

Green Finance Toolkit for Place Leaders

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Foreword

This toolkit was first written in February 2020 in collaboration with leading infrastructure provider Amey, reflecting the discussion at the Excellence in Place Leadership (EIPL) session in January. Green finance was much in the news at the time, and we had intended to publish the toolkit in March to coincide with the planned launch of the All-Party Parliamentary Group on Sustainable Finance.

Of course, much has changed since then. But as countries across the globe focus on the immediate fight against the coronavirus pandemic, it is important that we do not lose sight of the huge challenges of climate change. Climate risks are growing year by year, and the steps we take over the coming months and years to rebuild our economies will have a profound impact on future sustainability, resilience and wellbeing. Green finance is centre stage to facilitating sustainable recovery and renewal.

Senior politicians and business leaders in Europe and elsewhere have said that efforts to revive the global economy in the wake of the coronavirus pandemic must ensure a "green recovery" that helps the world tackle climate change. The UK's Business Secretary and President of COP26, Alok Sharma, told the international Petersberg Climate Dialogue in April that "the world must work together, as it has to deal with the coronavirus pandemic, to support a green and resilient recovery, which leaves no one behind".

Green finance will be a key focus of the recovery and renewal programme following the coronavirus emergency. At the time of writing, the European Commission is consulting on its Renewed Sustainable Finance Strategy to mobilise capital and boost green investments by fully integrating climate and environmental risks into the financial system.

In the UK, there are national recovery groups being set up by government covering a range of areas relating to our shared interests including economic recovery, transport and environment. These plans need to be joined up and to be more than just recovery; they need to be about place shaping and renewal. Local authorities are also planning for recovery/renewal, and at the same time reviewing their climate emergency strategies to see what can be accelerated or what may have to be put on hold until there is more clarity about the level of government funding.

ADEPT and Amey recognise that we need a 'new normal' where we capture and build on some of the positive side effects of Covid-19 and the behaviour changes we have seen. We want to 'leapfrog' our ambitions for clean growth, green recovery, and delivering net zero carbon.

ADEPT members and partners are playing their part in supporting the transition to a new normal for people and places, for the economy and the environment. We aim to provide our members and partners with the tools, information and guidance they need to help do this effectively. This toolkit is part of that offer.

Why do you need to know about green finance?

The second session of the Excellence in Place Leadership (EiPL) programme (details can be found on the ADEPT website) was held at KPMG's Canary Wharf offices on 17th January 2020. The group was given the challenge of Making Green Finance Work – to understand the Government's Green Finance Strategy (GFS), why it is important for Place Leaders, and what we must do in practice to embed it into our work. The event could not have been more timely:

- Mark Carney, the outgoing Governor of the Bank of England, had just been appointed UN Special Envoy for Climate Action and Finance.
- BlackRock, the world's largest investment fund manager with \$7tn in assets and the largest investor in coal, oil and gas companies, had just announced sweeping changes in an effort to position itself as a leader in sustainable investing after criticism that the company had failed to use its position to combat climate change.
- In the UK, a number of Local Government Pension Scheme (LGPS) funds joined with other institutional investors and shareholders to submit a resolution to Barclays' annual general meeting in May calling for the bank to set and disclose targets to phase out the provision of financial services to nongreen energy companies, and to report on progress each year.

- Mark Carney was also appointed as the Prime Minister's Finance Adviser for the UN Conference of the Parties COP26, to help the UK Government to mobilise ambitious action from across the financial system ahead of the international summit in November.
- It was announced that an All Party Parliamentary Group on Sustainable Finance was to be established in March, to increase parliamentarians' understanding and awareness of how sustainable finance can be unlocked to deliver a net zero economy in the UK, and what role the finance sector has in achieving our climate goals nationally and globally.
- In January at the World Economic Forum in Davos, Greta Thunberg argued that the world is rapidly using up its remaining carbon budget and that the US stance makes tackling global heating more difficult.

This toolkit is a direct output from the EiPL session. With the help of great inputs from a wide range of speakers representing BEIS, KPMG, Amey, AVIVA, HSBC, and CDP, the EiPL cohort worked in teams to unpack:

- Is the GFS meaningful for Place Leaders, if not what are the gaps?
- What are the brakes and blockages to embedding green finance in our sector?
- How do we tackle these blockages?
- What are the things we can do to promote and embed green finance in our day job?

