

UNUS



UNOS Sense

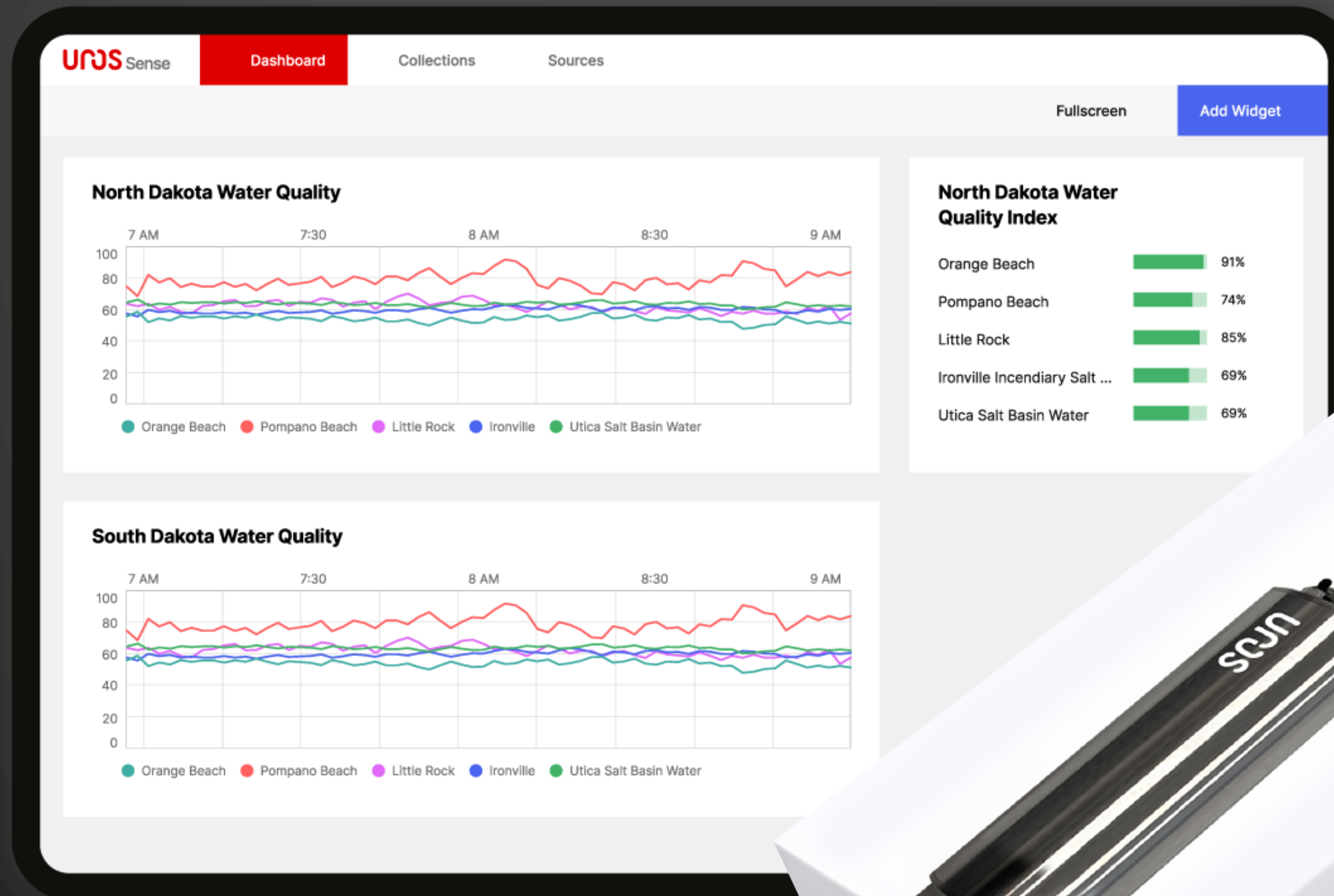
**The New Way of Monitoring
Overall Liquid Quality**



Making the IoT Promise a Reality

A unique ecosystem of IoT solutions and Smart Connectivity – bringing the benefits of digitalisation to various verticals.

The world's only single-sensor solution capable of detecting multiple types of contaminations in **real time, in **any type of liquid**, designed for even the **harshest environments**.**





The early warning system for liquid quality monitoring.

Think of it as the 'smoke detector' for liquid quality deviations.

UNOS Sense / Key Feature

**Instant, usable and
easy-to-interpret data**

Get a real-time view of the electrochemical fingerprint of the liquid,
automatically measured once a minute, and presented online.

UNOS Sense / Key Feature

AI powered notification service

Take corrective actions without delay when needed thanks to the automatic alerts, set off by significant deviations from the baseline. Receive alerts by e-mail.

Easy installation

The wireless sensor units are delivered pre-configured and come with full installation instructions. Installation takes less than 15 minutes per unit.

Once installed, monitoring results are instantly available on the online dashboard.

URS Sense / Key Benefit

Powerful Insight

Uncover cause-and-effect relationships affecting liquid quality that parameter-selective sensors and solutions fail to see.

