White paper


# Guide to the Sustainable Factory

Six steps to resource-efficient production

# The sustainable factory
# Economical because it's ecological

**Digitalization is changing all areas of life at an ever-increasing speed, including economic, social, and technological aspects. The digital transformation is equivalent to a revolution. It opens up undreamed-of possibilities for digital production facilities, new business models, and agile ways of working. In short, it is changing corporate values and equipping us all with a whole new set of tools.**

The digital transformation also provides us with one of the most powerful tools to tackle the most pressing and threatening challenge of the future: global warming.
Companies that face up to this responsibility and reduce their direct and indirect carbon emissions to net zero will have a decisive competitive edge over the rest of the market in future. Because this is something that consumers and customers will demand of companies. Around the world, countries are also generating momentum through appropriate legislation and standardization regulations. We are all becoming increasingly aware of the responsibility that each individual has for the future of our global community.

## +2.7°C:
### Time to act

The world is barreling towards a climate apocalypse by the end of the century. We can only change this scenario by all committing to sustainable business practices.

**Contents**

The digitalization of production processes is the key to a sustainable factory. Phoenix Contact has already taken this step at its Bad Pyrmont production site. In the Digital Factory, the company was able to increase productivity by more than 10% within just 18 months.

Focusing on sustainable development and Corporate Social Responsibility have become strategically important tasks in modern corporate policy.

In the context of this profound transformation, the All Electric Society concept has emerged. It describes a future in which electrical energy generated from renewable sources is available worldwide as the primary type of energy in sufficient quantities and in an entirely economical way. This is based on the comprehensive electrification, networking, and automation of all sectors of the economy and infrastructure.

**"Only companies that pursue a business model directed toward sustainability will be economically successful in the long term."**

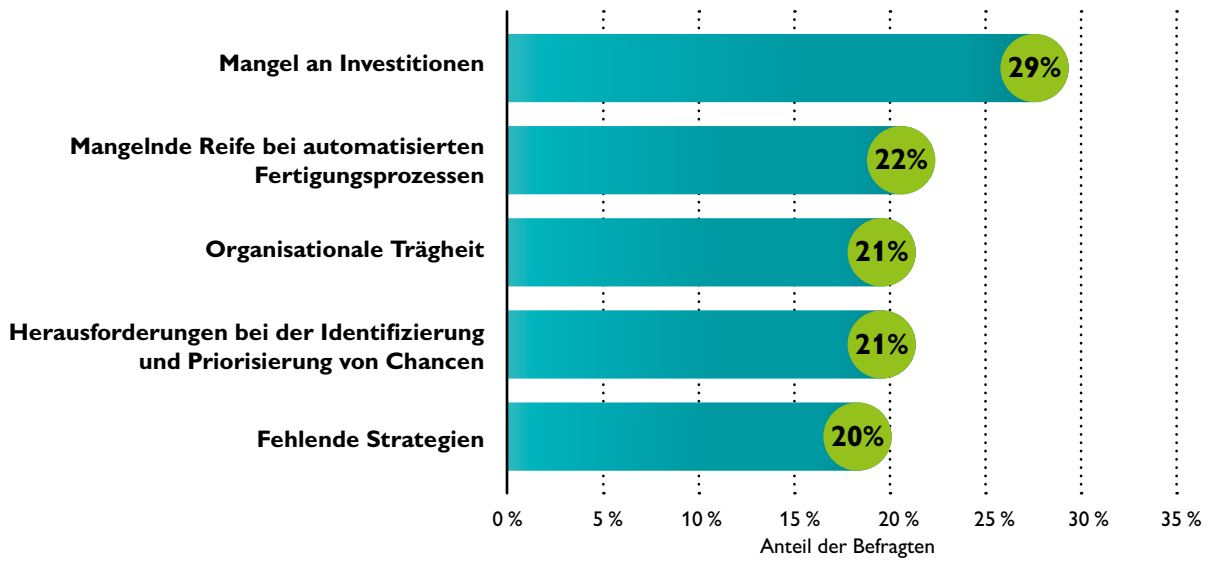
Frank Stührenberg, CEO of Phoenix Contact

Let's come straight to the point: Digitalization is the key to resource-efficient production. First, it gives us the technical tools for resource-optimized, highly efficient, and networked supply and production chains. The digital transformation opens up enormous potential savings in terms of energy, resources, processes, and costs. This applies to both industrial production as well as medium-sized trade and commerce.

Why then are so many companies still hesitant? The diagram shows some of the biggest challenges that many companies encounter. From our experience, customers often do not know where to start. They want to find out where to begin, what to take into consideration, and how to proceed.

We have devised six steps that will help you successfully navigate your way to carbon-neutral production. This guide is intended to provide you with both the technological and business drive to make the sustainable factory a reality.

**Let us inspire you!**




Source: Capgemini, 05/2017
Smart Factories: How can manufacturers realize the potential of digital industrial revolution, page 15

Challenges when introducing strategies for smart factories

# Step 1:
# The right attitude

**5% strategy**

# 95% mindset

As with most things, it all comes down to having the right attitude. With the right mindset, the strategy can also be implemented. But take note, sustainability must first capture the hearts and minds of employees.
And that is a formidable task.

## Step 1:
## The right attitude

**The only thing that is constant is change. The extent to which this impacts the working world can also be seen in the job market, where companies and organizations are increasingly recruiting sustainability managers, for example. Their role is to help companies in their transformation towards greater sustainability.**

The role of the operations manager is also changing: With the net zero factory being the ultimate aim, they are in charge of the largest source of potential for resource-efficient production.

