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GPS



# Sustainable Transitions

## Unleashing the Power of Treasury

Citi GPS in collaboration with Citi Services

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# SUSTAINABLE TRANSITIONS

## Unleashing the Power of Treasury



**Shahmir Khaliq**  
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The modern Treasury and Finance operation has so much more to offer any forward-looking organization. Its impact should extend beyond traditional core competencies of stakeholder and business ecosystem management, financing (working capital management and liquidity optimization), and monitoring and reporting. Treasury has a crucial role to play in critical capabilities including real-time treasury process digitization and increasingly, an expectation of supporting the company's sustainability strategy.

Sustainability encompasses not only the current issues at the heart of business resilience, but more importantly, the defining transformational and growth opportunities of our generation.

From opportunities that define businesses, to KPIs that can quantify, monitor, and manage them, to targets through supply chains and procurement, to ensuring liquidity, access to capital, and the cost of that capital – no function is better positioned to understand, promote, and drive change, both within the company and across broader business ecosystems.

In this report, two pieces of proprietary research were conducted in conjunction with Citi's Services business.

In our first analysis, we found that companies with the most sophisticated treasury operations tend to be the most advanced in their sustainability journey.

Our second piece of analysis looks at net-zero-alignment across the supply chains of 1,500 companies, highlighting the risks of supply chain lock-out and, conversely, the opportunity to drive broader systemic change via innovative financial instruments such as sustainable supply chain finance. This provides a compelling example of the power of an engaged treasury, and how its unique visibility and influence across business ecosystems and supply chains can manage and mitigate risks and drive systemic change.

This report provides the intellectual groundwork that Treasury and Finance need to engage with the organization about its role in moving towards a more sustainable future. We look at this in a structural, strategic sense, and the financial instruments that can be deployed to bring that strategy to life, demonstrating how treasury's earlier and deeper engagement can reduce risk, improve access to capital, and embrace opportunity.

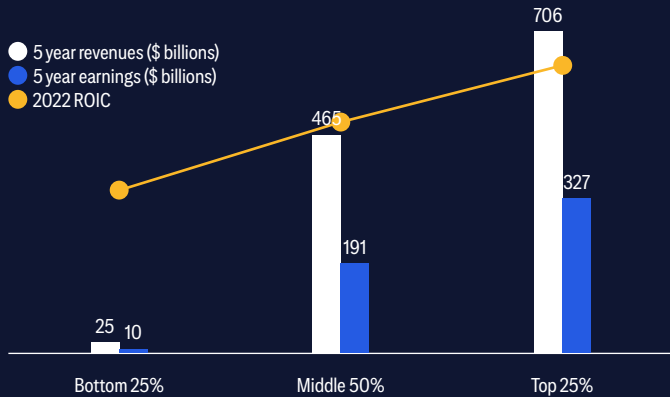
'Sustainable Transitions: Unleashing the Power of Treasury' highlights why the treasury must be central to any successful sustainable transition, and why it needs to be involved from the start – shaping the discussion, ensuring scrutiny of the facts, and maintaining rigor in implementation. As a long-term partner to treasury at the world's leading companies, we look forward to accompanying you on this exciting journey to a more resilient and sustainable future.

# Treasury & Sustainability

## Why does it matter?

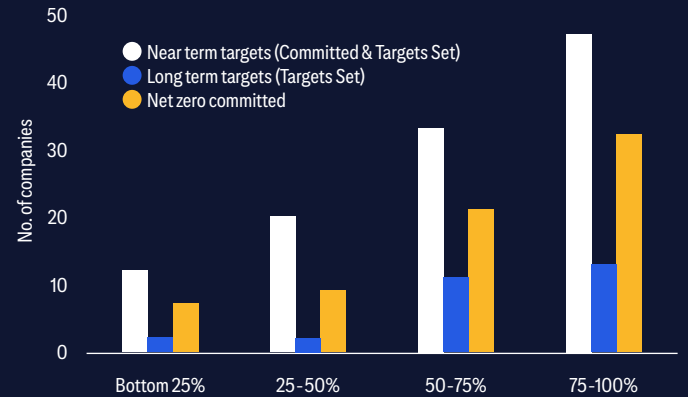
Sustainability themes remain material to corporates, and treasury is a key stakeholder in any corporate's sustainability journey. The more sophisticated treasuries enjoy better financial performance and also tend to be more engaged with climate issues.

Company revenue, earnings and ROIC as a function of treasury performance



Source: Citi GPS, Citi Services

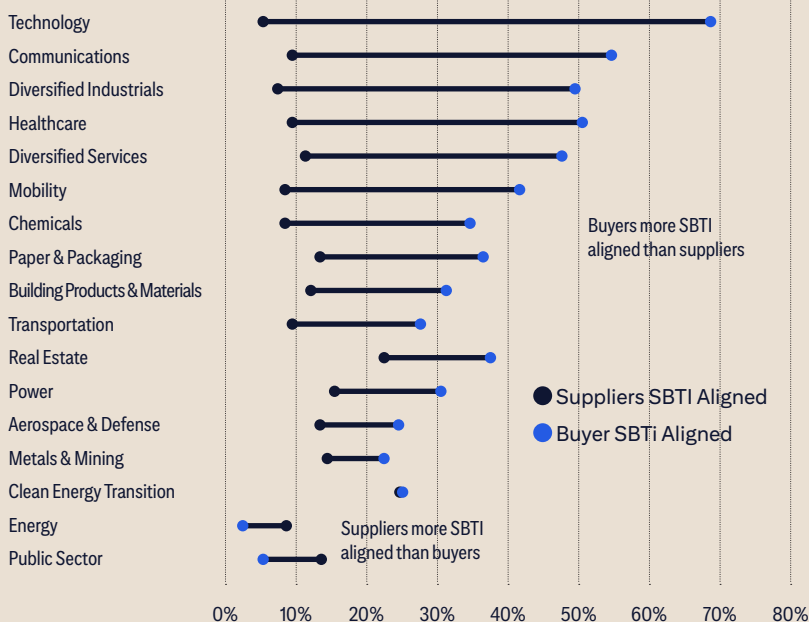
Sophisticated treasuries are more often aligned to Net Zero



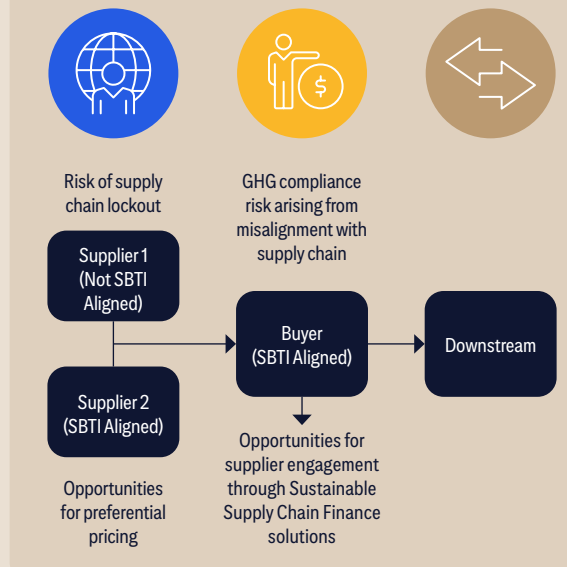
## Supply chain risks and opportunities

Our analysis finds that for many industries, the largest purchasers of goods and services have science-based net zero targets but their supply chains do not. Treasury is uniquely placed to influence supply chains via instruments such as sustainable supply chain finance.

Delta between Buyer alignment and Supplier alignment to SBTi



Risks and Opportunities: A Buyer's Perspective



## Sustainable finance solutions along the sustainability journey

Sustainable finance is a vehicle, not a destination and can be used for mitigating risks, building long-term resiliency, improving sustainable performance, and capturing growth opportunities.



### Supply chains up and downstream: Expanded treasury influence across business ecosystems

#### 1 Procurement strategy

- Leveraging sustainable supply chain financing solutions
- Trade and working capital solutions i.e. trade loans for sustainable procurement
- Linking documentary services i.e. letters of credit and guarantees to carbon footprint of the good purchased or sold
- Linking payment flows data to carbon footprint of goods purchased

### Financing: Expanded treasury influence and engagement

#### 2 Sustainable operations objectives

- Working capital solutions can facilitate efficiencies in resource usage and operational emissions and environmental footprint

#### 3 Business growth opportunities

- Low/zero carbon and nature-positive products, services, business models, revenue streams
- Geographic opportunities due to green taxes and incentives

#### 4 Sustainable finance frameworks and KPIs

- Selection of sustainability KPIs and linking measures of success to financing
- Early engagement enables a robust sustainable finance framework

#### 5 Sustainable investment strategy

- Integration of ESG criteria in investments, use of sustainable deposit solutions and money market funds
- Alignment of banking partners to sustainability strategy

#### 6 Sustainability mitigations

- Integrating carbon offsets and removals into financing solutions e.g. direct investment in projects, purchasing of credits, PPAs

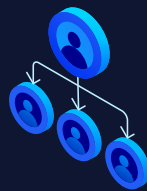
## Action items for corporate treasury

Treasury operations are also well placed to have a material input into all stages of building and delivering a company's sustainability strategy and in our view, must be engaged to be successful.



#### Engagement

- Strategy
- Risks and opportunities
- Metrics, KPI's and monitoring
- Targets and milestones



#### Business ecosystems

- Supply chains
- Procurement
- Customer engagement
- Counterparties
- Peers
- Regulators
- Financing partners



#### Metrics, data and KPI's

- Operating KPI's
- Strategic KPI's
- Financing metrics
- Supply chain data



#### Financing strategy

- Link financing to strategy, ecosystem and metrics
- Growth and transition
- Trade and working capital solutions
- Investments and liquidity
- Trading and risk management



#### Reporting

- Strategy
- Risks and opportunities
- Metrics, milestones and targets
- Ratings, regulators, frameworks
- Financing
- Feedback loops

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## Introduction

The world of business has become a more challenging place in recent years, pushing sustainability onto the backburner for some.

But are we back to a world of cold, hard 'Friedmanesque' economics, where profit trumps all, or should sustainability still be at the heart of corporate strategy? And if so, how do we implement it successfully, with a fully engaged and aligned financing strategy?

The reality is that many of the challenges we face currently are in fact reflections of sustainability-related issues; from food price inflation and security, to inequality and the cost of living, to energy security and pricing, to growth, employment, tariffs and protectionism.

But not only is sustainability (and resilience, to look at it a different way) still at the heart of current issues, it encapsulates the key longer-term megatrends which will drive the economy, society and the environment, and hence impact businesses, over the coming decades, from the energy transition, to changes in mobility solutions, to the employment that might suffer from the introduction of AI, and the exciting new industries which will be created.

Stepping back from these longer-term transitions runs the risk of being left behind. We think the direction of travel for these megatrends is clear, and a historic analysis of tipping points highlights that when we tip, we tend to do so faster than expected, and completely. To persist with 'unsustainable' (in the dictionary sense) models runs the risk of simply investing in strategies and in assets which will ultimately become stranded.

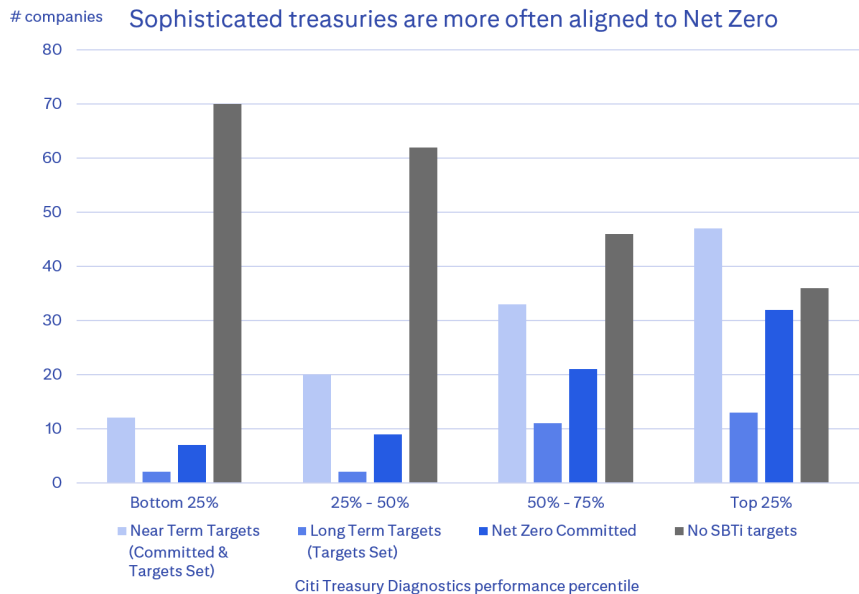
Moreover, history also tells us that these shorter-term dislocations often lead to a longer-term acceleration of the underlying sustainability trend; the same was as true in the energy crises of the 70s, as it is today, with a renewed drive for energy security and insulation from price volatility.

This poses a significant risk for any corporates that are overly attentive to shorter-term issues at the expense of longer-term transitions; they risk losing ground to their peers, and at worst having invested in stranded assets.

Rather than simply looking at why sustainability still matters, this report is about how to build an effective sustainability strategy, and how and why an engaged treasury and finance operation is critical to success.

The backbone of this report is formed by two pieces of proprietary research, conducted with Citi's Services business.

The first builds on previous work by Citi Services Client Advisory team and others, in comparing treasury sophistication (via Citi Treasury Diagnostics survey) to corporate engagement in net zero commitments and targets (both long and short-term) as a proxy for broader sustainability engagement.

**Figure 1. Sophisticated treasuries are more often aligned to Net Zero**

Source: Citi Services

The results back up the central hypothesis of this report – that corporates with the most sophisticated treasury operations also tend to be more advanced in terms of sustainability alignment.

Having demonstrated this alignment, we then lay out a series of steps to building an integrated sustainability and financing strategy, which has an engaged treasury operation at its heart.

We do this by means of a corporate sustainability journey, building on corporate purpose, through risks & opportunities, strategy, targets & milestones, implementation and reporting.

