

Executive Study

Sustainability & the Data Ecosystem Challenge

*How European Organizations are Harnessing Data to Enable
their Sustainability & Impact Ambitions*

A PAC Research Study

Commissioned by





INTRODUCTION

Data will play a critical role in enabling successful Sustainability and Impact strategies.

From tracking and capturing the relevant data on aspects such as energy consumption, carbon emissions, sourcing and waste production, to reporting the right level of insight to different stakeholder groups, the effective use of data will be vital to helping businesses understand their starting point and to monitor progress.

Many strategy leaders are currently attempting to map out Sustainability and Impact data lineage within their own organization and across their wider ecosystem, to build a clear understanding of where it originates, how it changes over time and how it needs to be captured, processed and visualized.

But how confident are strategy leaders that they have the insight they need today? What are the strategies they have in place to capture a clear view of their Sustainability and Impact data, and to what extent have the underlying processes been automated? What are the barriers they believe that their Sustainability and Impact data strategies will need to overcome, and what role do they believe distributed ledger technology (DLT) can play?

PAC, Europe's leading analyst firm focused on the market for digital and sustainable transformation, recently undertook a major study based on briefings with 550 senior Sustainability & Impact strategy leaders at large European organizations. These participants represent nine major economies within Europe, and are split evenly across eight major industry sectors.

The ultimate aim of the study to understand whether sustainability ambitions had been side-lined or de-prioritized due to wider market challenges, and to identify the main opportunities and barriers that strategy leaders currently have on their radar. In this White Paper, the second in a series based on the headline findings of the study, we provide Sustainability & Impact strategy leaders with an opportunity to benchmark their own thinking and progress against other European organizations, while providing some real-life examples of the initiatives that their peers are implementing in order to accelerate their momentum.

AUTHOR



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A RESTRICTED VIEW

The majority of European organizations are backing up their commitments on Sustainability and Impact strategies with action.

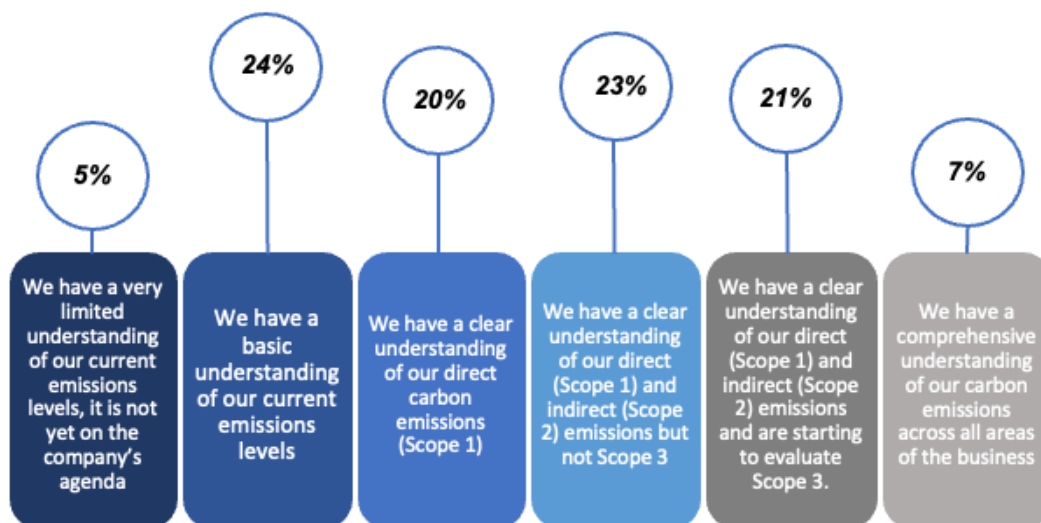
In the first White Paper in this series, “Operationalizing Sustainability & Impact,” the PAC study found that despite wider economic and geo-political challenges, the majority of businesses were pushing ahead with their targets in areas such as carbon emissions and waste reduction. In many cases, such as the fashion retail group **Inditex**, we see businesses putting more ambitious horizons in place as they look to keep pace with the changing attitudes of clients, employees and investors.

