



Sustainability:
Seize Opportunities
for ***Robust Economic***
Management Now

WHITEPAPER
SUSTAINABILITY

The World Climate Report 2022 (IPCC) paints a clear picture of climate change and the action which is needed to counteract it. Each additional 0.5°C of global warming leads to heat waves, precipitation, and droughts, etc. of ever greater intensity and frequency. According to the Intergovernmental Panel on Climate Change, the target agreed in Paris of limiting global warming to 1.5°K by 2100 is unlikely to be met, as global warming is expected to exceed 1.5°K already by 2030. The 2022 Temperature Report of the Carbon Disclosure Project (CDP) makes it clear that the G7 countries can expect to see global warming of 2.7°C, despite all the efforts to reduce it.

Against this backdrop, the EU is introducing further measures to boost cross-sectoral decarbonisation, including significant carbon reductions, the replacement of fossil raw materials with renewable energy sources and the use of renewable fuels. In addition, the security of supply is threatened by Russia's invasion of Ukraine. The energy crisis is forcing companies in Europe to increase their energy efficiency. The EU has produced significantly more wind and solar power since the beginning of the war. From March to September, almost a quarter of the electricity generated came from renewable sources, saving 11 billion euros on gas purchases.

Sustainability and Cyber Security

Climate change and the requirements surrounding the efficient use of resources are also driving digitalisation. But the greater the networking of data-driven processes, the more elaborate defence strategies against cyber criminals have to become. Businesses are also now being called upon to include information and IT security measures in their sustainability strategy. It is important to ensure the availability, integrity and confidentiality of sensitive data related to the essential production processes – not only in emergencies, but also in order to improve the resilience of regular operations.

Sustainable Health Promotion

Undesirable developments in preventive health care and employee well-being create a sustainability risk. The pandemic has led to social and health burdens affecting numerous individuals, resulting in high sickness rates and critical staff shortages in large parts of the economy. Similarly, the flood of negative news triggered by terrorism, wars and natural disasters can increase fears for the future in the workforce and negatively impact corporate performance. By reinforcing the mental health of their employees, companies can strengthen the resilience of the organisation and its ability to respond successfully to crises – or even emerge stronger from them.

Increasing Pressure to Act – the “ESG Revolution”

The introduction of standards for sustainable and future-proof business is more important than ever on account of the accumulation of ecological, social and economic crises being experienced worldwide. The sustainability megatrend is therefore showing no signs of abating. The acronym ESG is frequently used to describe what it means in practice: “Environmental Protection” (E), “Social Standards” (S) and “Good Corporate Governance” (G).

Corporate Social Responsibility (CSR) strategies focus primarily on companies’ social engagement and the working conditions in supply chains, while ESG activities go deeper. As a response to the desire for strategic reinvention, they intervene in the operational processes in order to adapt the core business to changing ecological and social eco-systems.

➔ **Management systems generate stability and agility in the dynamic risk environment. This guide discusses the basics involved in implementing the three ESG dimensions, as well as the potential of tried-and-tested standards.**

1. The Very Basis of Businesses Is Endangered

ESG measures were often criticised for distracting from the core business in the past and were mostly seen in the context of social engagement, but stakeholder requirements are now shifting. The reduction of direct and indirect greenhouse gas emissions, the use of clean and safe energy, as well as compliance with environmental protection and stricter social requirements are shifting CEOs' priorities.

Examples include mandatory environmental requirements (carbon taxes, exploding energy costs, mobility restrictions), and rising environmental and social standards in global supply chains. All of these problems are interconnected. Activities in the three ESG areas can help organisations to assess their own risk environment and to put themselves on a stronger footing for the future.

➔ **External shocks and extreme events such as the COVID-19 pandemic, the war in Ukraine, floods and calls for international boycotts show the importance of the three ESG levels for the future viability of companies.**

Achieving resilience in the face of different crises is more important than ever if companies wish to safeguard their business model. In addition, measures which demonstrably serve to increase sustainability also enhance reputation, trust and competitiveness.