**12.5% more success through greater openness and agility.**

Digital mindset study,
ONESTOPTRANSFORMATION

Change always starts in the mind. Before developing strategies and finding solutions, you need to have the right mindset. It is important to be constructive. Take the future into your own hands, have an open-minded and positive approach to new ideas and perspectives as well as unconventional, innovative solutions. Ideally, bring along a digital mindset: Be open and agile.

### Digital mindset checklist

- Take a proactive and entrepreneurial approach.
- Think creatively and actively shape your environment.
- Be customer-focused in all measures.
- Be open to criticism and promote a culture of constructive feedback.
- Learn from mistakes and deal with failure openly.

# Step 2:
# Meaningful Purpose

## Step 2: Meaningful Purpose

**Do you regard ubiquitous change, the dynamics of change, as a positive challenge and an opportunity for innovation, added value, and improvement? Then you are ready for an exciting journey. But where to?**

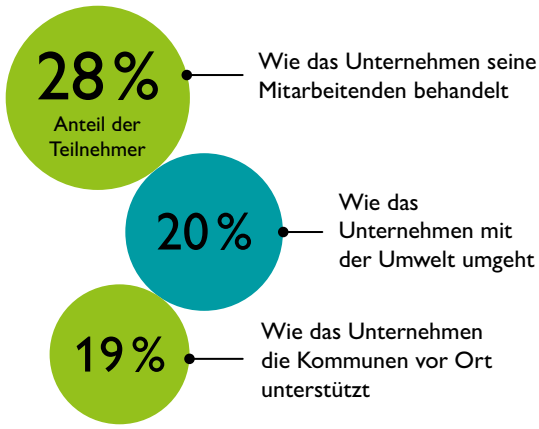
Destination: Sustainability. It is not just the market, customers, or society calling for sustainability. Legislators and standardization bodies are increasingly setting the pace and are the driving force for the transformation topic of sustainability.

When the UN enacted the Sustainable Development Goals (SDGs) in 2016, this marked a paradigm shift. The SDGs place an obligation on every person, and especially on companies and organizations, to act responsibly and sustainably. The member states have since incorporated these requirements into national regulations.

### Brief explanation of the CSR Directive

- The directive compels companies to face up to the issue of sustainability.
- The directive came into force on January 5, 2023.
- The directive makes it mandatory for companies to provide reporting on environmental, social, and employee matters, human rights, and anti-corruption efforts.

The German government has also adopted the SDGs. This includes, for example, the country's revised sustainability strategy and the implementation of the CSRD (Corporate Sustainability Reporting Directive) into national law.




Source: Deloitte, 2019, Consumer Pulsing Survey in the US, UK, China, and Brazil (deloitte.com/insights)

Top issues consumers identify with while making decisions about brands

Without doubt, the SDGs formulated by the UN are a major goal. And the legislature is now setting out conditions to monitor and regulate consistent compliance with this route. This will result in transparency and commitment to sustainability.

Companies can only achieve this goal if all employees are on board with it. But how can companies and their employees contribute effectively to sustainable business practices and, above all, make this visible internally and externally? And how can this attitude become a lived reality?

**The answer is: with a Meaningful Purpose.**

## The formula for Purpose or: Why do I exist?

A Purpose is an important component of modern and successful corporate management. However, it requires a lot of time and empathy. It is not about the mission of the company or its innovative products. It all centers on this existential question: What is my company's reason for being? To help you formulate a Purpose, we invite you to participate in a small workshop:

### Purpose creates added value

Companies that formulate a Purpose record higher market share gains and grow on average three times faster than their competitors. They also achieve higher levels of employee and customer satisfaction.

Source: Deloitte

**Step 1: Answer these questions:**

**What contribution do our solutions make to a livable future?**

.....

**How do our business practices impact society and the environment?**

.....

**Step 2: Add your answers here and formulate a sentence:**

Contribution/Question 1

.....

**so**

Impact/Question 2

.....

**Example – Our Purpose:**

**Together, we are creating a sustainable world based on our passion for technology and innovation.**

# Step 3:
# Honest situational analysis

## Step 3:
## Honest situational analysis

**Sustainable actions are demanded and encouraged. Consumers base their purchasing decisions on this. Sustainability will therefore be rewarded in the future. With new directives and laws, it will become increasingly clear which companies take on the responsibility and which do not.**

Companies are having to face up to the issue of sustainability more and more publicly. One example of this is the CSR Directive mentioned earlier.

Although this may sound daunting and bureaucratic at first, it actually has many positive aspects: You will get clarity about the sustainability potential within your company.

### What is a materiality analysis?

This analysis helps you identify the sustainability issues that are most relevant to your company. This enables you to focus your efforts meaningfully and efficiently and to tackle the issues that will have the biggest impact for you.

**Start by conducting a materiality analysis.**

### The advantages of the analysis

- Uncover the crucial issues, opportunities, and risks for your company.
- Prevent organizational blindness through active dialog.
- Improved level of information for strategic and operational decision-making.
- Possibility of process optimization as well as product and service innovations.
- Greater credibility through transparency.
- Effective and targeted use of staff and financial capacity.
- Basis for environmental reporting and for compliance with reporting standards.
- Supporting argument for your "license to operate," i.e., social acceptance of your company.

Source: IZU (bayern.de)
Materiality analysis: How does a materiality analysis work and what does it bring to my company?

