New Opportunities Portfolio"<sup>43</sup> (NOP) to enable it to invest in "alternative" asset classes such as infrastructure, renewables, housing and smaller property (local regeneration). These asset classes are considered alternative because traditionally pension funds have invested mainly in equities, bonds, large properties and foreign currencies. The initial capacity of the NOP is £350 million.

Although NOP was not created to be an exclusively local investment vehicle, NOP has been designed to take advantage of local investment opportunities. For example, the NOP's first investments were debt and equity financing of SMEs through 3 Scottish based funds, and to date, the majority of the £275 million investment in infrastructure has been in Scotland. Investments have been broad ranging and included the Glasgow 2014 Commonwealth Games' Athletes' Village construction, start up costs for the proposed Pensions Infrastructure Platform, maintenance contract for the M8, the construction of the replacement hospital for the Royal Infirmary in Dumfries and Galloway, £20 million in the Muzinich UK Private Debt fund, which lends directly to UK SMEs, and £15 million to provide improved levels of social care for adults with mental and physical disabilities.

Since 2014, the focus of the NOP has been on renewable energy infrastructure, including<sup>44</sup>:

 £50 million has been committed for investment in the Green Investment Bank Offshore Wind LLP fund. The GIB Offshore Wind LLP, established on a long term basis of 25 years, entails pension funds buying equity stakes in developments. Some fossil fuel companies like RWE and Statkraft have invested in the offshore wind fund. These equity stakes will be operational assets and will enable capital to be released and recycled as development finance for further offshore wind projects. The investment will provide an immediate yield and the target long term IRR over the life of the fund is projected as 9%.

- £10 million in Albion Community Power for community scale renewable energy (see GMPF case study in section 6.2), £10 million in Resonance British Wind Energy and £30 million over 7 years in Temporis Onshore Wind Fund LP. Rates of return are confidential for most investments but expected to be around 8-10%, although the Temporis fund investment which includes construction risk has a target return of 10% - 14%.
- £7.5 million in the £79 million SEP
   Environmental Capital Fund which invests
   in an existing gas transmission network
   upgrade and in renewables.
- £20 million in Aviva Investors Pensions Infrastructure Platform (PIP) Solar PV Limited Partnership.
- £100 million soft commitment to the Pensions Infrastructure Platform (PIP)<sup>45</sup>.

#### 6.4. Lancashire County Pension Fund (LCPF)

#### Fund Size: £5 billion

LCPF has undergone significant structural changes since 2009. In 2009, when Mike Jensen joined as a CEO, the fund was over reliant on equity assets, with 73% of assets allocated to equity, around 20% in bonds and the rest in property. In the last 6 years, the fund has sought to diversify its overall portfolio, building in-house investment expertise and parting ways with generalist investment advisors.

By December 2014, the fund had reduced equity investments from 73% to 50% and

increased investments in infrastructure, property and other asset categories<sup>46</sup>. Infrastructure investments include both direct and indirect investments (i.e. via external fund managers), and the majority of LCPF's direct investments have been in operational renewable energy assets in the UK, US and Australia. According to Investment & Pensions Europe, the main focus for infrastructure investments has been in equity but further expansion in debt is possible.

Also in December 2014, LCPF signed an agreement with the London Pension Fund Authority (LPFA) to create a create a jointly owned vehicle to manage £10.5bn<sup>47</sup>. The details of what this partnership will invest in are as of yet not known. Potentially the partnership could invest in renewable energy, social housing and so forth.

LCPF is hailed for its £12m debt investment in Westmill Solar Coop, UK's largest cooperatively owned solar farm. In February 2013, LCPF issued a 23.5 year bond to "refinance" the co-operative. Since the investment was made after, rather than before, the farm was operational, the investment is described as "refinance". Generally, refinance investments are considered less risky than development or construction finance. The long term nature of the bond provides the co-operative with guaranteed finance and LCPF receives a return 3% points above the retail price index.

LCPF is a signatory of the UN PRI. At a meeting in September 2015, the fund agreed to<sup>48</sup>:

 create a Responsible Investment Policy which will include a more detailed statement on responsible investment aspirations, identification of practical approaches, design of any new approaches needed to fulfill these aspirations, and a structured framework for discussions with external asset managers.