The success of these strategies rests on the ability of these companies to have the right data at the fingertips to provide a reliable, auditable and accurate view to these different stakeholder groups on how progress matches up against these targets.

However, if we take the example of insight into carbon emissions, the study finds that the large majority of businesses have only a partial picture at best. Just **7%** of organizations claim to have clear insight into emissions across all levels, from direct (Scope 1) to in-direct (Scope 2) and all other upstream and downstream emissions (Scope 3). More than one third (**29%**) admit that they have only a basic or very limited grasp today, with public and healthcare organizations (40%) having the most work to do in this area.

There is a strong correlation between those organizations that are starting to demonstrate real momentum in their Sustainability and Impact strategies and those with a strong underpinning data strategy. Electronics giant **Philips** recently achieved the highest ever score in S&P Global Ratings’ assessment of its Environmental, Social, and Governance strategies, targets, and performance. The company has already achieved Net Zero status on a Scope 1 and 2 basis, and has committed to having at least 50% of its suppliers committed to science-based targets for carbon emissions reduction by 2025. In addition, it is also aiming to increase the proportion of revenue it generates from “circular” products from a current level of 18%.

Fig 1. How would you describe your current understanding of your organization’s carbon emissions levels?



Philips is able to measure progress against these targets due to the robustness of its data strategy and its use of technology. The company’s dedicated ESG governance team has developed an internal control framework that enables its ESG data to be externally audited at the highest level. The company has also adopted tools that enable it to analyze data from multiple publicly available sources such as corporate reports and mandatory regulations to help it develop a list of topics and issues that are material to its Sustainability and Impact ambitions. This data-driven approach helps it to ensure that its ambitions remain relevant to a shifting regulatory landscape and the changing priorities of its other stakeholders.

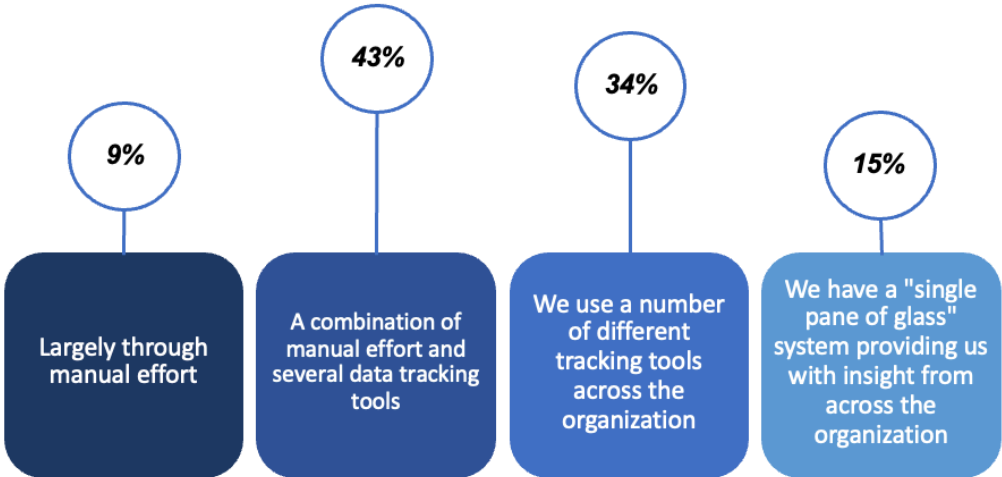
It is clearly not just in carbon emissions where organizations are struggling to build a clear view. The controversy in the UK over sewage discharge into rivers found that water utilities were significantly underestimating levels due to inadequate monitoring and that they may actually be ten times higher than actually reported. The **Environment Agency** has stated that sewage in water is a “growing health problem” in the UK, and many utilities are now investing in new sensor technology and data analytics tools to provide more robust tracking.

Technology presents a major opportunity for Sustainability and Impact leaders to improve their insight, and one of the major challenges highlighted by the study was an overdependence on manual effort. Most European businesses (52%) still rely, at least partially, on manual effort to track their Sustainability & Impact measures, with just 15% claiming to have a “single pane of glass” view on all relevant insight from across the organization. This is supported by research from consulting group **Bain & Co** who found that Sustainability & Impact teams typically spend as much as 70% of their time on data collection.

