

# update



Seeding the future  
Sustainability in theory and practice

**ESMT  
BERLIN**



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**A**t ESMT Berlin, we are dedicated to preparing current and future business leaders with the knowledge and skills necessary to navigate an increasingly complex world. One of the central ways we achieve this is by embedding sustainability principles across our teaching, research, and institutional strategies. The need for sustainable development is more urgent than ever, and we recognize the pivotal role that business schools play in educating the leaders who drive this change.

Rankings provide a useful benchmark regarding sustainability in the curriculum, but our commitment goes way beyond that. We are driven by the global challenges we face — from climate change to economic inequality. These challenges demand a concerted effort from all sectors of society, including business education. We believe that by fostering a deep understanding of sustainability we empower our students to act as responsible leaders who are well-equipped to have lasting, positive impacts on the environment, society, and corporate performance.

Sustainability principles are now essential to modern business strategy. As we look ahead, the demand for leaders who understand the intricate links between business operations, societal expectations, and environmental sustainability will only grow. Many of the most successful organizations already recognize that long-term profitability is closely tied to responsible corporate practices. Investors, customers, and regulators increasingly expect companies to be transparent about their sustainability efforts, and failure to do so can lead to reputational and financial damages.

We have embraced a forward-looking approach by integrating sustainability into the very core of our academic programs and our research. Research at ESMT addresses critical sustainability challenges, covering topics from biodiversity and the circular economy to sustainable finance and corporate transparency. Our aim is to provide not only rigorous analysis, but also actionable support for real-world solutions that can drive transformation within organizations. We aspire to ensure that every executive education participant and every graduate of ESMT is equipped to meet the demands of the future.

In addition to integrating sustainability into our research and teaching, we are also “walking the talk” when it comes to sustainability on campus. Our carbon neutrality target has been advanced from 2035 to 2030, thanks to significant investments in solar energy infrastructure and the purchase of renewable energy sources. As a side effect, these efforts have already contributed to an improvement in our carbon-footprint ranking.

To expand our impact beyond campus, ESMT hosts the Sustainable Business Roundtable (SBRT), a peer-to-peer learning network founded in 2011. SBRT offers a collaborative platform for representatives from each member company to exchange best practices, gain actionable insights, and strengthen their ability to drive meaningful change within their organizations.

The integration of sustainability into our curriculum is a core element of our mission to develop entrepreneurial leaders who think globally and act responsibly. In today’s business environment, companies are held accountable for their impact on the world in ways that extend far beyond profit and loss statements. Our role as educators is to prepare our students to meet these challenges head-on, equipped with the knowledge, skills, and mindset necessary to drive positive change.



**JÖRG ROCHOLL**  
President, ESMT Berlin

# IN THIS ISSUE

WINTER 2024



20



16



27

## 03 EDITORIAL

### FEATURES

#### 05 Lessons from the sustainability frontier

Joanna Radeke and Jörg Rocholl

#### 09 Climbing the net-zero mountain

Jörg Eigendorf, Deutsche Bank

#### 13 Connecting data, policy, and people

Tammi L. Coles

#### 16 Empowering employees for a greener future

Aparna Justin and Christina Iosifidou, Siemens Energy

#### 22 Social sustainability – formal obligation or competitive advantage?

Thomas Ogilvie, DHL Group

#### 26 Protecting the natural world secures business futures

Myriam Rapior, Friends of the Earth Germany

### IN PICTURES

#### 20 Berlin Global Dialogue

#### 24 Sustainable Business Roundtable

#### 32 Expert Forum Adaptation and Mitigation

### CAMPUS & COMMUNITY

#### 29 Of note

#### 30 Reading room

#### 34 On ESMT's sustainable renovation efforts

#### 36 Learning by doing – sustainability solutions with NIVEA

### Imprint

**Editorial** Tammi L. Coles, Senior Editor, tammi.coles@esmt.org

**Contributors** Molly Ihlbrock, Head of Corporate Communications; Jeanne M. Gaebler, Deputy Director of Corporate Communications; Joanna Radeke, Director, ESMT Institute for Sustainable Transformation

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# LESSONS FROM THE SUSTAINABILITY FRONTIER

The pioneering ideas and leaders of social sustainability show how past innovations in labor management continue to shape more responsible and resilient business practices today.



**JOANNA RADEKE**  
Director, ESMT Institute for  
Sustainable Transformation



**JÖRG ROCHOLL**  
President, ESMT Berlin

There is no universally accepted definition of social sustainability (McGuinn et al., 2020). Nonetheless, within the broader sustainable development framework, it is pragmatically defined as the process of “identifying and managing business impacts, both positive and negative, on people” (UNGC, n.d.), with social equity, human rights, and well-being at its core.

In the book *Social Sustainability – Duty or Choice? Success Factors, Experiences, Expectations* (orig., *Soziale Nachhaltigkeit – Pflicht oder Kür? Erfolgsfaktoren, Erfahrungen, Erwartungen*), our chapter delves into the historical evolution of social sustainability. We trace its origins back to the labor movements of the late 19<sup>th</sup> and early 20<sup>th</sup> centuries, characterized by advocacy for improved working conditions, fair wages, and reduced working hours.

As business leaders now strive to make meaningful contributions to sustainability, they must glean

insights from the past to comprehend the intertwined environmental and social issues emerging as the central challenges of our era.

## Conceptual roots

The historical development of sustainability is tied to the broader concept of sustainability. Hans Carl von Carlowitz’s 1713 work *Sylvicultura Oeconomica* provided an early definition of sustainability in forestry as using natural resources at a rate they can regenerate. Social sustainability principles trace back to the late 19<sup>th</sup> and early 20<sup>th</sup>-century labor movements. Workers advocated for better conditions, fair wages, and shorter hours, and some business owners stressed worker productivity and societal contributions (Wren, 2009; Carroll, 2008).

Formal corporate social responsibility definitions emerged later, notably with Howard Bowen’s 1953 book *Social Responsibilities of the Businessman*.



## The 2015 Sustainable Development Goals (SDGs) provide a global framework for addressing sustainability, including decent work, economic growth, reduced inequalities, and well-being.

Bowen defined it as the obligation to pursue policies, decisions, or actions desirable for societal objectives and values (Bowen, 1953, p. 6). Milton Friedman and R. Edward “Ed” Freeman further influenced the definition of the social responsibility of business. In 1970, Friedman advocated shareholder primacy, prioritizing profit maximization. Conversely, in 1984, Freeman, a business scholar, detailed stakeholder theory, urging businesses to consider all stakeholders, not just shareholders.

The next phase of sustainability development focused on environmental concerns, influenced

by the environmental movement of the 1960s and 1970s. This era saw anti-nuclear and anti-pollution protests, with environmental issues gaining attention. The 1969 Santa Barbara oil spill and the 1986 Sandoz chemical spill further spurred support for environmental protection. Reports such as the 1972 Club of Rome’s *The Limits to Growth* and German politician and environmentalist Herbert Gruhl’s 1975 book *A Planet is Plundered* underscored the focus on environmental topics.

Sustainability became more explicit during the late 20<sup>th</sup> and early 21<sup>st</sup> century. The term “sustain-

able development” gained global recognition with the 1987 Brundtland Report. It defined sustainable development as meeting present needs without compromising future generations, highlighting intergenerational justice (United Nations, 1987). It has since been redefined to have three dimensions: environmental, social, and governance (ESG). With companies embracing these dimensions, social sustainability underscores social equity, human rights, and well-being. This encompasses fair labor practices, social inclusion, and the welfare of communities.

The United Nations played a significant role in advancing sustainability in work and social affairs. The 2015 Sustainable Development Goals (SDGs) provide a global framework for addressing sustainability, including decent work, economic growth, reduced inequalities, and well-being. EU sustainability regulations emphasize environmental and social aspects, with directives like the Corporate Sustainability Reporting Directive (CSRD) and the proposed Corporate Sustainability Due Diligence Directive (CSDDD) demonstrating these priorities.

### The pioneers

The origins of social sustainability trace to the late 19<sup>th</sup> and early 20<sup>th</sup>-century labor movements. During industrialization, poverty, child labor, and poor living and working conditions were prevalent.

Some visionary examples of business engagement emerged. Some of the early pioneers of social sustainability included:

- William Hesketh Lever (Unilever co-founder) built the Port Sunlight village for workers with housing, schools, and cultural institutions.
- George Cadbury (Cadbury founder) developed Bournville

village with affordable housing for employees.

- James Norris Gamble (Procter & Gamble heir) introduced profit-sharing for workers and supported schooling.
- Milton Hershey (Hershey founder) invested in schools and housing.
- Robert Bosch (Bosch founder) introduced an eight-hour working day in 1906 and supported health and social causes.

