





# SmartCity by Schneider Electric: Solutions Overview

Our collaborative, integrated solutions for efficient urban infrastructures

Today's cities occupy only two percent of the earth's surface, yet they account for 50 percent of the world's population, 75 percent of global energy consumption and 80 percent of global  $CO_2$  emissions. Truly, cities are at the forefront of our world's energy and water supply challenges. Cities also face transportation congestion issues that significantly undermine business processes and the quality of life for hundreds of millions of citizens.

Schneider Electric's integrated SmartCity solutions, tailored to the unique needs of each city, deliver improved efficiency, sustainability, and livability. Our solutions are comprehensive and practical to deploy and manage. They help cities improve the efficiency and sustainability of all urban infrastructures, yield better and more integrated mobility management, help meet ambitious environmental goals, and yet remain affordable to cities' strained operational budgets.

Here's an overview of our comprehensive solutions offering that supports collaboration of government, industries and citizens to create livable, efficient and sustainable cities.

#### **Smart Grid Solutions**

• Robust and proven telemetry systems sustain realtime automated network operations control.

- Smart metering and demand-response solutions enable accurate and timely collection, monitoring and reporting of energy usage, to streamline enterprise business processes and engage consumers in conservation practices.
- Distributed energy management systems effectively integrate volatile renewable energy to the grid.
- Smart Grid Software solutions provide fully integrated tools for efficient planning and design, and reliable operations, of increasingly complex grids.
- Industry-leading weather information solutions -
  - Help predict energy loads and heating and cooling requirements of commercial facilities and homes.
  - Provide solar forecasts that make solar energy a more reliable alternative for cities.

### **Smart Mobility Solutions**

- EV charging solutions manage public infrastructure and parking to maximize driver utilization, as well as energy management across the electrical network.
- Traffic management solutions use real-time detection and analysis of traffic, conditions of critical infrastructures such as road tunnels and bridges, and current and forecasted weather.
- Usage and tolling services optimize access control and revenues.
- Public transit solutions put real-time information to work to maximize efficiency and capacity.

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- Traveler information solutions encourage public utilization and safety.
- Reliable delivery of weather conditions and forecasts help airports, airfields and air transportation operators improve safety, streamline activities such as fueling and plowing, and optimize efficiency of flights and fuel usage.

### **Smart Water Solutions**

- Smart network solutions help optimize operation and maintenance of water distribution networks

   minimizing water loss and labor costs – and support planning, decision making and performance benchmarking.
- Water management solutions
  - Maximize plant performance to optimize energy.
  - Balance water production and demand, using weather forecasts and consumption data.
  - Monitor and control chemical dosage, and collect and report quality analysis data, to assure regulatory compliance.
- Urban flooding solutions integrate weather forecasts with real-time runoff and collection information to accurately predict areas of impact, provide alert of risk and best deploy equipment and personnel to minimize damage and injury.

## **Smart Public Services**

- Emergency Management systems improve response coordination and resiliency to disruptions.
- Healthcare management systems reinforce efficient healthcare provision.
- Public safety and video systems support crime response and prevention.
- Smart Street Lighting improves operational control, costs and street safety.

• eGovernment and city administration solutions enhance interoperability of city systems and encourage citizen participation.

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## **Smart Buildings & Homes**

- Energy and carbon dashboards and monitoring help manage costs and optimize the carbon footprint.
- Energy efficiency and security equipment reduce energy consumption and costs, and can be integrated with building, power, datacenter and process management systems for complete supervision and control of a site, multiple sites or across the whole enterprise.
- Multi-application energy controls and Home Area Networks (HAN) promote resident engagement in energy management and usage reduction.

Schneider Electric's collaborative approach to integrated city management helps cities become smarter. Our innovative, expert SmartCity solutions combine state-ofthe-art hardware, software and services to deliver better infrastructure efficiency, increased sustainability and improved city services. And we work with best-in-class partners, especially local ones, to meet cities' immediate and long-term needs. Contact our experts to learn more about how your city can benefit from Schneider Electric's innovative SmartCity solutions, today and tomorrow.



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