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Public financial management can lead on climate action: the case for carbon pricing

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February 2023

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Content

Introduction

Extreme weather events are hitting the news headlines with greater frequency, amplifying the call for global climate action. The 27th annual summit on climate change, COP27, was held against the backdrop of a series of crises ranging from the war in Ukraine to turmoil in energy and food markets. These have amplified what were already profound social and economic challenges laid bare by the COVID-19 pandemic.

In retrospect, it was overly ambitious to consider COP27 the 'implementation COP', aimed at turning climate pledges into concrete action. While the establishment of a loss and damage fund for developing countries experiencing climate vulnerabilities is positive, such finance cannot be a substitute for the much needed step change in greenhouse gas reduction.

Protracted negotiations at COP27 highlight a lack of progress for climate change mitigation. The longevity with which carbon dioxide (CO^2) remains in the atmosphere has left many communities frustrated with the failure to forge an agreement over plans to phase down fossil fuels.

Despite the signing of the landmark Paris Agreement seven years ago, carbon emissions are set to increase by 11% by 2030. This trajectory is misaligned with the goal to limit the rise in global temperature to 1.5°C by reducing carbon emissions by 45%.

While the scale of the challenge cannot be addressed through public finances alone, the sector can leverage its expertise in measurement and reporting through carbon pricing. The framework places a monetary value on emissions, incentivising behavioural shifts in production and consumption to less carbon-intensive activities. For example, the revenue generated through policies such as cap-and-trade or a carbon tax can help to alleviate budgetary pressures and support the delivery of vital public services.

Initiatives calling for a greater role of carbon pricing in driving climate action include Canada's Global Carbon Pricing Challenge. Although the partnership aims to cover 60% of global carbon emissions by 2030, only a quarter of global carbon emissions are currently priced by these instruments. Achieving broad public support and acceptability has not been straightforward. A significant gap exists between the level of carbon pricing that is politically acceptable and that which is needed to achieve climate goals.

For emissions reduction to be consistent with the 2015 Paris Agreement, prices would need to rise from a global average of $6 per tonne of CO2 to $75 by 2030.

Considerable progress has been made in adopting carbon pricing in the UK, and there are opportunities for stronger follow through in policies. The UK was among the first industrialised economies to commit to a legally binding target to achieve Net Zero by 2050. In its 2021 Net Zero Strategy, the UK government committed to ensuring that "the biggest polluters pay the most through fair carbon pricing". Indeed, this formed one of four guiding principles for building back greener from the pandemic.

Public finance professionals can play an important role in advancing the global adoption of carbon pricing. Common standards and practices in accountancy and audit can enable the managers of public services to understand cost drivers and behaviours in a shared language. Information can then be more readily aggregated, interpreted and exchanged to support enhanced transparency and assurance.

Policy outcomes are strengthened when there is deliberate co-ordination that seeks to optimise total performance rather than the individual parts. By better aligning economic activity with the cost of environmental impact, carbon pricing can form a part of a whole system approach to national green transition agendas.