Another compelling example of social sustainability comes from Germany. In 1884, chemist Otto Schott, physicist Ernst Abbe, and optician Carl Zeiss founded the Schott glass company. In 1896, Abbe introduced the Carl Zeiss Foundation charter, granting employees unprecedented rights, including job protection, a minimum wage, paid leave, and pensions. The foundation also prioritized research and education, becoming a leader in both employee welfare and scientific progress.

Abbe's contributions to social sustainability were summarized in a 1913 article in the *Economic Journal*, in which the company's workers were called "the aristocrats of the working class" (Glatzer 1913, p. 336). Abbe's legacy included:

- advancing the company's interests while ensuring financial stability;
- supporting scientific developments;
- upholding social responsibility for employees' economic and social well-being;
- expanding educational opportunities; and
- promoting academic initiatives like founding university chairs and buildings.

Abbe's leadership not only gave the company a competitive advantage through employee benefits but also had a lasting positive impact by increasing access to education and knowledge.

## Paying it forward

The historical evolution of social sustainability transitioned from social issues in the early 20<sup>th</sup> century to environmental concerns in the late 20<sup>th</sup> century. Key issues included workers' rights, eradicating child labor, health and education programs, and cooperative production.

Today's sustainability landscape highlights interconnected issues such as climate change, biodiversity loss, employee rights, health, and well-being. This evolution underscores the need for business leaders to learn from history and adapt to effectively contribute to sustainable corporate and societal development.

Recent studies show employees feel business leaders "lack concern" for environmental and societal issues (Deloitte, 2024; Polman, 2023), underscoring the need for stronger leadership.

A trend among younger talent highlights two concerns: Environ-

mental awareness, exemplified by figures like Greta Thunberg, resonates with Millennials and Generation Z (Deloitte Millennial Survey, 2023). Gender diversity is scrutinized, with 75 percent of younger employees potentially leaving an organization because of a lack of progress (World Economic Forum, 2019).

Young adults acknowledge some positive strides in diversity, equality, inclusion, and work-life balance, but express concerns regarding environmental protection (Deloitte, 2023). Employees of all ages aspire to drive change within their company (Polman, 2023).

Business must tackle interconnected global challenges to maintain a competitive advantage, meeting expectations from capital, product, and labor markets. Understanding current societal concerns and empowering both companies and employees to address them is crucial to attract top talent in an increasingly competitive market.



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This article is a condensed version of the chapter "The Historical Development of the Concept of Sustainability in the Work and Social Realms: Drawing Lessons from the Past to Address Contemporary Challenges," published in *Soziale Nachhaltigkeit – Pflicht oder Kür? Erfolgsfaktoren, Erfahrungen, Erwartungen (Social Sustainability – Duty or Choice? Success Factors, Experiences, Expectations)* by Haufe Publishing.

# Your path to sustainable leadership

ESMT Berlin's master programs (Msc) are all designed to refine your skills and develop the foundation to drive sustainable change in a corporate or startup business.

## Master in Global Management

Gain the skills to drive meaningful change by participating in the **Social Impact Project**, where you will act as a consultant to organizations focused on achieving significant social objectives.

## Master in Innovation and Entrepreneurship

Join the **Sustainability Bootcamp** to connect with students, corporations, startups, and NGOs to develop new ventures that tackle the greatest challenges of the 21<sup>st</sup> century.

## Master in Analytics and Artificial Intelligence

Learn to align business goals with sustainability through data and AI. Choose from **sustainability-focused electives** such as Modeling and AI for Sustainability, Doing Business Sustainably, Designing for Social Inclusion, and more.



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# CLIMBING THE NET-ZERO MOUNTAIN

Integrating a net-zero commitment into a bank's decision-making process is as challenging as climbing a steep mountain. After two years, Deutsche Bank has made progress, but major obstacles still lie ahead.

The first sign of change was a number we published in our non-financial report in March 2022: 30.5 million. This was the sum of CO<sub>2</sub> metric tons we financed with our corporate loan portfolio in 2021, based on outstanding loans of 106.6 billion euros at the end of that year. It was the first time we publicly communicated our financed emissions, categorized as Scope 3.15.

Two years later, in March 2024, our non-financial report offered a completely different depth of information: not only did we publish the number of CO<sub>2</sub> metric tons for the overall corporate loan portfolio, we also published our progress towards portfolio-specific decarbonization targets for seven carbon-intensive sectors, including oil and gas (upstream), and coal mining. Our investors could also find the amount of CO<sub>2</sub> financed through our European residential real

estate loan portfolio and along our supply chain. Finally, Deutsche Bank announced with the publication of the report that the management board's long-term incentives would be partially linked to successfully staying aligned with the sectoral net-zero pathways we had published. This was an important step forward to make CO<sub>2</sub> emissions a key performance indicator in the steering of our bank.

What sounds easy has actually been a long and complex journey. What did this journey look like? Which of these steps were easy, and which were difficult? What are the consequences? And what are the flaws in the system?

## Forming a strategy

Our progress in CO<sub>2</sub>-reporting and management is the consequence of a self-imposed commitment: in April 2021, we founded the Net-Zero Banking Alliance (NZBA) together with 42 other banks. We committed not only to creating transparency about our carbon emissions but also to publishing the net-zero pathways for the most CO<sub>2</sub>-intensive sectors in our corporate loan portfolio. This commitment included the obligation to publish a transition plan twelve months after our disclosures on the first four sectors. For Deutsche Bank, this meant that our transition plan had to be published by the end of October 2023. And from next year, all NZBA members will publish their facilitated emissions, i.e., also bond issuance.



**JÖRG EIGENDORF**  
Chief Sustainability Officer  
Deutsche Bank

## Navigating challenges and refining processes

Just publishing 30.5 million metric tons for the corporate loan portfolio in March 2022 triggered serious consequences; once the carbon emissions are public, it draws the attention of regulators, investors, and NGOs. It became clear quickly that we needed more steering mechanisms.

By early summer 2022, we started refining our tracking. We needed to answer the simplest questions, such as which factors, beyond outstanding loans to our corporate clients, were influencing this number.

It also was the moment our Net-Zero Forum (NZF) was born. Our corporate bank and investment bank, our enterprise risk management, and the chief sustainability office came together to manage our carbon footprint effectively.

Foremost, we needed more transparency. Here, the pathways for the first four carbon intensive sectors helped tremendously. Quickly, we gained not only an overview of the most CO<sub>2</sub>-intensive companies among our clients, but also an awareness of how our loan portfolio developed from a carbon perspective. The astonishing result: only one percent of our corporate clients made up over 80 percent of the emissions of our corporate loan portfolio (scope 1 and 2 of our clients). This made obvious what was needed for managing our carbon exposure: focus.

### Establishing thresholds for lending

Our next step was to create thresholds for lending transactions. We made it a requirement that every loan to in-scope sectors over 25 million euros must be discussed if the emissions of the transaction would lead to an increase of more than one percent of the financed emissions for the individual sector.

Deciding what to bring up in the NZF is one thing; discussing the individual loans quite another. Although the NZF has no formal right of veto, it formulates recommendations. And our experience is that this comes very close to a veto right, as deals are usually not done when risk or sustainability representatives voice concerns.

As of the time of writing (September 2024), the NZF had discussed over 80 transactions of our corporate clients. These meetings have a standard procedure: businesses, risk, and sustainability teams analyze the client's ability to transform. We look at net-zero commitments and transition plans and assess their credibility.

## Client engagement and influence

While the discussions are based on lots of data and analysis, soft factors increasingly play a role. What influence do we have on our client? Are we in a constructive dialogue regarding their sustainability targets? Or are we merely one of a client's many banks, without enough influence to specify additional conditions attached to a loan, e.g., the publication of the CO<sub>2</sub> footprint and a net-zero pathway?

In one case, we had two transactions with similar carbon profiles: both clients had no net-zero commitment and credible transition plans were missing. We nonetheless came to different conclusions. In one case, we did not recommend the transaction; in the other case, we recommended it. Why? Because our bank played an important role in the latter's financing. That meant the deal team could be sure to implement additional conditions attached to the loan relating to the transparency of the CO<sub>2</sub> reporting and the outstanding net-zero commitment.

This kind of dialogue with our clients is vital if we want to achieve our net-zero target. We have set ourselves the ambition that at least 90 percent of

Jörg Eigendorf (Deutsche Bank) at the 27<sup>th</sup> meeting of the Sustainable Business Roundtable, ESMT Berlin, on June 19, 2024.



our high-emitting clients in the most carbon intensive sectors who seek to engage in new corporate lending transactions shall have a net-zero commitment in place from 2026 onwards. This is ambitious in a world where only 40 percent of listed companies have a net-zero commitment of any kind.

