Smart Home automation as part of the Smart Grid

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Agenda

● Schneider Electric at a glance

● Smart Grid Concepts

● Smart Home Automation

● Conclusion
Schneider Electric at a glance

18.3
Billion global sales in 2008 (in €)
32% of sales in new economies
x2 compared to 2004

110,000+
people in 100+ countries

5%
Sales devoted to R&D

170
Years of history through innovation and leading brands

Making energy:
- Safe
- Reliable
- Efficient
- Productive
- Green

The global specialist in Energy management

Covering
72% World Energy consumption

A Recognised Sustainable commitment

Energy production & transmission

Energy usage
Smart Grid is accelerating the energy value change transformation

- Carbon trading
- Energy efficiency
- Micro network management

Consumers

Intelligent Metering & Demand Response

Centralised Generation

Distributed Generation

- Renewable
- On-site Storage
- Backup Power

All Generation and Storage Options

Self Healing

Ensures Power Quality

Resists Attack

Includes and Motivates the Customer

Optimizes and Ensures Efficiency

Intelligent Transportation

Residential

Commercial

Industrial

Transportation

Active Consumers

Intelligent Transmission

Intelligent Distribution

Self Healing

Ensures Power Quality

Resists Attack

Optimizes and Ensures Efficiency

Intelligent Metering & Demand Response
Smart Grid Architecture

- Distribution Management System
- Energy Management System
- Building Management System
- City-wide Performance Dashboards
- Home Automation System
- Green Office

Control:
- Lighting
- HVAC
- Blinds
- A/V
- CCTV
- Appliances

Metering:
- Lighting
- HVAC
- Sockets
- Water

Dashboards:
- Energy
- Tariff
- Historical
- Forecast
- Carbon
- Services
What do we want from Smart Homes?

- Comfort & Entertainment
- Safety
- Efficiency
- Connectivity
Efficiency

With Schneider Electric, you can achieve more while using less at home…
Automation makes energy saving happen

- Enjoy scene control while optimizing energy consumption
  - Lighting control is not about reducing light. It offers the correct light when and where required, while reducing wastage.
  - Enjoy optimal scenes by recalling the optimized pre-sets every time for sustainable energy-saving.
Automation makes energy saving happen

- Save energy according to occupancy, light level, time of day, temperature, and demand levels
  - Blinds and shutters open and close automatically, based on time of day and amount of light to optimize the mix of natural light and artificial light; or according to the temperature difference between indoor and outdoor to optimize HVAC power consumption.
  - Minimize wastage of energy without affecting usage with occupancy detection
  - Plan appliance control and vary settings depending on demand response levels
Automation makes energy saving happen

- Time scheduling and predictive scheduling ensures peace of mind while providing energy savings
  - Lights and TV turned on will help to discourage potential intruders while you are away from home. Now with pre-set scheduling, you don’t need to turn them on all the time and thus save energy.
  - Appliances and system settings can be automated to respond to demand response levels.

- Energy Monitoring
  - Monitor energy consumption alerts you about energy use and conservation.
Helps to encourage change of behaviour

- Setup advance personal energy consumption plans
  - Take advantage of rebates/incentives
  - Plan and adapt to change
- Benchmark yourself on a community level
The limitless possibilities that open up when you are fully connected
The limitless possibilities that open up when you are fully connected

- Use your mobile as a window to your house
  - Control all your devices from your mobile
  - Receive an email when the system detects an unexpected event
  - Combine remote video monitoring with your security system

- Stay in touch with the external world
  - Receive and display messages
  - Display news or the weather forecast on your wall mounted touch screen,
  - Etc…
Visit us

Hall 4, booth 4405
(next to the BP Carbon Theater)

Tour the booth and be entered into our daily lottery
The lucky winner to receive a brand new
Amazon Kindle e-reading device right away!