





SmartCity by Schneider Electric: Smart Buildings and Homes

Maximizing energy efficiency

By 2050, it is expected that nearly 70 percent of the world's population will be living in cities. As these urban areas grow, so will the demand for smart buildings and housing — in particular, green housing. This rapidly rising demand is based on numerous factors, including global regulatory pressures, public and stakeholder pleas for socially sustainable business practices, increasing energy demand and prices, and economic, demographic and industrial growth.

Green directives are driving major housing changes worldwide. In addition to new building standards and labels, certifications for the operational performance of existing buildings are also impacting the housing environment — leading to the retrofitting of current structures. All of this puts increasing pressure on business leaders to achieve better outcomes, including increased asset value, occupancy, and rental rates.

Schneider Electric offers solutions built on a single, open platform to help Smart Cities meet their building and housing challenges. These comprehensive, scalable and integrated solutions enable structures to actively contribute to the triple bottom line of people, profits, and planet.

EcoStruxure[™] integrated management system

Through its EcoStruxure integrated architecture, Schneider Electric enables the integration of five key domains of your building: power, IT room, process, building and security management systems. EcoStruxure delivers guaranteed compatibility across key application areas and leverages open standards across both Schneider Electric and thirdparty solutions.

Increase insight into and management of building energy usage in the city. Increase building energy efficiency, while reducing energy consumption and costs. Use visualization and control systems to promote resident engagement in energy usage reduction.

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- Integrate power, IT room, process, building and security management systems
- Follow your structure's global consumption up to the minute
- Enhance security using comprehensive solutions
- Increase environmental awareness and sustainability through savings optimization
- Reduce energy consumption, meet corporate social responsibility goals, and provide highly-productive work environments

This single, open platform enables significant savings on design, installation and commissioning, as well as on hardware and software costs. In addition, it can be applied to both retrofits and new construction to achieve significant savings on capital and operational expenses, across the whole building or enterprise.

Energy and Carbon dashboards

Energy is one of the most significant costs of operating a building. By offering customized energy and carbon dashboards, Schneider Electric allows operators to follow their structure's global consumption up to the minute, helping to better manage energy usage, cut costs, and provide occupants with a better environment. In fact, when integrated with other Schneider Electric solutions energy costs can be reduced by as much as 30 percent — even more if renewable energy sources are used. These comprehensive dashboards allow operators to...

- Increase energy efficiency by tracking key performance indicators (KPIs) by area or activity, using enhanced visualization and control capabilities.
- Decrease energy consumption and costs through greater transparency and user awareness.
- Easily locate and resolve issues within their system through capabilities like fault detection and diagnostics.
- Free up capital for strategic investment and expansion by reducing costs through convergence and improved energy management.

Security management

Schneider Electric offers comprehensive security solutions featuring scalable architecture, and secure, yet open networks that can be cost-effectively expanded as needed. This architecture allows a simple one- or two-door access control system to be expanded to an enterprise-wide, multisite integrated security management system. It can provide operators with...

- A comprehensive view of the security landscape by offering everything from video monitoring to access control, intrusion detection, fire safety, and emergency lighting.
- Efficient and effective troubleshooting of security breaches or faulty equipment through event reports that include details down to the exact access point.
- The knowledge of who accessed what areas and when by connecting security systems with personnel information and recorded video.
- Reduced training time and necessary manpower to operate the system due to its simple, integrated environment.



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Home energy controls

Schneider Electric delivers solutions for the home that go beyond appearance and comfort to provide a whole new way of approaching environmental awareness and sustainability — taking the concept of eco-friendly from savings to optimization. Scalable, flexible and easy to upgrade, different solutions are available to meet different needs, including control, system and input/output devices. With them, users can...

- Access and control their home from anywhere and at anytime through a secure wireless connection.
- Easily manage their homes through an intuitive graphic user interface with jargon-free language and self-explanatory icons that are consistent across different devices.
- Increase efficiencies comfortably with time scheduling, scene control and power monitoring functions.
- Truly integrate their devices, including different brands and makes, by interlinking electrical, multi-media and telecommunications

through TCP/IP or Wi-Fi.

Energy management system operation

It is becoming increasingly difficult to strike the balance between environmental, financial and workforce issues. Schneider Electric delivers integrated solutions to help building operators reduce energy consumption, meet corporate social responsibility goals, and provide highly productive





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work environments. Through its EcoStruxure[™] architecture system, Schneider Electric can help operators...

- See, measure, and manage energy and utilities usage across their building portfolio through the aggregation of data from multiple systems.
- Manage enterprise level software down to hardware components by delivering guaranteed compatibility across key application areas and leveraging open standards.
- Reduce total life cycle costs, capital expenditures and operations costs by integrating building infrastructure systems and processes through convergence.

Rely on proven solutions

Our SmartCity Smart Buildings and Homes solutions are at work in cities around the world to help manage and optimize energy usage and encourage green living, safely and sustainably. Contact us to learn more about a solution configured to serve your current and future needs.