Overview of the Three ESG Areas

Environmental (E)

Focus on environmental risks with a direct impact on the business model

- ! Local extreme events due to heatwaves, floods, storms, forest fires
- ! Water scarcity, resource scarcity, supply bottlenecks due to crop failures, drought, etc.
- ! Air pollution, toxins, lack of biodiversity, zoonoses
- ! Inadequate recycling (metal fires caused by used electrical appliances, etc.)

Strategic Approaches

- ▶ Reduce carbon emissions (in production, in energy purchasing, in the supply chain)
- ▶ Limit use of chemicals and restrict land use in the supply chain
- ▶ Use of renewable energies
- ▶ Reduce waste

Social (S)

Focus on social risks through networked action among stakeholders

- ! Working conditions that do not meet the criterion of ethical responsibility
- ! Lack of occupational health and safety, risk to infection control and mental health
- ! Non-sustainable incentives
- ! Reputation/image crises due to misconduct by internal/ external stakeholders

Strategic Approaches

- ▶ Selection of suppliers and partners who comply with social standards.
- ▶ Avoidance of products that are manufactured under questionable working conditions.
- ▶ Support for stakeholders who promote diversity and anti-discrimination.

Governance (G)

Focus on quality standards, leadership culture, transparent decision-making

- ! More stringent requirements by the financial markets for ESG reporting, against "greenwashing"
- ! Information and IT security as tools against cyber attacks
- ! Weaknesses in quality and risk management
- ! More stringent customer requirements with regard to compliance, sustainability, occupational health and safety

Strategic Approaches

- ▶ Use of management systems to increase quality, energy efficiency, environmental performance, mental health...
- ▶ Reporting of ESG activities and analysis of environmental impact
- ▶ Development of key figures, carbon accounting, trustworthy information as result of certification



2. Corporate Governance: Decisions for Greater Sustainability

Large companies and original equipment manufacturers (OEMs) are keen to see higher sustainability standards in their industry. And they are passing their own standards on to their upstream and downstream supply chains. In addition, a local event can trigger regulation, which in turn can have a restrictive effect on an entire globally networked supply chain. Companies that have not yet incorporated any of the three ESG dimensions into their business model will not only find it more difficult to adapt quickly, but will also lose their competitive edge.

Most risk environments – from regional location and production factors through to geopolitical shifts – are currently undergoing major change, adding to the list of reporting requirements for sustainable corporate governance as a result: move away from “short-term performance” to “long-term resilience”. Consumers, investors, regulators, ESG rating agencies and financial institutions are increasingly questioning the misleading practice of marketing polluting technologies as green or sustainable (“greenwashing”), and are attaching greater value to companies that are demonstrably improving the ecological, social fairness and transparency aspects of their core processes.

An ESG strategy can only be implemented in stages, given its complexity and direct impact on supply chains. It is important here for organisations to be aware of their own strengths and of the sector/customer requirements in order to return the respective focus of the ESG levels gradually to the core processes.

I. Risk Awareness

Gaining an awareness of sustainability risks represents the entry point to the ESG process. Operational processes can be made more resilient in the business context by developing skills to identify environmental, social and economic risks in the supply chain, thereby helping to understand the threats they pose to the business. The risk analyses of proven management systems can help here. They are not contingency plans. Rather, the first parts of most standards require lists of critical processes to be drawn up using basic documents. These provide a basis for decision-making on the extent to which ESG activities can be used to make core processes and competencies more robust. Here it is important to minimise the impact on the business model and certainly not to endanger it economically. Stabilising the core processes avoids the necessity of making hasty ad hoc decisions.

- ▶ Anticipation of external risk factors and opportunities for own business model
- ▶ Consideration of industry trends aimed at increasing sustainability
- ▶ Identification of financial and human resources for ESG projects
- ▶ Definition of minimum standards in the company

ESG in Stages

How can companies strengthen their resilience to climate change and the resulting threat scenarios? A prerequisite for achieving this is an analysis of which ESG measures lend themselves to integration in the business model, and which weaknesses in the organisation and supply chain currently prevent this.

