

Building Technologies

A photograph of a modern building's interior, featuring a large, glass-enclosed atrium with a complex, geometric steel framework. The space is bright and open, with people walking on a polished floor. A large tree is visible on the left side of the frame.

The leading provider
for energy efficient, safe
and secure buildings and
building infrastructure

Peter Hallberg
BT Nordic Division

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Who we are and what we do



Peter Hallberg
Head of Building Technologies
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BT is the leading company in the building infrastructure market to offer customers and partners innovative, cost effective and integrated solutions.



BT helps to protect people and makes buildings and building infrastructure more secure and safe, more comfortable and more efficient throughout their entire lifecycle.

What influences the market?

Growing of population



By 2025: World population will grow from more than 6 billion now to 8 billion.

Urbanization



By 2030: 60% of the world's population will live in cities.

Care for the environment



Today we face the **highest CO₂ concentration** for the past 350,000 years.

Scarcity of resources



50% of the world's population consume **75%** of the energy.

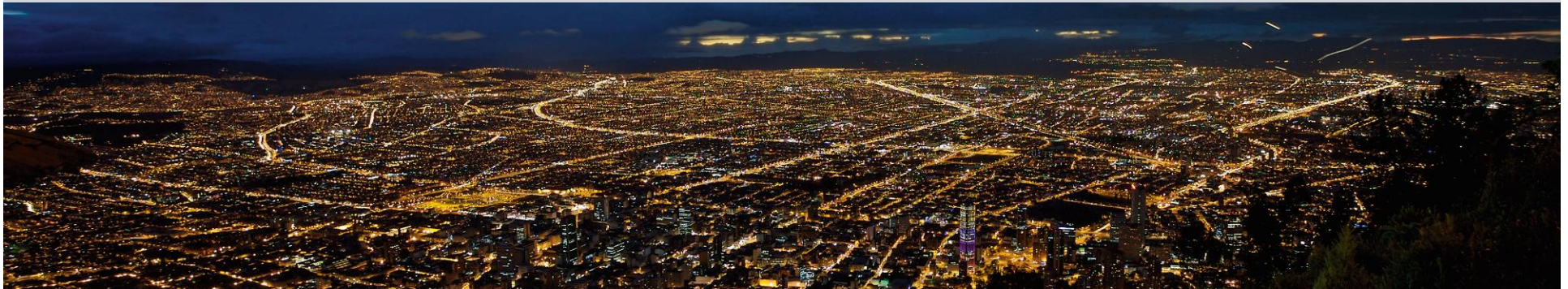
- The need of protection of critical infrastructure is increasing.
- The requirements concerning the security of life and property are constantly increasing.
- The consumption of energy and the CO₂-emissions have to be reduced dramatically.
- Ideal working and living conditions are nevertheless required.

What does that mean for our customers?

Conclusion drawn from the megatrends and the developments in the market:

Building and building infrastructure owner and user have two main

- 1 Safety and security for their buildings and building infrastructure
- 2 High level of energy efficiency



Either as an integrated or as a specific solution

Siemens Sverige

Sektorer

Industry

Divisioner

- Drive Technologies
- Industry Automation
- Building Technologies
- Mobility
- Lighting (OSRAM)
- Industry Solutions



Energy

Divisioner

- Fossil Power Generation
- Renewable Energy
- Oil & Gas
- Energy Service
- Power Transmission
- Power Distribution



Healthcare

Divisioner

- Imaging & IT
- Workflow & Solutions
- Diagnostics



Order: 21 000 MSEK Omsättning: 20 800 MSEK Investeringar: 878 MSEK Anställda: ~4 900 p

What we offer our customers

Technologies:

Building Automation



Security



Fire Safety



Power supply and installation equipment



Services:

Life Cycle Services



System Integration



Monitoring Services

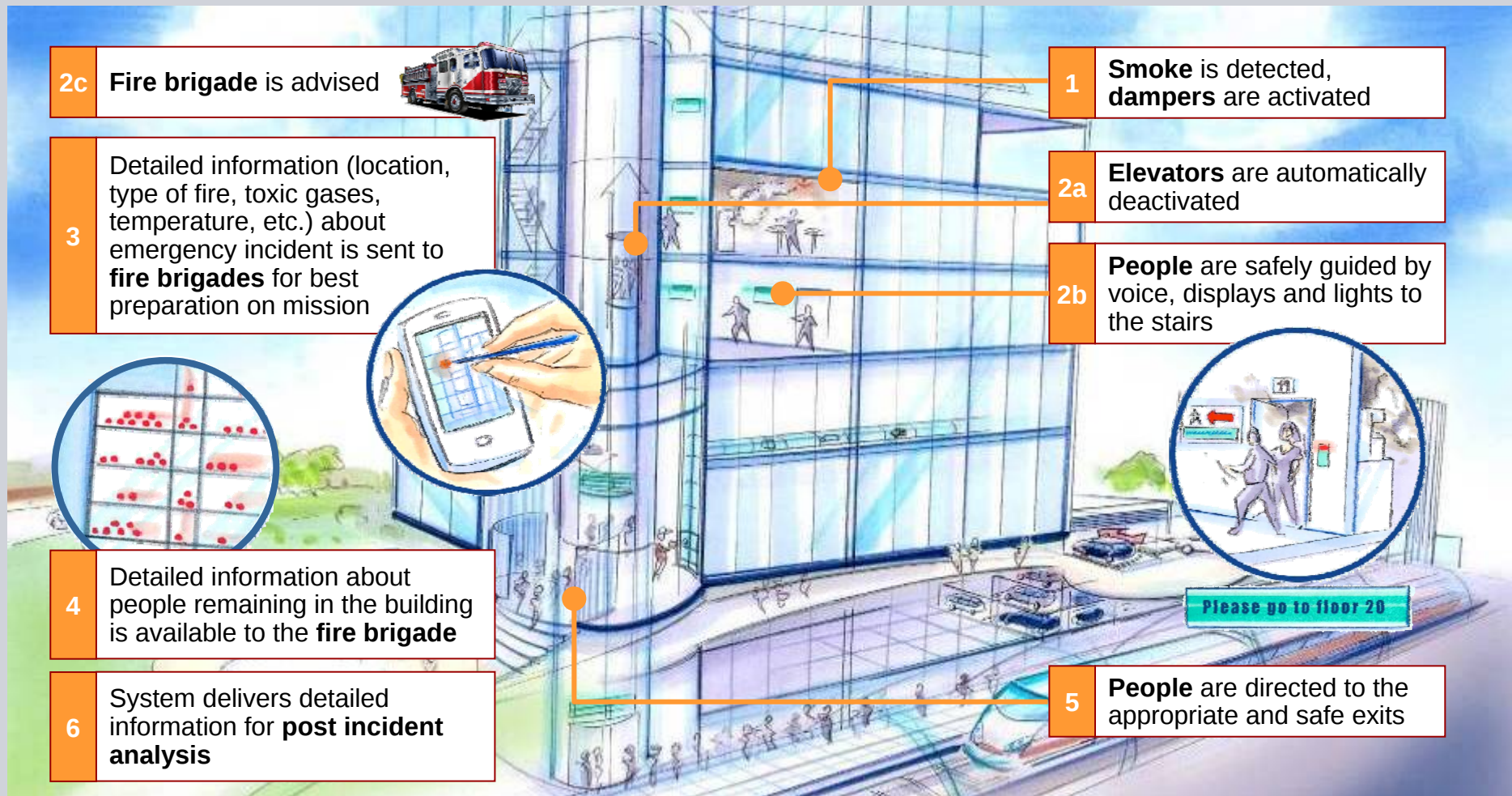


Energy Efficiency Solutions



Example Danger Management

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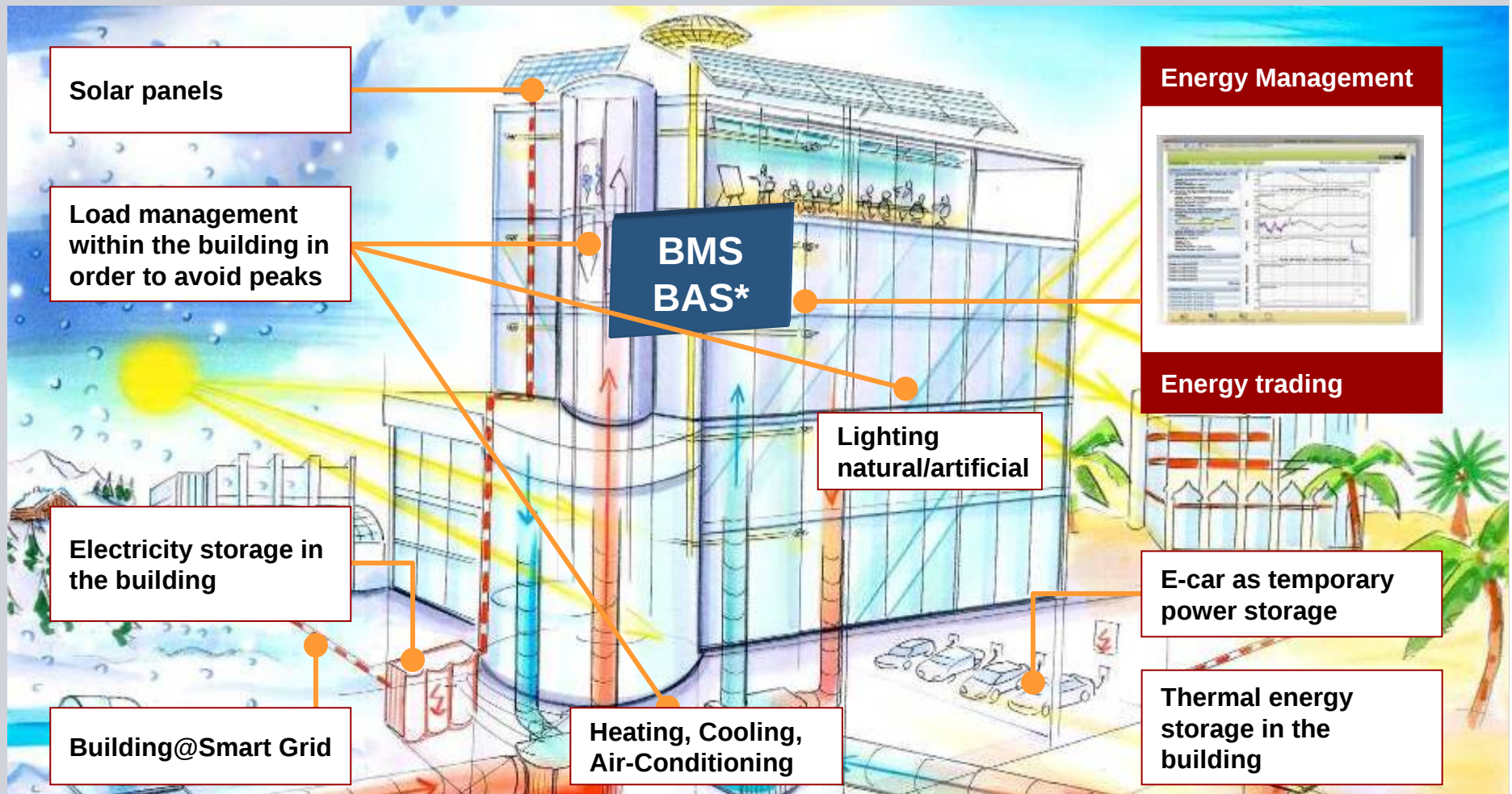


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Example Energy Management

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* BEMS: Building