CAMBRIDGE AHEAD

Young Advisory Committee

CARBON PRICING STRATEGIES:

INSIGHTS FROM DIVERSE INDUSTRIES IN CAMBRIDGE

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Summary

- This research presents findings on carbon pricing mechanisms employed by organisations based in the Cambridge city region. The research emerged from conversations with the City Leaders Climate Change Group, a collective of stakeholders working towards supporting the decarbonisation of Cambridge in various forms.

- Using case studies, the findings reveal a range of carbon pricing strategies across and within industries. We caution that these findings should not be generalised as representative of all industry practices due to the sampling method's specificity.

- We find that companies widely recognise carbon pricing as a strategic tool for integrating future risks and opportunities into their current financial decisions, effectively managing present and future carbon emissions.

- Carbon pricing is also seen as a mechanism to incentivise businesses financially and exert influence over suppliers, promoting the adoption of less carbon-intensive practices across supply chains.

- Most of the organisations we interviewed have developed their own carbon pricing methods, indicating a diversity of approaches rather than a standardised or universal method for implementing carbon pricing. Companies prefer internal pricing mechanisms as it allows them to focus on their own footprint and costs of reducing it.

- The effectiveness of sustainability strategies, including carbon pricing, is significantly linked to strong management and decision-making structures. This research finds that active involvement of decision-makers in sustainability initiatives enhances their success.

- Finally, we find that obstacles in adopting carbon pricing strategies include selecting an appropriate carbon price, dealing with international price fluctuations, convincing decision-makers of the importance of sustainability projects, risks associated with perceptions of greenwashing, and navigating regulatory complexities.

Glossary

Carbon	In the context of this report, carbon refers to carbon dioxide and other gaseous compounds released into the atmosphere, associated with climate change.
Carbon dioxide equivalent	CO2e –A unit used to compare the emissions from various greenhouse gases associated with climate change.
Net Zero	A common emissions target where the emitting body (an organisation, building, country, etc.) emits as much CO2e as they absorb through offsetting or other absorption methods. While Net Zero can be achieved through offsetting alone, it is typically and preferentially achieved through first reducing emissions and only offsetting what cannot be eliminated.
Greenhouse gas	GHG – A category for any gas that contributes to the greenhouse effect by absorbing infrared radiation, therefore contributing to climate change.
Carbon pricing	An instrument that captures the external costs of greenhouse gas (GHG) emissions and ties them to their sources through a price, usually in the form of a price on the carbon dioxide (CO2) emitted.
Offsetting	Compensating for CO2e emissions from human activity by participating in schemes or processes designed to reduce or avoid GHG emissions, such as planting trees.
Scope 1 emissions	Direct emissions from assets that an organisation owns or leases.
Scope 2 emissions	Indirect emissions from the generation of electricity that an organisation purchases.
Scope 3 emissions	Indirect emissions within the value chain of an organisation.
Greenwashing	Disinformation disseminated by an organisation so as to present an environmentally responsible public image.

Introduction

The climate change debate is becoming increasingly urgent and complex. As countries strive to transition towards net zero emissions, the demands on businesses are intensifying. This urgency is driven by the escalating frequency and severity of extreme weather events such as floods, heatwaves, droughts, and storms, which not only have a devastating impact on the environment but also cause significant economic damage and loss of human lives.

The 2015 Paris Agreement, a pivotal moment in international climate policy, set ambitious targets to limit the increase in global mean temperature to 1.5°C above pre-industrial levels and to achieve net zero greenhouse gas (GHG) emissions by 2050. This global commitment underscores the necessity for concerted action from both governments and business leaders to mitigate GHC emissions and drive the transition towards a sustainable and safe future for everyone.

A key strategy in this global effort is the implementation of carbon pricing. The World Bank defines carbon pricing as:

> *an instrument that captures the external costs of greenhouse gas (GHG) emissions - the costs of emissions that the public pays for, such as damage to crops, health care costs from heat waves and droughts, and loss of property from flooding and sea level rise - and ties them to their sources through a price, usually in the form of a price on the carbon dioxide (CO2) emitted (The World Bank, n.d.).*

Carbon pricing mechanisms come in various forms, such as carbon taxes and emissions trading systems (ETS). A carbon tax 'directly sets a price on carbon by defining an explicit tax rate on GHG emissions or – more commonly – on the carbon content of fossil fuels, i.e. a price per tCO2e.' while an ETS 'is a system where emitters can trade emission units to meet their emission targets' [1].