We also examine which stakeholders will be critical to work with along this journey. Treasury operations are more traditionally involved in the latter stages of this journey (e.g. financing and reporting), but as per the results of the first piece of analysis, we identify the opportunities for treasury to be much more engaged in the earlier stages - bringing their unique insights into materiality,

KPIs, supply chains and business ecosystems, risks and opportunities, access to pools of capital, the cost of that capital, and of course governance expertise. In short, we examine the opportunity of expanding treasury's remit, impact, influence and contribution through the lens of sustainable finance.

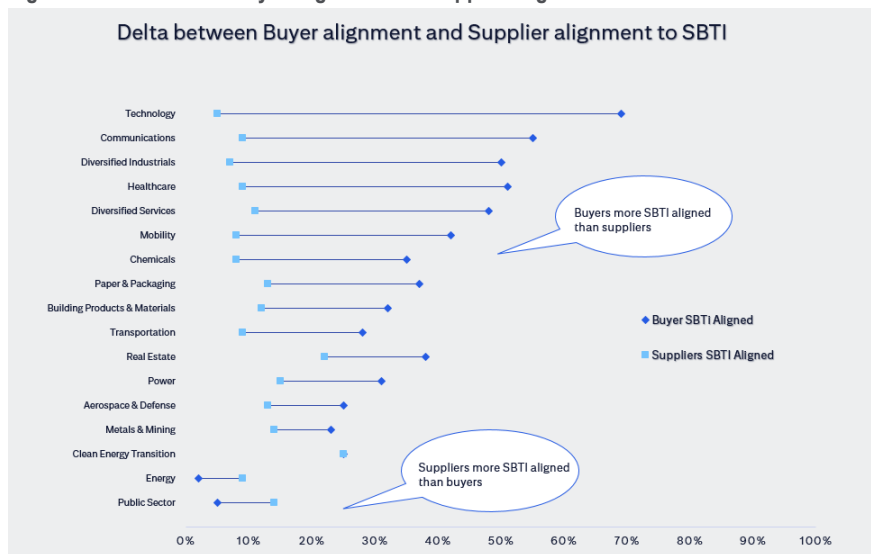
The second piece of proprietary analysis looking at business ecosystems provides an essential case study. In a world where a scope 3 mentality is becoming ever more prevalent, it is a fallacy to believe that any corporate can reach its net zero targets without the engagement of its supply chain, and indeed its customers.

Put simply, if a corporate has a scope 3 net zero target, its suppliers run the risk of supply chain lock-out if they are not moving in tandem. In this report, we examine supply chain interlinkages for the largest 100 buyers across 17 industries (1,598 of the largest companies from a dataset of 102k), and their supply chains (65,805 suppliers), and

buyer/supplier alignment to 8,910 companies in the Science Based Targets initiative database, to examine the extent to which suppliers are aligned with customers.

The results are telling – for many industries, the largest purchasers of goods and services have scope 3 net zero targets, but their supply chains (from any industry) do not.

Figure 2. Delta between buyer alignment and supplier alignment to SBTi



Source: Citi GPS, Citi Services

This mismatch is particularly acute in the tech, communications, industrials and healthcare spaces, where buyers are leading both their supply chains and other industry buyers in setting science-based targets.

This highlights an important example of the benefits of treasury engagement and alignment earlier on in the sustainability journey - treasury can offer unique insights into business ecosystem risk. Moreover, it makes the point about connecting a company’s sustainability objectives to sustainable finance; treasury is also uniquely placed to *influence* these supply chains and business ecosystems via instruments such as sustainable supply chain finance (SSCF).

Beyond this, we look at numerous other forms of sustainable finance, such as Use of Proceeds instruments like green or social bonds<sup>1</sup>, through the broader general-corporate-purpose financing such as KPI-linked instruments. We look at procurement, trade and working capital solutions, payment flows data, sustainable deposits, tax (credits), and new instruments such as carbon credits, to name but a few opportunities.

Having demonstrated the linkage between the most sophisticated treasury operations and sustainability, and highlighted one key business risk which can be identified and managed by treasury, we lay out a series of practical steps, as well as

<sup>1</sup> According to the International Capital Markets Association (ICMA), a social bond is a use of proceeds bond which raises funds for new or existing projects addressing or mitigating specific social issues and/or seek to achieve positive social outcomes. A green bond is also a use of proceeds bond; the ICMA green bond principles seek to ‘support issuers in financing environmentally sound and sustainable projects that foster a net-zero emissions economy and protect the environment.

potential financing vehicles, by which the forward looking and engaged treasury can play a much greater role in a comprehensive corporate sustainability strategy.

We see sustainable finance as a vehicle to create a new generation of more broadly engaged treasury operations, with a full seat at the table in terms of strategy formulation and implementation.

## Why sustainability still matters

There is no doubt that the recent energy crisis, inflation, lackluster growth and the specter of stagflation, if not the fear of recession, has caused corporates, investors, governments and individuals to focus on more pressing issues, like keeping the lights on, the mortgage paid, or food in our bellies.

Add to this factors such as the impact of dollar denominated debt on emerging markets and capital outflows from emerging markets (where much of the investment in the energy transition is required), economies burning more coal, and traditional energy companies scaling back green ambitions, and you have a tough backdrop for ESG and sustainability.

Figure 3. Challenging environment for ESG

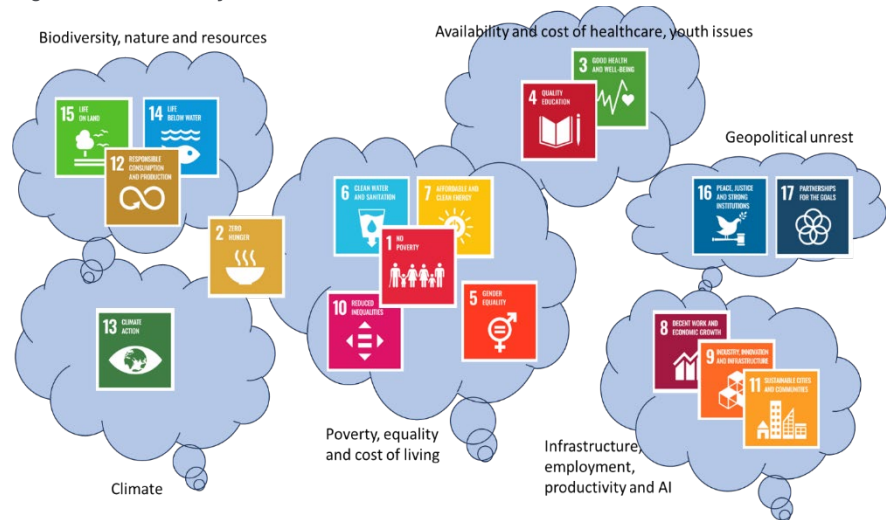


Source: Citi GPS

## Sustainability at the heart

There is little argument that 'ESG' needed to evolve from what was for some in the past a 'tick the box exercise' which rewarded transparency over business impact and real-world outcomes. However, the *themes* encapsulated by the broader concept of sustainability increasingly make up the megatrends positioned to drive the economy, society, politics, business, and the environment over the coming decades.

Figure 4. Sustainability at the heart of current issues



Source: Citi GPS

Wherever we look, if we think about the biggest challenges and opportunities facing the global economy, society, and the planet both now and in the coming decade, they are encapsulated by sustainability. This is supported by World Economic Forum’s 2024 Global Risks Report. For example, extreme weather was cited as the second-highest risk globally for 2024, moving to the number one spot in the ten-year horizon.

Figure 5. Current risk landscape



Source: WEF Global Risks Report 2024

Another way to illustrate this is the UN Sustainable Development Goals. For example, if we break them into thematic buckets, we see that environmental issues such as climate change remain front and center, while social issues such as the

cost-of-living crisis, poverty, and inequality, encapsulated by food security/food price inflation and rising energy costs/energy security remain high on the political, economic, and social agendas.

So while we might agree that 'ESG' needs to continue to evolve, sustainability remains a critical issue for us all, not least for business, and at the heart of our current challenges. Ignoring these megatrends and their economic, political, and social impacts is fraught with risk.

## Lessons from history

History tells us that while short-term dislocations can slow the pace of transition, they often result in a longer-term acceleration of these trends.

The early '70s provide an almost perfect facsimile of recent events – a world in economic turmoil driven by an energy price shock (the '73 oil crisis), itself driven by a conflict, which led to food price inflation, higher levels of inflation generally, and subsequently rising rates to try to tackle that inflation, as well as the collapse of the Bretton Woods System and resulting FX volatility.

Geopolitical tensions rose, and alongside this, industrial unrest increased dramatically with widespread strike action in countries like the UK, culminating in the so-called 'winter of discontent'. There were also long-term effects, with various policy initiatives launched that continue to show their impacts today.

## Longer-term implications

Following the energy crisis of 1973, the desire for energy security and to limit exposure to energy price volatility drove numerous policies around the world. One of the highest profile policies was Nixon's 'Project Independence', which as the name suggests aimed to increase the US's energy independence (the original plan, though unsuccessful, targeted energy independence by 1980). In essence it attempted to improve energy efficiency and develop new sources of energy such as nuclear, oil & natural gas (including shale), as well as coal, and increased energy-related R&D, all of which would drive American energy independence.

As it turns out, Nixon's dream was one of the less successful resulting transitions, and US energy independence wasn't to fully materialize until the shale boom facilitated it in 2019.

More 'successfully', in France it drove the so-called Messmer plan (named after the French prime minister of the time) whereby a desire for energy independence versus a history of almost entirely imported energy commodities, drove a shift in France's energy system becoming almost entirely nuclear (a legacy which is still much the case today though renewables are now making significant inroads).

Another initiative, the Proálcool program launched in Brazil, entailed higher blending requirements for bioethanol, reaching up to 100% today, reducing the country's dependence on oil imports and explaining why many of Brazil's domestic autos run on ethanol.

These longer-term implications were not limited to the energy complex, but also resonated through industries. The energy crises of the 70s laid the foundations for the transformation (and relative decline) of the US domestic auto manufacturing industry, as consumers transitioned from traditionally large, big engine US-manufactured autos to smaller-engine, more economical imported vehicles from Japan and West Germany.

## Short-term headwinds, longer-term tailwinds

So while these dislocations can provide challenges, they may actually accelerate fundamental shifts, which in many cases play into sustainability themes.

The European Union provides a more recent example of this dichotomy between a short-term slowdown and a longer-term acceleration of decarbonization. Following the start of the Black Sea conflict in 2022, the EU announced its intention to burn 5% more coal over the following 5-10 years versus prior expectations, equating to another 100 terawatt-hours (TWh) of power (in context, equivalent to the annual electricity consumption of Belgium), alongside the accelerated sale of €20 billion (approximately \$19.9bn) of surplus emissions permits, facilitating the release of a further 250 million metric tons (MMt) of CO<sub>2</sub>.

However, the Repower EU plan which resulted was aimed at accelerating the longer-term energy transition, with measures such as increasing the binding Energy Efficiency Targets from 9% to 13%; accelerating the roll out of renewables.

So, while the recent turmoil risks slowing the energy transition in the short term, Europe's underlying desire for energy security, self-sufficiency, and insulation from price volatility will likely accelerate the transition in the longer term.

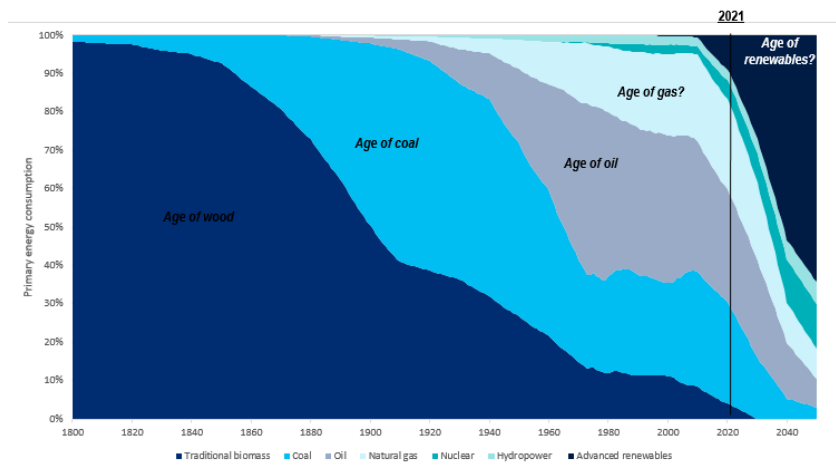
## Tipping points

It is a widely held fallacy that transitions to new and disruptive technologies 'tip' when the new technology reaches economic parity with the old.

While this might be true for certain commoditized items, it is not the case for long-lived capital-intensive assets such as a power station. The tipping point happens some way before economic parity, occurring when the direction of travel becomes so obvious, that to continue to invest in an older technology suggests an almost certain future of owning a stranded asset.

But this is not just true for power – it applies to anything with long-lived capital-intensive assets, with a risk of stranding if the wrong asset is built.

Figure 6. The Global Ages of Energy



Source: Our World in Data, Citi Global Insights

Moreover, as the above chart shows, when we 'tip', we tend to ultimately do so completely. We don't for example have 50% steam trains and 50% diesel/electric trains. From portable CD players to analogue cameras, the list is endless - but the point is always the same.

## What does this mean for corporates, and the role of corporate treasury?

The most obvious impact is a strategic one, in terms of ensuring that businesses remain aligned positively with these fundamental transitions (looking beyond short-term dislocations), and not exposed to associated risks such as stranded assets or shifting customer & consumer sentiments, or indeed regulatory change.

Being engaged in understanding these macro shifts can help act as an early warning system and to build expertise ahead of potential impacts.

Placing longer-term sustainability themes onto the corporate strategy backburner brings risk, not just because these themes are central to many current issues, but moreover it presents the risk of emerging from these dislocations as a laggard and falling behind once these themes re-emerge and accelerate.

A growing number of studies have reported a positive relationship between company financial performance and sustainability performance. For example, a recent MSCI study found that higher ESG rated companies saw a lower cost of capital, including future cost of capital, the reverse being true for companies that were downgraded to lower ESG ratings.<sup>2</sup> In our view, sustainability simply represents a broadening of the lens through which corporates need to think about strategic opportunity and risk – and corporate treasury must be a key stakeholder in that debate.

