Case for Divestment from Fossil Fuels: Strathclyde Pension Fund

Strathclyde Pension Fund (SPF) is the 2nd largest Local Government Pension Scheme (LGPS) provider in the UK, delivering to over 200,000 members from more than 200 organisations in 12 local authorities within the former Strathclyde area. SPF holds £15 billion of investments, of which £752 million are currently invested into fossil fuel industries.

As a whole, the LGPS stewards £225 billions on behalf of its members. Its investments have a major impact on the wider economy and help shape the future of our society and planet.

Why divest? Climate change and fossil fuel companies.

Climate change is an enormous environmental threat that is mainly driven by fossil fuels. The use of fossil fuels at its current rate will ensure a world of poorer health, increased inequality, and greater poverty. In order to avoid severe global injury, the total quantity of fossil fuels burned by humanity must be capped far below the level of fossil fuels available to be burned. The business plans of fossil fuel companies do not take this reality into account. In fact, they are betting against restrictions on fossil fuel emissions in order to be able to continue their activities. Since these companies are knowingly promoting the burning of fossil fuels past safe limits, it is ethically problematic to keep investing in them. If it is wrong to wreck the climate, then it is wrong to profit from that wreckage.

Is the Strathclyde Pension Fund socially responsible?

The SPF claims that it takes environmental and social factors into consideration in its investment policy. Yet, the fund remains deeply invested in fossil fuel companies, which are not only the main drivers of climate change but also have a record of conducting their activities in highly irresponsible ways.

BHP Billiton	**£10,338,423**	Exxonmobil	**£34,717,089**
Chevron	**£21,166,822**	Rio Tinto	**£5,5121,884**
BP	**£18,496,878**	Royal Dutch Shell	**£6,373,968**

Most of the countries that **Shell** operates in, have been victims of severe environmental degradation and human rights violations by the company.

- The water of Niger Delta has been heavily contaminated by the company, destroying local economic activity and leading to serious health issues. It is estimated that the recovery of the soil, groundwater and vegetation could take up to 30 years.[1]
- Following the spill of 50,000 gallons of toxic drilling mud in the North Sea in Scotland in 1989[2], Shell's lack of responsibility in its operations was again proved in 2011, when a pipeline leaked an estimated 200 tonnes of oil in the North Sea.[3]

[1] United Nations Environmental Program, 'Ogoniland Oil Assessment Reveals Extent of Environmental Contamination and Threats to Human Health' (2011) <http://www.unep.org/disastersandconflicts/Portals/155/countries/nigeria/press_release_ogoniland_en.pdf>(accessed 12 February 2016)

[2] Corperate Crimes, 'Royal Dutch Shell' (2005) <https://corporatewatch.org/company-profiles/royal-dutch-shell-corporate-crimes>(accessed 12 February 2016)

[3] Reuters, 'Shell fined by Scottish court for 2011 North Sea oil spill' (2015) <http://uk.reuters.com/article/us-shell-northsea-fine-idUKKBN0TD1T420151124>,(accessed 12 February 2016)

Rio Tinto is one of the biggest coal producing company in the world. Several times it has been accused by civil society groups and global mining unions and 'shamed by its failures on union rights, worker safety, damage to the environment, and indigenous peoples and other communities'.[4]

ExxonMobil has been prosecuted for causing severe environmental contamination and disruption of surrounding communities, including the 11 million gallons of crude oil spilled by the super tanker Valdez in Alaska in 1989[5] and Pegasus pipeline spill in Arkansas in 2013.[6]

BHP Billiton is one of the world's largest mining companies and has projects including coal reserves of approximately 16 billion tonnes, producing about 44 billion tonnes of carbon dioxide.[7] The company has been involved in numerous lawsuits following the disastrous effects of its mining operations on local communities and the environment, such as the Samarco Dam failure, which devastated the surrounding environment upto the Atlantic coast[8] and led to a sharp fall in the value of the company's shares.[9]

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[4] Richard Solly, 'Rio Tinto AGM 2015: yawning and struggling.' *London Mining Network* (2015) http://londonminingnetwork.org/2015/04/rio-tinto-agm-2015-yawning-and-struggling/ (accessed 12 February 2016)

