Deloitte.



Finance for a sustainable future: Less carbon. More value.

Finance for a sustainable future

Mitigation, targeting, and reporting are still part of the decarbonization calculus—but no longer the only focus. New methodologies and markets create avenues to turn an organization's carbon commitments into sources of value.

How can finance lead the way?

Decarbonization (or carbon mitigation) is a broad term principally, it's the removal of greenhouse gas (GHG) emissions, including carbon dioxide, from human activity, usually accomplished by changing processes that generate or use energy. As a physical factor in addressing the global environment, decarbonization sits comfortably among other familiar imperatives: don't litter, don't pollute, don't destroy. In the traditional view, we accept the moral and social value of these principles even if there's a cost to carrying them out.

What if it didn't have to be that way?

Because global markets for carbon credits and voluntary offsets have become larger and more standardized, they've begun to do what markets tend to do: offer ways to turn a need into a profit. Demand for carbon credits and carbon monetization may grow to 15 times its current level by 2030 and 100 times by 2050. In 2019, voluntary offset transactions totaled about \$320 million. In 2050 they may approach \$200 billion.¹ Trading on carbon isn't the only way to find value in mitigating it. Consumers reward companies that pursue decarbonization in their processes and end products and may be willing to pay a price premium if the actions and benefits are clear.

This means an organization's carbon strategy will be of interest to audiences other than government regulators and climate monitors. As a bottom-line profit and loss factor, it will matter to investors and other stakeholders. This reality could cast CFOs in a lead role, giving them an opening to identify specific decarbonization opportunities, apply the relevant cost/benefit calculus, and lead internal efforts to monetize decarbonization policies wherever feasible. Decarbonization remains something your organization ought to do. Depending on your industry and regulatory environment, it may be something you have to do. Now, it can also be something you pursue for your own reasons not only out of concern for the planet, but also because there are tangible benefits to be realized.

Demand for carbon credits and carbon monetization may grow to 15 times its current level by 2030, and 100 times by 2050.

How finance can drive carbon monetization

Today's CFO is not only an operator but also a steward and a catalyst for an organization's evolution. In another time, the CFO's role might have been merely to approve the funding for sustainability work elsewhere in the organization, but today, finance is where that work can live. In pursuing value through decarbonization, finance doesn't have to deviate from its core mission. The critical levers are ones the function already touches.





Physical carbon reduction

What operational changes can take carbon out of the business? This might involve restructuring contracts, changing supply or distribution chains, or taking a fresh look at the real estate portfolio—inputs, outputs, and benefits, which are home turf for the finance operation. Remember, a company's carbon footprint involves more than the offsets that compensate for emissions. It can also include the insets, that prevent some of those emissions from happening in the first place.



Identifying and realizing tangible value

What role can carbon offsets play in the path to achieving net-zero targets? Piecemeal transactions may provide value here and there, but a large-scale carbon monetization strategy requires a project focus that sees across the enterprise. What changes are consistent with overall strategy? What working groups, such as a sustainability command center, can define decarbonization measures and see them through? What contract structures can deliver the value these changes make possible? Remember that carbon doesn't "trade" the way other commodities do. It may behave in the market more like a repo, without standard definitions of basis risk.

Finance can also help identify and develop value sources adjacent to existing operations. For example, a company that operates a fleet may take one step by switching to electric vehicles and then an additional step by building a new business offering around its power generation and recharging infrastructure.



Measurement and reporting

On the compliance side, setting carbon goals and tracking progress against them remains a must-do, especially as new global and US reporting standards are in effect. In addition, requirements may expand to include Scope 3 emissions from value-chain partners outside the organization.

But the metrics of decarbonization contribute to the carbon monetization "plus side" as well. Realizing value through trade-offs and credits is an intrinsically quantitative undertaking, and may require new tools. The same applies to the task of expressing carbon progress to consumers in ways they'll understand and find credible—and to charting the "green premium" in revenue they allow companies to realize as a result.

To turn theory into practice, set the tone

Reducing carbon isn't a new idea. Nor is chasing enterprise value. As organizations reach a point at which everyone internalizes that this is really happening, finance has command of the critical specifics to set that tone.





Establish a sustainability command center

The in-house capabilities that can drive carbon monetization may be scattered across the organization, reporting to different places. As part of a sustainability command center, finance can bring together core capabilities across the organization—to lead the charge on developing goals, proofs of concept, and the drivers that can effect and accelerate change.

Scan the landscape

What are the current and pending regulatory controls? What markets exist to trade in carbon-related value, and where are they headed? Finance can help make sure the organization has a clear picture of the external playing field.

Provide leadership

NVV

Finance can interface with operations teams to identify and activate decarbonization process changes. It can set up the governance, technologies, processes, and team structures to put those plans into action. And the CFO can play a large role in signaling that this is a practical shift, not a theoretical one. When Finance takes the reins, it's real.

Critical first steps

Where to start?

A finance organization can make fundamental early moves that set the stage for progress.

