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.

Towards Net Zero emissions

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

Up to 30% energy cost reduction

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.

For a better future from agriculture to packaging

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.

Build a sustainable Value Chain
Energy & Sustainability
Reduce your environmental footprint and meet your sustainability goals

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

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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Build a sustainable Value Chain

90% of all disclosed emissions in the food sector come from supply chains

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Achieve End-to-End Traceability

- **Responsible & sustainable sourcing** (Traceability Advisor – Origin)
- **Track & Trace your product across the logistics journey** (Traceability Advisor – Track & Trace)
- **Responsible consumption through transparent information** (Traceability Advisor – PIM)

Cold chain monitoring
End to end traceability

Connecting the Entire Value Chain, ultimately

Applications

Farm data ← Collect data ← Manufacturing data ← Distribution data ← Consumer data

Upstream:
- Fields
- Farms
- Cooperative

Plant:
- Manufacturing

Downstream:
- Warehouse
- Retail
- Consumers

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EcoStruxure Traceability Advisor
Providing End-to-End traceability and transparency solutions across the supply chain

« Origin » traceability/transparency
Processing traceability
Distribution traceability

Upstream
Fields
Farms
Cooperative

Plant
Manufacturing

Downstream
Warehouse
Retail
Consumers

MODULAR & SCALABLE
• Based on a set of modules
• Potentially: Independent or Integrated
• Start with your business priorities
• Start Small and Scale fast

OPEN
• Through API or other technologies
• Connect your solution Eco-system: ERP, LIMS, WMS...
• Data model based on Standards (ISA88-ISA95), Web Ontology W3C
• GS1 compliant (GDSN, EDI...)

GLOBAL
• Global and worldwide support
• Common Cybersecurity policies
• Hosting Services (SLA, 24/7...)
• Worldwide footprint in term of :
  Project Execution, Rollout,....

EVOLUTIVE
• It’s a journey, a complete digital transformation
• New components integration :
  Transportation (cold chain management, CRM (customer relationship), advanced planning / forecasting and analytics...)
• Blockchain Technology
• IT and OT Convergence
• Based on our IOT platform, Datahub

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EcoStruxure™ Traceability Advisor
A complete suite of Flexible, Open and Scalable solutions

Origin Module
• Map your suppliers & identify risks
• Check certificates compliance
• Ensure a credible transparent supply chain

Digital solutions for the plant
• Plant traceability is a prerequisite in this journey
• Paperless solutions for your plant

Track & Trace Module
• Anti-Counterfeiting
• Digital tax verification
• Supply chain optimization
• Events tracking
• Inventory management

PIM Module
Product Information Management
• Your single source of truth and trust for your product data
• Increased data accuracy and availability
• Operational efficiency: reduction in labour costs and time to market

Food Safety Module
• Save time in recalling your products in the supply chain
• Cost savings in product recall batch sizes
• Cost savings on insurance premiums

Learn more
Launch Q3 2021
EcoStruxure™ Traceability Advisor- App

Connecting the entire Value Chain into a single App

See 3D demo
Discover our customer’s journey to End-to-End Traceability

Cracking digital for An End-to-End Traceability Journey with Danone

Watch the video

Read the blog
EcoStruxure™ Traceability Advisor – Origin Module

Cloud-based solution for Supply Chain transparency

The solution

- Cloud-based platform enabling data collection from multi-tiers suppliers
- Suppliers Mapping & Risk identification as well as supplier Scorecard
- Traceability at supplier, purchase order or batch/lot level

Business value

- Increase sales and assure consumer trust (e.g. sustainable sourcing)
- Mitigate supplier risks and potential for reputational damage
- Streamline compliance and sustainability operations
EcoStruxure™ Traceability Advisor – Track & Trace

Serialization, Aggregation and Track & Trace solution for increased brand protection and food fraud avoidance

The solution
- Flexible solution (comply with specific country regulations)
- Hardware: on-line printing solutions and on-line vision system
- Software: Serialization suite
- High Speed Serialization: 600 – 1200 units/min
- Supply Chain tracking system

Benefits
- Improved traceability at a product level along the entire value chain
- Quicker product recall
- Reduced food fraud opportunities
- Logistics and Inventory Management
- Compliance to regulation
- Increased consumer experience

Learn more
Serialization to fight counterfeiting in tobacco, India

Indian Company

Customer Challenges
• Company loses about ~15% of their volume due to counterfeiting and transport related issues
• Solution able to print unique serial number as per UAE regulations (Tax and Track & Trace) on each SKUs at production lines
• Stringent project timelines.
• Allow central regulation body to get complete track and trace information of each product exported in different packaging level
• Ensure volume control by external agency on production.