## How to achieve your goal

Part of the materiality analysis involves the development of a situational analysis. This is where you can ask very specific questions.

**The ecological and social actions of companies are a buying factor for over 50% of Germans.**

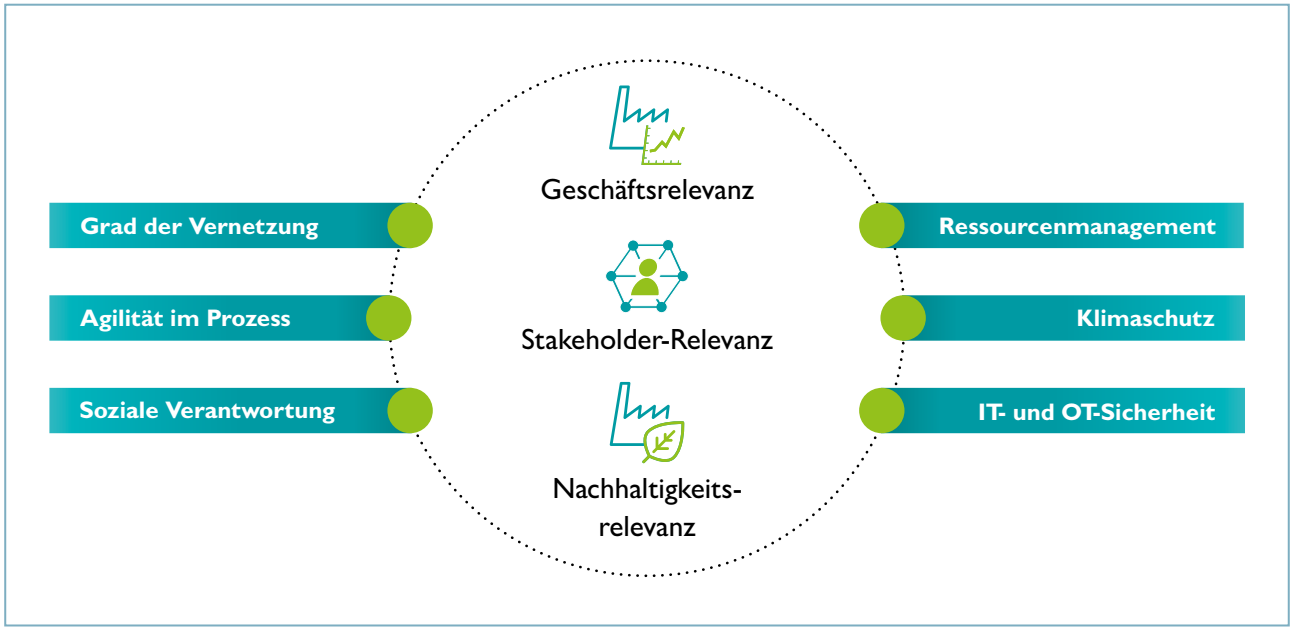
Source: Statista, 2022

Examine all relevant dimensions in the analysis phase: the business relevance, the stakeholder relevance, and the impact on sustainable development. You can then determine the relevant segments from these results step by step, e.g., emissions and climate protection, resource management, environmental protection, and social responsibility.

With a systematic materiality analysis that takes various perspectives into consideration, you are able to create a solid foundation for the development or further development of your sustainability management.
And there is another important point to consider: Management is actively responsible for sustainability reporting.

### Take a close look

- Where does consumption occur?
- What is the energy balance like in buildings and production equipment?
- Where are the silos?
- Where is the biggest potential?




Where is the greatest leverage? Where would you like to start and which aspects need to be considered?
The materiality analysis helps you develop the right point of attack for your sustainability initiative, based entirely on your individual situation.

# Step 4:
# Realistic climate strategy

Take the first step. To start with, when formulating climate goals and then also directly when optimizing your factory.

## Step 4: Realistic climate strategy

**Even small steps can lead to big results. Such as resource-efficient production. The important thing is to make a start. If your company does not yet have a well-formulated climate strategy (very few do), simply begin step by step.**

### Formulate realistic climate goals

- Analyze individual operational processes and formulate meaningful and realistic climate goals for each unit.
- Does the company have a specific climate goal? Verify this with the help of previously gained insights.
- Or focus on the big things then the small things, and determine your climate goals for individual processes based on the big picture.
- Also, look at your employees. Do they all have the mindset for a corporate climate strategy (see Section 1)?
- Would it be useful in your company to establish a sustainability manager, for example?