[5] Corporate Research Project, 'ExxonMobil' (2015) http://www.corp-research.org/exxonmobil (accessed 12 February 2016)

[6] Corporate Crime Reporter, 'ExxonMobil to Pay $5 Million to Settle Arkansas Pollution' (2015) <http://www.corporatecrimereporter.com/news/200/exxonmobil-to-pay-5-million-to-settle-arkansas-pollution-claims/> (accessed 12 February 2016)

[7] Coalwire, 'BHP Billiton's mission to save the coal industry' (2015) <http://endcoal.org/2015/09/bhp-billitons-mission-to-save-the-coal-industry/>

[8] The Guardian , 'Brazil's mining tragedy: was it a preventable disaster?' (2015) <http://www.theguardian.com/sustainable-business/2015/nov/25/brazils-mining-tragedy-dam-preventable-disaster-samarco-vale-bhp-billitonv >

[9] Jon Yeomans, 'BHP Billiton shares drop as it braces for £3.5bn fine over Brazil dam burst', *The Telegraph* (2015) <http://www.telegraph.co.uk/finance/newsbysector/industry/mining/12024182/BHP-Billiton-shares-drop-as-it-braces-for-3.5bn-fine-over-Brazil-dam-burst.html > (accessed 12 February 2016)

Executive Summary

The COP21 and the Carbon Bubble:

- In December 2015, the outcome of the COP21 conference underlined the need to limit the global temperature increase to 2°C and to keep 80% of known of fossil fuel reserves unburned.
- This creates the so called 'carbon bubble' meaning that most of the reserves are worthless as burning them would raise global temperatures above the internationally recognised 2°C limit.
- In addition, the Scottish Climate Change Act (2009) requires a 42% cut in emissions by 2020 and up to 80% by 2050. These measures have been taken to prevent a catastrophic backwash of high emission activities originating from fossil fuel extraction.

Such agreements must be reflected in the Fund's future decisions and in evaluating the risk of their assets, in terms of returns but also in terms of social and environmental impact.

The Future of the Fossil Fuel Industry:

Several factors have already affected the future of the fossil fuel industry. These include:

- changes in the value of fossil fuel companies and shares as well as unpredictable price of oil and rising cost of production;
- the overvaluation of assets which will ultimately become stranded and lose their value;
- governmental action to regulate the increasingly toxic environment;
- the cost of renewable energy is continuously decreasing and is in some areas outcompeting fossil fuels.

Fiduciary Duty and Responsible Investment:

- According to the Strathclyde Pension Fund, the board members have a 'duty to act in the best long-term interest' of the beneficiaries. This duty takes in account matters of environmental, social and corporate governance (ESG), which may better 'align investors with the wider objectives of society'.
- Continious investments in fossil fuel companies is therefore failing duty of reducing carbon emissions under the Climate Change Act (2009), failing to actively take part in fulfilling the international commitment of limiting global warming to 2°C and exposing the Fund and its members to unprecedented financial risks.
- Furthermore, engagement with these companies, that is currently carried out by the Global Engagement Services (GES) on behalf of the SPF, will not change the companies' desire of keeping up with their hydrocarbon intensive activities and prevent them from producing 'the final product'.

As the economic and social threats of these investments increase, it is essential that the SPF revises its antiquated investment strategy to meet the realities of the 21st century – may they be environmental, social or economic. Pursuing a short-sighted and risky investment strategy on behalf of their members is in effect a breach of the fiduciary duty.

Recommendation – a brighter economic and environmental future:

- It is essential that the SPF takes the risks listed into account and acts upon them in a responsible and comprehensive manner. It has to make decisions that aim to fulfil their duty in securing a stable and better future for its beneficiaries, Scotland and the international community.
- Clear objectives of shifting finance flows must be established; while working in cooperation with other governmental bodies, companies and the public, we can reinvest in the local infrastructure and create mechanisms to deal with the loss of jobs by providing alternative industries.

It is an opportunity for the SPF to take a realistic approach to the necessities of in the 21st century and join public institutions and councils across Europe, including the University of Glasgow, Oxford City Council and the Norwegian Government Pension Fund, that have already divested.

The UN Talks

The UN and the G7 have recognised the urgency of drawing a formal and world recognised agreement in order to prevent devastating impacts of the climate change.