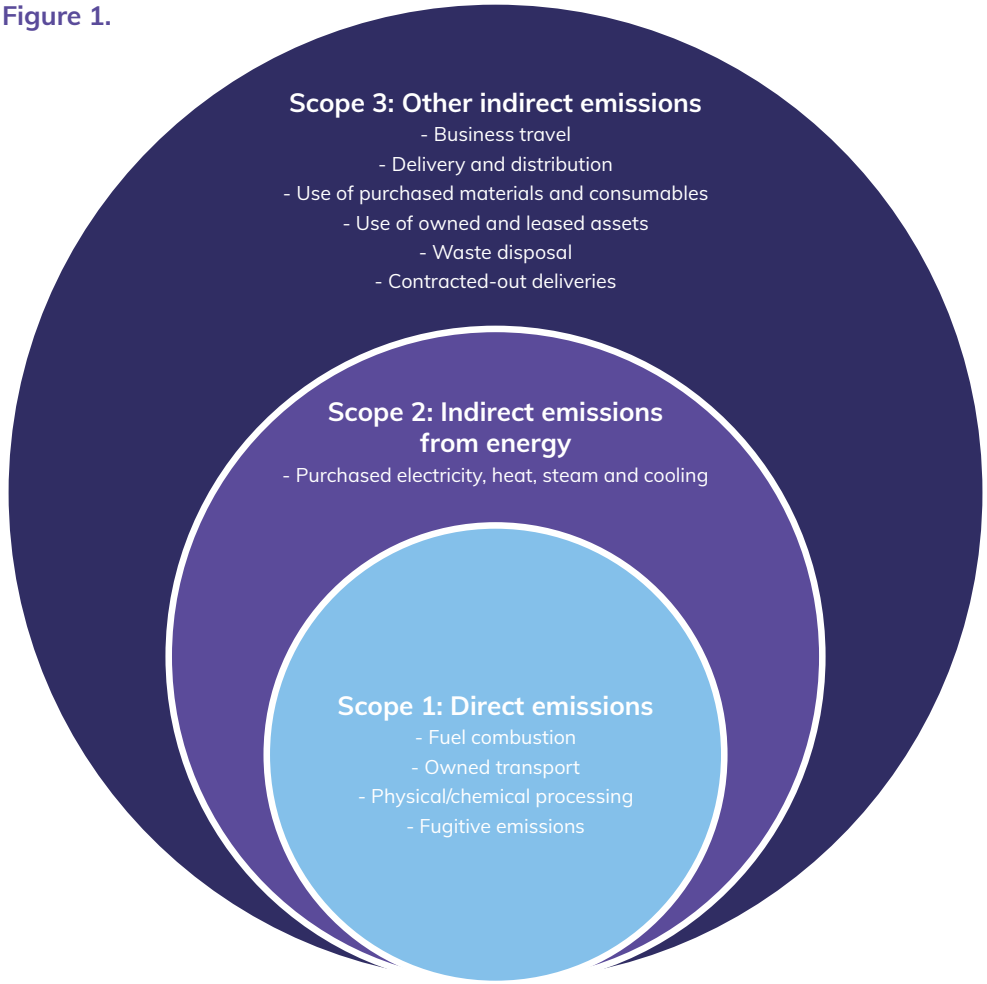
Enhancing accountability – from measurement and disclosure to green PFM

Key points

- Public financial management (PFM) can support climate action through the reporting of carbon emissions data in a standardised and globally recognised format. The sector can integrate this with wider forms of reporting while accelerating the alignment and harmonisation of existing frameworks.
- Although the Greenhouse Gas Protocol (GHG Protocol) distinguishes between direct and indirect emissions, considerable uncertainties remain around the accuracy of measurement for wider indirect emissions. The sector can provide clarity on the definition and scope of carbon reporting while underscoring the role of assurance.
- National measurement and integration of carbon emissions data is mandatory under the Greening Government Commitments (GGC) and sustainability reporting guidance. This activity should be guided by what is happening across local jurisdictions.
- As the newly established High-Level Expert Group on Net Zero Emissions Commitments of Non-State Entities makes clear in its recommendation to improve accountability and transparency of climate efforts, there needs to be a commitment to robust reporting at an institutional and organisational level.

Common approaches to measuring and estimating GHG emissions

Figure 1.



Source: Adopted from Greenhouse Gas Protocol (2013), HM Treasury (2021), Anthesis Group (2021).

By supporting the alignment of emissions measurement with internal carbon prices to attribute financial value, PFM can inform the broader impact of policy options. In the UK, 21 central government departments are already required to measure their progress towards the GGC based on the HM Treasury's sustainability reporting guidance

Two widely used measurement approaches are summarised in this section:

- the GHG Protocol's scopes of emissions
- the difference between production and consumption-based measurement.

The GHG Protocol estimates total emissions by measuring direct (Scope 1), indirect from purchased energy (Scope 2) and other indirect emissions (Scope 3). There has been an increasing call to capture Scope 3 data as this can account for 60–80% of an organisation's emissions.