Nonetheless, we typically recommend a deal. More often, the extensive NZF discussions lead to the addition of conditions to the loan terms to support the clients in their transition towards net zero. Naturally, if they become more ambitious in their emission reduction, our CO<sub>2</sub> emissions profile will also benefit.

This is in the spirit of what we want to achieve. We must understand that most companies, also carbon intensive ones, will keep getting financing. If they do not get it from a highly regulated market participant like us, they will go to less regulated entities in the private credit market. Hence, our approach is to support our clients in their transition, which requires intensive dialogue. Exiting a client relationship should be only the last resort. That is, Deutsche Bank believes that client relationships are our most effective lever in the fight against climate change. Once those relationships are terminated, our influence on their carbon footprint vanishes too.

## Deutsche Bank believes that client relationships are our most effective lever in the fight against climate change.

### Collaboration and industry standards

It has been tremendously helpful that many banks have now joined the NZBA. This helps level the playing field and facilitates a common understanding between banks and industry. It is always easier to climb a mountain when everybody understands that no one is staying behind to party down in the valley. Creating this kind of commitment across industries without being overly prescriptive, and leaving enough room for competition, is the biggest achievement of this self-regulation in the banking industry.

We all owe kudos to Michael Bloomberg and Mark Carney, the masterminds behind the Glasgow Financial Alliance for Net Zero (GFANZ), which created the basis for the net-zero alliances. No one is competing over whether we protect the public good of global climate. We compete over how we achieve it best together with our clients.

### Managing carbon budgets

Once we started this journey, each step naturally followed the next. In 2023, it became obvious that managing a carbon budget for Deutsche Bank required more responsibility on the divisional level. This avoided the risk of having no budget left for strategic transactions supporting the divisional business strategies.

This was the reason why, this year, we broke down the group carbon budget into divisional ones, with all the challenges this entails, especially on the data side. The more granular we get with our budgets, the



more we need detailed information on our clients, as our business colleagues suddenly face the risk of breaches on their respective level. The positive result is that our approach to carbon management has become increasingly strategically driven, as businesses needed to analyze their portfolios in depth. Today, two and a half years after we published the first number of the carbon footprint of our corporate loan portfolio, we know much more about our clients, their ability and willingness to transition, and the challenges they face along the way. And we continue to learn.

### **Data challenges and volatility**

But there is still a lot that remains to be done. It starts with data. Our industry is still heavily reliant on modeled data instead of original and audited data from our clients. In one case, the modeled carbon emissions by a trusted data provider were roughly 50 times higher than the data provided by the client, based on audited numbers.

We also see huge volatility in the data, as the enterprise value including cash (EVIC) is used to determine our share in its financing. Thus, while the nominal

value of our loan stays stable, EVIC can be highly volatile. This means that our financed emissions in absolute terms may fluctuate significantly, with no change in the factual emission of a company.

Next to data, the transition finance framework poses another challenge. It needs to be clearly determined what a credible transition looks like in any sector. This will then effectively influence decisions we take as a bank and in our NZF. All of this needs a considerable number of investments in resources and time across the industry.

### **Residential real estate challenges**

Although 54 percent of our corporate loan portfolio – i.e., the most carbon-intense sectors – is under a net-zero regime, it will be much more challenging to formulate and execute a strategy to reduce emissions for our residential real estate portfolio. At just 2.5 million metric tons EU-wide, compared to 28.1 million metric tons of the corporate loan portfolio by year end 2023, our residential real estate portfolio may not be as material in overall outstanding financed emissions.

However, managing the footprint of residential mortgages is much more challenging. First, there is the sheer number of loans (Deutsche Bank finances over 1.5 million mortgages in Europe) and their long tenures. Second, the transition of the housing sector depends heavily on government support for homeowners.

### **The road to net-zero success**

Our journey since joining the NZBA demonstrates how complex it is to integrate a simple KPI, like metric tons of carbon, into the steering mechanisms of a global bank and the significant challenges that remain. While the NZBA has set a standard for the industry, it has been tremendously helpful that the self-imposed commitments for individual banks were not overly prescriptive. This allowed us to develop our own approach and focus on what really matters: working with our clients to transform their business models and, ultimately, the economy.

To continue with the mountain climbing metaphor: We have come a long way, and the small houses in the valley are now barely visible below. However, the summit remains distant, and the path is shrouded in fog, filled with uncertainties. While we are encouraged by the progress of the first two and a half years, much more hard work, intelligence, and collaboration – both internally and across the industry – will be needed to make the net-zero mission a success.



# Connecting data, policy, and people



Using a data-driven approach, businesses and communities can collaborate to create sustainable systems.

**H**ow do we ensure that sustainability is more than just a well-intentioned idea? The Forward Society Lab (FOS Lab) – co-directed by Rajshri Jayaraman, an associate professor at ESMT – focuses on how data and evidence can shape more sustainable practices. Through research-practice partnerships (RPPs), FOS supports partners in maximizing data use to address unique challenges and co-develop long-term, tested, and tailored solutions.

Sustainability, in its broadest sense, requires businesses, governments, and communities to work together. It's about making informed decisions that respond to real-world needs and ensuring that these solutions positively develop. Projects at FOS Lab – from

education initiatives in Puerto Rico to resilience-building in Brazil – do just that. The lab is committed to making sustainability work in practice, not just in theory.

## Turning research into action

At FOS Lab, the guiding principle is that action must be informed by evidence. Academic insights are only useful when applied in ways that are tailored to real-world challenges. What's needed is a seamless connection between data, people, and application. This is why FOS Lab research affiliates work alongside governments, businesses, and local communities to gather data and co-create solutions informed by evidence and grounded in the specific needs of those served.



**TAMMI L. COLES**  
Senior Editor  
ESMT Berlin



Assoc. Prof. Rajshri Jayaraman

Sustainability isn't a one-size-fits-all concept. Every community presents a distinct set of challenges. To meet those challenges, FOS Lab uses an iterative model, working closely with stakeholders from the ground up. By identifying the unique barriers faced by communities, the Lab co-develops data-driven solutions that are tested and refined in real-time through constant feedback. This iterative process ensures that the interventions remain flexible and responsive to the changing needs of the communities they support.

Below are two examples that show how this collaborative and responsive model works in practice.

### Puerto Rico – Education and emotional resilience through innovation

In Puerto Rico, the aftermath of hurricanes, economic instability, and the COVID-19 pandemic

created an urgent need for sustainable solutions in education and emotional resilience. FOS Lab – represented by FOS co-director Gustavo J. Bobonis – partnered with local initiatives, including EDUGESPRO, Atemá, and Acemocion, to address these challenges through data-driven approaches focused on long-term sustainability for schools and communities.

The EDUGESPRO initiative provided school administrators with digital tools for resource allocation and teacher support, while Acemocion worked with students to enhance emotional resilience. FOS Lab measured the short-term and long-term effects of these interventions, tracking improvements in emotional well-being, educational performance, and administrative efficiency.

Initial results showed that students involved in Acemocion experienced reduced anxiety levels, while schools in EDUGESPRO re-

ported better resource management and teacher satisfaction. These outcomes underscore the need for sustainable educational systems that balance technological innovation with emotional support to prepare students and educators for future challenges.

### Brazil – Water access as a catalyst for autonomy

In Northeastern Brazil, water scarcity had historically been manipulated by local politicians to maintain control, with families dependent on intermittent access to water in exchange for political support – a practice known as clientelism. FOS Lab – represented by Bobonis and FOS research affiliates Marco Gonzalez-Navarro and Simeon Nichter – partnered with local researchers to evaluate the long-term effects of a government program that installed rainwater cisterns in rural communities. The research aimed to determine whether reliable access to water could disrupt this cycle of dependency and shift political dynamics.

The findings were striking. Families with cisterns became less reliant on political favors and felt empowered to vote independently. Data also showed increased community participation in local governance, illustrating how sustainable access to a basic resource like water can foster long-term political and social resilience. Local leaders played a crucial role in the program's success, ensuring the cisterns were integrated into the communities' broader resource management systems. Their involvement not only strengthened trust but also helped solidify the sense of ownership among residents.

Beyond the political impact, the consistent access to water also had economic benefits, allowing families to dedicate more time to farming and other income-generat-



ing activities. This shift contributed to greater economic stability and reduced the uncertainty that had plagued the region for decades.

### **Data-driven, human-centered**

At FOS Lab, commitment to sustainability extends beyond implementing solutions – it’s about fostering long-term, adaptive engagement with the communities served. Jayaraman believes the true impact of FOS Lab’s approach is in the continuous integration of local feedback and lived experience. While data helps guide interventions, the ongoing collaboration with people that ensures that sustainability thrives in practice.