In this report we focus on the role of treasuries and examine how their operations can expand from their traditional focus on finance, liquidity, and reporting, and engage with earlier stages of a corporate's sustainability journey.

To help support the case, we have carried out two original assessments - the first examines whether there is a link between treasury sophistication and net zero targets and commitments, which we discuss in detail below. The second piece of analysis looks at treasury through the lens of supply chain and sustainability targets to assess supply chain net zero alignment and opportunities for greater supply chain engagement and risk management. This latter part is explored in detail in Chapter 3.

For the first assessment, we used the Citi Treasury Diagnostics Index, which is a proprietary dataset from Citi Services, measuring treasury sophistication, a measure of treasury sophistication. As a proxy for sustainability 'sophistication', we leverage the Science-based targets initiative (SBTi) database<sup>3</sup> which tracks companies' science-based GHG emissions reduction targets.

We recognize that it is only one sustainability factor and metric and is not the only initiative or determinant for companies taking positive action. However, corporate action on climate is still the most advanced compared to other sustainability issues moving up the corporate agenda i.e. water use, biodiversity loss, and science-based targets, for many, represents best practice in net zero action.

The Citi Treasury Diagnostic Index was created based on a comprehensive review of survey results gathered from corporate treasury between May 2019 and May 2023 through the Citi Treasury Diagnostics (CTD) service.

<sup>2</sup> <https://www.msci.com/www/research-report/msci-esg-ratings-and-cost-of/04811577649>

<sup>3</sup> <https://sciencebasedtargets.org/>

The CTD service offers benchmarking and analysis of a company’s treasury performance across six pillars: Policy and Governance, Liquidity, Working Capital, Subsidiary Funding and Repatriation, Risk Management, and Systems and Technology.

Over 350 companies participated in the survey, ranging in size from below \$2 billion to over \$100 billion in annual sales and from a diverse set of industries and regions across the globe. The index is discussed in detail in a Citi GPS [report](#) published last year which found that high-performing treasuries ensure that working capital is efficiently funded and liquidity is deployed to fund the company’s most important needs. They also proactively identify and mitigate financial risks.

Larger companies (measured by annual revenue) are generally more efficient and effective in their treasury policies, processes, and procedures.

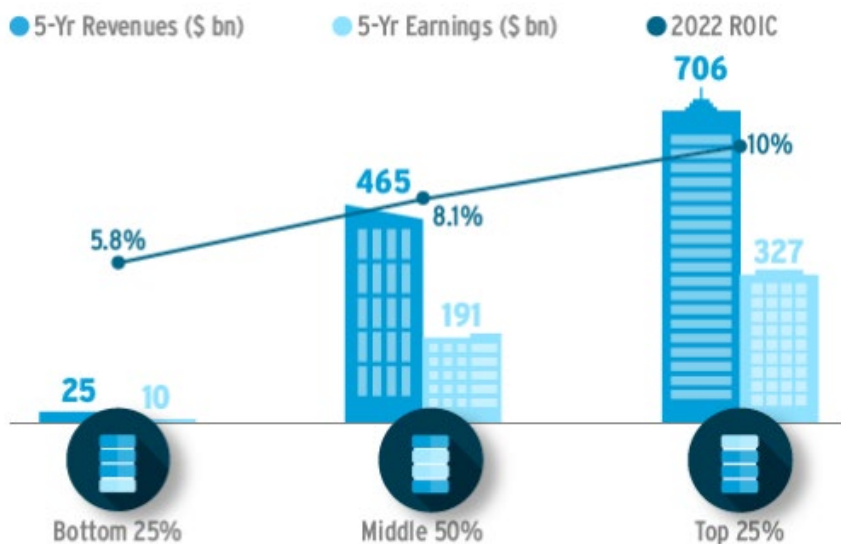
Figure 7. Performance of various sized companies in the 6 pillars of treasury



Source: Citi GPS, Citi Services

The report finds that there is indeed a positive correlation between treasury sophistication and company performance, and that companies that have nurtured treasury teams to be leaders in their field tended to enjoy stronger financial performance. Companies’ earnings-to-revenue ratio increased significantly between the bottom 25% and top 25% of treasuries, with the top 40 performing companies, as measured by the study, generating \$44 billion of additional earnings over the past five years.

Figure 8. Company revenue, earnings and ROIC as a function of treasury performance



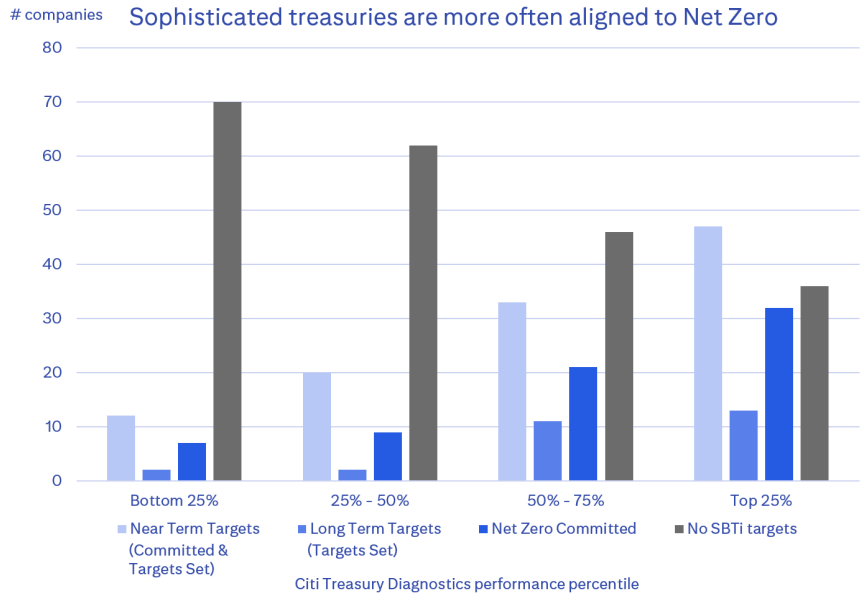
Source: Citi GPS, Citi Services

The treasury survey also found that 60% of companies are now looking for transformative opportunities across both their core business and treasury function (compared with 57% in 2021 and 49% in 2018). Most are focused on digital adoption and emerging technologies which is indeed important and found to correlate with treasury sophistication. We make the case that sustainability also offers a ‘transformative opportunity’ that treasuries (and business at large) should consider and can go hand-in-hand with digital adoption.

Our own assessment using the Citi Treasury Diagnostic Index and SBTi targets finds that sophisticated treasuries are most often aligned to net zero. This can be seen in the chart below with the difference between the top 25% and bottom 25% showing the most diversion between net zero commitments.

Companies with less sophisticated treasuries are showing meaningful progress towards setting near term targets but are at the nascent stage in setting long-term targets or net zero commitments. And they lag companies with more sophisticated treasuries on all measures of net zero alignment.

Figure 9. Correlation between treasury sophistication and net zero ambition



Source: Citi GPS, Citi Services

Figure 10. The Science Based Target initiative (SBTi)

### The Science Based Targets initiative (SBTi)

is a corporate climate action organization that provides companies and financial institutions with roadmaps to reduce emissions in line with the Paris Agreement goals, including sector specific guidance.

**The SBTi Corporate Net Zero Standard** supports companies to set targets aligned with climate-science for the path to meeting net-zero emissions by 2050.

Through the standard, corporate net-zero is defined as

- ❖ Reducing scope 1, 2, and 3 emissions to zero or a residual level consistent with reaching net-zero emissions at the global or sector level in eligible 1.5°C- aligned pathways and
- ❖ Permanently neutralizing any residual emissions at the net-zero target year and any GHG emissions released into the atmosphere thereafter

**Four key elements to a corporate net-zero target**

**Near-term science-based target**

5-10-year GHG mitigation targets, in line with 1.5°C pathways

**Long-term science-based target**

Targets showing how much value chain emissions reduction needed to meet global or sector level 1.5°C pathways by 2050 or sooner

**Neutralization of any residual emission**

Measures companies take to remove and permanently store carbon, counterbalancing impact of emissions that remain unabated after long-term target is achieved.

**Beyond value chain mitigation (BVCM)**

Mitigation action or investments falling outside a company's value chain

**Over 5,500 Companies**

As of July 2024, over 5,500 companies and financial institutions have GHG emissions reduction targets validated as science-based by the SBTi

Source: Science Based Targets initiative, Citi Global Insights, Citi Services

However, it is important to note that while sustainability and ESG risks may seem further away, they are increasingly closer to business operations and financial materiality, if not already ingrained in them. In a recent publication released in collaboration between Citi and PYMNTS Intelligence titled 'Why Treasurers' Influence Matters', closer collaboration between treasury and other departments was cited as positive, with 77% of treasurers in the study finding that finance departments would benefit from closer collaboration<sup>4</sup>. Other findings show how beneficial an influential treasurer can be on predicted cash flows, revenue outlooks, and adaptability to market pressures; the article can be read [here](#)<sup>5</sup>.

Over the coming chapters, we examine the process by which corporates can build an effective and integrated sustainability strategy, and how in particular how finance and treasury can, and indeed must, be at the heart of that transformational process.

From identifying material risks and opportunities, to managing supply chains on a 'scope 3' emissions basis, to the goals and targets, and the KPIs and metrics which support them, and the business ecosystem-wide strategies which must deliver them, not to mention the financing and reporting on those journeys, the opportunities for the forward-looking and engaged treasury operation are significant.

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<sup>4</sup> <https://www.pymnts.com/wp-content/uploads/2024/07/PYMNTS-Why-Treasurers-Influence-Matters-July-2024.pdf>

<sup>5</sup> <https://www.pymnts.com/wp-content/uploads/2024/07/PYMNTS-Why-Treasurers-Influence-Matters-July-2024.pdf>

# The corporate sustainability journey

The distance travelled on the corporate sustainability journey varies enormously between companies, even in the same industry.

It can be influenced by many factors, such as the geographic footprint of the company itself and its value chain, the industry, the business model, the customer base (B2B, B2C or both), resourcing, governance structure, regulatory backdrop, and many more factors. These factors in turn will also determine how a company is organized (or indeed not) around sustainability, and the level of engagement of the various business functions.

## 1. What purpose does your company serve?

All companies operate by providing either goods or services to elements of society, and for this to be successful there must of course be demand – hence the company is effectively meeting a need in society (though we must reflect that some companies create that need by developing demand for something new from scratch).

Asking what need your organization meets in society is often far more illuminating than the responses to more basic questions on purpose, which might just lead to an answer of 'we sell cars', rather than 'we provide mobility solutions to individuals, corporates and fleets either on a sales or leasing approach'.

In recent years, sustainability has become an integral part of corporate values and culture, to the point where many companies across all industries have incorporated sustainability into their corporate mission or purpose. This is a significant evolution from the minimum baseline or 'license to operate' and gives employees across the organization the responsibility and mandate to incorporate sustainability considerations into business decision-making across the organization.

Integrating sustainability into a company's core mission is becoming a competitive advantage to companies who align their values with those of their downstream value chain, whether their customers are companies large or small, or individual consumers.

A new benchmark is emerging for those companies who intend to differentiate themselves via their sustainability strategy and have already developed a deep understanding of their environmental and social impacts. This new era of sustainability goes beyond net-neutral targets and intentions to 'do no harm', by aiming to proactively target areas to have a net *positive* impact on the environments and communities in which a company operates.

Companies who not only cease to be part of the problem but start becoming part of the solution and incorporate this into their corporate purpose, have an opportunity to appeal to stakeholders - from customers to investors - in redressing balance and securing a place for their business in the sustainable economy of the future.

## 2. What are your impacts and the outcomes of your materiality analysis?

Having a net positive impact, rather than just a 'net zero' or neutral impact, is a concept that leading companies in sustainability are aiming at. This mindset shift is critical if we are to redress some of the damage already done to our environment.

Having thought in more detail about what our company does and what need in society it fulfils, we must think about the impacts the provision of the product or

service has on society, the economy, and the environment. Moreover, in this expanded world of 'double materiality', we also need to consider how the company depends on those areas - what does it use in terms of resources, financially, or indeed socially.

### **3. What risks need to be managed, and opportunities harnessed?**

Now that we understand the impacts and dependencies which our entity has on the world around it, we need to consider the risks and opportunities which are presented by these factors. Questions that a company could ask are - Is a negative impact likely to be regulated, constrained, taxed, or even banned in future? Are the things on which the provision of that service likely to continue to be available, or will they become more scarce/expensive, constrained (e.g. by exceeding planetary boundaries) or their use banned? Conversely, we should also consider what opportunities are presented by those impacts or constraints, e.g. the provision of alternatives or substitutions. How are our customers' needs or desires likely to change based on all of these factors we have previously considered?

### **4. What is your strategy?**

Companies need to look forward, not just over the next 12 months, but over the next 3,5,10 years (and potentially even longer if we consider factors such as energy transition). This is particularly important in industries involving capital intensive, long-lived assets, such as energy production, shipping, real estate, steel, etc. These assets may need to operate for multi-decades to generate a full return, and are we confident that these are the right assets? By identifying those goals and aspirations, we effectively set the end point, which we will need to build a strategy to reach.

Companies would then need to consider how they are going to get there. What steps will there be along the way? What resources, capital, skills, etc. will we need to get there? What obstacles will there be along the way? Do the required technologies exist to allow us to get there, or do we need to engage in R&D to invent, develop and commercialize those technologies ourselves? All these questions would form part of a company's strategy and will influence the implementation process of the strategy.

### **5. How do you plan to implement the strategy?**

A successful sustainability strategy implementation is underpinned by the support of strategic decision makers across the company, incorporating sustainability-related metrics into business KPIs or objectives and key results (OKRs).

How this structure of stakeholders interacts with central sustainable functions is also a critical component of accountability and effective communication with key stakeholders both internal and external (which we discuss below) on progress. The latter is usually managed by a central sustainability team- for example under the Chief Sustainability Officer. There are a wide range of organizational structures even within the same industry; the key is how these stakeholders interact to ensure accountability, progress and the ability to course-adjust as the regulatory environment, frameworks and best practices all evolve.