Energy Management System → BAS: Building Automation System © Siemens AB 2011. Alla rättigheter förbehålles.

Några svåra frågor som fastighetsägare och fastighetsförvaltare ställs inför

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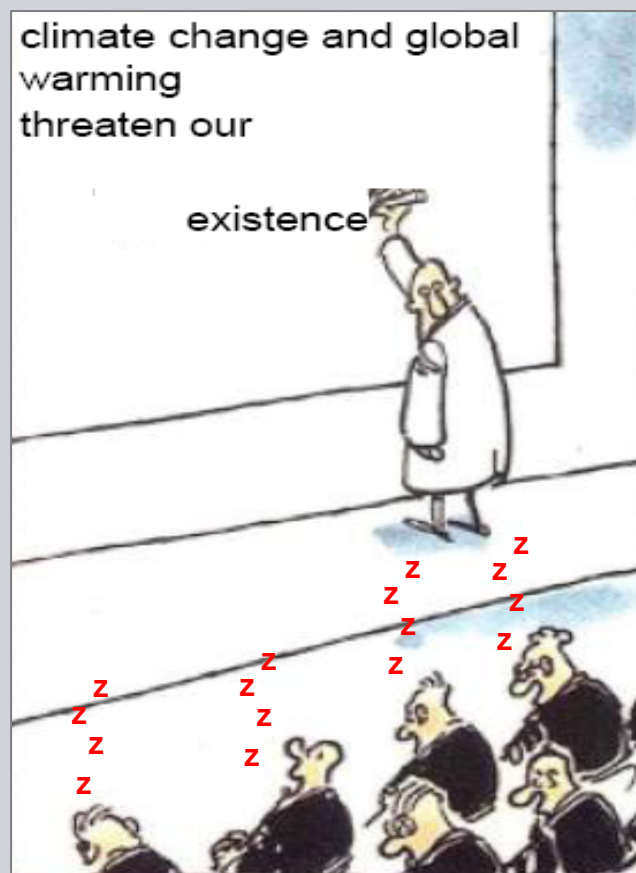
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Klimatförändringar och global uppvärmning

Inte en ny fråga, men nu med rätt fokus!