FOS Lab’s projects are seen as the start of an evolving partnership with communities, where progress is measured not only by metrics but by the strength of local ownership. In Brazil, for example, the installation of rain-water cisterns didn’t just provide

water; it sparked a shift in local governance and economic stability. Similarly, in Puerto Rico, emotional resilience programs like *Ac-emocion* grew stronger because they were tailored to reflect the psychological realities of students navigating multiple crises.

### **Data insights in sustainability**

Sustainability has become a buzzword in the business world. Research from FOS Lab highlights how organizations and communities are using data to focus on key sustainability efforts such as reducing waste, improving resource efficiency, and fostering transparency. These insights provide evidence on how data-driven strategies can guide decision-making processes related to resource allocation and operational efficiency. By leveraging data, organizations can explore potential pathways for balancing immediate pressures with long-term sustainability goals.

### **Sustainability as a shared journey**

FOS Lab’s work shows that sustainability is a long-term process that involves continuous collaboration across sectors. Whether addressing educational initiatives in Puerto Rico or supporting political autonomy in Brazil, the challenges vary but are consistently addressed through evidence-based approaches.

At ESMT Berlin, future business leaders and policy experts are learning how data and evidence can inform sustainability practices. The institution emphasizes an ongoing process of learning, adaptation, and collaboration, equipping students with the skills to integrate data-driven sustainability solutions into business practices.

Everyone has a role to play in building a sustainable future. This requires leadership at every level – from the classroom to the boardroom, and through education, research, and action.

# Empowering employees for a greener future

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**CHRISTINA IOSIFIDOU**  
Head of Sustainability Grid  
Technologies, Siemens Energy



**APARNA JUSTIN**  
Sustainability Manager at Grid  
Technologies, Siemens Energy

Siemens Energy partners with ESMT to equip employees with the skills needed for sustainable business practices through a tailored training program.





**A**t Siemens Energy (SE), sustainability is at the heart of everything that we do. Our strategy focuses on two key areas: decarbonizing our business and ensuring responsible operations. We have set ambitious decarbonization targets to reach net-zero emissions across our entire value chain, in line with the 1.5°C pathway, as verified by the Science Based Targets initiative (SBTi).

Central to our decarbonization efforts are reducing greenhouse gas emissions, improving energy efficiency, and fostering innovation. Beyond environmental sustainability, we focus on inclusion and diversity, talent attraction and retention, and health and safety to ensure our operations are socially responsible and ethical.

Integrating sustainability into every function of our business is essential to our success. Our environmental, social, and governance (ESG) initiatives are driven by a central corporate team, with dedicated sustainability experts embedded in each business area. We have identified several levers for change, but these efforts cannot be shouldered by one department alone. Sustainability is a cross-functional imperative that must be integrated into all operational processes and strategic decisions.

To support this, we partnered with ESMT to develop a tailored sustainability business training program to upscale our workforce with the principles and practices of sustainability.

## Personal challenges in sustainability leadership

When I was entrusted with the opportunity to lead the sustainability team for Siemens Energy Grid Technologies, I was both excited and nervous. While the excitement stemmed from the importance of the topic and the impact I could generate, I was concerned about my lack of formal education in sustainability. However, I was eager to bridge this gap by educating myself and believed that, by combining my expertise in energy transmission products, I could drive the sustainable transformation of our business. Over the years, working with my team and collaborating with fellow sustainability professionals in the industry, I came to realize that this challenge was not unique to me.

A recent survey conducted by Kite Insights, which spanned over 7,000 respondents across 10 countries, revealed that fewer than half of employees feel confident in their ability to take meaningful climate action. Research conducted by Microsoft



and Boston Consulting Group (BCG), involving some 250 employees at 15 companies at the forefront of sustainability innovation and change, highlighted the considerable challenges we must overcome to develop sustainability skills on a global scale.

### A shared vision

SE and ESMT have a strong history of collaboration, working together through various training initiatives and projects. Given ESMT's strong reputation in executive education, we saw a clear benefit in partnering with ESMT to develop this program.

However, the journey to create a program for a company as large and diverse as SE presented significant challenges. Our employees come from different functions and business units with varied levels of sustainability knowledge. Defining the right format, scope, and content to meet the training needs of such a diverse group proved to be a complex, multi-faceted task.

### Tailored training for a diverse workforce

The program's goal was to provide employees without formal sustainability education with a foundational understanding of the principles and practices guiding corporate sustainability initiatives. A key objective was to familiarize everyone with the regulatory frameworks currently governing sustainability initiatives and the upcoming laws that will affect the way we do busi-

**This is a testament to our resolve in driving the sustainable transformation of the energy sector.**

ness. Additionally, the program sought to deepen their understanding of the capital market outlook on sustainability, helping them see how our sustainability efforts and the resulting ESG ratings will affect various aspects of our business. Practical methodologies to decarbonize the entire value chain was another crucial focus, with industry and academic case studies illustrating successful results. Finally, we designed the program to inspire and motivate our employees by introducing innovations in circular economy.

The expertise the ESMT executive education team brought to content development proved extremely valuable throughout the entire process. Their prior experience in creating customized corporate trainings helped us collaboratively define a format and structure that worked for our diverse workforce. One particularly effective idea was to have an optional virtual pre-training on sustainability basics, which bridged the gap between the sustainability knowledge levels of the participants. The immense knowledge and expertise of the ESMT professors – most of whom have experience not just in academic research but also in corporate guidance in sustainability initiatives – added great value to the development and execution of the training.

### Pilot training and feedback

In June 2024, we conducted our pilot training program, which served as a valuable learning opportunity for both SE and ESMT. Participants from across the globe gathered to take part in the four-day training at the ESMT campus in Berlin. After collecting insights from participants, we fine-tuned the program to better suit the requirements of our target group.

The initial feedback was overwhelmingly positive, with participants praising everything from the quality of the lectures to the logistical arrangements. Our participants also expressed great satisfaction with their involvement in the training.

As we prepare for our next group of trainees, the upskilled pilot cohort is already motivated and energized to contribute to the sustainable transformation of our business in their daily operational roles.



### Building for broader impact

With extreme weather events – such as storms, floods, and landslides – making headlines more frequently, and the climate crisis becoming increasingly tangible, sustainability has become a focal point of global discourse. This is no longer confined to news bulletins; it is a key concern for academia, regulatory frameworks, and businesses worldwide.

Our collaboration with ESMT on developing this training program reflects our deep-seated commitment to sustainability. The willingness of our managers to invest in their teams, facilitating travel from around the world to participate, shows that sustainability is not merely an aspirational goal, but a core value embedded in our organization. We believe this training will help turn our sustainability goals into tangible results. By equipping our employees with the knowledge and skills necessary to navigate the complexities of sustainable business practices, we are fostering a culture of innovation and responsibility. This initiative is not only an investment in our workforce, but also a testament to our resolve in driving the sustainable transformation of the energy sector.

The partnership between SE and ESMT in developing the Sustainable Business Training program sets a precedent for how industry and academia can collaborate to address the urgent need for sustainability education. While our journey has just begun, we are committed to continuously refining our approach to ensure that our employees are not just participants in this transformation, but leaders shaping a more sustainable future for all.

# BUILDING COMMON GROUND BERLIN GLOBAL DIALOGUE 2024

**T**his year, the Berlin Global Dialogue (BGD) at ESMT brought together more than 900 participants from over 70 countries under the theme “Building common ground.” With 300 CEOs and C-level executives, two heads of state, including French President Emmanuel Macron, 13 ministers, 11 deputy ministers, and 29 ambassadors, BGD tackled pressing global issues from many perspectives. In a dynamic blend of small- and large-format sessions, discussions ranged from economic resilience to technological innovation, often returning to sustainability as a cornerstone for future stability and progress.

Students actively contributed as part of the Young Voices Program, which hosted 38 students representing 24 nationalities from ESMT and our partner schools within the Global Network for Advanced Management.

The 2024 BGD demonstrated that, while sustainability can be a challenging and multifaceted goal, it is central to long-term global stability. By fostering collaborative leadership, BGD supports ESMT Berlin’s commitment to shaping a sustainable future, bridging sectors and disciplines to forge resilient and responsible solutions for the complex challenges ahead.

Photos by Izzy Dempsey, Andrew Grauman, and Ana Torres.