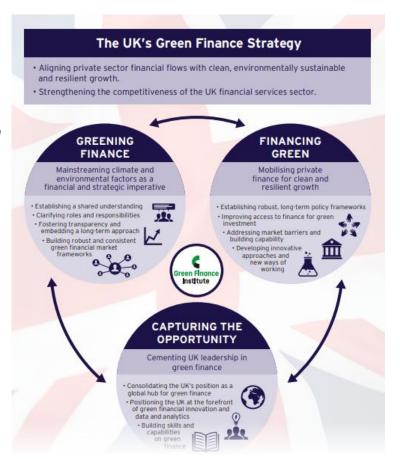
To read the summary of the day please follow the link **here**

What is green finance?

Green finance means investment in the environmental technology, infrastructure and services central to the future of the UK and global economy. The Green Finance Strategy (GFS) advocates government and the private sector working together to fund green projects and make green finance an integral part of the financial system, while also ensuring climate and environmental risks are integrated into mainstream financial decision making. Its objective is to align private sector investment with clean, sustainable and resilient growth.

The GFS has three core elements:

- Greening finance ensuring current and future financial risks and opportunities from climate and environmental factors are integrated into mainstream financial decision making, and that markets for green financial products are robust in nature.
- Financing green accelerating finance to support the delivery of the UK's carbon targets and clean growth, resilience and environmental ambitions, as well as international objectives.
- Capturing the opportunity ensuring UK financial services capture the domestic and international commercial opportunities arising from the 'greening of finance', such as climate related data and analytics, and from 'financing green', such as new green financial products and services.



The Government's Green Finance Strategy

The burning issue of climate change means that public policy and the private financial sector must respond. We are beginning to see significant steps in the global economy towards cleaner, more resilient economic growth. International funds into green investment is gearing up, and the transition to a low carbon economy will reshape energy, transport, cities and land use in ways that could mitigate the risks of climate change. Transformation on this scale will bring rapid technological and commercial change.

In the UK, clean growth sits at the centre of the Industrial Strategy (2017) as one of four 'grand challenges', with the finance sector seen as key to its success. In 2018, the Green Finance Taskforce published its report Accelerating Green Finance. It was from there that the Green Finance Institute was established. The Green Finance Strategy (GFS) was published in July 2019, coinciding with the first London Climate Action Week and the government announcement legislating for net zero greenhouse gas emissions by 2050 — the first major economy to do so.



The GFS headings are concise but powerful: *Greening Finance* and *Financing Green*. The strategy aims to position the UK to capture the national and international economic benefits that could emerge from developing green finance and investing in clean growth. More detailed actions include setting expectations for all listed companies and large

asset owners to disclose the risks posed to their business by climate change, in line with the Task Force on Climate-related Financial Disclosures (TCFD) recommendations by 2022; and using the International Climate Finance and Prosperity Fund budgets to collaborate internationally with emerging economies on green finance.

Although the political landscape has changed since the GFS was published, the Government appears committed to it with a high level of cross-party support. The major financial institutions and investors are aware of climate change risks and the role green finance must play. The local government challenge is to understand these new sources of finance and to package investment projects in ways that will give access, and be attractive to new green funds.

Image Sources

- https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/ file/820284/190716_BEIS_Green_Finance_Strategy_Accessible_Final.pdf
- https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/ file/700496/clean-growth-strategy-correction-april-2018.pdf
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CASE STUDY

Great Manchester Combined Authority (GMCA) IGNITION project

The Greater Manchester Five Year Environment Plan is a key component of the city region's overall strategy. Boosting investment in the natural environment is one of the five priorities of the Plan. Recognising that current natural capital funding draws on limited (mainly public sector) business models and financing strategies, the GMCA commissioned a Natural Capital Investment Plan to identify opportunities to mobilise existing and new sources of funding. These included leasing green and blue infrastructure to a trust which could then exploit new revenue opportunities, selling habitat and carbon credits to other organisations, and revenue generation from Sustainable Drainage Systems (SuDS).

