Climate Finance – Financing Southwark's Green Transition

Environment and Community Engagement Scrutiny Commission

May 2023

Introduction

This report sets out to look at two matters: firstly, how to generate more of the investment required to deliver Southwark's climate emergency strategy and action plan and, secondly, to analyse the progress made on decarbonising Southwark Council's Pension Fund. It also explores potential synergies between these two objectives.

Investment required to deliver the on the climate strategy

As part of developing Southwark's climate emergency strategy and action plan, the Council commissioned experts from Carbon Descent and Anthesis to carry out work to assess the scale of the challenge and the cost of meeting our ambition. This work demonstrates that as well as investing our own resources, Southwark will require considerable additional investment and will need to find ways to leverage funding into the borough to support not just the council, but other stakeholders including businesses, educational and cultural establishments and residents too in their efforts to decarbonise. The scale of the challenge is huge. Experts estimate that the cost will be around £3.92bn in capital expenditure, supported by additional revenue funding.

Sources of funding

Officers have identified that potential investment or funding streams include, but are not limited to, the Council's own carbon offset fund (the Green Building Fund), HRA funding, central government grants, revenue and capital funding from the GLA or TfL and various funding bids across the public, private and charity sectors. The Council has a demonstrable track record here with significant sums already raised through large grant awards to take forward heat pumps and networks, as well as a range of other bids, often in partnership with other stakeholders.

The Committee on Climate Change has estimated that reaching zero carbon by 2050 will cost the UK £1.4 trillion, about a third of which is expected to come from the public sector. Therefore, about two thirds of needs to come from private capital.

This report considers, in particular, some potential sources of private investment capital, which are currently underdeveloped in Southwark. A start has been made here with Southwark Green Finance. Additionally there are some large government backed initiatives which have recently been launched and Southwark Council could partner with these to make the most of the private finance available. Of particular interest are a partnership programme recently launched by the Green Finance Institute (GFI) and the work of 3ci. Both bring together investment and public sector expertise, and take a place based approach.

A place based approach to mobilising public and private investment

The focus on a place based approach is significant. The UK Government's Net Zero Strategy highlighted that 82% of all UK GHG emissions are within the scope of influence of local authorities. A study, cited by GFI, and conducted by UKRI (UK Research and Innovation), involving six diverse local authorities, showed that taking a place-specific approach would require £58 billion total investment between now and 2035 and would return a total of £825 billion in social and economic benefits in the next 30 years; whereas, a place-agnostic approach would require a total of £195 billion investment and return £444 billion in the same timeframe.

The Green Finance Institute is championing this approach. The GFI was established by government in 2019. It is led by bankers and commercially focused, bringing together experts and practitioners to mobilise public and private investment to deliver clean growth. In July 2022 GFI launched a Place Based Partnership, whereby GFI will partner with local authorities to bring forward local Climate Municipal bonds, as well as promote uptake of green mortgages, and deliver innovative finance models to enable homes owners to access capital to retrofit their homes. Retrofit of private homes, by both owner occupiers and landlords, will be crucial but increasingly challenging as it will take a sizeable investment to both insulate and then install renewable energy systems. (As discussed in this Commission's Energy Review carried out during the last municipal year, this will also require significant investment in education and training to deliver a workforce with the required skills base.) Other cities, such as New York also focus on retrofits with estimates that most energy conservation measures have a payback period of less than 10 years through savings on utility bills – and more than half of potential measures have a payback period of less than 5 years. This makes retrofit an attractive avenue for investment by both property owners and the private sector.

Local Climate Municipal Bonds utilise the savings of local people to both provide capital for investment and generate community buy in. The associated community engagement has the added benefit of encouraging residents to think about other means of decarbonisation e.g. – their own homes/ businesses – and offers an opportunity for the council to share information about these programs with them. Several councils have now issued Climate Bonds, delivered by Abundance Investment, who work with GFI. These generate a return on investment for local people whilst providing capital for a range of green initiatives from solar arrays to electrified buses. An additional benefit is that a small proportion of investors – estimated at roughly 8% by Abundance – donate the interest earned on their investment, enabling projects with no revenue stream to be paid for, such as tree planting.