From an industry perspective, energy & utilities firms and banks are the most advanced in how they track their emissions with 25% and 19% respectively claiming to have a comprehensive view on their impact. Banks are increasingly looking to invest in companies that can demonstrate meaningful progress on their Sustainability and Impact ambitions, with Bloomberg estimating that ESG-related funds and assets will reach a valuation of more than \$53 trillion by 2025. As a result, many are looking to improve the speed and accuracy with which they process Sustainability and Impact data in order to gain a competitive edge.

Deutsche Bank and **HSBC** are among the banks that have joined a service run by services provider Arabesque, which has developed an open-source platform that enables companies to request and view the disclosures of more than 9,000 companies in real-time. Other banks are using robotic process automation (RPA) to automate the reading and extraction of relevant data in order to ease the burden on data teams and free them to perform more strategic analysis and reporting tasks.

Fig 2. How does your organization currently track the Sustainability and Impact measures of your organization?



BARRIERS & ACCELERATORS

European businesses need to reduce their dependence on manual effort if they are to gather the necessary insight they will need to meet increasingly demanding regulatory reporting requirements.

But what are the other barriers that are preventing their Sustainability and Impact data strategies from taking flight?

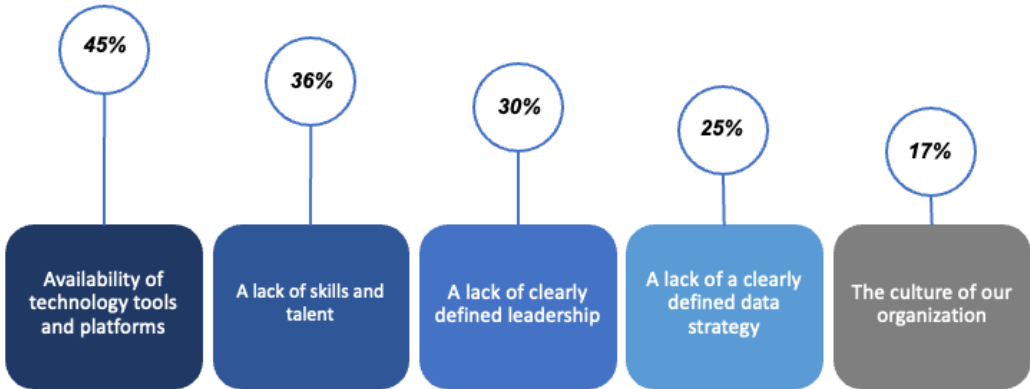
The study found that the availability of software tools and platforms, and a shortage of data-related skills are perceived as a significant obstacle by more than one third of strategy leaders. Manufacturers (57%) and banks (48%) in particular are struggling to find the right technology solutions to meet their requirements. PAC believes that the problem is not necessarily that the tools don't exist, it is rather that businesses face an overwhelming choice of established and emerging options. A growing number are leaning on systems integrator or advisory partners to navigate the supplier landscape.

One third of European organizations identify a lack of clearly defined leadership as a stumbling block, and again, it is noticeable how the more successful and progressive organizations have got this right. For example, **Philips'** Sustainability and Impact data strategy is ultimately overseen by the group's Chief ESG and Legal Officer, who drives a transparent and compliance-centric approach to reporting. Shipping giant **Maersk** has its strategy led by the VP for Group Accounting, Governance, Risk & Controls to ensure that Sustainability and Impact reporting is closely integrated into the group's overall strategy and execution.

One of the more surprising findings within the study was that just 17% believe that the culture of their organization is a significant barrier. Many companies have for some time talked about broadly becoming more "data-centric" to mirror the success of brands such as **Amazon** and **Uber**. However, this requires more than just heavy investment in technology - it means that organizations need to ingrain the value of data into every level and department, and incentivize colleagues to work in ways that ensures that every team and silo pulls together to help the business achieve its over-arching goals.