Both carbon taxes and emissions trading systems are designed to internalise the environmental cost of emissions, effectively making it more expensive to pollute. By incorporating the cost of environmental impact into the economic equation, carbon pricing aims to shift the balance towards more sustainable practices and as the global community rallies to confront the challenges posed by climate change, a steer to a more sustainable path will increasingly become an economically efficient option.

[1] The World Bank, Carbon Pricing Dashboard

> *The practice of internal carbon pricing clearly has the ability to translate climate risks and opportunities into monetary terms (Harpankar, 2019).*

Implementing a carbon pricing model offers businesses and institutions a practical approach to quantify the financial impact of their GHG emissions. Such models aid in evaluating the risks climate change poses to an organisation and inform the decision-making process for adopting low-carbon strategies and technologies, as well as providing a cost-efficient way of reducing carbon.

How carbon pricing is calculated and implemented varies across the world.

> *Currently, there are 73 regional, national, and subnational carbon pricing initiatives that have been implemented, with numerous other organisation-specific carbon pricing practices.*

In the UK, the EU Emissions Trading System guided carbon pricing until December 2020 when the country exited the EU. Thus, in January 2021, the UK Emissions Trading Scheme (UK ETS) was introduced, allowing the UK to set its own price for trading carbon. The UK's carbon price has fluctuated since then, reaching about £32 per tonne in February 2024 compared to the EU's €80.

The UK ETS offers a platform for trading and offsetting carbon emissions. It enables companies to manage their carbon footprint by allowing them to buy and sell emissions allowances, providing a market-driven approach to reduce overall emissions. Participation is not mandatory, but focuses on sectors with significant carbon footprints, such as healthcare, aviation, and other large-scale carbon-intensive industries.

Why should organisations invest in carbon pricing?

Questions arise about why businesses would choose to engage in carbon pricing if it is not a legal requirement. We offer three reasons why companies would choose to engage in carbon pricing.

1 Future proofing and risk management: addressing climate change through carbon pricing is essential for long-term business resilience. Companies that proactively manage their carbon footprint are better positioned to adapt to evolving regulatory frameworks, market demands, and physical risks associated with climate change impacts. By integrating carbon pricing into their strategic planning, companies can mitigate risks related to carbon intensive assets, supply chain disruptions, and reputational damage. Additionally, investing in emissions reduction measures now can help companies transition towards a low-carbon economy, ensuring their competitiveness and viability in the future marketplace.

2 Bottom line benefits: implementing carbon pricing can lead to cost savings and operational efficiencies. As Harpankar (2019, 221) notes, 'carbon management is emerging as a way not just to react to regulations or social pressure, but to incorporate carbon-related issues in business strategy proactively.' By incentivising reductions in carbon emissions, companies are driven to adopt cleaner technologies, improve energy efficiency, and optimise resource use. This often results in reduced energy expenses, enhanced productivity, and decreased operational risks associated with regulatory compliance and carbon-intensive practices. Moreover, carbon pricing can spur innovation, fostering the development of low-carbon products and services that cater to evolving consumer preferences for sustainability.

3 Moral imperative: companies have a responsibility to mitigate their environmental impact and contribute to combating climate change. Carbon pricing reflects the true cost of carbon emissions, aligning with ethical considerations of sustainability and environmental stewardship. By internalising the social and environmental costs of carbon emissions, companies uphold their ethical obligations to future generations and the planet.

> *Carbon pricing is usually used to adjust the return on investment on capital expenditure. Meaning the estimated carbon savings are multiplied by the internal carbon price and subtracted from the investment. This means that some capital expenditure becomes economically viable with a shorter return on investment than without a carbon price.*
> *(Research participant, 2024)*

Why did we conduct this research?

Cambridge, as a leading economic and technology centre in the UK, hosts a diverse range of businesses with global influence. Given this prominence, it's crucial to examine the sustainability practices and carbon pricing strategies employed by these companies. This research acknowledges the current lack of comprehensive guidelines for carbon pricing. Although the UK government is at the forefront of global efforts towards net zero, regulations within and across industries are still fragmented. This situation underscores the need for this study, aiming to identify any commonalities in approaches and inform industry-specific as well as cross-industry learnings on carbon pricing mechanisms. By being aware of existing carbon pricing models, organisations can avoid incurring additional costs trying to recreate what already exists.

