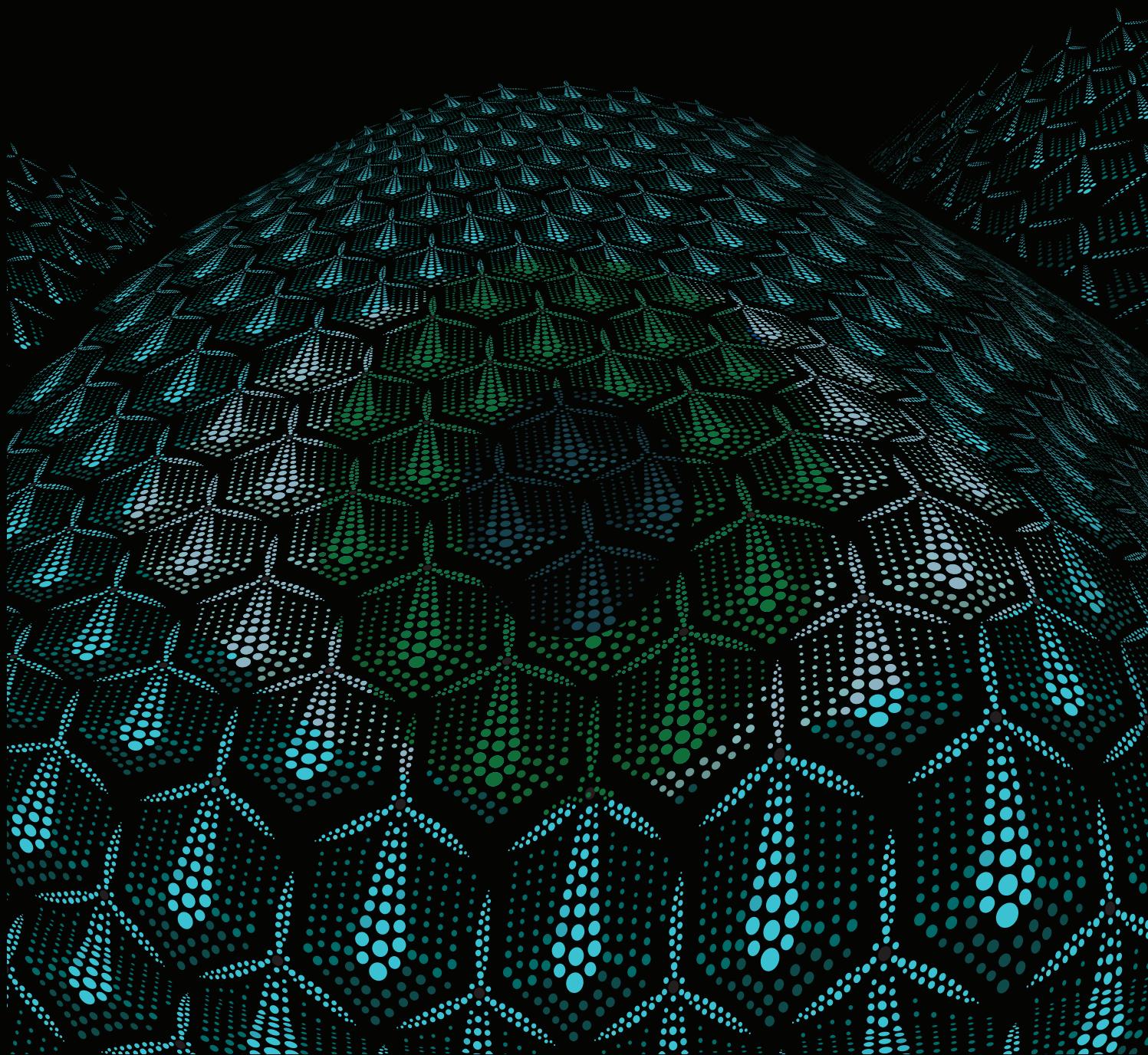


Net balance

Paying for a
carbon-neutral world



This is the 13th in a series of *PF Perspectives*, produced by CIPFA and *Public Finance* to stimulate discussion on key public finance and policy issues. These essays, by leading public sector practitioners and experts, examine the financial challenges for governments in meeting the UN's Sustainable Development Goal of reaching global net-zero carbon emissions by 2050

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FOREWORD



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The previous five years have been the hottest ever recorded, a trend that shows no sign of reversing.

This is a huge cause for concern – and one that the public sector must face head on. Amid an alarming global environmental backdrop, this edition of *Perspectives* focuses on sustainability. The public sector is likely to be the largest economic sector in most developed nations, bringing with it a massive economic and environmental impact. Governments are responsible not only for the carbon footprint of their own activities, but also as referees and regulators for the private sector.

In effect, governments are doubly responsible for environmental costs. And if we are to be given a fighting chance in our struggle against climate change, all government action and outputs must be first considered through the lens of sustainability.

While the public sector may have different demands than the private sector, it is important that it does not lag behind in the wider sustainability transition, as it currently does on sustainability reporting. Insight from sector experts and adapting the way we do everyday tasks will allow us to benchmark our environmental impact, performance and identify areas for improvement within our public organisations.

We also must not lose sight of the bigger picture. This publication is divided into three sections covering the global overview, operations and audit. We look at various aspects of sustainability and attempt to comprehensively examine the pan-public sector context.

In their article, Amiée Aguilar Jaber and Mariana Mirabile from the OECD look at how we can transition to sustainable and green transport through the use of public funds. They argue that instead of funding the development of parts of a system (such as an electric car), we should be looking at it another way and focus on the system itself.

What can we learn from other cities around the world? City of Toronto chief financial officer Heather Taylor explains how key metrics have informed the city's decision-making process and how it incorporates key climate change strategies into daily policy making.

Other contributors include Toby Roxburgh from the World Wide Fund for Nature, who examines the role of regional and sub-national governments in meeting net zero targets; and Chris Coyne from the UK National Audit Office, who asks what are the climate change concerns for audit and risk committees. This edition also includes many other fascinating essays from a diverse range of international contributors.

These exciting and challenging questions must be properly considered and prioritised if the public sector is to progress forward with meaningful change. After all, the temperature is rising and time is not on our side.

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THINKING GLOBAL:
FINANCING NET
ZERO TRANSITION

Fixing a broken finance system

ESSAY



BY TOBY ROXBURGH

Public finance can play a key role in driving forward the transformation needed to avert dangerous climate change



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COP26 PRESIDENT DESIGNATE Alok Sharma has made it clear that the mission for global leaders at the United Nations climate summit in Glasgow is to ‘keep 1.5 °C alive’. But time is running out. The latest science warns us that emissions are on track to rise 16% by 2030 – rather than the 45% cut needed to keep the global temperature rise to below 1.5 °C. As this year’s Dasgupta Review into the economics of biodiversity warns, global finance is still overwhelmingly flowing towards activities that are destroying the planet and putting our planet’s life support systems and our economies at risk. The value of fossil fuel subsidies globally was about US\$6trn (£4.4trn) in 2020, according to the International Monetary Fund.

Developed countries are also failing to provide the US\$100bn (£73.5bn) a year they promised to help developing countries address climate change. The OECD reports that international climate finance only increased 2% between 2018 and 2019, to about US\$80bn (£59bn), leaving a significant financial shortfall for those most in need.

According to the Climate Change Committee, the UK is falling behind its own pathway to net zero. Research firm Cambridge Econometrics estimates that the total funding gap for decarbonising key UK economic sectors is £141bn between 2022 and 2025, with power generation, residential buildings and surface transport requiring the largest investments. Most of this is expected to come from leveraging in private investment, but of the £24bn that will need to come from government, so far only around half has been committed over the next parliament.

To keep 1.5 °C alive, we need to re-invent finance. Phasing out coal, shifting to electric vehicles, mobilising international climate finance, and recovering nature: all of the prime minister’s priorities means shifting financial flows from polluting to clean infrastructure, and recognising that investment in helping communities to adapt, is in everyone’s interests.

It will also require help from all forms of finance, public and private. Public spending is vital for developing the green, climate-resilient infrastructure we need to support the transition. Public policy and finance must also leverage private investment, helping to develop new markets and channel the trillions needed away from fossil fuels and into tackling climate change.

Aligning the UK’s fiscal framework with net zero is a key priority. Government expenditure represents around 40% of UK gross domestic product, but at present HM Treasury does not assess and report how much spend is going on green policies versus polluting ones, or if spending overall is putting us on track for net zero or taking us in the opposite direction. This is why WWF and others are calling on the Treasury to apply a net-zero test (NZT) to all future spending reviews and annual budgets.

An NZT is a method for systematically assessing the impacts of spending and tax policies on climate and other environmental criteria, and for quantifying emissions to help assess alignment with net zero. When applied to the previous budget in March 2021, the NZT revealed that overall, it will undermine progress to net zero, with policies that will drive up emissions – like the fuel duty freeze – equating to more than

£40bn. Only £145m was associated with policies that will reduce emissions. Other opportunities were also missed, such as not applying green requirements on the super deduction for capital allowances.

Many other countries have already adopted ‘green budgeting’ tools to help in the race to net zero, such as France, Ireland, Denmark, and Canada. Having recently joined the OECD’s Paris Collaborative on Green Budgeting, the UK is well placed to announce a commitment at COP26 to do the same.

Greening public procurement

The UK’s £290bn government procurement budget is another vital tool in promoting net zero innovation. This year, the UK became one of the first countries in the world to commit to bringing in new legislation that requires companies bidding for major government contracts to commit to net zero by 2050. Such companies must also have a clear and published transition plan to do so.

