

Demand Response

Alueelliset energiaratkaisut –tulosseminaari 29.03.2012

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...and the energy challenge is here to stay

Energy demand by 2050



(Electricity demand by 2030)

CO₂ emissions



to avoid dramatic
climate changes by 2050

vs.

***Frequent
power outages***

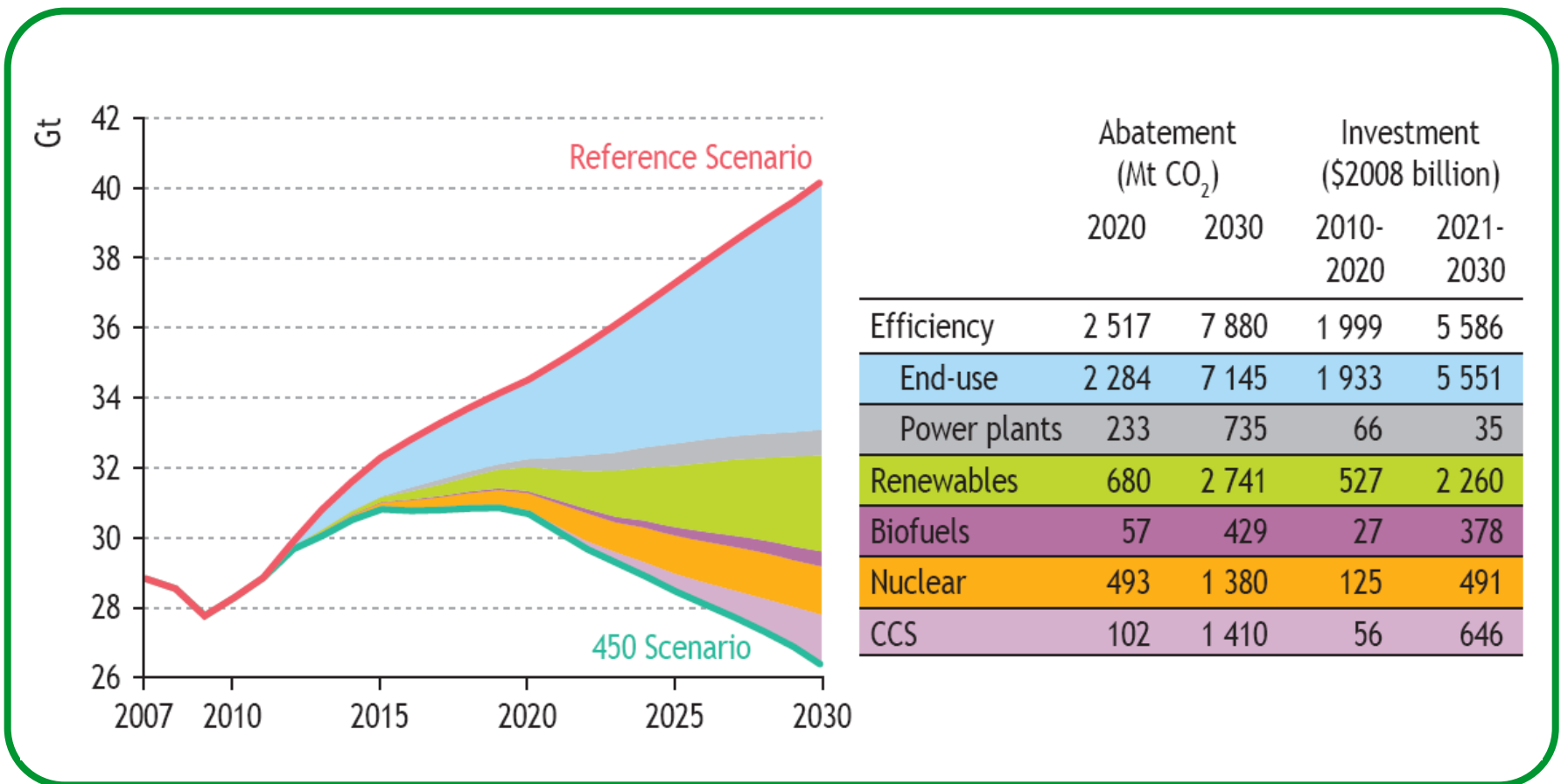
***Rising
energy prices***

Climate change

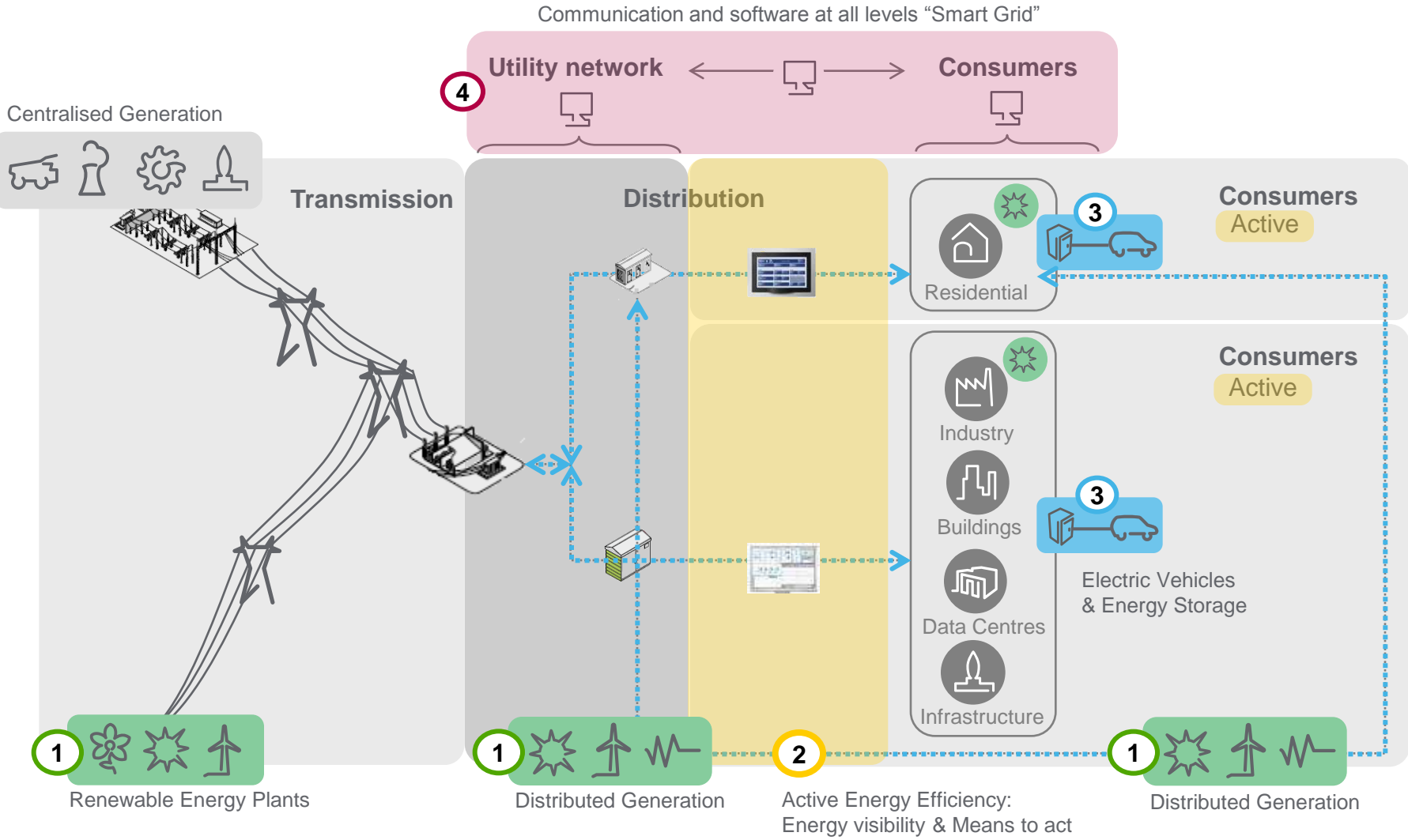
***Conflicts for
resource access
and control***

