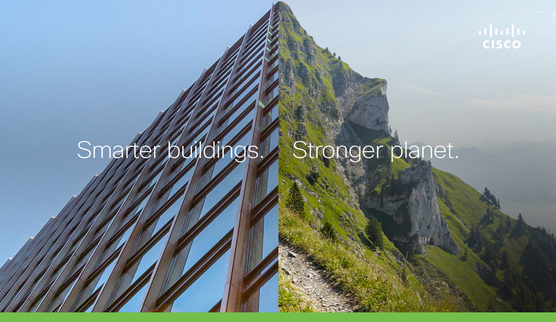


Efficiency in facilities with connected IoT devices

Solutions for Sustainability in Facilities
Challenges & Opportunities

Business premises use more energy than residential buildings.

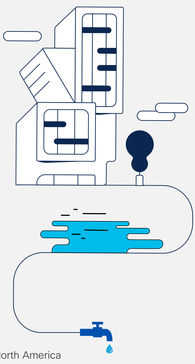
In fact, some reports estimate that non-residential buildings account for more than **55%** of all energy consumption. Despite this, most business premises are inefficient and energy waste is a real problem.*

It is estimated that buildings consume

40% of the energy we use and

55% of electricity.
But it is also estimated that

30% of that energy is lost, meaning that most companies have astronomical energy bills and a disastrous environmental footprint. **



Similarly on the way to the customer's tap, many water utilities are losing an estimated

20 to **35%** of the fresh, treated drinking water they produce.

In Europe, the average water loss is

26%, but some major cities both there and in North America have reported leakage rates of **30%** and more.***

Why Sustainability in Facilities
Build an intelligent plant to better manage energy, waste, and materials to support emissions and recycling objectives, social responsibility and regulatory compliance.

Discover

- Connect and extend utilization of legacy equipment
- Increase asset tracking and utilization
- Centralized and automated environmental controls (using AI, software applications, and a single pane of glass)
- Monitor water, temperatures, and opened/closed doors for IT closets and carpeted locations (not replacing existing environment sensors)
- Smart buildings and renewable energy generation
- Connectivity for outside EV charging infrastructure

Act

- Reduce the cost of energy consumption
- Reduce carbon emissions and other air pollutants
- Manage waste (water, by-products, scrap, etc.)
- Enable ongoing energy monitoring with sensors and data collection systems
- Inventory monitoring for consumables, packaging, and scrap
- Increased usage of recycled products (packaging materials, component parts, and consumables)
- Co-design and remote design collaboration
- Integrate sustainability into facilities operations

Report

- Overall reduction in resource utilization
- Improved asset utilization
- Lower energy costs
- Regulatory compliance
- Support sustainability goals by reducing energy consumption, water usage, and waste
- Balancing energy needs by integrating on-site renewable energy generation

Solutions for Sustainability in Facilities
Food & Beverage remote asset monitoring.

Challenges

- Reduce reliance on manual monitoring of temperature and humidity levels to minimize food spoilage due to high temperatures during summer
- Lack of remote visibility to water consumption & leakage within the plants to enable optimization
- Big industrial fridges run full load during summer periods & any lose of energy matters.

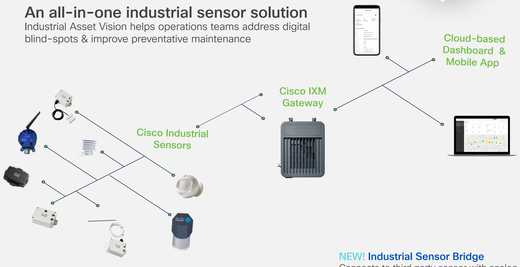
Cisco Solution

- Open APIs from our Industrial asset vision platform to existing Asset management Applications.
- Remote visibility to water levels and leakage, moisture condition, fridge door open/close status.

Outcomes

- Minimize manual clipboard measurements of refrigeration temperature, humidity, moisture, machine condition across the plant
- Reduce amount of food spoilage and unnecessary energy losses coming from left open door fridges.

An all-in-one industrial sensor solution
Industrial Asset Vision helps operations teams address digital blind-spots & improve preventative maintenance



NEW! **Industrial Sensor Bridge**
Connects to third party sensor with analog or Digital output (4-20mA, 0-10V DC)

NEW! **Industrial Vibration Sensor**
Machine health condition monitoring

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