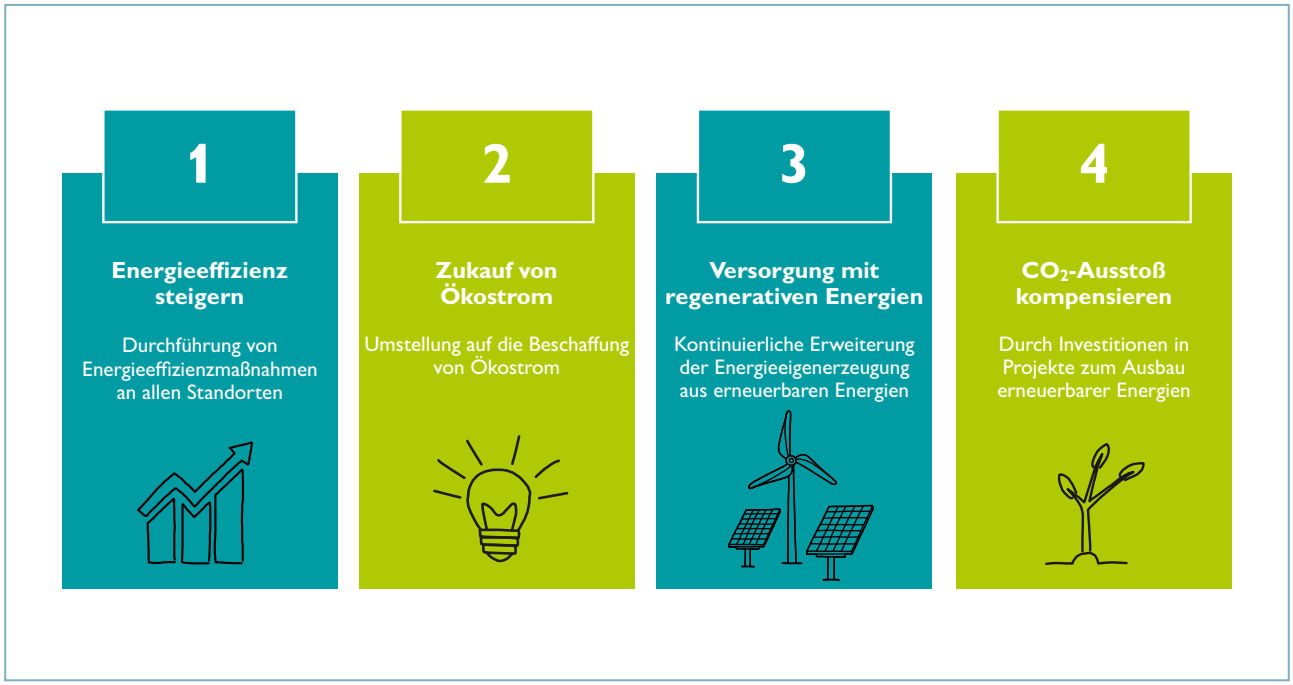
## Tackle the challenge

How do you measure carbon balance and impact on the climate? If your company has no systematic data acquisition and data analysis, this task can appear insurmountable. But complexity can be simplified, a multitude of data can be brought into focus, and concrete figures can be derived and deduced. Start simple and small:

Examine competitors and customer requirements, perform a risk analysis, and reach a consensus with the Executive Board. The goal of the climate strategy is to achieve climate neutrality by a defined point in time. And this deadline is determined by you or your company.

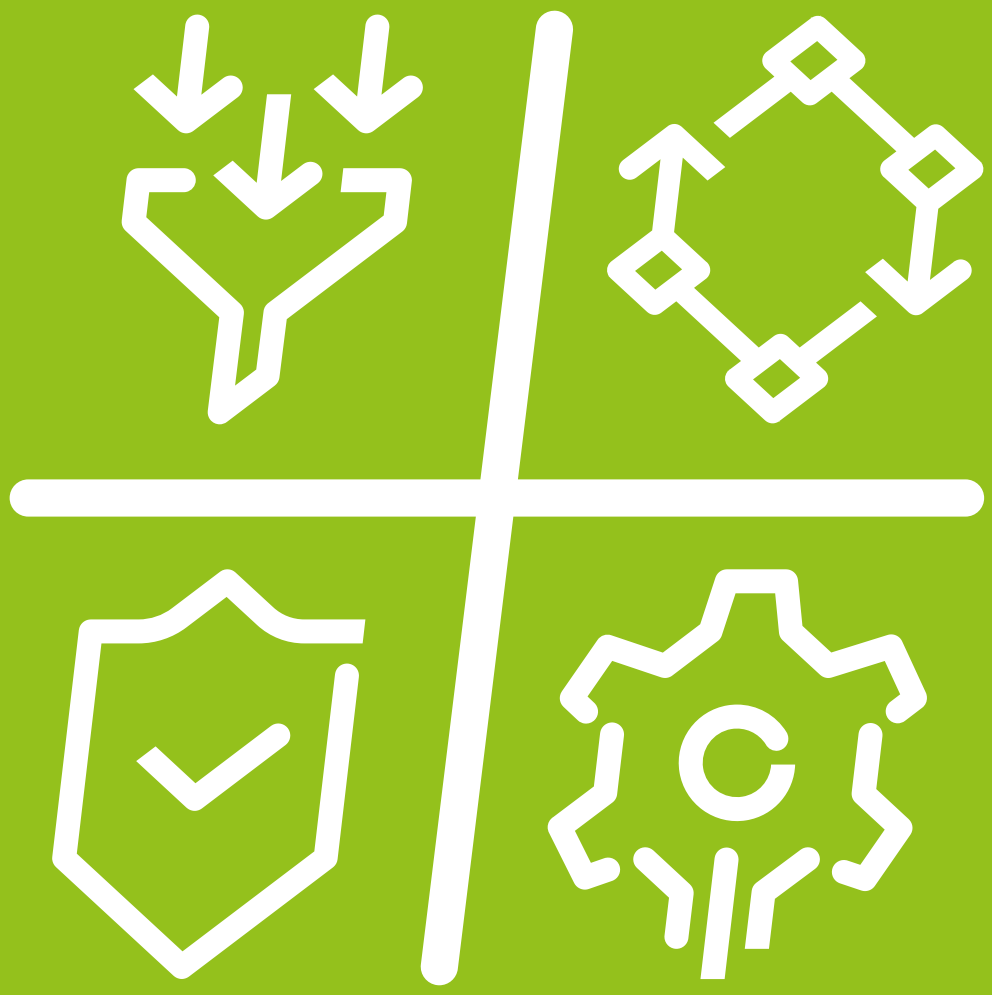
Once you have defined the climate strategy for your company and analyzed the impact that your products have on the climate, it will be easier for you to devise measures to reduce, compensate, and communicate the impact on the climate.