Government-led efforts to organise knowledge and build capacity will help to bridge the gap between suppliers and procurement teams in national, regional, and local government. Canada has opened a Centre for Greening Government, aimed at green technology uptake, both to decarbonise the public sector and to stimulate the broader Canadian green technology sector.

Keeping our international finance promises

Hitting the \$100bn (£73.5bn) target at COP26 is pivotal in the global race to net zero. The UK has doubled its International Climate Finance commitment to help developing nations with £11.6bn over the next five years up to 2025/2026. It is vital that this is ‘new’ money, rather than being offset by reductions elsewhere (such as the UK overseas aid budget), and that the UK encourages other countries to step up.

Unleashing trillions in private investment

Mark Carney, the prime minister’s finance adviser for COP26, has emphasised the need to redirect the power of the private sector towards net zero by creating a “virtuous circle of innovation and investment”. Governments must start by translating the Paris Agreement into ambitious national legislated targets and credible climate policies, setting the direction for the new economy and providing certainty for future investment.

This will help companies, banks, insurers and investors develop credible plans for the transition, adjust their business models, and invest accordingly. As private action intensifies, this will, in turn, help governments to target and amplify the effectiveness of climate policies and investment, minimising the overall cost of transitioning and burden on the public purse, while delivering green growth and jobs.

Transforming global debt capital markets is another priority. With more than US\$280trn (£206trn) in outstanding financing and investment, they are by far the largest pool of global capital and exert a profound influence on global patterns of development and investment. At COP26, the UK must lead by example, ensuring that its financial sector is fully aligned with Paris Agreement targets. It must commit to requiring all UK-listed companies and financial institutions to disclose and report their climate and nature-related risks, and to publish net zero transition plans that cover their global investments and lending.

Other countries have already taken steps. France now requires all financial institutions to disclose climate and biodiversity-related risks, and to publish information on compliance with the environmental criteria in the EU taxonomy.

As the UK prime minister put it, COP26 is a “turning point for humanity”. Governments must use every tool in their toolbox. In the UK, bold policy and spending can unleash a wave of green private sector spending, unlocking £90bn of annual benefits, including green jobs and export opportunities; warmer, comfier homes; and more green space for everyone. Aligning the City of London with climate goals can help ensure that UK trade and investment is helping rather than hindering global efforts to tackle climate change.

This is not just our moral duty – it also makes economic sense. The UK’s fiscal watchdog, the Office for Budget Responsibility, estimates that unmitigated climate change will send UK debt spiralling by up to 290% of GDP by 2100 as the country is forced to adapt to a warming climate. Early global action to curb emissions will cost far less overall than a delayed response, and will reward us in terms of stability in our economy and public finances. Glasgow is perhaps the last major opportunity to keep 1.5 °C alive and prevent irreversible damage to our world. With so much at stake, our leaders must succeed. ●

‘Government-led efforts to organise knowledge and build capacity will help to bridge the gap between suppliers and procurement teams in national, regional and local government’

Ensuring a just transition

ESSAY



BY JONNY MARSHALL

Paying for measures to reach net zero requires revenue-raising mechanisms which do not hit the poorest hardest



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HOW WE PAY for net zero is crucial in making it happen. The UK is entering a new phase on its journey to carbon neutrality. We are moving from a period of setting targets, to one in which delivery becomes paramount. This will bring to the fore questions about how to pay for the transition, and how to distribute both the costs and the benefits of decarbonisation.

The second half of the journey is likely to be much more disruptive than the first. It will impact on the daily lives of millions of households in a way that measures to cut carbon from our electricity system have not. It also poses new questions on funding: to what extent should the state pay to improve private property? How should the costs of new products and services be spread when the transition will take place at different speeds for different people and different parts of the country?

On an aggregate level, the total cost of net zero should be manageable, having been forecast at around £300bn over 30 years – a figure that will inevitably fall as technology continues to develop. However, this headline number hides crucial distributional and timing challenges. Without support, the upfront costs associated with decarbonising homes and transport will be too much for many households, clearly requiring the public sector to step in. For many others, though, the transition is very affordable – just look at the recent surge in private sales of electric cars.

Figuring out where the dividing line between those who can pay and those who will need support is a challenge that will define climate policy until net zero is reached. For example, the UK's fiscal watchdog – the Office for Budget Responsibility – assumes that the state will pick up around a quarter of the overall tab for the transition. Its projections vary, though, from a minimum of covering just the cost of public sector buildings and vehicles, to a much greater share of net zero infrastructure, such as extensive electric car charging networks and the cost of insulating millions of private homes. However much of the funding falls on the shoulders of government, it is essential that the costs of decarbonising do not land on the backs of those least able to bear the load.

The financial load must be fairly spread

Greening electricity generation, for example, has been funded largely through levies on energy bills. While improvements in efficiency along the way have stopped bills increasing, they could be lower still if this spending was instead funded through general taxation. With energy costs consuming three times as much of household budgets for the lowest income families compared with the richest, ministers should be looking to avoid recouping further costs via regressive means.

Unfortunately, initial signs are not good. Multibillion-pound nuclear and hydrogen projects are also set to be funded through customer bills, a move that risks worsening inequality at a time when the lowest income families are finding life is getting increasingly difficult. Funding projects such as these through general taxation would be much fairer.

Another vital consideration is ensuring that the benefits of net zero are shared fairly. Warmer homes and cleaner air are a natural by-product of decarbonising our buildings and cars but risk being concentrated among the better off. Over the past decade, the energy efficiency of higher income households has improved quicker than for lower income households (despite government support targeted at the fuel poor). The higher ticket price of electric vehicles mean they are increasingly owned by wealthier people in wealthier areas. As it stands, these trends will continue without state intervention, reducing chances of an equitable transition.

There is also a mismatch between the timing of investment costs and payback costs that will need navigating. The Climate Change Committee's (CCC) projections see an annual net investment of £27bn per year over the 2020s and £15.9bn over the 2030s, before an annual net payback of £11.2bn in the 2040s. How is a household with limited means expected to invest now, if the payback will not arrive until a number of decades down the road?

Dealing with the challenge cannot be left to the private sector alone. Households with electric vehicles and high mileage lifestyles are on track to pocket the lion's share of the payback, at the expense of the lowest income families, nearly half of whom do not even own a car. The public purse will need to step in to bridge this gap, ensuring that savings are shared fairly rather than concentrated in multi-car families.

A strategy that faces up to these tricky issues can also help poverty alleviation, improved health and more satisfying livelihoods. Without actions to make this a reality, though, it is unlikely to happen.

It is all in the implementation

Net zero will also change the shape of our tax base, eroding long-standing sources of revenue such as fuel and vehicle excise duty. Allowing this to happen unchecked could lead to a £13bn per year hole in tax take by the end of this parliament, accelerating rapidly as electric vehicles come to dominate.

Road pricing is the obvious solution but it comes with difficulties in implementation. Still, policymakers should be facing up to these challenges now. The potential cost and pain associated with these transitions will only get worse if they are delayed by politically-motivated prevarication.

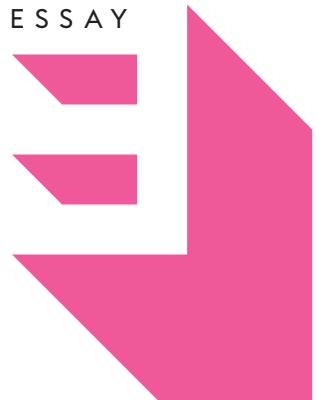
Carbon taxation could also see its day in the sun, providing that it does not impact finances of the less well off and can be delivered in a way that drives private investment – a long-time flaw in the concept. Either way, our tax base will change, with dramatic effects on how public finances are raised and therefore how they can be spent.

The next phase of decarbonisation raises a number of questions that have been avoided until now. It is only by facing up to the challenge that lies ahead that we can make sure the move to net zero works for everyone. ●

'Net zero will change the shape of our tax base, eroding long-standing sources of revenue such as fuel and excise duty'

Taking a systems approach to transport

ESSAY



BY AIMÉE AGUILAR JABER
AND MARIANA MIRABILE

Meeting net zero goals requires prioritising changes to transport systems above improvements to vehicle technology



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MOST OF US were educated to solve problems analytically, to break systems into parts, to analyse and improve each of these parts in isolation. The predominance of analytical thinking in decision making explains, to a great extent, why policies and investment decisions place an overriding focus on improving parts (eg vehicles) within systems with fundamentally unsustainable functioning (eg car dependency).

Analytical thinking is useful when dealing with simple problems but disregards a key insight: in complex systems and problems, the results depend more on the way in which parts are arranged within the system than on the properties of the individual parts. Take, for example, a parent's preference to drive their child to school, rather than letting them go by bike. This preference likely depends more on how public space is allocated to different transport modes (making cycling safe or unsafe), or on how far your house is from school (making cycling feasible or unfeasible), than on whether the child's bike has three or six gears (ie the part's properties). Such a preference will also not change if all cars become electric, as the safety and distance considerations remain.

In addition, we tend to use the wrong proxies of success, preventing us from questioning the desirability of high - and growing - demand systems. For example, economists and policymakers use gross domestic product growth as a proxy for wellbeing. In the transport sector, we use mobility in the same way, even when people's wellbeing does not ultimately depend on how much and how far people can travel, but on the possibility to access places with ease – including by not having to travel long distances or to travel at all. Indeed, proximity to places and the possibility to walk or cycle, rather than use six-lane roads, are a characteristic of most of the neighbourhoods where people want to live.

