Making the Smart Grid happen

Yann Desnoues Strategy Director – Infrastructure Business



Schneider Electric – the global specialist in energy management

22.4

billion € sales (last twelve months)

39%

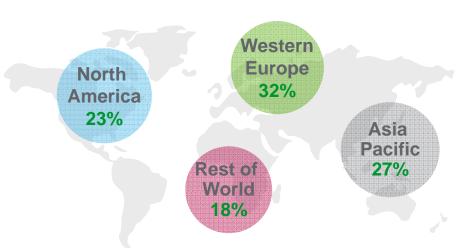
of sales in new economies (last twelve months)

137 000+ people in 100+ countries

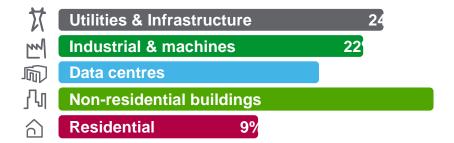
4-5%

of sales devoted to R&D

Balanced geographies - FY 2011 sales



Diversified end markets - FY 2011 sales



...with the Energy challenge as cornerstone of our business strategy

The facts

The need

Source: IEA 2007

The need

CO₂ emissions to avoid dramatic climate changes by 2050

vs. 1990 level

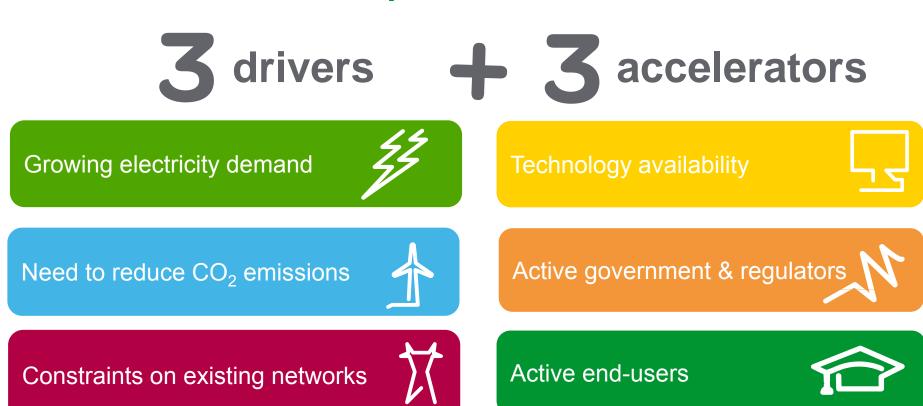


we want to help address this challenge

Introducing the Smart Grid



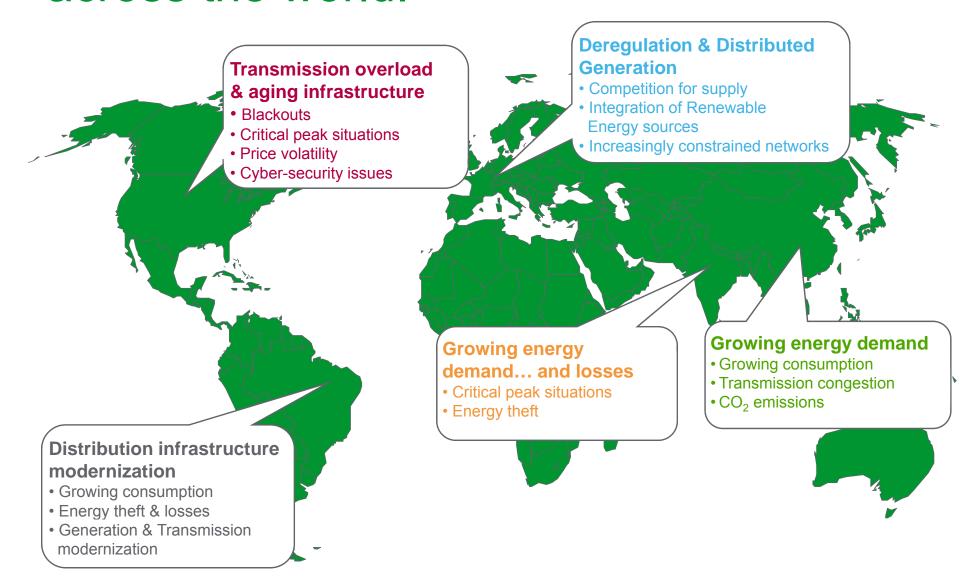
The new Grid equation:



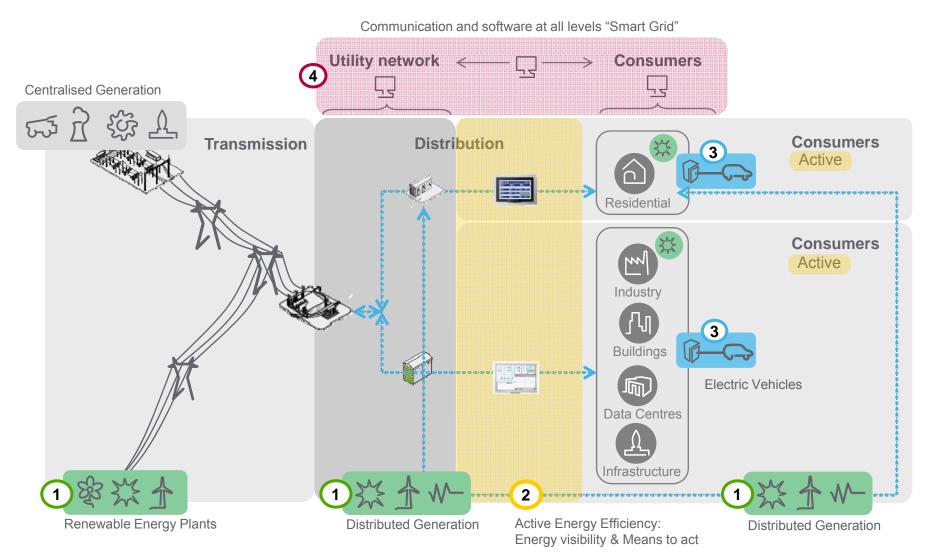


Schneider Flectric

The equation parameters vary across the world.



