The Catalyst Effect of the Finance Function on Decarbonization
Guiding organisations to a more sustainable future

2021
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Key takeaways

1. Sustainable ‘purpose-led’ companies outperform their traditional peers.
2. Application of internal carbon pricing leads to better financial and social performance.
3. CFOs can actively play a role to drive decarbonization and to anticipate carbon tax.
Introduction

Since carbon tax has been officially announced, Dutch companies need to act now. Carbon tax will significantly impact the competitive environment, and at the same time offer new opportunities for purpose-led organizations. Because, as has become clear during this COVID-19 crisis, sustainable companies are outperforming their traditional ‘make-take-waste’ peer companies (ethical investments are outperforming traditional funds). In this article, we will focus on the role of the CFO in sustainability and internal carbon pricing as a powerful tool.

Decarbonization as a strategic goal, underlined with ambitious carbon targets, is widely adopted within larger Dutch organizations. We see that decarbonization is a central theme in the Future of Energy, the Future of Mobility and the Future of Food. In addition, major financial institutions have also embraced decarbonization, which we can conclude from their adoption of the Dutch Climate Agreement.

A recent Deloitte study of European firms in the years 2009-2018 showed that there is a positive business case for decarbonization. It shows that lower CO2 emissions have a positive impact on financial and social performance. This is mainly because organizations that actively lower their emissions are more attractive to external investors and spend more time and money on innovating their core business. The positive impact of lower emissions was strongest in the years 2015-2018.

However, we also see that organizations are struggling to execute their decarbonization strategy. That is why an implementation programme needs to be initiated, which ensures (1) that progress is made to realize the ambitious targets set and (2) that they will do more than just greenwashing.

Finance departments have a critical role in the sustainability transformation of their organizations. In many organizations, the climate programmes still is siloed, although they are working to embed programmes better across the business, as our recent Goal 13 Impact Platform research with shows. Sustainability/CSR functions are driving the sustainability programmes with C-level leadership, but they are increasingly joined by other functions and lines of businesses. Finance plays an important role in shaping the agenda, the initiatives and delivery. Additionally, finance provides its expertise in funding, business case development and investment decisions, and reporting. The role of finance in reporting is especially important, given the increasing demands for better quality information from stakeholders, and the lack of qualified people, controls and system support in sustainability functions. This is emphasized once more in the recent Deloitte Insights – Financing a sustainable transition – with responses of almost 1000 European CFO’s.
Internal carbon pricing

One of the powerful tools finance has for accelerating the sustainability transformation is internal carbon pricing. By internally assigning a monetary value to the GHG emissions, they can be translated into a financial metric that can be used for decision making. A recent study of the World Bank Group shows that many companies already use carbon pricing.

Carbon pricing helps spotting new opportunities, such as low-carbon related R&D investments, environmentally driven innovations, disruptive and circular products and services. In addition, if you have sufficiently embedded an internal carbon price in your financial processes, you will avoid financial surprises, including potential impairments.

In general, companies make a distinction between two forms of internal carbon prices:

**Shadow price:** this represents the theoretical cost per ton of carbon emissions produced. This is calculated but never actually internally charged. The shadow information is used to better understand exposure to climate risk, guide procurement decisions, make assumptions about the future and prioritize low-carbon initiatives. The shadow price can be incorporated into valuation models or planning tools to determine the impact of carbon emissions on the business.

**Internal carbon fee:** this allocates a predetermined amount for each ton of carbon emission produced by a business unit. The proceeds from the fee are then used for investments in emission reducing solutions. The impact can be increased by leveraging grants and incentives (e.g. increasing your budget to invest in climate transition measures). Companies collect this carbon fee at a predefined level directly from business units.

Companies have positive experiences with carbon pricing. There are numerous publicly available case studies of companies who have implemented internal carbon pricing to achieve net zero or carbon negative targets. See for instance World Bank Group – State and Trends of Carbon Pricing 2020 (p 99) and Accounting for Sustainability – Essential guide for management information (page 49).
A Unique frontrunner

One of the best examples of a successful carbon pricing implementation is that of large technology multinational. That company introduced internal carbon pricing in 2012 in order to increase efficiency, demonstrate corporate responsibility and support innovation. In January 2020, the company announced its plans to become carbon negative by 2030. In its extensive approach, the multinational uses seven basic principles:

1. Grounding in science and math,
2. Taking responsibility for its carbon footprint,
3. Investing in new carbon reduction and removal technology,
4. Empowering customers around the world,
5. Ensuring effective transparency,
6. Using its voice on carbon-related public policy issues,
7. Enlisting their employees.

The internal carbon price is adjusted annually and based on the required investment for executing their carbon reduction strategy. The carbon fees are charged to all divisions across countries harmoniously. The money collected from divisions is allocated into a central fund and used for investments into green solutions and carbon offsetting projects. The company announced reduction in carbon emissions of 7.5 million metric tons of carbon dioxide equivalent (mtCO2e), over 10 million dollars of yearly savings in energy costs and 10.2 billion kWh of purchased and applied green power from 2013 till 2015. Besides that, the company has invested the carbon emission fees in various carbon offsetting projects (e.g. planting forests and air carbon capture) in multiple countries around the world, which has impact on millions of people. Its current carbon price is $15 per mtCO2e and the organization is committed to investing into new innovations and further support technology development.
The commitment of the CFO

Management commitment and a core position in an organization’s finance strategy are important preconditions for successful internal carbon pricing. For instance, a shadow pricing analysis is not effective when financial decisions are not committed to this price. According to Deloitte’s CFO Insights – *How CFOs can help companies weather climate change* (2020), CFOs need to convince directors that climate change could have a material impact on their business. Integrating climate change strategy into the board’s mandate, as well as building competence and assigned oversight will help to mitigate climate-related risks. As referred to in ‘CFO Insights Leaving a legacy— for your company, your team, and yourself’, common goals seem to be the desire to build a finance department that is “known as a value-added analytical partner to the business” and one that “provides expert support for managerial decision-making.”