These funds are projected by GFI to have a small but important role to play, complimenting funds available through the Public Works Loan Board (PWLB). GFI see Climate Bonds providing 5% of lending to councils by 2030. The local capacity here is huge: Abundance estimates that every 100,000 people have roughly £4billion potentially available to invest. With the right engagement research finds, 70% of people would be willing to invest in Municipal Bonds.

3Ci is a partnership between Connected Places Catapult, CoreCities UK, London Councils and the wider local government sector aimed at supporting local authorities in their quest to secure the necessary long-term finance for achieving Net Zero. 3ci also takes a place based approach and provides a model and expertise to deliver a pipeline of projects. The starting point is to identify which parts of local authorities' climate strategy are revenue generating, and how councils can work with partners with different types of expertise and assets to bring forward projects. Examples include renewable energy generation, which is likely to provide an income stream. These revenue generating projects can then potentially cross fund projects which are harder to finance, such as decarbonising waste.

Carbon Offsets, in the council and beyond

Another source of funds is carbon offsetting. The council has established its Green Buildings Fund, using the carbon offset funds paid by developers. This will be open to community bids this year.

There is potential synergy here with plans in development by London Bridge Business Improvement District (BID). London Bridge BID is keen to develop a model whereby businesses located in the area can offset their carbon emissions by investing in the local community. Possible schemes include solar and retrofit projects on schools and council housing, as well as tree planting. With its community links and existing governance arrangements, the Council is well placed to be a partner in this initiative and to deliver assurance and transparency with regard to the local environmental and community benefit of any given project. London Bridge BID also has corporate partners who can offer such assurances.

Southwark acting as system leader bringing forward a green pipeline of projects using mixed sources of finance

This report considers how we could facilitate the better use of private investment and mixed funding for projects in the pipeline. This is across the spectrum: from individuals investing in retrofitting their homes, through to local rewilding initiatives and up to larger scale projects, such as District Heating Networks. Many of these could be delivered through a mix of public and private funding, depending on their capacity to generate revenue or savings and/or attract donations.

Research by Leeds University has scoped out the range of society finance[1] for social and environmental outcomes. The UK is advanced here. Options include debt from Public Works Loan Board, crowdfunded donations, crowd debt, Climate Municipal Bonds, community equity shares (the Community Energy model), institutional private investment, public grants, carbon offset funds, as well as existing capital and revenue streams.

[1] FINANCING FOR SOCIETY Assessing the Suitability of Crowdfunding for the Public Sector, LOCAL AUTHORITY GUIDE, University of Leeds, May 2019

The council's partnership with Veolia to combine grant funding and private capital to deliver the expansion of the District Heating Network, which generates revenue through sale of energy, is an example of just such a project that the Council is already in the advanced stages of delivering. There were some notes of caution sounded here with regard to developing further projects that involve partnering with corporations. Officers advised that, on the whole, residents are concerned with the democratic oversight of PFI projects, however there was a long standing relationship with Veolia and SELCHP, so the recent decision to partner to extend the District Heating Network was an exception. The Commission also considered evidence that favourably contrasted the low rates of interest offered through Municipal Bonds (pegged just below PWLB rates) with criticisms of the extractive rates of profit seen in many of the PFI projects in the 90's.

Another example of a beneficial financial model, outside of the council, is the work of Community Energy companies (such as SE24, whose appearance before this Commission in the previous municipal year is covered in the Energy Review). These bring forward projects, by utilising Community Benefit Companies' social entrepreneurial skills, through negotiation with asset owners (e.g. schools and community centres) relying on a mix of share equity from residents, generating a small return on investment, and grants. The outcomes are a reduction in carbon and fuel costs for the asset owner as well as social outcomes such as locally targeted fuel poverty relief and greater community awareness and buy in for energy transition.

A partnership with 3ci would develop this capability, in the Council and community, and apply it to other sectors. Examples could include utilising the buildings of local partners to generate the power for commercial EV charging points, or developing green infrastructure and improving local habitats for wildlife by landowners collaborating, or creating local circular waste systems through combining the work of BIDs, carbon offsets and a partnership with Veolia, who deliver waste services.