III. Integration/ Impact

Synchronise ESG activities with relevant core processes

II. Commitment

Verifiable ESG projects lay the foundations for an ESG strategy

I. Risk Awareness

Listing and preventing environmental hazards and sustainability risks

II. Commitment

The organisation starts to promote – and identify with – internal and external sustainability projects. Most initiatives are still outside the core business at this stage. The requirements are introduced into the organisation as new benchmarks in order to build up the necessary know-how and human resources.

- ▶ Identify sustainability trends that impact business operations.
- ▶ Define sustainability targets that are above those of voluntary industry standards.
- ▶ Identify the strengths which have particular sustainability potential.
- ▶ Formulate sustainability policy and promote it to stakeholders.

III. Integration/Impact

In this stage, the desired sustainability characteristics (environmental protection, social standards, good corporate governance) are synchronised with the relevant processes of the core business. The company's products and services have a positive impact on all three levels. Customers and suppliers enquire specifically about this. These best practices raise the sustainability level of the sector as a whole.

- ▶ ESG activities take place in all areas of the company
- ▶ Investment decisions and resource allocation meet sustainability criteria
- ▶ ESG activities are verifiable on the basis of performance indicators
- ▶ Incentive programmes for employees and partners in the supply chain (upstream/downstream)

3. Quality Management Best Practices

The management system PDCA cycle (Plan, Do, Check and Act) has proven effective in implementing ESG goals in operational processes. The quality management principle of ongoing improvement is particularly suitable for long-term quality improvement projects. By making regular improvements to their ESG performance, companies can respond more flexibly to rapidly changing environmental conditions and stricter regulations.

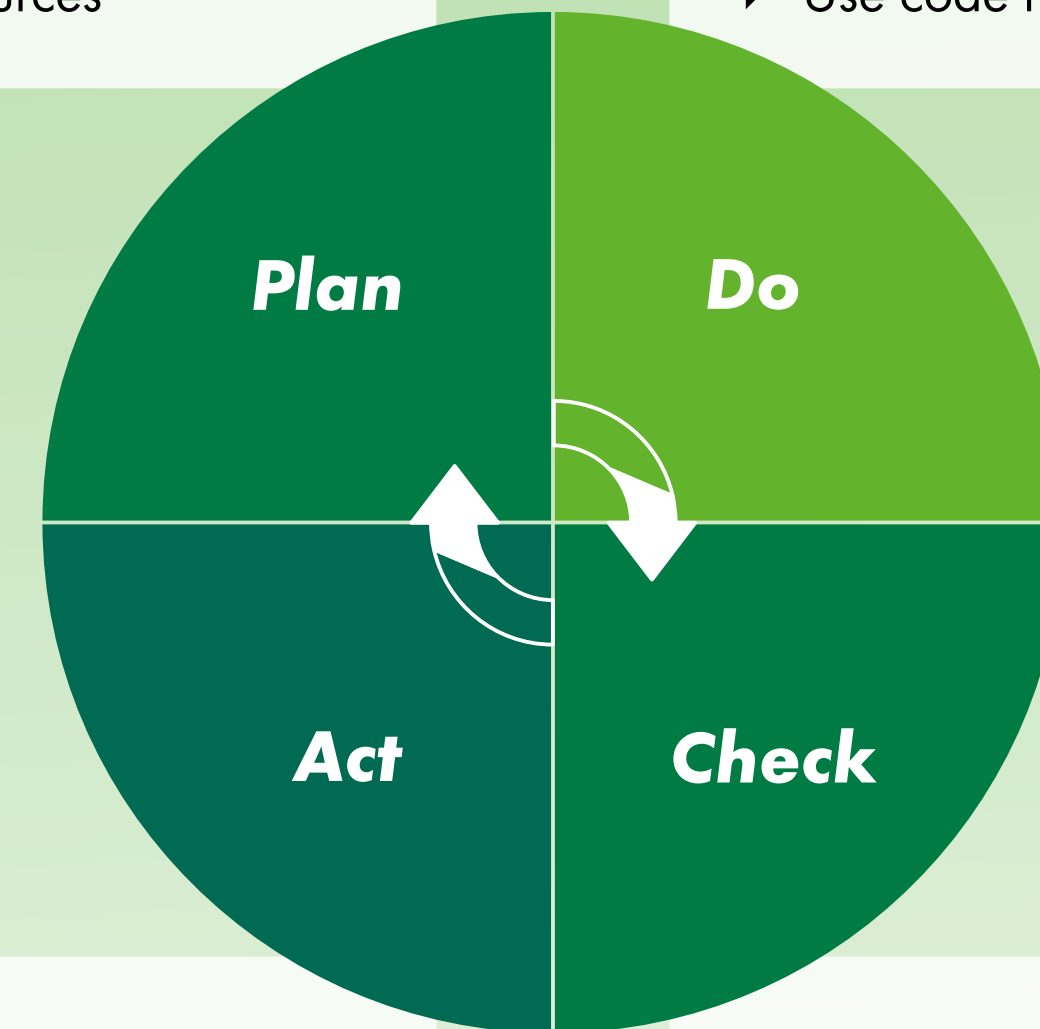
After proactively deciding on a package of ESG measures and identifying the most beneficial areas for the company (e.g. lower carbon consumption by the vehicle fleet, use of renewable energy sources, packaging made from sustainable production, improved labour economics, transparent reporting ...), iterative execution of the PDCA cycle is recommended. It is continually readjusted until the sustainably defined core process has become the operational standard and part of a more robust business model.