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Ingen miljömedvetenhet utan ekonomiska fördelar



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Möjligheter till energibesparing I varje byggnad – i varje verksamhet

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Sjukhus



20-30 %

Skola



20-30 %

Hyreshus



20 %

Hotell



30-40 %

Butik/galleria



30-40 %

Kontor



20-30 %

Smarta byggnader?

Overstretched grids



More transparency for consumption/ cost



Millions of e-cars



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Smarta byggnader?

Over - **Energieffektiva**

- Styrbara utifrån elnätets prissignaler
- Laddinfrastruktur för elfordon
- Småskalig produktion
- Energilagring

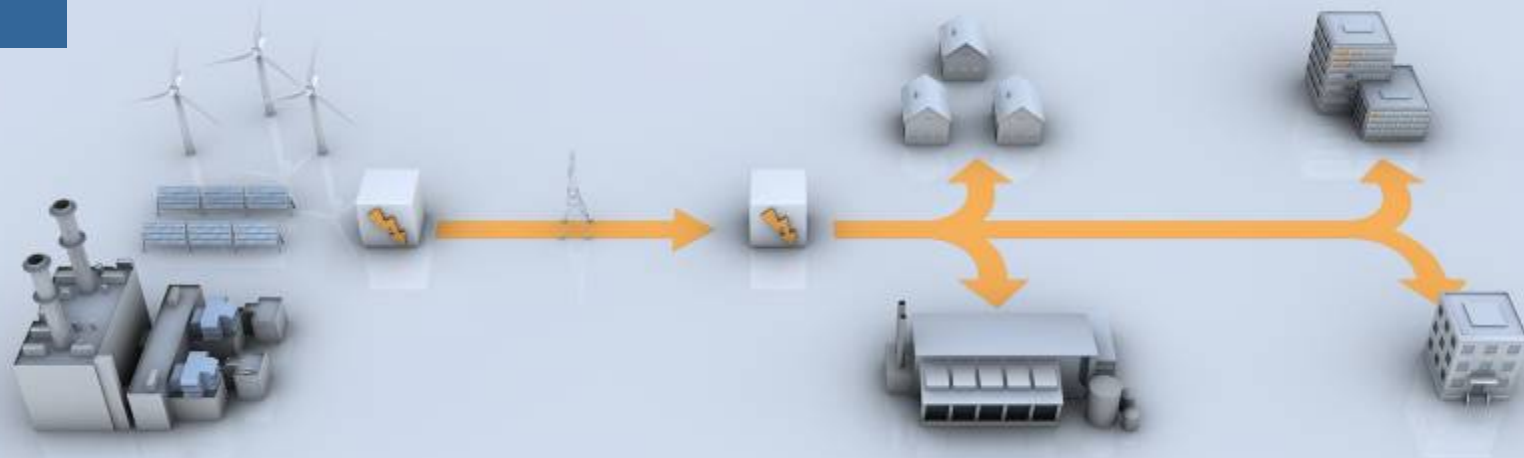
- **Aktiva konsumenter**
 - Visualisering

