



DATA FOR NET ZERO

**NO CHOICE
BUT CHANGE**

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It's now or never

It's a fact that humanity is in an urgent race against climate risks and losses to people and planet, socially, environmentally, and commercially. Business has already endured USD 2.9 trillion of losses due to global warming over the last 20 years, representing an increase of 250%.

In April 2022, the Intergovernmental Panel on Climate Change ([IPCC](#)) published the third and final report in its Sixth Assessment Report (AR6) on the state of climate change and the world's response.

The headline '[code red for humanity](#)' was a stark summary of human experience in the affluent northern hemisphere, still in shock from the experience of pandemic, wildfires, and flooding. The latest IPCC report on mitigation highlights how humanity now faces its last chance to take drastic and transformative action to reduce global greenhouse gas (GHG) emissions, outlining affirmative action that can be taken to secure a viable future for us all. But as the third IPCC report makes clear, although time is limited, it's never been more possible to take action.

NO CHOICE BUT CHANGE

The need for action is crucial. We have no choice but to act now to reduce emissions to secure a viable future for people and planet.

- Intergovernmental Panel on Climate Change (IPCC) highlights increasing evidence of need for climate action
- Warming must be limited to around 1.5°C. This requires global greenhouse gas emissions to peak before 2025 at the latest, and to be reduced by 43% by 2030
- Legislation is increasingly demanding. In March 2022, The Securities and Exchange Commission proposes rules to enhance and standardize climate-related disclosures for investors from FY2023. The required information about climate-related risks also would include disclosure of registrant's greenhouse gas (GHG) emissions

Don't just go with the flow

There is no choice but change. The question is, will you go with the flow? Or will you create change to get precisely the future you want?

To enable real change, and to establish crucial sustainability performance and transparency, you'll need to achieve data mastery. Because it's not enough to have data. You also need to learn to trust it and to use it. Data mastery is about achieving data source transparency; universal accessibility; alignment of data sources; control of human error; clear ownership criteria; and sensitivity to growing demand.

Mastering data is crucial to keeping your business current and competitive. And to accomplishing sustainability maturity. You need to implement the same level of controls in carbon accounting, as you do in financial reporting. Once trusted, your ESG data can become the lifeforce of your organization, opening horizons and creating new paths to deliver exciting and unimagined outcomes.

Data for Net Zero helps you make the most of data to accelerate and secure your sustainability transformation.

What is Data for Net Zero?

Data for Net Zero seamlessly utilizes net zero intelligence to build resilience, reducing climate and business risk. Wherever you are on your sustainability trajectory, we can help you go the whole way, securing your net zero transformations through three offer components:

Data Strategy for Net Zero

Sustainability Data Hub

Environmental, Social, and Governance (ESG) Data Performance

Data Strategy for Net Zero offers clarity to help organizations navigate the complexity of regulatory frameworks in order achieve compliance. It conducts data projects and indicators; implements organizational models and governance; enables the right technologies and solutions to be deployed; and orchestrates the optimum data partner ecosystem.

Sustainability Data Hub enables granular activity data identification to feed the data hub with your external emission data base. It initiates industrialized data collection through the deployment of automated ingestion and normalization pipelines and inference algorithms. And it allows data management and technological platform design and set up. The hub also establishes data founded insights measurement, and facilitates data models packaging to enhance to enhance sustainable analytics and reporting.

ESG Data Performance provides ESG insights and performance measurement; enables ESG reporting automation in accordance with frameworks and indices to comply with regulations and meet expectations from investors; and organizes the steering and governance of the transformation.

Why Data for Net Zero?

Accelerating along the transformative sustainability journey is an imperfect art, demanding calculated risk and positive compromise along the way. Sustainability trade-offs must be a part of every decision-making process for your CxOs. You need to help your CxOs orchestrate net zero data to make fully informed decisions.

You can't manage what you don't measure

Data for Net Zero enables you to make the best of your data to secure your net zero transformations, seamlessly exploiting net zero intelligence to monitor and report on your ESG commitments, achieving transparency and accountability. Essentially, Data for Net Zero enables you to measure, improve, and anticipate, using net zero intelligence to reach sustainability maturity.