UNUS Sense / Key Benefit

Savings

Save money and resources by detecting and dealing with issues before they affect end-product quality. Less spoilage. Less waste.

UNUS Sense / Key Benefit

Sustainability

Respond to current social, economic and environmental trends and demands while improving your image.

Key Features + Benefits summary



Instant, usable and easy-to-interpret data

Get a real-time view of the electrochemical fingerprint of the liquid, automatically measured once a minute and presented online in real time.



AI powered notification service

Take corrective actions without delay when needed thanks to the automatic alerts, set off by significant deviations. Receive alerts by e-mail.



Easy installation

UROS Sense units are delivered pre-configured and come with full installation instructions. Installation takes less than 15 minutes per unit. Once installed, monitoring results are instantly available online.



Powerful insight

Find and understand cause-and-effect relationships affecting liquid quality that parameter-selective sensors and solutions fail to see.



Savings

Save money and resources by detecting and dealing with issues before they affect end-product quality. Less spoilage. Less waste.



Sustainability

Respond to current social, economic and environmental trends and demands while improving your image.

UROS Sense Deliverables



UROS Sense
Sensor unit



UROS Sense
Service subscription



UROS Sense
Dashboard



Pricing model

Sensor **One-off cost** / unit

- Includes pre-configuration by UROS Experts
- Includes gateway for connectivity
- Includes setting the baseline values through a 2-week monitoring period with assistance of UROS Experts

Service **Monthly fee** / unit

- Access to the UROS Sense Platform
- Monitoring the liquid quality
- Automatic alarms when a change is detected
- Analytics and handling of the sensor data
- Monitoring battery level
- Network connectivity, with support for global rollout
- Over-The-Air Device Management for FW updates
- Technical support
- Pre agreed number of hours of UROS Expert service for consultation

Expert Service **Fixed rate** / hour

- Additional consulting services are offered at a fixed hourly rate

Applications and use cases

Municipal Water

Monitor water sources. Shift from reactive actions to proactive operation, and safer, high-quality water for the city's inhabitants.

Industrial Waste Water

Identifies and locates abnormal discharges into natural water bodies.

Pulp Biocide

With early corrective actions and adjustments to the biocide feed, quality problems can be prevented, and good chemistry maintained.

Beverage Production

Potential issues can be detected and dealt with before they affect end-product quality

Brewery

Maintain high quality and unique flavour with constant quality monitoring.



Use cases/ References



UROS Sense brings operational savings to the City of Jyväskylä

Jyväskylä city in Finland monitors all of the city's six water sources with UROS Sense. Previously, monitoring was done manually every 30 days. Not only was this expensive, but it resulted in hit-and-miss water quality and contaminations. With UROS Sense, Jyväskylä has achieved operational savings alongside with a better management of the whole water cycle, a shift from reactive actions to proactive operation, and safer, high-quality water for the city's inhabitants.