There are several steps you need to take to make production more resource efficient. The 4-phase model has proved practical here. Increasing the efficiency of internal direct and indirect processes is the biggest influencing factor. But the most important thing is to make a start. Draw on the knowledge of all stakeholders with regard to the requirements of current processes and the feasibility of measures.




Four steps to a climate strategy

# Step 5:
# The four key segments



## Step 5: The four key segments

**Small things make a big impact: Process optimization in existing workflows is one of the most effective levers for making production and manufacturing more resource efficient. Often, even small steps yield quick, noticeable, and sustainable results. And in many cases, this can be achieved without significant engineering effort, downtimes, or costly retrofits. But best of all, everything is done during operation.**

**3 to 5% transparency regarding your data (statistical mean value) and you have already created added value for individual processes.**

Source: PLCnext Factory, Phoenix Contact

When it comes to data, the lowest common denominator is often energy and media consumption. This already provides lots of information about the systems. An analysis of the consumption of individual gaseous, electrical, or liquid media over time provides a great insight into the effectiveness of the system.

Your data is the key to this success. The more transparency and knowledge you gain regarding your active processes, the greater your leverage. Whether scheduling maintenance intervals in servicing, synchronizing the supply chain with production, or implementing needs-based climate and light control with sensors: it often just takes a few data points to gain key insights for optimization potential and to achieve more resource-efficient processes.

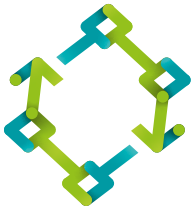
Phoenix Contact has first-hand experience of this in their own production operations in Bad Pyrmont.

There are four specific segments that enable you to increase productivity, efficiency, and decarbonization quickly and successfully:

1. **Data acquisition:** efficient data processing and analysis
2. **Data transport:** smart, secure, and structured management of networks
3. **Data security:** maximum security for OT and IT
4. **Data use:** standardized, time-saving, and horizontal as well as vertical integration of sensors, machines, and systems

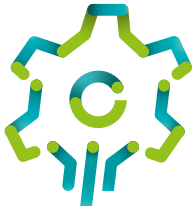
These four segments will later form the basis for tailored and turn-key applications. Whatever your industry, you will achieve tangible results quickly and precisely.

**Data acquisition**



**Data transport**

**Data security**



**Data use**

## Data acquisition

The basis of every sustainable factory is the comprehensive collection of data. This can include existing sensor, machine, and process data, for example. This information is collected across different locations and worldwide. Thanks to the Internet of Things (IoT), all the relevant trades can be networked and can communicate with each other. The meaningful analysis of this data, including with the aid of artificial intelligence (AI), can provide new insights for increasing productivity. In addition, systems can be much better utilized, monitored, and developed further.

The integration of existing machines into these types of network poses something of a challenge. In many cases, individual interfaces must first be created before data can flow. Modern, open communication protocols connect the old world to the new. They ensure smooth data exchange from the production process right through to the DCS, MES, or ERP. Sensors, measuring modules, and control cabinet solutions provide the hardware for this. They are the basis for data acquisition in the sustainable factory and transfer back to the operational processes. After all, "Smart Production" is not a one-way street. Here data is not only transferred from OT to IT, but also transferred back from the IT world to the OT levels.

## Data transport

Data is generated in all levels of the sustainable factory – from the sensor through to the cloud. But the number of Ethernet devices continues to rise. Development results in increasingly complex networks. Managing them in a smart and structured way is one of the key tasks in the sustainable factory.

Efficient data transport is a basic requirement in order for production to run smoothly. Just like the factory grows and changes, the data traffic in the network and the complexity of the system also change. Therefore it is always necessary to integrate new intelligent devices into the network and drive forward the expansion of the infrastructure. The key ingredients for a future-proof infrastructure are open interfaces and having a flexible IT system design from the outset with the option of permanent network diagnostics. This will allow you to continue to meet the growing and changing requirements of the sustainable factory.

## Data security in OT

Connecting all the devices in a network to the Internet provides many advantages for production operations. This includes being able to easily access sensors, machines, and systems anywhere and anytime so that status checks can be performed on demand or service partners can be engaged to carry out maintenance work. However, this type of networking also has its risks, e.g., cyberattacks. In certain circumstances, existing systems may present a challenge here if updates or trojan and virus protection programs are not available or are not available in time. However, even these issues are usually manageable. First, you should perform a risk analysis: What level of security is required? How much can or should that cost? And is it even necessary for production and the associated systems and machines to be fully networked when they were never networked before? Or is it possible to concentrate on a few very specific items of data, which are retrieved using autonomous stand-alone solutions and are then later networked to form larger clusters if necessary?

## Data use

One of the essential steps on the path to a sustainable factory is the targeted use and networking of data. It enables the flexible control of material flow in production and makes it possible to respond quickly to changes in volatile markets. The horizontal and vertical integration of systems into the sustainable factory is necessary in order to achieve shorter production lifecycles. The networking of ERP, MES, DCS, and production is key here. New information is generated from the stored production data, enabling increased efficiency through optimization. Along with the data, there are also challenges associated with the integration of global safety, communication, and security concepts that need to be taken into consideration.