Harness net zero intelligence

Net zero intelligence supercharges your sustainability performance. But what is it? Net zero intelligence is created by using the net zero data you collect, from internal activity data and external emission factors sources, to build unique insights that enable you to make informed, gamechanging decisions.

Sources of emissions are categorized into three scopes. Direct sources are called Scope 1 and are characterized as those owned by the organization, such as company facilities and vehicles. They also include fugitive emissions, like unexpected leaks of greenhouse gases, and process emissions, which are created during industrial processes.

Indirect sources of emissions are categorized as Scope 2 and 3. Scope 2 sources concern the generation and supply of power, like purchased electricity. Scope 3 sources are not owned or created by the organization but happen upstream or downstream of your company. They predominately concern purchased goods and services, materials acquisition, commuting of your employees, transportation and logistics, and the processing and use of sold products.

In driving to net zero, there is also a huge opportunity to completely redefine the efficiency and effectiveness of your business. In a future where everything will be augmented with intelligence, entire value chains will evolve and transform into value networks. Nurturing net zero intelligence and enabling data collaboration is essential, not only to allow you to participate in the new experience economy, but also to solve wider issues facing our society and our planet. Data sharing and co-creation through data ecosystems will enable us to meet our net zero ambitions, conduct business more efficiently, create new business models for the next economy, and shape a universal, sustainable future.

Enable a viable, sustainable future

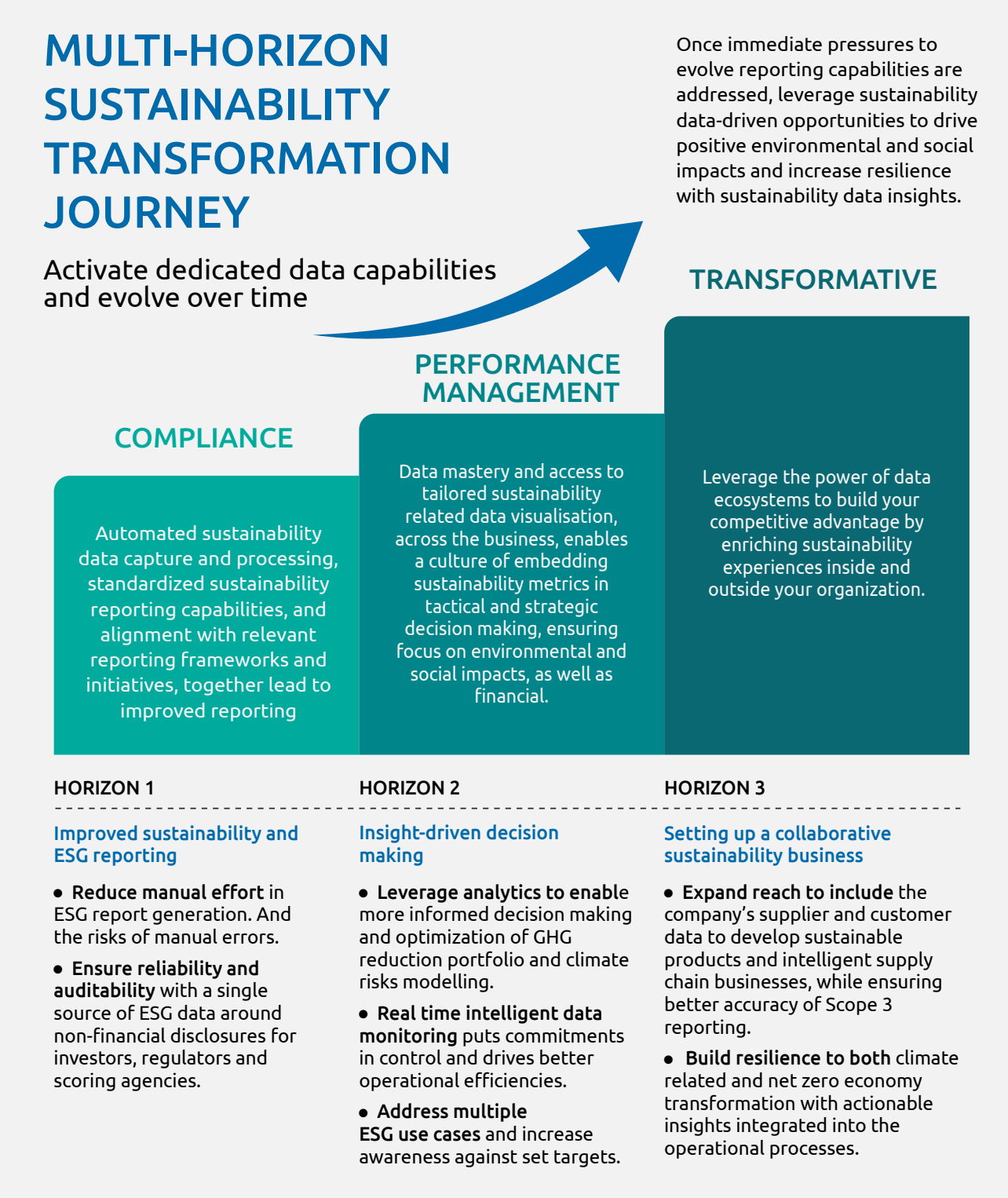
Many businesses talk the sustainability talk. But most are still at compliance stage. By leveraging Data & AI, you can achieve net zero intelligence, which will supercharge your sustainability performance.