This would see the Council playing a role as system leader, using its convening, enabling and brokering capacity to bring together different groups including local businesses and asset owners, residents, investors, and local BIDs. As such, 3Ci says this demands a different mind-set, akin to the ambition of the climate strategy where achieving Net Zero Carbon by 2030 is for the whole Borough of Southwark, rather than being limited to what the council has responsibility for delivering directly. The ambition the Council has shown here for the whole borough is already mobilising other parts of the community to align with Southwark's plan with, for example, the London Bridge BID adopting the same target. This is in line with the role 3ci envisages the Council would play in facilitating a whole borough plan to decarbonise Southwark. An expansion of this ambition would pave the way for the Council to work with all parts of Southwark collaboratively to develop an economic ecosystem capable of delivering net zero by 2030, utilising the considerable local resources available. This provides the opportunity for the council to play not just a facilitating role, but a catalytic one, matching opportunities with resources and providing the support to execute on them.

3ci recommends that the Council consider additional capabilities that it would require to do this and highlights that having sufficient project development capacity and the capability to work with partners (schools, community and cultural institutions, Business Improvement Districts, SMEs) to develop a portfolio of projects is a key competence.

As such it is recommended the Council employ a project director with a commercial background in social enterprise (or similar) to bring forward a green pipeline, and envisages this role would pay for itself, as well as contribute to community wealth building.

Adopting transparent finance models from the outset, which ensure reasonable rather than extractive rates of return, and benchmarking performance in local delivery of projects, will build resident confidence and provide democratic oversight.

Climate Finance will remain a significant challenge that needs to be addressed at a strategic national level. Meanwhile, there is much more work to be done within the Council to fully explore and evaluate the benefits of other local financing options such as cooperatives and public common partnership models. The Council has committed to view all areas of policy through the prism of the Climate Emergency and, as such, generating green finance will remain an overarching imperative. Accordingly, this area of work must be prioritised within Cabinet and given due political direction. In turn, this approach to funding will help to make addressing the climate emergency a priority that resonates with all of our residents and stakeholders.

Southwark Pension Fund

In December 2016, the council committed to divest Southwark Pension Fund from fossil fuels, and more recently pledged that the fund would be carbon Net Zero by 2030.

The decision to divest followed a survey of staff (scheme members) in 2015 that showed support for a move towards green investment, a petition to Cabinet by Fossil Free Southwark in December 2016, and campaigns by local trades unions with local branches of both Unison and GMB passing motions to divest. These local divestment campaigns were part of a global movement to divest that started in US universities in 2011. They were inspired by the 1980s Anti-Apartheid sanctions movement which highlighted as never before that companies and individuals can use their collective financial clout to achieve a political outcome – in this instance to delegitimise the Fossil Fuel industry and inflict economic damage upon it, whilst supporting greener alternatives.

Over time, the commitment to divestment has grown in line with the Council's declaration of Climate Emergency in 2019 in which it committed to reaching net zero by 2030. By March 2021, the Fund's carbon footprint had reduced by 38.3%, whilst maintaining strong investment performance. This demonstrated that investment performance can be maintained alongside reducing carbon exposure. Given this reassurance, the decision was made to move to the next stage, and in December 2021 the investment strategy was relaunched as an 'Investment Strategy to Achieve Net Zero Carbon Exposure by 2030'. This set out updated actions to be taken in the short, medium and long term.

Southwark's commitment to divest makes the local authority an early adopter, with our fund already 55% decarbonised (as of January 2023). The Pension Fund's front running work on divestment has been challenging as there is a shortage of financial products and set standards on Environmental, Social and Governance (ESG) investment criteria. Government regulation on carbon intensity is now in development, with GFI leading on this. There are also several initiatives and wider coalitions working on this agenda that could support our work.

The Pension Fund has already taken most of the easier steps to decarbonise, including completely ending direct investments in fossil fuels, moving money into renewables as well as adopting innovative approaches to reduce its carbon footprint, such as retrofitting its property portfolio.

The Commission heard from Pension Fund officers and Carbon Tracker on what more can be done to decarbonise the rest of the portfolio. This includes taking account of global markets with significant investments in fossil fuels and the opportunities to move money into renewables, such as solar and wind, as the transition accelerates.