## Industry 4.0 becomes a reality

Factory 4.0 combines efficiency and productivity with maximum sustainability. It is characterized by generic, open, and coherent interoperability. This means that all trades communicate with each other, even in the furthest corners of the building. However, it also means that Factory 4.0 requires the highest standards of data security and data transport.

### Industry 4.0 – enormous potential

- Shorter production times
- Superior delivery reliability
- Smaller batch sizes
- Greater flexibility
- Quality improvements
- Greater transparency regarding production
- Lower costs


**Industrie 1.0**
Übergang von Muskel- zu Maschinenkraft

**Industrie 2.0**
Massenproduktion durch hochgradige Arbeitsteilung

**Industrie 3.0**
Automatisierung durch Mikrochips

**Industrie 4.0**
Digitale Transformation, Vernetzung, Anreicherung zur Selbstoptimierung

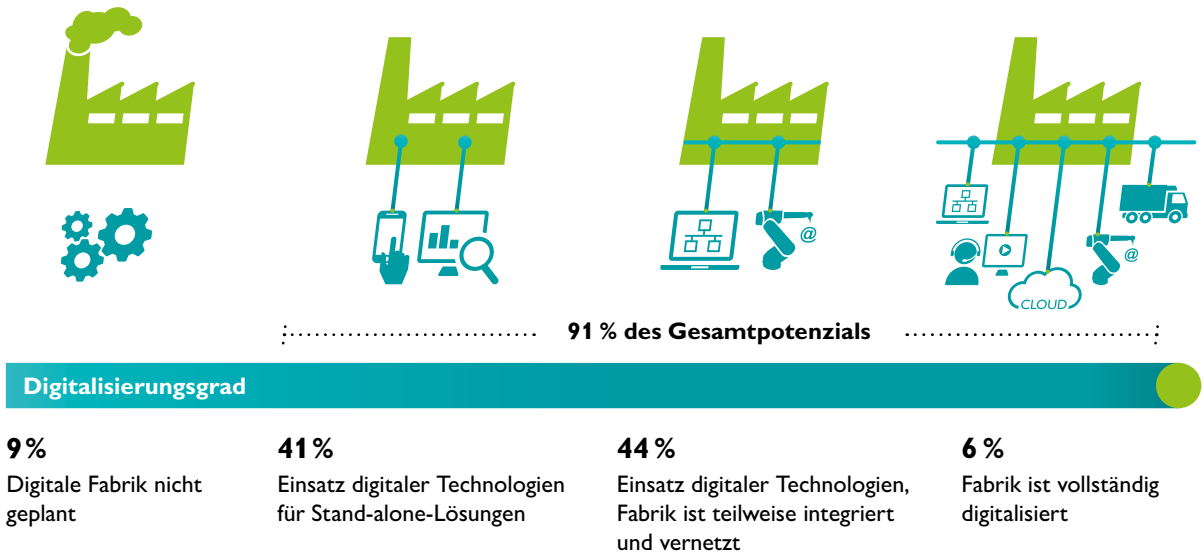
Source: Industrie 4.0 – Die digitale Fabrik, Johann Hofmann

The four stages of the Industrial Revolution

## What stage are you at?

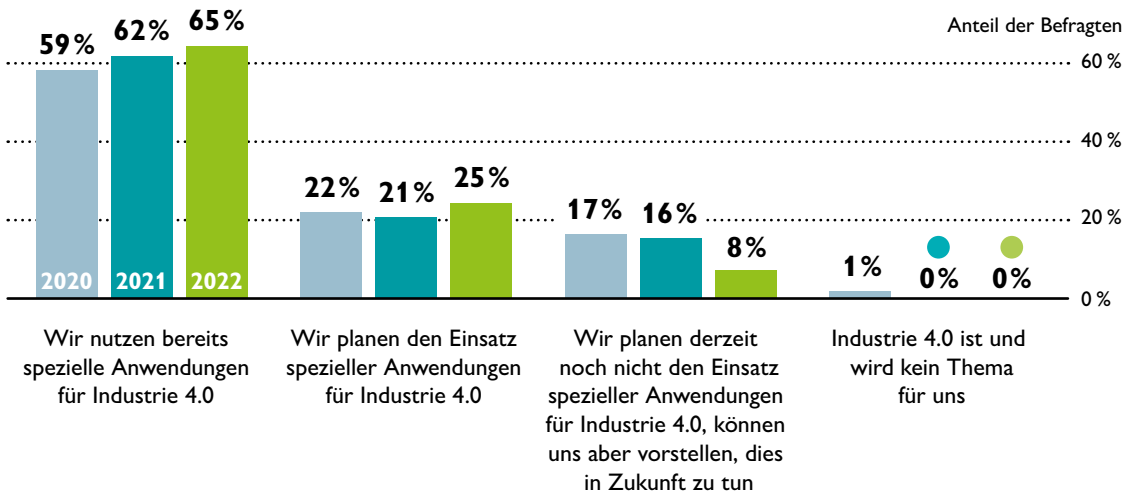
Nine out of ten companies are already investing in the digitalization of their operational processes. However, only six percent report that their factory is already completely digitalized.

Now is the time to implement a step-by-step approach, which identifies the countless possibilities for increasing your productivity and system availability.