- investigate procuring a responsible investment monitoring service.
- develop a LGPS procurement framework for the provision of ESG Services with the London Pensions Fund Authority.
- respond to the Lancashire Fairness
   Commission's recommendation no 14 as detailed in 'Fairer Lancashire Fairer Lives': "We (Lancashire Fairness Commission) recommend that The Lancashire County Pension Fund should be asked, within the legal constraints of its fiduciary responsibilities, to develop responsible investment within its portfolio and seek to shift a proportion of the fund to the local economy including investment in renewable energy and affordable housing".

LCPF is in a good position to divest and develop a reinvestment strategy. Not only has the fund built up in-house expertise over the last several years through portfolio diversification, the fund now also has backing, as a result of the Lancashire Fairness Commission, to reinvest into the new economy.

#### 6.5. London Borough of Islington Pension Fund (IPF)

#### Fund size: £971 million

Recently IPF announced it would be investing 15% of its total fund in infrastructure and social housing through a new portfolio - both debt and equity investments are being considered. Resources for this portfolio will be acquired through selling bonds. Could future financial resourcing of this fund also be provided through divestment of fossil fuel company shares?

Currently, IPF uses a passive tracking computer system to manage its investments. The fund was recently advised by Mercer to move to "smarter" systems to enable a mixture of passive and active management, including the use of low carbon indices which is an option currently not being pursued by IPF. In theory, smarter systems should increase the fund's capacity to invest more responsibly.

The Mayor of Islington, Councillor Richard Greening, reports that IPF is interested in responsible investment but the fund's relatively small size constrains what the fund can achieve on its own. Not only does a small size mean less in-house expertise and resources to access advice, a relatively smaller volume of funds also means greater risks than those faced by larger funds for the equivalent investments. The London pension funds are seeking to overcome this issue by pooling funds and creating a Collective Investment Vehicle (CIV)<sup>49</sup> that will manage assets worth £24 billion. The CIV, which will be operational from 2016, will primarily be used for infrastructure investments. It is not yet known what kind of infrastructure investments will be made via the London CIV and whether the London boroughs will be able to retain democratic oversight and ownership. However, a CIV does open up possibilities for individual funds to jointly invest in renewable energy and sociallyuseful infrastructure. Funds for the CIV can be obtained via divestment.

## **Key policy trends**

#### 7.1. Investing in infrastructure

Infrastructure finance is an area that is rapidly developing. Refinancing operational infrastructure projects is currently the most common investment approach for pension funds due to the risks associated in the construction phase of major infrastructure works. These risks arise from complex planning approvals processes, cycles of financial investment, and contractor delivery and staff and material shortages which have the potential to prolong the construction phase.

Typically, large banks, central or local government agencies or private equity investors tend to fund the capital phase of a major construction project, with pension funds buying in post-completion. Once construction is completed, the project consortium will refinance at a lower, relatively risk free interest rate, and offer shares to institutional investors including pension funds.

There is growing political pressure for local authority pension funds to invest into infrastructure. In autumn 2015, George Osborne announced the government's intention to pool the assets of the 89 local government pension funds into six new British Wealth Funds to overhaul infrastructure financing.

The government has begun consulting on this proposal. The first consultation on a new set of investment regulations to support this pooling initiative opened in November 2015 and closed on 19th February 2016<sup>50</sup>. By end of February 2016, individual LGPS were expected to submit their initial proposals for the merger, with final proposals submitted by end of July 2016. Also in autumn 2015, a few days after Osborne's announcement, the FT reported that Lord Adonis, the chair of the Infrastructure Commission had been asked to develop infrastructure proposals for Crossrail 2, High Speed 3 rail project and energy storage. These proposals are likely to feature in Osbourne's spring 2016 budget speech and are intended to tap into local authority pension funds<sup>51</sup>.

In November 2015, the Scottish parliament's Local Government and Regeneration Committee recommended that councils should maximise the opportunities presented through pension funds and City Deals to improve local infrastructure such as affordable housing<sup>52</sup>. The report states that 5 out of 11 Scottish pension funds are already investing in infrastructure: Fife, Strathclyde, Borders, Falkirk, and Lothian<sup>53</sup>.

These policy announcements reflect the trend towards using pensions to invest in infrastructure. As the case studies also outline, examples of funds seeking investments in infrastructure include Greater Manchester Pension Fund's £500m infrastructure investment partnership with the London Pension Fund Authority, and the London pension funds' new Collective Investment Vehicle.