> *"The talks at the COP21 conference in Paris have culminated in a global deal, with the whole world now signed up to play its part in halting climate change. In other words, this generation has taken vital steps to ensure that our children and grandchildren will see that we did our duty in securing the future of our planet."*
>
> ***David Cameron, British Prime Minister***

At the 21st Conference of the Parties (COP21), which took place in Paris in December 2015, 196 nations agreed to keep global warming below 2°C and attempt to 'limit the temperature increase to 1.5°C'. This is a turning point in the energy industry. Fossil fuels will need to be phased out and a shift towards clean energy implemented in order to achieve the target of net zero emissions by 2050.

> *"The Paris Agreement is a historic turning point for investors... sending a very strong signal to business and investors that there is only one future direction of travel to reduce emissions in line with a 1.5 degree pathway. Investors across Europe will now have the confidence to do much more to address the risks arising from high carbon assets"*
>
> ***Stephanie Pfeifer, CEO, Institutional Investors Group on Climate Change***

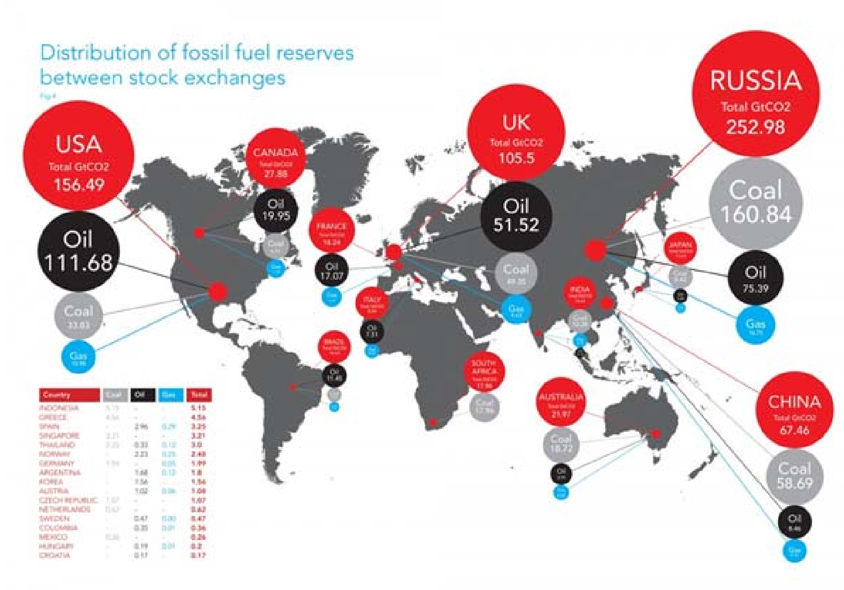
The outcome of the Paris agreement also drew a critical line for fossil fuel industries; to prevent a temperature rise over 2°C, 80 percent of the existing fossil fuel reserves MUST stay underground.

The Carbon and Coal Bubbles

The concept of the Carbon Bubble was conceived by the Carbon Tracker initiative.[10] It recognises that humankind cannot burn all available fossil fuel reserves without severely impacting our environment. Whilst petrochemical companies and oil producing nations base their value on claimed reserves, most of these reserves are worthless, as burning them would raise global temperatures above the internationally recognised 2°C limit.[11]

The total carbon potential of the Earth's known fossil fuel reserves is 2795 $GtCO_2$. However, research by the Potsdam Institute[12] calculated that to reduce the risk of exceeding 2°C of temperature rise to 20 percent, the global carbon budget till 2050 can only be 565 $GtCO_2$. This means that reserves that are treated as assets by governments and global markets are nearly five times the size of the carbon budget for next 40 years.