The importance of this research is further heightened by the UK Government's announcement on 18th December 2023 about implementing new carbon pricing mechanisms, notably impacting the construction industry and other carbon-intensive sectors.

> *The proposed Carbon Border Adjustment Mechanism (CBAM) is designed to reduce carbon 'leakage' by imposing a carbon cost on imports like steel, cement, iron, and aluminium from countries with lower or no carbon pricing compared to the UK.*

This approach is meant to incentivise decarbonisation efforts. Further consultations planned for 2024 will shape the design, delivery, and compliance aspects of the CBAM. It is important that organisations are aware of this evolving policy landscape and implement practices to ensure they are prepared for any forthcoming changes.

Therefore, a thorough understanding of both current and planned regulations, as well as industry practices, is essential. This knowledge will better position organisations in their efforts to reduce carbon emissions, aligning them with evolving governmental policies and global sustainability trends. The research from Cambridge's business sector could provide valuable insights and potentially influence broader policy and practice in carbon management.

A key focus of our study is to identify and understand the challenges organisations encounter when adopting or implementing carbon pricing, particularly the significant obstacles that could impede this process. Our goal is to provide actionable guidance on effectively implementing carbon pricing models, while consciously avoiding any practices that may lead to greenwashing, even unintentionally.

The findings in this document offer real-world applications of carbon pricing and emission reduction strategies that will aid Cambridge Ahead members in transitioning to a low-carbon business model.

How did we do this research?

We identified companies or institutions among Cambridge Ahead members from a range of industries. We selected carbon-intensive industries such as construction and aviation, considering that they will have higher incentives to implement emission reduction strategies as they are relatively larger sources of emissions and more prone to carbon taxation risks. We also selected academic institutions given their prevalence locally in Cambridge. Their world-leading research in sustainability could also provide insights into the latest practices. After identifying the candidates, we set out to explore their current carbon reduction and pricing practices by interviewing six companies' sustainability leads. This form of qualitative data was deemed appropriate for this investigation due to the detailed knowledge and understanding required for the topic. The breakdown of respondents was three from higher education, two from construction, and one from aviation.

It is important to note that the research is conducted on a limited number of organisations and industries. Therefore, the findings are only practical demonstrations of carbon pricing approaches and are not intended to be generalisable. In addition, the research only showcases internal carbon pricing models used across organisations and does not provide guidance to carbon pricing related government policies.

Findings

In this section, we present the findings of the research, outlining companies' approaches to tracking and monitoring carbon emissions. We explore how these organisations not only quantify their emissions but also how they leverage this data to inform their sustainability strategies and decision-making processes. This section aims to provide a clear understanding of the current landscape in carbon emissions tracking, and highlights challenges faced, as well as innovative solutions adopted by companies.

Exposure to carbon emissions varies across industries

The organisations we spoke to offered valuable insights into their sustainability strategies and the challenges they face in reducing emissions. Property developers shared that they face particular challenges when addressing their Scope 3 emissions (those not directly controlled by them and generally relate to supply chain emissions) due to a lack of oversight of manufacturing processes. With the built environment accounting for about 40% of UK emissions, moving to the use of less carbon intensive materials and building practices is a priority for the developers. However, the continued reliance on and preference for concrete, a highly carbon intensive material, due to its versatility, means that the transition to low carbon materials remains a challenge. The companies we spoke to shared that the less carbon intensive alternatives don't quite meet the standards offered by concrete or those expected by developers and their customers. This means that there is a need for companies in this sector to invest in innovative tools to track emissions across their operations and adopt cutting-edge methods to reduce their emissions.

Higher Education institutions faces similar challenges given their diverse property portfolios and estate management obligations. As a result, their sustainability priorities include ensuring that future capital investment in new facilities and buildings meet their net zero objectives. To develop and implement a sustainability strategy across such their broad portfolios requires active management and engagement across the organisation, their contractors and, ultimately, their tenants. Higher Education institutions are also confronted with the challenge of addressing Scope 3 emissions, which include emissions from the travel of their staff and students. The indirect nature of these emissions and the diverse travel patterns within the academic community means that higher education institutions must raise awareness within their communities on adopting sustainable travel behaviour in order to their carbon footprint.

