



Supporting the Sustainability goals of the Food & Beverage industry

Building a sustainable, resilient and credible Value Chain with EcoStruxure for Food & Beverage

Life Is On

Schneider
Electric



**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

Agile manufacturing

Boost manufacturing
flexibility & efficiency

Resilient supply chain

Manage complexity and
improve visibility

... 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



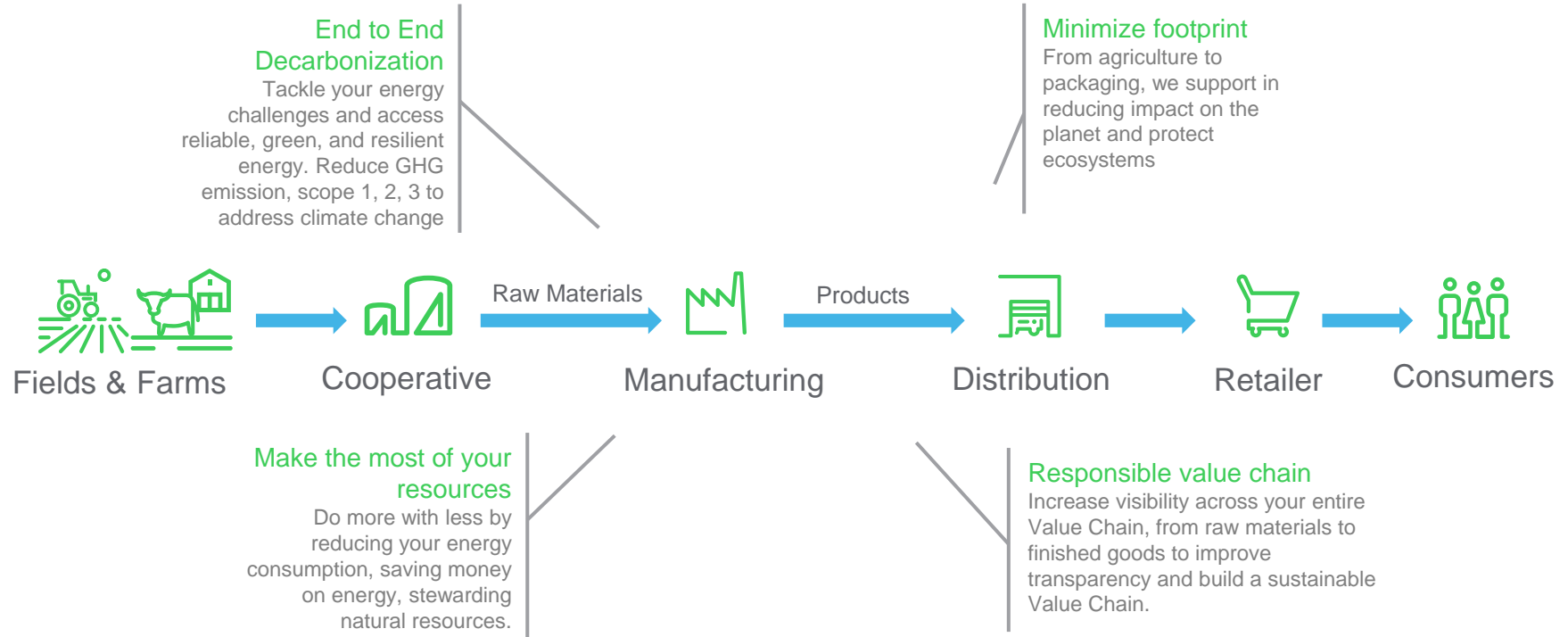
Responsible Value Chain, end to end

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





Supporting the Sustainability goals of the Food & Beverage industry

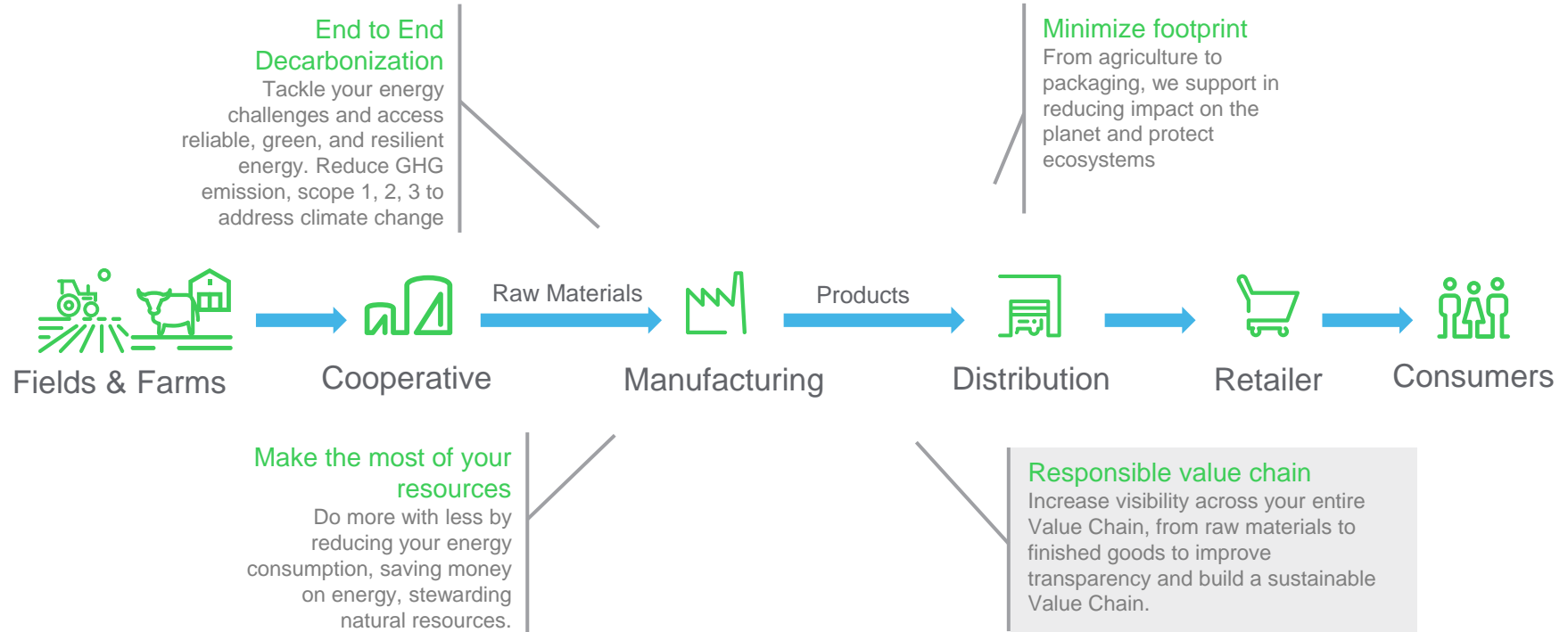
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Energy & Sustainability