Critical first steps



Recognize the categories of risk that decarbonization can help address. The moves you choose to make and the ones you have to make introduce forces you have to account for. Physical risk includes the potential for tangible effects of climate change, such as a flooded factory. Transition risk involves regulatory, market, and other forces imposed from outside the organization. And technology risk accompanies any new tools an organization adds as it matures.

 \bigcirc

Establish an emissions baseline and set decarbonization targets so you have a basis to track and report future improvements.



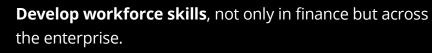
Inspect your utility and lease footprint to help determine what commitments you currently operate under and how they contribute to the organization's carbon picture. **Establish a zoom-out/zoom-in framework** that focuses on different time horizons, so the organization can plan and reach goals in an ordered way.

Scan the external market. Other organizations are working toward the same goals, and their experience can teach you what is working, what isn't, and what may have promise once it has time to gain traction.



 \bigcirc

Develop a pathway to align climate project priorities into capital planning.



Survive, drive, thrive

Your path to carbon monetization can span different time horizons—what to do now, soon, and later. But that's not the only way to break it down.

Think about degrees of urgency as well: what you must do, what you can benefit most by doing, and everything in between. This advice can help you prioritize the strategies you adopt and the steps you take to realize them.

Some core requirements surrounding decarbonization are clear, current, and mandatory. In some industries, the stakes may even be existential. Those are the moves you need to make to **survive**. Less urgent but more promising are the approaches that can set you on the path to monetization—to **drive** toward realizing the promise that carbon can be a source of value. Finally, an organization should reach for aspirational strategies that allow it to not merely keep up with the decarbonization challenge but to **thrive** in doing so.

Survive

The finance organization can meet the baseline to survive by ensuring that you comply with current regulations through accurate internal and external reporting completed in a timely manner. At this level, your priority should be the most pressing or highest value decarbonization opportunities. Become knowledgeable about renewable energy tax credits to make sure money is not being left on the table. Begin to engage stakeholders across the organization more broadly, looking for ways to integrate decarbonization opportunities into other in-flight projects and programs. The goal is to build momentum and generate quick gains to offset the perceived "pain" of transformation.

Become knowledgeable about renewable energy tax credits to make sure money is not being left on the table.



Drive

Finance has the power to drive results by helping the organization understand what initiatives have greater importance and by devising and measuring progress. Instead of focusing on granular pluses and minuses, look more broadly across the enterprise to see the big picture. Directly address the challenges and opportunities of a program that's going to span multiple horizons and require sustainable funding and ongoing executive support. Look outside the organization at industry stakeholders. In many industries, making meaningful progress on the organization's monetization journey requires partnering with other companies or organizations in the same industry.

Instead of focusing on granular pluses and minuses, look more broadly across the enterprise to see the big picture.



Thrive

Finance can thrive by instituting new processes and talent that move the organization steadily toward its sustainability goals and opportunities, even amidst sustained disruption. In this phase, finance helps the organization transform its business by monetizing decarbonization. Thriving means thinking big—embrace an innovation mindset, think long term, turn internally focused opportunities into external ones, and think beyond immediate stakeholders to your broader community and to nontraditional stakeholders. By helping lead the charge to monetize and productize your organization's decarbonization efforts, you can justify charging a "green premium" and make decarbonizing an essential part of your organization's brand.

Thriving means thinking big—embrace an innovation mindset, think long term, turn internally focused opportunities into external ones, and think beyond immediate stakeholders to your broader community and to nontraditional stakeholders.





The role of data

If decarbonization is an industry-wide effort, that means its implications aren't confined to a niche sustainability function. Tax considerations, financial reporting, regulatory compliance, workforce hiring and training, investor relations, asset optimization, energy use, real estate, and other factors affect or are touched by decarbonization. And what ties it all together is data.



The role of technology

Technology can play a pivotal role in helping organizations manage decarbonization. It can simply help standardize and scale processes and automate ESG reporting. As an organization moves further along the path, technology solutions can go from helping establish a comprehensive, endto-end net zero strategy right through to identifying opportunities for competitive advantage and carbon claims that can command premium pricing. All while managing volumes of complex data.



The regulatory landscape

Regulatory regimes impose standards, but they also provide a context in which value chain partners, competitors, and consumers are all motivated by the same large-scale objectives. When everyone wants to achieve the same things, and some are better at it than others, that's a market.

The regulatory landscape

In a different paper, this would just be a list of requirements against which an organization needs to comply and report. But these rules, and others like them, set the stage on which everyone is playing. That makes them competitive factors. Here are some significant current and anticipated regulatory structures to be aware of:



Corporate Sustainability Reporting Directive: A European

Union requirement for large and publicly listed companies to publish regular reports on the social and environmental risks they face, and on how their activities impact people and the environment. This includes a requirement for disclosure of a company's decarbonization commitment—or a reason why there isn't one.

Securities and Exchange Commission climate rules:

A proposed set of US rules, likely to go into effect soon, that may likely require companies to include certain climate-related disclosures in their registration statements and periodic reports. GHG emissions are among the required categories in the proposal.

The Task Force on Climaterelated Financial Disclosures:

Currently voluntary, this recently created arm of the Financial Stability Board is developing recommendations on the types of information companies should be required to disclose so climate action is transparent and carbon markets are correctly informed. Its determinations may become mandatory in the future.