Senior managers play a crucial role in the sustainability decision making process

Throughout the evidence-gathering process, it became apparent that businesses with decision-makers directly involved in planning and implementing sustainability projects, and a direct method of implementation across their organisation, are successful at delivering on their sustainability strategies.

One company provided an excellent example of decision-makers being involved in the development of sustainability work from the outset. The company's sustainability committee is attended by about 95% of their Board. With senior decision makers, including the Chairman and CEO, sitting on the sustainability committee, the company can ensure 'buy-in' for their sustainability projects from inception through to delivery. This has enabled them to work with a greater level of confidence when implementing their sustainability initiatives across their varied business portfolio, with teams working together, rather than in 'silos'.

In another organisation, we found that the sustainability manager also oversees part of the company's financial assets. This means that the manager responsible for the company's work towards achieving net zero has both a sustainability role and an obligation to produce a financial return. Therefore, working against silos, supporting consultants to understand the importance of sustainability, and developing a method for making trade-offs, are essential aspects of a company's sustainability approach.

Another company's sustainability unit made the decision to trial the use of carbon pricing on large capital investments (new buildings and facilities). The company rightly identified the need for decision makers, with responsibility for capital investments, to be aware of the financial benefits of engaging in carbon pricing and the need to incentivise the use of less carbon intensive practices. However, the sustainability team faced challenges when attempting to implement their carbon pricing trial, despite having a well-thought-out plan. Engaging with the many layers of decision making involved with major capital investments, from the project team and architects, designers, and quantity surveyors, made the implementation process challenging. Although the team developed a relatively simple carbon pricing procedure, the requirement was lost in the "labyrinth of people involved in making decisions". This example highlights the challenge of establishing buy-in from decision makers across an organisation and with partners.

How organisations monitor carbon emissions

In this section, we explore how organisations are collecting and effectively using data to inform their carbon pricing methodologies. We found that to develop carbon pricing models, which successfully meet the objectives of an organisation, be it reducing emissions overall or making decisions on future capital investments, an organisation must have an accurate understanding of its carbon data. This requires organisations to undertake a data collection process which encompasses the full range of their business activities.

Each of the organisations we spoke to had recognised that the basis of any carbon pricing is the accurate collection of data on their emissions. Each organisation had either started to explore new methods of data collection or expanded their current processes. Two key considerations emerged in the research: data-driven assessments and the use of innovative tools to monitor emissions.

Carbon footprint assessment and data-driven energy management

A higher education institution we spoke to owns a portfolio of residential and commercial properties, and initially lacked control over the energy usage of their tenants. To address this, they first established a carbon baseline by monitoring their tenants' energy consumption. This baseline study, undertaken by a third party, was critical for understanding their initial carbon footprint and putting in place measures to reduce emissions from their portfolios. They used this information to develop a model for continuous data collection, underscoring the need for primary data. The institution is expanding this data collection approach across all its facilities and properties. Their goal is to develop a comprehensive understanding of the carbon impact of their entire portfolio.

Use of innovative tools

Case study 1 shows Morgan Sindall Construction's life cycle assessment tool, CarboniCa, which serves as an intelligent carbon calculator designed to measure and reduce the carbon emissions of the company's products delivered nationwide. This approach stands out as a quantifiable and externally validated tool, offering precise primary data to guide decision-making. The tool was externally validated in 2020 by a third party, a process that aligns with the company's commitment to science-based targets, particularly in rolling out tools for measuring and reducing embodied carbon. The tool is recognised and verified by various standards and institutions, including the RICS Whole Life Carbon Assessment for the Built Environment, BS EN 15978, UKGBC, and BRE for BREEAM assessments.

To enhance the tool's application, the company also collaborates with another third-party to evaluate the tool and assess its current use, future impact, and improvement potential. This involves gathering and incorporating feedback from users and external parties into the tool's development plan. The internal audit process reinforces CarboniCa's robustness and credibility.

CASE STUDY 1: CARBONICA – MORGAN SINDALL CONSTRUCTION'S INNOVATIVE TOOL

CarboniCa, Morgan Sindall Construction's intelligent carbon calculator, represents a significant stride in the company's approach to understanding and reducing their carbon footprint. Developed internally, CarboniCa serves as a comprehensive life cycle assessment tool, enabling the company to evaluate the environmental impact of its construction projects in a detailed and quantifiable manner. The tool considers various factors, from the types of materials used, like concrete and steel, to the operational and embodied carbon emissions of the buildings. By inputting specific project details, CarboniCa provides Morgan Sindall Construction with an extensive report that not only highlights the carbon footprint but also suggests potential areas for emission reductions.