There is clearly some distance to travel on this point. Research from **Harvard Business School** found that just a quarter of S&P 500 companies integrate Sustainability and Impact goals into executive pay using standalone ESG metrics. However, a growing number of businesses are taking steps to change behaviour through the use of data, by using gamification as a way to encourage employees to reduce or make more sustainable choices with corporate travel.

Fig 3. What are the biggest barriers facing your Sustainability & Impact data strategy?



One of the most important aspects of a successful Sustainability and Impact data strategy will be to drive trust in the metrics that organizations present to the market.

There has been a surge in the number of European organizations facing legal action over perceived “greenwashing,” with a growing level of skepticism over some of the claims of progress made by firms in sectors such as energy, financial services and transport. At the same time, many companies operating in the European Union have had to make a marked improvement in the way that they report how sustainability issues are impacting company development, finances, and performance due to the introduction of the Corporate Sustainability Reporting Directive (CSRD).

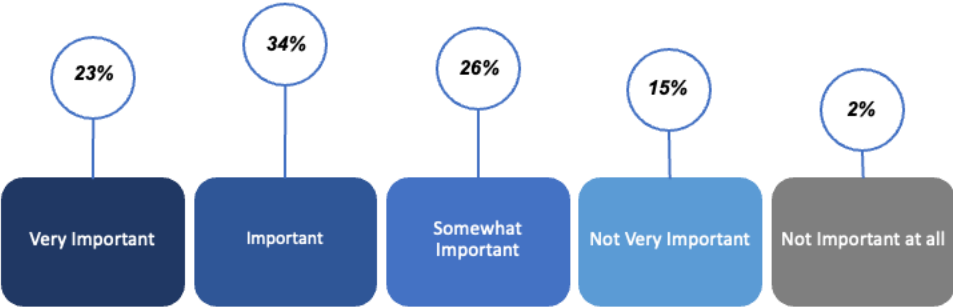
Some companies are leveraging sustainability-related data-as-a-service offerings from information providers such as **Bloomberg** or aggregation platforms such as **CSHub** that help them benchmark and rank their performance against their peers. But many organizations have also started to explore how distributed ledger technology (DLT) can enhance this level of trust, by improving transparency into labor conditions across the supply chain or verifying the impact or footprint of specific products or services. DLT can provide an unalterable record of these data points which can then be shared to key stakeholders through smart contracts.

However, there has been a swell of negative coverage over the high energy consumption and carbon emissions generated by the use of blockchains, particularly when compared to exchanging information using cloud or mainframe environments. While it is important to draw a distinction between blockchain mining (highly energy intensive) and private permissioned ledgers such as Corda (built around smart contracts, rather than intensive cryptographic algorithms), there continues to be a lot of debate about the role that DLT will play in supporting Sustainability and Impact strategies.

The study paints a positive view, with more than half of the participants (**57%**) stating that DLT will be an important ally. More than two thirds of manufacturers (**67%**) believe that DLT will play an important role in enabling their ESG ambitions, followed closely by companies in the banking sector (**61%**). One interesting example that overlaps both of these sectors is an initiative that is taking place as part of the EU’s DLT Pilot Regime, which aims to create a framework for DLT trading and settling between countries in the region. The aim is to reduce the cost of reading, to lower the minimum trade amount, and make investments in products such as green bonds more accessible.

One participant in the initiative is **Agreena**, a Danish company that issues verified carbon certificates to farmers with carbon-friendly soil practices. The company is using the initiative to use its ledger, which provides immutable proof of the impact of individual companies’ farming practices, to plug directly into the financing structures of banks, pensions and insurance companies. Projects such as these are at an early stage, but momentum is clearly building. The pressure to demonstrate and verify Sustainability and Impact progress is increasing and many companies see DLT as an important part of the solution.

Fig 4. What impact do you believe that distributed ledger technology will have on your ability to track ESG performance across your supply chain?



CONCLUSIONS & RECOMMENDATIONS

Data will be the foundation to a successful Sustainability and Impact strategy and its importance has been underlined in recent months.