Once you've evaluated your current state, you can define your strategy, translating carbon assessment into tangible insights to monitor and report at scale through industrialized measurement powered by our trusted Data & AI platforms. We can help you orchestrate simulations and advanced analytics to provide centralized real-time insights. These will help you form action plans, shaping your net zero ambitions into a universal, sustainable future for you and others.

By nurturing data to deliver unique insights and build net zero intelligence, you'll drive transparency and accountability on your ESG commitments. And enhance performance in terms of market optimization, value generation, and driving competitive advantage and increasing brand reputation.

Follow the rules

The sustainability maturity model starts with compliance. No organization has gone the whole way yet. Most are still on the compliance level. Before your organizations starts to progress along its sustainability journey, you'll need to make sure it complies with all appropriate legislation. Data for Net Zero can help you achieve the compliance level and then accelerate through the subsequent milestones along your sustainability trajectory.



Put carbon accounting to work now

It's taken over 100 years for financial accounting procedures to be become normalized and universally embraced, shared, and applied. Carbon accounting does not have the luxury of time. It needs to be put to work now. Businesses need to measure the impact of their sustainability actions, in order to adjust their net zero strategy and plans and overcome major sustainability challenges.

But it's also critical to look at how and when you measure. Most organizations measure their carbon footprint annually using simple spreadsheets and deploy a lot of manual effort that drives the risk of errors. We can help you industrialize your measurement to secure and adjust, simulate, and track your data on a monthly, or even a weekly basis. In addition to industrialization, we can also implement analytics, creating dedicated sustainable insights to allow you to incorporate sustainability metrics into your decision-making process.

Regulatory ecosystem always in flux

For a start, you'll need to monitor, address, and meet constantly changing regulations on a local, regional, national, and global level.

There is now a growing recognition that, as with accounting, sustainability reporting needs regulatory reporting requirements. Regulatory frameworks are under construction, geared towards providing objective and quantitative measurements of non-financial performance, thus preventing greenwashing.

There are three significant new proposals now in the public domain for comment:

- [The U.S. Securities and Exchange Commission's proposed rule for "The Enhancement and Standardization of Climate-Related Disclosures for Investors".](#)
- [The International Sustainability Standards Board's \(ISSB\) "IFRS S-2 Climate-related Disclosures".](#)
- [The European Sustainability Reporting](#)

- [Standards \(ESRS\) developed by the European Financial Reporting Advisory Group \(EFRAG\) “ESRS E1: Climate change”.](#)

The proposals differ in terms of how prescriptive they are and the scope they cover. However, the common themes they share offer realistic hope for a global baseline on climate-related disclosures that could be applicable for FY23. While there is an issue as to how each jurisdiction will embrace the standards set by the others, these proposals represent great progress in developing a global baseline for climate-related disclosures.