Reduce your environmental footprint and meet your sustainability goals



Responsible Value Chain, end to end



Build a sustainable Value Chain

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

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

Achieve End-to-End Traceability

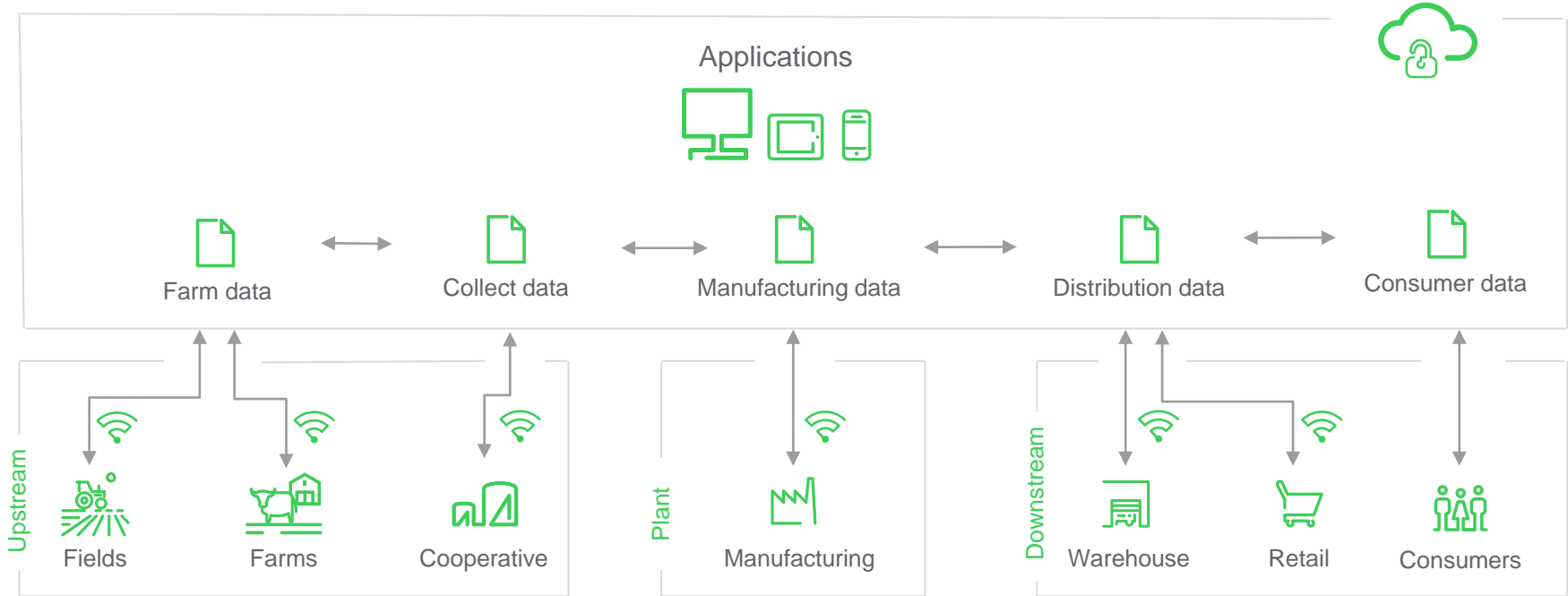
- [Responsible & sustainable sourcing](#) (Traceability Advisor – Origin)
- [Track & Trace your product across the logistics journey](#) (Traceability Advisor – Track & Trace)
- [Responsible consumption through transparent information](#) (Traceability Advisor – PIM)

[Cold chain monitoring](#)



End to end traceability

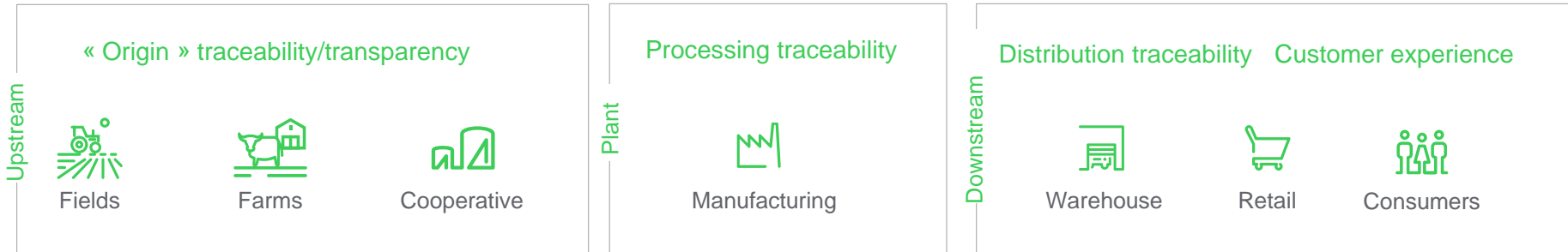
Connecting the Entire Value Chain, ultimately



EcoStruxure Traceability Advisor

Read the blog

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



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

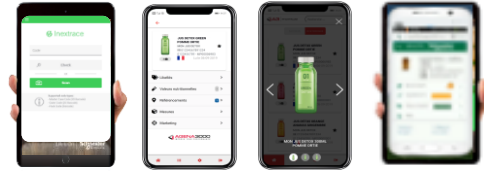
- Its' a journey, a **complete digital transformation**
- New components integration : Transportation (cold chain management, CRM (customer relationship), advanced planning / forecasting and **analytics**...)
- Blockchain Technology
- IT and OT Convergence
- Based on our **IOT platform**, Datahub