Many brands are being put under pressure to drive greater transparency in their performance against Sustainability and Impact metrics due to pressure from customers, employees, investors and regulators. At a time of a record level of legal action over perceived “greenwashing,” organizations need to be able to demonstrate progress through transparent, auditable data.

As we shall explore in this series of White Papers, many European organizations believe that their Sustainability and Impact strategy will enhance their revenue potential, and the effective use of data can help to identify and unlock new growth opportunities. There is also potential for businesses to open up some of their data sets for wider use across their ecosystems or in the public domain to driver broader benefits in tracking, highlighting solutions or creating a platform for collaborative working.

The report found that the majority of businesses have a lot of room for improvement in how they harness the potential of data to support and accelerate their Sustainability and Impact ambitions. Less than a fifth claim to have a clear, 360-degree view on their carbon emissions data, while most still rely, at least partially, on manual effort to track their data. This will become a major challenge as regulatory demands on emissions reporting tighten.

There are a growing number of technology solutions available to help strategy leaders gain better control of their data to meet compliance demands, including process automation and distributed ledger technology. The report found that many businesses are struggling to keep pace with what is a rapidly evolving supplier community and a growing number looking for external help in identifying and building the most effective solution for their needs.

However, data strategy leaders should not solely be focused on tracking and reporting Sustainability and Impact in the most efficient manner. Right from the start, they need to identify and map the different parts of their organization and broader ecosystem to pinpoint the data flows that need to be incorporated and understand how they will need to adapt their business processes existing data architecture to ensure that organizational silos don't act as a barrier to building an holistic view or creating company-wide use cases.

Data governance is a crucial element to any successful strategy. This is based on having the right level of leadership and accountability in place, as the success of **Philips** and **Maersk** has demonstrated. This needs to be supported by a cross-functional steering committee that brings together stakeholders from different areas of the business, as well as technology and risk and compliance. This will help to ensure that all key parts of the organizations are involved in the decision-making process and will help to avoid a fragmented, siloed approach.

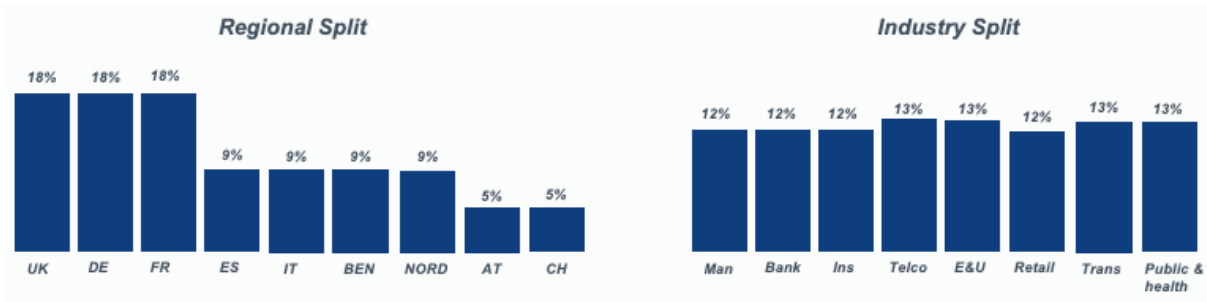
Strategy leaders should also look at fostering a culture across all areas of the business that drives an appreciation of the value of Sustainability and Impact data to driving its future growth. Education is vital to help the workforce understand at all levels how adapting the way that they work will play a vital role in supporting the evolving goals of the organization.

By putting the right building blocks in place today, businesses can ensure that they stay ahead of a rapidly changing regulatory landscape, build trust with key stakeholder groups, and provide a level of insight that can uncover new opportunities for growth, collaboration and positive environmental and societal impact.

METHODOLOGY

The findings of this study are based on a survey of senior business and technology executives at 550 large and medium-sized organizations based in nine major Europe economies. All of the participating organizations have between 500 to 5,000 employees and operate across eight different industry sectors. The survey was run in the first quarter of 2023. A breakdown of the survey sample by industry and region can be found below.

Breakdown of Sample Group by Sector and Region



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