Investors and clients pile on the pressure

You’ll also need to respond to increasing and relentless pressure from rating agencies, investors and clients. As sustainability issues touch every part of lives, so increased consciousness makes stakeholders in every business more demanding of your sustainability credentials. [Research](#) shows that more and more customers choose products based on the brand’s reputation (~60%), and a good reputation leads to a measurable increase in sales (~5%). Millennials are 200% more interested in sustainability compared to older generations, while 49% of younger High Net Worth Individuals are committed to invest sustainably.

With a clear impact on financial performance, an organization with a good ESG performance can clearly now attract more favorable financing terms, as financial institutions also need to justify the provenance of the funds they invest, proving that the funds are derived from business activities listed in the EU Taxonomy. The EU Taxonomy is the fundamental cornerstone of a suite of regulation to be launched by the EU to improve and standardize sustainability reporting. In particular, the Taxonomy will support the [Sustainable Finance Disclosure Regulation \(SFDR\)](#) and the upcoming [Corporate Sustainability Reporting Directive \(CSRD\)](#).

Avoid those bumps on the road

Inevitably, transformation that has a fundamental impact on your business will create some organizational and operational difficulties. [Less than one in ten](#) (7%) organizations have automated the collection of emissions data, and only 13% have adopted a carbon management solution at scale. Data for Net Zero will help you develop, analyze, and implement net zero intelligence.

Achieve sustainability through data mastery

Data is an essential lever to gain resilience and reduce climate and business risk. By orchestrating data intelligence you’ll be able to measure, improve, and then anticipate to adjust your plans accordingly. By measuring the impact of your actions, you’ll reduce your overall impact, and gain insights on where to act next.

Measure to move forward fast

First, you’ll need to measure to steer progress. Making your environmental data transparent will help you enhance communication with your stakeholders. At the same time, you’ll need to digest and integrate developing regulatory requirements, meet compliance expectation and provide auditable proof points to avoid greenwashing.

By measuring the emissions created by your organization, in a rigorous and structured way, you can get clarity on where you stand and tackle the related challenges you face. **53% of organizations have experienced faster progress towards their net zero goals when embedding emissions data in decision-making.**

Improve for better outcomes

Second, based on a clear “data-driven” view, you’ll be able to improve to reduce impact. You can improve your brand reputation among customers by sharing and updating creditable claims. To achieve operational excellence, you’ll need to leverage Data & AI technologies for GHG reduction use cases.

As your resilience improves, and you start to gain momentum on your net zero trajectory, you should see increasingly impressive results. We recently helped a mining and metallurgy company achieve a -40% reduction in FeSi** consumption and -25% reduction in furnace production loss. Similarly, we helped a leading

retailer to achieve a -4% inventory reduction after optimizing supply chain.

Anticipate and adjust your sustainable future

Third, you’ll need to fine tune your ability to anticipate global events that will impact the smooth running and the sustainability of your business. You can steer environmental transformation based on reliable GHG measures and calculation methodology. Then you can use data as ideation fuel to deliver new sustainability use cases. Meanwhile, reporting all measurable milestones will reduce the risk of bad press.

If you can anticipate what lies ahead, you’ll be able to adjust your plans and your organization’s response accordingly. For example, 14,500 businesses worldwide were heavily impacted after 2011 floods in Thailand. Of course, the sustainability profile of your goods and services will also impact your profitability, and you’ll need to focus on optimizing their appeal. Sustainability credentials heavily influence consumer buying decisions. [79% consumers](#) are changing purchase preference based on social or environmental impact of purchases.

4.6%

Average reduction in emissions achieved per year by embedding emissions data in decision-making*

* source: Capgemini Research Institute - Data for Net Zero: Why data is key to bridging the gap between net zero ambition and action

The best place to learn is on the road

There's an urgent need for us all to reach a net zero emissions status. There's no time to waste on well-meaning trials, exploratory projects, and optimistic false starts. The best place to learn is on the road, so the sooner you start your journey, the better.

Working with Capgemini, and kickstarting Data for Net Zero, will give you access to the comprehensive expertise and experience we've developed working with some of the world's leading brands to enable and orchestrate their transformation journeys to a data driven sustainability journey.