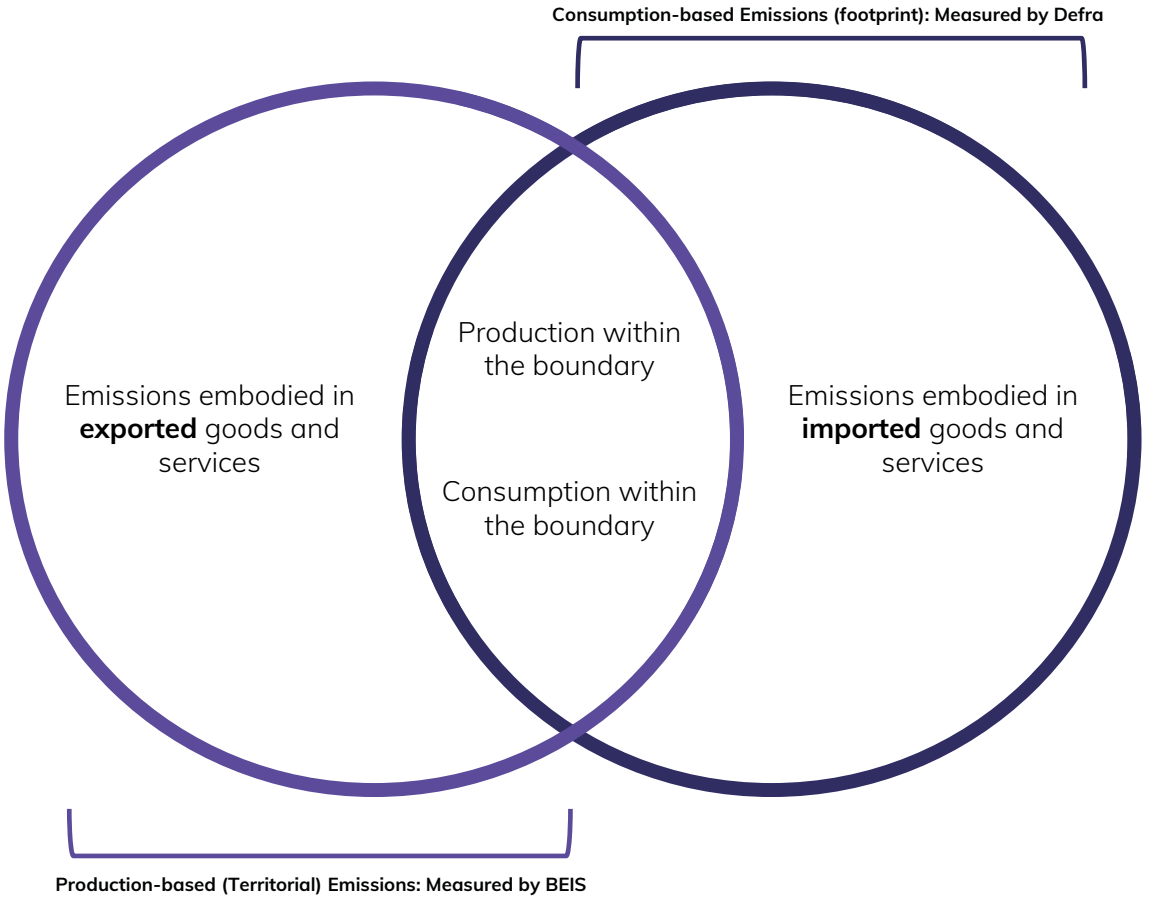
For instance, HM Treasury's current guidance only stipulates that government departments consider business travel as part of their Scope 3 emissions. The relevance of this measurement gap extends sub-nationally as well, as Scope 3 emissions are critical for identifying place-specific risks and opportunities that form the basis upon which to engage with local stakeholders' carbon management.

Production-based emissions are widely used as a measure of progress towards emissions reduction targets but given the scale of international trade, consumer emissions should also be considered. Rather than relying on where a good was manufactured, a consumption-based approach to measurement reflects the emissions embodied in imported goods and lifestyle choices. In the UK, the Department for Business, Energy and Industrial Strategy (BEIS) estimates production-based emissions to monitor the progress towards net zero, whereas the Department for Environment, Food and Rural Affairs (Defra) models consumption-based emissions, as set out by the Office for National Statistics.