Both analytical thinking and mobility as a proxy for success have constrained climate action and low-carbon finance to reducing emissions per vehicle. At the same time, the number of vehicles and distances travelled keep increasing. Focusing climate action on improving vehicles' performance is logical if we think that people's preferences are independent from the type of system in which they are embedded, and that reducing the number of vehicles and distances travelled goes against people's freedom and wellbeing since 'more mobility is always better'. Based on this thinking, it is also reasonable to invest huge sums in roads to accommodate the growing traffic volume resulting from people's 'preference' to drive cars.

However, we face a race against the clock. Data shows that increased emissions from growing traffic volumes importantly offset the emission reductions from vehicles' improvements. Secondly, mainly focusing on replacing vehicles (eg with electric vehicles) within car-dependent systems perpetuates inequalities (eg between car and non-car owners and increasing the burden of car-dependent lower income groups), which also reduces the feasibility of key climate policies (eg carbon pricing). Thirdly, we are missing benefits bringing wider health benefits (eg from increased physical activity) and implies important trade-offs (eg electrifying a big and growing private vehicle fleet will increase the already-unsustainable level of materials/resources consumption).

Shifting mindsets and re-allocating finance

Opportunities lie in transitioning towards low-demand systems, ensuring better accessibility with fewer cars and overall mobility. If we shift our attention from parts towards the way that systems function – and in parallel, rethink our proxies of success – we realise that the choice to drive a car or a motorbike – and the increase in traffic volume that results from it – are not a given or an inevitable consequence of ‘progress’, as often claimed. These are rather consequences, or symptoms, of transport systems organised around car driving, and characterised by the dynamics of induced demand, urban sprawl and the erosion of active and shared modes.

When thinking of systems, and having sustainable accessibility (instead of mobility) as the goal, it becomes obvious that far from improving wellbeing, relentlessly investing in roads is at the heart of unsustainable results. When high mobility is no longer an end, the focus of low-carbon finance shifts from (solely) improving vehicles’ performance towards improving systems as wholes, so that they become ‘car independent’. Car independent systems are those where sustainable modes such as walking, cycling, micro-mobility and public transport become the most convenient transport modes, and those that most people choose for the bulk of their trips.

These systems can, by design, drastically reduce emissions while improving equity (eg increasing accessibility for women who rely more on public transport and walking), health (eg reducing pollution and increasing physical activity), job opportunities, and life quality more broadly.

Public finance can contribute to the transition towards car-independent systems by:

- **Channelling finance and investment towards radical street redesign**

Examples like Barcelona’s ‘superblocks’ (car-free zones) show that this low-tech intervention can transform cities and align ambitious mitigation with wider wellbeing goals. While in some places investing in walking/cycling infrastructure has gained momentum after the Covid-19 crisis, the potential of these efforts lies in embedding them in wider efforts to reverse induced demand and move towards disappearing traffic.

‘Proximity to places and the possibility to walk or cycle, rather than use six-lane roads, are a characteristic of most of the neighbourhoods where people want to live’

- **Investing and incentivising private finance in urban renewal projects to help reverse urban sprawl**

Studies show that urban renewal favouring sustainable and less space intensive transport modes can liberate space for centrally-located housing (including social housing), and bring green space, sports facilities and local businesses nearer to people. Even suburbs or towns that are part of the economic unit comprised by cities, which are often the most car-dependent areas within urban regions, could be redesigned in this way.

- **Supporting shared and on-demand services to accelerate the development of integrated public transport networks**

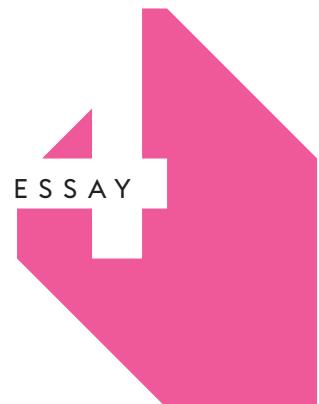
Subsidies for electric vehicles are increasingly common, while micro-mobility and other on-demand (eg micro-transit) services hardly receive financial support. Public finance could, for example, foster the development of these services in areas where they might not be profitable (eg hinterlands), but may be fundamental to reduce car dependency, emissions and increase access to opportunities.

- **Directing finance to support innovation for mainstreaming the most sustainable (and least space intensive) vehicles and services**

GPS technologies and apps allow us today to share vehicles and combine transport modes in ways that were unimaginable. In contrast to innovation for improving cars, the amount and sources of finance to support innovation in terms of new vehicles (eg micro-mobility for families or goods supply) and business models for on-demand and shared sustainable modes is very limited (practically only venture capital). This needs to radically change if we are to prevent a transition from car dependency to ‘high-tech’ car dependency (eg increased ride hailing), and instead foster the transition towards multi-modal sustainable transport systems. ●

The article is based on the forthcoming report Transport Strategies for Net-Zero Systems by Design, which applies the OECD ‘well-being lens’ policy design process to the surface transport sector in and around urban areas. Sign up to the launch of the report and contact the authors: www.oecd.org/climate-change/well-being-lens/

Mitigate or adapt: a false dichotomy for climate finance



BY DANAЕ KYRIAKOPOULOU

Government spending must find a better balance between measures to slow carbon emissions and those aimed at adapting to climate change

THESE HEADLINES from 2021 are a taste of what the future is on course to look like:

- Texas deep freeze leaves millions without power
- Greece wildfires force people to flee island by boat
- Hundreds missing and scores dead as raging floods hit Western Europe
- Nowhere is safe, as extreme heat causes chaos in US and Canada

After a brief pandemic-related drop in 2020, global greenhouse gas emissions are back on the rise. The International Energy Agency (IEA) expects CO₂ output to reach its highest levels in human history in 2023 and continue rising thereafter. The United Nations Environment Programme's latest *Emissions Gap Report*, which measures national commitments to reduce emissions, concluded that the world is heading for a temperature rise of 3.2°C this century. Such temperatures were last recorded on Earth during the mid-Pliocene epoch, some three million years ago.

The window of opportunity to mitigate this prospect remains open, but not for long. This decade is critical. COP26 is widely acknowledged as a 'now or never' moment to reduce emissions so as to limit temperature increases to 1.5°C above pre-industrial levels, the goal set out by the 2015 Paris Agreement. The impacts of failure could be devastating. The difference between a 1.5°C and a 2°C increase is strongly significant: The share of the global population exposed to severe heat at least once every five years would rise from 14% under a 1.5°C scenario to 37% – almost three times as high – in the 2°C scenario. The difference could be 10 times worse for the number of sea-ice-free Arctic summers. And in terms of bioclimatic effects, it ranges from twice as bad for vertebrates and plant species to three times as bad for insects.

The growing awareness of this urgency has mobilised actors across public and private finance to step up their role in directing capital away from climate-harming activities and towards sustainable investments. The Glasgow Financial Alliance for Net Zero, launched in April, includes over 160 financial firms collectively responsible for US\$70trn (£51.5trn) of assets. One in five of the world's largest publicly listed companies, as well as governments representing the majority of the global population and emissions, have adopted net zero targets. The Network for Greening the Financial System has grown from eight members in 2017 to almost 100, with a workstream dedicated to the role of central banks and supervisors in scaling up green finance. Since 2016, 18 countries have issued sovereign green bonds with cumulative issuance exceeding US\$100bn (£73.5bn).

Most of these efforts have concentrated on reducing or limiting emissions through lowering reliance on fossil fuels, investing in less harmful energy sources and sustainable transport systems, and improving energy efficiency. But as we act to mitigate climate change, we should not ignore the reality that – even under the best-case scenario – the world will continue to experience extreme climatic events at growing frequencies for at least the next three decades. Financial flows must also be directed to support those most at risk in adapting and building resilience against these new realities.



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Support can take many forms. Strengthening early-warning systems can help communities cope better with natural disasters such as typhoons and tsunamis. Infrastructure such as electric power grids can be fortified to withstand extreme heatwaves and natural disasters such as wildfires. Developing drought-resistant crop varieties and making them available to farmers in regions exposed to droughts can safeguard the economic resilience of entire communities. Urban planning that uses green spaces to imitate a 'sponge-like' reaction to flooding can significantly reduce the disruption from heavy storms and floods in urban areas.

Providing this finance is a moral imperative. In October, the United Nations Human Rights Council recognised for the first time the right to a clean, healthy and sustainable environment. The physical costs of the climate crisis are borne disproportionately by disadvantaged and vulnerable communities, and are particularly high in the global south that is hit hardest by natural disasters. Under-investing in adaptation can skew pre-existing inequalities both within and between countries.

Moreover, the countries and communities that suffer the greatest impacts are those least responsible for the climate crisis. And they are also the ones least equipped with resources to address these impacts. Developed economies have had the dubious privilege of industrialising and generating economic growth without 'internalising' environmental considerations. For countries at earlier stages of development this is – rightly – no longer a possible nor a desirable growth model. The pandemic has put the global south into an even worse place, with almost 70 low-income countries either in debt distress or at high risk of debt distress. Support from international public finance through grants, concessional loans and funding by the multilateral development banks will be crucial to fill the gap. Reflecting this recognition of responsibility and resource capability, developed economies have made a collective commitment to provide \$100bn (£73.5bn) per year in climate finance. But they have so far failed to act on it.

Investing in adaptation and resilience is also an economic imperative. While it is itself costly, it is ultimately less costly than the alternative of addressing the full cost of the consequences of climate change. Yet adaptation finance has consistently received disproportionately less attention within international climate finance: according to analysis by the OECD, mitigation represented around two-thirds of total climate finance provided and mobilised by developed countries during 2019, while adaptation's share was only one quarter.

