



# FASTER

## EcoStruxure Hybrid DCS provides process automation standardization

EcoStruxure™ Hybrid DCS system provides a reliable, modular solution with low TCO, using libraries custom designed by Schneider Electric for Vitens.

The first drinking water companies in the Netherlands came into being at the end of the 19th century, at a time when towns and villages were undergoing steady and rapid growth. Until then, drinking water came mainly from wells, rain reservoirs, and surface water.

Eventually, the Netherlands became home to over 220 drinking water companies, but over the years, they merged until only 10 were left. Of these remaining companies, Vitens is the largest. It provides drinking water to 5.4 million people and owns approximately one-third of the Dutch drinking water market. Its primary processes are the production of drinking water from ground water, water distribution, and technical services to domestic customers and businesses.

The steady growth of the modern drinking water companies meant that more investment in water technology was possible and the quality of the Dutch drinking water showed steady improvement. The most recent study (2006) ranked the Netherlands in the top spot in Europe in terms of the quality of drinking water and water expertise.

### The challenge

Vitens faced difficulties due to the fact that each one of its five internal regions uses various systems and different methods of operation. In order to streamline and harmonize their systems, the company is driving an initiative to change its processes and head towards one uniform procedure and automation platform. Wanting to reduce their total cost of ownership (TCO) while also ensuring a solution that is highly reliable and that meets all the standards for the delivery of drinking water as required by Dutch law, Vitens turned to Schneider Electric for help.

### The solution

Despite the fact that Vitens already had a good working relationship with Schneider Electric for several years and an installed base in one of its five regions, they went through a European vendor selection tender to choose Schneider Electric as their preferred supplier for the process automation component.

This project offered the opportunity for Vitens and Schneider Electric to further cultivate their business partnership and allowed for collaboration on technology that represented a departure from their previous ways of thinking and working.

Schneider Electric's process system provided a reliable and modular solution with low TCO, using libraries custom designed by Schneider Electric for Vitens, a flexible SCADA system offer and more:

- SCADA: Vijeo Citect (265) servers and (350) clients
- Unity Pro
- UAG (application generator)
- (465) M340 PAC controllers
- (200) Quantum controllers
- (120,000 I/O) Advantys STB
- Connexion switches for the Ethernet/DSL networks
- IPCs

## Goal

Reduce total cost of ownership while ensuring a solution that would be highly reliable and meet all the strict environmental standards for the production and delivery of drinking water

## Story

Vitens faced difficulties due to the fact that each one of its five internal regions uses various systems and different methods of operation. They needed to streamline and harmonize their systems

## Solution

- EcoStruxure Hybrid DCS collaborative and integrated automation architecture
- Vijeo Citect SCADA system

## Results

The EcoStruxure Hybrid DCS solution reduced deployment time by 65%, and engineering costs by 25%

Schneider Electric was recognized as a reliable supplier for the long term (it will take up to eight years to complete the implementation of the new process automation standard) and the provider of a cost-effective maintenance plan over the 20-year period required to support the hardware.

### The benefits

#### Easy access to information

The Vijeo Citect SCADA system is designed to handle projects that range in scale from small to enterprise size, enabling unrivaled scalability and clustering flexibility. Its increased transparency gives Vitens easy access to relevant and critical information for a universal way of reporting and benchmarking the different systems.

#### Reduced engineering costs

The pilot project for the new automation platform was built in a shorter period of time, reducing engineering costs by up to 25% and FAT and SAT times by about 65%. UAG's (Unity Application Generator) innovative way of building an application — by generating software instead of writing it — meant fewer trained staff could build and maintain applications.

This gave Vitens increased flexibility over its resources, which were already becoming stretched to capacity.

#### Increased reliability

Schneider Electric's automation platform is built using a standard design and proven technology so maintainability and reliability will be high.

#### Assurance of a quality system approach

Schneider Electric's extensive background in the field of water and wastewater contributed to intensive consultation and collaboration with Vitens during the library-building phase, combining rich knowledge, know-how, and technology to assure a quality approach. The resulting customized libraries made it possible to keep the same look and feel of their legacy system so process operators did not require any extra training. The rollout of the entire project will take years due to Vitens' size, yet during that time, process operators will not have to work with two different systems.