DATA STRATEGY FOR NET ZERO

GHG Emissions measurement for industrial giant

Our collaboration aimed to better measure the organization's CO2 footprint by analyzing external database providers; rules and calculation methodology; and tolls and vendor screening.

We identified six major pain points, detailing the building blocks of the To-Be architecture. Then we screened 385 companies to create a benchmark, of which 20 were shortlisted based on priorities, and 10 were interviewed. In addition, we screened 50 emission factors databases and prioritized 22. We identified six data best practices and made maturity assessments of an emission factor data base to be leveraged for that industry. In the process we created long and short term action plans to target a global emission factor data base. We also made recommendations of calculation methods based on internal available data and created long and short term roadmaps and a proof of concept (POC) related to ERP Data quality.

SUSTAINABILITY DATA HUB

Sustainable analytics for global car brand

Capgemini was selected to create a scalable and



future proof data and analytics foundation for CO2 and logistics data for this global car brand. This unified CO2 data & analytics platform covers end-to-end supply chain and logistics, from inbound to outbound logistics and spare parts management processes.

The solution has now been rolled out and is now connected to the umbrella CO2 annual reporting process. We're moving forward to include cost and manufacturing processes, adding more capabilities on data, analytics, automation, and AI.

The project is designed to secure a 25% reduction in supply chain emissions and a 40% reduction in the total lifecycle carbon footprint per car by 2025.

ESG DATA PERFORMANCE

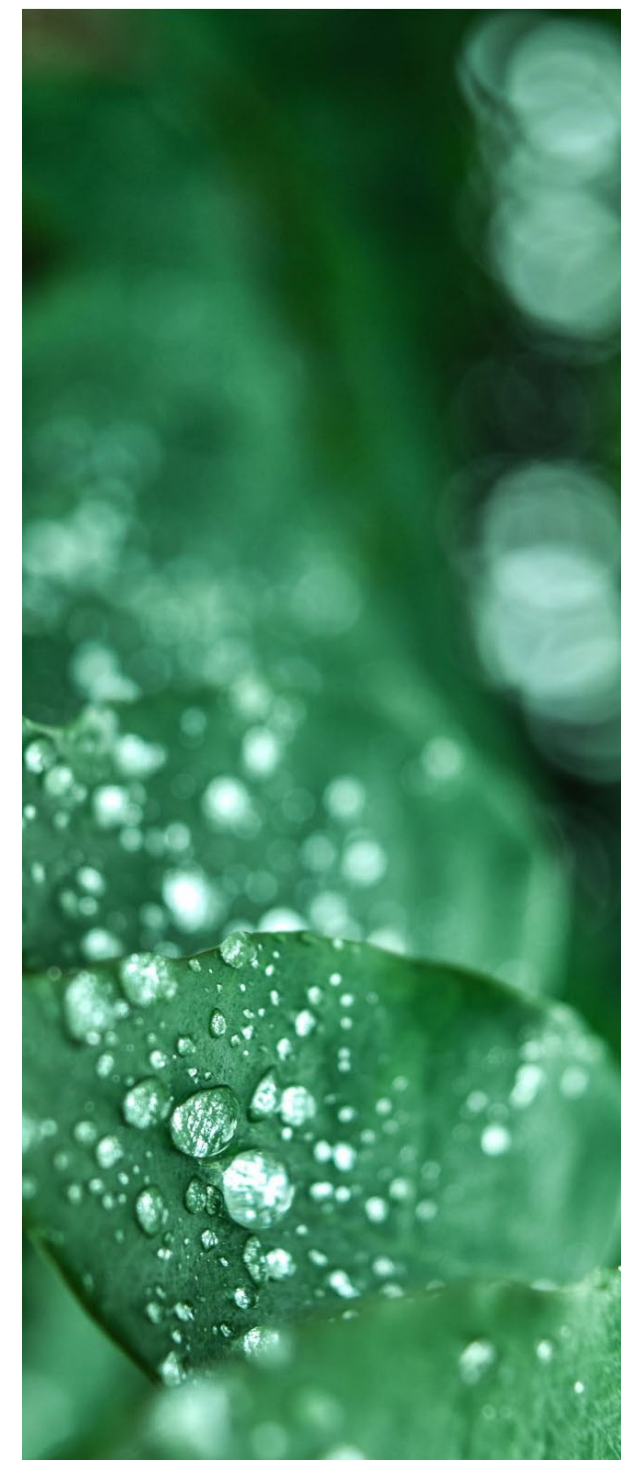
ESG Regulatory requirements for global bank

