Scaling Up Net Zero Investment

Event Summary

On 16 September 2021, Policy Connect through its low-carbon energy forum Carbon Connect held a roundtable to explore how public and private investment in net zero can be scaled up in the near term. The discussion focussed on ways forward for parliament, business, industry and local government to scale up net zero investment and drive down costs of energy efficiency upgrades, low-carbon heating and sustainable solutions. Led and informed by government strategies, participants asked how different local and private actors can help to accelerate the delivery of net zero targets and lead the way towards wide-scale green investment.

The event was chaired by Sarah Deasley (Frontier Economics), with introductory remarks from speakers Dr Alan Whitehead MP (Labour), Beata Bienkowskwa (LSE Grantham Research Institute – Transition Pathway Initiative), Dan Meredith (E.ON), Emma Harvey (Green Finance Institute), Mike Thompson (Climate Change Committee) and Tanguy Debienassis (International Energy Agency). This document was produced as a post-event write-up by Policy Connect. While it was informed by the roundtable discussion, it does not necessarily represent the views of all those in attendance or Policy Connect. Please note, this roundtable took place before the release of the Net Zero Strategy and Heat and Buildings Strategy.

Discussion themes

- **Increasing investment:** capital-intensive clean energy infrastructure requires greater, faster investment which will bring operational savings.
- **Creating confidence and continuity:** government must ensure policy and targets are sufficiently clear and long-term to allow companies to invest in net zero skills and infrastructure.
- **Homes as a priority:** private finance is required to bridge the initial funding gap in home decarbonisation, whilst mass markets for low-carbon energy develop.
- **Financing mechanisms:** key mechanisms for upscaling investment include, but are not limited to, PACE funding, removing levies from electricity bills and green bonds.

Investment by sector according to the CCC

Power: Upfront investment in renewable infrastructure (to electrify heating in particular) is required, using auctions, CFD and flexibility.

Transport: Initial costs of switching to electric cars could conservatively reach £10bn, but by 2030, they could be as cheap as the petrol cars they are replacing.

Networks: Ofgem must sign off anticipatory investment in infrastructure to join power sources to electrified technology.

Buildings: Grant funding is required to support this particularly challenged sector, particularly as the heat pump market develops.

Industry: Switching to electrity and hydrogen will require investment of £2-3bn per annum, which will initially require grant funding from government.

Increasing investment

Increasing the amount of investment in net zero technology is the first step in scaling up the necessary financing to reach net zero. Spending on clean energy in particular must triple between now and 2030 to reach $1.3tn per annum globally. Some of largest increases in spending are required within clean energy, amounting to $900bn invested in 2030 globally for infrastructure in particular.

According to the CCC, UK investment must be scaled up from £1bn to £50bn by 2030, due to the different cost paradigm of net zero technology: high-capital technology that brings operational cost savings. Upfront investment is therefore vital. Concurrently, there is massive availability of capital and appetite to fund sustainable energy, with global issuance of sustainable debt reaching record levels in 2020 and already breaking this new record in 2021. However, this enthusiasm is not translating into investment in sustainable energy on the ground. Sustainable debt remains a drop in the bond market at 4% of global debt, and opportunities for financing developing economies are lacking. New climate measures must not prevent developing economies from investing in clean energy, as this could create international fault lines in sustainable energy and exacerbate environmental inequalities.

Private companies must also increase their commitment to net zero investment. Of 2,000 large companies surveyed by LSE's Transition Pathway Initiative, one fifth had net zero commitments and only 12% are changing quickly enough to reach net zero based on their own targets. Research also revealed that some companies utilise internal organisational boundaries and targets to greenwash their net zero commitments. Increased pace and strengthening of commitments are required to scale up private investment in net zero to the required level.

Creating confidence and continuity

Providing continuity in policy and thereby creating confidence for companies and individuals is a crucial element of upscaling net zero investment. For example, the Green Homes Grant's short timescale did not allow installers sufficient time or confidence to invest in training and gaining qualifications required to take part. As this demonstrates, certainty must precede the announcement of schemes which require investment of time and resources.

Participants commented that infrastructure and background financial arrangements are essential preconditions for investor confidence. They afford investors a clearer understanding of the nature and timescale of returns and make sustainable energy in particular a more attractive prospect. Government has an important role to play in priming the market in these early stages; when government indicated support for renewables, what began as a niche and initially expensive product is now a successful mass market. Government should move first by indicating support and removing the incentivisation of gas to create an economy of scale, followed by decreasing costs and disruption. Once demand has been stimulated in this way, the finance sector will follow.

Current strategies provide an indication of policy direction, but setting targets without provisions for market stimulation are at risk of ''missing the moment''. Government policy must provide detail for its ambitions that allows industry to plan. For example, the UK Hydrogen Strategy concentrated on blue hydrogen, which participants felt conflicts with investment in the field and did not stipulate the preferred use of hydrogen, whether that be home heating or industrial production. To commit to investment in hydrogen production, companies will require more clarity than current strategies offer.