"Local government and pension fund members should always retain decision making rights, and actively engage with emerging agendas." Another example of funds collaborating to finance infrastructure is the Pension Infrastructure Platform (PIP). PIP was established in 2011/2012 with the aim of developing a range of infrastructure investment opportunities for pension funds by British Airways Pension pension schemes, BAE Systems Pension Funds, BT Pension Scheme, Lloyds TSB pension schemes, London Pension Fund Authority, the Pension Protection Fund, the Railways Pension Scheme, Strathclyde Pension Fund, and the West Midlands Pension Fund.

In October 2013 Dalmore Capital was appointed to operate a Public-Private Partnership (PPP) Equity Fund and in February 2015 Aviva Investors were appointed to launch a second fund, focused on small scale UK solar PV installations. In February 2015, PIP announced that a new fund - PIP Multi-Strategy Infrastructure Fund (PIPMIF1) - will provide £1 billion refinance to UK infrastructure assets already at operational stage. A number of PIP founding investors have also committed equity to one of the consortia bidding to build and operate the Thames Tideway Tunnel, or London "Super Sewer".

In May 2015, the European Union established a new investment vehicle, the European Longterm Investment Fund (ELTIF), which would be available for investors across the EU for investment in a range of assets, including infrastructure projects<sup>54</sup>. There is a possibility that there may be 'green' ELTIFs in the future.

**Health warning**: If local government does not take an active role in shaping infrastructure investments, central government could attempt to use local government pension funds for investment in controversial infrastructure with limited positive social impact.

As noted previously, new infrastructure can include housing, low carbon infrastructure and renewables, but could also include pipelines, airports and road building. Whether investing in a Super Sewer is the right type of low carbon infrastructure is debatable - different schools of thought have different views.

## "Central government could try to use local government pension funds to finance controversial infrastructure."

Also, the financial vehicles governing the investment are essential to ensure social good. Structures like Public Private Partnerships and Private Finance Initiatives (PFIs)<sup>55</sup> do not have the best track record. Described as creating an "enormous financial disaster", PFI and PPP initiatives have left the UK government in more than £222 billion debt.<sup>56</sup> In contrast, public-public partnerships<sup>57</sup>, which have financed the wind revolution in Denmark and the solar revolution in Germany, are an alternative to public-private partnerships and private finance initiatives<sup>58</sup>.

There are also concerns whether merging funds will undermine the democratic oversight of local government pension funds, pension holders and local residents. One of the driving aims behind the proposed merger of 89 LGPFs is to make savings on fees paid to external advisors and CIVs enable smaller funds to invest in opportunities that would be too risky for small funds to do so on an individual basis. While these reasons have merit, it would be dangerous to assume that merging or pooling funds do not have pitfalls or that merging funds is the only way to tackle fees overcharging by pension fund advisors.

It is vital that local government ensures that funds are invested in socially useful and low carbon infrastructure and through governance structures that are transparent and democratic. Local government and pension fund members should always retain decision making rights. Committing to divestment and developing a reinvestment strategy which includes investment for low carbon infrastructure, will enable local government to effectively respond to the national government's infrastructure agenda in a manner that is appropriate for their constituents and local area.

#### 7.2. Investing in community energy - (contribution by RegenSW)

Community energy in the UK has been growing exponentially but the government's proposed changes to the Feed in Tariff (FIT) would make the current renewable energy based business model for community energy unviable. FIT cuts means investment partnerships such as the Lancashire-Westmill Co-op refinancing deal or funds such as FSE Group Community Generation Fund are unlikely to be replicated. Recent changes in tax relief<sup>59</sup> – Enterprise Investment Scheme (EIS), Seed Enterprise Investment Scheme (SEIS) tax relief and Social Investment Tax relief (SITR) - have also pulled the rug under pioneering community energy projects such as Repower Balcombe<sup>60</sup>.

However, RegenSW's national Community Energy Accelerator programme suggests that the FIT cut threat has not caused community groups to stop work but, on the contrary, has galvanised them.

