Supporting the Sustainability goals of the Food & Beverage industry

Building a sustainable, resilient and credible Value Chain with EcoStruxure for Food & Beverage
Our mission is to be your digital partner for Sustainability and Efficiency
Rethinking next generation industries: business resilience and sustainability performance for lifecycle integrated management
We help on every step of the value chain

Efficient facilities
Safer, more available, and greener resources

Resilient supply chain
Manage complexity and improve visibility

Agile manufacturing
Boost manufacturing flexibility & efficiency
… enabled by transversal digital transformation capabilities

Food Safety & Traceability
Ensure compliance and increase trust across the whole value chain

Energy & Sustainability
Reduce environmental footprint and meet sustainability goals

Asset Performance
Maximize return on asset investment

Workforce Empowerment
Take teams efficiency to the next level

Digital Engineering
Cut time, cost and risks of capital project engineering
Reduce your environmental footprint and meet your sustainability goals

End to End Decarbonization
Tackle your energy challenges by creating an optimized way to access reliable, green, and resilient energy. Reduce GHG emission, scope 1, 2, 3 to address climate change

Efficient and sustainable operations
Meet your energy and sustainability goals and reduce costs with smart energy, water and waste management at your facilities

Minimize footprint on environment
Reduce impact on the planet by helping farmers improving productivity and better managing the usage of resources. Protect agriculture and ecosystems.

Responsible Value Chain, end to end
Increase visibility across your entire Value Chain, from raw materials to finished goods to improve transparency and build a sustainable Value Chain.

Towards Net Zero emissions

Up to 30% energy cost reduction

For a better future from agriculture to packaging

Build a sustainable Value Chain

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Energy & Sustainability
Reduce your environmental footprint and meet your sustainability goals

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Minimize footprint
From agriculture to packaging, we support in reducing impact on the planet and protect ecosystems.

Fields & Farms → Cooperative → Manufacturing → Distribution → Retailer → Consumers

Make the most of your resources
Do more with less by reducing your energy consumption, saving money on energy, stewarding natural resources.

Responsible value chain
Increase visibility across your entire Value Chain, from raw materials to finished goods to improve transparency and build a sustainable Value Chain.
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Efficient and sustainable processes

Do more with less

Make the most of resources by reducing your energy consumption, saving money on energy, stewarding natural resources, and reducing your overall impact on environment.

Holistic approach to energy and sustainability

- Active Energy Management
- Energy as a Service (EaaS)

Digital solutions for the plant

- Industrial software
- Clean-in-Place Operations
The Trend toward Convergence
At Schneider Electric, we promote a holistic approach to energy and sustainability

Convergence leads to a holistic view of strategies, data and resources needed to **reduce consumption, drive innovation** and **maximize savings.**

“97% of CEOs surveyed by Accenture in 100 countries believe that sustainability is important to the future, success of their business”

$450 billion spent by businesses on efficiency and sustainability initiatives each year

44% of industry professionals indicate that "lack of coordinated planning" is a challenge

Discover more
Energy Management Programs
Removing capital burden and risk exposure to scale impact and maximize ROI

The solution

- Programmatic approach to accelerate efficiency programs on a global scale
- Tailored business models to meet calculated, timely outcomes
- Access to capital with flexible models on cash flow, accounting treatment and asset ownership
- Outcome assurances with performance guarantees and proven M&V methodology and documentation

Business value

Learn more

Watch the video
Agrial: From Energy Intense to Efficient

**Purpose**
- Implement a far-reaching energy performance solution combining energy audits and an energy performance contract
- Achieve guaranteed savings
- Save 10% on energy by 2025

**Solution**
- Select the plants with the highest energy-savings potential
- Confirm the potential for savings exists
- Replace lamps, add insulation, and set up energy monitoring tools

**Path**
- Approved selection of three test Agrial facilities
- Completed an in-depth audit of the equipment and energy consumption
- Assessed the potential energy savings and how we could achieve the stated goals

**Results**
- 17% total energy savings
- 10% energy savings in 3 years
- Achieved ROI in three years (2 less than expected)
- Selected 7 more Agrial plants for the next program roll-out

10% reduction in the plant’s energy spend in just three years

WATCH VIDEO
Discover our customer’s journey to sustainability

Discover how Royal Canin has harnessed Active Energy Management and learn more about their journey.