[10] Carbon Tracker Initiative, 'Carbon Bubble', (2014) <http://www.carbontracker.org/report/carbon-bubble/>, (accessed 12 February 2016)
[11] Carbon Tracker Initiative, 'Unburnable Carbon', (2014) <http://www.carbontracker.org/wp-content/uploads/2014/09/Unburnable-Carbon-Full-rev2-1.pdf>, (accessed 12 February 2016)
[12] Potsdam Institute for Climate Impact Research, 'Press Releases', (2014), <https://www.pik-potsdam.de/news/press-releases> (accessed 12 February 2016)



The analysis shows that London currently has 105.5 $GtCO_2$ of fossil fuel reserves listed on its exchange, over ten times the UK's domestic carbon budget for 2011 to 2050, of around 10 $GtCO_2$.(Source: Carbon Tracker Initiative, 2013)

Pension funds like the SPF invest heavily in fossil fuels, seeing them as stable, good long-term bets. The carbon bubble initiative focuses on these companies listed publicly on global stock exchanges whose value is reliant on stated reserves of fossil fuels, and consequently future carbon emissions. The share value of these companies held by pension providers is therefore based on assets that are unusable. A bubble has been created and it is in danger of bursting as investors realise the instability of the stocks.

For pension funds this could mean a sudden loss of value. The simplistic inclusion of fossil fuel stocks to maximise returns must be reassessed, demanding that a deeper analysis of the risks should be undertaken, and divestment of stocks made if assets are indeed unusable.

Future of Fossil Fuels

Academic research undertaken by the University of Oxford made clear that changes in the use of fossil fuels and the value of the companies that exploit them, is being driven by several factors.[13] :

- Governments are taking actions to improve air quality (for example, China) which limits the use of fossil fuels, and therefore their value.[14]
- Fossil fuel companies are increasingly overvalued as fossil fuel assets become stranded, due to the recent COP21 meeting setting an aspirational 1.5°C warming limit.[15]
- Renewable energy costs continue to fall and solar power is expected to be as cheap to produce as fossil fuels by 2020.[16] Once renewables become cheaper than fossil fuels, the market will switch and devalue fossil fuel assets.

[13] Smith School of Enterprise and the Environment, 'Stranded Assets Programme', (2016), <http://www.smithschool.ox.ac.uk/research-programmes/stranded-assets/>(accessed 12 February 2016)
[14] Carbon Tracker, 'Unburnable Carbon 2013: Wasted Capital and Stranded Assets', (2013), <http://www.carbontracker.org/wp-content/uploads/2014/09/Unburnable-Carbon-2-Web-Version.pdf> (accessed 12 February 2016)
[15] Helen Briggs, 'Global climate deal: In summary', *BBC News,* (2015), <http://www.bbc.co.uk/news/science-environment-35073297> (accessed 12 February 2016)
[16] The Solar Trade Association, 'The Solar Independence Plan for Britain', (2015), <http://www.solar-trade.org.uk/the-solar-independence-plan-for-britain/> (accessed 12 February 2016)

Oil as an asset is notoriously unstable, leading to crises of confidence in investment and value. International oil prices began falling in 2014; the price of Brent crude fell from over $100 per barrel in Summer 2014 to $55 in December 2014 and below $40 per barrel at the end of 2015. Decommissioning of the oil rigs in the North Sea in Scotland has already begun as they fail to remain profitable. An estimated one-third will be closing in the next 5 years even if oil price was to rebound from $30 to $85 a barrel.[17]

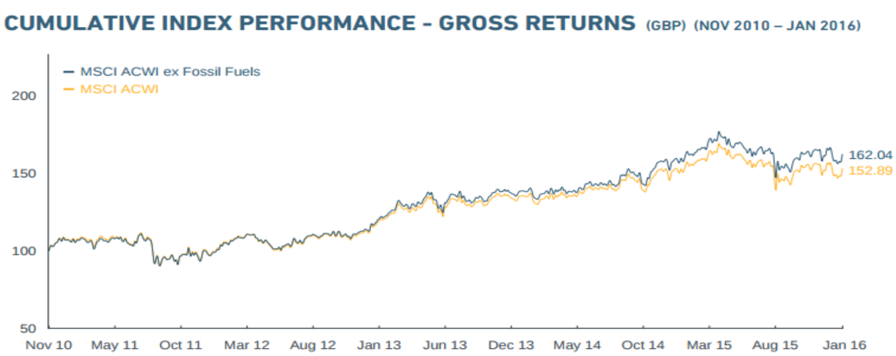
> *"The growth of global coal consumption is likely to slow sharply as the Chinese economy rebalances. Renewables are set to grow rapidly, as their costs continue to fall and the pledges made in Paris support their widespread adoption"*
>
> ***BP Energy Outlook 2016 Edition***

In the UK the fall in production efficiency and rising costs means that capital investment is expected to drop from £14.8 billion (2014) by £2 billion to £4 billion in each of the next three years.[18] In Scotland more than 6,000 jobs are reported lost or being at risk by the Scottish Government. Furthermore, Unite claims over 70,000 oil-related jobs across the UK have been lost since the oil price fell in January 2015, with a grim forecast that as many as 200,000 could be shed before the crisis eases.[19] Other knock-on effects include increased Health and Safety fears with a reduction in health and safety incident reporting by employees at fear of losing their jobs.