There are several reasons for this imbalance, and for the perceived tension and competition for political attention and funding across the two areas of action. Investments in climate change mitigation have usually been motivated by a search for yield. Returns to investments in infrastructure assets such as sustainable transport and energy can be straightforward using conventional economic and investment models. They have been also incentivised by lower returns on traditional fixed-income assets, following years of very low interest rates and quantitative easing. The risk of stranded assets in fossil fuel sectors has further motivated the shift to renewables. A report by Imperial

'The physical costs of the climate crisis are borne disproportionately by disadvantaged and vulnerable communities, and are particularly high in the global south'

College Business School and the IEA earlier this year found that over the period 2010-20, the return to publicly-traded renewable power companies was seven times higher than for fossil fuel companies. A growing body of regulations has also helped drive the process of internalising the costs of contributing to climate change through growing emissions, further sharpening the incentives for mitigation investments. Five central banks of G20 economies are working on climate stress tests for the financial sector, and a further three are expected to do so in the near future.

With adaptation, incentives and motives for return can be less clear. This is partly because climate change is not a factor fully internalised in decision-making, and because the so-called ‘tragedy of the horizon’ that temporally disconnects impact from the time of action, generates short-term biases and leads to an under-allocation and misallocation of resources for adaptation. Regulatory measures and policy direction have worked towards closing that gap for emissions reduction and mitigation, but the disconnect is more persistent when it comes to adaptation.

There are also geographical disconnects: while the benefits to mitigation are global, the benefits of adaptation and costs of underinvestment in it are felt primarily at the local level. Foreign investors thus have a stronger narrow incentive to invest in, say, renewable energy capacity in developing economies that will ultimately generate benefits that will be globally shared, than invest in adaptation and resilience which will benefit local populations alone.

But that does not mean that the economic benefits do not exist. A study by the Global Commission on Adaptation concluded that investing US\$1.8trn (£1.3trn) globally in adaptation over the next decade could generate US\$7.1trn (£5.2trn) in benefits. This is based on a set of illustrative investments across five areas: strengthening early warning systems; making new infrastructure resilient; improving dryland agriculture crop production; protecting mangroves; and making water resource management more resilient.

The study further shows how benefits to adaptation are realised in multiple ways, which can conveniently be grouped in three categories to create the ‘triple dividend’. First, it helps to avoid losses, for example, through early-warning systems or making infrastructure more resilient. Second, it can generate economic benefits by making investment possible in geographies where it would otherwise not be – the Thames Barrier to manage the risks of flooding in East London is cited as a key example here, as in its absence investments into the Canary Wharf set of developments would not have been possible. Third, there can be social and environmental benefits to adaptation.

Ultimately, while a better understanding of the benefits to adaptation and resilience is needed to support scaling up finance towards these objectives, we also need a more fundamental shift away from viewing finance choices through a mitigation Vs adaptation lens. It can be tempting for policymakers managing budgets to consider decisions in terms of trade-offs: should limited resources be invested towards flood defences or towards reducing emissions to lower the likelihood that such floods occur in the first place?

But separating one from the other is a false dichotomy. Investing in adaptation and resilience can also enhance the effectiveness of climate change mitigation. For example, better forest management to protect communities from the increased likelihood and intensity of wildfires can also help to reduce the total size of land burnt when wildfires do occur, and in so doing reduce the amount of carbon emitted during the fire. Investments in water-efficient technologies in response to higher-frequency droughts can at the same time help to reduce energy consumption. More broadly, adaptation and resilience investments that are focused on nature-based solutions will almost always also aid mitigation.

At COP26, developed economy leaders have a responsibility to act on their collective commitment to scale up climate finance and deliver on the Paris Agreement target of \$100bn (£73.5bn) per year. In doing so, they should not only focus on the aggregate figures but also their composition. When it comes to climate change, we are all in the same storm, but we are not all in the same boat. And while we are getting better at navigating new routes out of rough seas, we should also focus on building better boats where they are most needed. A holistic and comprehensive approach to climate finance that integrates mitigation with adaptation and resilience will help dispel false notions of a zero-sum-game and show, in practice, the ways in which one can reinforce the other. ●

‘Investing in adaptation and resilience can also enhance the effectiveness of climate change mitigation’



ACTING LOCAL:
MUNICIPAL
SOLUTIONS

Guiding change through collaboration

ESSAY



BY HEATHER TAYLOR

The City of Toronto in Canada has embedded an understanding of the costs of climate change into its policymaking and financial planning processes



Heather Taylor is chief financial officer and treasurer at the City of Toronto, Canada

PUBLIC SECTOR ORGANISATIONS are currently dealing with tremendous upheaval triggered by the issues stemming from the unprecedented global pandemic, the growing climate change emergency, and dramatic social inequality. These challenges pose additional burdens on the public sector as we urgently navigate stewardship, transparency and a continuously changing environment.

A signal of hope is provided by banks, asset managers and investors, who are beginning to acknowledge and take action through their Environment, Social, and Governance (ESG) strategies and disclosures. But while disclosure is now required within these corporate entities, few public sector organisations have divulged how they are addressing the same issues. Government bodies have always viewed themselves as transparent, democratic, and responsible due to the legislative controls they operate within. However, their public disclosure documents don't currently meet that mark.

Public sector organisations now have the opportunity to lead beyond their legislative responsibilities and demonstrate progress on critical ESG disclosure and performance metrics. The Covid-19 pandemic has been a catalyst for us to think about evolving our economies in a more equitable and sustainable way. This directly correlates with ESG considerations. What organisations, including those in the public sector, need now are common standards and key measurements to demonstrate progress in these critical areas. This means that chartered professional accountants working in public sector organisations now have the opportunity to be trailblazers within the realm of ESG measurement advancement and to inspire others to do the same.

I strongly believe that public sector leaders have the opportunity to pave the way, developing and regulating standards to ensure the prioritisation of ESG goals deliver enhanced outcomes and define accountability. The profession is uniquely positioned to deliver those measures because it is skilled, trusted and respected. This creates an unmatched possibility and obligation to report beyond 'just the numbers'. We can seize this moment by coming together to take action against climate risk. We can influence how current and future generations make informed and relevant decisions by developing the required metrics to measure ESG progress.

What actions has the City of Toronto taken?

The City of Toronto has implemented several key strategies to address climate change and social issues, and strengthen governance. We adopted 'TransformTO', Toronto's ambitious climate action strategy, which sets greenhouse gas emissions targets aimed at improving health, growing the economy and advancing social equity. We launched our first green bond in 2018, supporting specific capital projects that target climate mitigation and resiliency. We became the first Canadian government to issue a social bond in 2020, to fund social and affordable housing investments, deploy affordable basic infrastructure to communities, and support socio-economic advancement and empowerment.

The bonds have been supported by the creation of a 'Social Debenture Framework', that intentionally expands our sustainability framework to demonstrate our commitment

in both the green and social space. By creating green bonds and social bonds, we have attracted new types of investors from all around the world – investors who keep ESG reporting at the top of their priorities and insist that sustainability and equity issues are incorporated in their investment choices.

We also created the Toronto Investment Board, an independent, skill-based board with experience in investing and ESG issues. This board directs the city's strategy to invest its investable assets in a reasonable and prudent manner. The investment managers selected by the board are all signatories to the United Nations Principles of Responsible Investing and have had to demonstrate a process for ESG integration in their decision-making. Since there is no single source of reporting for ESG initiatives, Toronto has chosen to take the lead and become the first Canadian public sector entity to release an ESG performance report, demonstrating our commitment to each of the three areas.

The inaugural report, released in January 2021, included topics ranging from the City's greenhouse gas (GHG) reduction targets, social and economic inclusion, and workplace culture and inclusion. The report set out the priorities in each of the ESG areas along with associated performance metrics aligned with the United Nations Sustainable Development Goals.

What lessons have we learned?

To maintain public trust and confidence, it is imperative that public sector organisations invest wisely, focusing on demonstrating stewardship and accountability over financial resources. For this reason, we are proud to be the first municipality in Canada to incorporate our GHG target and progress in the notes to our financial statements. We are also one of the first municipalities in Canada to voluntarily adopt the recommendations made by the Task Force on Climate-Related Financial Disclosures (TCFD), with publication of the city's climate risks and opportunities in our 2019 annual financial report, which outlined our strategy to mitigate those risks and meet our net zero target. TCFD was intended to influence the allocation of capital for public companies, but for public sector organisations it goes beyond capital market allocation decisions. It is essential to understand how climate issues are impacting the city and our ability to provide services.

In addition, Toronto's decision-makers are mandated to consider climate risks in their policies and financial planning processes. In order to do so, public sector organisations need reliable information and clear standards to measure against. Our profession is expected to meet those types of information requirements in the financial sphere, but we will need to extend our expertise to develop those needs. Getting started on the TCFD journey was challenging, even when accountants worked closely with sustainability professionals. It was important to understand what data was available; what risks or opportunities impacted service delivery and asset infrastructure; what opportunities could be woven into policies and processes; and what has already been disclosed as compared to the recommendations. As an industry, we can build best practices that will bring true comparability to the disclosures recommended by TCFD. ▶

'To maintain public trust and confidence, it is imperative that public sector organisations invest wisely, focusing on demonstrating stewardship and accountability over financial resources'

In our experience, multi-disciplinary team collaboration was the key to getting started, with knowledge pooling helping to support efficient adoption, and harmonised approaches enabling consistency of disclosures. By starting small, the City of Toronto was able to develop disclosures and harness buy-in from across the organisation. More collaboration with sustainability professional organisations will build the methodology and enable the development of this information. Each actor plays an important role in guiding change and taking action to enhance sustainability in our global community. We can all motivate one another to address risks associated with climate change, and disclose our progress on environmental, social and governance factors.