Practical Tip

- ▶ Set meaningful KPIs that are linked to the business model
- ▶ Use scientifically proven KPIs and data analytics to assess progress
- ▶ Also set short-term milestones to enable rapid adjustments to the PDCA cycle
- ▶ Improvements in information and IT security strengthen the ESG strategy

- ▶ ESG requirements of all stakeholders (internal/external)
- ▶ Evaluate industry standards/benchmarks
- ▶ Determine resources

- ▶ Determination of ESG level
- ▶ Which areas benefit most?
- ▶ Pilot project for core processes
- ▶ Use code numbers



- ▶ Is the ESG process suitable for use as a standard?
- ▶ Verifiable improvement?
- ▶ Communicate lessons-learned to stakeholders

- ▶ Analysis and measurement of effectiveness
- ▶ Adjustment of ESG targets
- ▶ Integration of further processes, if necessary

4. Management Systems for Implementing ESG

Stable core processes are a prerequisite for companies becoming more agile. At the same time, the processes must be continuously improved and capable of being adapted to the dynamic market environment at any time. Management systems can help here. They set the basic course for doing business on a risk-adjusted basis. They are cost-efficient because they focus primarily on the organisational quality of essential operational processes. They allow companies to start laying the foundations for an effective sustainability strategy immediately.

➔ **Management systems can help solve the apparent dilemma of reconciling business success with sustainability. Management systems provide agility and process orientation in helping companies to implement their own goals.**

Management systems above all in the areas of quality (ISO 9001), energy (ISO 50001), environment (ISO 14001), occupational health and safety (ISO 45001) and IT security (ISO 27001) lend themselves for establishing a sustainability strategy. Their structured approaches, tailored to the needs of the respective company, help to maintain an overview of the dynamic risk environment and to implement the adaptations associated with climate change in a consistent manner. This significantly reduces the amount of coordination required for realigning the processes and for measuring and evaluating what has been achieved.

Best Practices - The Trucking Company DHL Freight Introduces a Global Management System with DEKRA

The international road haulier DHL Freight has had its global management system certified to ISO 9001 (quality management), ISO 14001 (environmental management) and ISO 50001 (energy management). DHL set out its ambitious goal in the 2020 Freight Strategy: Zero emissions in logistics. DEKRA had audited 88 DHL branches back in 2020.

Matrix certification for responsible energy management in accordance with ISO 50001 was still a rarity in logistics in 2020. Uwe Brinks, CEO DHL Freight: "This shows that DHL is in compliance both with the EU Energy Efficiency Directive and the self-imposed goals of the group-wide Go Green environmental protection programme and the mission of achieving zero-emissions logistics by 2050." The combined global use of the management systems enabled DHL to meet the sustainability and quality targets.