A decentralized strategy empowers business divisions and product lines to take ownership and accountability for integrating sustainability into their business strategy, including monitoring of performance against relevant KPIs or OKRs, and appropriate allocation of both financial and human capital. They can be guided by the 'north star' of the corporate sustainability strategy, whilst having the autonomy to make business decisions with sustainability in mind, and monitor the sensitivity of key stakeholders

(such as customers and suppliers) to their strategy, whilst benefiting from specialist expertise on specific aspects of their implementation strategy via the central sustainability team, and from the experiences of colleagues in other business areas who are faced with similar business challenges and opportunities.

Given the long-term nature of many corporate sustainability targets, it can be beneficial to adopt a mindset of continuous improvement. The cadence of sustainability metrics in business performance monitoring may differ from other business performance metrics; due to data availability, practicality of obtaining, aggregating and analyzing data, and the time periods over which progress is expected or anticipated, as well as other factors such as seasonal fluctuations in data or performance.

A key consideration in the accountability framework is performance incentives, facilitating the prioritization of the sustainability strategy alongside other critical business objectives such as financial performance, long-term growth, and resiliency of the business model.

### Philanthropy alignment

Some companies have viewed philanthropy as part of their sustainability journey, especially when it comes to the social pillar of that work. Indeed, it is not by coincidence that giving by corporations – including cash and in-kind giving, plus donations from corporate foundations – increased by 18% between 2018 and 2022 as companies increasingly formalized their approach to giving. We see three dimensions for philanthropy to contribute to the corporate sustainability journey.

First, charitable giving inherently seeks social benefit. While corporate giving cannot eliminate the need for socially responsible practices, both in a company's own operations and across its supply chain, giving to non-profits is one way for companies to deliver the positive social impacts that some companies seek. There are many different approaches to giving, including in-kind gifts of products and services, strategic giving through corporate foundations, or mobilizing employees as volunteers – all of them involve lending a company's resources and expertise to social and environmental causes.

Second, charitable giving and corporate volunteering can bring a company closer to stakeholders like customers and local communities. This allows companies to better understand the impact, both positive and negative, that they can have on local communities. As such, this presents an opportunity to define an impactful sustainability strategy that puts the communities in which a company operates at the center.

Third, corporate foundations are often ahead in how they think about social impact – and this knowledge can support the development of a sustainability strategy. The world of philanthropy has incubated frameworks for positive social impact for decades. Although they often require some translational efforts to apply to sustainability initiatives, corporations that engage in sophisticated giving programs can inherit these frameworks and the tools for measuring and reporting on social impact that often come with them from the professionals that manage their philanthropy.

There are plentiful reasons that companies engage in philanthropy, some of which we have discussed in our Citi GPS series, [Philanthropy and the Global Economy](#).

## 6. What stakeholders will you need to work to achieve it?

No corporate operates in a vacuum, and it will be implausible to meet these targets without engaging and working with external stakeholders. This involves a whole range of third parties, from suppliers, to distributors, customers, peers, industry bodies, regulators, policymakers, financiers, consultants, NGOs etc. Clearly as we move towards a 'scope 3' mentality where we are responsible for the performance of our supply chain, and the use of our product, focusing on supply chains and business ecosystems both up and downstream is critical – a subject which is examined in detail in the following section using data analysis.

Sustainability can even be thought of as a pre-competitive issue, where the urgency of the problem, and the potential benefits and risk mitigations may justify (acceptable) collaboration, even among competitors. One example of such industry collaboration is the Sustainable Agriculture Initiative (SAI) Platform<sup>6</sup>, founded in 2002 by Danone, Nestle and Unilever. The platform aims to be ‘the primary global value chain initiative for sustainable agriculture’ and now has over 180 members worldwide with companies across the agri-food supply chain including farmer cooperatives, traders’, manufacturers, processors, and retailers.

This type of industry-wide collaboration facilitates the sharing of deep domain expertise, toolkits and best practices between peers and industry experts, for the benefit of the whole industry and their upstream suppliers.

## **7. How will you finance that transition?**

None of this will happen without financing. A company needs to determine a couple of key things, for example, how much they need in finance, what the purpose is of the financing (capex, working capital), what is the intended outcome (business operations or transition investment), and from there, what financing mechanisms are available.

Companies looking to finance working capital might be expanding or growing their sustainable business line whereas, operational transition might require capex financing. As we will examine in detail later, financing can be key not just in providing capital, but also in terms of incentives and making it happen across supply chains. For example, large multinationals might leverage their credit relationship to enable smaller supply chain partners access to working capital at competitive rates.

## **8. How will you report on that transition?**

This is critical, not least for the providers of capital, but also for our business ecosystem and supply chains both up and downstream, as well as for customers, regulators etc. Having the correct narrative, combined with milestones and data on performance is key to taking stakeholders along that sustainability journey with you.

Reporting on sustainability can be voluntary or mandatory. Many companies choose to disclose information voluntarily before mandatory standards and requirements are in effect, via engagement with their key stakeholders (such as investors) on what information they want to see. Even some private companies choose to disclose publicly on their key sustainability priorities and progress towards targets.

Voluntary reporting can be an important engagement tool with customers and communities, as well as a step towards gathering the data sets needed to support mandatory reporting as it is rolled out. Many companies select the voluntary reporting standards that they will disclose to themselves, potentially via engagement with key stakeholders such as investors, while others, particularly small and medium enterprises (SMEs), may have been encouraged or requested to do so via their large customers, who want to ensure they have visibility into their supply chain's sustainability footprint, or have set either minimum standards that they want to ensure their suppliers meet, and/or targets for improvements that they must work towards over time in order to remain in the supply chain, due to a required alignment with the sustainability commitments of the buyer.

Voluntary reporting standards include the Global Reporting Initiative (GRI), the Greenhouse Gas (GHG) Protocol, the SBTi and the Carbon Disclosure Project (CDP), among others. Some even work together, for example the SBTi utilizes the

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<sup>6</sup> <https://saiplatform.org/>

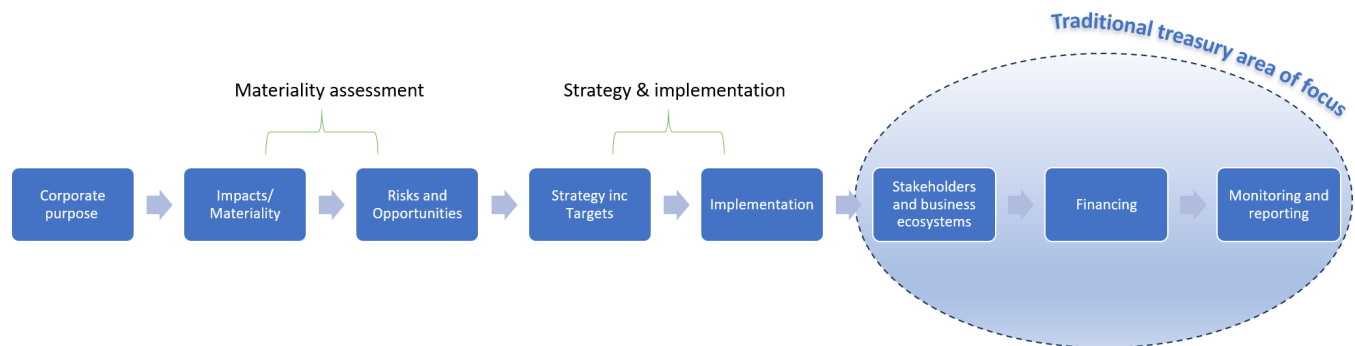
GHG Protocol to validate that a company's emissions reduction target is both comprehensively reported, and aligned to climate science, while the Carbon Disclosure Project enables companies to report annually on their progress towards their validated SBTi target (in addition to reporting on their impact on other key environmental domains, including Water, Forests and Plastics).

The Task Force on Climate-related Financial Disclosures (TNFD) and Task Force on Nature Related Financial Disclosures (TNFD) are global recommended climate and nature-related disclosures, and they are endorsed and mandated for large entities in some countries. For example, the UK government has mandated TCFD-aligned disclosure for large private sector entities.<sup>7</sup>

Mandatory reporting standards vary considerably across jurisdictions, sectors and sustainability criteria, and there are different speeds of travel between different jurisdictions. A few keystone reporting directives include the Corporate Sustainability Reporting Directive (CSRD), the Corporate Sustainability Due Diligence Directive (CSDDD) and the Carbon Border Adjustment Mechanism (CBAM) which are requiring companies to understand and report on sustainability factors, in some cases beyond emissions to ESG more broadly, and throughout their supply chain.

The CSRD requires companies undertake a Double Materiality Assessment (DMA) which means that companies have to report not only on how sustainability issues might create financial risks for the company, but also on how the company impacts on the environment and society. The European Parliament has estimated that around 50,000 companies will be legally mandated to report on their sustainability risks and impacts, and an analysis by Refinitiv identified at least 10,300 non-EU companies will likely be subject to the directive.<sup>8</sup>

Figure 11. The Corporate Sustainability Journey, and Treasury's Traditional Focus



Source: Citi GPS

<sup>7</sup> <https://www.gov.uk/government/publications/tcf-aligned-disclosure-application-guidance/task-force-on-climate-related-financial-disclosure-tcf-aligned-disclosure-application-guidance#:~:text=The%20UK%20government%20formally%20endorsed,entities%20in%20the%20private%20sector>

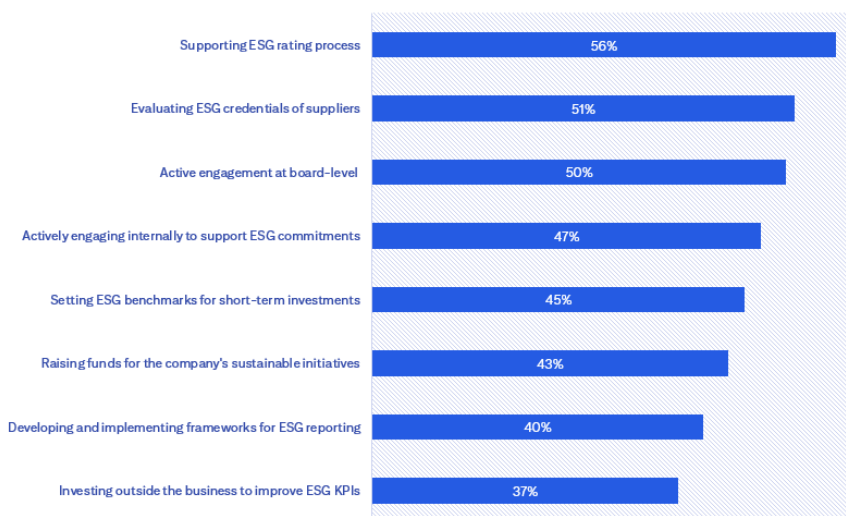
<sup>8</sup> <https://www.lseg.com/en/insights/risk-intelligence/how-many-non-eu-companies-are-required-to-report-under-eu-sustainability-rules>

## Treasury’s traditional areas of focus

Treasury’s traditional areas of operation and expertise are typically found at the latter stages of the corporate sustainability journey, namely in focusing on procurement, financing, and reporting.

Driven largely by stakeholder expectations and regulatory pressures, corporate treasuries are increasingly integrating ESG and sustainability into their functions, and leading on green financing solutions and investment policies as well as ESG integration in risk management and corporate governance.

Figure 12. ESG strategies treasurers have already implemented (Aug-Sept 2022)



Source: Economist Impact Survey September 2022<sup>9</sup>

For companies which have a green and/or sustainable financing framework, whether they have issued ‘Green’ or ‘Sustainable’ bonds<sup>1</sup> already or are signalling their commitment to sustainability to their financial stakeholders, it logically follows to assign someone within Treasury to own that framework. That party will coordinate engagement with the central sustainability and finance functions around reporting relating directly to the framework, as well as developments in the regulatory and business environment which could affect engagement with financial stakeholders on the topic of sustainability.

Strong monitoring, reporting and an honest and comprehensive narrative regarding a company’s sustainability journey is critical, and this is an area where treasury can take the lead.

As ESG/sustainability regulations evolve and mandatory reporting requirements come into play, finance functions are becoming increasingly involved in the reporting of sustainability-related metrics – often via the emerging new role of ‘ESG Controller’ under the Chief Financial Officer (CFO) function – with the Finance organization’s involvement contributing to the quantification of impact and the credibility of metrics over the more anecdotal examples of sustainability-related initiatives which tend to be front and centre in many early iterations of voluntary reporting.

<sup>9</sup> ‘Treasury’s expanding role in supporting corporate ESG strategies’, ESG strategies treasurers have already implemented, Aug-Sept 2022, Economist Impact

Therefore, treasurers are well placed to drive ESG reporting, compliance and alignment across the business, ensuring the company is adopting best practices and incorporating the needs of key stakeholders in its disclosures.

### Technology as an enabler

As ESG regulatory frameworks and reporting standards evolve around climate and now increasingly on nature and social factors, data collection and collation is fast becoming a key area of focus, and potential pain point, for treasurers. A 2022 Treasury survey by the Economist Impact found difficulty in data collection and reporting to be among the top 3 challenges to implementing ESG initiatives. Treasuries can leverage technologies and digital tools to improve operational efficiencies and support and optimise data collection and analytics of both financial and non-financial ESG relevant data to support monitoring and reporting. Emerging technologies that could be deployed include Machine Learning (ML) / Artificial Intelligence (AI), blockchain, and big data. A report from Citi's Business Advisory Services team found that across ESG, data and reporting are key challenges AI can help tackle – traditional AI methods can help to validate and check data, while Generative AI (GenAI) can help with partially automating report generation. As treasuries grapple with changing and evolving ESG regulatory disclosure requirements, AI capabilities may help in the need to report against multiple frameworks. However, the authors also note that the ability to utilise AI methods may require firms to improve data practices e.g. from the standardisation of data within the firm to better unification of data infrastructure and having the technology available to collect the data.

More broadly, the Citi GPS report on Treasury Leadership which we referenced earlier also found that digital adoption is now a priority for many corporate treasuries. We believe that treasury digitisation can work hand in hand with sustainability and greater ESG integration, especially in supporting ESG reporting.