How procurement accelerates digitization in F&B new-generation industries with Olam

Read the story  Watch the video

Watch the video  Read the blog
Energy-as-a-Service (EaaS)

Reduce your energy consumption, save money on energy and reduce your overall impact on environment

The solution

- EaaS is a funding model for projects ranging from energy supply to establishing more renewables.
- It's not limited to the energy production and energy efficiency assets; it can also span new infrastructure.
- Includes long-term service agreements with a performance.
- We design, build, own and operate energy systems that meet your comprehensive goals.

"An industrialized setup providing a single point of interface with customers and managing financial and commercial risks over the life cycle »

Business value

- Increasing resilience and reliability
- Cost predictability with no capital outlay.
- Improve productivity
- Meet your sustainability objectives.

Watch the Role of Procurement video
Learn about the evolution of EaaS
Read the blog
Customer Challenge
• Increased operational efficiency & sustainability
• Local v Global challenges – benchmarking & performance management locally versus Corporate goals
• Local Challenges:
  • Multiple siloed data gathering systems
  • Data manually read & collated into excel tracking system
  • Lack of timely & actionable information
  • Performance management & M&V (support ISO50001 program)
  • Asset management – lack of visibility on performance & status of key plant & assets

The Solution
• Energy & Asset Management Enterprise Platform delivered as a turnkey solution including:
  • EcoStruxure Resource Advisor
  • EcoStruxure Building Operation with integrated EcoStruxure Power Monitoring Expert (PME)
  • Integration of multiple 3rd party systems (BMS / PLC etc.)
  • Specification & installation of new metering (WAGES)
  • Consultancy Services

Customer Benefits
• Site profile visibility & global benchmarking capability
• Optimize equipment utilization and the cost of operations thru KPI & continuous improvement monitoring
• Asset management – plant visualization & control
• Corporate Dashboards - enhance public image and social responsibility through communication of energy & sustainability metrics to multiple stakeholders
• Aid in the sites on-going ISO50001 program
• Ensure electrical network reliability and reduce downtime
• Future proofed & scalable architecture with control functionality

The Results: Life is On with... Reduced energy-related costs, water consumption and GHG emissions
Customer Challenges
• Rebuilding public trust after the dairy safety crisis to prove that manufacturing is secure and smart
• Rising energy costs and strict emissions reduction targets
• Specified statistics and analyses for decision-making
• Scientific quantification of energy input-output ratio

Solution
• A complete energy management solution with EcoStruxure Plant, leading to sustainable development and helping to achieve a smart dairy industry
• Real-time monitoring and management of the energy efficiency status of equipment
• Industry expertise and experience helping dairy producers to save energy & increase efficiency, with multiple references in this area

Customer Benefits
• Energy efficiency improved by 19%
• Operational costs reduced by 5%
• Improved accuracy in process and energy data through automatic collection
• Better and more timely decision making as the basis for operational improvements
• New industry benchmarks set for energy efficiency & operations management
• Complete transparency between energy demand side and supply side distribution
• Labor costs reduced and efficiency improved

The Results: Life Is On with...
19% improvement in energy efficiency and 5% reduction in energy costs

“By applying Schneider Electric’s EcoStruxure Plant... we have achieved transparent and efficient operations management, with operational efficiency increased by 19% and energy costs reduced by 5%.”
Wei Xiangyun
Deputy Director
Liquid Milk Production Management Department
Yili Group

Asia’s biggest dairy enterprise, and the first dairy company listed in MIIT’s 2025 smart manufacturing pilot project, takes the lead in building smart factories as part of sustainability strategy

Inner Mongolia Yili Industrial Group Co., Ltd
A model for smart manufacturing and energy efficiency in the dairy industry

Link to Paper
Link to Video
Industrial software

Increase energy efficiency, help reduce waste, boost circularity to maximize sustainable performance

Combining the power of information and artificial intelligence with human insight to elevate industries’ performance, driving sustainability and growth.