There can be a considerable difference in how emissions are measured depending on the method used. For example, BEIS estimates that the public sector contributes 3% of the UK's total emissions compared with Defra's estimate of 8%. For local government, the choice between these two approaches can be equally significant – emissions from consumption can be up to twice that of production.

In practice, the approaches should be considered as complementary rather than mutually exclusive. The Global Protocol for Community- Scale Greenhouse Gas Emission Inventories (GPC) standards blend these approaches with a degree of flexibility on the granularity permitted based on local capacity.

Figure 2.



Source: Adopted from C40 Initiative (2022), Office for National Statistics (2019), Department for Business, Energy and Industrial Strategy (2022), and Department for Environment, Food and Rural Affairs (2022).

According to the Climate Change Committee (CCC), an independent, statutory body established under the UK's Climate Change Act 2008, local authorities can influence around a third of emissions through their statutory and discretionary public services, including engagement with local stakeholders. While local government is currently not covered in the GGC and sustainability reporting guidance, PFM professionals can play a constructive role in operationalising national goals into local practices.

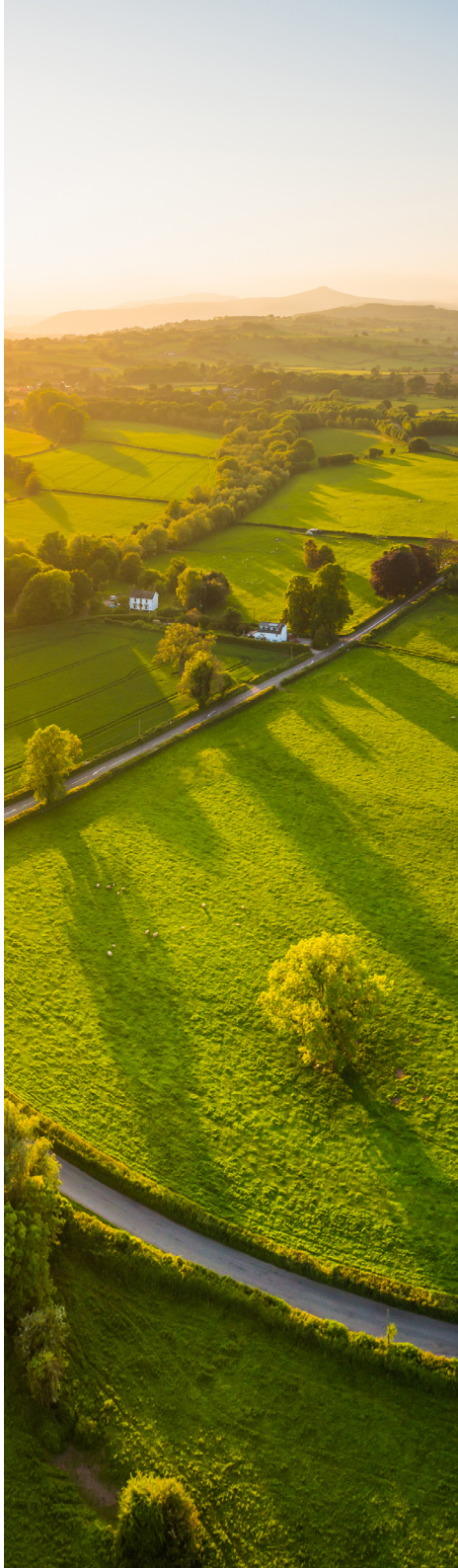
As measurement incurs administrative costs and burden, the sector should consult existing tools that have been developed for local authorities, some of which are already widely used. For instance, SCATTER, developed jointly by BEIS, Greater Manchester Combined Authority and Nottingham City Council, quantifies the impact of capital and revenue projects while embedding the financial cost of carbon into decision making across statutory responsibilities such as housing and transport. Similarly, Local Partnerships and the Local Government Association (LGA) have produced a Greenhouse Gas Accounting Toolkit that helps local authorities establish an annual baseline using the GHG Protocol.