CarboniCa has become integral to Morgan Sindall Construction's operations, allowing for a more informed approach to sustainable construction. CarboniCa is used across various projects, over 100 to date, enabling teams to assess the impact of changes at each development stage and make data-driven decisions. For instance, in projects like Unity Campus in Sawston, Cambridge, CarboniCa has been instrumental in analysing the use of materials and their corresponding carbon emissions, resulting in a saving of 1089.8 tonnes CO2e. The accuracy and external validation of the tool assure Morgan Sindall Construction and its stakeholders of the reliability of the data. Beyond its immediate utility, CarboniCa fosters a culture of learning and improvement within the company. It encourages collaboration with clients, architects, and the supply chain, promoting sustainable practices and driving the company closer to its net-zero ambitions. As Morgan Sindall Construction progresses towards its 2030 net-zero goal for its own operations, tools like CarboniCa play a pivotal role in quantifying and managing the company's carbon footprint. Exemplifying a proactive and innovative approach to tackling the challenges of sustainable construction, the tool enables comprehensive and detailed schedules to be prepared with granular details, further assisting with Morgan Sindall Construction's 2045 net-zero target for Scope 3 emissions. CarboniCa is challenging the approach to undertaking whole life carbon assessments, as showcased within the Guide to Sustainability in the Built Environment published by the Chartered Institute of Building in October 2023.

Carbon pricing approaches: carbon levies and shadow pricing are common approaches

This section highlights two carbon pricing approaches taken by organisations in this study: carbon levies and shadow pricing.

Carbon levy

One organisation told us that they do not engage in emissions trading or external offsetting. Instead, they handle offsetting internally across their UK operations. They have developed what they term a 'carbon levy' for their internal processes. For each of the company's eight regional arms, depending on the proportion of emissions they contribute to the group's total, they pay a percentage towards the group's offsetting schemes. The levy also goes towards funding research and development, their carbon tracking tool and retrofitting of buildings. For example, if Cambridgeshire accounts for 20% of the group's construction carbon footprint, it pays 20% of the allocated funds for R&D and offsetting. As they move closer to net zero, the costs for exceeding carbon targets will increase, which they believe will incentivise progress toward sustainability.

Shadow pricing

Another company uses a 'shadow' carbon price to make decisions. A shadow price is a theoretical or assumed cost per tonne of carbon emissions. To establish the price, they examined carbon prices from other companies in the industry, which revealed figures ranging from £45 to £110. In their approach, they calculated the implicit cost of carbon and assessed how it compared to others' costs.For this company, it was crucial to consider portfolio variations, as some buildings, like labs and historical structures, demand more substantial investments for decarbonisation.

In an example of how they are using carbon pricing, the company told us that when deciding whether to refurbish a building to a certain standard and how much emissions will be saved, they will factor in their carbon pricing and calculate the cost as their price multiplied by emissions in tonnes.

Challenges and risks around implementing carbon pricing

Each organisation reflected on the numerous potential benefits of implementing carbon pricing, as part of their overall strategy to decarbonise. However, recognising that carbon pricing is still a relatively new concept, with ongoing debate over its usage and effectiveness, we heard some of the challenges and risks around implementation.

Cost and return

Cost and impact on return were two risks, and challenges, each organisation raised with us. Persuading decision makers that, whilst in the short-term, sustainability projects will require capital investment, this is essential work to protect business interest in the long-term. Being able to demonstrate to decision makers the importance of investing in less carbon intensive and energy saving solutions is a challenging prospect, particularly given the current economic pressures, and many businesses working to meet shorter term profit goals. Carbon pricing is one way in which organisations can quantify the impact of their investments, however, it does require decision makers to feel confident in the pricing system and its long-term accuracy.

Fears over greenwashing

Several of the organisations remarked on accusations of 'greenwashing', that have been associated with carbon pricing and said that the impact on reputation that such accusations may have on an organisation causes them to carefully consider their carbon pricing approaches, particularly by using rigorous scientific methods to track their emissions and developing robust carbon pricing tools. One business we spoke to noted that, in recent years, there has been a noticeable increase in clients inquiring about their credibility, credentials, and their ability to use less carbon intensive methods. Whilst many organisations do understand that being more sustainable can lead to increased profitability over time, there is a concern that many will see the adoption of carbon pricing, and sustainability initiatives, as a decision made solely to secure future projects and contracts.