Source: PWC, Digital Factories 2020 – Shaping the future of manufacturing

Nine out of ten companies are already investing in the digitalization of their factory




Source: Statista

Significance of Industry 4.0 for companies

# Step 6: Implementation

## Step 6: Implementation

As you work towards resource-efficient production, bring together all the people involved in the process. Make use of the experience that is already available in your company. From the sustainability manager, supply technician, operations manager, maintenance engineer, machine operator to the Executive Board, make sure that all valuable information from your employees is compiled and available transparently at all times.
In terms of your production operations, the answer lies in a comprehensive and open, cross-industry generic system.

**Also get an external perspective. There is no ideal solution that fits every company. The solution is always based on specific requirements and is highly individual.**

DIGITAL FACTORY now

**"Thanks to our Digital Factory now solutions, we were able to increase the productivity of our in-house production processes by more than 10% within just 18 months. And there is still more potential..."**

Dr. Till Potente, Vice President Operations and Sustainability, Phoenix Contact

**Digitale Transformation**

- Digitalisierung des Geschäfts
  - Kein Papier
  - Einheitliche Daten
- Informationen sammeln mit aktuellen Daten
- Nutzung von Digitalisierung, um Menschen zu informieren und zu führen

**Industrie 4.0**

- 4. industrielle Revolution
  - Netzwerk/Technologie
  - Standards/Protokolle
- Smarte Fertigungsprinzipien
  - Vernetzung aller Maschinen und Anlagen
  - Offene Architektur

**Digital Factory**

- Das Ergebnis von digitaler Transformation und Industrie 4.0
- Informationen von jedem Erzeuger zum Verbraucher
- Verfügbare Daten jederzeit und überall
- Übersetzung von Daten in Informationen

The path to a Digital Factory

With the Digital Factory now retrofit solutions from Phoenix Contact, existing systems can also be digitalized quickly and easily during operation.

## Sustainability could not be simpler

How does a factory succeed at decarbonization? Phoenix Contact's PLCnext Factory in Bad Pyrmont demonstrates possible and proven related applications. With minimally invasive intervention in existing processes, overall equipment effectiveness was increased by 10 percent within just 18 months.

The secret to this rapid success: external toolboxes that can be docked into existing systems at a later date. Instead of implementing complete, conventional automation, stand-alone solutions were created based on the specific requirements, which then gradually grew to form a large cluster – all the while delivering permanent performance and data. The central block was the open PLCnext Technology ecosystem. Using individual IoT connectors, it enabled connectivity to the signal and field levels as well as the IT and cloud levels.

The PLCnext blocks form a meaningful, generic, modular, and scalable system. This made it possible to implement the specific applications in the PLCnext Factory in Bad Pyrmont five times faster than using a conventional approach with laborious planning, new installations, and system calibration, and without external system manufacturers.

Everything was accomplished very easily, with only minimal intervention required with respect to the safety of machinery and systems, and there was no need for any laborious reassessment of the systems in the CE process.

# Checklist
# Overview of the six steps

### 1. The right attitude

Before you begin, internalize an open and positive attitude.
Ideally, bring along a digital mindset.

### 2. Meaningful Purpose

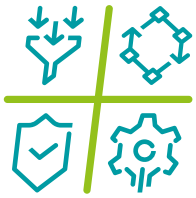
Formulate a Purpose for your company.
Familiarize yourself with your company's contribution.

### 3. Honest situational analysis

Analyze your situation and define a sustainability strategy.
Create a foundation for the (further) development of your sustainability management.

### 4. Realistic climate strategy

Take a look at your company's climate strategy and analyze the impact that your products have on the climate. Then devise measures to reduce, compensate, and communicate the impact on the climate.



### 5. The four key segments

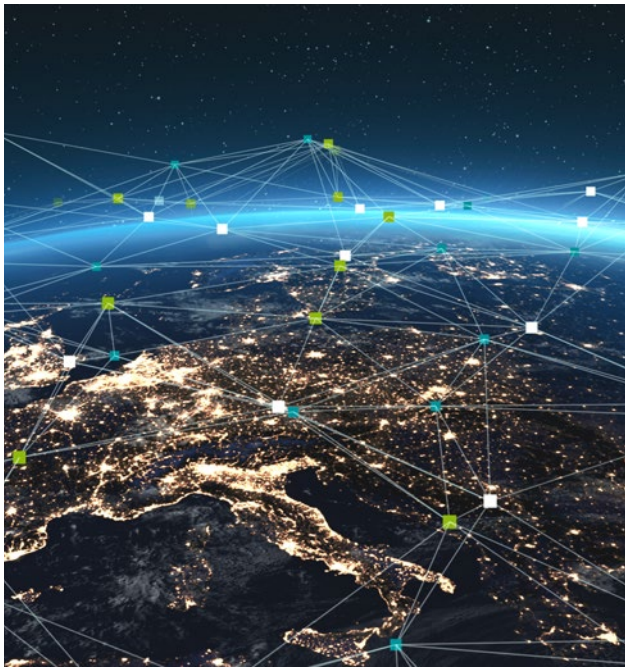
Optimize your processes and gain maximum possible transparency regarding your data. From data acquisition, data transport, and the security of your data to optimum data use during operation.

### 6. Implementation

Bring together all the people involved in the process. Make sure you have a comprehensive and open system, and get an external perspective from an expert.