The IGNITION project, led by the GMCA with support from Defra's 'Pioneers' Programme, is working to show how local government and stakeholders can work together to access funding and finance for natural capital investment, and identify pipeline project opportunities for investors. The GMCA and its partners have secured £4m in funding over three years from the EU-backed Urban Innovative Actions to find financing and delivery solutions for green infrastructure projects and support an overall increase in capacity for the city regions to deliver green infrastructure. Greater Manchester is targeting a ten per cent increase in urban green infrastructure coverage from a 2018 baseline over a 20-year period to adapt to the impacts of climate change.

The project will build a knowledge base of resources around contracting and investment approaches that will enable investment in nature-based solutions to be scaled in city regions across Europe. The first investment opportunity within IGNITION will enable investors to share the financial rewards from investing in sustainable urban drainage solutions, to deliver substantial reductions in public institutions' water and sewerage bills.

GMCA is also developing proposals for an Investment Readiness Fund, taking projects from concept to being investment ready. Key milestones for developing an Investment Readiness Fund are understanding potential project (demand) and investor (supply) requirements, design of fund, decision on whether to implement the fund and how, and investment and provision of technical assistance to potential projects.

Image Source:

 https://www.greatermanchesterca.gov.uk/what-we-do/ environment/ignition/

Green finance everywhere

The Government wants to strengthen local engagement and accelerate green finance across the country. By addressing market barriers and building capability, this will improve the flow of private finance into clean growth and resilient infrastructure, supporting local green finance action.

Government will showcase green investment opportunities, for example, by working closely with local stakeholders and investors, as with the Oxford-Cambridge Arc. Embedding natural capital into major new developments from the outset will help to maximise the opportunities for nature-based solutions to climate change and flood resilience, create great places for people and attract investment. It can also help improve strategic planning and decision-making, achieving better environmental outcomes.

Other examples of how green finance can positively impact the UK include:

- Setting out what 'good' green infrastructure looks like through Natural England's work to define a framework of green infrastructure standards to assist local authorities to audit and plan for green infrastructure in their area.
- Enhancing resilience, such as Defra's flood risk management consultation proposals on climate resilience and the GMCA IGNITION project (see case study).
- Unlocking new revenue streams for developing new approaches to financing natural habitats, expanding carbon finance, enhancing resilience and reforming regulatory frameworks, such as the commitment to introducing mandatory biodiversity net gain for new developments.
- Sharing local best practice, such as the BEIS Local Energy programme with five regional hubs to support a pipeline of projects coming out of LEPs' local energy strategies community energy hub.
- Reducing transaction costs by bringing forward projects with the size, volume and certainty to maximise the chance of attracting funding.



CASE STUDY

Greening finance at Cambridgeshire County Council

The Council approved a budget of £16 million in February 2020 to support carbon emissions reductions on Council assets and to build resilience for local communities. This builds on the £22 million already invested into schools, a solar PV park and energy improvements in its office buildings. A commitment of a further £56 million into the development of large energy projects up to 2023/24 has also been supported to reduce carbon emissions, generate renewable energy for local businesses and support electric vehicle charging.

Since 2014, the Council has been building its internal capacity to develop and deliver clean energy projects to address local market barriers. It is using a number of green finance models to facilitate these projects, accessing capital (borrowing from the Public Works Loan Board and Municipal Bonds Agency), government grants, and transformation funding – the use of council reserves for projects which generate longer term savings or income streams.

The Council has utilised these funding streams to implement the following models for energy investment:

- Invest to save: capital investment into energy measures to save money on energy bills. For example, £11million has been invested into Cambridgeshire's schools which will be fully repaid, whilst also helping 55 Cambridgeshire schools reduce energy bills by £750,000 each year – so they can spend more on educating children.
- Innovations/future market model: investment in low carbon technology, renewable energy community projects, and new business models to shape the market for a net-zero carbon 2050. We have two projects under development, St Ives Park & Ride green energy project and working with Swaffham Prior Community Land Trust to take the village off oil and onto renewable heat and hot water.
- Income Generation model: capital loans to bring forward projects that reduce carbon and generate a surplus over the lifetime of the project. Successes include the £10million invested into Triangle Solar Farm which generates approximately £1million gross revenue per annum.
- Capacity and skills building: investment to build new skills for the future. For example, the Council secured a £1million grant for the Mobilising Local Energy Investment Project funded by Intelligent Energy Europe, to build the capacity of staff and politicians to develop and invest in energy projects.