- Möjliga att integreras i överliggande DMS-system

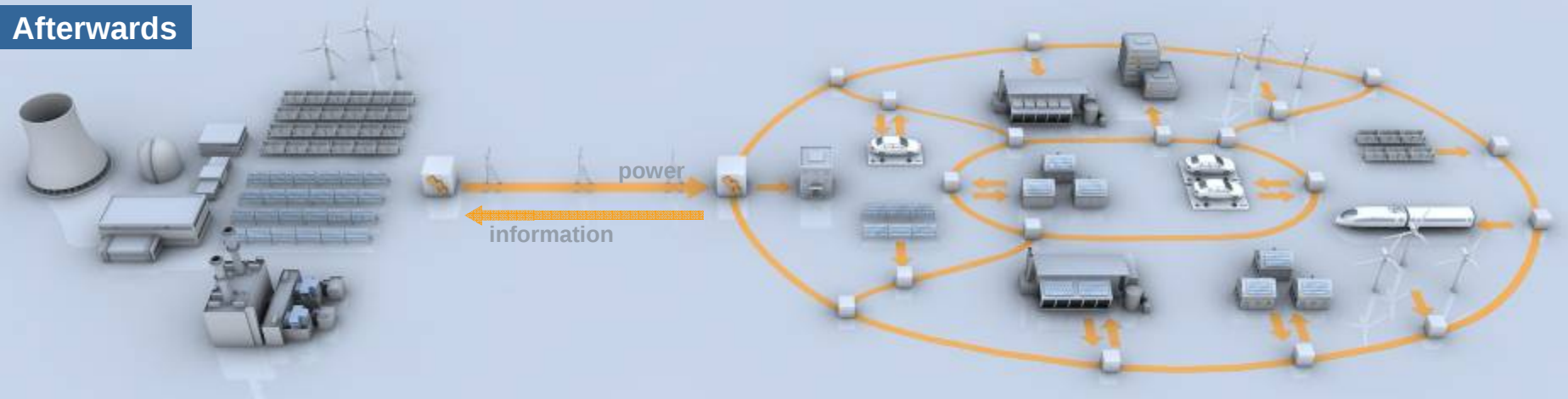
Our customer's world is in transformation – Consumption will follow load

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Before



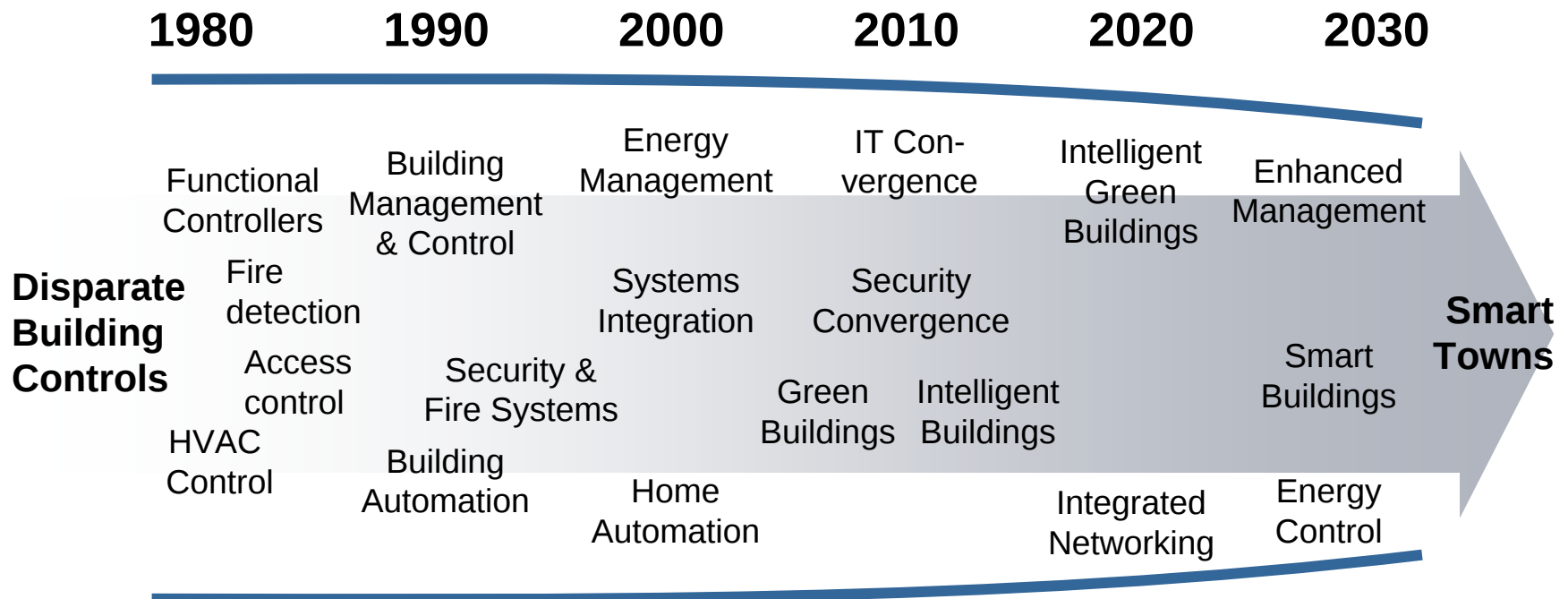
Afterwards



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From individual subsystems to integrated building management and to smart building within smart grid