Together, OSIsoft and AVEVA are unlocking Performance Intelligence for industrial organizations to achieve sustainable operations.
Customer Challenge
• Minimize impact on the environment by transitioning from fossil fuel-based sources to total renewable energy options.
• To reduce its wastewater impact by increasing its waste diversion rate (sans spent grain and sludge) from 73% in 2007 to 95% by 2015.
• Reduce Water use per barrel by 10%

The Solution
• AVEVA System Platform
• AVEVA InTouch HMI
• AVEVA Historian

Customer Benefits
• Analyze and optimize all energy Usage.
• Batch data was used by accountants for government tax reporting.
• Control lighting system of entire Brewery operation.

The Results: Life is On with... Sustainable production environment.
“Every Wonderware system is what our operators pretty much use. That’s where our data is being extracted from, so it kind of unites all of the systems together. We unify our plant information through Wonderware, We’ve been utilizing InTouch for 10 years plus for extended period of time. We’re pretty happy with this system.”

Valuyev
New Belgium Brewery

Link to Video 1
Link to Video 2
Confidential: Property of Schneider Electric

Customer Challenge
• Improve competitiveness at local market
• Digitize operations, simplify production processes
• Be smarter about manufacturing process execution
• Keep track of production performance
• Guarantee food safety

The Solution
• EcoStruxure for F&B including:
  • AVEVA System Platform
  • AVEVA Manufacturing Execution System (MES)
  • EcoStruxure Power Monitoring Expert

Customer Benefits
• Energy saving 20% at HVAC
• Increase efficiency of packaging lines by 15%
• Reduce water & Energy consumption by 15%

The Results: Life is On with... 6 months Payback

"Schneider Electric Solution has provided a platform to best manage production requirements & initiate process improvement. Our next step is to gain better visibility to this data to empower our team to make smarter, more informed decision".

Sjur Fitje
General Manager Manufacturing

Link to Web

Almarai, Saudi Arabia
Improved competitiveness with EcoStruxure Plant

Largest Food manufacturer in the Middle-East. Dairy leader in Middle East.
Digital Solutions to turn water systems intelligent
Collaborative approach for Unique Monitoring system for Integrated WR Management

1. Develop sustainability through Water efficiency program
2. Leverage on Start-Ups with a strong know-how in Water Efficiency
3. Deploy Globally with all the right certifications & cybersecurity
4. Empower Cross Functional Teams facing Complex Problem Solving

Schneider Electric & AVEVA Value Proposition
Co-Design & Solution Industrialization & Deployment

Resources
- Strategic Relationship
- Value Creation Approach
- Global Coordination & Local Presence

Interoperability
- Adapt to a large number of factory set-up with open and scalable architecture

Deployment
- Use of Playbook and Templates to simplify deployment

Aquassay Value Proposition
Water Efficiency & Digital Services in a Start-Up Mode

- A deep understanding of the technologies and practices of the Water Industry
- A End-to-End Approach of Water efficiency and its challenges

- Software as a Service Approach
- Advance Optimization
- Collaborative Approach

Learn more
Watch the video
Discover our customer’s journey to sustainability

Discover how Heineken Spain leveraged data for improved sustainability

Learn how Syngenta enabled savings of over 68 million gallons of water in Ethanol Plants

Discover how Henkel harnesses its big data to drive sustainability and boost energy efficiency
EcoStruxure™ Clean In Place Advisor
Unveiling sources of optimization and documenting evidence of proper cleaning

The solution

• Performance Assessment unveil current status of your CIP stations
• Clean-In-Place Advisor monitors real-time operation and document optimization possibilities and cleaning evidences