Image Source:

 https://www.mlei.co.uk/projects/ cambridgeshire-county-councilbuildings-programme

The view from private sector investors

To attract green finance, Place Leaders need to understand the basic principles of the investment market. The green loan guiding principles are:

- Projects need to be reasonably tested and sound before banks will get involved.
- There needs to be evidence of cross-party political commitment, giving assurance that a change of administration will not lead to projects being halted.
- Understand private sector risk assessment. Standards give clarity e.g. the Loan Market Association's Green Loans Principles are voluntary recommended guidelines but have become the "Gold Standard" for green loans.
- Green buildings, energy efficiency, clean transportation, sustainable water and waste water management, climate change adaptation are all eligible categories.
- Project evaluation requires evidence of green impact and fit with eligible categories e.g. high BREEAM certified buildings.
- Evidence that green funds are only used for the eligible categories, that the green elements are monitored, and reported on using independent verification if necessary.

Types of green finance

There is a range of sustainable finance options for green infrastructure and projects designed to provide broad environmental and economic benefits. Using sustainable finance can increase bank and investor interest and aid local authorities in demonstrating the sustainable impact of their investment through independent monitoring, e.g. the usage of water and energy.

Options include green bonds, green loans, a green revolving credit facility, green hire purchase, and lease and asset loans. Finance might well come with conditions attached e.g. borrowing rates linked to the achievement of targets, or marginal variation funds to pay into when targets are not quite met/just exceeded.

In addition to traditional forms of investment, crowdfunding can fund a green project or venture by raising small amounts of money from many people, typically via the Internet. The crowdfunding model is generally based on three types of actors:

- The project initiator who proposes the idea or project to be funded.
- Individuals or groups who support the idea.
- A moderating organisation (the "platform") that brings the parties together to launch the idea.

CASE STUDY Bristol City Leap Energy Partnership

Bristol is leading by example in taking action on climate change. It was the first city in the UK to declare a climate emergency and has committed to being a carbon neutral city by 2030. Since 2005, Bristol City Council has delivered a wide programme of energy efficiency and investment initiatives, investing tens of millions of pounds in renewable energy generation and energy efficiency. The council met its 2020 corporate carbon reduction target three years early. It is now moving forwards with innovative pilot schemes that will help build the city's future smart energy system. Bristol has a thriving community energy scene and a wealth of socially responsible organisations.

Looking now to up the pace of delivery to help meet the 2030 target, the Council has issued its City Leap Prospectus, seeking long-term partners to invest and work with. City Leap is a series of energy and infrastructure investment opportunities that represent a big step towards a cleaner, greener Bristol. It aims to create a healthier and fairer city for all, to create jobs, maintain economic competitiveness, decarbonise the city, and build strong partnerships.

The prospectus of partnership and investment opportunities attracted interest from over 180 local, national and international organisations, including tech firms, investors, community organisations and innovative energy and infrastructure developers. Following a six-month options appraisal, Cabinet was asked to decide around building a strategic partnership with the private sector to support the city's carbon neutrality ambitions.

The City Leap initiative includes a range of projects including low-carbon heat networks, renewable energy from wind, solar and marine sources, as well as energy efficiency, electric vehicles and smart energy systems using the latest technology. The Council is currently running a competitive procurement process to identify its future strategic partner and formalise the City Leap Energy Partnership and the £1bn transformational energy projects that it will deliver.

More information on City Leap and Bristol City Council's energy projects can be found at www.energyservicebristol.co.uk.

Image Source:

https://www.energyservicebristol. co.uk/cityleap/

CASE STUDY

Swindon - crowdfunding for clean energy projects

Swindon Borough Council was the first to use Abundance, and raised £2.4m in a solar bond offer, crowdfunding to finance the building of two new solar farms. Residents could invest between £5 and £20,000. The solar farms now generate enough energy for around 1,200 homes, and residents benefit from the reduced carbon emissions, cleaner energy and – for those that invested – returns on their investment.

