

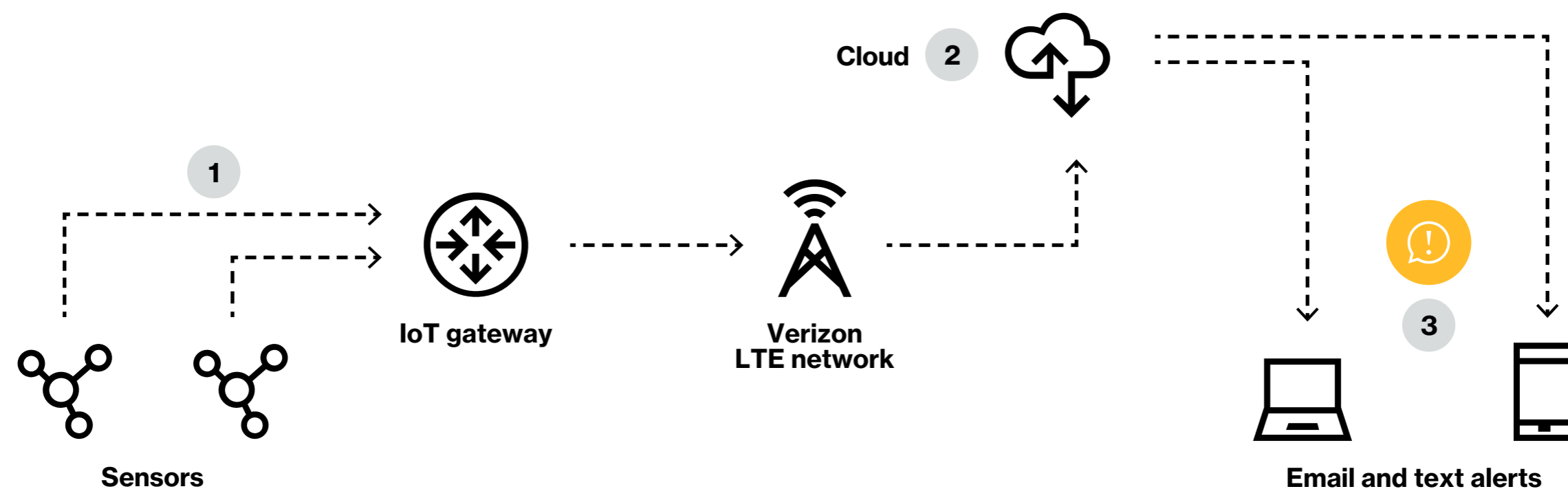
# Know more, act sooner.

**Verizon Condition Based Maintenance solutions simplify remote monitoring of critical systems, products and equipment.**

Unnoticed, small issues in your operations can grow. Verizon Condition Based Maintenance solutions bring together Verizon's advanced edge management capabilities and award-winning network with Verizon or third-party sensors to help you take action.

## Simple to deploy, manage and run

These preconfigured, quick to deploy solutions help you head off bigger problems through a highly secure and scalable remote monitoring system. You'll have proactive monitoring and enhanced visibility of machinery, consumer products, security cameras, factory tools – virtually anything fitted with edge computing or Internet of Things (IoT)-based maintenance sensors and connected through LTE-enabled gateways.



### 1. Readings transmitted

Sensors take readings at set intervals and transmit them to the cloud via an LTE-enabled gateway.

### 2. Data analyzed

Collect, organize, report and respond to data from new and existing systems for optimizing machine performance in the cloud.

### 3. Process improvements

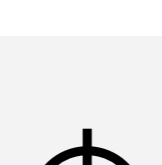
Automate alerting by setting predefined threshold readings in near real time to enhance visibility, prevent costly downtime and mitigate risk.

## Intuitive, integrated experience

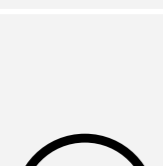
Customizable dashboards feature detailed key performance indicators and sensor visualizations. Verizon Condition Based Maintenance remote monitoring solutions help you know what's really happening across your industrial or commercial operations.



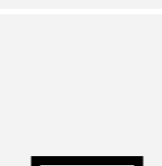
Provides 24/7 remote monitoring – virtually anytime, anywhere, on any device



Helps save time and money by identifying and fixing emerging issues before they become real problems