Typical benefits

• Reduced water and carbon footprint:
  – Up to 30% energy savings
  – Up to 5% water and chemical savings
• Higher productivity: up to 15%
• Improved traceability
• Typical ROI from 6 – 8 months

Learn more
Customer Challenges
• Empower workforce with convenient diagnostic tool that’s easy to configure & install
• Improve traceability by making it fast & simple to retrieve data on each production batch or cleaning process
• Improve quality by tracking deviations & highlighting abnormal production and Clean-In-Place (CIP) behavior

The Solution
Nestlé selected Schneider Electric’s innovative EcoStruxure Clean-In-Place Advisor solution, including OptiCIP software and services, to optimize their CIP operations, because of its:
• Flexibility to adapt the architecture to their IT and automation constraints
• Efficiency to better track and diagnose the process
• Differentiation from the competition who lack the features for this dedicated activity

Customer Benefits
• Improved tracking & diagnosis of processes
• Significant reduction in traceability time and savings per CIP line
• 340t CO₂ used in sparkling water process saved in the first year (50% less for specific lines)
• Increased productivity, with 20% CIP reduction for some lines
• Facilitated commissioning of new production line
• Improved maintenance with dedicated custom features related to usage of the valves (like flip counters)

Life Is On with... 20% less CIP time

“Thanks to Schneider Electric’s EcoStruxure solution we are now able to reduce our production line downtime for CIP by 20%.”

Bernard Flores
Spring industrial process department manager
Nestlé Waters, Vergèze

The world’s largest bottled water company has 11% of the market share. The Vergèze plant already has 13 equipped production lines, and is a “laboratory” for innovative solutions.
Reduce your environmental footprint and meet your sustainability goals

Let’s engage in this journey!

- Towards Net Zero
- Doing more with less
- Minimizing impact on environment from agriculture to packaging
- Building a responsible and sustainable Value Chain, end to end
- Communicating sustainability goals, projects and achievements with all company stakeholders.

Up to 50% energy cost savings
Up to -5% of OpEx savings
Up to 40% CO₂ footprint reduction.
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# EcoStruxure for Food & Beverage / CPG

## Agile manufacturing
**Boost manufacturing flexibility and efficiency**
- Manufacturing Operation Management
- Industrial Information Management
- Process Control System
- HMI and data Integration
- Process Automation
- Packaging Automation

## Efficient facilities
**Safer, more available, and greener resources**
- Smart Building Management
- Power Safety & Availability
- Power Quality & efficiency
- Renewable Energy & Microgrids
- IT Infrastructure Management

## Resilient supply chain
**Manage complexity and reduce logistics costs**
- Agriculture Efficiency & Sustainability
- Suppliers Management
- Supply Chain Optimization
- Cold Chain Monitoring
- Product Information Management

## Food Safety & Traceability
**Ensure compliance and trust across the product life cycle**
- Food Defense
- Cybersecurity Services
- Digital Calibration
- Raw material traceability
- Production traceability
- Product Identification & Tracking

## Energy & Sustainability
**Reduce footprint and meet sustainability goals**
- Sustainability Consulting
- Energy Demand Services
- Strategic Energy Sourcing
- Enterprise data management
- Energy as a Service

## Asset Performance
**Maximize return on capital expenditure**
- Assessment and Consulting
- Enterprise Asset Management
- Condition Monitoring
- Predictive Analytics
- Line & Process Optimization
- Modernization services

## Workforce Empowerment
**Improve staff knowledge, productivity and collaboration**
- Operator Training Simulator
- Augmented & Virtual Reality
- Workflow Management
- Staff Schedule Management
- Operator Knowledge Sharing

## Digital Engineering
**Cut time, cost and risks of capital project engineering**
- Electrical CAD
- Building Information Modelling
- Integrated Engineering-Design
- Digital Asset Visualization
Let’s talk about

EcoStruxure™
Innovation At Every Level

for Food & Beverage