EcoStruxure™ Traceability Advisor

A complete suite of Flexible, Open and Scalable solutions

Learn more



Launch
Q3 2021



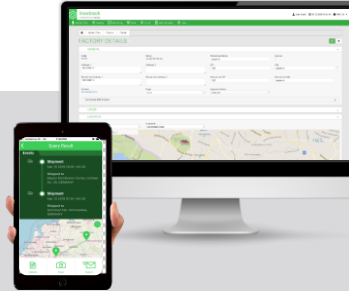
Origin Module

- Map your suppliers & identify risks
- Check certificates compliance
- Ensure a credible transparent supply chain



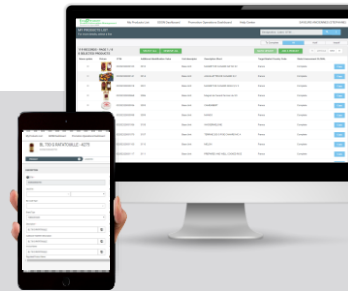
Digital solutions for the plant

- Plant traceability is a prerequisite in this journey
- Paperless solutions for your plant



Track & Trace Module

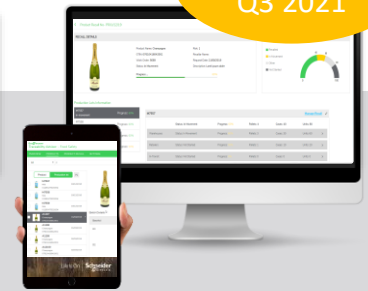
- Anti-Counterfeiting
- Digital tax verification
- Supply chain optimization
- Events tracking
- Inventory management



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

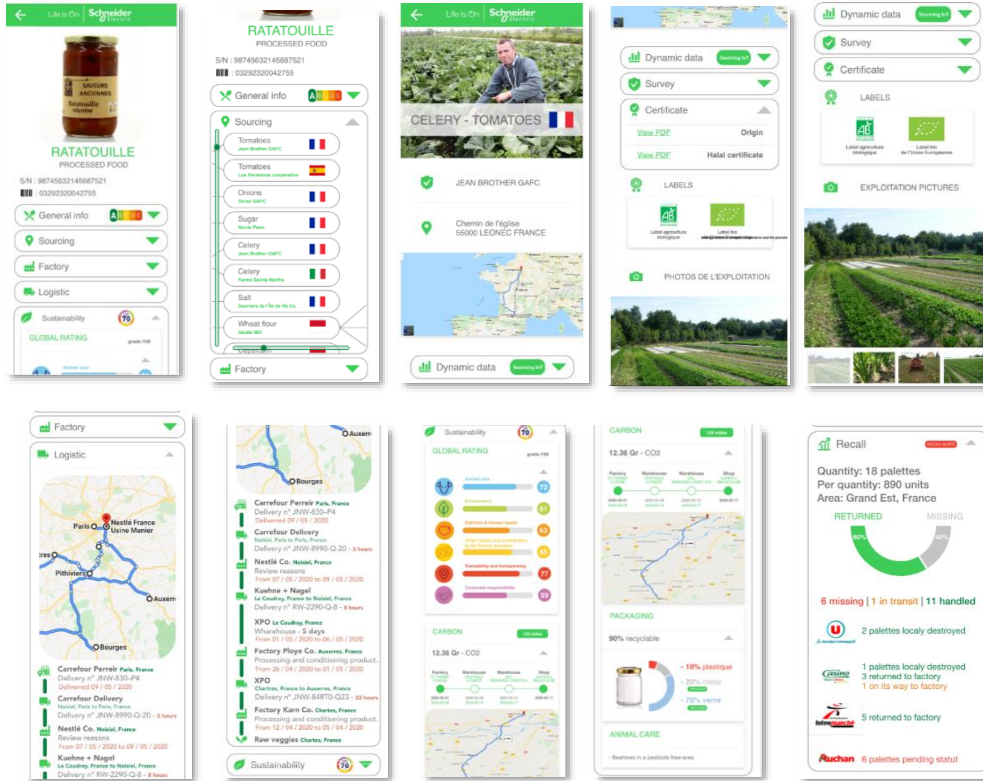


Food Safety Module

- Save time in recalling your products in the supply chain
- Cost savings in product recall batch sizes
- Cost savings on insurance premiums