Public understanding about the need for action is increasing as the impact of climate change becomes more apparent. As a result, it is necessary to know both the feasibility and the cost of meeting greenhouse gas emissions targets, as well as the cost of impacts of extreme weather on interdependent infrastructure systems. Cross-disciplinary teams can determine the data required and establish processes to capture that information.

In Toronto, different teams of professionals are working together to ensure that, in the end, capital investments will be directed to those programmes with the greatest impact. Implementation of TCFD in annual financial reporting highlights good practice for finance and accounting professionals, and the role and value that accountants can bring to sustainability.

More work lies ahead

Toronto will continue to take an integrated ESG approach, with responsible practices embedded across the organisation to build a sustainable, transparent and resilient foundation for the delivery of quality services and value over the longer term. Striving to be a caring and friendly city that invests in quality of life for all, the City of Toronto prioritises maintaining and creating housing that is affordable, investing in people and neighbourhoods, and enhancing social outcomes for residents and our global community. We are committed to achieving our climate goals, including the reduction of greenhouse gas emissions and accomplishing our net zero targets, which will require transformational changes in how we live, work, commute and build.

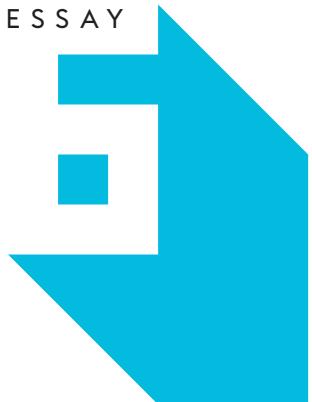
Enhancing the city's resilience will enable us to survive, adapt and thrive in the face of challenges. Toronto is striving to be a leader in making positive impacts and hopes to demonstrate to others that incorporating ESG into financial and policy decisions is not only possible to do, but it is the right thing to do. We have experienced first-hand that when working together you can address climate risks and social inequities.

We are proud of the actions in ESG priorities that the City of Toronto has undertaken and look forward to partnering and collaborating with other forward-looking public sector organisations in developing key metrics to measure the success of our initiatives. As the saying goes, 'what gets measured, gets done'. By developing key metrics, chartered professional accountants can be the leaders to drive a sustainable future for us all. ●

'Public understanding about the need for action is increasing as the impact of climate change becomes more apparent'

The missing link: regional government

ESSAY



BY TIM ASH VIE

State and regional governments have a crucial role to play in cutting carbon emissions while creating economic activity



Tim Ash Vie is director of the Under2 Coalition Secretariat. The coalition is a network of local and regional governments which are taking climate change action

WE ARE NOW nearly two years into what has been termed the ‘climate decade’ – 10 years in which we must halve carbon emissions globally. If we truly want to prevent the worst effects of climate change and protect biodiversity, then temperature rises must be kept to 1.5°C and governments, businesses and individuals must work together on ways to achieve that goal.

This is because the window of opportunity to prevent rises of more than 1.5°C is closing – and closing fast. Every additional 0.5°C of warming increases the intensity and frequency of extreme weather events, including heatwaves, heavy rain storms and prolonged droughts in some regions. If, collectively, we do not reduce greenhouse gas emissions and create more sustainable and resilient economies, we will not be able to stop the escalating effects of climate change becoming worse and making some areas of the planet unliveable.

One of the biggest opportunities to take the action needed is at COP26 in Glasgow this November. High-level summits like these have become ever bigger and more urgent as time passes, and this year’s event will be no exception. Governments – such as Under2 Coalition’s co-chair Scotland – have even described COP26 as representing “the world’s best chance – perhaps one of our last chances” to avert the worst impacts of climate change. Reaching net zero emissions is a key step in seizing that chance.

Who should act on climate change?

Traditionally, action on climate change has been seen as a responsibility of national and international government. Undoubtedly they have a huge role to play. But one of the biggest lessons the climate community has learnt is that none of us is immune from the impacts of extreme weather or food shortages, and so everyone has to help to find solutions. That is why the Climate Group works with state and regional authorities, as well as international businesses, to reduce emissions and encourage sustainable development.

State and regional governments are uniquely placed to make an impact because they have their own legislative powers and more keenly understand the localised issues caused by a warming planet. They can pass new laws, create favourable business conditions, improve public transport systems and influence behaviour change. And in doing this, they have a critical role in setting the context to attract innovative finance to support climate-positive investments.

These local governments are also increasingly bolder than national governments, with 55% of states and regions with a 2030 emissions reduction target having one that is more ambitious than that of their national counterparts (*Global States and Regions Annual Disclosure, 2020*). However only 16% of them have been consulted by their national governments on climate action planning.

Net zero emissions

With this boldness we have seen a marked shift to recognising the value of reaching ‘net zero emissions’ – the point at which we are not adding new carbon to the atmosphere ►

'States and regions play a key role in influencing national governments, including by providing a voice to communities experiencing change on the ground and developing solutions to meet their needs'

because any increase in global emissions is balanced by an equivalent absorption of them from the atmosphere. More than 40 members of the Under2 Coalition, which represents 133 states and regions from around the world, now have net zero targets, and that number has been increasing throughout the year.

Our Net Zero Futures programme works to support state and regional governments in understanding, setting and delivering on net zero emissions targets. Those that have already analysed their emissions and identified key areas where cuts can be made are demonstrating how to make progress to those governments still in the earlier stages. It is a great example of governments around the world learning from one another and showing leadership on the climate.

Most of our Net Zero Futures members have also joined the UN's Race to Zero campaign, where they are part of a cross-section of businesses, regions, cities, universities and others committed to reaching net zero emissions by 2050 – or, preferably, earlier – and setting out pathways to get there. This collaboration and momentum matters. Government actions influence businesses and vice versa. Positive change in one area can spread to others.

The cost of inaction

Reaching net zero is no easy task. It will require time, effort and money. However, keeping temperatures down means avoiding the staggering costs that come with the more frequent extreme weather events caused by climate change, such as flooding, wildfires or dangerous storms. These are costs that many in the global south – with some of the countries worst affected by climate change – cannot bear, and which will lead to greater inequalities in years to come.

Many of the members in the Under2 Coalition are already feeling the effects of a changing climate, particularly in rural communities. Without worldwide change, this will escalate, causing rising food shortages and homelessness. We need the largest and most powerful countries to step up with more ambitious commitments that recognise the needs of all. The upcoming meeting of G20 countries will be an important staging post along this long journey.

Economic opportunity

Yet reaching net zero is not just about preventing the worst from happening. It is also about the opportunities that can open up as a result of new economic models. A report from consultancy firm Deloitte this year found that policy shifts to achieve net zero greenhouse gas emissions by 2050 would not only avoid the worst impacts of climate change but could provide the region with economic gains of US\$12.5trn (£9.2trn) by 2070.

According to management consulting firm McKinsey & Company, government spending on renewable energy and/or energy efficiency creates roughly three times more jobs than spending on fossil fuels. Therefore, any action taken at state level to stimulate these sectors can more than pay for itself in increased economic activity. This can include the roll out and maintenance of renewable energy technology; energy efficiency investment such as

the retrofitting of buildings and homes; the development of clean transportation; and nature and soil restoration as crucial carbon sinks.

One example comes from New South Wales in Australia. There, the state government's *New South Wales' Electricity Infrastructure Roadmap*, published last year, is expected to create an estimated 6,300 construction jobs and 2,800 ongoing operational jobs by 2030, and reduce average household energy bills by AUD\$130 (£70) per year between 2023 and 2040.

In Mexico, Yucatán's Plan for the Improvement of Urban Mobility in Mérida, also released last year, has reduced city centre traffic, expanded and enhanced cycle lane provision, widened pavements, improved road crossings for pedestrians and led to the planting of more than 2,000 trees. It has also generated 280 direct and 700 indirect jobs for local people, demonstrating the economic possibilities of more sustainable ways of living.

Joining the global and the local

States and regions play a key role in influencing national governments, including by providing a voice to communities experiencing change on the ground and developing solutions to meet their needs. They can act as hubs of innovation to test out better ways of doing things. Setting – and meeting – targets at this level can act as a solid demonstration of what is possible. It also provides others with an example to follow.

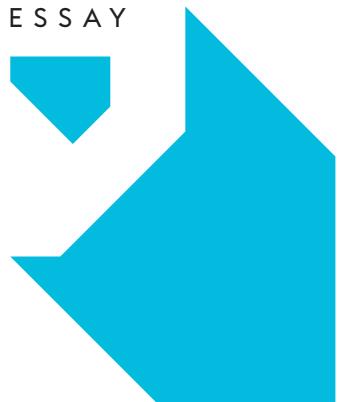
The challenge now is ensuring that all states and regions have an equal opportunity to develop their economies at the same time as cutting greenhouse gas emissions, so that we have a truly equitable transition to net zero. This means having fair and robust climate financing processes in place so that the technologies open to some regions of the world are open to all regions of the world. National governments and finance institutions will need to find ways to make this a viable proposition.

Over the next decade, millions of new jobs are expected to be generated worldwide within green industries at all levels. Net zero targets are just the first step in identifying areas for this economic growth, but they can stimulate creativity and new ways of thinking across government, and in the private sector too. Being able to realise the opportunities ahead will require everyone working together for solutions that meet the needs of both people and the planet. Looking at the work already being done in states and regions is the perfect place to start. ●

'Over the next decade, millions of new jobs are expected to be generated worldwide within green industries at all levels'

Stage is set for local authorities to tackle net zero

ESSAY



BY KAREN SANDERSON

Central government can only meet its net zero targets by giving local authorities the financial tools to tackle climate change



Karen Sanderson
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ALMOST AS IF it needs no introduction, the climate crisis is now at the very top of political and economic agendas across the world. It is quite the headline act. There is not a single country immune from the unfolding crisis.