Fiduciary Duty

Most funds seek to maximise their returns whilst balancing the risk of their investments. Historically, stocks such as fossil fuel companies have been seen as stable, long-term investments that have given a good rate of return. Green funds on the other hand have been seen as marginal, too innovative and lacking in longer-term outlook.

The way stocks are valued is changing as we begin to understand how much carbon we can safely release into our atmosphere (see section on Carbon Bubble). Regulations to restrict carbon emissions are getting stricter, demand for fossil fuels is falling, and consequently asset management companies such as Impax are warning that investment risk in fossil fuels is rising.[20]



ANNUAL PERFORMANCE (%)

Year	MSCI ACWI ex Fossil Fuels	MSCI ACWI
2015	5.82	3.84
2014	13.23	11.22
2013	22.68	21.15
2012	13.47	11.67
2011	-6.32	-6.17

MSCI compares its diverse international index fund with and without fossil fuel showing in the last year the ex-fossil fuel fund performed better in all but one year.[21]

[17] Kiran Stacey, 'North Sea: After the Fall', (2016), *Financial Times,* <http://www.ft.com/cms/s/0/ed241136-cab3-11e5-a8ef-ea66e967dd44.html> (accessed 12 February)

[18] BBC News, 'Optimism in UK oil and gas sector "hits new low"', (2016), <http://www.bbc.co.uk/news/uk-scotland-scotland-business-35541244> (accessed 12 February 2016)

[19]Unite, 'Unite Calls for Emergency Tax Measures to Save Future North Sea Production', (2016), <http://www.unitetheunion.org/news/unite-calls-for-emergency-tax-measures-to-save-future-north-sea-production/#sthash.bjgCRZ0s.dpuf> (accessed 12 February 2016)

[20] Impax Asset Management, 'Beyond Fossil Fuels: The Investment Case for Fossil Fuel Divestment', (2014),<http://www.impaxam.com/media-centre/white-papers/beyond-fossil-fuels-investment-case-fossil-fuel-divestment> (accessed 12 February 2016)

[21] MSCI, 'Cumulative Index Performance - Gross Returns' (2016) <https://www.msci.com/resources/factsheets/index_fact_sheet/msci-acwi-ex-fossil-fuels-index-gbp-gross.pdf> (accessed 12 February 2016)

On 2 April 2015, Glasgow City Council recognised the initiative of other major cities and funds and questioned whether the SPF was meeting its fiduciary duties to minimise carbon emissions under the Climate Change (Scotland) Act 2009. The council asked the SPF to outline how it might go about divesting from fossil fuels.[22]

SPF has a fiduciary duty towards its beneficiaries, meaning that all trustees must:

- Act in line with the trust's deed and rules;
- Act in the best interests of the scheme beneficiaries;
- Act impartially;
- Act prudently, responsibly and honestly.

In 2015, SPF rejected a divestment proposal based on fiduciary duty. The response of SPF trustees[23] highlighted their **lack of willingness** to change from current investment strategies.

Following that fossil-free investments can regularly out-perform fossil fuel stocks,[24] and that relying on a sector at risk of stock value collapse is unwise, it is prudent to look more deeply at longer-term alternative investments. In this new business environment, trustees need to examine whether they are still meeting their fiduciary duty by investing in fossil fuels.

Responsible Investment

SPF is a signatory to the United Nations Principles for Responsible Investment (PRI), which requires investors to include environmental, social and corporate governance (ESG) concerns in their investment analysis and decision-making.

Currently SPF enacts its commitments in two main ways:

- With new investments, they favour those with positive ESG attributes. In 2014 and 2015 they focused on new investments in renewable energy infrastructure.
- Addressing the ESG concerns in their existing investments through **engagement**, meaning that through their status as shareholders, they monitor the companies they have invested in, and, if necessary, pressure the companies to adjust their ESG policies.