With support, the community energy movement has been one of the strongest lobbyists for the renewable energy sector in this time of instability. Because they are socially motivated, community energy groups are already working hard to think about new business models and approaches which will allow them to achieve their goals. The costs of renewables globally are reducing rapidly and the sector will be viable in the UK without subsidy within a few years. Cheryl Hiles, Director of RegenSW explains, "The next stage of the community energy revolution is widely recognised to be to sell the power that groups generate locally. This model, increasingly common on the continent, opens up a much more radical shift in the energy system and much greater opportunities to create local economic resilience".

Currently communities sell power they generate for less than 5p kWh whilst purchasing it back for around 14p kWh. Local supply<sup>61</sup> and storage options can enable this gap to be closed; enabling generation projects to be viable even with low, or no, subsidies and communities to access cheaper power.

Local supply may involve the formation of public-public partnerships between local government and community groups or remunicipalisation of local supply - for example, Nottingham City Council's Robin Hood Energy company<sup>62</sup> and Bristol City Council's Bristol Energy Company. A campaign launched in December 2015 in London, Switched on London<sup>63</sup>, is calling for the GLA to create an energy company that is 100% owned by Londoners, provides 100% renewable energy, a significant proportion of which is sourced locally from community or public organisations, and invests ambitiously in clean energy infrastructure.

There is no single model for this new local energy economy. A diverse range of solutions will be required enabling local community energy groups to adapt the best options for them. While it is not known yet exactly how LGPFs can invest in the next stage of community energy, this is a sector that is important for the low carbon transition and can facilitate the democratic ownership of the energy system.



# Developing a new economy reinvestment strategy

Committing to divest will unlock funds for reinvestment. Pensions can be harnessed to drive the energy transition, create local jobs and support local innovation.

The politics of austerity and further changes to local government income are significantly impacting local government's financial viability and capacity to invest in the new economy. Local government pension funds currently have £14 billion invested in the fossil fuel industry - these funds can be divested and reinvested to create jobs, boost local economies and future proof against climate change while protecting pensions.

Our research has demonstrated there are many avenues for reinvestment and the perceived lack of options or narrow interpretations of fiduciary duty should not be a barrier for local governments to commit to divestment. A commitment does not involve immediate divestment but rather divestment over 5 years. A reinvestment strategy can be developed in tandem to facilitate divestment and reinvestment into the new economy.

#### 8.1. Starting points

The following can be used as a starting point to develop a reinvestment strategy:

- Many local government pension funds are pursuing responsible investment strategies that can be adapted into a reinvestment strategy.
- 2. This report has identified a number of potential opportunities for reinvestment, from offshore wind funds (e.g. Green

Investment Bank Offshore Wind Fund) and green bonds to social housing, commercial retrofitting (e.g. Low Carbon Work Place Fund) and renewables co-operatives.

- 3. Creation of specialist portfolios is an effective starter mechanism to facilitate low carbon and socially positive investments. Those local government pension funds that haven't already created new portfolios specifically for renewable energy, social housing, and low carbon infrastructure should do so. A proportion of divested funds should be used for investment into the new portfolios. Since divestment is a phased process, different investment strategies for the specialist portfolios can be tested and adjusted over time.
- Funds that already have such portfolios can expand the portfolios' capacity using divested funds.
- Both new and existing specialist portfolios should earmark a percentage of the total portfolio for investment into projects that have clear democratic governance structures to facilitate the democratisation of the low carbon economy.
- As a short to medium term option, pension funds can invest into low carbon index tracker funds.

#### 8.2. The road ahead

Committing to divest will unlock funds for reinvestment. This report argues that local authority pension funds can safeguard pensions while using these funds to deliver a decarbonised and democratised new economy. Pensions can be harnessed to drive the energy transition, create local jobs and support local innovation.

In tandem, socially and environmentally beneficial enterprises and projects that have transparent and democratic governance structures can be supported. Public-public partnerships at various scales, from the neighbourhood, to the municipality, to the regional and national, have much potential.

As an important civic institution, local government has a duty to invest in our future. Today's several co-linked crises and the urgency of climate change coupled with funding and capacity constraints faced by councils create a pressing need for local government to understand how to deploy available resources. This includes pension funds in general and divested funds in particular. We all have a stake and responsibility to ensure that public sector workers' pensions are reinvested democratically in the new economy.

This means all of us - local government (councillors and staff), pension holders, and local residents - need to take an active role in demanding divestment and shaping reinvestment decisions that democratise and decarbonise our economy.