Carbon Tracker recommended that investment decisions take into account the wider economy, as industry powered by renewables takes over from fossil fuel dependent industries. Examples are Electric Vehicles (EVs) replacing petrol and diesel powered cars and predictions that eventually EVs will take over the fossil fuel powered freight industry. Other examples are changes to the energy distribution network, including the scaling up of battery technology, and the move away from plastics and towards biodegradable alternatives.

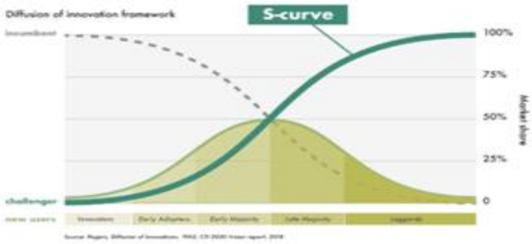
The 2020s are expected to be the decade of disruption, where change will happen quickly and be harder to ignore. Carbon Tracker takes the view that Pension Funds need to position themselves for low-carbon growth stocks and be aware of companies that are likely to lose out in the transition. The potential risks and benefits are aptly illustrated by S Curves:

GRADUALLY, THEN SUDDENLY
The power of S-curves

Carbon Tracker

S-curve in Energy Transition analysis

Tool to capture the non-linear nature of energy technology adoption and diffusion



Behind every successful S-curve there has to be a **successful learning curve**

In a virtuous loop the successful technology will get cheaper the more it gets deployed

Solar panels

Wind turbines

Lithium-ion batteries

Each **declined in cost by 90%** over the past **2 decades**

Climate benefit

Production benefit

Economic benefit

An energy transition driven by S-curve technologies is unlikely to be smooth

S-curves by their nature are **disruptive and rapid**, **investors and stakeholders** in new entrants and incumbents shold **be aware** of their impact.

INDUSTRY CASES

1 Automotive industry

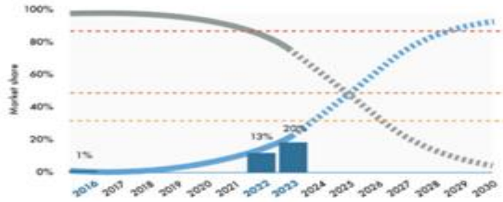
Rapid change of the global automotive industry structure is due to the sudden emergence of battery electric vehicles (BEVs) at industrial scale.

–90% cost in past 15 years

Scalability of BEV batteries

Transport contributes **20%** to global emissions

BEVs become affordable and become a major policy tool to achieve Paris targets



9 in 10

1 in 2

1 in 3

At current rates of growth, the global passenger car fleet could be 20% BEV by 2030, **removing 4-6mb/d of oil demand**

2 Solar and wind power

The learning curves of utility scale solar PV panels has made solar electricity in many cases the cheapest in the world.

solar + wind share in global electricity generation

Wind and solar now account for most of the annual growth in the power sector, forcing out fossil fuels at an increasing rate

Yet, despite all this new energy at speed and scale, across several sectors, **incumbent fossil fuel companies continue to increase their investment** in out-dated energy production, and so rapidly increase the risk of stranding their uneconomic energy assets.

Oil & gas investment in 2021/Q1 2022 (**$130bn**)

Paris-aligned climate pathway

62% of oil and gas investments inconsistent with a 1.7°C climate outcome in 2021

This is not just bad planning, or bad environmental governance – it is high risk economics with investor money, given the speed of new entrant alternative energy technologies.

Source: Carbon Tracker, S-curves in the driving seat of the energy transition, Jan 2023

www.carbontracker.org

The risks for pension funds extend beyond equities of fossil fuel producers and include fossil fuel usage infrastructure, corporate bond holdings, and passive index-linked funds.

There are significant opportunities for clean tech investors as the world electrifies and transitions to low-carbon energy systems. Moving investments to the right places at the right time has the potential both to accelerate change in the wider economy and make the most of opportunities to generate wealth, as well as to mitigate the risk of losses to the fund through investment in stranded assets.

This has the co-benefit of producing a more democratic and socially equitable global economy as both energy security (i.e. through diversification away from fossil fuels) and wealth are distributed more widely, rather than being concentrated in a few oil rich countries. Carbon Tracker highlighted that the current prevailing global energy model is one in which most of the global population is wholly or significantly dependent upon a small minority of countries (less than 15), many of which are subject to poor standards of democracy and human rights, that export most of the world's fossil fuels.

