



SmartCity by Schneider Electric: Weather Services

Supporting safety and efficiency
throughout the city

While we cannot change the weather, the SmartCity can plan and prepare for the impact weather has on the well-being of an increasing urban population. Schneider Electric's industry-leading weather information services, relied on extensively in North America and available around the globe, help forecast and mitigate weather effects at many different levels — and actually help put weather to work.

Top-rated temperature forecasts

Up to 90 percent of the error in load forecasts created by electric and natural gas energy providers can be attributed to inaccurate weather forecasting. Our temperature forecasts have been independently rated the most accurate in the industry for the past four years and are relied on by more than 70 percent of the IOUs and public utilities in the U.S. to make load forecast decisions.

These accurate forecasts yield load predictions that most closely reflect actual demand and help the utility avoid excessive base loads, costly peaking resources and imbalance penalties. Utilities also rely on Schneider Electric's highly localized weather information to efficiently manage weather-related power outages, restore service faster and optimize customer safety and service.

Managing renewable energy

Already, renewable energy has become more prevalent as a power source to meet rapidly increasing energy demand. Schneider Electric is providing world-class solutions for wind and solar power forecasting that helps authorities optimize renewable energy production, meet aggressive environmental targets and minimize load on current distribution assets without building additional infrastructure.

While distributed solar, both residential and commercial, is an increasingly popular renewable option, the increasing deployment of rooftop solar can destabilize the utility grid. Schneider Electric offers a highly accurate solar forecast solution using an irradiance forecasting system instead of observational or historical data. By applying satellite-based cloud forecasting to help predict how changing cloud cover will impact the amount of solar power generated and fed into the grid, this advanced solution helps make solar energy a more reliable alternative for cities.

Streamlining transportation operations

Integrating weather information into a traffic management solution helps calculate traffic delays, mitigate weather impacts and optimize urban traffic flow. Schneider Electric provides an industry-unique system that helps transportation authorities optimize roadway management

with a comprehensive, single-interface presentation of real-time traffic information and essential weather information. This solution is secure and highly configurable too, so SmartCity operators and controllers across the enterprise access consistent information that targets their particular traffic challenges. This approach saves on systems maintenance and training and supports fast operations decisions that improve traffic flow and safety.

Comprehensive aviation solutions

Schneider Electric's solutions for airports, airfields and air transportation operators have been improving aviation operations for more than 30 years. These solutions reliably deliver complete and integrated weather information that helps both fixed wing and helicopter operations improve safety of ground and flight crews, streamline ground maintenance operations such as fueling and plowing, and optimize efficiency of flights and fuel usage by providing re-routing plans as needed. The SmartCity can count on more reliable aviation operations to complement its transportation and business processes.

Efficient building management

In the same way that Schneider Electric's high-accuracy forecasts are helping utilities, precise micro-forecasts are helping sophisticated building energy management systems to predict heating or cooling needs, as well as to control costs.

Schneider Electric also supports facility and public safety against severe weather, providing communities and corporations with the weather information identified by the organization as key to protecting employees, residents and customers. They access information online or via a mobile device:

- High-resolution tracking tools — to view the path of a storm for the next 30 minutes



- Real-time lightning detection — displays real-time lightning strikes for the most reliable indication of lightning threat to any specific area

With Schneider Electric weather tools, the SmartCity stays one step ahead of the weather; and data centers, manufacturing facilities, health care operations and other vital public facility management know when to take proactive measures against potential danger and outages.

Learn more

Schneider Electric's weather information services are now available worldwide, via online and mobile device, to deliver the data that helps improve efficiency and safety of a SmartCity's energy transmission and distribution, transportation and public safety. We invite you to contact our weather information system experts to discuss your enterprise's specific weather information needs.



Schneider Electric SmartCity
SmartCities for a Sustainable World