## "As an important civic institution, local government has a duty to invest in our future. "

## **APPENDICES**

#### **Appendix A**

# Some definitions of responsible investment:

1) The United Nations supported Principles of Responsible Investment (UN PRI) defines responsible investment as:

Responsible investment is an approach to investment that explicitly acknowledges the relevance to the investor of environmental, social and governance factors, and of the long term health and stability of the market as a whole. It recognises that the generation of long term sustainable returns is dependent on stable, well functioning and well governed social, environmental and economic systems<sup>64</sup>.

UN PRI is an international network of investors working together to put six Principles for Responsible Investment into practice. The principles are voluntary and aspirational. The principles are:

- We will incorporate environmental, social and governance (ESG) issues into investment analysis and decision-making processes.
- We will be active owners and incorporate ESG issues into our ownership policies and practices.
- We will seek appropriate disclosure on ESG issues by the entities in which we invest.
- We will promote acceptance and implementation of the Principles within the investment industry.
- We will work together to enhance our effectiveness in implementing the Principles.
- We will each report on our activities and progress towards implementing the Principles.

2) The Financial Times defines responsible investment as:

Responsible investment is an investment strategy which seeks to generate both financial and sustainable value. It consists of a set of investment approaches that integrate environmental, social and governance and ethical issues into financial analysis and decision-making.

Responsible investment goes by many names it is variously referred to as socially responsible investing (SRI), ethical investing, sustainable investing, triple-bottom-line investing, green investing - but underlying these differing names is a common theme focused on longterm value creation. Value in this context refers not only to economic value, but to the broader values of fairness, justice, and environmental sustainability<sup>65</sup>.

3) National Association of Pension Funds (NAPF)<sup>66</sup> defines responsible reinvestment as:

Responsible investment is an investment approach in which investors recognise the importance of the long-term health and stability of the market as a whole; seeking to incorporate material extra-financial factors alongside other financial performance and strategic assessments within investment decisions; and utilise ownership rights and responsibilities attached to assets to protect and enhance shareholder value over the long term – primarily through voting and engagement<sup>67</sup>

#### **Appendix B**

#### Examples of low carbon indices:

- MSCI Global Environmental Indexes<sup>68</sup> The MSCI ESG Environmental Index family includes the MSCI Low Carbon Indexes, MSCI Global Fossil Fuels Exclusion Indexes, and the MSCI Thematic Indexes, such as the MSCI Global Climate Index.
- 2. Solactive CK Low Carbon Europe Index<sup>69</sup>
- 3. The S&P/IFCI Carbon Efficient Index<sup>70</sup>
- 4. ET Index Series<sup>71</sup>
- FTSE All World ex Fossil Fuels Index Series<sup>72</sup>
- 6. The FTSE All-World ex Coal Index Series<sup>73</sup>
- LGIM/FTSE UK All-Share Carbon Optimised Index<sup>74</sup>
- 8. Euronext Low Carbon 100 Europe<sup>75</sup>
- 9. FTSE CDP Carbon Strategy Index Series<sup>76</sup>
- 10. UBS Europe Carbon Optimised Index<sup>77</sup>

These indices are not fossil fuel free unless otherwise indicated. However, moving investments away from general index-tracking funds towards low carbon index tracker funds can be a step on the path to full divestment.

#### **Disclaimer:**

The listing of indices above does not represent an endorsement by CRI, Platform, or partners and investors should carry out their own due diligence on their products and services.

### **Glossary**<sup>78</sup>

#### Active management:

The use of a human element, such as a single manager, co-managers or a team of managers, to actively manage a fund's portfolio. Active managers rely on analytical research, forecasts, and their own judgment and experience in making investment decisions on what securities to buy, hold and sell. The opposite of active management is called passive management, better known as "indexing".

#### **Environment and Social Governance:**

Environmental criteria looks at how a company performs as a steward of the natural environment. Social criteria examines how a company manages relationships with its employees, suppliers, customers and the communities where it operates. Governance deals with a company's leadership, executive pay, audits and internal controls, and shareholder rights.

#### Fixed income security:

An investment that provides a return in the form of fixed periodic payments and the eventual return of principal at maturity. Unlike a variableincome security, where payments change based on some underlying measure such as short-term interest rates, the payments of a fixed-income security are known in advance.