Homes as a priority

The UK's leaky housing stock was identified as an urgent priority area for scaling up investment. Participants discussed the critical need for private finance to help fill an investment gap of £250bn to decarbonise homes, in addition to government grants for homeowners. Whilst new consumer products for decarbonisation have proliferated in the form of green mortgages, solar financing options and local climate bonds (with successful issuances in Warrington and West Berkshire), private finance is still required to bridge the initial gap whilst the mass market develops. It must also be used to raise awareness amongst homeowners and encourage cross-sectoral collaboration.

The Local Authority Delivery Scheme (LADS) demonstrates that mass delivery of home energy efficiency can be achieved when the requisite funds are in place. Improving homes from EPC rating G to C can reduce family bills from circa £3,000 per annum to £500, so the potential long-term savings should be emphasised to consumers. Building renovation passports make the process and benefits of decarbonisation clear to homeowners, as suggested by the Green Finance Institute's upcoming framework of best practice. Above all, the stop-start, boom-bust approach to financing home decarbonisation must be avoided. The SMEs which are expected to make commitments of investment and qualification to create low-carbon supply chains and labour forces need certainty that their investments are worthwhile. Working in tandem with government spending commitments, private investment and lending products can support the atmosphere of certainty established by long-term government policy.

Financing mechanisms

Participants also discussed the range of emerging and established financing mechanisms that could support upscaling investment across different sectors for net zero:

- **PACE (property assessed clean energy) financing** is linked directly to properties, and can be used to make energy efficiency and low-carbon updates in homes. This mechanism has been popular in the USA, and allows charges to be paid over a longer time frame with lower interest rates, without negatively impacting property value. 64% of those surveyed by the Green Finance Institute were open to using this financing option in future. It is important that this mechanism does not increase service charges on homes, which can adversely impact property values and saleability.
- **Remove levies from electricity bills** to encourage uptake of low-carbon energy sources. Any move towards hydrogen-fuelled heating and power should not rely upon funding via household electricity bills, as this could be counterproductive for consumers.
- **Green bonds** have already been popular, and further borrowed funds could be allocated to capitalise on their popularity. Scaling up the proportion of public finance in investment is crucial, particularly a renewed strategic mandate for international financing. According to the IEA's joint analysis with the IMF, the increase in clean energy required by an international road map to net zero could add 0.4% to global GDP per annum.

Roundtable participants

APP Wholesale
BEIS
Climate Change Committee
DNV
E3G
E.ON
Energy & Climate Intelligence Unit
Energy Systems Catapult
Frontier Economics
Green Finance Institute
House of Commons
Institution of Gas Engineers & Managers
International Energy Agency
Knowledge Transfer Network
LSE Grantham Research Institute Transition
Pathways Initiative
Providence Policy
UCL Institute for Sustainable Resources
Waters Wye Associates

Resources shared

The Green Financing Institute, *Letter to Chancellor of the Exchequer* (2021)
https://www.greenfinanceinstitute.co.uk/letter-to-chancellor-of-the-exchequer/

About Carbon Connect

Carbon Connect is the independent, cross-party forum that seeks to inform and guide a low carbon transformation underpinned by sustainable energy. Carbon Connect's main activities comprise facilitating discussion between industry, academia and policymakers on low carbon energy and producing its own research and briefings in this area.

In 2009 the Rt Hon Ed Miliband MP, then Secretary of State for Energy and Climate Change, delivered a keynote address at the Westminster launch of Carbon Connect. Since then Carbon Connect has been at the forefront of policy debate, parliamentary engagement and research related to sustainable energy. Over a number of years, Carbon Connect has built up an unrivalled portfolio of parliamentary roundtables and conferences, detailed policy briefings and highly respected reports. This has been achieved by drawing on the expertise of Carbon Connect members and working with a wide range of parliamentarians, civil servants, business leaders and experts who give their time and expertise to support our work.

For our member organisations we provide a varied programme of meetings in Parliament and policy research. Together, we discuss and analyse the opportunities and challenges presented by a low carbon transformation underpinned by sustainable energy.

About Policy Connect

Policy Connect is a cross-party think tank with four main policy pillars which are: Education & Skills; Industry, Technology & Innovation; Sustainability; and Health & Accessibility.

We specialise in supporting parliamentary groups, forums and commissions for which Policy Connect provides the secretariat and delivers impactful policy research and event programmes. Our collaboration with parliamentarians through these groups allows us to influence public policy in Westminster and

Whitehall. We are a social enterprise and are funded by a combination of regular annual membership subscriptions and time-limited sponsorships.

We are proud to be a Disability Confident and London Living Wage employer, and a member of Social Enterprise UK.