Political priorities and economic imperatives have changed significantly in the past two decades as the world grapples with the growing effects of climate change. We only have to look at the previous five years to realise the alarming rise in temperatures – 2015–2020 being the hottest years ever recorded. This is obviously a cause for concern, and shows a clear trend projection that is not going to be solved by a few bottles of ‘factor 50’. Thankfully, there is now a strong (and growing) public appetite for government engagement in what is perhaps the defining issue of our time.

But time is, of course, a luxury. It is not in infinite supply, and it is running out much faster than we would like. It is clear that net zero is the goal, but where on earth do we start? Locally, of course.

Tackling the effects of climate change and working towards a net zero society will need action from the public, private and third sectors, working together not only with governments, but also local authorities to deliver innovative and sustainable solutions for communities. But solutions inevitably cost money, and this is where central government also needs to play its part. Funding for net zero initiatives must be made accessible without costly bureaucracy and endless hoops to jump through.

The climate doesn't really care who produces the carbon dioxide – whether it is the public or private sector is irrelevant. The public sector is, however, the largest economic sector of many of the world's economies, so has an inherent and integral part to play in global climate efforts. The public sector is responsible for contributing to climate change, not only through its own activities but also through the rules, regulations and standards it sets for private companies operating in various markets. In my view, the public sector is the gatekeeper to reaching a net zero economy.

CIPFA's recent *Evolving Climate Accountability: A Global Review of Public Sector Environmental Reporting* review found the public sector is lagging behind the private sector significantly when it comes to sustainability reporting. The practice of sustainability reporting, which can incorporate not only environmental but also social and economic measures, is now widespread in the private sector. After coming under continual pressure from investors, consumers and activists alike, private sector companies are increasingly adopting non-financial reporting measures to better assess their performance and impact on the climate.

But transparent and methodical reporting is only one half of the equation when trying to work out how to achieve net zero in terms of the public sector. Sure, good reporting will highlight areas for improvement and enable a bigger picture to be formed, but it will not solve the problem alone.

Enter stage right: central government

During COP26, we will hear much about the role of central government and the private sector in meeting net zero targets. But what if the key to achieving net zero was actually

through local authorities and their expert knowledge of the communities in which they operate? In the UK, as seemingly happens all too often with the current government, there is a distinct lack of clarity about the role that local authorities can, and should play.

In the net zero white paper currently working its way through Whitehall, the government sets out its vision for achieving net zero. Commandable and lofty ambitions such as a shift away from gas to electricity, better insulation for homes, a ban on petrol and diesel cars, and embracing new technologies such as smart devices and appliances form the backbone of the strategy. It is clear that the plan to achieve net zero puts consumers, job creation and affordability at its heart – but there is barely a mention of a local authority to be seen.

At a recent Environmental Audit Committee in the UK Parliament, business minister Lord Callanan effectively sank councils' hopes of a detailed and common framework to reach net zero – a long-standing request of local authorities. He also said that proposed changes to the fragmented way that they must communicate with central government had been rejected.

The role of the local authority is that of the boots on the ground. At CIPFA, we believe local authorities are best placed to plan, coordinate and deliver any strategy from central government direct into the unique and varied communities they operate in. Their part should not be overlooked. They are vital to the success of any net zero strategy, and therefore any framework or strategy must acknowledge that coordination between all parties is surely the most effective way to achieve desired outcomes, value for money and success.

Delivering a strategy is one thing, but building engagement and cooperation with local communities is another ball game entirely. For it to work, winning the support of communities across the country is going to be a deciding factor. Local authorities are uniquely placed to do just this through ongoing community engagement activities, local environment action plans, providing local incentives and also leading by example, such as introducing electric buses or the planting of trees.

Fighting climate change cannot just be for the enthusiast, the environmentalist or the politically savvy, it must be for everyone. Quite simply, it must be mainstream. That means it has to align with, and not come at the expense of, other local authority priorities such as bins being collected, finding housing for the vulnerable and providing other basic community services. Reaching net zero needs to be accessible and easy to understand if we are to get the public on board, with the dangers of not doing so clearly communicated, but also the benefits of change to local communities put front and centre in all campaigns. Who better to tackle these local challenges than local authorities?

Change is not cheap: how can it be funded?

The UK government has supposedly already assessed the totality of funding needed for local authorities to support the delivery of its net zero strategy. Evaluation is one thing, but actually making it happen is another. Whitehall has indicated it wants to set up a development bank that will provide loans to local businesses and authorities with net

'Delivering a strategy is one thing, but building engagement and cooperation with local communities is another ball game entirely'

zero conditions attached to them. For these loans to be effective and reach the desired recipients, they must be accessible with as few hoops as possible to jump through, and the conditions easy to understand. If not, the barriers to entry may become just too high and the return on time invested judged not worthwhile.

For local authorities in particular, accessing funding from central government can be a lengthy and time-consuming affair. This cash is often awarded through a competitive bidding process, which inevitably pits one local authority against another. Putting these bids together can be costly and time consuming and requires expertise which many – particularly smaller – local authorities may not have, while also diverting resources away from other activities and programmes. By definition, a competitive bidding process means there will always be bids which are not successful, meaning all the time and money that went into putting that bid together is in effect wasted. The sector is united in its calls for an alternative funding method.

What is needed is a more stable and longer-term view of what funding is available, and a promise of consistency – which would enable long-term planning and collaboration on a local level to reduce the carbon footprint of towns and cities across the country. Different areas will have vastly different needs – such as rural and urban areas – so an evidence-based assessment of local needs may be a more effective mechanism to divert funding for net zero projects to local authorities, giving them the funding they require without having to compete with their neighbours. If net zero conditions are placed on already existing central government funding streams and pots, this would join up the dots and encourage local authorities to build a net zero agenda into many aspects of their planning for wider services.

If local authorities are to be obliged to make statutory contributions and changes to tackling climate change, without the necessary central government support in place, this will surely burden them beyond repair. It will create more work, more confusion and overstretch a sector which is already at breaking point. It is a far better approach to give local authorities the responsibility to deliver net zero solutions which are tailored to their specific needs and communities, and support them in doing so by providing the resources they will inevitably require.

The urgent need for change

Local authorities must be given the responsibility and scope to innovate. The best solutions for reaching net zero will also be what is best for the local community. It is imperative that central government puts in place sustainable, consistent, clear and long-term funding mechanisms that do not see one local authority in direct competition with another.

Clarity on net zero criteria and obligations must be the golden thread weaving its way through all funding from central government – from ‘levelling up’, planning reform and infrastructure to home insulation and embracing new technologies. This common thread must also be accompanied by appropriate support and resources to enable local authorities to maximise their outcomes and achieve the best possible value for money.

As the final act approaches, we must not be a passive audience. The villain of this play is no pantomime buffoon, but rather the biggest threat to life as we know it. We must take action now if we hope to alter the course of the story. ●

‘It is imperative that central government puts in place sustainable, consistent, clear and long-term funding mechanisms that do not see one local authority in direct competition with another’



OVERSIGHT: MONITORING GREEN PERFORMANCE

Eyes on the prize: the value of risk management

ESSAY



BY CHRIS COYNE

Government bodies need to get to grips with climate change risks to ensure that public money is effectively protected



Chris Coyne is audit manager, financial and risk management, at the UK's National Audit Office

THE IMPACT OF CLIMATE CHANGE is increasingly impossible to ignore. Against a backdrop of more frequent extreme weather events, the World Economic Forum recently ranked climate action failure as the most concerning global risk. In August, the United Nations' Intergovernmental Panel on Climate Change issued its starker warning yet. UN secretary general António Guterres called its report on climate change a “code red for humanity”.

A global challenge requires a global response. COP26 will shine a light on how governments across the world are tackling the emergency – and what more needs to be done together around the globe. From the UK’s perspective, the government has committed to achieving net zero greenhouse gas emissions by 2050. Although a small number of departments are central to leading the response, all government departments and arm’s-length bodies have a part to play.

To do that, every organisation across government needs to understand how climate change risks can have an impact on their organisation – and how they can actively start to manage these risks.

Financial and risk management across government

Most government organisations are managing significant risks and competing priorities: challenges arising from the recovery from Covid-19; post-EU exit requirements; and ensuring the ongoing delivery of public services, to name just a few. Addressing long-term risks, such as climate change is also critical.

But why is considering net zero targets important from a financial and risk management perspective? Put simply, without considering the risks associated with climate change now, government organisations may make strategic and operational decisions which cause problems down the line. This is something that we at the National Audit Office (NAO) recently highlighted in our publication *Climate change risk: A good practice guide for Audit and Risk Assurance Committees*.

It is critical that public bodies gain an embedded understanding of the climate change risks facing them so that decision-makers are properly informed. This is not only about managing risks; it is also about identifying climate-related opportunities – economic and otherwise.

For instance, in a report on climate change risk assessment, the Climate Change Committee, which advises the UK government on carbon emissions, highlighted opportunities that may emerge for trade. It said that there could be a role for government in providing evidence and supporting businesses in transitioning to new functions as the climate changes.

Through our new guidance, the NAO hopes to offer those working in public sector finance – specifically members of audit and risk assurance committees (ARACs) – a simple way to further their understanding and management of climate-related risk. This will help them properly fulfil their vital role in supporting and advising the board and accounting officers in their responsibilities of climate change risk management.

What are climate change risks?

Climate change risks are about more than just extreme weather events, such as the impact of flooding on infrastructure or interruptions to supply chains. There are some less obvious risks that require serious consideration too. For instance, there are a number of key risks relating to the transition to net zero, and these can be categorised as adaptation-related risks and mitigation-related risks.