The Solution
• Schneider Electric Serialization solution suite/ Code printing and aggregation and Track & Trace module
• Schneider Electric Line aggregation Hardware systems

Customer Benefits
• Integrated Traceability solution for the downstream supply chain
• Centralized solution covering multiple sites
• Seamless Connectivity with customer’s SAP and MES systems.
• Secure access to the UAE regulatory authority for event tracking and production volume control
• Easy hardware retrofit.
• Individual packet Track n Trace information availability

The Results: Life Is On with ... Compliant solution providing Integrated Traceability with enhanced Flexibility for the Distribution Apps, analytics, and services

EcoStruxure Traceability Advisor – Track & Trace

PLC Control

Connected products

Cognex Camera

IPC

for Food & Beverage

Indian company with leading businesses in FMCG, Food & Beverage and Tobacco.
EcoStruxure™ Traceability Advisor – PIM

Ensure accurate and transparent information to consumers through omnichannel retailing

The solution

- Central repository for product information storage and management to push product information from multi-source data to different retail channels
- Compliant to GS1 standards and GDSN requirements
- Cloud-based solution
- Smart & Flexible, easy to integrate

Data transparency
Quality and availability
Improve end-user stickiness
Reduce business risks (GS1 compliant)

Operational efficiency
Reduce data redundancy
Reduce data storage costs

Minimized time to market
Optimize data exchange
Enhanced shopping experience
Enhanced SEO visibility

between 17 – 56% increase in online conversion rates

up to 67% reduction in labor costs

up to 17% increase in data accuracy & consistency

PLM: Product Lifecycle Management
MES: Manufacturing Execution System
WMS: Warehouse Management System
ERP: Enterprise Resource Planning
BI: Business Intelligence
CRM: Customer Relationship Management
CMS: Content Management System

Learn more
Customer Challenge
• Manage the product references (25,000 products) in a consistent way between the different entities using different ERPs and MES systems in 24 countries.
• Share the product information efficiently with retailers in a multi-channel environment.

The Solution
• Deployment of EcoStruxure Traceability Advisor - Product Information Management (PIM), internal solution deployed in 24 countries

Customer Benefits
• Central team deploying the solution globally
• Reduction of costs and errors linked to product data management
• Improved data quality & availability: +20% increase in data accuracy
• Reduced time to market: speed-up internal workflow from factories to sales entities and ease data exchange with end-customers
• Process effectiveness: +50% reduction in labour costs

The Results: Life is On with... A single source of truth and trust regarding Product Data
Food temperature cold chain monitoring
Providing End-to-End traceability from plant to distribution center to retail

Food industry main challenges

Public health
600 million illness
½ million people deaths per year by foodborne hazards

Food Waste
Even if 25% more food was stored properly and not lost, it could feed almost a billion people around the world each year

Regulation Compliance
HACCP, Hygiene Package, EN 12830, FDA, FSMA… traceability requirements

EcoStruxure™ - Refrigeration application

Digitize your food safety and quality process end to end, thanks to connected devices that automatically monitor temperature consistently

- Define your temperature threshold and be alerted when any refrigeration system is out of range
- Plan maintenance with task list and automated reminders
- Benchmark the energy consumption of your fleet of refrigeration equipment

- Receive 24/7 alarms in case of abnormal temperatures or cooler/freezer malfunction
- Check refrigeration equipment temperature remotely via smartphone app
- Monitor accurate and consistent food temperature trends with automated data logging
- Generate ready-to-use reports (HACCP) for food safety compliance inspections and reduce administrative workload

Manufacturing: food transformation & storage
Distribution: transport and warehouse storage
Retail: storage to aisle to consumer’s basket
**EcoStruxure™ - Refrigeration application**

The out of the box application for all operational data and basic control on cloud and mobile:

- Improve maintenance efficiency and repair faster
- Ensure all sites comply with food regulation
- Ensure maintenance traceability and regulatory compliance in all stores

The one platform integrating all your refrigeration equipment in order to control them on-premise, and to monitor all your sites in a centralized view.