The Council has also built Barnfield Park, a 2.5 MW 'private wire' project converting a council landfill site into a renewable energy production centre, and saving £185,000 a year in energy costs. In 2014, the Council set up Public Power Solutions (PPS), a wholly owned subsidiary, to develop new energy projects on behalf of any UK public sector body. To date, PPS has developed 185MW of solar capacity for various public sector organisations. PPS is based at Swindon's recycling centre, a Solid Recovered Fuel (SRF) plant, which diverts 97 per cent of the borough's waste from landfill and transforms it into a valuable fuel. The Council teamed up with PPS to develop a solar farm to supply power directly to the recycling centre and SRF Plant. The solar farm was switched on in December 2018, with future plans to deploy both behindthe-meter and grid-connected battery storage capacity, delivering grid-balancing revenue and other services to PPS and neighbouring businesses. The scheme is projected to operate profitably with only a small subsidy and a private-wire contract. The generation capacity will also facilitate future expansion plans including electric vehicle charging. PPS is working on a business case for a 1.2MW battery as the next phase of the development to optimise the usage from the solar PV.

Taking the green finance opportunity

The following reflections were taken from the EiPL session that may help you assess whether green finance is for you and how to take the opportunity within your own place or organisation.

- How do you signal broad and long-term local political commitment to a pipeline of projects? Do you have a clear green strategy or Place Commissioning Plan that clearly set out commissioning plans for place services and infrastructure, to inform the market about opportunities and a pipeline of projects?
- Political opportunities can you maximise the opportunity created by the Government's commitment to 'levelling up'? This gives a new focus on policies being viewed through a place lens, as regional and local infrastructure will figure prominently in the next budget and spending round.
- Can you use the opportunities of COP26 to take forward a new commitment to green finance in your organisation?
- How best to engage with government departments and get a joined-up approach across Treasury, BEIS, and Defra? What are the key policy asks that will help councils access green finance? What legislative changes are needed as levers to assist councils in driving change?
- Share information on current green financing schemes to identify possible opportunities for add-ons? Perhaps collaborate at scale with neighbouring councils to aggregate opportunities for investment?
- How do we raise green finance awareness and skills in our own teams and within our finance teams in particular? Stimulate the debate with your S151 Officer about green finance and treasury management strategy.



This section of the toolkit signposts Place Leaders to information and support on green finance. It lists some of the key stakeholders, briefly describes their roles, and provides links to further information including articles and case studies. New organisations and services are being developed rapidly at present, so this will be reviewed and updated frequently.

Stakeholders are listed under three broad headings – Government, Commercial and Non Government Organisations (NGOs). The commercial section includes the companies that contributed to the EiPL session, but of course there are many other providers out there.

Government

BEIS green finance advice – basic information about the Green Finance Taskforce, the GFS, and links to low carbon technologies and access to financial services www.gov. uk/guidance/green-finance.

Salix Finance provides interest-free government funding to the public sector to improve energy efficiency, reduce carbon emissions and lower energy bills in e.g. streetlighting, council offices and facilities, car parks, schools, colleges, and NHS buildings. Funded by BEIS, Salix has been working with local authorities in England for over ten years. They have invested over £255m in energy efficiency projects in English local authorities since 2004, saving councils over £56m per annum. Loans are normally repaid from energy cost savings over a five year period. The Knowledge Share page of the Salix website is a portal for projects to share information on a number of key areas including eligible technologies, case studies and technical support material.

Local Partnerships

www.localpartnerships.org. uk is a joint venture between the Local Government Association, HM Treasury and the Welsh Government. Their team of experts works solely for the benefit of the public sector. They provide trusted professional support helping the public sector meet the challenges it faces and achieve greater success. They help organisations transform the way they deliver projects, services and change at a local level. They also bring public and private sector experience that helps provide confidence, capability and capacity to central and local government, and other public sector organisations working across all areas of the public sector. The Re:fit programme is a procurement initiative for public bodies wishing to implement energy-efficiency and local energy-generation measures to their buildings or estate and support services. These measures improve the energy performance of buildings, thereby reducing carbon emissions and achieving cost savings. In addition, Re:fit can allow for incomegeneration opportunities through the introduction of energy-generation measures. Many of the Re:fit services require upfront and sometimes ongoing investment. In some cases external financing may be required.

Green Finance Initiative

(GFI) – established in 2019, the GFI an independent, commercially focused organisation, supported by seed funding from HM Treasury, BEIS, and the City of London Corporation. It is the UK's principal forum for public and private sector collaboration in green finance, working to mobilise capital at pace and scale, to accelerate the domestic and international transition to net zero and resilience.

All-Party Parliamentary Group on Sustainable Finance

www.bettersociety.net/ UK100-carney-parliamentfinance.php was launched in March 2020, supported by UK100 and ShareAction.