Delivers near-real-time alerts and notifications when an issue is detected

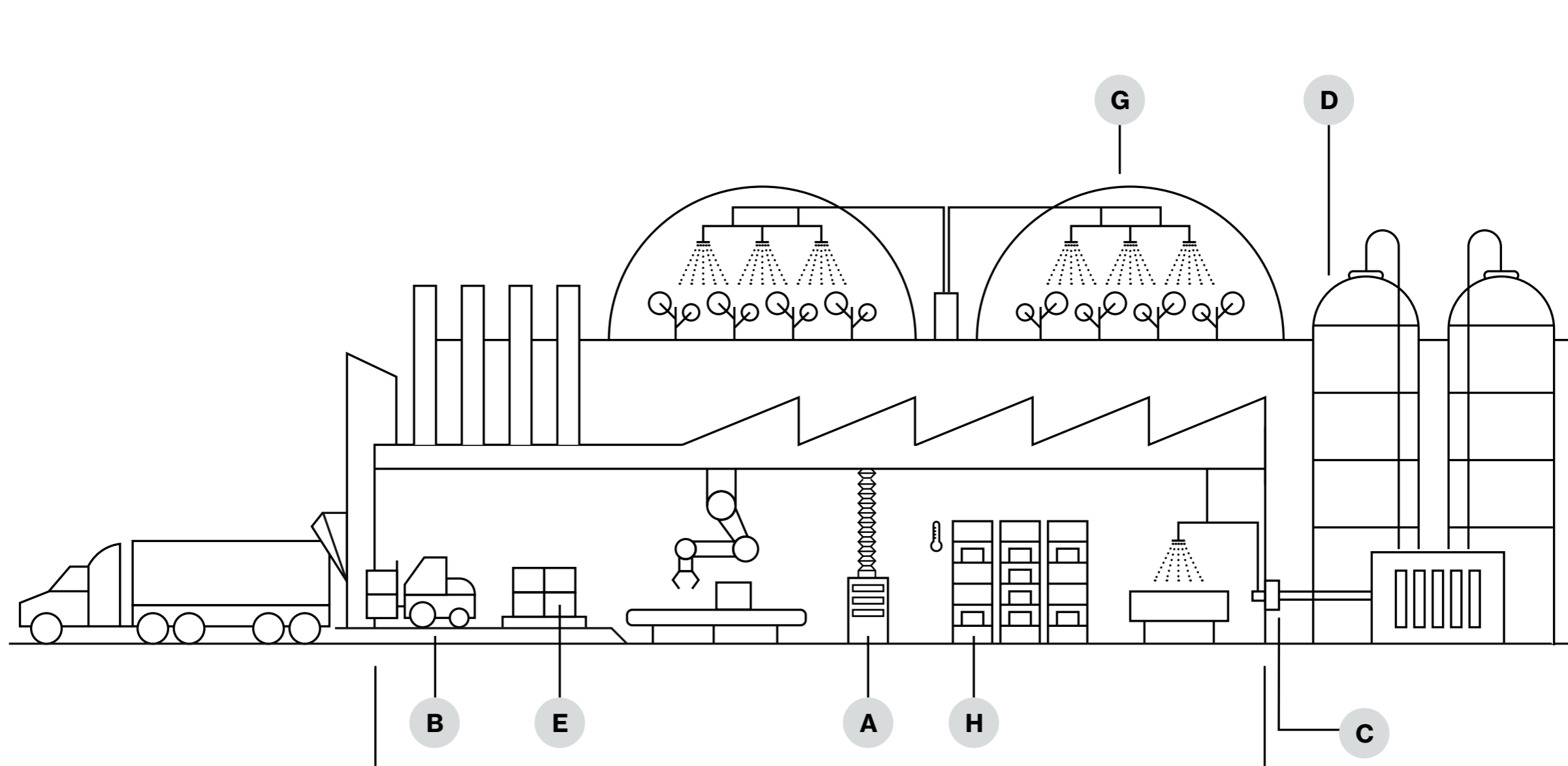


Reveals insights and trends through custom dashboards and reports



Enables robust compliance with data logging and reports that can help you avoid costly fines or legal issues

## Improve visibility and control with stackable solutions



### A. HVAC monitoring

Help keep buildings safe and comfortable while facilitating optimal efficiency of your heating, ventilation and air conditioning (HVAC) systems with continuous, proactive monitoring and alerting that can reduce energy consumption and lower costs.

**159 billion kWh** of electricity was used by commercial buildings for cooling in 2022.<sup>1</sup>

### B. Temperature monitoring

Protect temperature-sensitive assets and inventory with continuous tracking of products, equipment and vehicles, single rooms, or entire areas with alerts that signal you when temperatures are outside of defined parameters.

**16% of electricity** consumption in the buildings sector was from space cooling in 2021.<sup>2</sup>

### C. Leak detection

Continuously monitor for leaks throughout your facility's near-real-time alerts that can help prevent small leaks from damaging your property and equipment.

**\$277 per acre-foot** is the median cost of water savings from leak management.<sup>3</sup>

### D. Tank monitoring

Use this solution for liquids, gases or solid materials across a range of industries to monitor the levels, temperature, pressure and other factors in tanks and containers, even in rapidly changing conditions.