However, as we shall examine in the next section of the report, treasuries can further expand their influence, impact and contribution through the lens of supply chains and financing across the earlier stages of a corporate's sustainability journey.

By doing so, forward looking and engaged treasury operations are well placed to capture the financial benefits alongside supporting the company and broader business ecosystems to achieve their collective goals.

## Expanding treasury's remit, impact and contribution through the lens of sustainability

Treasurers have unique insights into factors that are truly material for the business, and so engagement early during the Materiality Assessment stages (impacts/materiality and risks/opportunities) of a company's sustainability journey can help to ensure financing is aligned with assessments of risks and opportunities, and early discussions are held on how financial tools can be used to manage risks and support growth opportunities around sustainability themes.

Continued collaboration during the formulation of the strategy as well as Implementation stages are important for aligning financial operation objectives with sustainability strategy priorities.

Greater alignment of treasury operations and sustainability strategy can deliver both financial and non-financial benefits. In terms of financial benefits, a straightforward example could be the investment of excess cash in green or sustainable deposits which are deployed towards environmental and social projects – returns may be generated whilst supporting the company's sustainability objectives.

Alignment of sustainability objectives to financing may also have a positive impact on the cost of capital and improve access to new pools of capital, often via the use of innovative sustainable finance products or structures. It may also facilitate better engagement with stakeholders such as impact investors who have sustainability objectives at the core of their investment strategy.

Treasuries have expertise in risk management and governance, and alongside their extensive operational reach and influence, are also well positioned to drive sustainable practices across the company, as well as throughout wider business ecosystems.

### Supply chain risk and opportunity

Companies and industries cannot reach 'net zero' alone; significant coordination and collaboration through value chains and across industries is needed. According to a report by BCG and WEF<sup>10</sup>, eight supply chains account for more than 50% of global emissions: food (25%), construction (<10%), fashion, fast-moving consumer goods, electronics, automotive, professional services, and freight. For some companies, not least in the world of finance, scope 3 emissions can represent >90% of their total emissions.

However, insights from CDP find that companies are failing to engage suppliers on climate as well as nature despite incoming regulation. Hence the implication is clear; greater efforts are needed by companies to tackle supply chain emissions and nature impacts. Accordingly, companies should consider the following question - how can both upstream (suppliers) and downstream (including transportation, use of goods and end-of-life) supply chains support your sustainability journey, and how can you play a part in theirs?

To be clear this is both a necessity in terms of reaching scope 3 net zero, but also a material risk. Companies will need to engage their supply chains to hit their own targets, and where those suppliers are holding a company back, they may impose

<sup>10</sup> BCG/WEF (2021) The Supply Chain Opportunity

stricter terms, or at the extreme switch suppliers to someone who is aligned with their sustainability objectives.

They may also offer better terms – by negating the need to e.g. purchase carbon credits to offset supply chain impacts which are beyond their direct control. It takes little imagination to see that considering switching suppliers yourself, could just as easily be applied to your own business by your own customers. Put simply, not aligning objectives with supply chains, both up and downstream presents the risk of being frozen out of business ecosystems, with the resultant loss of market share, revenue etc.

**Figure 13. Illustrative Example of Meeting Net Zero Target as a Buyer**



Note: This chart is only an illustrative example of ways to meet net zero targets from the buyer's perspective. For example, expenses incurred from buying offsets when working with suppliers who do not share a net-zero target.  
Source: Citi Global Insights

To help support our case for greater supply chain engagement, we carried out an analysis using proprietary data from Citi's Services business on supply chains in combination with SBTi data, to identify industries and supply chains where net zero alignment is limited/extensive.

The Citi Services supply chain dataset maps out the supply chains of over 100,000 companies across 17 industries. We combined this with the 8,910 companies in the Science Based Targets initiative database, as of June 2024. We focused our analysis on the largest 100 clients across each of the 17 industries (1,598 corporate buyers), and their supply chains.

We found 3,791 companies in both the Citi buyer and the SBTi data sets, for which we can map SBTi targets and net zero alignment, and we are also able to map to Citi's definition of company industry. We then mapped each company's supply chain to the 8,910 companies in SBTi's database, via Citi Services transactions data.

This unique combination of insights allows us to assess which industries' largest companies are being constrained by their business ecosystems. This data then allows us to examine preparation for scope 3 emissions compliance and explore possible application of incentives via e.g. supply chain finance.

Figure 14. Methodology - Buyers and Supply Chain Alignment to SBTi

<b>Methodology – Buyers and Supply Chain Alignment to SBTi</b>	
<p>For our analysis, companies are grouped as buyers and suppliers and then grouped by Citi industry categories. The study then details the perspective of a company as a 'buyer' and maps out their supply chain to determine if their suppliers' commitments are aligned to the buyer's SBTi commitments. Using this information, we produce a risk category grouped by industry and displayed in quadrants as either low, moderate, or high risk where the higher risk category means higher risk to the buyer due to misalignment with suppliers and low risk indicates lower risk to the buyer.</p>	
Buyers defined as	<ul style="list-style-type: none"> <li>• Citi mapped entities which are both included and not included in SBTi data set. Then excluded SBTi entities which do not map to a Citi parent client ID (reducing the SBTi dataset from 8,910 to 3,791)</li> <li>• The total number of in-scope buyers (i.e. not excluded) is 1,598</li> <li>• The top 100 by Industry defined were defined by their Citi client industry, and company annual sales (threshold &gt;\$500mm, CapIQ annual sales, Fiscal Year 2023)</li> </ul>
Supply chain relationships inferred from combined data sources	<ul style="list-style-type: none"> <li>• Citi Transaction Data - Collection of Payments and Receivables that passes through Citi Network, where Citi is either a Remitting Bank, or Beneficiary Bank or an Intermediary Bank or all</li> <li>• Dun &amp; Bradstreet Shipping Data - Shipping data capturing information on all involved parties, ports, shipments, and departure &amp; arrival times of all shipments from ports capturing 65% of global maritime container trade</li> <li>• Bloomberg Supply Chain Data - Data on the global supply chains of large international firms to study the web of interactions between companies, their suppliers, and their customers</li> </ul>
Suppliers defined as	<ul style="list-style-type: none"> <li>• Suppliers of the Top 100 in each buyer industry (as defined above)</li> <li>• Including all SBTi data set plus Citi parent client ID dataset, and excluding entities which do not map to a Citi parent client ID (reducing the SBTi dataset from 8,910 to 3,791)</li> <li>• The total number of in-scope suppliers is 65,805</li> </ul>

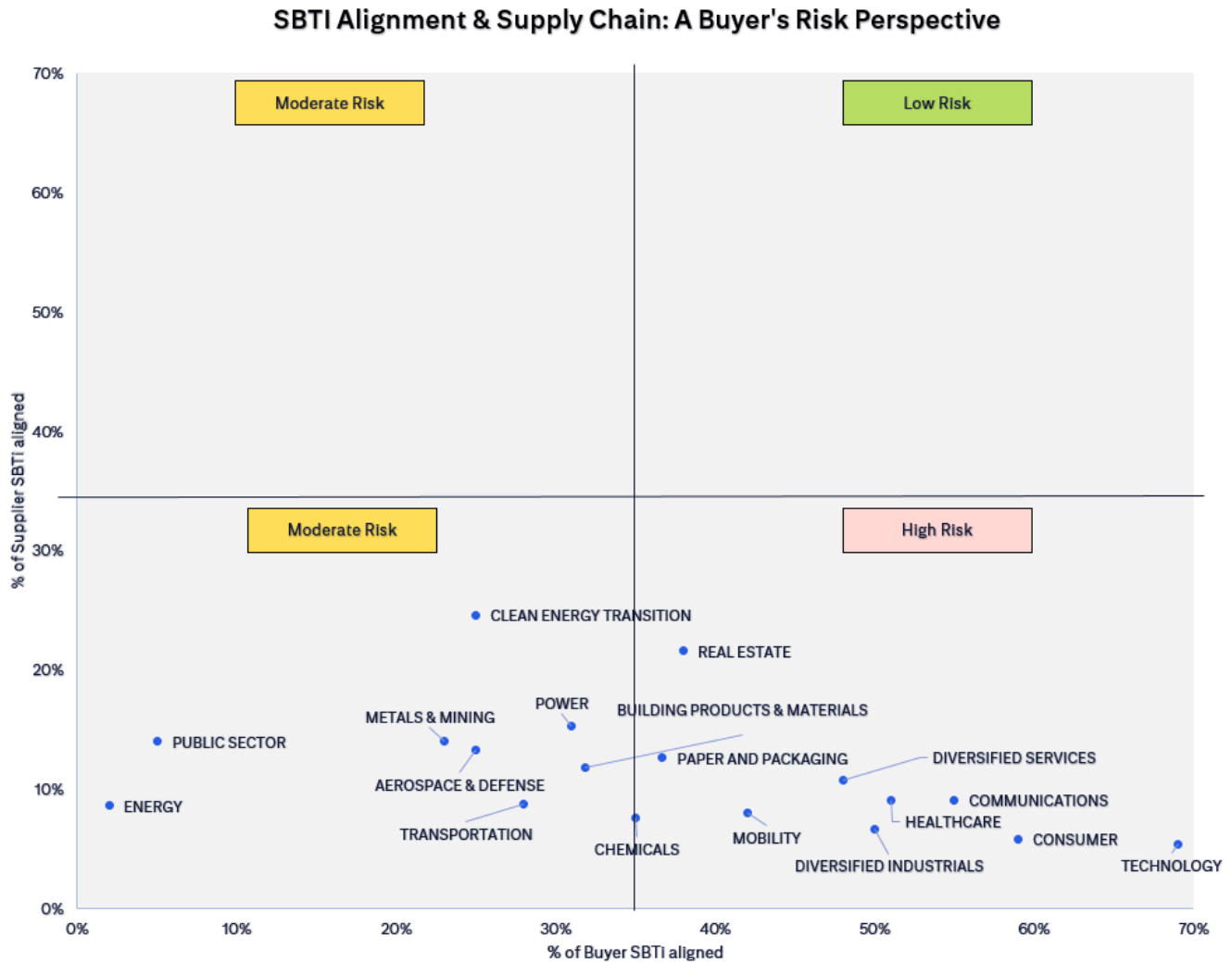
Please note that all companies have been mapped using Citi's sector specific mapping. Companies in the energy / oil & gas sector and the public sector cannot currently set targets with SBTi. The SBTi is developing a standard for companies within the oil and gas sector. SBTi does not currently assess targets for cities, local governments, public sector institutions, educational institutions, or non-profit organizations. Where companies in the Top 100 buyers have been classified as either Energy or Public Sector, these are Citi's sector mappings. These sectors have been included in the analysis to show the alignment of their supply chains to net zero.

Source: Citi Global Insights, Citi Services

It is worth noting that this piece of analysis focuses only on supply chain net zero alignment using the SBTi data as a proxy, but there is also a broader scope of environmental and social factors such as water usage, deforestation and human rights that may also be material considerations in a company's supply chain.

Figure 15 shows SBTi alignment between buyer and suppliers through the lens of the buyer industry i.e. the named industry is the "Buyer". The percentage of Buyers that are SBTi aligned is shown along the X axis to demonstrate in which industries there is leadership and action being shown by the top 100 companies. The Y axis shows the percentage of an industry's supply chain that is SBTi aligned and considers all industries that supply the buyer.

Figure 15. SBTi alignment between buyer and suppliers: A buyer's risk perspective



Enter Footnote

Source: Citi GPS, Citi Services

The chart is divided into quadrants, with the positioning messages as follows –

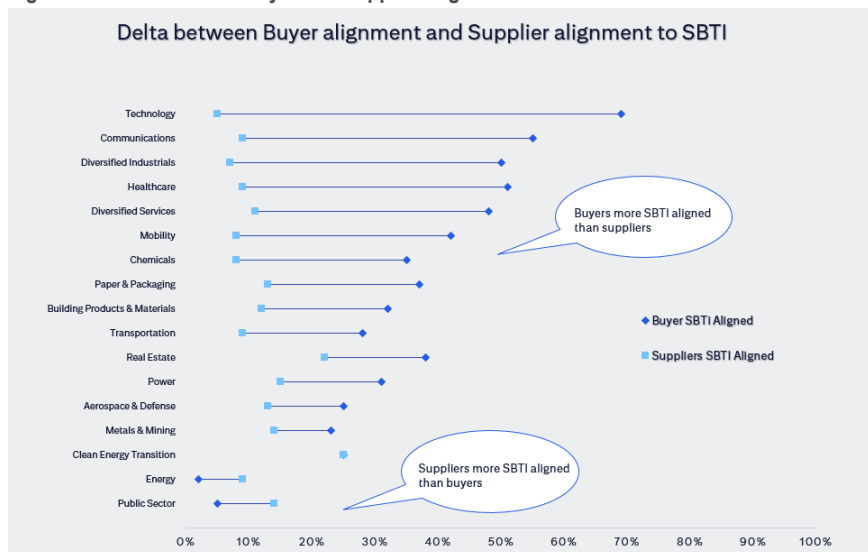
1. No industries in the top right quadrant implies that there is no widespread adoption of SBTi targets amongst buyer's supply chains, and supply chain net zero alignment is limited. This shows that there is plenty of room for improvement across industries that supply the buyer in adopting net zero best practice. This quadrant being populated with industries would be the goal, where most buyer industries and their supply chains are net zero aligned, supporting value chain decarbonization.
2. The well populated lower right quadrant shows industries where there is widespread adoption of science-based climate targets amongst the largest companies in buyer industries, but this is not widely reflected in their supply chains. This implies that the scope 3 emissions compliance/targets of buyers could be at risk, and conversely, that suppliers who are not aligned with the sustainability objectives of their buyers risk supply chain lock out. There is

significant scope for buyers here to leverage sustainable supply chain financing solutions to incentivize suppliers to improve sustainability disclosure and/or performance. Technology and Consumer appear to have largest delta between buyer alignment and supplier alignment to SBTi.

