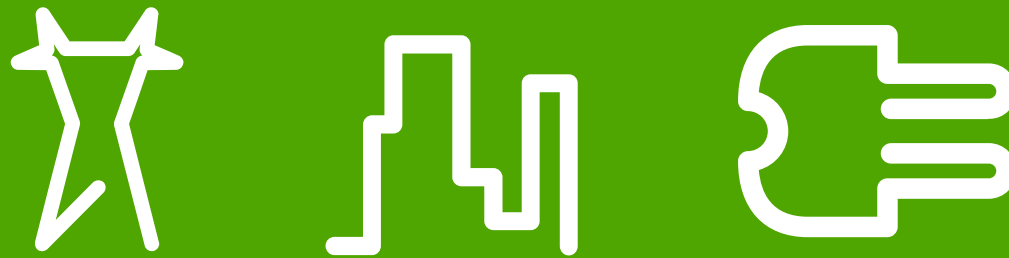


Schneider Electric: The global specialist in energy management



Helping customers make the most
of their energy, from plant to plug

Bruce Ford

Green Building Engineer
Certified Energy Manager
Professional Electrical Engineer

Schneider
Electric

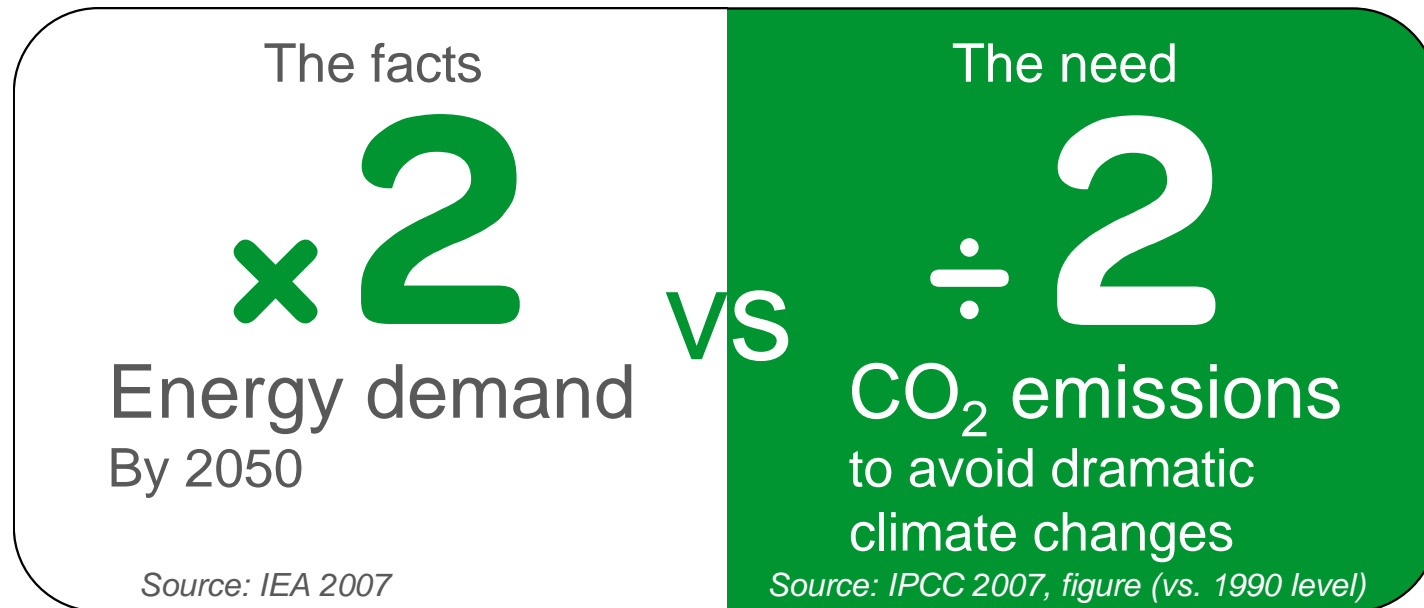
Our Vision

A world where we all can **achieve more while using less** of our common planet.

Our Mission

Help people **make the most of their energy**, while providing added value through building services for energy and security.