#### ON THIS PAGE

Carolin Albrecht, Managing Director, Berlin Global Dialogue; Bernard Mensah, President of International, Bank of America; Emmanuel Macron, President of France; Lars-Hendrik Röller, Founder and Chair, Berlin Global Dialogue and Professor of Economics, ESMT

Mohammed Al-Jadaan, Minister of Finance, Saudi Arabia; Christian Lindner, Minister of Finance, Germany; Emma Marcegaglia, CEO, Marcegaglia Holding With moderator Carolina Chimoy, Political Correspondent, Deutsche Welle



Vjosa Osmani Sadriu, President of the Republic of Kosovo; Merit Janow, Dean Emerita and Professor, Columbia University; Patrick Zhong, Chairman and CEO, M31 Capital; Anish Shah, CEO, Mahindra; Lars-Hendrik Röller, Founder and Chair, Berlin Global Dialogue and Professor of Economics, ESMT



**ON THIS PAGE**

BGD Young Voices participants with President Macron

Jochen Flasbarth, State Secretary, Federal Ministry for Economic Cooperation and Development, Germany; Ndiarka Mbodji, Founder & CEO, Kowry Energy; Hans Otterling, Founding Partner, Norrsken22

Francine Laqua, Anchor & Editor-at-Large, Bloomberg; Larry Fink, Chairman & CEO, BlackRock

BGD Young Voice participant Niken Wijaya

Ola Kallenius, CEO, Mercedes-Benz; Cecilia Malmstrom, Former Trade Commissioner, EU; Robert Habeck, Vice Chancellor and Federal Minister for Economic Affairs and Climate Action, Germany; Brian Gu, Vice Chairman of the Board and Co-President, XPeng; Michaela Kufner, Chief Political Editor, Deutsche Welle



Roundtable Dialogue "The Path Forward – A Global Economic Outlook"



# SOCIAL SUSTAINABILITY — FORMAL OBLIGATION OR COMPETITIVE ADVANTAGE?

**As businesses face growing regulatory demands, Thomas Ogilvie, Global CHRO at DHL Group, examines the role of social sustainability in enhancing corporate resilience and competitiveness.**



**THOMAS OGILVIE**  
Global Chief Human Resources  
Officer, Management Board  
DHL Group

**O**ver 50 years ago, prominent economist Milton Friedman famously wrote that the primary responsibility of business is to maximize shareholder profits – often paraphrased as “the business of business is business.” This idea remains an anthem for private companies, especially publicly listed ones, as they share a common focus on profit generation. Therefore, management teams must act credibly as custodians of their owner’s invested capital, as shares can be easily traded and alternative investment opportunities are abundant.

While these pillars of capitalism remain true, capital today is invested at the speed of a fingertip, driven either by the desire to maximize returns or constrained by the investment policies, standards, and value propositions of private investors, institutional investment companies, or pension funds.

The same mechanisms apply when companies interact as suppliers and customers, with the customer side – often led by procurement teams – seeking the best quality but prioritizing the best price. Identifying the best price (in nominal terms) is straightforward when comparing two offers, but

assessing quality or credibility is far more complex when determining the best value for money. Product or service quality, along with reliability and assurance of availability, are key variables in this equation.

In recent years, however, another important factor has begun to shape and influence negotiations between enterprises: sustainability.

While there are consumer expectations for companies to do good – or at least do no harm – a tightening set of regulations and standards is pushing companies to comply with sustainability requirements.

Until now, the focus on sustainability has been largely on the environmental dimension of ESG, with efforts centered on addressing climate change through decarbonizing business practices and reducing pollution and waste. The introduction of a standardized metric for GHG emissions, along with categorization into different scopes, has made the environmental aspect of sustainability measurable, comparable, and tradeable – particularly with the established pricing mechanism for per-ton GHG emissions and the mandatory, auditable reporting requirements.

In contrast, social sustainability lacks a clear, standardized leading metric to measure the baseline, set targets, identify gaps, and track progress in closing them. Social sustainability is a multi-dimensional concept of various elements, including occupational health and safety, inclusion and belonging, human rights across the value chain, and strong leadership and development opportunities. Nevertheless, an examination of the regulatory landscape shows that similar reporting standards, control obligations, and public oversight bodies are emerging for social sustainability, much like those in finance and decarbonization.

Some may argue that this adds bureaucracy and reduces entre-

preneurial freedom – a common criticism that holds some truth, given the breadth and depth of social KPIs to be reported. Nevertheless, these formal obligations are unavoidable, as they have the same level of gravity within an integrated reporting environment as the IFRS 16 standard.

Focusing solely on this aspect overlooks the important link between increased entrepreneurial resilience and social sustainability. The simple truth is that engaged, motivated, and satisfied employees create an intangible competitive advantage by delivering better service quality, higher productivity, and greater innovation, which leads to higher customer satisfaction, more business, and higher profits.

However, with the upcoming obligations of the Corporate Sustainability Due Diligence Directive (CSDDD) and its existing national equivalents in many European and non-European countries, there are other tangible competitive advantages to running a socially sustainable business: retaining existing clients and attracting new ones.

By expanding accountability for adherence to certain social standards beyond the boundaries of the directly employed workforce, companies covered by the CSDDD risk fines of up to 5 percent of global revenue for severe breaches, surpassing the maximum 4 percent penalty for GDPR violations.

Consequently, companies are increasingly required to assess their suppliers' approaches to social sustainability – just as they do for environmental sustainability – making social sustainability a crucial factor in supplier selection, particularly in emerging markets and industries with an inherently higher risk profile.

Tenders and RFQs among large multinational companies often include sections requiring disclosure of policies, governance structures, practices, and track records related to social sustainability. While this is rarely the reason for winning a contract, it can certainly be a decisive factor in losing one.

So if, as Friedman asserted, “the business of business is business,” then the business of a business is also social sustainability.



# CREATING A LEGACY OF IMPACT WITH THE SUSTAINABLE BUSINESS ROUNDTABLE

Established in 2011 by former ESMT faculty member CB Bhattacharya, the Sustainable Business Roundtable (SBRT) promotes collaboration among companies focusing on sustainability. At a time when the topic was rarely discussed, the SBRT created space for businesses to connect and exchange ideas under ESMT faculty guidance. It brought together diverse corporate departments and perspectives to foster candid, in-depth conversations on integrating sustainability into business practices, seeking collective solutions to drive sustainable change.







As the SBRT grew, diverse industries joined, enriching discussions and highlighting the need for tailored approaches. The SBRT broadened its focus beyond idea exchange, emphasizing practical sustainability applications across all business areas. Representatives explored how to communicate the complexity of sustainability efforts – addressing issues like innovation, regulation, and compliance – while also focusing on measuring impact and creating sustainable customer value.

**Join now**



The SBRT inspires businesses to integrate sustainability throughout their operations, providing a platform for transformative collaboration. Membership offers companies a unique opportunity to learn from peers, share challenges and successes, and engage in a community dedicated to advancing sustainable practices. It grants access to high-level discussions, practical insights, and a network of leaders committed to driving positive change. Companies interested in joining can connect with ESMT to become part of this growing, dynamic network.

# Protecting the natural world secures business futures



**MYRIAM RAPIOR**  
Biodiversity Manager,  
University of Hamburg

Vice President, Friends of the Earth Germany / Bund für Umwelt und Naturschutz Deutschland (BUND)

Council Member, German Council for Sustainable Development (RNE)

Photo credit: PHOTOGRAPHIC Berlin

**B**iodiversity – the variety of life on Earth across genes, species, and ecosystems – is not just a concern for environmentalists; it is a cornerstone of business sustainability and resilience. The ongoing loss of biodiversity, driven by habitat destruction, overexploitation, pollution, climate change, and the spread of invasive species ([UN Environment Programme, 2022](#)), presents significant risks to companies worldwide. More than half of global GDP is endangered when biodiversity and related ecosystem services decline ([World Economic Forum, 2023](#)).

Since companies are both contributing to and affected by biodiversity loss, they must take an active role in its protection – not only to meet regulatory demands but also to safeguard their own long-term viability.

## Why it matters

Companies rely on ecosystems for essential resources like clean water, fertile soil, and pollination. Industries such as agrifood, pharmaceuticals, textiles, and construction are particularly dependent on these ecosystem services and natural resources. The loss of biodiversity can disrupt supply chains, reduce resource availability, and increase costs. For example, impaired soil health undermines food production, and species extinction may eliminate potential medicinal sources.

As ecosystems weaken due to biodiversity loss and climate change, natural disasters like floods or droughts become more frequent and severe. This heightens operational risks for businesses, including disrupted logistics and damaged infrastructure. Com-

**Integrating biodiversity management into business practices not only meets regulatory demands but also strengthens resilience, builds consumer trust, and attracts investor confidence for long-term sustainability.**

panies located in areas vulnerable to such natural calamities must factor these risks into their business continuity planning.

Governments and international bodies are increasingly introducing regulations that mandate companies to assess, disclose, and mitigate their impact on biodiversity. The European Union's Corporate Sustainability Reporting Directive (CSRD) includes specific reporting standards (ESRS E4) on biodiversity and ecosystems. Additionally, biodiversity-related laws like the EU Deforestation Regulation (EUDR) are imposing stricter controls on companies that are linked to biodiversity destruction through their supply chains. Companies that fail to comply with these regulations risk legal penalties, reputational damage, and loss of investor confidence.