3. The lower left quadrant shows low SBTi alignment across buyer industries and their supply chains. This suggests buyer companies in these industries and their supply chains could face growing transition risks. Again, we would like to recognize that SBTi is not the only indication of climate action.
4. The top left quadrant, though not populated with industries as of this analysis, is considered of low risk to any buyers who would lie in this category. Those who would be in this category are buyers who have a supply chain that is more SBTi aligned, or at least have higher stated target alignment, than the buyer itself. This is low risk to the buyer in this case but important to note that this does not include the risk that their suppliers might be concerned about their own downstream emissions and could start looking to work with buyers who are more SBTi aligned in the future. Further to this point, the buyers themselves will have their own emissions risk to worry about in this case.

Another lens is to consider the delta between buyer industry and their supply chain alignment to SBTi, to assess which industries show the biggest misalignment. Figure 16. groups the industries by the size of the delta (% of buyers minus % of suppliers).

Figure 16. Delta between buyer and supplier alignment to SBTi



Please note that these are Citi's sector mappings. Companies in the energy / oil & gas and the public sector cannot currently set targets with SBTi. These sectors have been included in the analysis in order to show the alignment of their supply chains to net zero. Please see the Methodology box on page for more details on SBTi's approach to these sectors.

Source: Citi GPS, Citi Services

As we can see from the figure above, there is scope for greater alignment between buyers and their supply chain across most industries. Those with the biggest misalignment i.e. technology, communications, diversified industrials, and healthcare, are where we see the greatest opportunities for buyer companies who have SBTi targets to engage with their suppliers and collaborate to measure and manage scope 3 emissions.

This figure also helps to illustrate there is still much progress to be made across all industries – those which do show greater buyer-supplier alignment have limited SBTi adoption overall.

Supply chain decarbonization brings risk and opportunities for buyers and suppliers. A key first step to managing the risks and opportunities for any company is baselining their supply chain emissions, and developing the capabilities to collect, measure and report on scope 3 emissions.

From there, companies can assess supply chain risks and opportunities to achieve value chain decarbonization. The next figure illustrates some of the scenarios buyers and suppliers in a supply chain may find themselves in, and the risks and opportunities that they present.

**Figure 17. Managing Supply Chain Risk: SBTi Alignment of Suppliers and Buyers**



#### Risks and Opportunities: A Buyer's Perspective



Source: Citi Global Insights

These findings provide a high-level overview of the analysis, but the dataset also lends itself to much more granular assessments and insights. For example, through our analysis, companies can determine a whole market view for suppliers and buyers, examine how they compare to their peers, and assess net zero alignment across the full breadth of their supply chains.

This analysis can be enhanced in the future by layering in other sustainability-related metrics beyond carbon emissions, such as other environmental factors (including deforestation, water, biodiversity and nature), and social factors (including human rights and diversity, among others).

## Implications for treasury and procurement

Treasury and procurement collaboration can help to incentivize sustainability through the value chain. In developing their sustainable procurement strategies, many companies have developed a baseline of their minimum expectations, such as a “supplier code of conduct”, either referencing proprietary scoring or metrics, or a standardized approach offered by some third parties.

The approach to ensuring adherence to the criteria can vary; it **can** be supported by internal teams, or by working with external partners, including those who specialize in ESG or sustainability assessments, or broader-scope auditing companies. Treasurers around the world are expanding their mandate to include evaluating ESG credentials of suppliers and other external partners.

Key supplier sustainability metrics can be integrated into supply chain finance (SCF) programs, providing incentives to suppliers by improving working capital, in reward for improved sustainability disclosure and/or performance. The genesis of Sustainable Supply Chain Finance programs often starts with the company’s procurement strategy, and potentially a ‘supplier code of conduct’, which the sustainability team may have had input into (along with procurement and/or treasury), or the company may be looking to enhance to incorporate sustainability metrics from scratch, as part of the company’s sustainability strategy implementation.

Sometimes the conversation starts from the opposite angle, of wanting to explore how to deploy new sustainable finance solutions to help with sustainability strategy implementation. Regardless of the starting point, the sustainability metrics of a SSCF program should align with some part(s) of the company’s overall sustainability strategy.

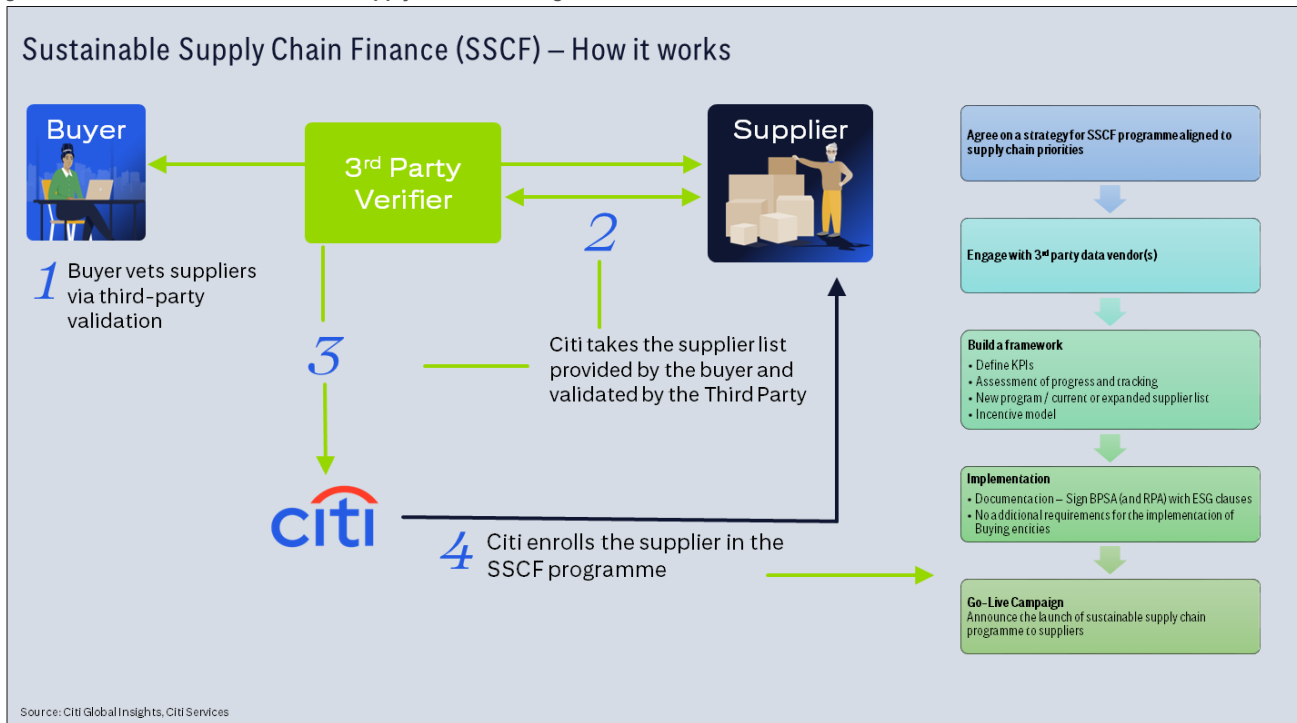
The factors a company focuses on can range from Scope 3 emissions – a key objective of many in their engagement with their suppliers – to broader environmental factors, such as deforestation, water usage and pollution, and biodiversity and nature, and to social factors, such as human rights and diversity.

Some approaches consider suppliers’ ESG credentials across a broad set of environmental and social factors, sometimes differentiated according to an ESG risk assessment of particular groups of suppliers and their material risk factors.

Supply chain finance solutions can also help to improve data disclosure and performance on sustainability criteria through the value chain.

The figure below shows a simple flow chart of how SSCF works.

Figure 18. Process flow of sustainable supply chain financing



Source: Citi GPS, Citi Services

Figure 19. Examples in Supply Chain Finance: Aligning Metrics to Targets

Examples in Supply Chain Finance: Aligning Metrics to Targets
<p>Citi Services offers corporate clients the ability to integrate environmental and/or social metrics into their Sustainable Supply Chain Finance programmes. One environmentally-focused supply chain scoring solution utilises metrics from Carbon Disclosure Project (CDP), a not-for-profit running the global disclosure system for companies, investors, cities, states and regions to manage their environmental impacts.</p> <p><b>This enables:</b></p> <ul style="list-style-type: none"> <li>❖ Buyers to identify and engage with their suppliers to evaluate their potential climate impacts, deforestation, biodiversity, plastics and water security risks, through CDP's disclosure platform</li> <li>❖ Buyers to use reported data to measure performance and track progress towards their own targets and commitments set for their supply chain and overall sustainability strategy.</li> <li>❖ Buyers to incentivise performance and/or improvement in metrics over a multi-year period.</li> <li>❖ Companies to use Citi's Sustainable Supply Chain Finance with CDP's metrics as a tool in the implementation of their sustainability strategy for their supply chains.</li> </ul> <p><i>“ CDP data shows that supply chain emissions (scope 3) are 26x that of their direct operations emissions, scope 1 and scope 2.</i></p> <p><i>Companies use data disclosed through CDP, and our Supply Chain Program, to enhance Scope 3 transparency by mapping out carbon emissions across their suppliers, identifying hotspots, and prioritizing reduction efforts. The granular insights enables businesses to understand their supply chain and better collaborate with suppliers with targeted decarbonization strategies, driving down emissions. As a result, CDP data supports regulatory compliance and empowers companies to achieve meaningful progress towards their environmental sustainability goals. ”</i></p> <p><i>James Chamberlayne, Director, Sustainable Finance Program, Capital Markets Carbon Disclosure Project</i></p>

Source: Citi Global Insights, Citi Services

## Engagement with supply chains

Corporate sustainability is not possible without supply chain sustainability, and greater supply chain engagement is needed to mobilize the cross-industry collaboration needed to implement wide-scale change.

The journey to supply chain sustainability requires a significant undertaking to capture data and measure and/or estimate exposure through multiple tiers of the value chain.

Transparency into supply chain emissions can be complicated without the right infrastructure and engagement with suppliers, since many companies acting as suppliers are not publicly traded entities, and therefore may not be subject to the same reporting, regulatory and transparency expectations as larger public companies.

It is, however, crucial for companies to have insight into their full supply chain's greenhouse gas (GHG) footprint.

This is not a 'nice to have' exercise. Reporting directives including the Corporate Sustainability Reporting Directive (CSRD), the Corporate Sustainability Due Diligence Directive (CSDDD), the Carbon Border Adjustment Mechanism (CBAM), California SB 254 Disclosure Regulation, Singapore Mandatory Climate Disclosures, as well as the EU Deforestation Regulation (EUDR) are requiring/will be requiring companies to understand and report on sustainability factors, in some cases beyond emissions to ESG more broadly, throughout their supply chain.

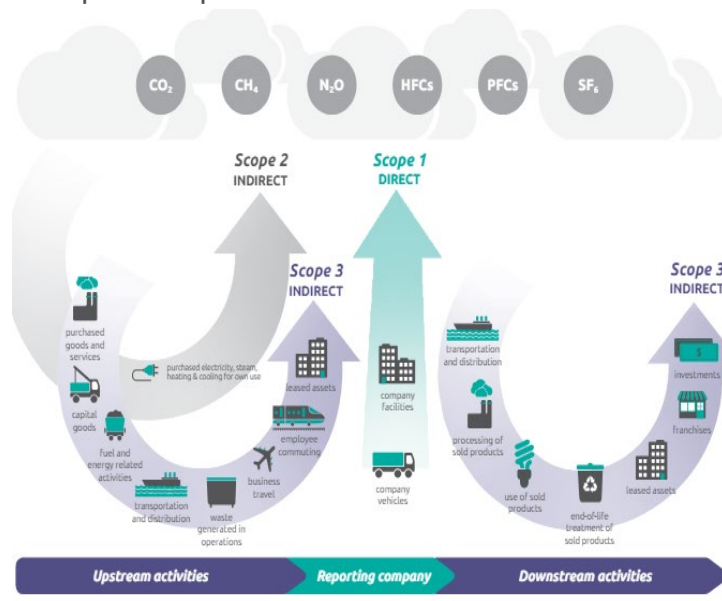
Companies can use both incentives and stipulations to facilitate improvements in both disclosures and performance of suppliers, for example using supply chain financing as discussed above.

Banks are well positioned at the intersection of industries to facilitate and support engagement, given a client base that spans across industries and extensions into the supply chains of their corporate clients, either via direct client relationships or supply chain financing and payment processes.

Although focused on GHG emissions, and not the broader scope of environmental and social factors, the Scope 3 emissions categories within the Greenhouse Gas Protocol can be useful for defining the scope of relevant stakeholders to engage with on all aspects of a company's ESG strategy, with particular focus on emissions.

It's likely that understanding the social aspects of a company's footprint, such as human rights, and other environmental impacts beyond emissions such as water usage and pollution and deforestation, will also involve gathering information and data from the same groups of value chain stakeholders. We identify some ways in which engagement with trade finance, liquidity management solutions and payment infrastructure providers can facilitate alignment specifically between the corporate sustainability strategy and supply chain, using the Scope 3 categories as a guide.

Figure 20. GHG protocol scopes and emissions across the value chain



Note: Not all categories are relevant to all corporates  
 Source: GHG Protocol, Fig 5.2 in Corporate Value Chain Accounting Standard

**Upstream activities –**

**Purchased Goods & Services:**

While many companies have developed a ‘supplier code of conduct’ as part of their procurement strategy, the sustainability and provenance of the underlying goods they procure is important to understand. Supply chain data is currently focused on the corporate level attributes of suppliers; a more complex challenge is the product- and service-level granularity.

Without this information, companies find it difficult to attribute emissions and other sustainability factors to the specific goods or services they are procuring from a supplier, and therefore to make sustainable procurement decisions.

Partnering with financing partners and data providers could assist companies to make informed decisions, initially at the supplier level, and as technology and traceability mechanisms evolve – which is already evident in some commodities supply chains – at increasingly more granular levels.

**Capital Goods:**

As with purchased goods and services, the capital goods that a company procures are often difficult to differentiate from an ESG footprint perspective from those of the company who produces the goods.

Additionally, circular economy and ‘machinery as a service’ will become increasingly important as companies look to optimize their revenue model for circular product design, recycling of parts, right-to-repair, incorporation of recycled materials, and other sustainable design considerations. Sustainable finance solutions can facilitate the transition to a circular economy, and integrating innovative payments solutions will be an important part of enabling business model design towards sustainability objectives.