Energy efficiency is our first priority

Over **50%** of CO₂ reduction will come from energy efficiency

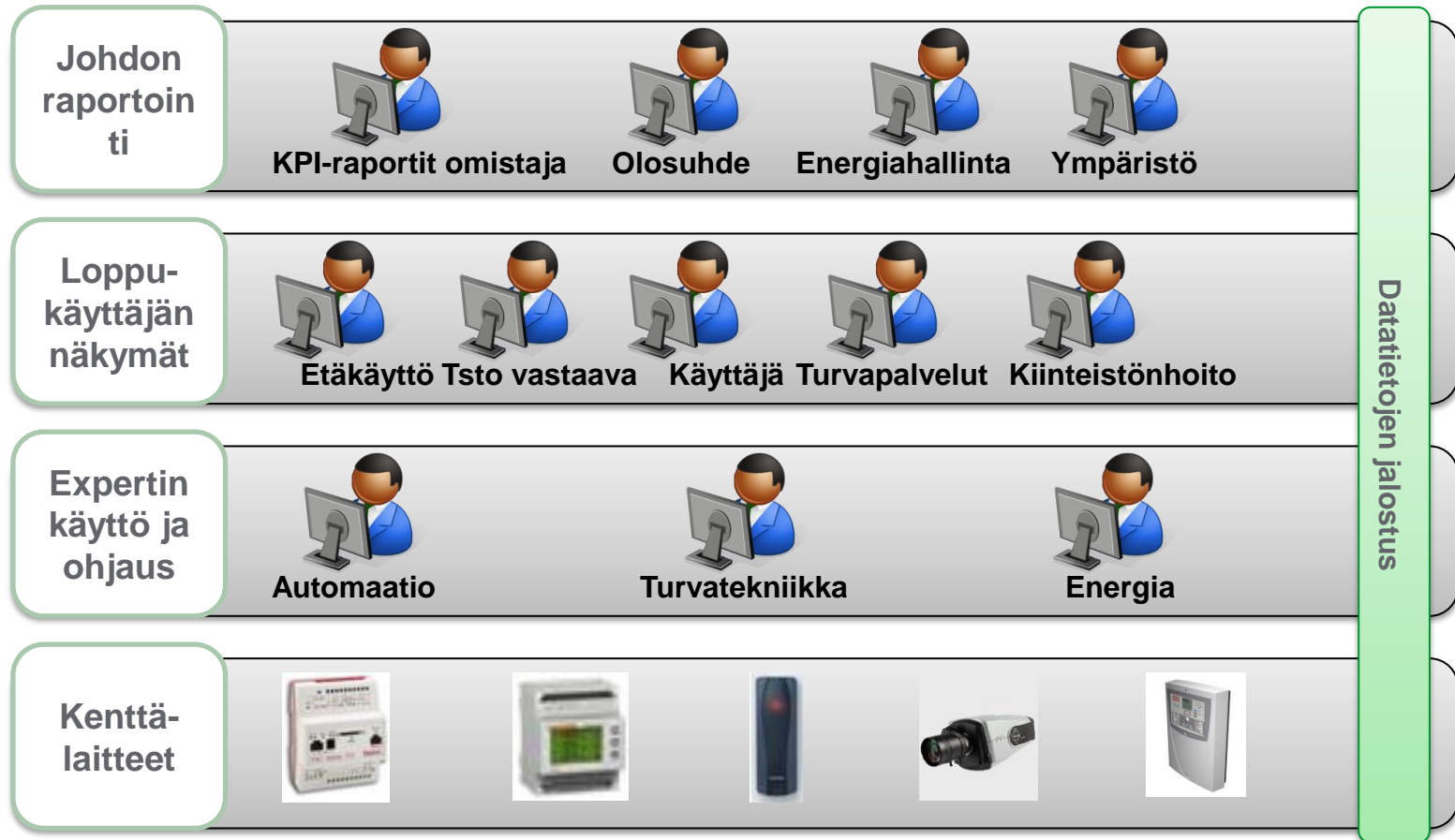


From one-way energy-only grid to two-way energy+data Smart Grid

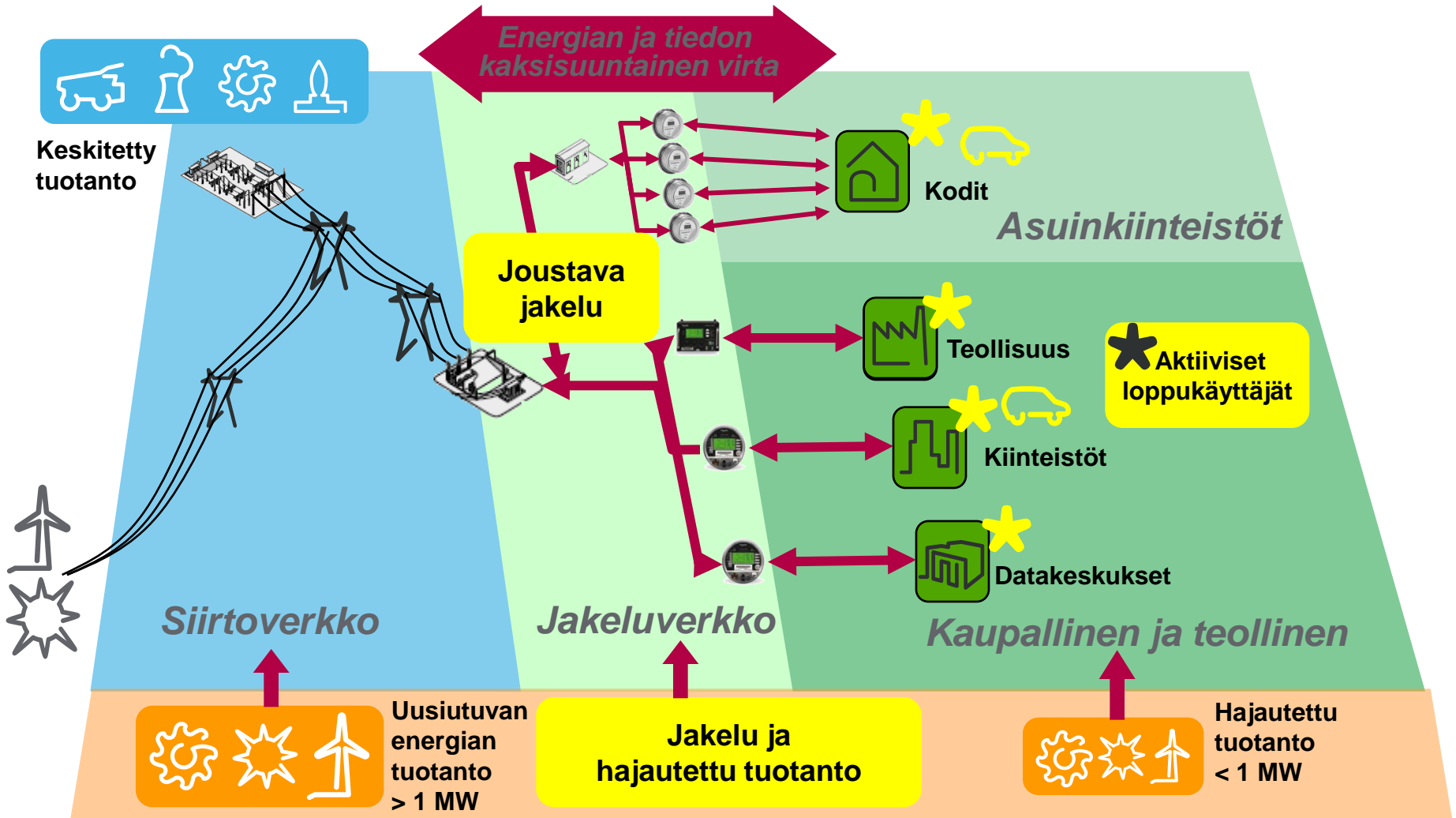


Informaation hallinta eri toimintatasoille

Tukee liiketoimintaa eri tasoilla tarpeen mukaan



Smart Grid on tulevaisuutta



Schneider Electric is Smart Grid-ready

Flexible Distribution

HV/MV – MV/MV – MV/LV

Consulting

Switchgear

Protection

Metering

Substation Automation

Feeder Automation

SCADA*

Demand Side Management

Demand Response

EE solutions

Energy Management Solutions

Consulting

Residential energy management

Circuit Protection

IS&C

& EV charging spots

Efficient Home

Power Management

IT Management & Secure Power

Building Management & Security Management

Process & Machine Management

EcoStruxure integrated architectures

Performance Contracting

Turnkey projects

& EV charging spots

Efficient Enterprise

Smart Generation

In-plant MV, LV, SCADA* & Automation

Services & Retrofit

Renewable farms (*Trans or Dis*)

Pro-sumer Renewable installations

Renewable energy integration

Demand-Response: what is it?

- **Airline passengers are paid** to get off of an **over-booked flight**
- **Demand Response participants** are paid to get off “over- booked” **grid**:
 - By reducing their load through load management
 - By transferring their load to on-site generation