# The All Electric Society or why choose Phoenix Contact?

**We firmly believe that the future concerns us all. Based on our passion for technology and innovation, we find technical solutions for complex and challenging tasks.**



Empowering the All Electric Society

The All Electric Society (AES) is the scientifically based concept that is the answer to this question: How can we tolerate energy consumption in the future – and therefore production, growth, and value creation – yet still protect the climate?
The goal of meeting our energy needs completely and economically from renewable sources in a sustainable manner is fundamental to this future. We all need to work together to achieve this goal.

At Phoenix Contact, we are contributing with innovative products, solutions, and services for a world worth living in.
The AES concept describes a future in which electrical energy generated from renewable sources is available worldwide as the primary type of energy in sufficient quantities and in an entirely economical way. The basis for this is that all sectors of the economy and infrastructure are coupled; in other words, comprehensively electrified, networked, and automated. In the AES, energy generated exclusively from renewable sources can flow in an optimally balanced manner – from generation through conversion and storage to consumption.

By collecting and evaluating data on energy consumption and generation, the entire energy flow is optimally controlled. This means that no energy is wasted. This can be achieved if the sectors are intelligent (smart). Then they exchange data and energy with each other so that it is available in the right form and quantity where it is needed.
The aim of sector coupling is to use resources efficiently and reduce carbon emissions. Thus, sector coupling creates the technical basis for a world worth living in – also for future generations.

**Would you like to find out more about the exciting topic of the All Electric Society?**

→ **Find out more now**

phoenixcontact.com/aes

# Glossary

**This white paper contains certain terms that you may not be familiar with. These include abbreviations and terms that are now generally used in the context of sustainability, ecology, and responsible entrepreneurship. We have provided a brief explanation of these terms for you.**

**All Electric Society:** The All Electric Society (AES) concept describes a future in which electrical energy generated from renewable sources is available worldwide as the primary type of energy in sufficient quantities and in an entirely economical way. This is based on the comprehensive electrification, networking, and automation of all sectors of the economy and infrastructure.

**CSR:** Stands for Corporate Social Responsibility. This means that a company has to take on "social responsibility." CSR describes a company's voluntary contribution towards sustainable development that goes beyond the legal requirements. The aspects of sustainability are defined by the UN 2030 Agenda in the form of Sustainable Development Goals (SDGs).

**CSRD:** Stands for Corporate Sustainability Reporting Directive. This is a directive from the European Parliament regarding corporate sustainability reporting that came into force on January 5, 2023. The European Commission thereby requires companies to publish information on the sustainability of their business activities.

**Mindset:** General attitude toward things in general and challenges.

**Net zero factory:** A net zero factory is a production facility with net zero energy consumption and net zero carbon emissions.

**Purpose:** Meaning and aim (of a company), motivation that has lasting validity

**SDG:** Stands for Sustainable Development Goal. The UN formulated these sustainability goals in its 2030 Agenda, mapping out its vision for the future of a world worth living in. The 17 individual goals describe a global master plan for promoting lasting peace and prosperity and protecting the planet. Since 2016, all countries have been working to transform this shared vision into national development plans.

# Contact Germany

## When do you want to become climate-neutral?

**We will be by your side on your individual journey towards a sustainable and productive future for your company. Contact us for more information.**

**Ramon Iglesias**
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Email: ramon.iglesias@phoenixcontact.de

Sales is his passion: Ramon Iglesias looks back on more than 25 years of experience in sales – both nationally and internationally. He has been employed at Phoenix Contact for more than 20 years, where he has been able to build upon and further develop his many years of expertise in the sale of automation systems. During this time, he accompanied numerous customers into the world of digitization and automation and, among other things, had a significant role in Business Development Automation in Germany.

Armed with the motto "Digital Factory now!" he is on the road for the German sales company as Sales Director in the fields of automation, IoT, Industry 4.0, and digitalization.

**Oliver Fischer**
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Email: oliver.fischer@phoenixcontact.de

For more than two decades, Oliver Fischer has been involved in the development of solutions in an industrial context. Starting out as an application engineer in the field of visualization systems for plastics processing machines, he is now responsible for the IMA Engineering department at Phoenix Contact's German sales company.

He has the support of an expert team that holistically realizes and supports application projects. And this from the idea through to commissioning at the customer's premises.

Answering complex questions in the context of digitalization and breaking them down into achievable goals are what drive him. His passion is the continuous, sustainable development of solutions.

# Contact international

## When do you want to become climate-neutral?

**We will be by your side on your individual journey towards a sustainable and productive future for your company.**
**Contact us for more information.**

**Markus Berghammer**
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Having begun his career as a PLC programmer and startup engineer for prototype applications, Markus Berghammer has accumulated more than 30 years of professional expertise in various industries.
Focusing on business development and sales in the field of factory automation, in recent years he has turned his attention to digitalization as a means to increase efficiency.
Drawing on his experience of both factory automation and digitalization, he has been instrumental in creating predefined reusable solutions for greater efficiency and sustainability, which are marketed under the umbrella of "Digital Factory now!" and Smart Factory.
Markus Berghammer has been Director Business Development Factory Automation at Phoenix Contact since July 2022.

**Markus Kick**
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For more than 20 years, Markus Kick has specialized in generating added value from various automation and digitalization processes that provide producing companies and their suppliers with an individual and scalable edge in the market, which is both sustainable and long-term.
His expertise and industry experience range from predictive maintenance in metal cutting using CNC machines, intelligent functional safety, and explosion protection to international directives in the field of thermoprocessing equipment and machinery for the glass and food industries.

In his role as International Business Development Manager, he has been responsible for Phoenix Contact's cross-industry market approach of "Digital Factory now!" since 2021.

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