The energy dilemma is here to stay



Energy management is the key
to address the dilemma

A unique positioning



Knowledge is Power

- You can't **manage** what you can't **measure**.
- Rising energy costs and environmental awareness have spurred investors, developers, builders, operators and occupants to make their **buildings and factories more energy efficient**.
- But to **truly optimize energy consumption**, you need detailed, accurate data about how that energy is being used.

Smart Energy Solution Fundamentals

- Consume **smarter** and consume **less** by deploying a **comprehensive energy strategy** that includes:
 - Understanding how energy is consumed through **measurement** and **verification**, and **energy efficiency audits**
 - Establishing **goals and benchmarks**
 - Delivering actionable information to key stakeholders with **reports** and **dashboards** at their fingertips
 - **Sustaining maximum performance** levels with responsive controls



Measurement and Verification

- Audits, assessments and energy action plans
- System analysis and recommendation
- Engineering and design
- Installation and commissioning
- Performance contracting
- Enterprise energy management, greenhouse gas emission reporting
- Complete after-sale service for maintenance, training, and upgrades

Schneider Electric has a wide array of energy services

Responsive Control

● Real Time Power System Dashboard

- Synchronized sequence of events recording
- Supervisory control and data acquisition
- Automatic transfer schemes
- Load preservation and power system control
- Generator paralleling controls
- Comprehensive power quality monitoring and event recording

● Integrated Building Automation

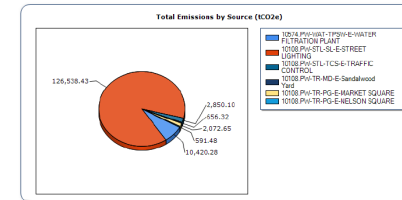
- Regulating indoor environment
- Thermal energy control of chillers, air handlers and mechanical systems
- Security
- Lighting control
- Fuel tank monitoring
- CO2 sensors

● Compliance Reporting

- Greenhouse gas emissions
- Emergency power supply system exercising
- LEED

Comparison And Variance

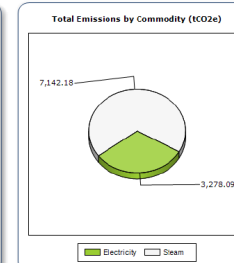
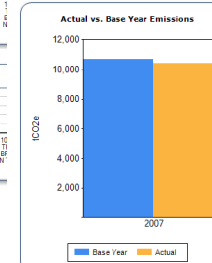
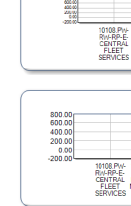
Monday, January 01, 2007 - Tuesday, January 01, 2008



Variance from Target (%)