#### Impact investment:

Investing that aims to generate specific beneficial social or environmental effects in addition to financial gain. Impact investing is a subset of socially responsible investing, but while the definition of socially responsible investing encompasses avoidance of harm, impact investing actively seeks to make a positive impact – investing, for example, in non-profits that benefit the community or in clean technology enterprises.

#### Private equity:

Private equity is the collective name for investing in equity or equity-linked investments in non-listed enterprises, in companies or parts of companies that are taken into private ownership<sup>79</sup>.

#### Passive management:

A style of management where a fund's portfolio mirrors a market index. Passive management is the opposite of active management in which a fund's manager(s) attempt to beat the market with various investing strategies and buying/ selling decisions of a portfolio's securities.

#### Security:

A security is a financial instrument that represents an ownership position in a publicly-traded corporation (stock), a creditor relationship with governmental body or a corporation (bond), or rights to ownership as represented by an option. A security is a negotiable financial instrument that represents some type of financial value.

### Endnotes

- 1. <u>http://www.localgov.co.uk/Spending-review-could-floor-local-services-warns-LGA/39650</u>
- 2. <u>http://www.theguardian.com/society/2014/nov/19/</u> <u>councils-risk-financial-failure-auditors</u>
- 3. <u>http://www.palestinecampaign.org/conservative-plans-ethical-investment/</u>
- 4. <u>http://www.theguardian.com/politics/2015/oct/06/</u> <u>business-rates-plan-may-widen-inequality-among-</u> <u>councils</u>
- 5. <u>http://www.theguardian.com/environment/2015/</u> <u>oct/12/millions-wiped-off-uk-local-government-</u> <u>pensions-due-to-coal-crash-analysis-shows</u>
- 6. http://gofossilfree.org/uk/pensions/
- 7. <u>http://gofossilfree.org/uk/press-release/south-</u> <u>yorkshire-pension-fund-commits-to-low-carbon-</u> <u>investments-ahead-of-paris-talks/</u>
- 8. <u>http://www.theguardian.com/environment/2015/</u> <u>nov/23/britain-cities-green-energy-pledge-2050-</u> <u>climate-change-paris-talks</u>
- 9. <u>http://action.shareaction.org/page/-/</u> <u>MissionPensionPower.pdf</u>
- 10. <u>http://www.bwbllp.com/knowledge/2015/11/25/</u> <u>bwb-instructs-christopher-mccall-qc-on-ethically-</u> <u>questionable-investments/</u>
- 11. Bank of England Prudential Regulation Authority (2015) The impact of climate change on the UK insurance sector. <u>http://www.bankofengland.co.uk/pra/</u> <u>Documents/supervision/activities/pradefra0915.pdf</u>
- 12. Mercer (2015) Investing in a time of climate change. <u>http://www.mercer.com/content/dam/mercer/</u> <u>attachments/global/investments/mercer-climate-</u> <u>change-report-2015.pdf</u>
- UNPRI is an international network of investors working together to put six Principles for Responsible Investment into practice. The principles are voluntary and aspirational. See Appendix A for the six principles.
- 14. http://www.unpri.org/signatories/signatories/
- 15. Mercer (2015) Investing in a time of climate change <u>http://www.mercer.com/content/dam/mercer/</u> <u>attachments/global/investments/mercer-climate-</u> <u>change-report-2015.pdf</u>
- 16. <u>https://www.eapf.org.uk/~/media/document-libraries/eapf2/news/eapf-sustainable-equity-mandate-july-2015.pdf</u>
- 17. http://www.investopedia.com/terms/b/benchmark.asp
- 18. Mercer, 'Investing in a Time of Climate Change'
- 19. <u>http://www.independent.co.uk/news/business/</u> news/vodafones-84bn-tax-avoidance-bonanza-