Since 2012, engagement has been outsourced to an outside provider, Global Engagement Services (GES). GES argue that engagement is able to create durable change, and 'only in extreme cases' would they recommend divestment.[25] This is echoed by SPF which states that engagement is 'better aligned with fiduciary duty and protection of value and ultimately more responsible than an ethical or values based exclusion policy.'[26]

However, in the case of fossil fuel industry, engagement as a strategy of responsible investment is fundamentally inadequate. Engagement can address individual problems in a company's policies and production processes, pressuring it to continue its primary activities in a more responsible way. However, the environmental problems of fossil fuel industry are integral to the products themselves. From an environmental point of view, the problem is not *how* we extract and burn fossil fuels, but the fact that these activities occur in the first place. If we aim to stay within the internationally agreed upon limits of 2°C, we should be rapidly moving away from fossil fuels.

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[22] Glasgow City Council, 'Strathclyde Pension Fund Fossil Fuel Divestment – Motion', (2015), <https://www.glasgow.gov.uk/councillorsandcommittees/viewSelectedDocument.asp?c=P62AFQUTNTDXZ3DN>, (accessed 12 February 2016)

[23] Glasgow City Council, 'Notice of Meeting: Strathclyde Pension Fund', (2015), <http://www.spfo.org.uk/CHttpHandler.ashx?id=30528&p=0> (accessed 12 February 2016)

[24] Impax Asset Management, 'Beyond Fossil Fuels: The Investment Case for Fossil Fuel Divestment', (2014), <http://www.impaxam.com/media-centre/white-papers/storms-horizon-investment-case-fossil-fuel-divestment> (accessed 12 February 2016)

[25] Global Engagement Services, 'Engagement and investment management solutions', (2015), <http://www.globalengagementservices.ch/our-solutions/engagement-investment-management-solutions/>, (accessed 7 February 2016)

[26] Strathclyde Pension Fund, 'Investing Responsibly,' (2015), p. 2, <http://www.spfo.org.uk/CHttpHandler.ashx?id=31631&p=0> (accessed 7 February 2016)

Engagement services like GES can then pressure fossil fuel companies to conduct their business in a more responsible way, for example through better prevention of oil spills, but they cannot pressure the company to finish producing its core product. Moreover, past attempts to collaborate with petroleum companies in more ambitious ways have been unsuccessful. After years of working with BP and Shell on green energy projects, Jonathon Porritt, a leading UK environmentalist from Forum for the Future, concluded that 'it was impossible for today's oil and gas majors to adapt in a timely and intelligent way to the imperative of radical decarbonisation'[27].

On a symbolic level, by continuing to invest in fossil fuel companies, SPF is indicating that it is committed to fossil fuel exploitation and accepts the legal and human rights records of the companies in which it invests. Divestment would send the opposite message: that SPF is committed to addressing climate change, and willing to enact that commitment by selling its holdings in a particularly problematic investment.

Divestment at Present

Pension fund trustees are under enormous pressure to maximise returns, and rely on specific 'blue chip' stocks to make a regular quarterly contribution to ongoing pension costs. Taking into consideration issues such as the Carbon Bubble and the ethics of investing in companies whose activities adversely affect beneficiaries' quality of life, trustees need to find positive reasons for investing in ethical portfolios.

Research shows that investing ethically is cost-neutral at worst, and shows **positive financial benefits** at best. Ethical funds have the added incentive of being less volatile and reliant on foreign organisations and countries in fixing resource prices such as oil, or a reliance on the value of the petrodollar.

Through an analysis of 40 ethical and 40 non-ethical investment funds, Kreander et al. have shown that ethical investing is possible without loss of return[28]. Ethical fund managers took longer to make decisions, however the deeper thought behind investments balanced out this effect and even added value to the stock selection process.

In October 2014, the University of Glasgow became the first university in the UK to commit to fully divest from fossil fuel investments. Full divestment will mean the reallocation of around £18 million of current investments over a 10 year period.[29] In July 2014, Oxford City Council divested,[30] November 2015 insurance giant Allianz partly divested, as well as doubling investment in wind and solar to 4 billion euros.[31] They join California's largest pension fund, the Environment Agency Pension Fund, Norwegian Government Pension Fund Global (coal only) and French banking company BNP Paribas.