In adapting to climate change, strategic uncertainty risk is exacerbated. Organisations are making long-term spending decisions now. The uncertainty brought about by climate change makes future strategic planning highly challenging. Organisations will need to be aware of the long-term social impact of climate change on communities – such as the risk of reduced workforce productivity due to rising temperatures.

Mitigation-related risks cover regulatory, legal or technological factors. The government expects to achieve net zero by 2050. Achieving a lower-carbon economy will involve adhering to new legislative changes or investing in new technology.

The report also identifies some risks particular to government, such as policy leadership, value for money, accountability and coordination and delivery. While these risks are not unique to government, they may be more prominent given the particular challenges faced by government organisations.

Starting the journey

Understandably, some government organisations are more advanced than others when it comes to identifying, assessing and managing climate change risks. Organisations that do this well have a dedicated person or team accountable for climate change risk. They can demonstrate that climate change is fully integrated into their risk assessments and that there is a clear strategy which involves consideration of climate change impacts.

The NAO's good practice guide highlights a number of examples from organisations we have seen lead the way on reporting in this area. It also sets out a clear way of thinking about climate change risk, using the principles of risk management set out in HM Treasury's Orange Book. It guides organisations through each stage of the risk management cycle – governance and leadership; risk identification and assessment; risk treatment and monitoring; risk reporting; and continual improvement. The guide frames each principle in the context of climate change – setting out what organisations should be thinking about and trying to ensure that their consideration of climate change risk is effective.

Each stage of the process comes complete with a set of questions which ARACs can use to challenge management. We also provide examples that illustrate where organisations have started to apply some of their thinking about climate change risk. For many organisations, this is the start of the journey when it comes to climate change risk. We really hope our guide allows these conversations to start – and continue – to take place. ▶

'Climate change risks are about more than just extreme weather events, such as the impact of flooding on infrastructure or interruptions to supply chains'

Sharing good practice

In compiling our guide, we were struck by the extent to which climate change risk is evolving, and the speed at which the landscape is changing. Over coming years, we expect to see further legislative changes and enhanced reporting requirements that the bodies we audit will need to comply with. The NAO's guide highlights some of the key initiatives, targets and policies to date.

Sharing good practice between organisations, being vocal in cross-departmental conversations, and learning from the lessons of others will be really important for government over the next few decades. A theme throughout our guide is the importance of looking out beyond your own organisation for risks. But the same applies to opportunities – we do not have to struggle alone with the climate challenge, and co-ordination and sharing is going to be key.

Achieving net zero and other environmental goals requires transformation on an arguably unprecedented scale. This presents a number of strategic challenges that government must manage. The National Audit Office is committed to providing accessible insight that supports robust assessment and reporting on environmental and climate risks. ●

'Sharing good practice between organisations, being vocal in cross-departmental conversations, and learning from the lessons of others will be really important for government in coming decades'

The crucial role of information sharing

ESSAY



BY BARRY MELANCON

What can the public sector learn from private sector accounting and finance experience on ESG reporting?



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THE INCLUSION OF environmental, social and governance (ESG) information as part of corporate reporting began in the early 2000s and has been rising in prominence ever since. It is in many ways, therefore, still a new construct. Nonetheless, the private sector has been making great strides in accounting for and reporting reliable, comparable, and relevant ESG data.

Historically, ESG reporting has taken place outside of regulatory submissions drawn up by accountants and their colleagues. But with an increasing focus on reliable data from organisations by shareholders, communities and policymakers, the public sector must follow suit.

We can all see the impacts of climate events happening around us. Extreme weather, droughts and wildfires threaten to harm our environment and how we interact with it. We are hearing murmurs of concern from the public as they recognise and experience the human health impacts of extreme weather, such as reduced air quality from the rampant and widespread wildfires we have seen recently. Governments and policymakers continue to enact proactive measures but are often called to react to and fund recovery for the aftermath of natural disasters.

The rise in attention given to climate risk is just one of the reasons the demand for sustainability information has grown over the past decade. It illustrates what is perhaps the most recognisable piece of the ‘sustainability puzzle’, a confluence of issues that, when taken and addressed together, can help ensure progress meets the needs of the present but does not do so at the expense of the future.

Businesses have taken note of this and have acted. The public sector is starting to play an increasingly large role in not only managing the negative impacts of climate events, but by assessing risk and supporting the efficient and informed transition to a lower-carbon economy.

At the same time, investors are looking for consistent, reliable data to support their decisions. They view ESG matters as critical to understanding the full risk profile of a company and its business resilience.

Moving to integrated reporting

Accounting standard setters, such as the Financial Accounting Standards Board (FASB) and International Financial Reporting Standards (IFRS) Foundation, have issued papers highlighting the connection between ESG-related matters and the effect they have on financial statements.

Standard setters are calling attention to circumstances in which there may be a need to include amounts or disclosures related to the effect of climate-related matters in an entity’s financial statements. This is significant. It indicates that preparers and practitioners need to be aware of the possible connection between ESG-related matters and financial statements when carrying out their responsibilities.

Therefore, corporate reporting itself has changed. Commonly, companies are moving from strictly financial reporting to a more integrated approach. This means that an ➤

'To properly evaluate the ESG data reported, we must be able to operate under a generally-accepted set of international standards of sustainability and non-financial reporting'

organisation's non-financial information – such as its ESG data – is included alongside formal financial reporting. A recent study presented by Association of International Certified Professional Accountants and the Chartered Institute of Management Accountants (AICPA & CIMA) in partnership with the International Federation of Accountants found that 91% of companies reported that some level of sustainability information is now included. We are in a new era. Business performance can no longer be judged purely on short-term financial returns to shareholders.

Groups such as customers, workforce, society, governments and investors all demand greater organisational transparency beyond the traditional financial metrics. Sustainability has fast become the lens through which an organisation is judged. Being able to present information of this sort means organisations can strengthen stakeholder confidence in their activities by demonstrating their performance on ethical and sustainability issues.

We all know, however, that none of this works without strong, unified standards allowing for consistent and transparent reporting. To properly evaluate the ESG data reported, we must be able to operate under a generally-accepted set of international standards of sustainability and non-financial reporting. Having such standards will allow the private and public sectors to work in concert – not only in regulatory submissions, but also to create better protections across the globe for ESG-related matters, such as climate-related risk.

Therefore, we continue to work with a number of international bodies responsible for the setting of standards in order to develop a set of consistent global standards that is based on the suite of existing frameworks. We support a global approach to sustainability standards. This approach is being pursued by the IFRS Foundation, which is currently collaborating with other standard setters in order to leverage standards from existing global frameworks.

Accounting and finance professionals play a crucial role

The accounting and finance profession has long focused on assessing and managing financial risks. The global risks we are seeing today—climate-related ones in particular—are pushing our profession to expand its remit.

The sustainability call to action affects both management and public accountants. As core members of almost every business and non-governmental organisation, accounting and finance professionals have a pivotal role in providing non-financial and financial management information to drive business performance, develop strategies and influence decision-making.

These professionals bring a unique set of skills and knowledge to the table and can work with stakeholders to integrate responsible and sustainable practices into their business and operating models. Without the rigour and business acumen of finance and accounting professionals, it may prove impossible to truly embed sustainability into 'business as usual'.

The profession's very nature makes it a powerful force for supporting and implementing strategies aligned to organisational goals and assuring this information and the systems.

To increase stakeholders' confidence in the reliability of a business's ESG information, organisations are engaging auditors to provide robust assurance on their sustainability information. Independent auditors, in their public interest role, play a part in the flow of reliable information for decision-making. Licensed professionals are held accountable to core values of integrity, objectivity and independence. This means that they are required to follow comprehensive standards of practice. They are also subject to independent inspection, making them uniquely qualified to help enhance the reliability of ESG-related disclosures.

Partnership approach

The partnership between financial and auditing professionals is critical in guiding effective financial and non-financial decision-making for investors, as well as policymakers, governments, business leaders and the public. We are individuals, teams, and finance functions working together towards a greater good.

We own the processes, systems, data, management information, reporting, and assurance that will support our organisations' transitions to sustainable businesses. Enabled by our skill sets and powered by our knowledge of organisational governance, strategy, risk management and performance, we are well positioned to report and assure ESG information.

For some time, AICPA & CIMA have been focused on sustainability efforts, playing a critical role in supporting accounting and finance professionals to anticipate, report on, and mitigate these risks, as well as provide guidance for related assurance. We aim to achieve a balance of sustainability reporting and assurance alongside data-driven insights. This work means that resilient organisations and accounting and finance professionals can adapt to and thrive while addressing future challenges relating to prosperity, the planet and people. ●

'To increase stakeholders' confidence in the reliability of a business's ESG information, organisations are engaging auditors to provide more robust assurance on their sustainability information '

Lessons from Europe

ESSAY



KATHERINA BRYAN

The European Union needs to do more to ensure its resources are being directed to sustainable projects



Katherina Bryan is head of the private office of European Court of Auditors member Eva Lindström

FOUR YEARS AGO, together with my colleagues, I presented the European Court of Auditors' (ECA) landscape review on energy and climate at a COP23 side event in Bonn. When preparing for the event, we were more than once asked whether auditors had a role to play at the conference at all. In the preparations for this year's COP, I have noticed a change. Supreme Audit Institutions (SAIs) have prepared for the event with confidence to demonstrate once more the important role that auditors can play in this area.

Still, when it comes to designing climate policy, or when journalists and citizens require information on whether taxpayers' money is spent 'sustainably', it is perhaps not yet a reflex action for decision-makers to ask 'what have the auditors found?' However, when faced with the urgent need to mitigate and adopt, it is important to take into account the objective and independent views from auditors, not just for democratic scrutiny, but also sound financial management and effective decision-making. The area of sustainable finance is no different and that is why the ECA carried out an audit. The results will be presented at a COP26 side event co-hosted with the European Investment Bank (EIB).