Data visualisation tools can be used to identify broad priority areas. For example, IMPACT combines over 30 data sources to estimate emissions based on consumption and production-based measurement.

The data is presented by policy domains for parishes, wards, district councils and unitary authorities, which can help to identify gaps and inform future resources planning. Given the lack of consistency across local authorities' measurement, there is significant scope for PFM to develop best practices that address the issues of fragmentation and inconsistencies.

In practice, decisions will need to be made about the optimal parameters of measurement since these may not coincide neatly with organisational and administrative boundaries. For instance, excessive granularity may render the data unreliable if residents travel across geographic borders to work and study. Furthermore, activities need to be prioritised based on principles such as relevance and authorities' control and influence over emissions.

Knowledge exchange and sharing what works through frameworks such as CIPFA's nearest neighbours model have the potential to accelerate change. Climate Emergency UK's Council Climate Plan Scorecards, which assess and rank action plans according to a set of nine criteria, can be a useful starting point for such peer learning as well.



Recommendation: Integrate carbon data into reporting and disclosure.

Public sector bodies should consider how PFM can improve the integration of climate-related data into broader reporting and disclosure. By embedding both financial and non-monetary information, carbon pricing can provide important market signals that guide future expectations.

Moreover, the alignment of measurement with reporting will improve the readiness for alternative sources of capital to blend into public finance portfolios. This may be particularly attractive to local authorities in the UK that have historically relied on a short-term, ring-fenced and highly competitive funding landscape.

Verifiability of environmental benefits will be central to effective green finance. To address concerns over greenwashing such as with 'unhypothecated' green bonds, financial markets are developing performance-based instruments that tie payments with outcomes such as decarbonisation.

In 2021, the UK government announced its Net Zero Strategy that would legislate the reporting of all public sector emissions. Although the timing remains uncertain, BEIS has committed to issuing guidance for the whole of the public sector, and HM Treasury has suggested that recommendations from the Taskforce on Climate-related Financial Disclosure (TCFD) will apply to everyone by 2025. As the TCFD covers governance, strategy, risk management, and metrics and targets, including broadened Scope 3 carbon emissions, there will be pressure to develop additional capacity.

In shaping these standards and guidance, public finance managers should be aware of the risks around inconsistency and duplication. CIPFA has identified 12 reporting frameworks that can already be adopted in the public sector. Rather than recreate the wheel, PFM should adopt a building blocks approach that reconciles financial information with the needs of a broader range of stakeholders.

The recently launched International Sustainability Standards Board (ISSB) at the IFRS Foundation is establishing a global baseline that will allow different jurisdictions to contribute to a unified framework. By reducing regulatory burden, these climate-related disclosures are expected to form the basis of the IFRS Sustainability Disclosure Standards.

Furthermore, the International Public Sector Accounting Standards Board (IPSASB) is due to announce its guidance later this year based on ISSB's initial guidance and a public consultation. Such developments are an exciting opportunity for the PFM profession to articulate its role in advancing climate action.

Strengthening support and improving public acceptability

Key points

- There is substantial public support for carbon pricing in the UK, but it may be fragile. Policy reversals following the Gilets Jaunes protests in France and changes in political leadership in Australia offer cautionary tales. To facilitate the expansion of carbon pricing – in terms of a higher price and increased scope – during periods of high political and economic uncertainty, the maintenance of public support and trust will need to be prioritised.
- PFM should emphasise a whole system approach to climate action. Equity and fairness considerations will need to transcend national ambitions to address large income disparities across geographies. Public finance managers can build on public trust by developing approaches and methodologies that identify with place-based values.
- Carbon pricing principles can inform policy and spending decisions based on impact visibility. Demonstrating the effectiveness of price-based incentives such as congestion charges may increase the acceptability of carbon pricing as a local revenue source.

Awareness of the UK's Net Zero Strategy has grown over the past year. According to the latest BEIS Public Attitude Tracker, around half of the public know at least 'a fair amount' about the initiative.