Creating Risk-Oriented Management Systems Through Intermeshing

Around 300,000 companies and organisations of all sizes and from all sectors are ISO 14001-certified worldwide.

The uniform High Level Structure (HLS) of the ISO standards allows companies to combine a number of different management systems which then intermesh smoothly. Information can be bundled and communicated throughout the corporate environment. Sections 4. Context of the organisation, 6. Planning (measures for handling risks and opportunities) and 7. Support (awareness, competence...) are developed uniformly for the organisation if the management systems for quality, environment and energy are deployed in combination. This eliminates potential friction, such as conflicting quality and environmental protection goals.

Environmental

▶ Energy management ISO 50001: 2018:

An energy management system based on ISO 5001:2018 can serve as a foundation for raising energy efficiency. It allows companies to place energy assessment at the heart of their business activities. The main consumers are identified, appropriate energy performance indicators (ENPIs) defined and energy baselines (ENBs) determined before the technical implementation takes place. The standard also includes all relevant partner companies (internal, external) and their energy management system requirements.

▶ Environmental management ISO 14001:

The main aim of the standard is not to reduce energy consumption, but to fundamentally improve environmental performance. It takes all environmental impacts into account (use of raw materials, waste minimisation, carbon emissions, impact on ecosystems, investment decisions, etc.). At the heart of the ISO 14001-based management system is the defining of environmental goals and measures, their implementation and review on the basis of the formulated environmental policy, and finally improvements at the operational and product level. Companies benefit from lower raw material costs, new KPIs for managing environmental performance, and risk prevention procedures.

▶ Greenhouse Gas Protocol and ISO 14064:

The global climate protection agreements to reduce greenhouse gas emissions require measurement of the corporate carbon footprint, including greenhouse gas emissions in the upstream and downstream processes of the supply chain. This requires correct delineation and accounting of relevant direct and indirect emission sources. Here, the GHG Protocol uses the criteria of relevance, completeness, consistency, transparency and accuracy, all based on appropriate accounting standards. The three parts of the ISO 14064 International Standard on Greenhouse Gases provide clear guidance and requirements for quantifying and verifying greenhouse gas emissions in a GHG inventory at both the organisational and project levels. ISO 14064-1 is the basis for accounting for a company's greenhouse gas emissions, i.e. for establishing its Corporate Carbon Footprint (CCF). Businesses can use it as the basis for their own climate policy and for making energy savings. It also enables them to meet the increasing demand for information on climate protection measures from external stakeholders such as owners, investors, business and end customers.



Social

- ▶ **Occupational health and safety management ISO 45001 and ISO 45003:**
The standards improve organisational resilience and strengthen the underlying values required to create a positive working environment. The number of work-related accidents has been declining for years, but mental health hazards in the workplace are increasing. To ensure that mental health risks are managed at all levels of the organisation, the new ISO 45003:2021 standard supports employers by providing practical instructions on how to identify and manage the psychosocial risks faced by their employees. The aim is for the entire organisation to continue to act in a considered manner and remain effective even in the face of numerous external stress factors. ISO 45003:2021 is not a certifiable standard. However, compliance can be assessed separately or in combination with ISO 45001 management system certification.

Governance

- ▶ **Quality management ISO 9001:**
ISO 9001 is the basis of all quality standards. It ensures consistently high product or service quality and thus forms the basis of effective quality management in all industries. At the heart of the standard are economic, market-oriented, sustainable and user-friendly operational processes. One of its key features is its risk-based approach, which identifies opportunities and potential threats, and then derives appropriate measures and evaluates their effectiveness. This ensures that the quality management system and the accompanying processes achieve the results targeted in the corporate strategy.
- ▶ **Information security ISO 27001:**
Businesses lay the foundation for the secure handling of their data and information by means of an integrated information security management system (ISMS).

Most information security standards (confidentiality, integrity, availability) are now derived from the international standard. If businesses have introduced a QM system based on ISO 9001:2018, and the critical processes and components for handling data are already being monitored, this provides a good basis for an integrated information security management system in accordance with ISO 27001. It involves understanding and describing the relevant external and internal business processes. This in turn includes drawing up an inventory of all equipment and system components that are related to data and information or information-processing equipment.