The US Inflation Reduction Act:

A 2022 federal legislative package that includes resources some organizations may be eligible to receive in support of decarbonization projects.

A win for the planet can be a win for your organization

In many organizations today, finance teams still regard decarbonization as a place to spend money, not to make it. More than two-thirds of surveyed CFOs told Deloitte's Q2 2022 CFO Signals[™] survey that they fund decarbonization strategies with internal cashflows from operational savings.

A business that instead calibrates its decarbonization commitment to a business and operational lens can reverse that perspective. With finance in the lead, it can find transformational opportunities, new business models, and other novel approaches that marry carbon reduction to value creation.

Progress against carbon targets is a welcome feature in any annual report. Profit is even more welcome. As the carbon market matures, net-zero no longer has to come with a net loss.

Learn more about Deloitte solutions for managing the journey to a decarbonized future

Deloitte GreenLight

is an end-to-end decarbonization software tool that helps unlock a clear, actionable path to net-zero emissions. This software-as-a-service solution is built on Deloitte's CortexAl data management and analytics platform and incorporates one of the largest global data libraries, including 150,000 emissions factors and 200 real-world-tested emissions abatement projects.

In an alliance with Workiva, Deloitte offers three sustainabilityfocused accelerators that assist with more effective ESG reporting, including Scope 3 emissions calculations and dashboarding, continuous controls monitoring, and ESG report templating. Omnia ESG is a cloudbased platform with environmental, social, and governance audit capabilities that helps companies cut through the confusion of varying standards and regulations, focus on what matters to stakeholders, and report and mitigate risk with confidence.

Deloitte GreenSpace

Tech helps organizations navigates the climate technology landscape and identify opportunities to create sustainable competitive advantage as part of decarbonization. It connects climate technologies to industry via an ecosystem that spans startups, research institutes, incubators, accelerators, and universities. **ClearCarbon** is a digital Deloitte solution that helps organizations identify, make, and substantiate product-level carbon claims that can demand a premium in the market, amplifying revenue streams or creating new ones.

Authors

Abby Levine

Real Estate Transformation Principal, Consulting Deloitte Consulting LLP

+1.213.553.1929 ablevine@deloitte.com

Jonathan Schuldenfrei

Managing Director, Risk & Financial Advisory Deloitte & Touche LLP +1.212.653.7693 jonschuldenfrei@deloitte.com

Mark Dolson

Senior Manager, Consulting Deloitte Consulting LLP +1.212.436.4896 mdolson@deloitte.com

Joel Sonkin

Climate Change Specialist Leader Specialist Leader, Risk & Financial Advisory Deloitte & Touche LLP +1.212.436.6003 jsonkin@deloitte.com

Acknowledgements

Chris Ruggeri

Principal, Sustainability & Climate Leader, Risk & Financial Advisory

Deloitte Transactions and Business Analytics LLP Tel: +1 212 436 4626 Email: cruggeri@deloitte.com

Susan Hogan

Principal, Finance Transformation Practice Leader

Deloitte Consulting LLP Tel: +1 404 631 2166 Email: shogan@deloitte.com

Dina Trainor

Managing Director, Risk & Financial Advisory

Deloitte & Touche LLP Tel: +1 617 437 2147 Email: dtrainor@deloitte.com

Vishnu Narins

Managing Director, Consulting Deloitte Consulting LLP Tel: +1 212 313 5005 Email: vnarins@deloitte.com

Hesse McKechnie

Director, Consulting Deloitte Consulting B.V. Tel: +31 (0)6 5017 8004 Email: hmckechnie@deloitte.nl

Mateus Begossi

Director, Consulting Deloitte MCS Limited Tel: +44 20 7007 0912 Email: mbegossi@deloitte.com

20

Endnotes

1. Voluntary Carbon Markets Integrity Initiative. (2021). (rep.). *Aligning Voluntary Carbon Markets with the 1.5* °C Paris Agreement Ambition.

Deloitte.

To find out more, please visit **deloitte.com/us/en/services/sustainability-climate-equity**.

This publication contains general information only and Deloitte is not, by means of this publication, rendering accounting, business, financial, investment, legal, tax, or other professional advice or services. This publication is not a substitute for such professional advice or services, nor should it be used as a basis for any decision or action that may affect your business. Before making any decision or taking any action that may affect your business, you should consult a qualified professional advisor. Deloitte shall not be responsible for any loss sustained by any person who relies on this publication.

About Deloitte

Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited, a UK private company limited by guarantee ("DTTL"), its network of member firms, and their related entities. DTTL and each of its member firms are legally separate and independent entities. DTTL (also referred to as "Deloitte Global") does not provide services to clients. In the United States, Deloitte refers to one or more of the US member firms of DTTL, their related entities that operate using the "Deloitte" name in the United States and their respective affiliates. Certain services may not be available to attest clients under the rules and regulations of public accounting. Please see www.deloitte.com/about to learn more about our global network of member firms.

Copyright © 2023 Deloitte Development LLC. All rights reserved.