Here is a little taster.

Supporting the public sector to deliver a sustainable transition

In its role as the EU's external auditor, the ECA aims to focus its performance audits where it can add most value. With climate change being the key risk and challenge of our time, one of the priorities of the new ECA strategy 2021-2025 is on "climate change and the sustainable use of natural resources". The strategy defines sustainability as a cross-cutting issue for its work.

The audit on sustainable finance was decided before the current strategy came into force, but it is a prime example of such a cross-cutting issue. It is not just about climate change but also affects our other priorities: the economy (namely the EU's economic competitiveness), resilience, as well as sustainable public finances.

The EU's spending on climate action is planned to be roughly €200bn (£170bn) each year until 2027. To achieve the 2050 net-zero emissions target, experts estimate that we need to invest almost €1trn (£0.85trn) each year in climate action – even without counting the cost of adaptation. This already shows that public spending alone will not be enough. Private and institutional capital is needed to fill the investment gap.

Our audit therefore examined whether the European Commission has been taking the right action to redirect finance towards sustainable investments. Our audit focused on whether the commission's 2018 action plan on sustainable finance addressed the key issues for sustainable finance and was implemented on time. We also looked into the role of the EIB and the EU budget's support for sustainable investment.

Unsustainable business is still too profitable

The starting point for the audit was to ask why private finance is not flowing sufficiently into sustainable investments – most notably, what economists call 'negative externalities' and market failures. This refers to the fact that the market does not sufficiently price in

negative side effects of greenhouse gas emissions and other negative environmental and social effects of unsustainable economic activities. As the member responsible for the audit, Ms Eva Lindström, put it, “unsustainable business is still too profitable”.

Additional barriers include the lack of sufficient transparency and disclosure on sustainable activities, the potentially higher risks and costs of financing for some sustainable investments, and the lack of clarity on sustainable investment needs and a lack of projects for investors to invest in. These challenges had already been highlighted by the 2018 report of the high-level expert group on sustainable finance, which formed the basis for the commission’s action plan on sustainable finance.

More consistent action is needed

So what did we find? We found that the commission’s action plan rightly focused on transparency. The key measure of this is the EU taxonomy, with its ‘do no significant harm’ principle, as well as its detailed criteria to classify what is sustainable and what not. During our audit, several new proposals and documents were published by the commission. While this shows that much is going on in the area, auditing such a moving target was certainly challenging. We also found that many actions, including the EU taxonomy, had suffered delays and require further steps to become applicable.

In addition, these actions have not been accompanied by measures to fully address the environmental and social cost of unsustainable economic activities. Unless additional measures are taken to price these in, the EU’s actions on sustainable finance will not be fully effective. We therefore recommended that the commission identifies additional measures that aim to ensure the pricing of greenhouse gas emissions better reflects their environmental cost. The commission responded in July with its Fit for 55 package. However, at the moment this is just a proposal under scrutiny and subject to negotiations with Member States in the European Council and the European Parliament.

As regards EU financial support, we found that the EIB has an important role to play in supporting sustainable investments and applying the EU taxonomy. Between 2012 and 2021 the EIB financed nearly €200bn (£170bn) of sustainable investment. Only a small part of this can actually be audited by ECA, as our mandate is limited to what is guaranteed or financed by the EU budget. This is why we focused our audit work on the European Fund for Strategic Investments (EFSI), which is guaranteed by the EU budget and managed by the EIB.

We found that EFSI did not focus on where sustainable investment is most needed. Of the investment projects on climate action, only around 5% were being carried out in Central and Eastern Europe, where experts see the biggest need. We also found that EFSI almost exclusively supported investments to mitigate climate change, with less than 4% going to adaptation projects. While this might reflect the difficulty of getting bankable adaptation projects, the provisions of the latest Intergovernmental Panel on Climate Change (IPCC) report, or the deadly floods and fires this summer, underline the need for such projects.

‘Of the investment projects on climate action, only around 5% were being carried out in Central and Eastern Europe, where experts see the biggest need’

Is the EU providing good practice?

In the final part of our audit, we looked at whether the EU is applying or plans to apply in its budget what it expects from the private sector. We found that there is no consistent and binding requirement on all activities receiving EU financing to apply the 'do no significant harm' principle. For example, this principle is not inserted in the relevant rules for the Common Agriculture Policy (CAP), an area that accounted for nearly 40% in the EU's previous multi-annual financial framework and where emissions are not decreasing. And while the principle is inserted into the EU's recovery fund – the Recovery and Resilience Facility (RRF) – in practice the member states can implement this differently.

On a project level, we found that just one EU spending programme assesses individual investments against social and environmental standards comparable to those used by the EIB. This means that insufficiently strict or differing criteria may be used to determine the environmental and social sustainability of the same activities funded by different EU programmes.

We also looked into how the EU labels its own 'green' investments. We found that many of the criteria used for assessing and tracking the EU budget's contribution to climate objectives are not as strict and science-based as those developed for the EU taxonomy. The lack of consistent application of the EU taxonomy runs a risk that finance raised for the climate part of the RRF will not meet the EU taxonomy-based criteria that will apply for the EU green bond standard.

Audit as input for the decision-making process

Our recommendations are addressed to the commission and include completing the action plan; introducing additional measures to price greenhouse gas emissions; increasing efforts to generate a sustainable project pipeline; and applying the 'do no significant harm' principle and the EU taxonomy criteria consistently across the EU budget. The report will be debated in the European Parliament and the council, who are the main stakeholders and can hold the commission to account.

I believe that COP26 will once again be a good opportunity to show what we as auditors can contribute and that we are forward-looking with our recommendations. With more and more SAIs working in this area, we can show our added value. However, the increased activity of SAIs in the complex area of sustainability will also require new, in-depth competencies. It will be more challenging but also more interesting. ●

'I believe that COP26 will once again be a good opportunity to show what we as auditors can contribute and that we are forward looking with our recommendations'

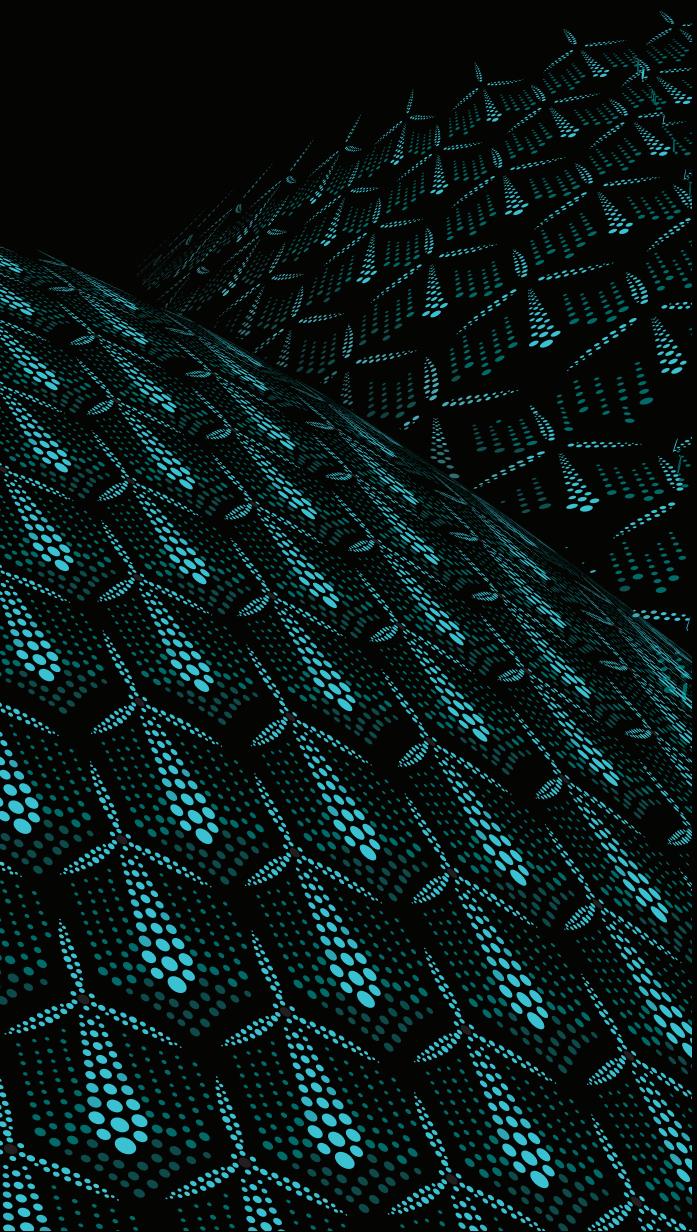
Evolving Climate Accountability

A Global Review of Public Sector Environment Reporting

The climate crisis now sits at the top of global, political and economic agendas, as the effects of climate change have become more evident. CIPFA has identified what public sector organisations around the world are doing to report their impact on the climate.

We surveyed public sector professionals globally and hosted a series of regional roundtables. The research identified seven key areas requiring further consideration if sustainability reporting is to become a mainstream part of public sector external reporting.

Download the report and sign-up for sustainability updates
visit cipfa.org/protecting-place-and-planet/sustainability-reporting



Net balance

This is the 13th in a series of *PF Perspectives*, produced by CIPFA and *Public Finance* to stimulate discussion on key public finance and policy issues. This collection of essays, by leading public sector practitioners and experts, examines the financial challenges for governments in meeting the UN's Sustainable Development Goal of reaching global net zero carbon emissions by 2050, and the role of public finance professionals in reporting progress

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