Accelerating the scale and scope of governmental action has been challenged by the global nature of the climate crisis and the technical jargon often used to describe its consequences. Compared to the immediacy of acute shortfalls in public services or the cost of living crisis, environmental issues can seem psychologically distant. For there to be effective mobilisation of support, policy makers will need to better associate the outcomes of climate action with people's everyday lives and shared values. In this regard, local leaders are well placed to frame policy options in terms of localised interests and risks.

Transparency can improve public acceptance and their willingness to absorb the costs of carbon pricing measures. Through its ability to quantify and relate the comprehensive nature of local benefits and spill overs, PFM can support information sharing in a meaningful way.

For example, Plymouth City Council has reviewed their nature-based assets such as green and blue spaces to understand how they can be leveraged to address multiple challenges including mental health and local job creation. By aligning the visibility of near-term benefits with medium and longer-term goals, these nature-based approaches can help to sustain the momentum for climate action during periods of heightened uncertainty.

As the impact of carbon pricing policies can vary considerably across geographies based on the level and sources of emissions, successful implementation will require local awareness and buy-in. Social and economic equity should take into consideration the impact of proposed policy changes based on internal carbon pricing mechanisms. Extending the UK's emission trading system to other sectors beyond power generation and aviation, for instance, may allow the measurement of localised impact and encourage public consultation.

Recommendation: public finance managers should calibrate spending based on a carbon pricing framework that integrates climate action into wider policy domains.

Governments can use carbon pricing and emissions data as a lens to interpret how their spending aligns with climate-related targets. In public procurement, the UK already mandates companies engaged in contracts over £5m to disclose Scope 1 and 2 emissions as well as a subset (5 out of 15 categories) of Scope 3 emissions. While local authorities are not subject to the requirement, this may be an opportunity to review the climate impact of their procurement practices – estimated to comprise up to 80% of councils' total carbon footprint.

There is substantial scope for a larger domestic contribution. Purchases from UK suppliers have increased steadily from 41% in 2016 to 46% in 2021. When short-term contracts make local (and typically smaller) investments into decarbonisation less worthwhile, provisioning carbon impact into an initial project assessment may encourage local firms to take climate action.

For example, in 2020 Manchester City Council introduced a 10% carbon impact weight into its procurement assessment framework. This required bidders to disclose their emissions data and climate action plan. The council acknowledges that collecting and analysing such data remains crucial to achieving its sustainability goals.

Price-based interventions such as road charging schemes have the potential to generate additional revenue targeting specific segments of the population. Depending on local priorities and needs, the levies could be spent on areas such as improving road conditions or public transport where the incidence of costs and benefits may differ. While it would seem fiscally efficient to apply the proceeds to a general revenue account, public acceptability tends to improve when such funds are earmarked for environmental projects and other redistributive concerns.

In addition, price-based mechanisms create opportunities for more responsive policy adjustments. For example, London's congestion charge was increased from £11.50 to £15 during the COVID-19 pandemic to prioritise essential travel. Although the congestion charge had initially been introduced with an aim to reduce congestion and air pollution, it also managed to lower GHG emissions by 16% while increasing bus passenger traffic into the affected zone by 37% within the first year of launch. Combined with the Ultra Low Emission Zones and Low Emission Zones, the schemes generate around £400m a year in revenue which goes to support public transport upgrades.

Some jurisdictions are piloting more direct forms of carbon pricing. The City of Lahti in Finland recently introduced a mobile app-based cap-and-trade system that allows its residents to reduce their carbon emissions as part of a broader transport strategy. During the pilot, participants were assigned reduction targets based on their personal circumstances and could redeem the excess emissions rights earned through reduced vehicle travel to purchase tickets on public transportation. Data was then analysed to inform spatial planning for cyclists and improve road safety measures. Although robust evaluation of the programme was not possible due to coinciding with the pandemic, data from 2020 showed that participants reduced their carbon emissions by 30% compared to 20% among non-participants.