nothing-for-taxpayers-in-verizon-deal-while-bankersshare-500m-8794169.html

- 20. <u>http://www.huffingtonpost.co.uk/chuka-umunna/ed-</u> miliband-google-speech-tax-avoidance\_b\_3320561.html
- 21. <u>http://www.theguardian.com/business/2014/</u> <u>may/09/margaret-hodge-urges-boycott-amazon-uk-</u> <u>tax-starbucks</u>
- 22. <u>http://www.independent.co.uk/news/business/</u> <u>news/lawyers-back-uk-uncut-on-taxes-2280762.html</u>
- 23. https://www.climatebonds.net/standards/taxonomy
- 24. <u>http://www.icmagroup.org/Regulatory-Policy-and-</u> <u>Market-Practice/green-bonds/</u>
- 25. <u>http://www.climatebonds.net/files/files/CBI-HSBC%20report%2010Nov%20JG.pdf</u>
- 26. <u>https://www.climatebonds.net/files/files/CBI%20</u> media%20release%20HSBC%202015.pdf
- 27. <u>http://www.traderisks.com/2015/08/warrington-borough-council-issues-150-million-40-year-cpi-linked-bond-to-fund-its-capital-program/</u>
- 28. <u>http://www.businessgreen.com/bg/news/2423018/</u> european-investment-bank-issues-eur600m-green-bond
- 29. <u>http://bridgesventures.com/our-funds/</u>
- 30. <u>http://impaxenvironmentalmarkets.co.uk/sites/</u> <u>default/files/IEM%20Annual%20Report%202014\_0.</u> <u>pdf</u>
- 31. <u>http://www.eib.org/projects/</u> pipeline/2015/20150306.htm
- 32. <u>https://www.carbontrust.com/about-us/</u> press/2012/01/low-carbon-workplace-trustannounces-new-investment/
- 33. <u>http://bigissueinvest.com/wp-content/</u> <u>uploads/2014/10/THREADNEEDLE\_FUND\_</u> <u>INTERIM-SOCIAL-PERFORMANCE-REPORT-</u> <u>OCT-2014.pdf</u>
- <u>https://www.triodos.co.uk/en/personal/ethical-investments/socially-responsible-investments/sustainable-equity-fund/about-the-fund/</u>
- 35. <u>https://www.triodos.co.uk/en/personal/ethicalinvestments/socially-responsible-investments/</u> <u>sustainable-pioneer-fund/about-the-fund/</u>
- 36. <u>http://www.whebgroup.com/media/2015/11/</u> <u>FP-WHEB-Sustainability-Fund-Portfolio-Holdings-</u> <u>Published-October-2015.pdf</u>
- 37. <u>http://www.ft.com/cms/s/0/0a5c23a6-7348-11e5-bdb1-e6e4767162cc.html#axz23psb4UYjf</u>
- https://www.responsible-investor.com/images/ uploads/resources/research/11208506970UK\_
   Environment Agency- RI in sustainable private equity.pdf pg 8

- 39. <u>https://www.eapf.org.uk/~/media/document-libraries/</u> <u>eapf2/report-and-accounts-doc/active-fund-annual-</u> <u>report-financial-statements-14-15-v11.pdf?la=en</u>
- 40. Including GMPF, Merseyside Pension Fund, West Yorkshire Pension Fund, South Yorkshire Pensions Authority, West Midlands Pension Funds, Northern Ireland Local Government Officers' Superannuation Committee. <u>http://www.investing4growth.co.uk/Aboutus.html</u>
- http://www.ipe.com/news/alternatives/greatermanchester-ap2-invest-in-new-timberlandcompany/10008837.fullarticle
- 42. <u>http://www.lpfa.org.uk/Admin/Public/</u> <u>DWSDownload.aspx?File=%2fFiles%2fFiles%2f20</u> <u>151020+Greater+Manchester+and+LPFA+make+fir</u> <u>st+investment+FINAL.pdf</u>
- 43. <u>http://www.scottish.parliament.uk/S4</u> LocalGovernmentandRegenerationCommittee/ <u>Meeting%20Papers/Meeting\_Papers\_2015\_04\_29.pdf</u>
- 44. <u>http://www.spfo.org.uk/CHttpHandler.</u> <u>ashx?id=29664&p=0</u>
- 45. <u>http://www.ipe.com/news/mandates/strathclyde-grows-renewables-exposure-with-offshore-wind-fund/10008313.fullarticle</u>
- 46. <u>http://www.ipe.com/pensions/investors/how-we-run-our-money/how-we-run-our-money-lancashire-pension-fund/10006423.fullarticle</u>
- 47. <u>http://www.lpfa.org.uk/Who-we-are/LPFA-IN-THE-NEWS/In-the-News.aspx</u>
- 48. <u>http://council.lancashire.gov.uk/documents/g5045/</u> <u>Public%20reports%20pack%2030th-Sep-2015%20</u> <u>14.00%20Pension%20Fund%20Committee.</u> <u>pdf?T=10</u>
- 49. <u>http://www.londoncouncils.gov.uk/our-key-themes/</u> local-government-finance/london-pension-collectiveinvestment-vehicle
- 50. <u>https://www.gov.uk/government/consultations/</u> <u>revoking-and-replacing-the-local-government-</u> pension-scheme
- 51. <u>http://www.ft.com/cms/s/0/dec4977e-6b71-11e5-</u> 8171-ba1968cf791a.html#axzz3tk4bGerD
- 52. <u>http://www.scottish.parliament.uk/S4</u> <u>LocalGovernmentandRegenerationCommittee/</u> <u>Reports/LGRS042015R05.pdf</u>
- 53. <u>http://www.scottish.parliament.uk/S4</u> <u>LocalGovernmentandRegenerationCommittee/</u> <u>Reports/LGRS042015R05.pdf</u> p5
- 54. <u>http://www.elexica.com/en/legal-topics/asset-</u> <u>management/06-european-long-term-investment-</u> <u>funds-a-summary-of-the-new-eltif-regulation</u>
- 55. PFIs are similar to PPPs infrastructure and governance
- 56. <u>http://www.independent.co.uk/money/loans-</u> <u>credit/crippling-pfi-deals-leave-britain-222bn-in-</u> <u>debt-1017021</u>