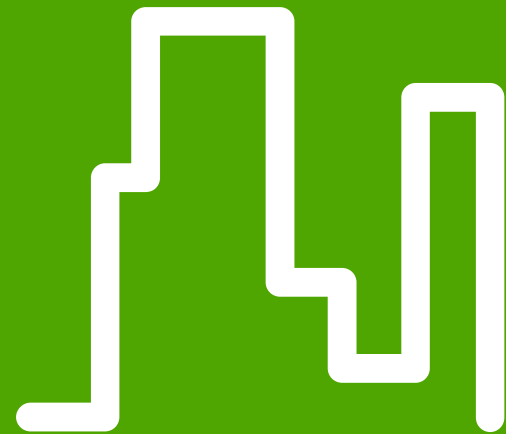
Aggregate Emissions

Monday, January 01, 2007 - Tuesday, January 01, 2008

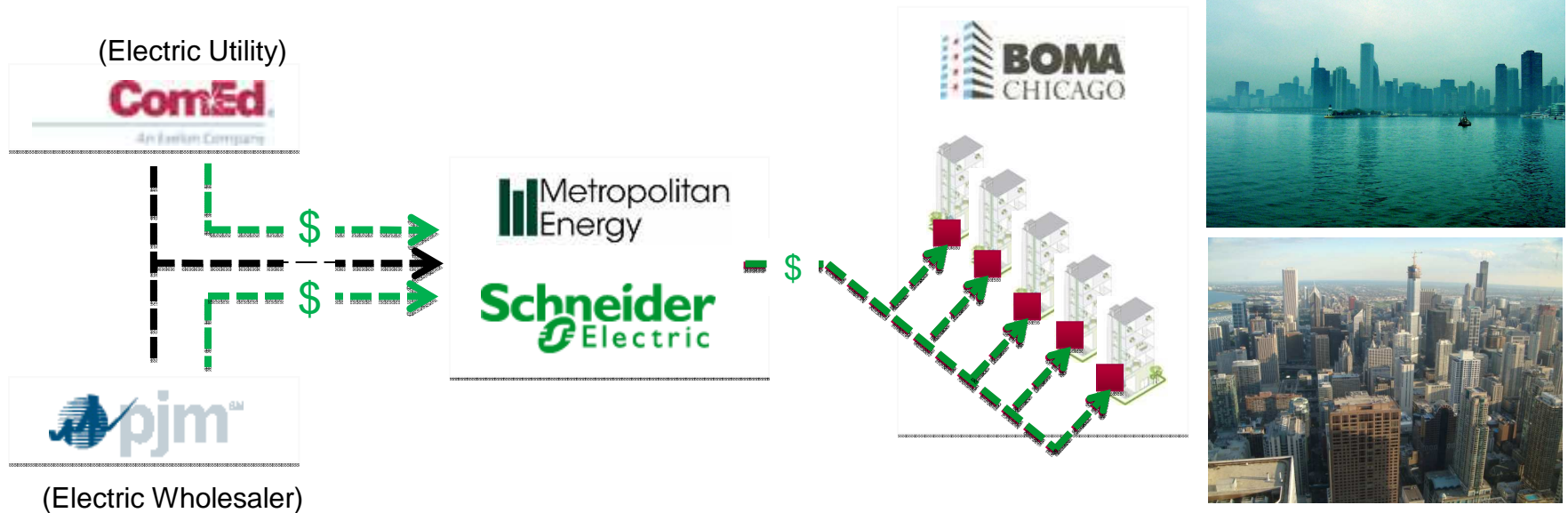


Smart Grid Green Generator

Building Owners and
Management Association
(BOMA) of Chicago



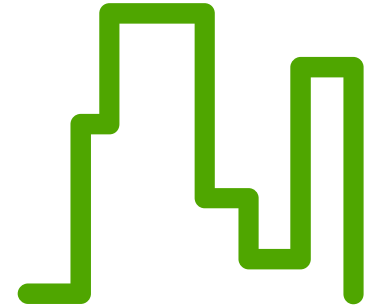
Operation of our Smart Grid Solution at BOMA



- The “green generator” is started by sending a signal from PJM or ComEd to controls in BOMA buildings.
- Building automation systems and electrical distribution systems in each building respond by executing pre-defined routines that have been designed by Schneider Energy Engineers to reduce electrical demand.
- PJM or ComEd compensate Metropolitan Energy for providing load reduction. Payments are shared with buildings after any capital project loans are paid off.

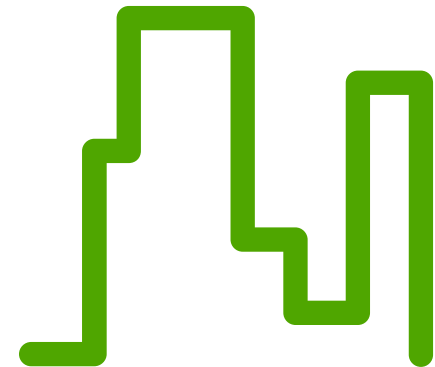
BOMA Chicago Project

- Create a utility-scale, “green generator” through implementation of smart grid technology
- Upgrade buildings with real time smart meters
- Build Network Operating Center to communicate with buildings and grid markets
- Subsidize and finance over \$150 million in building-level upgrades of equipment and building automation systems
- Enable buildings to participate in demand response programs
- Create new income streams and cut operating expenses
- Total program cost of \$184.4 million



Benefits to BOMA Participants

- Creation of new building revenue streams from demand response program participation that could exceed \$90,000 annually
- Optional financing with no additional out-of-pocket expense
- Reduced operating expense for electricity
- Upgraded building systems
- Enhanced asset value



Benefits to Society at BOMA

- Annual energy cost reductions of \$82 million
- Reduced carbon emissions of 300 million pounds annually
- Ability to measure and verify regional economic and environmental benefits in unprecedented scope, scale, and granularity
- Creation or retention of over 2,000 jobs
- Opportunity for replication in other markets