The Treasury Committee of the House of Commons opened an inquiry into decarbonisation of the UK economy and green finance in June 2019. This was closed in the run up to the general election but may restart in the new Parliament.

Commercial

Abundance Investment works with businesses, government and financial services to facilitate investment in green and social infrastructure, and connect private investors with innovative projects and companies. This green investment platform managed the crowdfunding of the Swindon energy project (see case studies). Abundance Investment is a founding member of the UK Crowdfunding Association (UKCFA) and has pioneered the development of public sector investment crowdfunding within the UK.

Amey Investments is part of Amey plc, the infrastructure maintenance and operations company. It sponsors, invests in and develops new opportunities in the transport, waste and utilities sectors, investing in and developing infrastructure that creates social value. Amey published a 'green paper' on UK infrastructure development and finance – A Better Future – in January 2020.

International Capital Market Association (ICMA) has a resource centre for Green Bond and Social Bond principles, Sustainability Bond guidelines, green project mapping and reporting.

The **UK Green Investment** Bank plc (GIB) was launched by the UK Government in 2012. It was the first institution of its type in the world – a publicly funded bank designed to mobilise private finance into the green energy sector. Between 2012 and 2017, GIB helped to finance more than £12bn of UK green infrastructure projects. In 2017, GIB was acquired by Macquarie from the UK Government, Now operating as the Green Investment Group Limited (GIG), it is a specialist in green infrastructure investment, project delivery and the management of portfolio assets and related services. It is one of Europe's largest dedicated green infrastructure investors.

KPMG offers services to the public sector to develop place or sector specific green growth strategies in the context of national priorities. Services build technical knowledge and capacity at a local level, help mobilise private sector finance for green growth projects, manage projects and measure outcomes.

Aviva is a global insurer and investor, and a strong proponent of the reorientation of capital away from shortterm thinking and towards more sustainable financial markets and delivering sustainable finance - how long-term thinking with an emphasis on environmental, social and governance (ESG) factors on investment decision-making. Aviva has produced reports on Global Sustainable Finance and Financing our Future.

RP Martin is a wholesale broking firm within the financial markets sector specialising in finance for local authorities. They are a partner of the Association for Public Service Excellence and have contributed to CIPFA events on green finance.

Triodos Bank offers sustainable finance products, investing in projects and organisations that support positive social and environmental change, helping them to raise capital. They operate an online crowdfunding platform to help investors to find and invest in sustainable projects.

Non-Governmental Organisations

The Aldersgate Group is a politically impartial, multi-stakeholder alliance championing a competitive and environmentally sustainable economy. Through targeted political engagement, evidence gathering and policy development, they advocate the business case for decarbonising the UK economy, improving resource efficiency and investing in the natural environment. They are a membership organisation composed of some of the largest businesses in the UK with a collective global turnover in excess of £550bn, including leading NGOs, professional institutes, public sector bodies and politicians from across the political spectrum. They have published a report on increasing investment in green infrastructure www. aldersgategroup.org.uk/ asset/1009. Other information on green finance can be found on www.aldersgategroup.org. uk/green-finance.

Anthesis has a web-based tool, SCATTER, to help local authorities assess, report on and reduce greenhouse gas emissions in their areas using a wide range of existing data sets. SCATTER stands for Setting City Area Targets and Trajectories for Emissions Reduction. It was developed in partnership with Nottingham City Council in a project funded by BEIS, and has been used by some other UK cities to set and monitor targets to meet climate change objectives.

Ashden is a charity that supports and promotes clean energy initiatives internationally and shares best practice. Case studies are identified via an annual awards scheme. They have published a climate change co-benefits toolkit for councils and, with Friends of the Earth, published top-31-climate-actions-forcouncils to help councils to deliver their climate action plans – an evidence-based list of the most effective actions councils can take based on cost, effectiveness, and cobenefits. They run a Liveable Cites programme focused on the seven mayoral combined authority city-regions.

Centre for Cities 2017 CPD

www.cdp.net/en supports companies and cities to disclose the environmental impact of their investments and activities. It aims to make environmental reporting and risk management a business norm, to measure and monitor progress towards decarbonisation, understand the gaps and enable benchmarking. Through its Matchmaker platform CDP collects project-related information (costs, impacts, etc.) which it aggregates into a dashboard to share with potential investors.