“With the Schneider Electric solution, “we will have a high-performance automation platform with high reliability and maintainability.”

— Doeke Schippers,  
Manager, Vitens

The PlantStruxure automation platform reduced deployment time by 65%, and engineering costs by 25%.



# EcoStruxure™

## Innovation At Every Level

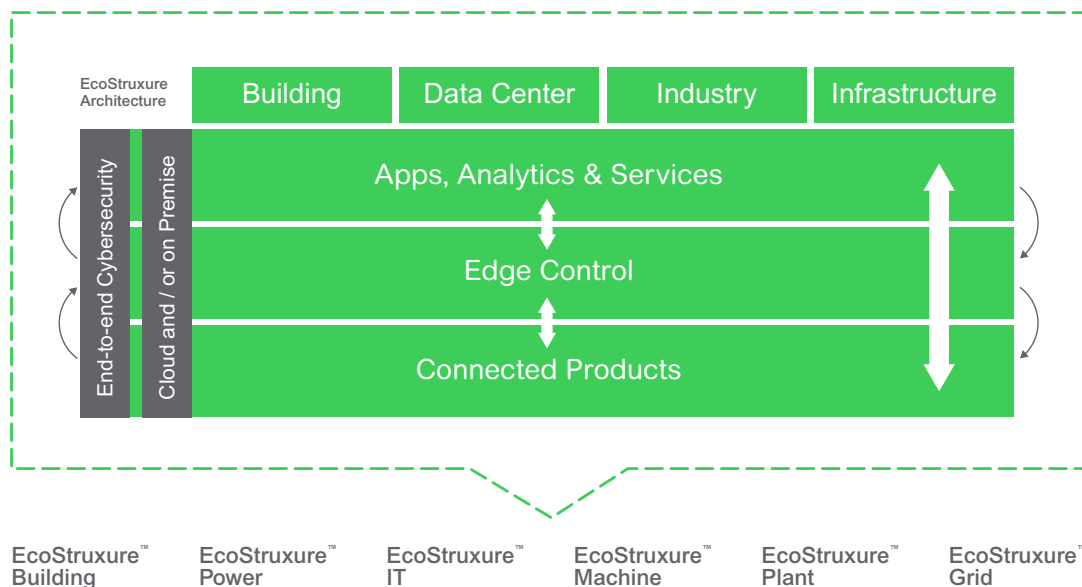
### IoT-enabled solutions that drive operational and energy efficiency

EcoStruxure is Schneider Electric's open, interoperable, IoT-enabled system architecture and platform.

EcoStruxure delivers enhanced value around safety, reliability, efficiency, sustainability, and connectivity for our customers.

EcoStruxure leverages advancements in IoT, mobility, sensing, cloud, analytics, and cybersecurity to deliver Innovation at Every Level including Connected Products, Edge Control, and Apps, Analytics & Services. EcoStruxure™ has been deployed in 480,000+ sites, with the support of 20,000+ system integrators and developers, connecting over 1.6 million assets under management through 40+ digital services.

### One EcoStruxure architecture, serving 4 End Markets with 6 Domains of Expertise



#### Connected Products

The Internet of Things starts with the best things. Our IoT-enabled best-in-class connected products include breakers, drives, UPSs, relays, sensors, and more. Devices with embedded intelligence drive better decision-making throughout operations.

#### Edge Control

Mission-critical scenarios can be unpredictable, so control of devices at the edge of the IoT network is a must. This essential capability provides real-time solutions that enable local control at the edge, protecting safety and uptime.

#### Apps, Analytics & Services

Interoperability is imperative to supporting the diverse hardware and systems in building, data center, industry, and grid environments. EcoStruxure enables a breadth of agnostic Applications, Analytics, & Services for seamless enterprise integration.

### Find out more about EcoStruxure

[schneider-electric.com/ecostruxure](https://schneider-electric.com/ecostruxure)



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Discover EcoStruxure™ for  
Plant & Machine



EcoStruxure™ for Water and  
Wastewater solutions



Contact us to start your journey



Agriculture goes digital



City of Toronto implements best  
practices and increases productivity

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