From one-way energy-only grid to two-way energy+data Smart Grid

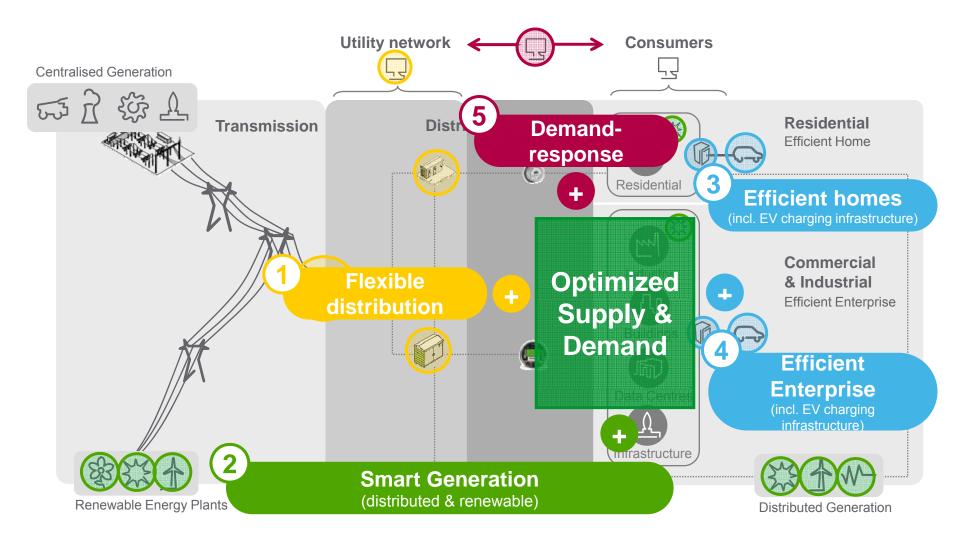




Making the **Smart Grid** happen

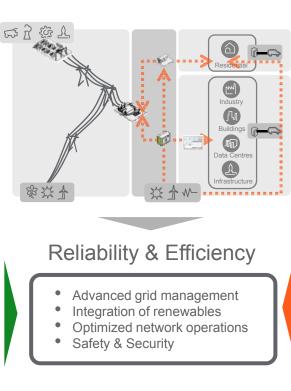


Our 5 Smart Grid domains optimize Supply and Demand



1 Flexible Distribution: combining Schneider Electric and Telvent solutions



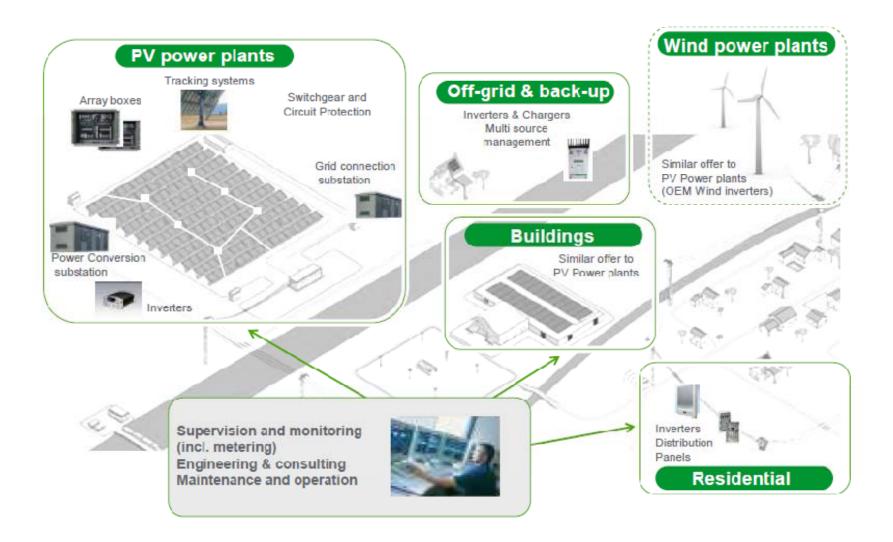


TELVENT Real time software suite for global grid management **Distribution Management** Load, Volt/VAR control; Outage management Geographic Info Systems Life cycle asset management **Smart Metering** Meter data control. rollout & operations **Substation Automation** Remote Terminal Units (IEC-61850) Integration services US, Canada, Europe

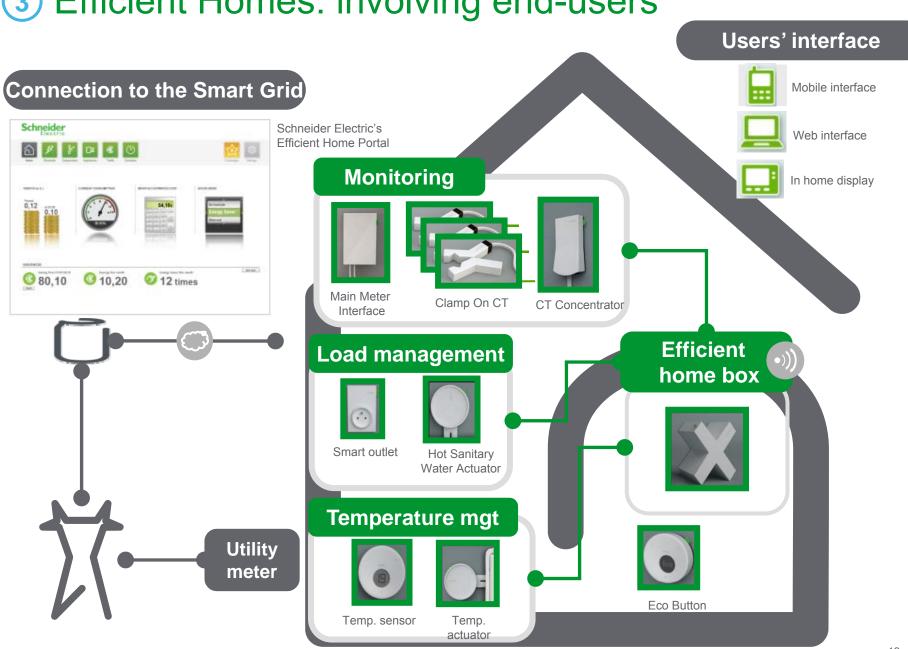


A complete medium and low voltage portfolio and a full set of management software for a more reliable, efficient, and secure grid