One company said that they recognise the importance of addressing greenwashing claims, and that decarbonization requires a comprehensive understanding of carbon pricing and sustainability initiatives. They are thus working with their supply chain to assess emissions and highlighted that transparency will play a crucial role in developing trust.

Deciding which carbon price to align with and fluctuations in international pricing

When trying to determine a reliable carbon price, it's important to consider that the figures for the UK, EU, and US can vary significantly. This variation is due to a sliding scale influenced by market forces and global events, such as wars, which can significantly impact prices. To create a level of certainty, for some organisations, a solution is to develop their own, in house, version of carbon pricing, based on a price that is internationally competitive, and most relevant to their particular sector. This strategy, however, leads to a diversity of carbon prices both within individual sectors and across different industries.

Each organisation's exclusive pricing model reflects its specific circumstances, challenges, and objectives. Such variance can make industry-wide comparisons and standardisations difficult. However, it provides an opportunity for a more nuanced and sector-specific approach to carbon pricing and information sharing within sectors would be key to achieving comparisons within industries, something we found is not being undertaken on a wide scale.

Regulatory challenges

We heard from various organisations that there are regulatory challenges restricting progress on some sustainability initiatives. There are some frustrations that the government does not issue clear, and updated, clear legislative or policy guidance on achieving net zero. While there are external programmes in the construction sector, like the London Energy Transformation Initiative and the RIBA 2030 Climate Challenge issuing recommendations and guidelines for emission management, the industry lacks comprehensive legislation and a clear roadmap.

CASE STUDY 1: TRINITY COLLEGE, CAMBRIDGE'S SUSTAINABILITY JOURNEY IN ITS ENDOWMENT

Trinity College Cambridge's sustainability strategy for its endowment is centred on three pillars: decarbonisation, positive investment, and engagement. The engagement pillar is particularly crucial, as over 80% of their emissions are from sources over which they have limited control, such as properties and equities. This necessitates working closely with tenants and other stakeholders to influence their behaviours towards sustainability. An innovative approach Trinity College employed was the creation of commercial accountability for the managers to whom they delegated sustainability responsibilities, integrating sustainability into their contracts and KPIs. This strategy ensured that all team members, not just the sustainability officer, were aligned with the College's environmental goals. The College faced challenges in its transition to net zero, mainly around the cost of sustainable initiatives and the potential impact on returns. They believed that though sustainability and commerciality are compatible in the long term, this may not be apparent in the short term. One specific challenge was the uncertainty around green premiums and the risk of not achieving the expected returns on sustainable investments.

Trinity's carbon pricing strategy uses a shadow price of £77, which is derived from the implicit cost of carbon in their portfolio and compared against industry benchmarks. However, the College is currently reviewing this price, as it might be too low, and acknowledges the need for annual reviews. Trinity College's case underscores the complexity of integrating sustainability into traditional financial frameworks.

It highlights the importance of alignment across the organisation, the need for a comprehensive approach involving all stakeholders, and the challenges of balancing immediate financial returns with long-term sustainability goals. The college's journey offers insights into the nuanced process of transitioning to net zero, emphasising the critical role of data, stakeholder engagement, and innovative financial strategies in achieving sustainability objectives.

Conclusion

This report sheds light on carbon pricing strategies and sustainability initiatives across diverse industries in Cambridge. The findings underscore the nuanced approaches companies employ to tackle emissions, emphasising the role of effective management structures and decision-making processes. From internal carbon pricing models to innovative emission monitoring tools, organisations are pioneering methods tailored to their specific challenges. Morgan Sindall Construction's CarboniCa tool is among myriad other tools that have been developed to track carbon emissions. During the process of this research, we found out about other tools such as OneClick LSA Net Zero Carbon Tool, which assesses whole life carbon, and Natwest's Carbon Planner, which supports businesses with estimating their carbon footprint. With the availability of these tools, organisations can be supported in adopting approaches that align with their objectives.