- ▶ **TISAX® (Trusted Information Security Assessment Exchange):** The TISAX® assessment and exchange mechanism, founded at the beginning of 2017, is based on the ISA (Information Security Assessment) requirements catalogue of the German

Association of the Automotive Industry (VDA), which itself is largely based on the international standard ISO/IEC 27001. The platform offers members throughout the value chain – from design offices to event agencies – standardised assessment of their information security status, which they can then share with partners from across the automotive industry. The platform is operated by the ENX Association on behalf of the VDA.

TISAX® distinguishes between three different protection classes and assessment levels as the basis for auditing enterprises. These levels depend on the protection needs of the information. DEKRA is a certified provider for carrying out assessments and issuing test certificates in accordance with TISAX. Our audits are recognised by international manufacturers, suppliers and service providers throughout the global automotive value chain.

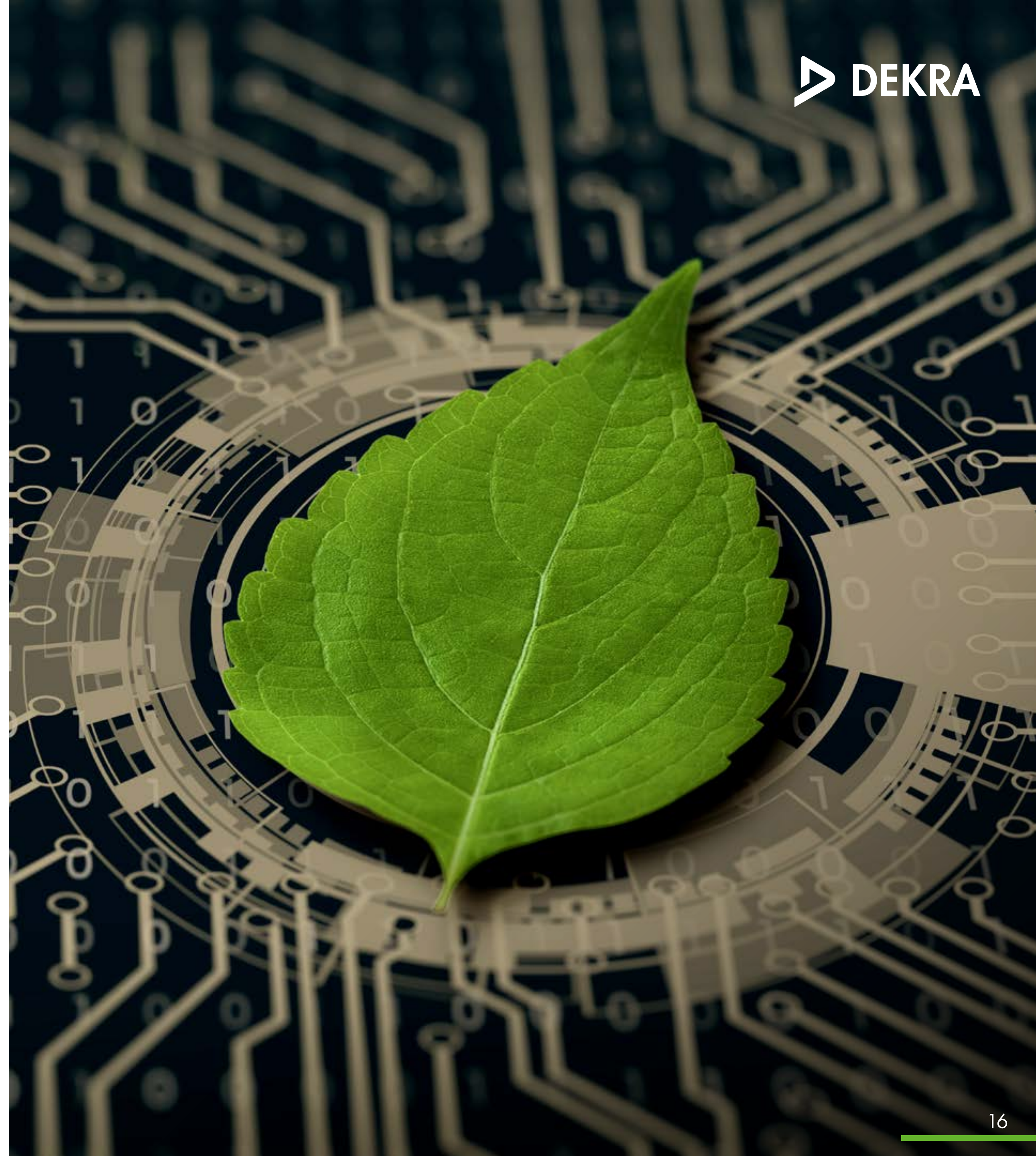
- ▶ **DEKRA Business Resilience Impact Assessment (BRIA):**
The self-assessment is not limited to just one risk class: the interdisciplinary questionnaire developed by DEKRA takes into account a large number of potential hazards for regular operations. It is based on the controls from relevant standards as well as best practices in the areas of risk management, occupational health and safety, quality management as well as IT security and corporate governance. Above all, the self-