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

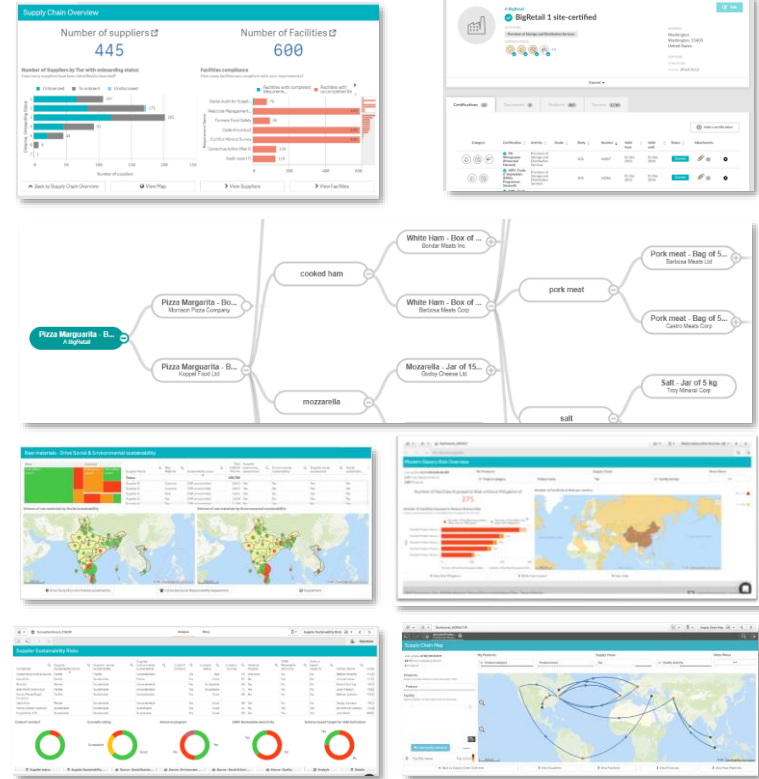
Cloud-based solution for Supply Chain transparency

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

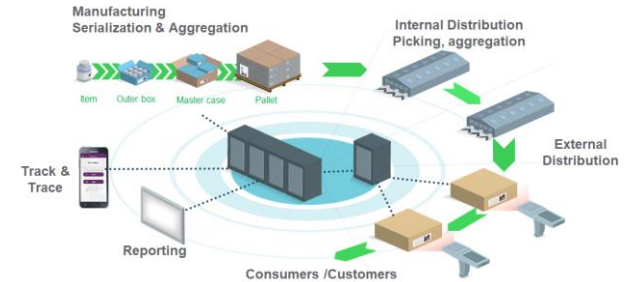
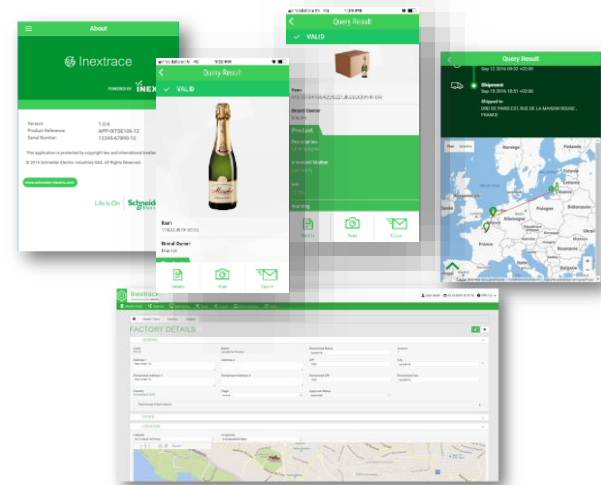
The solution

- 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

Compliant with 



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

Indian company with leading businesses in FMCG, Food & Beverage and Tobacco.