- **EcoStruxure Facility Expert**
- **EcoStruxure Building Operation**

**Connected Products**

- Cold Room control panel
- Remote cabinet controller & interface
- Temperature Sensor & Gateway
- Testo Smart Probes and digitized quality handbook

**Edge Control**
Eliwell TelevisAir Solution

The Solution

TelevisAir CLOUD for Delocalized Coolers Management
• Cooler geolocalisation
• Data storage & analytics for cooler performance
• Alarm notification
• Cloud enabled services

Eliwell AIR app for:
• Smart local interface with the controller: verify the status of the controller, the value of operating variables, the complete management of each parameter and the transmission of specific commands
• Easy setting & support: download and upload the full map of the device and share it through the media installed in your device, for example via email or WhatsApp
• Local datalogging management: dump and share the memory of the BTLE Dongle in CSV format for diagnostics or HACCP purposes

Benefits
• Efficient asset tracking: detect cooler geoloc changes
• Cooler performance: through data storage & analytics, check cooler performance during warranty period
• Optimized maintenance: alert notification, HACCP reports
• Optimized supply chain logistics: shop visit itinerary, refilling logistics and fleet profitability

Learn more
Secure, efficient and effective cold storage operations

Seafood products producer and exporter, India

Customer Challenge
• Increasing export demand
• Maintain good integration of automation control for cold and condensation storage process control system

The Solution
• EcoStruxure Plant incl.:
  • Automation & Control: Citect SCADA with Modicon PLC M340 Standalone using X80 IO’s used for total control logics
  • Aveva Historian

Customer Benefits
• Simplified supervision solution
• Easy integration
• More secure, efficient and effective operations

The Results: Life is On with...More secure, efficient and effective operations
Customer Challenges
- Connected and efficient cold chain storage to guarantee food safety
- Energy efficiency
- Intelligent logistics center
- Seamless information center for e-commerce

The Solution
EcoStruxure for Industry solution, including hardware & software, helps Jingkelun build an automated, intelligent refrigerated storage that is connected, efficient, and saves energy.

Customer Benefits
- Improved transparency: Automatic data generation, collection, processing and management to share with the company’s management system
- 70%-80% reduction in labor compared with traditional cold storage
- Annual power consumption of only 8kwh/m³ meets leading international standards

The Results: Life Is On with... 70-80% reduction in labor requirements and highly efficient energy usage

“Cooperation between Jingkelun and Schneider Electric creates a masterpiece for up-to-date intelligent cold storage and offers infinite possibilities for its fully intelligent and highly effective development in the future.”

Quanjiang Wang
General Manager,
Beijing Jingkelun Refrigeration Equipment Co., Ltd.
Securing the cold chain in a critical environment
Italian regional grocery retailer

Customer Challenge
• Secure the cold chain in a critical environment (hot temperature in South Italy)
• Reduce annual maintenance costs in their remote locations
• Energy saving & OPEX
• Several systems with different user interfaces to learn

The Solution
• EcoStruxure™ for Supermarkets incl.:
  • EcoStruxure™ Building Operation
  • EcoStruxure™ Power Monitoring Expert
  • Eliwell food refrigeration system
  • HVAC Control
  • Lighting Control
  • MV/LV & final distribution, capacitor banks, power meters, wiring devices & thermostats, NCO, UPS

Customer Benefits
• Reduced energy usage
• Cold chain guarantee in critical environment
• OPEX reduction in remote locations
• Easy to use and unique user interface

The Results: Life is On with... Energy consumption reduced by 25%

Italian retailer with 120 sales points
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.
Efficient and sustainable operations
Meet your energy and sustainability goals and reduce costs with smart energy, water and waste management at your facilities.

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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
- Sustainability Consulting
- Energy Demand Services
- Strategic Energy Sourcing
- Enterprise data management
- Energy as a Service

Energy & Sustainability
Reduce footprint and meet sustainability goals
- Assessment and Consulting
- Enterprise Asset Management
- Condition Monitoring
- Predictive Analytics
- Line & Process Optimization
- Modernization services

Asset Performance
Maximize return on capital expenditure
- Operator Training Simulator
- Augmented & Virtual Reality
- Workflow Management
- Staff Schedule Management
- Operator Knowledge Sharing

Workforce Empowerment
Improve staff knowledge, productivity and collaboration
- Electrical CAD
- Building Information Modelling
- Integrated Engineering-Design
- Digital Asset Visualization

Digital Engineering
Cut time, cost and risks of capital project engineering
- Energy as a Service
Let’s talk about EcoStruxure™ for Food & Beverage