Today's consumers and investors are more aware of environmental issues and expect businesses to operate responsibly. Companies that fail to engage in biodiversity management risk reputational damage, losing brand loyalty and destroying customer trust. In contrast, businesses that actively protect biodiversity strengthen their reputation

as sustainable leaders, gaining a competitive edge in markets where environmental, social, and governance (ESG) factors grow in importance.

Investors are increasingly favoring companies with strong ESG credentials, viewing companies that actively protect ecosystems as more future-proof. A company's stance on environmental issues, including biodiversity, also influences its ability to attract top talent. Especially younger generations prefer employers who demonstrate a commitment to sustainability.



**Consumers and investors are more aware and expect businesses to operate responsibly.**

Understanding the importance of biodiversity is just the first step. Companies need clear strategies and action plans to effectively manage their impact on biodiversity and ecosystems. Biodiversity management should focus on four key areas: governance, business model resilience, operational sites, and supply chains.

A robust biodiversity strategy should be embedded within the company's overall governance framework. Clear responsibilities should be defined at all levels, from top management to operational teams. The board and senior management must regularly engage with biodiversity topics, ensuring that policies and strategies are in place to guide decision-making. Companies should establish biodiversity policies that are aligned with their sustainability goals and monitor progress through measurable targets.

Biodiversity loss threatens the resilience of business models, especially for companies dependent on natural resources. Companies

**Companies should assess their ecological footprint, mitigate negative impacts, and restore or protect natural habitats.**

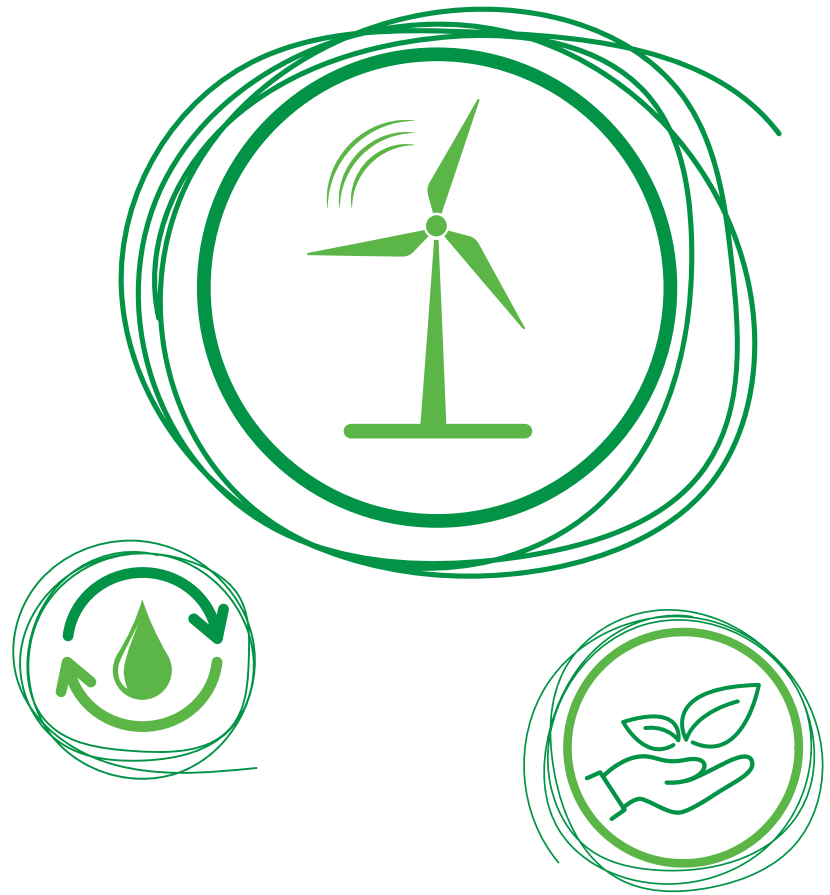
must evaluate how their business activities affect and are affected by declining ecosystems. Building resilience requires adapting business models to be less reliant on ecosystem services at risk, such as clean water, healthy soil, and pollination. This is particularly important for sectors like agriculture, forestry, and manufacturing, which are directly linked to biodiversity.

Corporate sites – whether production facilities, offices, or distribution centers – can have a direct impact on local biodiversity. Companies should assess their ecological footprint, mitigate negative impacts, and restore or protect natural habitats. By conducting such environmental impact assessments, companies can better understand how their operations affect surrounding ecosystems, enabling targeted mitigation strategies.

Biodiversity risks extend beyond a company's immediate operations, reaching deep into its supply chain. Raw material extraction, sourcing practices, and supplier

relationships all play a role in biodiversity conservation. Companies should evaluate how their supply chains contribute to biodiversity loss and implement responsible sourcing strategies. Working closely with suppliers to ensure biodiversity-friendly practices is essential, as is understanding the broader ecological implications of resource use.

Biodiversity is not just an environmental issue – it is a business imperative. Companies that fail to manage their impact on biodiversity risk supply chain disruptions, regulatory penalties, and reputational harm. On the other hand, those that embrace biodiversity management can unlock new opportunities, from improved business resilience to stronger stakeholder relationships. For businesses, protecting biodiversity is not just about doing the right thing – it is essential for ensuring long-term profitability and sustainability in an increasingly uncertain world.



# Of note

## ESMT Berlin events, faculty, and research announcements

### **Today's Global Leader with Bonita Grupp, Managing Partner, Trigema**

In ESMT's latest Today's Global Leader session, Bonita Grupp, managing partner of Trigema, engaged audiences with her journey in leading one of Germany's top family-owned businesses through generational change. Grupp highlighted her strategies for sustainability, supply chain independence, and fostering an inclusive workplace of over 40 nationalities – all while upholding Trigema's "Made in Germany" ethos. Opening remarks by ESMT's Bianca Schmitz, an expert on German SMEs, framed the challenges and opportunities facing the Mittelstand. Moderated by journalist Astrid Frohloff, the session also touched on Grupp's political engagement and her vision for family businesses in supporting economic stability across Germany. (October 24)

### **Ann-Kristin Achleitner appointed as distinguished affiliate professor**

ESMT has appointed Ann-Kristin Achleitner distinguished affiliate professor. A renowned academic and expert in the fields of entrepreneurial and corporate finance, Achleitner brings a wealth of experience and knowledge to her new role, further strengthening ESMT as a leader in innovative business education. (October 7)

### **Harald Christ appointed first honorary senator of ESMT**

ESMT named Harald Christ as its first honorary senator, recognizing his exceptional support for the business school and his commitment to promoting democracy, diversity, and innovation. Christ, founder of the Harald Christ Foundation, was honored for his contributions to advancing ESMT's mission and values. (October 2)

### **German winners of INNOVA Europe 2024 competition**

ESMT's start-up team Reduco, a property technology platform dedicated to reducing CO<sub>2</sub> emissions in buildings, won €5,000 in the Young Hopes category at the INNOVA Europe 2024 Grand Finale. Competing against teams from nine of Europe's top

business schools, Reduco was recognized for its innovative approach to energy efficiency. INNOVA Europe was co-founded by EDHEC Business School, POLIMI Graduate School of Management, and ESMT Berlin to promote responsible entrepreneurship and tackle global challenges through innovative startups. (September 27)

### **ESMT and KfW Capital partner for venture capital executive education program**

The Institute for Deep Tech Innovation (DEEP) at ESMT and KfW Capital announced a new executive education program for leaders in the venture capital sector. The program is part of the "Growth and Innovation Capital for Germany" (WIN) initiative launched by the German federal government. It will provide fund managers and passive investors with critical knowledge and practical insights to navigate the venture capital landscape. The first cohort is expected to begin in 2025. (September 23)

### **Book release: Leveraging digital innovation in business**

Christoph Burger, senior lecturer, and Jens Weinmann, program director for executive education, at ESMT, co-authored "Leveraging Digital Innovation: Lessons for Implementation." The book offers practical insights on integrating disruptive digital technologies, such as AI and blockchain, into business processes. Featuring ten case studies from companies like Allianz and Uniper, it provides executives with a roadmap for navigating digital transformation. (September 12)

### **ESMT, HHL, and WHU jointly host MBA Talent Forum**

On November 28, ESMT, HHL Leipzig Graduate School of Management, and WHU/Otto Beisheim School of Management partnered to host the inaugural MBA Talent Forum at ESMT. The event provided top MBA professionals valuable opportunities to connect with international companies from various industries, including e-commerce and finance, for recruitment and networking. (November 28)

### **ESMT and UVA McIntire partner for global impact program**

Together with the University of Virginia's McIntire School of Commerce, ESMT launched a global impact program for Master of Global Management students. Starting in 2025, students will collaborate across continents on social impact projects, enhancing their global business skills. (August 20)

