OPTIMIZING YOUR BUILDINGS AND INFRASTRUCTURE: HERE'S HOW TO CREATE A SOLID FOUNDATION **FOR THE FUTURE**

Productivity and sustainability in the food and beverage industry



New trends are transforming the world

Today's energy-intensive industries are facing tremendous challenges on the path to climate-neutral, economical, and high-quality production. What lies ahead for you?



Decarbonization

Decarbonization increases cost pressure resulting from rising energy and CO₂ prices and the simultaneous need to safeguard the power supply for production and buildings.



Decentralization

The pursuit of (partial) autonomy and the expansion of distributed energy creates a varied energy mix. This opens up new business opportunities!



Globalization

Our world is becoming more and more connected and the global interdependence of individuals, societies, companies, institutions, and nations is steadily increasing.

transformation

Edge devices and machines generate a huge volume of data that has to be effectively used for gaining specific knowledge.

What are your goals for the future?



Achieve your energy and sustainability goals

Sustainability efforts improve your public image and increase your brand value, making them an important competitive advantage. Additionally, helping you to maintain compliance with governmental regulations.



Reduce operating costs and carbon emissions

Identify and exploit energy saving potential in order to reduce your energy consumption and climate-damaging carbon emissions.



availability and your power supply

Ensure a stable, uninterruptable, high-quality power supply so that production and operation can avoid downtimes.



Make production flexible

Modular solutions and systems are easy to adapt to the individual and changing demands of production and new technologies. These solutions are easy to update and provide flexible set-ups.

Our answers

We help you to boost your sustainability and productivity so that you can optimize your buildings, production plants, auxiliary installations, and power demand. Supporting you in the production of high-quality, nutritious foods.





(R&D) and production

data analyses

production

Digital

optimization of R&D-related processes · Efficient integration and coordination of R&D and

Management software for the rationalization and

• Combination of previously separate workflows for simulations and tests

Digital twin that permits smart functionalities and

- performance optimization after delivery Multidisciplinary design exploration, technical simulations and tests with intelligent reports and
- the entire lifecycle

end-to-end, comprehensive plant management

- manufacturing data as well as processes
- Prediction of actual product behavior throughout · Integrated software solutions for consistent,



· Reliable and consistently available power supply for your production plant and all your property

Reliable,

intelligent power supply

• Companies' expansion of local energy structures to become prosumers

Microgrids that control the balance and load

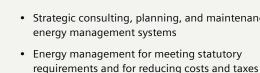
management of generation and consumption

- · Smart management of generation, storage, and consumption on site
- store excess energy, utilize machines more uniformly, and reduce peak loads Smart infrastructure, for example with intelligent

· Energy storage systems that make it possible to

for eMobility solutions • Complete solutions for electromobility from the design and operation of the charging infrastructure to the electrification of your company fleet

control of power generation and consumption or the development of a local charging infrastructure



• Strategic consulting, planning, and maintenance of energy management systems

Energy and

plant efficiency

interact with their residents, learn from them, and ultimately adapt themselves to changing demands Building management system as an open, power-

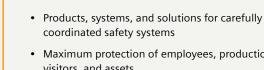
Smart buildings, which create environments that

ful, and modern platform that increases comfort, efficiency, capacity, and safety

Genuine smart buildings that learn from past

comfort, efficiency, durability, and safety

experience and real-time input and increase quality,



coordinated safety systems • Maximum protection of employees, production, visitors, and assets

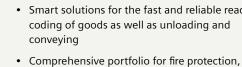
Comfortable,

and plants

secure buildings

- Maximum operating times with maximum energy efficiency and safety for data centers Smart processing of data from production and
- processes • Integrated data center solutions, expertise and services for optimized sustainability, safety, fire

protection, and reliable performance



products

User-oriented, efficient

· Smart solutions for the fast and reliable reading and coding of goods as well as unloading and

work environments

as recording in a certified monitoring system · Extraction and interpretation of all relevant sorting and routing information for food and beverage

extinguishing systems, and climate control as well

• Complete, integrated solutions for laboratories and cleanrooms: room and building automation including monitoring, validation, and qualification for safe, comfortable, energy-efficient, and standards-compliant places for working and

conducting research, and development.



according to IEC 62443 for plant security, network security, and system integrity

Consulting,

and services

planning,

• Holistic approach for reducing your carbon footprint and emissions

through IT/OT integration

- Smart, data-based maintenance of buildings and • Connection of the real world to the digital world
- Implementation of the real-time recording and analysis of building data
- increases capacity, and permits new business models • Support for generating an optimal financing plan

· Smart financing that also allows more agility,

More information

siemens.com/fab