EcoStruxure for Food & Beverage
Innovation At Every Level

Apps,
analytics,
and services



EcoStruxure Traceability Advisor
– Track & Trace

Edge
control



PLC Control

Connected
products



Cognex
Camera



IPC

Life Is On

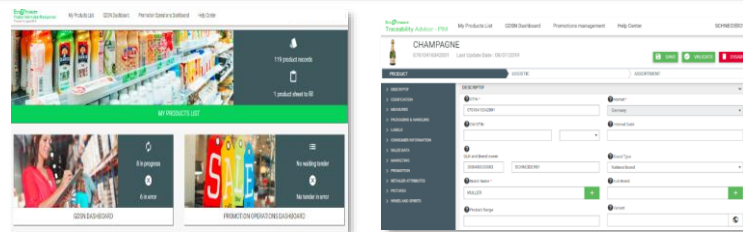
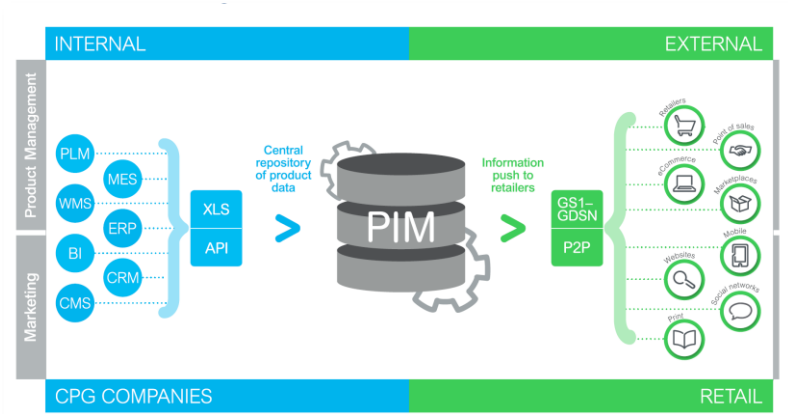
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EcoStruxure™ Traceability Advisor – PIM

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



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

Life Is On

Schneider Electric

Leader in Fruits & Dairy Products, France

Centralized and Global Source of Truth for Product Data



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

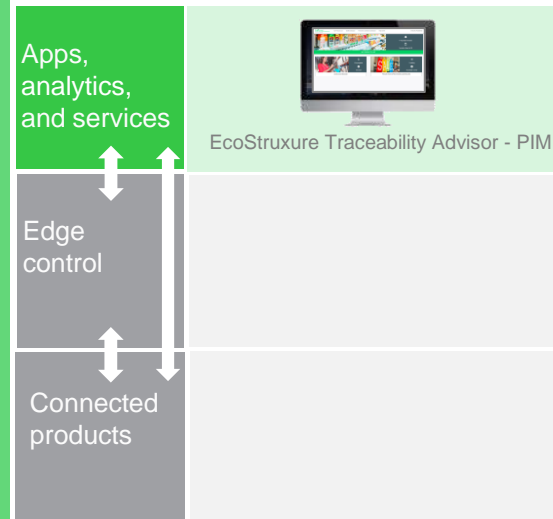
Customer Benefits

- 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

French leader in fruits and dairy products with strong international presence

EcoStruxure for Food & Beverage
Innovation At Every Level



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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



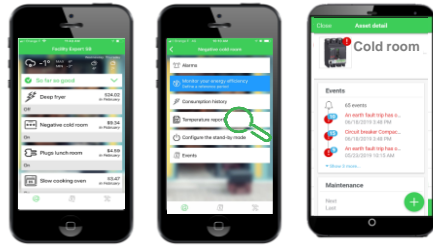
Retail:
storage to aisle to consumer's basket

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EcoStruxure™ - Refrigeration application

Edge Control



EcoStruxure Facility Expert

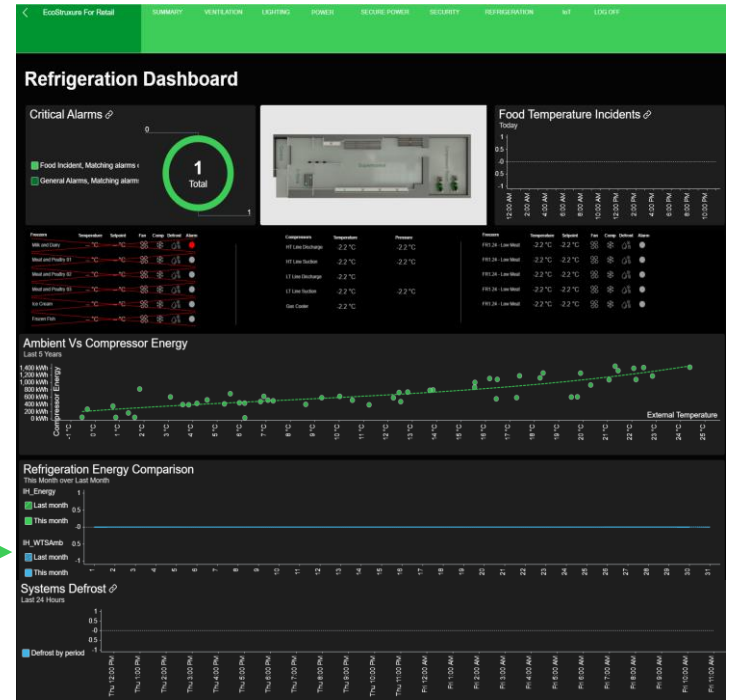
The **out of the box** application for all operational data and basic control on cloud and mobile:

- 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 Building Operation



Connected Products



Cold Room control panel



Remote cabinet controller & interface



Temperature Sensor & Gateway



Testo Smart Probes and digitized quality handbook



Eliwell TelevisAir Solution

The Solution

TelevisAir CLOUD for Delocalized Coolers Management

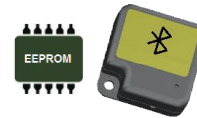
- Cooler geolocalisation
- Data storage & analytics for cooler performance
- Alarm notification
- Cloud enabled services

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



Connected controller
EWPlus AIR



BTLE AIR dongle



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

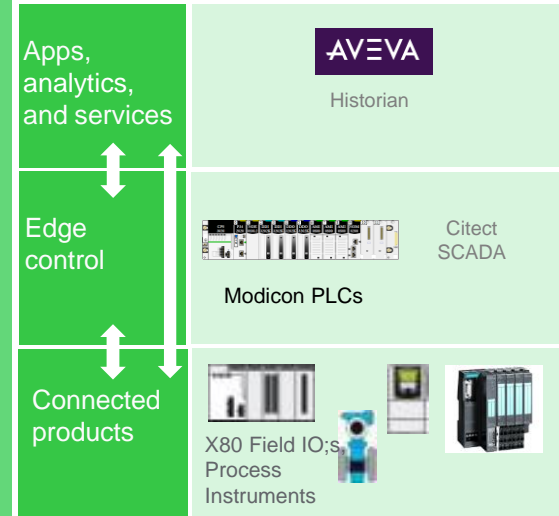
Customer Benefits

- Simplified supervision solution
- Easy integration
- More secure, efficient and effective operations

The Results: Life is On with...More secure, efficient and effective operations

Processing facility dedicated to producing environmentally sustainable, premium fish, shrimp and associated aqua products for the domestic & international markets.

EcoStruxure for Food & Beverage
Innovation At Every Level



Beijing Jingkelun Refrigeration Equipment Co., Ltd.

Lead the digitization of intelligent cold storage

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 efficiency** 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

Cold storage solutions to ensure the **highest quality** of frozen food

EcoStruxure[™] Machine
Innovation At Every Level

Apps,
analytics,
and services

Edge
control

Connected
products



Modicon PLC Citect SCADA

- Motion control
- Contactors
- Push buttons
- Sensors

Securing the cold chain in a critical environment 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

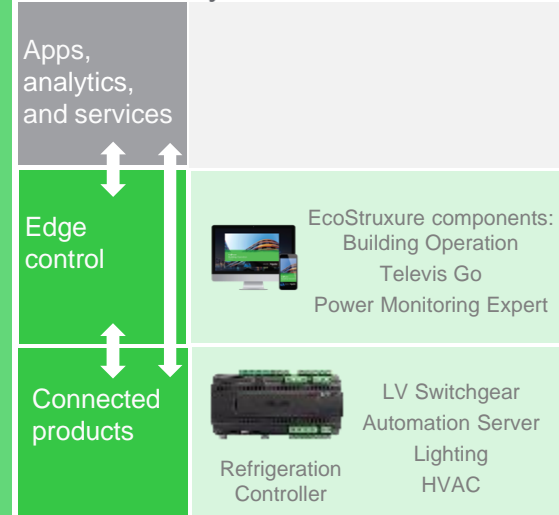
Customer Benefits

- 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**

EcoStruxure™
Innovation At Every Level for Retail



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.