http://www.world-psi.org/sites/default/files/rapport\_ eng\_56pages\_a4\_lr.pdf

http://bankwatch.org/public-private-partnerships/ case-studies/uk-hospital-ppps4.html

- 57. <u>http://platformlondon.org/p-publications/energy-beyond-neoliberalism/</u>
- 58. http://www.regensw.co.uk/
- 59. <u>http://www.theguardian.com/environment/2015/</u> <u>nov/05/treasury-tax-plans-will-decimate-community-</u> <u>energy-projects</u>
- 60. http://backbalcombe.org/
- 61. <u>http://www.regensw.co.uk/our-work/onshore-electricity/local-supply/</u>
- 62. https://www.robinhoodenergy.co.uk/
- 63. http://switchedonlondon.org.uk/
- 64. <u>http://2xjmlj8428u1a2k5o34l1m71.wpengine.</u> <u>netdna-cdn.com/wp-content/uploads/1.</u> <u>Whatisresponsibleinvestment.pdf</u>
- 65. <u>http://lexicon.ft.com/Term?term=responsible-investment</u>
- 66. <u>http://council.lancashire.gov.uk/documents/g5045/</u> <u>Public%20reports%20pack%2030th-Sep-2015%20</u> <u>14.00%20Pension%20Fund%20Committee.</u> <u>pdf?T=10</u> p229
- 67. <u>http://council.lancashire.gov.uk/documents/g5045/</u> <u>Public%20reports%20pack%2030th-Sep-2015%20</u> <u>14.00%20Pension%20Fund%20Committee.</u> <u>pdf?T=10</u> p229
- 68. https://www.msci.com/esg-indexes
- 69. <u>http://www.solactive.com/?s=soleutr&index=DE00</u> <u>OSLA4LC8</u>
- <u>http://us.spindices.com/indices/equity/sp-ifci-carbon-efficient-us-dollar</u>
- 71. http://etindex.com/services/et-low-carbon-index-series
- 72. http://www.ftse.com/products/indices/ex-fossil-fuels\_
- 73. http://www.ftse.com/products/indices/ex-fossil-fuels
- 74. <u>http://www.actuarialpost.co.uk/article/lgim-launch-</u> <u>carbon-efficient-index-tracker-fund-243.htm</u>
- 75. <u>https://www.euronext.com/pt-pt/content/</u> <u>attachment/low-carbon-100-europe-index-factsheet</u>
- 76. <u>https://www.cdp.net/en-US/Respond/Documents/</u> FTSE%20CDP%20Methodology%202-sider.pdf
- 77. http://www.trucost.com/company-detail/58/ubs
- 78. Unless otherwise specified, all definitions have been taken from: <u>http://www.investopedia.com/</u>
- 79. <u>https://www.responsible-investor.com/images/</u> <u>uploads/resources/research/11208506970UK</u> <u>Environment Agency- RI in sustainable private</u> <u>equity.pdf</u> p7