assessment is useful for obtaining a rapid overview of an organisation's resilience to critical risk situations. It includes risk aspects from the following standards: ISO 22301 (Business Continuity Management), ISO 3100 (Risk Management, Finance, Supply Chain), ISO 27001 (Information Security) and ISO 45001 (Occupational Health and Safety).

Conclusion

- ▶ The accumulation of ecological, social and economic crises all over the world coupled with new reporting obligations and compliance requirements is raising the pressure on companies to introduce standards for doing business on a sustainable and future-proof basis.
- ▶ The first priority is to identify the organisation's own risks and strengths, as well as the industry/customer requirements with regard to the three ESG dimensions: "Environmental (E)", "Social (S)" and "Governance (G)".
- ▶ ESG measures have a lasting effect if the key influencing factors of, and risks to, a company's business model are recognised and understood – and synchronised with the core processes.
- ▶ Given the direct impact on the upstream and downstream supply chain, it is most effective if the ESG strategy is implemented in stages: 1. Risk awareness, 2. Decision to adopt ESG measures in pilot projects, 3. Integration into business model.
- ▶ A regular improvement process (PDCA cycle) allows businesses to react more flexibly to rapidly changing environmental conditions and stricter regulations.
- ▶ Management systems based on internationally proven standards set the fundamental course for risk-adjusted and sustainable management. Management systems focus primarily on organisational measures, making them a cost-efficient basis for sustainable and targeted transformation.
- ▶ Suitable management systems for a sustainability strategy include those for quality (ISO 9001), energy (ISO 50001), environment (ISO 14001), occupational health and safety (ISO 45001) and information security (ISO 27001).

Do you want to learn more about sustainable management systems and how they can support your sustainability strategy?



For more information, visit

 dekra.com/audit

Process Safety Advisory and Training Services

DEKRA Organisational and Process Safety is a behavioural change and process safety consultancy company. Working in collaboration with our clients, our approach is to assess the process safety and influence the safety culture with the aim of making a difference.

In terms of behavioural change, we deliver the skills, methods, and motivation to change leadership attitudes, behaviours, and decision-making among employees. Supporting our clients in creating a culture of care and measurable sustainable improvement of safety outcomes is our goal.

The breadth and depth of expertise in process safety makes us globally recognised specialists and trusted advisors. We help our clients understand and evaluate their risks, and we work together to develop pragmatic solutions. Our value-adding and practical approach integrate specialist process safety management, engineering, and testing. We seek to educate and grow client competence in order to provide sustainable performance improvement. Partnering with our clients, we combine technical expertise with a passion for life preservation, harm reduction and asset protection.

We are a service unit of DEKRA SE, a global leader in safety since 1925 with over 45,000 employees in 60 countries and five continents. As a part of the world's leading expert organization DEKRA, we are the global partner for a safe world.

We have offices throughout North America, Europe, and Asia.

For more information, visit <https://www.dekra-uk.co.uk/en/process-safety-consulting/>

To contact us: <https://www.dekra-uk.co.uk/en/contact-dekra-process-safety/>