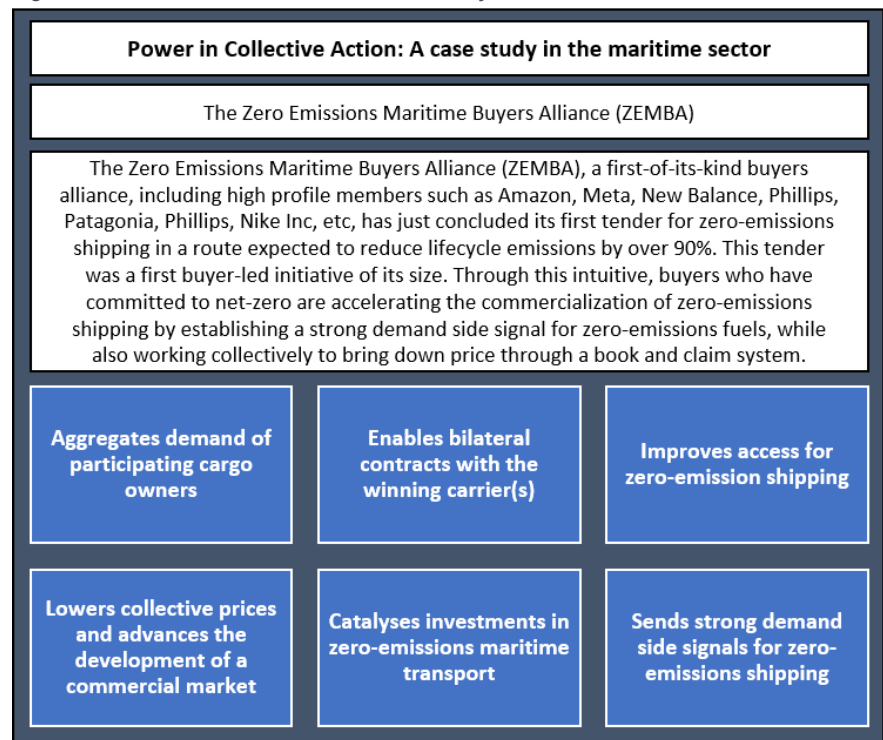
## Transportation & Distribution:

This is an important consideration for companies with global value chains, and particularly relevant for heavy goods. Consideration of factors relating to this category may be relevant to discuss with financial institutions supporting global trade of those goods, including letters of credit and guarantees, as banking partners may be able to leverage data in helping the business to make more sustainable procurement and transportation decisions.

One useful example comes from the shipping industry, where shipping companies have been cautious regarding investment in the next generation of ships, due to uncertainty about propulsion technologies, the availability of fuels (e.g. ammonia), and associated costs.

However, certain large customers, being cognizant of the need for zero emissions shipping as part of their scope 3 commitments, are working with shipping companies to provide a greater level of certainty regarding volumes (demand) and associated price. One alliance that has emerged is the Zero Emissions Maritime Buyers Alliance (ZEMBA) which we highlight as a case study below.

Figure 21. Power in Collective Action: A case study in the maritime sector



Source: Citi Global Insights, Ammonia Energy Association, Cozev.org

## Waste generated in operations:

Growing stakeholder and regulatory pressures on corporates to address nature impacts means there will be increasing focus on pollution and waste. Reduction of waste can represent an opportunity to improve efficiency in production processes, which sustainable finance solutions could enable. Opportunities also lie in innovative circular economy solutions which aim to minimize waste or even design waste out of production processes.

### **Business Travel:**

Payment infrastructure linked to carbon accounting tools and data providers can be leveraged to facilitate more sustainable business decisions. Conversations may span procurement via Corporate Cards programs, as well as Payments infrastructure providers. Banks and payments infrastructure providers can start to think beyond the concept of labelled products, to help their customers gain access to data that can better inform sustainable procurement decisions.

### **Employee Commuting:**

Many companies provide incentives to employees, for example to purchase bicycles for commuting, or pre-funding season tickets for public transportation. For companies with large workforces, it may be beneficial to discuss working capital solutions for employee benefits programs dedicated to encouraging greener choices.

### **Downstream activities –**

#### **Leased assets:**

In situations where companies are leasing property and are unable to improve energy efficiency of the asset themselves, carbon credits and removals may be one way to facilitate carbon neutrality within the constraints of their current contracts. Other solutions, such as innovative resolutions for working capital, that can be explored.

#### **Transportation & Distribution:**

While companies may not have full control over who they sell to and the location the product will be delivered to, there is room for data metrics to inform decision making in transportation options. Leveraging data facilitated by financing partners, for example those who provide letters of credit, guarantees or receivables financing solutions, and integrating carbon accounting solutions is one-way companies might enhance the information available to them to incorporate sustainability into their decision-making processes.

#### **Use of sold goods:**

Visibility into the use of sold products relies on extensive engagement downstream in the supply chain. Companies operating with both B2B and B2C business models are already collaborating with their downstream supply chain to reduce emissions in use of sold products. For example, home cleaning and personal care product manufacturers collaborate with capital goods manufacturers to improve water usage and energy efficiency of the equipment customers use in conjunction with their own products.

### **Sustainable finance solutions**

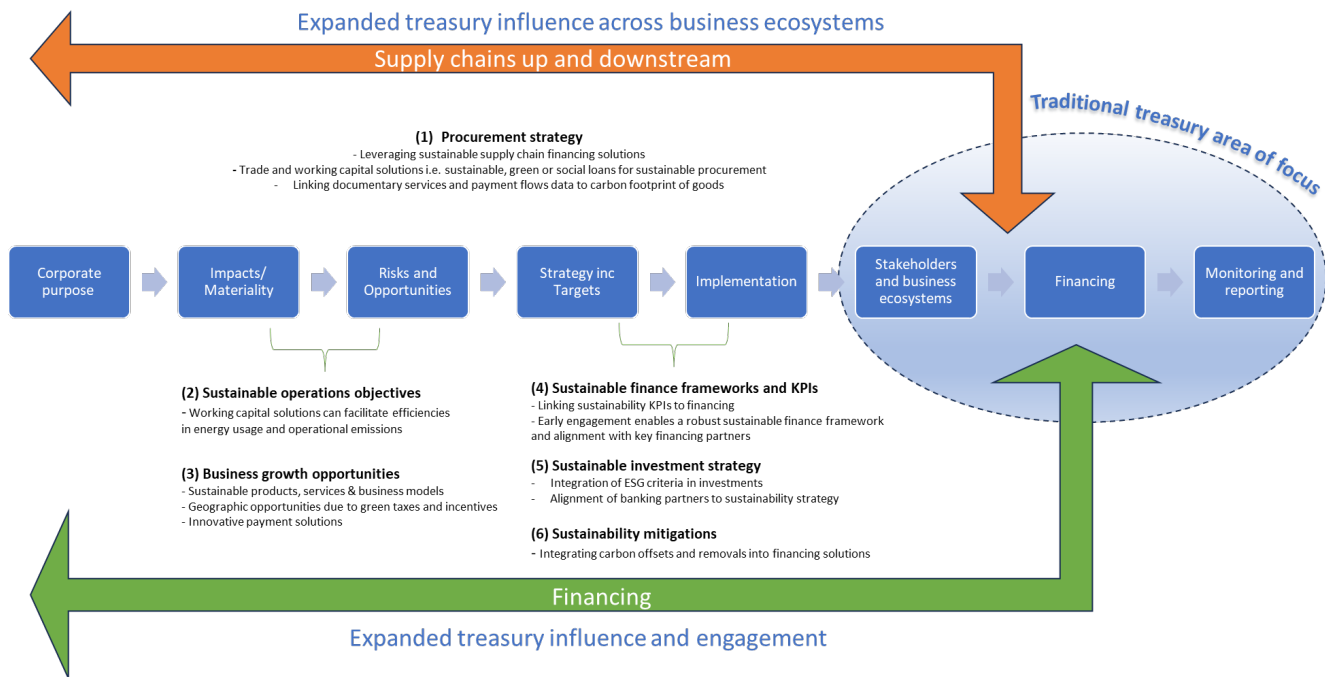
Sustainable finance is an important enabler of a sustainability strategy, which broadly follows two types of structure: defined use-of-proceeds (funding is ringfenced for a specific sustainability-related purpose); and sustainability-linked funding (incorporating a time-bound target, such as one or multiple key performance indicators, thereby linking funding to both impact, and improvements over time).

Use-of-proceeds structures can be supported by external certifications that assess the sustainability of supply chain practices, such as Rainforest Alliance, the Roundtable on Sustainable Palm Oil (RSPO) and others. KPI-linked financing structures have evolved to facilitate companies integrating their sustainability

objectives into financing solutions which are either too broad in scope to be considered dedicated purpose (such as derivatives), or general corporate purposes, such as revolving credit facilities (RCFs).

We see sustainable finance as a vehicle, not a destination and can be used for mitigating risks, building long-term resiliency, improving sustainable performance, and growth opportunities linked to the green transition. The figure below summarizes some of the key areas in which trade finance and liquidity management solutions can help a company on its sustainability journey.

Figure 22. Expanding treasury influence and engagement through a lens of sustainability



Source: Citi GPS

## Supply chain

### 1. Sustainable procurement strategy

As we have demonstrated above, supply chain resilience should be a top priority for corporates. Put simply, companies risk supply chain lock-outs if they are not aligned with their suppliers/customers' sustainability goals. Conversely, companies can competitively differentiate themselves from peers by proactively disclosing strong credentials. Companies can leverage sustainable supply chain financing solutions to support their sustainable procurement strategy as part of the firm's broader sustainability strategy.

Other sustainable financing opportunities related to procurement include –

- Linking payment flows data, for example from accounts and B2B cards programs to carbon footprint of goods purchased
- Linking documentary services, such as letters of credit and guarantees to the carbon footprint of the good purchased or sold, and that of their journey to the end customer

- Trade and working capital solutions such as sustainable, green or social loans for sustainable procurement, for example via certified and responsibly sourced products

## Materiality assessment (impacts/materiality and risks and opportunities)

### 1. Sustainable operations objectives

Working capital solutions can facilitate efficiencies in resource usage and operational impact on the environment i.e. energy use and emissions. As companies look to reducing their operational emissions, and with the progressive evolution of both carbon reporting regulations such as the Carbon Border Adjustment Mechanism, CBAM in Europe, and voluntary carbon markets (VCMs), measuring and proving quantifiable emission reduction is likely to become more established and accessible, which presents an opportunity to integrate carbon accounting into financing solutions.

### 2. Business growth opportunities

Sustainability challenges represent a significant opportunity for companies to invest in developing solutions that solve the problems they and other companies face.

A sustainable transition presents an opportunity to innovate and deliver a sustainable future with low/zero carbon and nature-positive products, services, business models, revenue streams and markets. A report by WEF found that shifting to a nature-positive economy could create annual business opportunities worth \$10 trillion by 2030.<sup>11</sup>

Additionally many companies are reconsidering their operational geographic footprint, for example due to advantageous tax incentives, such as the US Inflation Reduction Act<sup>16</sup>, and the Investing In America (IIA)<sup>17</sup> initiative where, according to the website as of 21-May 2024, "Under the Biden-Harris Administration, private companies have announced \$866 Billion so far in commitments to invest in 21<sup>st</sup> century industries like: \$395B Semiconductors & Electronics; \$173B EVs & Batteries; \$77B Clean Energy Manufacturing & Infrastructure; \$28B Biomanufacturing; \$38B Heavy Industry; \$155B Clean Power".

Developments in these jurisdictional frameworks can facilitate the growth of new business opportunities, and the funding structures that enable them. Given this may require companies to open new legal entities and new liquidity structures to enable their operations in new locations, it is worthwhile to engage early with liquidity and payments providers on optimising treasury operations to enable these growth and geographical alignment opportunities.

## Strategy and implementation

### 1. Sustainable finance framework and KPIs

For companies which have a green and/or sustainable financing framework, it logically follows to assign someone within Treasury to own that framework, coordinating engagement with the central sustainability and finance functions around reporting relating directly to the framework, as well as developments in the regulatory and business environment which could affect engagement with financial stakeholders on the topic of sustainability. Many companies across all industries, including the hard-to-abate sectors, have engaged their central sustainability team

<sup>11</sup> WEF (2020) The Future of Nature and Business

in their interactions with key financial stakeholders, such as investors and banking partners, to facilitate effective communication of their sustainability objectives and commitments, regardless of whether they are utilising green or sustainable finance instruments as part of their funding structure.

We think earlier engagement of treasurers in the corporate sustainability journey can facilitate awareness of considerations when selecting KPIs, ideally before incorporating them into and finalising a robust sustainable finance framework.

Working with banking partners may also help as they often have extensive experience in working with clients to integrate KPIs into financing instruments. Whether the KPIs are intended to be used in public markets or private bilateral lending facilities, potential use cases can expand as the company's financing needs evolve to help it deliver on its sustainability strategy. Setting KPIs that align to multiple stakeholders' requirements allows flexibility in framework utilisation.

## **2. Sustainable investment strategy**

Corporate treasuries vary in their approach to investment strategy and depending on the company's resourcing and prioritisation of different initiatives relating to sustainability, looking at sustainable deposit solutions and money market funds may be something they consider, as part of a much broader sustainability strategy.

While deposits do not themselves change the company's sustainability footprint of their underlying operations, as part of a holistic sustainability strategy it may be important to the company in aligning the selection of banking partners to its own sustainability strategy – for example, by ensuring that its banking partners have commitments to net zero aligned with their own.

## **3. Sustainable mitigations**

As carbon and nature markets develop and evolve, they will have to expand significantly over the coming decades to support the financing volumes required for a net zero and nature positive future.

This presents an opportunity for companies to explore creative ways to integrate measurable outcomes (for example, emissions or pollution reduction, or impact on nature) into their financing solutions.