Schneider Electric Financing at BOMA

- Schneider Electric will offer up to \$100 million of innovative performance-based contract financing to qualified participants
- Relying on new revenue generated by participation in demand response programs, which is assigned to cover debt service
- Once paid, participant retains future revenue
- Building participant retains benefit of energy cost savings



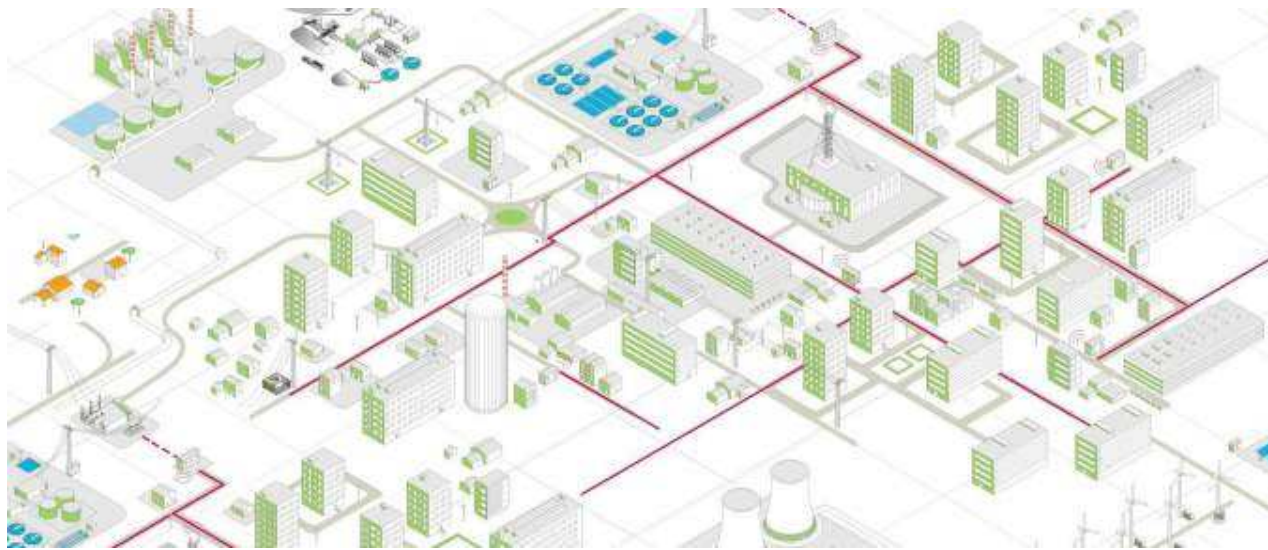
Helping customers make the most of their energy, from plant to plug

5 end markets

- Energy and infrastructure
- Industry
- Data centres & networks
- Buildings
- Residential

72%

part of the worldwide energy consumption of these five markets



Offering integrated solutions for segments

- Electric utilities
- Water & waste water
- Oil & Gas
- Marine
- Mining, Mineral, Metals
- Machine builders
- Data centres/Bank, insurance
- Hospitals
- Hotels
- Office buildings
- Retail
- Residential

Trusted by customers worldwide

Americas



Yale University



Golden Gate Bridge



Rockefeller Center



Shedd Aquarium



Héma-Québec

Trusted by customers worldwide

Europe



The Kremlin



Eiffel Tower



Byblos Bank



Harrods



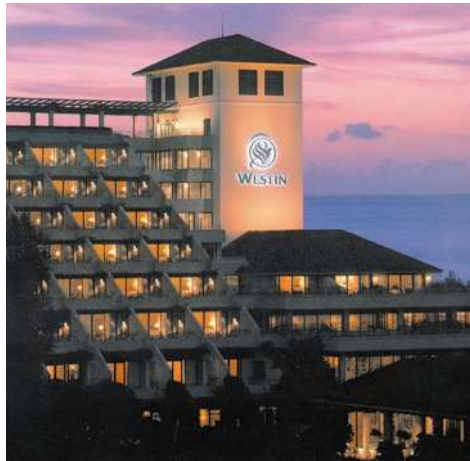
Sanoma House

Trusted by customers worldwide

Asia Pacific



Sydney Opera House



Westin Resort



**Two International
Finance Centre**



Kuala Lumpur Airport



Petronas Towers

Make the most of your energy