While these initiatives alone will not achieve the scale of emissions reduction needed to halt global warming public finance professionals can champion a whole system approach that encourages the use of carbon pricing to achieve complementarity with other policy goals. By testing innovative approaches to measurement while demonstrating impact and raising public awareness, the sector has the potential to further mobilise public support for carbon pricing and other forms of climate-related financialisation.

Co-ordinating across jurisdictions and policy priorities

The lack of capacity can be a significant impediment to navigating the rapidly evolving field of GHG measurement and reporting. Local government may be particularly affected as repeated budget cuts have prioritised front-line staff over environmental sustainability functions. This has led to an overreliance on external management consultants that may negatively impact on the transference of longer-term institutional knowledge.

Financing challenges continue to frustrate the implementation and scaling of climate action. The rapid succession of economic shocks has left many governments unable to prioritise environmental outcomes whose impact can take a long time to demonstrate. Given that local authorities are already struggling to maintain the quality and scope of existing statutory services, the capacity for redesigning services may be limited. Within this context, the perceived lack of a reward for carbon savings can make investment into sustainability seem less urgent.

Addressing these challenges will require better alignment across flagship government policy agendas. In the UK, this includes accelerating to net zero and addressing regional inequalities. While the Levelling Up White Paper released in February 2022 was relatively silent on climate action, its 12 missions and six capitals framework provide an impetus toward designing policies that are 'locally-based yet nationally aligned'.

Net zero is achievable through collective action and will impact everyone everywhere, albeit to varying degrees and only eventually. Within the context of spatial inequalities, climate change may exacerbate the allocation of resources and how they are utilised. Poorer households and communities may not have the capacity to worry about the future if their immediate needs are not being met. According to Innovate UK, place-based approaches that respond to local priorities with appropriately sequenced actions were found to save money and deliver wider health and economic benefits compared to place-agnostic approaches.

Local authorities are recognised as a conduit between micro-actions and macro-scale reform. Proposals have been made to create 'local area climate contracts' that would provide local authorities with stable funding based on pre-agreed conditions such as auditable emissions disclosures and scenario-tested action plans.

Some changes have already been implemented through the embedding of net zero principles into centrally distributed grants such as the Towns Fund and Levelling up Fund. Attention is warranted to ensure that the design of such measures do not unwittingly reinforce existing inequalities. The time and resources required to bid for numerous small grants has widened the gap between city-regions' and smaller councils' ability to access funding. Consolidation across this highly fragmented landscape will be needed to address longer-term climate challenges.

Conclusion

The scale of climate change and consequences for inaction make net zero a target we cannot afford to miss. Public financial management can support climate action through the reporting of carbon emissions data in a standardised and globally recognised format.

The sector can integrate this with wider forms of reporting while accelerating the alignment and harmonisation of existing frameworks. In doing so, public finance professionals can provide clarity on the definition and scope of carbon reporting while underscoring the role of assurance.

Rather than recreate the wheel, PFM is well positioned to articulate a building blocks approach that better reconciles financial information with the needs of a broader set of stakeholders. Establishing a global baseline that will allow different jurisdictions to contribute to a unified framework is a critical first step. The ISSB and IPSASB are leading the way to reduce the regulatory burden and risks around inconsistency and duplication.

Public sector bodies should emphasise a whole system approach to climate action. Equity and fairness considerations will need to transcend national ambitions to address large income disparities across geographies. PFM can build on public trust by developing approaches and methodologies that identify with place-based values. This framework can, and should, be adapted to local conditions and priorities.

Co-ordination across jurisdictions and policy priorities currently is weak. The rapid succession of economic shocks has left many governments unable to prioritise environmental outcomes whose impact can take a long time to demonstrate. Proposals have been made to create ‘local area climate contracts’ which would provide local authorities with stable funding based on pre-agreed conditions such as auditable emissions disclosures and scenario-tested action plans.

By integrating climate considerations into performance measurement, reporting and spending decisions, public finance professionals can play an important role in advancing the global adoption of carbon pricing. By better aligning economic activity with the cost of environmental impact, carbon pricing can form an integral part of a whole system approach to a country’s green transition.

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