### **Handelsblatt and ESMT partnered for Management Summer School**

To support leaders in mastering the challenges they are facing, ESMT partnered with Handelsblatt to offer a specialized management summer school. Designed for management professionals and corporate leaders, this program provided Handelsblatt subscribers with a comprehensive suite of resources including articles, podcasts, video tutorials, and live talks featuring top management experts. (July 12)

### **ESMT Open Lecture with Min Ye, founder and CEO of Alnvone GmbH**

Min Ye talked on developing AI strategies that comply with data privacy regulations, such as GDPR. Drawing from her extensive industry experience, Dr. Ye explored the challenges businesses face in aligning technological advancements with stringent data privacy standards. The open lecture was moderated by Carolin Puppel, program director for executive education and AI lead at ESMT. (July 3)

### **Today's Global Leader with Deutsche Bank CEO Christian Sewing**

ESMT welcomed Christian Sewing, CEO of Deutsche Bank AG, to the Today's Global Leader series to discuss the challenges of leading Germany's largest bank through transformative industry changes, with a focus on digital innovation and change



Molly Ihlbrock (ESMT), Bonita Grupp (Trigema), Astrid Frohloff (journalist), Bianca Schmitz (ESMT), and Petra Bösner-Handelmann (IZF) at Today's Global Leader on October 24 at ESMT.

management. Moderated by journalist Astrid Frohloff, the event featured opening remarks from ESMT President Jörg Rocholl who highlighted Germany's role as a global finance center. (June 11)

#### **Research shows businesses unintentionally discourage diverse ideas**

A study by ESMT's Professor Linus Dahlander and researchers from INSEAD revealed that businesses unintentionally limit idea diversity from external contributors. By signaling which ideas they prefer, organizations receive fewer diverse suggestions. The research highlights a trade-off between idea fit and diversity, suggesting that organizations may miss innovative breakthroughs. (May 15)

#### **Research highlights successful product launch strategies**

ESMT's researchers Tamer Boyaci and Huseyin Gurkan, in collaboration with Soudipta Chakraborty of the University of Kansas School of Business, presented findings on key strategies for launching new products. Their research outlines how firms can tailor their launch tactics based on the market's perception of the product and brand, emphasizing the importance of understanding customer sentiment, whether dealing with fans, skeptics, or mixed audiences. (May 13)

#### **ESMT and BMW Group continue Change Maker Fellowship**

In collaboration with the BMW Group, ESMT entered the third year of the joint Change Maker Fellowship program. The 2024 edition focused on digitalization and offered 10 full-tuition fellowships for the Global Online MBA. The initiative aims to support young professionals in mathematics or technology fields, fostering future leaders in key countries. (May 8)

#### **German Council of Science and Humanities reaccrated ESMT**

ESMT has been reaccrated by the German Council of Science and Humanities for another 10 years, without conditions. The reaccration acknowledges the school's academic excellence and strengthens its right to award PhDs. This decision underscores ESMT's commitment to top-tier research and teaching. (April 24)

#### **Affordable student housing**

Since June 2024, ESMT provides seven fully furnished shared apartments near campus in the Fischerinsel neighborhood.

The apartments offer 42 living spaces for students at cost, with plans to expand student housing as part of a broader campus development strategy. This initiative aims to improve living conditions for students and ease housing stress in Berlin. (April 12)

#### **AI can manage large-scale research projects**

New research from Henry Sauermann, professor of strategy, and Maximilian Köhler, PhD student and research associate, showed that AI can take on management roles in scientific projects to enable scientists to focus more on soft skills and strategies. The study highlighted AI's ability to handle tasks like coordination and motivation, enabling research to scale more efficiently; human leadership remains important for strategic direction. (April 2)

# Reading room

Selected reading with a sustainability focus from published ESMT research

#### **Peer-reviewed articles**

##### **Design for reusability and product reuse under radical innovation**

Sustainability Analytics and Modeling 3: 100021

Vedat Verter, Tamer Boyaci, Michael Galbreth (2023)

##### **A primer on green finance: From wishful thinking to marginal impact**

Review of Economics 74 (1): 1–19

Jan Krahnert, Jörg Rocholl, Marcel Thum (2023)

##### **Citizen science and sustainability transitions**

Research Policy 49 (5): 103978

Henry Sauermann, Katrin Vohland, Vyron Antoniou, Bálint Balázs, Claudia Göbel, Kostas Karatzas, Peter Mooney et al. (2020)

##### **Forward thinking for sustainable business value:**

###### **A new method for impact valuation**

Sustainability 12 (20): 8420

Herwig Buchholz, Thomas Eberle, Manfred Klevesath, Alexandra Juergens, Douglas Beal, Alexander Balc, Joanna Radeke (2020)

##### **Did Europe move in the right direction on e-waste legislation?**

Production and Operations Management 28 (1): 121–139

Shumail Mazahir, Vedat Verter, Tamer Boyaci, Luk N. Van Wassenhove (2019)

#### **Case studies**

##### **Wild herbs grow tall: Mastering structural change in Lusatia (A)**

ESMT Case Study No. ESMT-820-0186-1, Nagola Re

Jens Weinmann, Martin Kupp, Hans Rüdiger Lange (2020)

##### **Wild herbs grow tall: Mastering structural change in Lusatia (B)**

ESMT Case Study No. ESMT-820-0186-1, Lusiza

Jens Weinmann, Martin Kupp, Hans Rüdiger Lange (2020)



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# EXPERT FORUM ADAPTATION AND MITIGATION

The Expert Forum Adaptation and Mitigation, hosted by ESMT's Societal Impact Financing Initiative (SciFi) with support from the Bill & Melinda Gates Foundation, took place on campus on September 9. Participants, including policymakers, investors, and academics, focused on mobilizing climate finance through coordinated public-private efforts.

Jörg Kukies, state secretary in the German Chancellery and G7 sherpa, and Ottmar Edenhofer, director and chief economist of the Potsdam Institute for Climate Impact Research, delivered keynotes emphasizing the need to bridge climate adaptation and mitigation finance. Although industrialized nations produce most CO<sub>2</sub> emissions, developing countries bear the brunt of climate impacts. Participants explored financing strategies, such as using development bank guarantees to encourage private investment in high-risk regions. CO<sub>2</sub> pricing and reforms at institutions like the World Bank were identified as essential levers for scaling climate finance.

Expert  
Adaptation and  
Mitigation Finance







# ON ESMT'S SUSTAINABLE RENOVATION EFFORTS

**ESMT CFO Georg Garlichs discusses the strategic challenges behind renovating our historic campus to expand capacity, enhance sustainability, and preserve cultural heritage.**



**ESMT chose to renovate a historic landmark as its campus. What were the main challenges in making this decision, and why was adaptive reuse favored despite these difficulties?**

Preserving and repurposing the historic GDR State Council building is about respecting the cultural and collective memory embedded in this architectural landmark. By transforming this historic building into a modern educational facility, we honor Berlin's rich history while creating a vibrant space that meets the needs of our growing community.

Working within the building's constraints presents significant challenges. Integrating modern systems, like our photovoltaic solar panels, requires careful planning and creative problem-solving.

Adaptive reuse aligns with our core values of sustainability and respect for the past. We are committed to showing that sustainable development is possible, even in complex scenarios. With the right approach, we can preserve what is valuable from the past while making it functional and sustainable for the future. This approach provides a model of how urban development can be both forward-thinking and respectful of history.

**You mentioned installing solar panels as part of the renovation. How does this fit into ESMT's broader sustainability goals, and what challenges did it present?**

The installation of our photovoltaic system is one of the most tangible expressions of our commitment to sustainability. With 893 highly efficient modules on our rooftop, the system covers about 25 percent of our electricity needs, significantly reducing our carbon footprint. A screen in the entrance hall displays real-time energy data, turning our sustainability efforts into a learning opportunity for students and visitors and reinforcing our mission to develop responsible leaders.

Integrating solar panels into a historic building required careful consideration of both the building's aesthetics and its engineering limits. We had to ensure that the panels did not detract from the building's historical appearance while maximizing their efficiency.

But solar panels are just one part of our broader strategy. For greater energy efficiency, we are upgrading our lighting systems to LEDs and renewing our 30-year-old cooling system. Additionally, we



started purchasing only green electricity for the remainder of our needs. Each of these initiatives involves logistical and financial challenges but are essential to our goal of creating a sustainable campus.

**How does the renovation project contribute to the development of Berlin's city center, specifically regarding sustainability and urban revitalization?**

Our campus renovation supports Berlin Mitte's transformation into a dynamic educational and cultural hub. By preserving and enhancing this strategically located historic building, we contribute to the city's reputation as a center of innovation and sustainable development.

This project demonstrates that sustainability, education, and urban development can go hand in hand, offering a blueprint for future projects. Our vision is to create a campus that not only serves as an educational powerhouse but also as a living example of sustainable development, with facilities adaptable to evolving technologies and environmental standards.