As we can read in the article ‘Change is Coming: *The future of Finance: will Finance lose its reason to exist?*’ automation is key for the future of finance. Non-financial KPI dashboards will be real time and carbon reporting will become standardized so that it can easily be done by robots and algorithms, requiring little to none human intervention. Whereas typically the information is derived from a multitude of sources and systems – non-financial information is in the heart of business systems-, the use of a combination of RPA, cognitive solutions and blockchain can significantly reduce the workload and improve the quality of non-financial data. This allows organizations to more effectively steer on this information.

Both forms of internal carbon prices have significant impact on the finance function. If carbon pricing becomes a key pillar of the finance strategy the finance function can have a catalyst effect on decarbonization. To make the potential of decarbonization viable, we mapped the impact on the Deloitte Finance Assessment Wheel, a comprehensive, organized landscape of finance competencies and enabling areas.
Mapping sustainability on the Finance Assessment Wheel
Mapping sustainability on the Finance Assessment Wheel

How finance delivers value - top-half of the wheel: Especially through business finance areas like performance management, planning budgeting & forecasting, management information and decision making, finance has the opportunity to drive value by embedding both forms of carbon pricing in their core processes. In addition, several operational finance processes qualify to make an impact: reliable and definition-compliant carbon data (close, consolidate & report), setting up a process to measure and integrate the carbon of suppliers (purchase to pay) and controlling a process to charge internal carbon funds based on carbon emissions from the internal divisions or teams (finance & control).

What enables finance – bottom-half of the wheel: In essence all areas mentioned there should accommodate sustainability. Therefore, external auditors should be able to rely on the internal control framework of companies – also for non-financial information. Besides that, the capability gap between traditional finance knowledge and in-depth knowledge on carbon-related legislation and developments should be closed, just like we did with the digital capability gap of some years ago. Thirdly, information & systems should accommodate the need for efficient and effective data collection, which is required for planning and managing carbon targets. Though we are only at the forefront of carbon data technology developments, we do see that steps are being made. For example, some tech firms now offer carbon tracking software to meet oil-investor demands.

Companies that are initiating carbon reducing projects, should not forget about government grants and tax incentives. There are numerous types of instruments available for a broad range of activities that contribute to cost reduction, CO2 footprint reduction or both. For each carbon reducing project, CFOs should be considering the implications of all incentives available, for instance the European Innovation Fund. As mentioned before, finance departments therefore need professionals with sufficient knowledge of sustainability and related laws and legislation, in order to comply with ESG reporting requirements (Deloitte Insights – Financing a Sustainable Transition September 2020).

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Effectively implementing internal carbon pricing

For a successful implementation of internal carbon pricing, companies must have set clear objectives and align them with their sustainability strategy. These objectives will help determine the most suitable parameters of internal carbon pricing. Several questions should be asked to identify the most suitable internal carbon pricing project:

What price level of CO2 emission will help the company achieve its sustainability objectives?

What is the scope that should be covered by internal carbon pricing?

Which business decisions should be affected by internal carbon pricing?

The following five steps for implementing internal carbon pricing are recommended, they are based on best practice at Deloitte’s clients:

**Strategize**: Strategize the ambitions, opportunities and objectives.

**Explore**: Explore targets, impact and a program ready to embark the transformation.

**Design**: Design internal carbon pricing initiatives, support them with an implementation plan and change initiatives.

**Realize**: Build internal carbon pricing solutions and realize first wave of process and operating model.

**Deploy & Run**: Implement technical solutions, embed the internal carbon pricing tool in the entire organization.
In conclusion, the catalyst effect of the finance function on decarbonization

In this article, we have explored how internal carbon pricing can accelerate the sustainability transformation, that many organization now want to make. The CFO and the finance department play a crucial role in this transformation (The CFO of the Future - Rebecca’s Story - February 2020).

Deloitte globally commits to achieving net-zero emissions by 2030. Deloitte Netherlands has an even sharper target: we want to achieve net-zero emissions in 2025. Our goal is to extend our impact beyond ourselves. We therefore partner with our clients and are guiding them to a more sustainable future. We help them building a strategy, attaining sustainable operations and making sound climate choices that directly address the world climate crisis.

For more information, please connect with the Deloitte’s Finance & Performance Consulting.
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Joep is a sustainability oriented finance transformation professional, based in the Netherlands’ – Amsterdam office. Being purpose-driven, he challenges CFOs and their finance functions, to enrich their core finance processes and to focus on stakeholder value. He is a Dutch Chartered Auditor and contributed to the NBA Public Management Letter – Climate is Financial. In addition he has authored the Deloitte Insights article – Financing a Sustainable Transition.

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Our services
At Deloitte Finance & Performance Consulting, we help finance leaders and finance organisations leverage the potential of sustainability. We know that early adopters become the companies that thrive in the future. We help our clients identify those areas within their (finance) organisation where sustainability can create the highest impact, not only on their own business, but on society as a whole. For more information please visit Deloitte’s Finance & Performance Consulting.