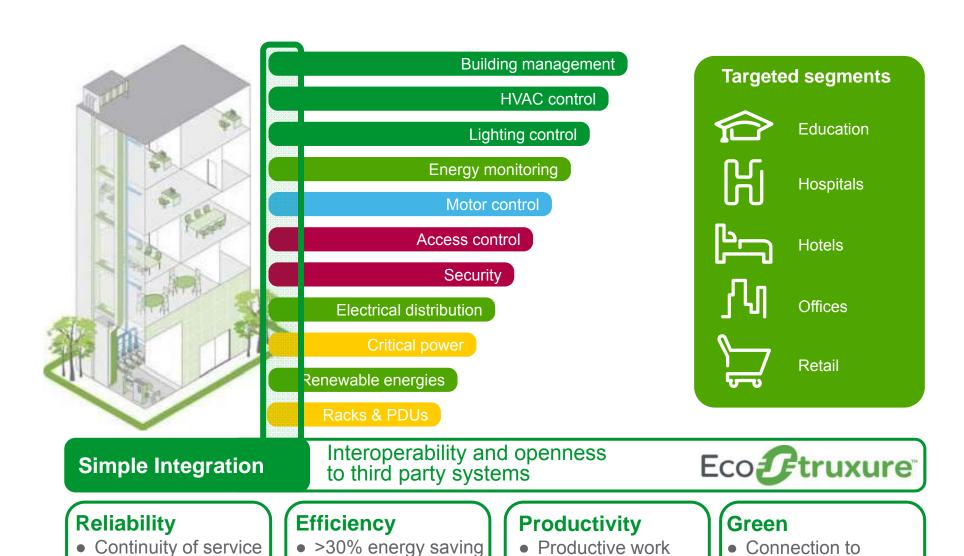
2 Smart Generation: integrating Renewables safely and efficiently into the Grid



3 Efficient Homes: involving end-users



4 Efficient Enterprise: complete integrated architecture



places

Optimised Capex &

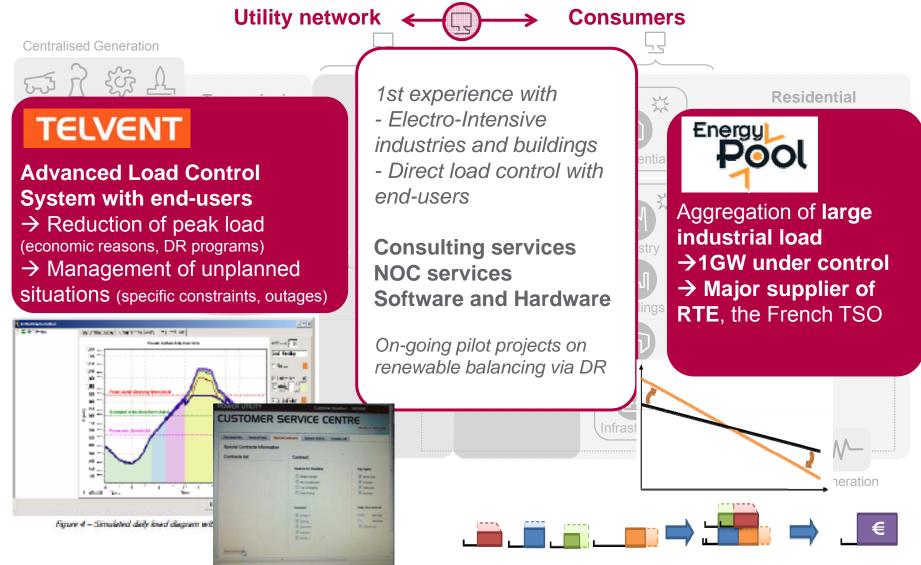
Opex

13

renewable energies

of Electrical Power

Demand response network management and Renewables integration





Needed: a collaborative business model



Innovative R&D smart grid projects

- > Collaboration with more than 60 partners (utilities, universities, industrials,..)
- **→ More than 15 projects**
- ➤ More than 200M global investment
- More than 10 countries

























In conclusion...



In conclusion...

- All over the world, electricity networks are becoming more complex and less stable. To continue to efficiently balance supply & demand, the grid needs to become smarter.
- Schneider Electric is smart grid-ready and we help all our customers in homes, buildings, industrial facilities, and across the electricity network be smart grid-ready too:
 - Utilities will drive smarter Supply, to manage increasing demand, network complexity and environmental concerns
 - Energy-efficient companies and active end-users will drive smarter Demand, to maximize the cost & environmental benefits from Energy Efficiency.
 - and Demand Response will efficiently link Demand and Supply.

Make the most of your energy TM