[27] Jonathon Porritt, 'It is "impossible" for today's big oil companies to adapt to climate change,' *TheGuardian*, (2015)<http://www.theguardian.com/environment/2015/jan/15/it-is-impossible-todays-big-oil-companies-adapt-climate-change-jonathon-porritt> (accessed 7 February 2016)

[28] N.Kreander, R.H.Gray, D.M.Power, and C.D.Sinclair, ‚*Evaluating the Performance of Ethical and Non-Ethical Funds: A Matched Pair Analysis*', Centre for Social and Enviornmental Accounting Research. https://www.st-andrews.ac.uk/media/csear/discussion-papers/CSEAR_dps-finance-evalperfeth.pdf (accessed 7th February 2016)

[29] University of Glasgow,'Glasgow becomes first UK university to divest from fossil fuel industry', (2014) <http://www.gla.ac.uk/news/archiveofnews/2014/october/headline_364008_en.html> (accessed 12 February 2016)

[30] Luke Barratt, 'Oxford City Council divests from fossil fuels', *Cherwell*, (2014) <http://www.cherwell.org/news/uk/2014/09/22/oxford-city-council-divests-from-fossil-fuels> (accessed 12 February 2016)

[31] Reuters, 'Allianz to pull funds out of coal businesses -exec to ZDF', (2015), <http://www.reuters.com/article/allianz-coal-idUSL8N13I4MJ20151123> (accessed 12 February 2016)

A Positive Future for Investment

Divestment enables '**Just Transition**' in the economy. This is the movement to a more stable and truly self-sufficient Scotland. Declining jobs due to the instability of the fossil fuel market can be balanced out through green alternative energy, but investment in it is needed. SPF members have the opportunity to invest into these areas producing long term benefit to them beyond the pension fund itself. The move to a low carbon economy will place a premium on creativity and innovation[32] as well as guaranteed energy outputs for communities, for example tidal power generation, wind, and hydro.

An £8.5m Run-of-the-river hydro-power project, funded in part by SPF is a prime example of the infrastructure that the fund is already investing in. Based near Crianlarich on the River Allt Coire Chaorach, it has the potential to power 1,900 homes. The joint fund that funded this project expects an Internal Rate of Return of 11%.

Across the UK, capacity exists for an additional 800 MW of new hydropower projects, enough to power over 500,000 homes with renewable energy. Building this capacity would see an investment of over £3bn in remote rural communities. Around 80% of this capacity is in Scotland with the remainder split between England and Wales.[33]

Green energy has been found to produce more jobs per unit of energy than fossil fuels, with solar photovoltaics (PV) creating the most jobs per unit of electricity output[34]. Furthermore Consoli et al. reveals that "that green jobs use high-level abstract skills significantly more than non-green jobs"[35]

While the SPF is indeed funding infrastructure in Scotland its potential is not being reached. We propose using the divested funds to further invest in similar projects, asking for SPF to consider the benefits beyond just short-term return that this fund can have to its members.

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[32] The Impacts of Climate Change on European Employment and Skills in the Short to Medium-Term: A Review of the Literature Final Report, Vol. 2 (2009)
<http://ec.europa.eu/social/BlobServlet?docId=2863&langId=en>

[33] Community Energy Scotland, 'New Funding route for smaller renewable projects' (2015)
<http://www.communityenergyscotland.org.uk/news/17-feb-2015-new-funding-route-for-smaller-reneables-projects.asp>

[34] Wei, M.et al., 'Putting renewables and energy efficiency to work: How many jobs can the clean energy industry generate in the US?', *Energy Policy*, vol.38, p.919-31 (2010)
<https://rael.berkeley.edu/wp-content/uploads/2015/04/WeiPatadiaKammen_CleanEnergyJobs_EPolicy2010.pdf>

[35] Consoli D. et al. 'Do green jobs differ from non-green jobs in terms of skills and human capital?' *SPRU Working Paper Series* (SWPS) (2015-16)
<https://www.sussex.ac.uk/webteam/gateway/file.php?name=2015-16-swps-consoli-etal.pdf&site=25>