This collaboration with a global financial institution looked at how the ESG regulatory environment will impact the business. First, we analyzed how ESG regulatory requirements will impact operational processes, reviewing, documenting, and organizing the Group's initiatives on ESG. Next, we assisted the organization's ESG expert committee to define and implement its ESG roadmap. Then we established an ESG architectural league to integrate ESG into the Group's IT architecture. And we also assisted in inserting ESG data management into existing processes.

Go the extra mile

Wherever you are on your sustainability trajectory, you'll need to dive in with confidence. We'll help you develop a clear vision to achieve your net zero and long-term sustainability goals.

We'll work with you to identify where you want to be, helping you navigate the compliance challenge. Then, working with your CIO, we'll guide you through the transition and transformation points to get you there.



Get ahead with our ready to roll assets

Our proprietary technological assets will help you to speed up data collection, processing, and usage. Together, we'll establish connectors with your main IT systems, and implement automated normalization, standardization, and AI inference algorithms to feed data gaps accordingly. We'll set up ready to use ontologies and data models. And we'll enable advanced modelling and simulation models for agreed, specific purposes.

You can also optimize our sectorial toolbox, which will help you benchmark against peers and address industry specific challenges. This can include sectorial benchmarks on GHG emissions; standard emission perimeters and data sources for specified sectors; and sector specific Data & AI models.

Act to accelerate your advance

Throughout your net zero journey, we can help you activate unique accelerators to guide you through your transformation. We offer proven frameworks that will enable you to set up the sustainable data strategy, governance, and related KPIs.

Once we've completed your carbon assessment, we put the findings to work. We translate the carbon assessment into tangible insights to monitor and report at scale, through industrialized measurement powered by our trusted Data & AI accelerators, IDEA, and 890 by Capgemini.

These centralized, real-time, enhanced insights are delivered by a dedicated **Sustainability Data Hub** through simulations and advanced analytics, enabling you to move and adjust your ESG commitments to create a pragmatic action plan.

Liberate the unknown, from just one interface

890 by Capgemini is a data exchange activator for data analytics acceleration. Available on any cloud, and with a single interface, it puts you at the helm, ready to engage with the kind of insights that deliver real business outcomes, at speed and scale.

The key is finding the data that's right for you, quickly and efficiently. By combining an extensive data ecosystem of industry-specific, open, and exclusive sources with your own data, we can help

you create specific sustainable insights that allow you to make key decisions with confidence. 890 by Capgemini is trusted, robust, and curated to your needs, so you can be more confident about taking your business forward.

You can also benefit from our existing carbon calculation and monitoring dashboard for procurement, asset management, ESG scoring, manufacturing, logistics, sales, life cycle assessment, and Green IT.

Go one step further

We can bring you up to speed with industrialized data discovery, ingestion, and management through our IDEA accelerator and partner solutions. We can also help you access accelerators and demonstrators with leading sustainability solution providers including Salesforce Net Zero Cloud, Microsoft Sustainability Manager, SAP end-to-end sustainability control tower, and an active start up ecosystem.

The bigger picture on Earth

When you need the bigger picture, we can help you establish geospatial intelligence (GEOINT) capabilities. GEOINT is intelligence about the human activity on Earth. It's created through the exploitation and analysis of imagery and geospatial information that describes, assesses, and visually depicts physical features and geographically referenced activities on Earth.

We walk the talk

We do as we say, acting as your strategic enabler, connecting sustainability solutions right across our business and operating value chain. We'll support you on every step of your journey, orchestrating a dedicated team of more than 25,000 highly skilled data experts across the globe, many among them specifically experienced in sustainability projects, and all members of our center of excellence. In addition, we partner with strategic hyperscalers and start-ups to accelerate results. Finally, our Data & AI Academy allows us to leverage and nurture in-house expertise to support your upskilling journey.