**60%** of all underground storage tanks in the United States have experienced at least one leak.<sup>4</sup>

### E. Cold chain monitoring

Preserve the quality and safety of food, chemicals and other temperature-sensitive products while enhancing visibility throughout the supply chain with an advanced solution that alerts you to damaging fluctuations in temperature that can cause spoilage and trigger fines and penalties.

**2x faster market growth** was experienced by cold chain medicines as compared to the total market between 2017 and 2022.<sup>5</sup>

### F. Facility monitoring

Improve efficiency, reduce costs and optimize performance of your facilities with 24/7 monitoring of customizable metrics such as temperature, humidity, energy consumption, potential equipment failures and myriad other critical measures, including your carbon footprint.

**40%** of annual global CO<sub>2</sub> emissions are generated by building operations, materials for building construction and infrastructure materials.<sup>6</sup>

### G. Greenhouse monitoring

Actively monitoring shifts in soil moisture, humidity, temperature and more helps maintain optimal growing conditions and higher yields for your valuable plant stocks – and can lower costs.

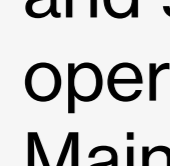
**Up to 34%** lower cost for optimal supplemental greenhouse lighting through IoT technologies.<sup>7</sup>

### H. Refrigeration monitoring

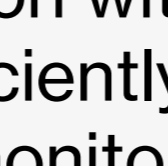
Secure perishables in cold storage, extend equipment life and support compliance with food safety regulations around the clock through an active monitoring, diagnostics and alerting system that lets you know quickly of the potential for spoilage.

**Up to 40%** of the food supply is wasted in the United States.<sup>8</sup>

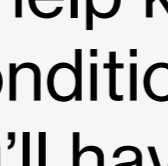
Verizon offers advanced IoT solutions; a simple, intuitive platform; and seamless integration with our network to help keep your operations running efficiently. With Verizon Condition Based Maintenance remote monitoring solutions, you'll have the confidence that comes with knowing that your products, facilities and assets are supported around the clock.



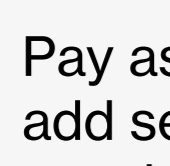
Pay as you grow – easily add sensors and extend capabilities as needed.



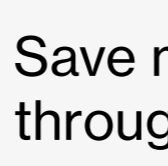
Save money and time through proactive maintenance and management.



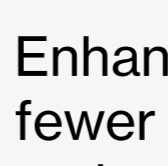
Enhance efficiency with fewer emergency repairs and greater uptime.



Improve customer service through smoother operations.

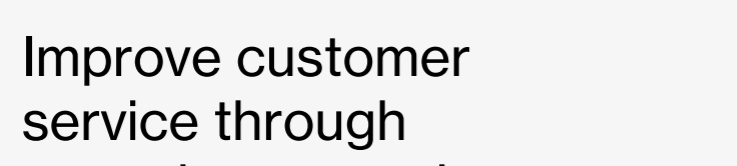


Open new revenue streams through new or expanded services.



Reduce manual checks on equipment operations.

**Learn more by contacting your Verizon Wireless business specialist today at 877.273.2279, option #3**



Network details & coverage maps at vzw.com. © 2023 Verizon. OGINF1224023

<sup>1</sup> "How much electricity is used for cooling in the United States?" U.S. Energy Information Administration, updated March 28, 2023. <https://www.eia.gov/tools/faqs/faq.php?id=1174&t=1>

<sup>2</sup> "Space Cooling." International Energy Agency, September 2022, licensed under CC BY 4.0, rearranged text to fit format. <https://www.iea.org/reports/space-cooling>

<sup>3</sup> "Untapped potential: leak reduction is the most cost-effective urban water management tool." IOPscience, February 24, 2022, licensed under CC BY 4.0, rearranged text to fit format. <https://opscience.iop.org/article/10.1088/1748-9326/ac544c>

<sup>4</sup> "Going Beneath the Surface: Petroleum Pollution, Regulation, and Health." Michelle Marous, American Economic Journal: Applied Economics, 13 (1), page 3, January 2021. <https://www.aeaweb.org/articles?id=10.1257/aep.20190130>

<sup>5</sup> "Pharma's Frozen Assets: Cold chain medicines." IOWA, 2023. <https://www.iowa.com/story/2023/02/01/pharmas-frozen-assets-388885-final.pdf>

<sup>6</sup> "Buildings." International Energy Agency, September 2022, licensed under CC BY 4.0, extracted text from bar chart. <https://www.iea.org/reports/buildings>

<sup>7</sup> "Development and Implementation of an IoT-Enabled Optimal and Predictive Lighting Control Strategy in Greenhouses." Plants, December 2, 2021, licensed under CC BY 4.0, extracted text from abstract. <https://doi.org/10.3390/plants10122652>

<sup>8</sup> "Food Waste FAQs." U.S. Department of Agriculture, accessed April 14, 2023. <https://www.usda.gov/foodwaste/faqs>