Reduce your environmental footprint and meet your sustainability goals



End to End Decarbonization

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Towards **Net Zero emissions**



Efficient and sustainable operations

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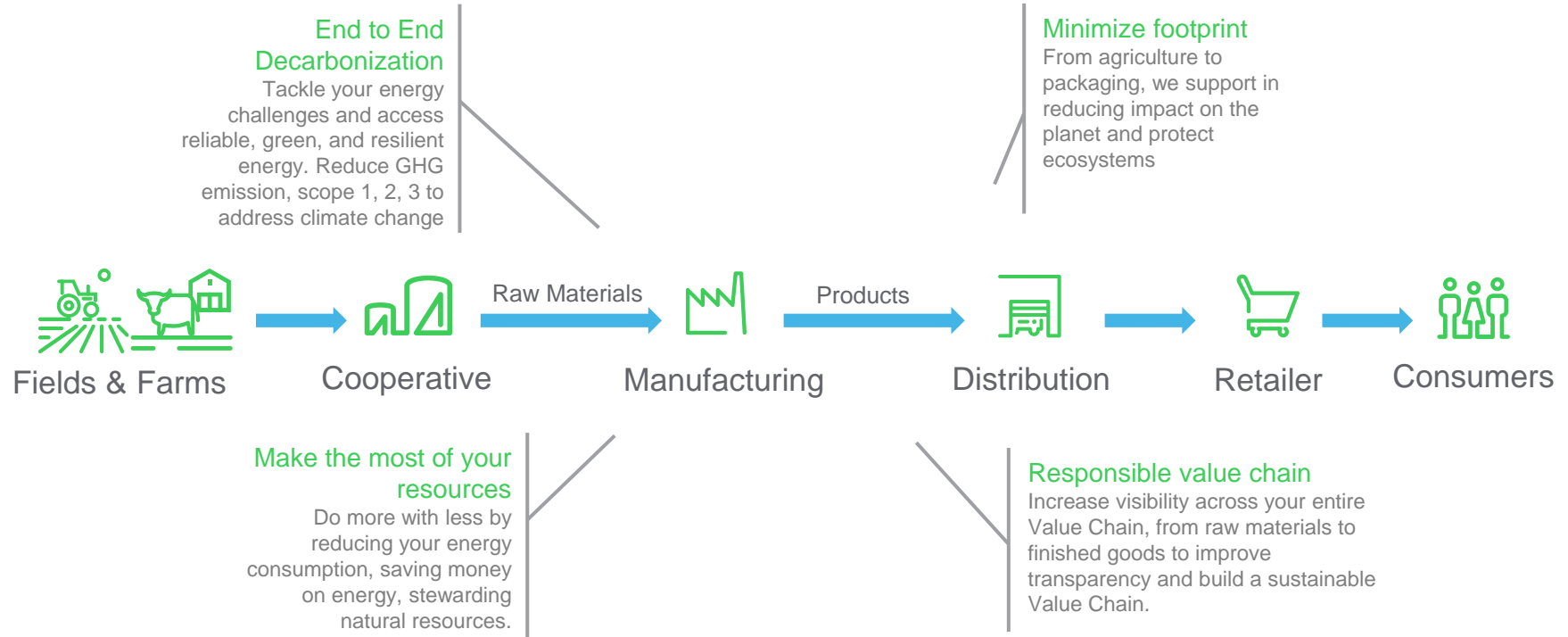
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Build a **sustainable** Value Chain

Energy & Sustainability

Reduce your environmental footprint and meet your sustainability goals



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	Energy & Sustainability Reduce footprint and meet sustainability goals	Asset Performance Maximize return on capital expenditure	Workforce Empowerment Improve staff knowledge, productivity and collaboration	Digital Engineering Cut time, cost and risks of capital project engineering
Food Defense	Sustainability Consulting	Assessment and Consulting	Operator Training Simulator	Electrical CAD
Cybersecurity Services	Energy Demand Services	Enterprise Asset Management	Augmented & Virtual Reality	Building Information Modelling
Digital Calibration	Strategic Energy Sourcing	Condition Monitoring	Workflow Management	Integrated Engineering-Design
Raw material traceability	Enterprise data management	Predictive Analytics	Staff Schedule Management	Digital Asset Visualization
Production traceability	Energy as a Service	Line & Process Optimization	Operator Knowledge Sharing	
Product Identification & Tracking		Modernization services		

Let's talk about

EcoEtruxure™
Innovation At Every Level

for Food & Beverage

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