These changes to the Pension Fund portfolio can be delivered primarily through changes to equity investments, both active and passive index linked funds, and corporate bonds, as well as through continuing to make the most of huge and growing opportunities to invest in green tech. This is in line with Southwark Pension Fund's current investment strategy.

Pension funds are very large sources of capital that are increasingly invested in the global market. However this was not always the case – post war most investment was in UK industries. In other countries Pension Funds do invest in local infrastructure such District Heating Networks. The recent move to re-localise the economy through community wealth building, in recognition of the social, environmental and economic benefits of a thriving local economy, is a worthy goal that could be supported by pension funds. A possible avenue is the London CIV, which pools the city's pension funds. This would potentially have the governance capacity to build a local green infrastructure fund.

The Pension Fund could also consider investing in Municipal Climate Bonds as these are a recognised form of green gilts. Currently our index linked gilts are a high carbon part of the portfolio, although they do protect against inflation.

Locally, Southwark Pension Fund is over halfway through the journey to net zero carbon whilst globally £trillions have been moved to lower carbon investments. As of 2021, according to Stand.earth, there were 1,485 institutions from 71 countries owning assets worth USD39.2trillion that had committed to fossil fuel divestment. The rapid growth in public institutional commitment to fossil fuel divestment during the decade 2012 – 2022 suggests that a stigmatising goal has been achieved. Moreover, The Oxford University and Smith School of Enterprise and the Environment report on divestment (2013) found that divestment creates far more indirect impact by raising public awareness, stigmatising target companies and influencing government.

More could be made of our achievements to date, in order both to celebrate our success and acknowledge the seriousness of the task. This should help to promote a further shift in the market and also to encourage the wider divestment movement, given that one purpose of divestment is to delegitimise fossil fuels, alongside building awareness of the growing importance of mobilising capital to invest in a green future, and the potential for Pension Funds to play this role.

Summary of Recommendations

Recommendation one

Explore partnering with the Green Finance Institute to bring forward the following programmes:

i) Integrated Retrofit Finance: Incorporating attractive private financial options into retrofit programmes in the community.

ii) Green Mortgage Campaign: Collaborating with local and national mortgage lenders, brokers and influencers. GFI's campaign aims to increase awareness and engagement across the market.

iii) Local Climate Bonds (LCBs): A debt instrument issued by Local Authorities to raise capital to fund their net-zero and low-carbon projects.

iv) Green Rental Agreements (GRAs): Innovative form of rental agreement to address the 'split incentive' between landlords and tenants to collaborate on environmental issues/improvements in privately rented homes.

v) Property Linked Finance (PLF): A new, innovative financial instrument that enables homeowners to receive financing to support 100% of the upfront costs for a retrofit project.

Recommendation two

Launch a Municipal Climate Bond to generate investment in projects that will help the Council to achieve its net zero target. The Commission recommends that the Council explores the most appropriate projects to be financed by a Municipal Climate Bond, recognising that these will need to have tangible environmental and community benefits.

Recommendation three

Build on the research by Leeds University (see its report *Financing for Society*), and partner with 3ci or similar organisations, to build a green projects pipeline. This will identify potential environmental projects that address the Climate Emergency, both within the Council’s own operations and with partners, which can be delivered utilising the most appropriate sources of funding, including from investment institutions, PWLB, Municipal Climate Bonds, issuing of community shares, donations/crowdfunding and others.

Recommendation four

The Council employ a project director with a commercial background in social enterprise or similar, to bring forward a green project pipeline, with the expectation that this role would pay for itself.

It is recommended that this role includes the responsibility of collaborating with the Greater London Authority to bring forward a project pipeline at the city level. This person could work to ensure select Southwark projects are prioritised within this pipeline, whilst also building a Southwark-level pipeline in accordance with appropriate measurement/ performance metrics

Recommendation Five

Develop a Green Finance Framework, which would serve as a voluntary governance standard, setting out how Southwark Council would manage its green financial instruments and projects in the future, and outline how they would be classified as 'green'. These frameworks are essential as they assure investors that funds raised would only be used to help deliver eligible green projects as outlined within the framework. A third-party could monitor the use of funds and provide third-party certification that funds are being used to finance projects with genuine environmental benefits as laid out in the framework, to build and maintain investor confidence.