There are a variety of ways for companies to engage in carbon markets (and this also applies to other adjacent markets that are more nascent, such as plastic credits and nature outcomes-based financing). These include via direct investment in projects, either alone or with partner organizations and/or alliances, where the investing parties become off takers of the credits generated; via purchasing of credits in the Voluntary Carbon Markets (VCMs), which must be retired in order to claim the carbon accounting benefit of offsetting; and via trading of mandatory carbon allowances, e.g. where a company does not use its full allocation and can monetize reduction of emissions below mandatory targets.

With many Nature-based Solutions (NbS), investment is needed over medium-term time horizons, which opens the opportunity for conversations about funding the investments or purchases themselves, as well as the integration into funding solutions of credits generated from projects invested in. Many companies are also entering into Power Purchase Agreements (PPAs) to enable access to renewable energy in the future.

Engaging with financial partners early in the implementation of a sustainability strategy may be beneficial in many ways –

- a) It can increase the opportunity to develop innovative financing solutions, leveraging markets such as VCMs where carbon credits are component of the funding structure, collateralized lending, accessing public financing such as tax incentives or guarantees, and solutions which reference sustainability performance metrics.
- b) Early engagement can also facilitate setting KPIs for bonds, revolving credit facilities, trade and working capital loans, among other instruments supporting by sustainable finance frameworks or agreements.

For companies considering setting KPIs at the treasury level for specific financial instruments, without support of a framework and buy-in at the corporate and business-line level, there is a risk of disconnect in execution strategy, and subsequent difficulty in meeting targets, which could raise further issues of reputation risk, 'greenwashing' accusations, and the challenges of whether financing instruments have to be de-linked from the KPIs in the future if targets are repeatedly not met.

- c) Early discussions can help to ensure the financing structure is aligned to both the company's and the financial partner's sustainability objectives, and follows best practices, which continue to evolve.

Sustainable finance is continually evolving to keep pace with the transition financing needs of companies across all industry sectors. We encourage corporates to think more broadly than just "labelled" solutions.

The finance market to date has been very focused on things that can be called "green", "social" or "sustainable", but the scope for sustainable finance, particularly within trade finance and liquidity management solutions, should be anything that helps business operations and value chains lower their GHG emissions, reduce waste and water usage, cut pollution, reduce impact on nature, support biodiversity and become more socially responsible and inclusive.

Early engagement of treasury in a corporate's sustainability journey can deliver both financial and non-financial benefits and help accelerate a company's sustainability transition, as well as drive ESG alignment across business ecosystems.

## Making it happen

As we have seen throughout this report, building a successful sustainability strategy which is fit for the long term, involves many different stages, and must encompass many different stakeholders.

All too often though, treasury operations are left to 'implement' elements of a strategy, and to report on these efforts, focusing on the latter stages of this sustainability journey.

The risk is missing out on the enormously valuable insights which a forward-looking and truly engaged treasury operation can bring to the process, not least in terms of metrics, monitoring, and reporting, as well as the influence it can exert. Moreover, it can only be via full and early engagement that a financing strategy can be truly and comprehensively aligned with a corporate strategy – and vice versa - with the valuable monitoring and feedback loops which that provides, as well as potential implications for access to pools of capital, and the cost of that capital.

Perhaps most importantly though, no company operates in a vacuum – they are all part of extremely complex, broad, and deep business ecosystems, with countless transactions with suppliers and customers across myriad industries and geographies every day.

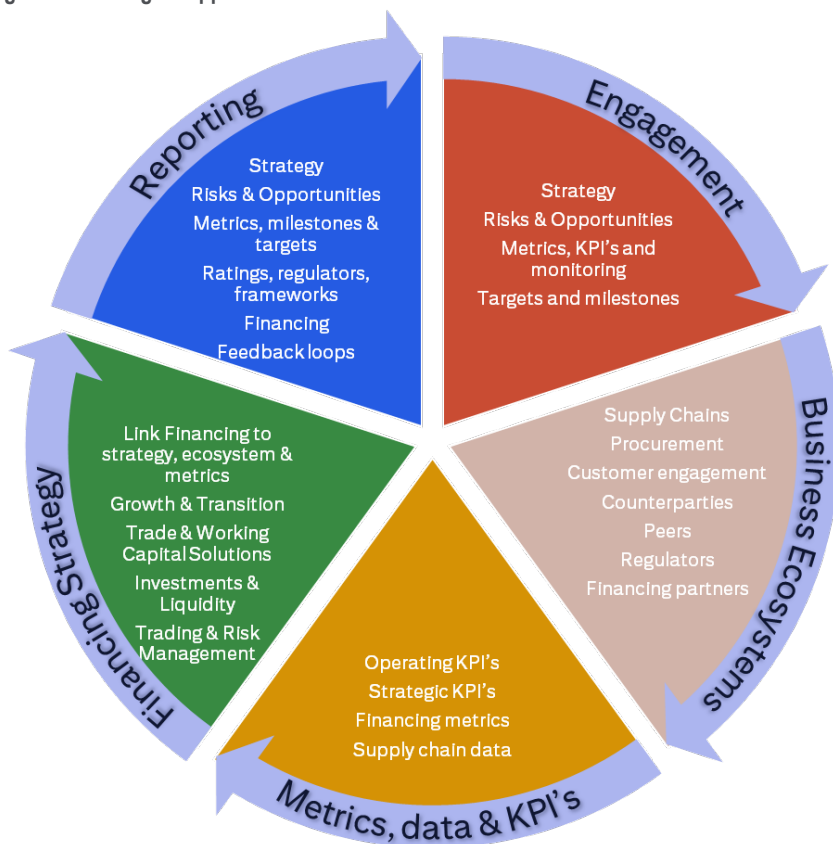
To believe that any corporate can truly achieve its goals in isolation is a fallacy, especially in a world where a 'scope 3' mentality is becoming ever more prevalent. Treasury operations have often unique insights and granularity into those interlinkages, both upstream and downstream, and hence must be engaged if we are to achieve our scope 3 objectives, to monitor our progress, and to report to stakeholders on how we are doing.

The proprietary datasets and analysis which form the backbone of this report appear to bear this out; companies with the most sophisticated treasury operations also tend to be those which are also leading on sustainability themes such as climate.

Moreover, as the data on supply chain interlinkages bears out, a sustainability lens can also be used to highlight business risks such as supply chain lock-out, and identify opportunities for greater collaboration, and to use counterparties to help achieve overarching corporate goals.

So if we accept that to achieve the best outcomes, treasury operations must be engaged earlier and to a greater extent than may have historically been the case, what are the practical steps a treasury operation should take to achieve these ends?

Figure 23. Making it happen



Source: Citi GPS

## Engagement

First and foremost, must be engagement - with those formulating not just the sustainability strategy, but the overall corporate strategy, and the strategy of each material business line. Importantly this does not mean engaging once it is decided, from an implementation perspective –treasury must have a seat at the table in formulating these strategies. Leverage the unique insights into business ecosystems which come from procurement/sales activities and counterparties, the risks and opportunities, and the extraordinary data & metrics generated and collected, and use these in formulating the KPIs which result.

## Business ecosystems

Understand the business ecosystem, and the risks and opportunities which sustainability themes represent therein – and use financial tools to drive and manage these factors.

## Metrics, data, KPIs and monitoring

Take an instrumental role in deciding these metrics, using your knowledge of which datasets already exist, what could already be sourced, and what should be sourced, especially across business ecosystems and supply chains.

## Financing strategy

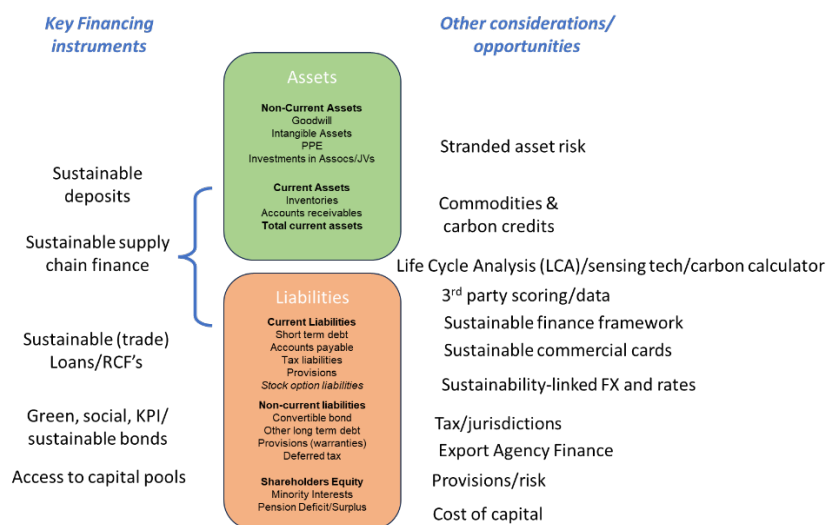
Having become engaged with the corporate and sustainability strategy, companies need to build a financing strategy which is fully aligned with the risks and opportunities, and the associated targets, metrics and KPIs, and importantly, which also drives strategic progress in a holistic sense across business ecosystems.

In practical terms, this could take numerous forms, but the key opportunities are as follows:

1. **Financing growth and transition**, via Use of Proceeds instruments such as green, social, or sustainable bonds, or via general-corporate-purpose instruments such as KPI-Linked bonds.
2. **Payment Infrastructure**, along with engaged financial institutions, are needed to support new business opportunities, new revenue streams and new geographic footprint (of business operations, customers, and suppliers)
3. **Trade and working capital solutions**, such as sustainable supply chain finance or trade loans,
4. **Investments and Liquidity** such as sustainable deposits or sustainability linked RCF's
5. **Trading & Risk Management**, such as carbon credits, or sustainability-linked derivatives (to manage FX and interest rates risk, for example)

Having highlighted these five main areas, the reality is that sustainability-related factors can influence every line of a balance sheet, from the risk of stranded fixed assets at the top, through working capital, provisions (risk) and taxation (or tax credits), right down to equity (to name but a few), as highlighted in Figure 24, and hence the opportunity is much broader.

Figure 24. Sustainable finance instruments and considerations for balance sheets



Source: Citi Global Insights

## Reporting

Last but not least, this critical task involves bringing it all together – and taking stakeholders on that integrated financing and sustainability journey with you.

Ensure that the risks & opportunities, the strategy, the metrics, milestones & targets, and the financing are all represented.

However, the task doesn't stop there; to be truly effective, the insights, data and metrics need to be transmitted back to the earlier stages of the process via feedback loops, so that progress can be monitored, and changes made or actions taken where situations have altered, or where progress is behind schedule.

This in turn can drive the engagement which was the starting point of the practical steps.

## Conclusions

The journey to a more sophisticated and engaged treasury operation and financing strategy through the lens of sustainability may seem like a complex one, with many steps and diverse methods and instruments to implement it.

At its heart however, it is very simple. With sustainability themes representing the megatrends of our time, and indeed being at the heart of current dislocations, they must be a key part of any comprehensive corporate strategy that is fit for the longer term.

It encapsulates many of the fundamental shifts which will drive business over the coming years and decades, from resource use to outputs & impacts be they physical, societal, or economic, to incentives, taxation and regulation, and ultimately, to consumer preferences and the propensity to buy, and at what price. Accordingly, it encapsulates many of the key opportunities and risks for any business.

Treasury operations are critical to the formulation of this strategy, having extraordinary insights into the key metrics which drive a business, the risks and opportunities, and moreover the broader business ecosystem in which any corporate operates – not to mention financing its operations.

Accordingly, treasury must be engaged from an early stage in the formulation of these strategies, and not relegated to simply implementing and reporting on a pre-determined strategy.

As we have seen, the data from Citi's Treasury Diagnostics Survey appears to bear this out – the more sophisticated treasury operations tend to correlate to companies more engaged with climate issues (as a proxy for broader sustainability engagement).

Moreover, any financing strategy must also be aligned with these risks and opportunities, the strategy, and with the business ecosystem in mind, especially as a 'scope 3' mentality becomes ever more prevalent.

Treasury operations are perhaps uniquely positioned to influence the behaviors of business counterparties, underlining the importance of their taking an *active* role in the creation of these strategies, rather than just a passive one in their implementation.

The data behind the outputs in this report helps identify which industries (with granular individual company data behind it) can engage with their suppliers to help themselves meet their overall scope 3 goals.

But businesses are of course not just 'customers' – they themselves are also suppliers to their downstream counterparts. Hence more pertinently, insights into these business ecosystems can provide invaluable perspectives on the risk of supply chain lock-out and substitution.

The data on supply chain interactions from 1,598 of the largest companies (the largest 100 buyers in each industry) from Citi's Services business highlights suppliers who do not yet have net zero targets (at least with SBTi), but where their customers do – and on a scope 3 basis.

Simply put, if these businesses do not align with their customer's goals, their customer must ultimately either pay for carbon credits to offset their activities

(potentially changing terms to offset the cost), or at the extreme, switching to a supplier that does have aligned goals, or indeed which is 'ahead', thereby helping the company purchasing these goods or services reach their own targets. The corollary of the above is of course that they may even be willing to offer preferential terms in doing so.

The core role of treasury in financing operations of course remains key. Integrated and 'sustainable' strategy can enhance opportunities, reduce risk, may open up access to alternative pools of capital, and all things being equal, may even have the potential to reduce the cost of that capital.

At the other extreme, a strategy which is viewed as being unsustainable (in the dictionary sense) and hence higher risk or with a limited lifespan, may be harder or more expensive to finance via conventional sources of funding, as the providers of that capital grapple with their own transition plans.

Last, but not least, reporting on all these factors, and feeding back metrics, insights and progress to the broader business are all key elements of a successful strategy, which by its very nature engages the treasury in the earlier, more formulative stages of that cycle, bring us back to our early engagement starting point of our corporate sustainability journey.

Simply put, incorporating a sustainable finance strategy into overall corporate strategy as the potential to reduce risk, to identify and harness exciting new opportunities, and to drive broader engagement across business ecosystems. It can also potentially open access to different pools of capital, with the possibility even of reducing the overall cost of that capital, if metrics are appropriate and material, and targets and milestones meaningful.

Treasury operations are perhaps uniquely placed to be able to see, influence, and accomplish all of this; the opportunity for the engaged and forward-looking sustainable treasury operation is clear.

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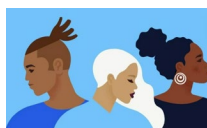
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