Leapfrog Finance, Pure **Leapfrog's subsidiary**, is a social and environmental impact investor. It aims to enable UK communities, particularly in deprived areas, to draw financial, environmental and social benefits from locally-owned renewable energy, and energy efficiency assets. Leapfrog Finance was established in 2015 to provide finance to communities wishing to acquire, install and build renewable energy with a £15m facility provided by Big Society Capital, which subsequently grew.

The Carbon Trust www. carbontrust.com/ works internationally with governments and companies with the aim of accelerating the commercialisation of low carbon technologies, and leads projects to deliver commercial partnerships and develop low carbon technologies. They offer a comprehensive advisory and assurance service for green bonds and loans, including feasibility assessments, identifying eligible assets (Green Tagging) and building Green Bond and Loan Frameworks www. carbontrust.com/what-wedo/green-finance.

In 2019 the Carbon Trust and Salix Finance worked in partnership to relaunch the Public Sector Network www. carbontrust.com/resources/ public-sector-network to support information circulation and facilitate conversations around the topic of climate change action. The online network operates exclusively for public sector professionals, where users can share their questions, knowledge, and experience surrounding all aspects of energy and environmental management, as well as a number of other sustainability issues.

Non-Governmental Organisations continued

Place-based climate action network is an ESRCsupported network that brings together the academic research community from five universities and decisionmakers in the public, private and third sectors. It consists of five innovative platforms to facilitate two-way, multi-level engagement between researchers and stakeholders, three city-based climate commissions and two theme-based platforms on business and finance. It focuses on opportunities for climate action within localities, decisions about low-carbon business opportunities, renewable energy investment, urban transport, energy management, buildings efficiency and the management of climate risks.

UK100 www.uk100.org is a network of local government leaders (including some ADEPT councils), who have pledged to secure the future for their communities by shifting to 100 per cent clean energy by 2050. They connect local leaders to each other, to business and to national government, enabling them to showcase their achievements, learn from each other and speak collectively to accelerate the transition to clean energy. They work closely with elected representatives, policy experts and grassroots campaigners to campaign for clean air and clean energy. They organise Clean Air Summits, the local energy conference www. uk100.org/wp-content/ uploads/2019/04/Investingin-Local-Energy-conferencehow-did-it-go_.pdf (2019), and regional workshops on financing green energy.

Established in 2019, the PCAN Finance Platform www. pcancities.org.uk/aims to build a community of practice which helps to connect the supply and demand for finance at local and regional levels, starting with the three Climate Commissions in Leeds, Belfast, and Edinburgh, aiming to identify the scale of finance required, the potential sources of finance and innovative tools that can be used. The Platform works with key UK financial sector institutions, alliances and policymakers to improve the flows of capital into place-based climate action. The Platform has coconvened a number of placebased finance workshops to understand the critical needs and opportunities, in various places including Birmingham, Leeds, Bristol, Cornwall, and Manchester.

ShareAction is a responsible investment charity, working with the whole extent of the investment chain, from pension savers to the institutional investors who invest their money, to ensure that the system is working in a sustainable and long-term way. It looks at how the rules and incentives of the system can be reformed so that more sustainable and responsible investment happens, companies are incentivised towards positive behavioural changes, encouraged by investors. Responsible investment is an investment strategy which integrates environmental, social, and governance (ESG) factors into investment analysis and decisions. It recognises that ESG factors can have an impact on the financial value of an investment and also that investments have an impact on the world around us. A responsible approach to investment recognises that longterm prosperity requires a move away from short-term profit as the only definition of value.

Tyndall Centre for Climate **Change Research** (University of Manchester) is a partnership of universities bringing together researchers from social and natural sciences and engineering to develop sustainable responses to climate change. They work with leaders from the public and private sectors to promote informed decisions on mitigating and adapting to climate change. The Tyndall Centre was founded in 2000 to conduct cutting edge, interdisciplinary research, and provide a conduit between scientists and policymakers. The Tyndall Carbon Budget Tool presents climate change targets for UK local authority areas that are based on the commitments in the United Nations Paris Agreement, informed by the latest science on climate change and defined by science-based carbon budget setting.

Articles

www.current-news.co.uk/blogs/the-green-crowd-how-crowdfunding-could-transform-local-authority-energy-projects
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