Recommendation Six

Investigate, in collaboration with other boroughs, whether the price per tonne of CO_2 equivalent set in the Council’s current carbon offset policy is at the correct level. The Commission recommends that the level set is reassessed on an annual basis.

Recommendation seven

Partner with the London Bridge Business Improvement District (BID) to support its carbon offset initiative , as well as other suitable community partners, including the remaining BIDS located in Southwark, as appropriate.

Recommendation eight

Join and/or learn from successful coalitions and initiatives that can maximise the impact that Pension Funds can have on decarbonising the real economy, as well as their own portfolios.

These are some examples:

- **Climate Action 100 + (https://www.climateaction100.org/)**
- **Science Based Targets initiative (SBTi)**
- **(https://sciencebasedtargets.org/how-it-works)**
- **CDP investor engagement initiative (https://www.cdp.net/en/investor/engage-with-companies)**
- **ShareAction's collaborative investor engagement initiatives on climate change**

Recommendation nine

Southwark Pension Fund makes use of Carbon Tracker's research on S curves and the risk of stranded assets for incumbent fossil fuel-based companies, as demand peaks and alternative low-carbon products come to market, with a view to making the most of these investment opportunities in growing green industries.

Recommendation ten

Southwark Pension Fund's existing plans to move Equity (active and passive) to low carbon funds also take account of a) global markets that are high carbon b) risks and opportunities that exist in fossil fuel dependent industries as they shift to renewables.

Recommendation eleven

Southwark Pension Fund explores and reports back on the potential to incorporate Scope 3 emissions into its definition of net zero carbon exposure recognising that this is particularly crucial for sectors where the majority of emissions are Scope 3 (downstream) such as the automotive and chemicals sectors.

Recommendation twelve

Southwark Pension Fund explores collaborating with other London local authorities on the divestment journey to bring forward a London CIV sustainable green infrastructure fund to increase community wealth building and make the most of London and UK investment opportunities, such as District Heating Networks, renewable energy generation and retrofit.

Recommendation thirteen

Celebrate and publicise the success of Southwark Pension Fund divestment and decarbonisation to date, and ensure the message is one of a commitment to take a collaborative approach to divest from high carbon assets and invest in the growth of a cleaner, greener, and more socially equitable economy, in line with our declaration of a Climate Emergency and commitment to a Just Transition.

Recommendation fourteen

In consideration of the pivotal role that Green Finance will play in achieving our aims within the Climate Emergency Action Plan, the Leader of the Council should ensure that this area is given due prominence in allocations of Cabinet level capacity and responsibility.

Acknowledgements and thanks

Contributors:

- Councillor Stephanie Cryan Cabinet Member for Communities, Equalities & Finance
- Duncan Whitfield, Strategic Director Finance and Governance
- Tim Jones, Departmental Finance Manager
- Jack Emery , Divisional Accountant, Finance and Governance
- Simon Perham, Head of Investor Outreach, Europe, Carbon Tracker
- Joel Benjamin Press & Communications Manager, Carbon Tracker
- Steve Turner, 3ci Director
- Zoe Jennings, Head of Climate Investment , 3 Ci
- Matt Ferretti, Head of Partnerships, Green Finance Institute
- Ryan Jude, Programme Director Green Taxonomy Green Finance Institute
- Karl Harder, co-founder of Abundance

Environment and Community Engagement Scrutiny Commission

Elected members:

- Councillor Margy Newens (Chair)
- Councillor Graham Neale (Vice-Chair)
- Councillor Ketzia Harper
- Councillor Emily Hickson
- Councillor Sarah King
- Councillor Reginald Popoola
- Councillor David Watson

Co-optees:

- Lydia Marsden
- Shalaka Laxman

<u>Expert advisor</u>

Clinton van der Spuy

<u>Officer</u>

Julie Timbrell, Project Manager, Scrutiny and co –report author with the Chair, Cllr Margy Newens.

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