Beyond learning, our campus practices sustainability daily, from the energy we use to the way we manage our green spaces. Our garden, for example, is both a beautiful addition to the campus and a certified wildlife habitat supporting urban biodiversity. As we continue to grow, we are committed to maintaining this balance between innovation and preservation.

**Given the project's scope, how is ESMT addressing the financial challenges, and what role does the broader community play in supporting these efforts?**

Financing a project of this magnitude is challenging, especially with the unpredictability of renovating a historic building. We've planned carefully, but the reality is that renovations like this often require more resources than anticipated. We launched a fundraising campaign to support this effort, reaching out to our alumni, partners, and the broader community for support.

This isn't just about covering costs; it's about engaging our community in a project that will benefit future generations of students and contribute to the sustainable development of Berlin. We want our sup-

porters to see this renovation as a shared mission, an opportunity to be part of something that will have a lasting impact.

**Finally, how do you see this renovation project influencing the educational experience at ESMT?**

This renovation is about more than just bricks and mortar; it's about creating an environment that reflects our values and enhances education. By integrating sustainable practices, such as solar panels and energy-efficient systems, we are demonstrating real-world applications of classroom learning. Our students will witness the challenges and rewards of such a project, gaining insights they can carry into their future careers.

Our revitalized campus will inspire, showcasing how innovation and tradition can coexist and contributing to a sustainable city center. It is a testament to our commitment to sustainability and our belief in the power of education to drive positive change.



# LEARNING BY DOING – SUSTAINABILITY SOLUTIONS WITH NIVEA

To reduce its carbon footprint, NIVEA partnered with ESMT's Sustainability in Practice (SIP), a five-week project where MBA students act as consultants for organizations with social impact objectives.

**W**ith the climate crisis reshaping industries at every level, sustainability has shifted from a choice to a core strategy that defines the future of business. Companies are challenged to reduce their environmental impact while remaining competitive and appealing to consumers. Recognizing this crucial balance, NIVEA, a flagship brand under Beiersdorf AG, partnered with ESMT for its 2024 Sustainability in Practice (SIP) project. The project, titled "The 2024 ESMT Berlin x Beiersdorf Data Crunch Project," offered a real-world learning experience for ESMT students while providing NIVEA with valuable insights into sustainable business practices.

The SIP, a cornerstone of ESMT's full-time MBA program and developed in partnership with the ESMT Institute for Sustainable Transformation, allows students to apply their knowledge as consultants for organizations facing environmental, social, or governance challenges. These five-week projects often involve fieldwork, research, and project management, giving students a chance to directly create positive impacts.

## The SIP value for students

The SIP experience extends far beyond a traditional classroom setting, offering invaluable benefits for

ESMT's business school students. By engaging in real-world projects with organizations dedicated to social impact, students gain:

- **Practical experience:** SIPs bridge the gap between theoretical knowledge and practical application. Students can apply the frameworks and concepts learned in their courses to address real business challenges with tangible social impact. This experiential learning fosters a deeper understanding of business principles and their application in a complex global environment.
- **Problem-solving skills:** SIPs present unique challenges that demand creative problem-solving. Students must analyze data, navigate cultural differences, and collaborate effectively to develop effective solutions within a limited timeframe. This experience hones their critical thinking, analytical skills, and adaptability – qualities highly sought after by today's employers.
- **Social consciousness:** By working directly with organizations striving for sustainability, students cultivate a heightened sense of social responsibility. They witness firsthand the challenges and opportunities in tackling issues like climate change. This experience broadens their perspectives and inspires them to become purpose-driven.

# The NIVEA SIP exemplifies how collaboration between businesses and academic institutions can drive innovation and create meaningful change.

en leaders committed to using business as a force for positive change.

- **Leadership and teamwork:** The collaborative nature of SIPs fosters strong teamwork and leadership skills. Students learn to navigate different personalities, leverage individual strengths, and work effectively towards a shared goal. They develop communication, delegation, and conflict-resolution skills, essential for success in an interconnected business world.
- **Networking opportunities:** Students interact with professionals from various backgrounds, including startups and business executives. These connections can lead to internships, job opportunities, and mentorship, enriching their professional journeys.

## NIVEA's challenge

As a global market leader, NIVEA faced the challenge of balancing its commercial success with the urgent need for sustainable practices. To meet this challenge, the company set an ambitious target: reduce CO<sub>2</sub> emissions by 30 percent across the entire assortment and value chain by 2025, and ultimately achieve net-zero emissions by 2045. This goal is part of Beiersdorf's broader sustainability strategy, which

has already earned the company the prestigious CDP Triple A rating for leadership in climate, water, and forest conservation. This recognition highlights Beiersdorf's dedication to environmental responsibility, positioning NIVEA to lead the industry toward a more sustainable future.

## ESMT's approach

A team of full-time ESMT MBA students – Priyanka Jain, Valentina Barros, Vikrant, and Yulia Kolomenskaya – were tasked with analyzing NIVEA's packaging practices. They recognized the need to align sustainability with consumer preferences and market demands, understanding that simply switching to eco-friendly options might not resonate with consumers accustomed to certain products, routines, and behaviors.

The students adopted a data-driven approach, examining financial statements, CO<sub>2</sub> emission reports for each product, and consumer behavior data. Their analysis extended beyond NIVEA, looking at competitors and adjacent industries to identify successful sustainable practices. This comprehensive assessment provided a holistic view of the challenges and opportunities in incorporating sustainability into NIVEA's product portfolio.



NIVEA-SIP project team (left to right): Lucie Wolters, Global Associate Marketing Director NIVEA Sustainability, Beiersdorf; Marieke Felix Global NIVEA Sustainability Manager; and ESMT MBA students Valentina Barros, Priyanka Jain, Yulia Kolomenskaya, and Vikrant.



## Insights and recommendations

The project underscored a crucial insight: while consumers are increasingly aware of environmental issues, their purchasing decisions are primarily driven by habit, price, brand loyalty, and product quality. Sustainability, while a growing concern, often takes a backseat to these factors. Consumers, particularly in the mass market, are rarely willing to pay a premium for “green” products and often expect companies to shoulder the responsibility for sustainable practices.

Armed with this understanding, the students recommended a multi-pronged approach for NIVEA:

- **Reducing aerosol usage:** Aerosol deodorants, while popular, are significant contributors to CO<sub>2</sub> emissions. The team suggested phasing out a fair share of these products and reallocating resources to more sustainable alternatives like creams, pump sprays, roll-ons, and sticks. The SIP team estimated that this shift could lead to a 9 percent reduction in CO<sub>2</sub> emissions while aligning with evolving consumer preferences for sustainable packaging.
- **Expanding refillable packaging:** Refillable packaging, an increasingly common practice among sustainability leaders, reduces the need for single-use containers. The students recommended expanding refill options for shower gels, particularly for larger formats. This shift could reduce CO<sub>2</sub> emissions by up to 48 percent in the body-wash segment without compromising profitability.
- **Shifting from jars to tubes:** Even seemingly small changes in packaging can have a significant impact. The students found that shifting selected face care products from jars to tubes could reduce CO<sub>2</sub> emissions by nearly 14 percent. Tubes,

because of their design and material usage, generally have a lower carbon footprint compared to jars.

- **Elevating visibility and transparency:** Beyond product-specific changes, the team emphasized the importance of communicating NIVEA’s sustainability journey to consumers. They recommended leveraging Beiersdorf’s CDP Triple A rating and highlighting the company’s efforts to reduce CO<sub>2</sub> emissions. By developing engaging content across online platforms, collaborating with influencers, and using technologies like blockchain and QR codes to promote transparency, NIVEA can educate consumers and enhance brand reputation.

## The power of collaboration

This project not only highlights ESMT’s commitment to creating sustainable business solutions but also aligns with the school’s mission of advancing business and society through leadership, innovation, and analytics. By empowering students to tackle real-world challenges and a channel for applying their knowledge, the SIP demonstrates how ESMT develops entrepreneurial leaders who think globally and act responsibly.

The NIVEA SIP exemplifies how collaboration between businesses and academic institutions can drive innovation and create meaningful change. This project, by exploring the intersection of sustainability, consumer behavior, and business strategy, provided NIVEA with actionable insights to reduce its environmental footprint while maintaining its market position. It underscores the power of integrating sustainability into core business operations, proving that economic success and environmental responsibility are not mutually exclusive.

Session #1  
January 26, 2024

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[deep@esmt.org](mailto:deep@esmt.org)



**ESMT Berlin**

ESMT European School of Management and Technology GmbH

Schlossplatz 1, 10178 Berlin, Germany

Phone: +49 30 212 31 0

info@esmt.org • www.esmt.berlin