Our proven capabilities, in building data driven solutions for more than fifty years position us as a strategic enabler ready to accelerate your transformation to sustainability maturity.

CAPGEMINI RECOGNIZED AS A LEADER IN EVEREST GROUP'S FIRST PEAK MATRIX® FOR SUSTAINABILITY ENABLEMENT TECHNOLOGY SERVICES IN 2022



Helping you smooth the way

The sustainability environment continues to evolve rapidly. As a CxO, you'll undoubtedly face new issues and often unexpected challenges on an almost daily basis. But wherever you are on your sustainability data journey, you'll need to commit to a measurable sustainability strategy and plan. Of course, you'll also benefit from collaborating and sharing information with your CxO colleagues, enabling accessibility and transparency across your internal ecosystem.

Here we look at some of the key preoccupations of CxOs as they progress their net zero journey and at how you might tackle the challenges ahead.

Where are you on your net zero journey?

If your organization is data mature, confident in the way it collects, analyzes, and puts data to work, then you might be thinking about how to link existing data initiatives with a consistent strategy, aligned with net zero objectives. It's also vital to focus the vision of top management onto net zero and ESG performance.

If your focus is on measuring your carbon footprint more precisely, you'll need to industrially capture robust environmental data from your company's operations into a unified accountability system. If your business is climate mature, then you'll be thinking about how to switch from climate claims to actionable environmental analytics. While, if your organization faced regulatory pressure, then you'll probably be focused on how to adapt data capabilities to meet regulatory evolutions and report accordingly.

What do you need to look out for?

If you're a CEO, you might be concentrated on how to translate the top management vision into clear net zero and ESG performance. You need to ask yourself, what major sustainable business

transitions and changes are you planning to implement over the next five years? What is important for you to track?

If you're a CDO, you could be considering the data maturity of your organization and the alignment between your data strategy and your net zero data strategy. You need to ask yourself, how are you collecting the information required to gain insights on sustainability stakes? How often are you running reports and who is doing it?

If you're a CFO, you'll probably be focused on compliance and ESG reporting, considering the likely impact on your business of the evolving regulatory landscape. You need to ask yourself whether you have identified the regulations your business needs to comply with, now and in the future? Have you analyzed which reporting frameworks and indices to report on?

If you're a CSO Chief Sustainability Officer, you might be analyzing how to use data and analytics to your best advantage. You need to ask yourself how to switch from climate claims to actionable environmental analytics? How will you ensure you provide the proof points and desired outcomes of your roadmap execution?

Wherever you are on your net zero journey, and whatever role you play in orchestrating and enabling your organization's success, Data for Net Zero can help you get clarity to make fully informed, transparent, gamechanging decisions.

No choice but change

The race against climate change is real.

Reporting entities are now able to use the data and insights gathered to help their identification of climate related risks and opportunities, mitigating their exposure to climate impacts, while capitalizing on the potential benefits presented by the transition to a low carbon economy. In short, investment in effective reporting and disclosure processes to comply with relevant regulations is likely to pay off. This can have massive direct business benefits by reconfiguring your business to deliver the next level of competitive advantage.

However, time is running out, but the willingness to act has never been greater or more consensual. It's essential that we act now to mitigate social, environmental, and commercial risks and losses to people and planet.

There is no choice but change. But you can choose how you change.

Instead of following the leaders, Data for Net Zero gives you the opportunity to own your sustainability journey. It will enable truly innovative change by achieving data mastery and optimizing net zero intelligence to get the future you want. It will create change that delivers positive outcomes, not just for shareholders and clients, but for us all.

Make the call for change.





About Capgemini

Capgemini is a global leader in partnering with companies to transform and manage their business by harnessing the power of technology. The Group is guided everyday by its purpose of unleashing human energy through technology for an inclusive and sustainable future. It is a responsible and diverse organization of over 340,000 team members in more than 50 countries. With its strong 55-year heritage and deep industry expertise, Capgemini is trusted by its clients to address the entire breadth of their business needs, from strategy and design to operations, fueled by the fast evolving and innovative world of cloud, data, AI, connectivity, software, digital engineering and platforms. The Group reported in 2021 global revenues of €18 billion.

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