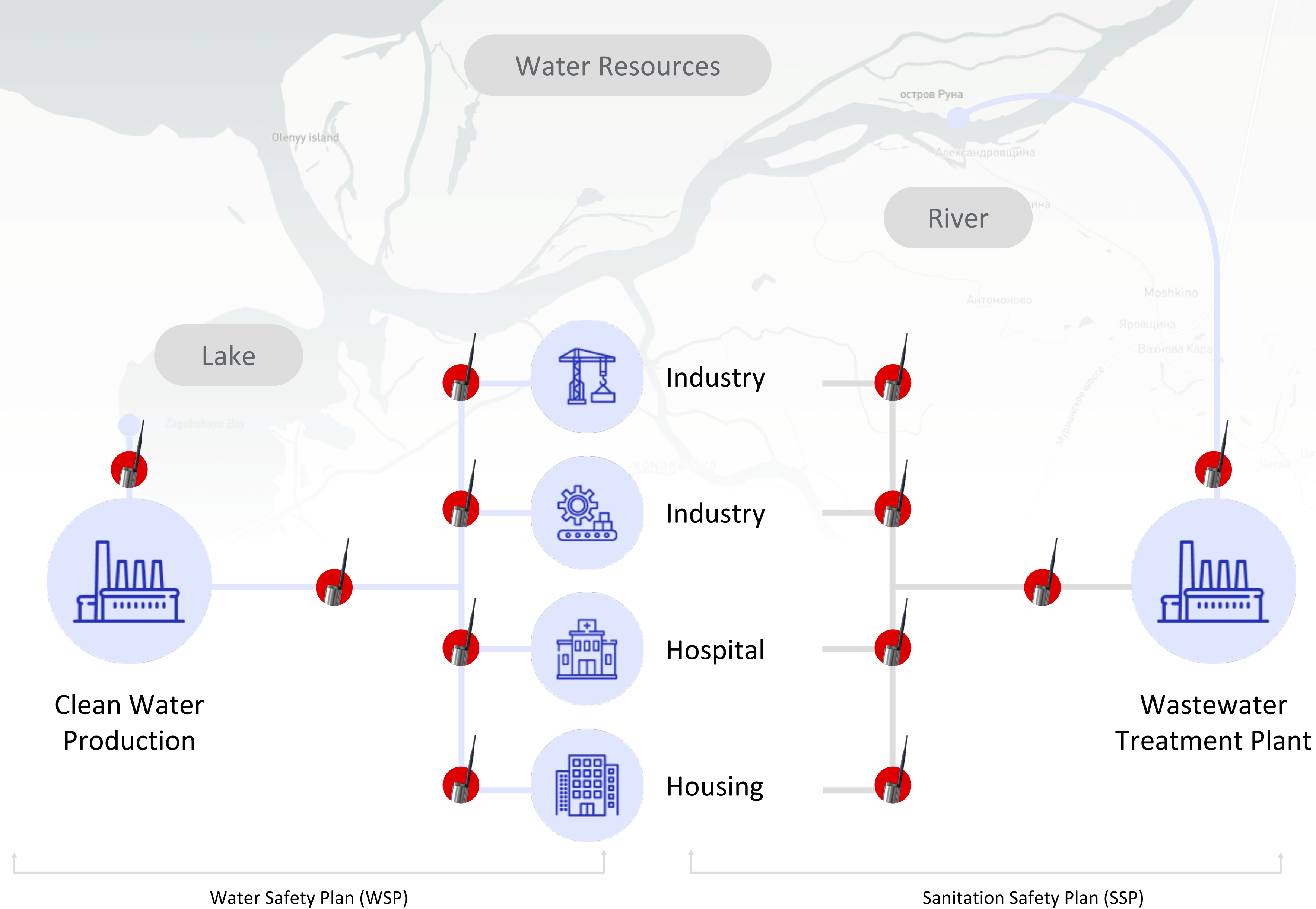


City of Kazan protects Volga River with UROS Sense

With the help of UROS Sense, Kazan's government identifies and locates abnormal discharges into the Volga river. With the real-time information provided by UROS Sense, local authorities are able to take timely action and work together with the polluting factories to resolve issues quickly, contributing to a more sustainable management of the Volga river and the environmental welfare of Tatarstan and Russia.



Clean Water
Quality



Hartwall optimizes beverage production with UROS Sense

Hartwall, the leader in the Finnish beverage industry, uses UROS Sense technology. Since the solution was implemented, numerous potential issues have been detected and dealt with before being able to affect end-product quality. UROS Sense raw water chemistry monitoring and early warning system have brought significant savings within Hartwall's beverage production process. In addition to manufacturing its own brands, Hartwall also owns the licence for manufacturing and selling some of the biggest beverage brands in the world, in Finland.



Brewery Reference /



UROS Sense ensures superior quality at Sonnisaari Brewery

Sonnisaari, the fast-growing independent craft beer brewery from Northern Finland relies on UROS Sense technology to maintain the high quality and unique flavour of their Nordic craft beers. Constant quality monitoring - *an important contributor to Sonnisaari's customer promise of superior quality and flavour* - can be done in real time, without costly manual labour, meaning that a batch never has to go to waste.



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Applications & Use Cases - Industry

Water Resources

River

Lake

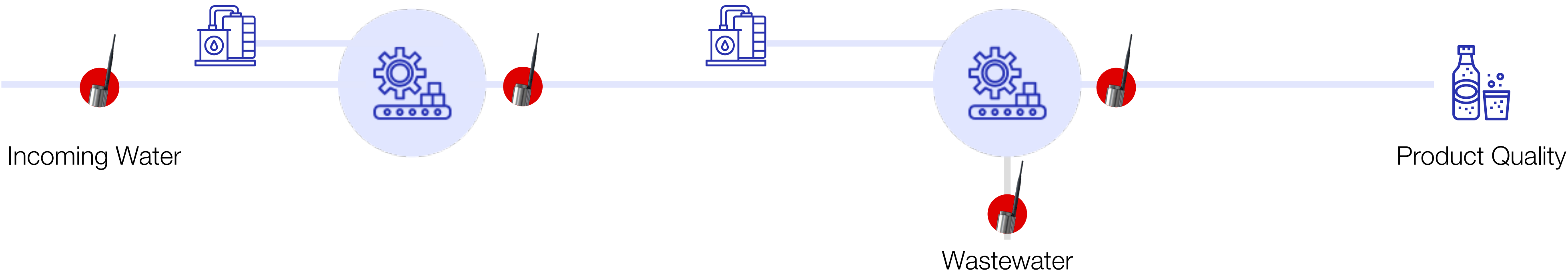
Industry

Waste Water Quality

Clean Water Quality

Process Industry

Critical Input/Output -processes



A photograph of a modern industrial facility, likely a food or pharmaceutical processing plant. The scene is dominated by large, polished stainless steel tanks and complex piping systems. The tanks are cylindrical and highly reflective, showing the surrounding environment. The pipes are also made of stainless steel and are connected by various fittings and valves. The background shows a high ceiling with a network of steel beams and additional piping. The overall lighting is bright and even, highlighting the clean and professional nature of the environment. The text is overlaid in the center of the image, in a white, sans-serif font. The word "transform" is italicized.

**“IoT can not only deliver more efficient
quality control, it has the potential to
transform a business.”**

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