However, the challenges identified, including regulatory uncertainties and the risks associated with perceptions of greenwashing, highlight the need for increased awareness of the approaches currently in use, collaborative efforts, clear communication, and sector-specific strategies. As businesses strive to reduce their carbon emissions, this research offers valuable insights and recommendations to guide the transition toward a low-carbon future. The varied experiences shared by our respondents exemplify the complexity of tackling climate change. However, they also demonstrate the potential of integrating carbon pricing into sustainable business practices, signalling a significant step forward in the collective journey toward a more environmentally conscious and resilient future.

Recommendations and call to action

- Sustainability leaders should focus on improving their communication with decision-makers, highlighting the long-term advantages of sustainability projects and how they safeguard business interests. It is essential to establish a collaborative decision-making framework that includes senior leaders and key stakeholders. This approach will ensure comprehensive support for sustainability initiatives, from their inception to their implementation. Additionally, it is important to dismantle any existing silos within organisations and promote active participation from all departments to successfully integrate sustainability across the entire organisation.

- Companies must address concerns about greenwashing by promoting transparency in emissions assessment, sustainability efforts, and reporting. This can be achieved by actively involving external, trusted partners for validation of their initiatives. Additionally, engaging with their supply chain to ensure sustainability practices are upheld throughout supply chains is crucial. This approach will help in building trust and enhancing the credibility of their sustainability commitments.

- Organisations must consider developing internal carbon pricing models that are internationally competitive and relevant to their specific sector, providing a level of certainty amid fluctuations in global carbon prices. There is a need for industry-wide collaboration and information sharing to ensure that there is synergy within sectors. This way organisations can stay informed about industry best practices and follow recommendations from industry leaders or associations. By doing so, they can align their internal carbon pricing with established and effective models already in use.

- Companies must consider tailoring sustainability strategies, including carbon pricing, to the specific challenges and characteristics of their operations, recognising the specific considerations of their products and services.

- It is important for companies to advocate for clearer and updated legislative or policy guidance on achieving net zero. Engaging with external organisations and initiatives that provide recommendations and guidelines for emission management will help companies achieve this.

References

Chen, S., 2023. Bearish EU carbon prices to continue in 2024 on lower power emissions, oversupply https://www.spglobal.com/commodityinsights/en/market-insights/latest-news/energy-transition/122823-bearish-eu-carbon-prices-to-continue-in-2024-on-lower-power-emissions-oversupply (accessed 1.16.24).

Financial Times, 2023. UK exporters face hefty EU carbon tax bill after Sunak weakens climate policies.

HM Treasury, 2023. New UK levy to level carbon pricing.
Royal Academy of Engineering, 2021. Construction sector must move further and faster to curb carbon emissions, say engineers https://raeng.org.uk/news/construction-sector-must-move-further-and-faster-to-curb-carbon-emissions-say-engineers (accessed 1.16.24).

The World Bank, n.d. What is Carbon Pricing?. https://carbonpricingdashboard.worldbank.org/what-carbon-pricing (accessed 1.9.24).

The World Bank, n.d. Carbon Pricing Dashboard. https://carbonpricingdashboard.worldbank.org/ (accessed 1.16.24).

Harpankar, K., 2019. Internal carbon pricing: rationale, promise and limitations. Carbon Manag. 10, 219–225. https://doi.org/10.1080/17583004.2019.1577178

Further Reading

Carbon Pricing Leadership Coalition, 2018. Carbon pricing and the Task Force in climate-related financial disclosures (TCFD).

Grantham Research Institute on Climate Change and the Environment, n.d. What is a carbon price and why do we need one? Grantham Res. Inst. Clim. Change Environ. URL https://www.lse.ac.uk/granthaminstitute/explainers/what-is-a-carbon-price-and-why-do-we-need-one/

Task Force on Climate-Related Financial Disclosures, 2017. The use of scenario analysis in disclosure of climate-related risk and opportunities [WWW Document]. URL https://assets.bbhub.io/company/sites/60/2021/03/FINAL-TCFD-Technical-Supplement-062917.pdf

UK Government, 2021. Carbon valuation. GOV.UK. URL https://www.gov.uk/government/collections/carbon-valuation--2

United Nations Climate Change, n.d. About Carbon Pricing. URL https://unfccc.int/about-us/regional-collaboration-centres/the-ciaca/about-carbon-pricing

World Bank, n.d. Pricing Carbon. World Bank. URL https://www.worldbank.org/en/programs/pricing-carbon

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