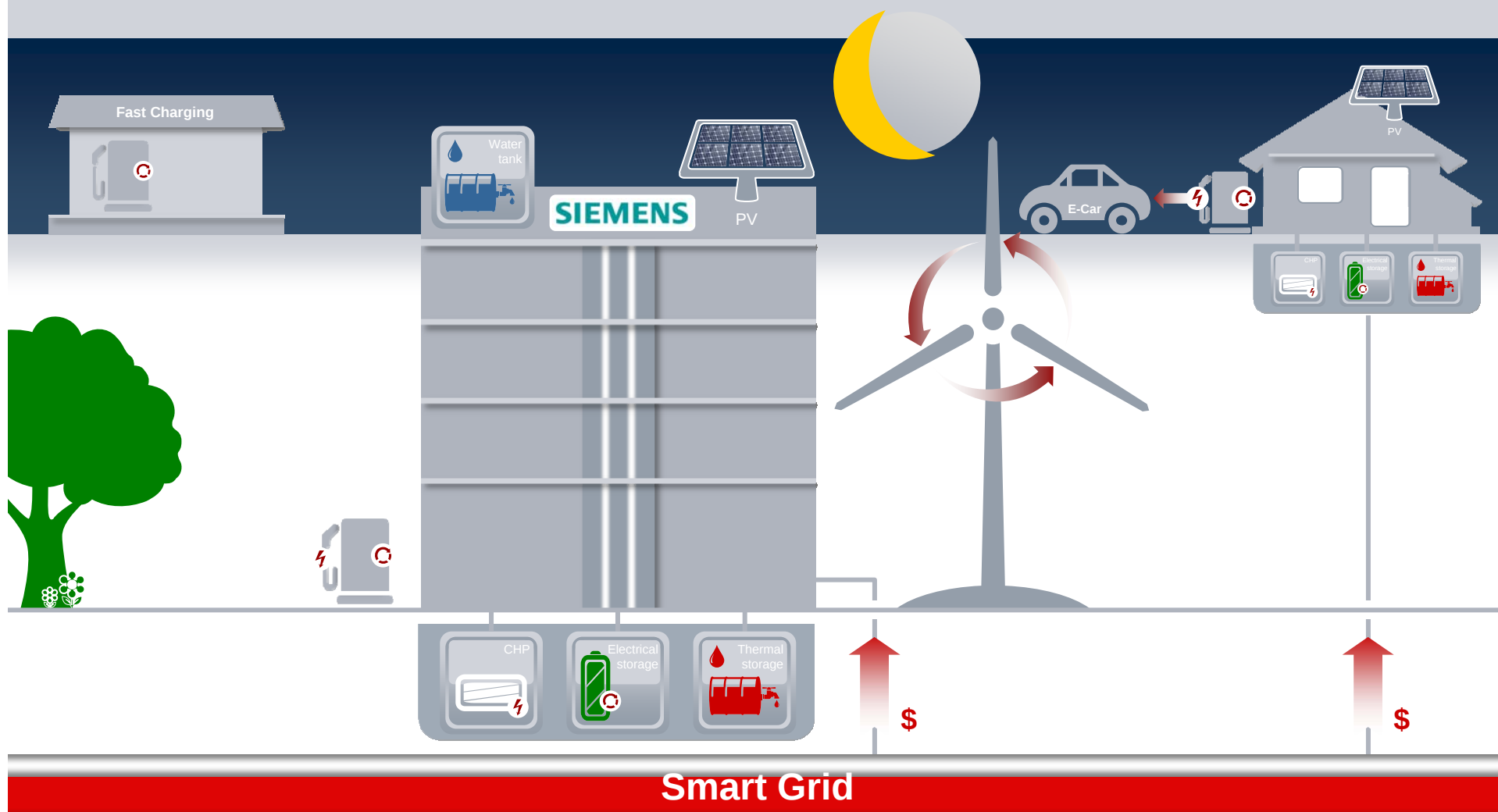
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The need for cross-linking disciplines and the need for constant availability of building data affects the growing together of building automation, safety and security systems as well as the IT technology.

Example 'Smart Building in a Smart Grid'

Low energy costs

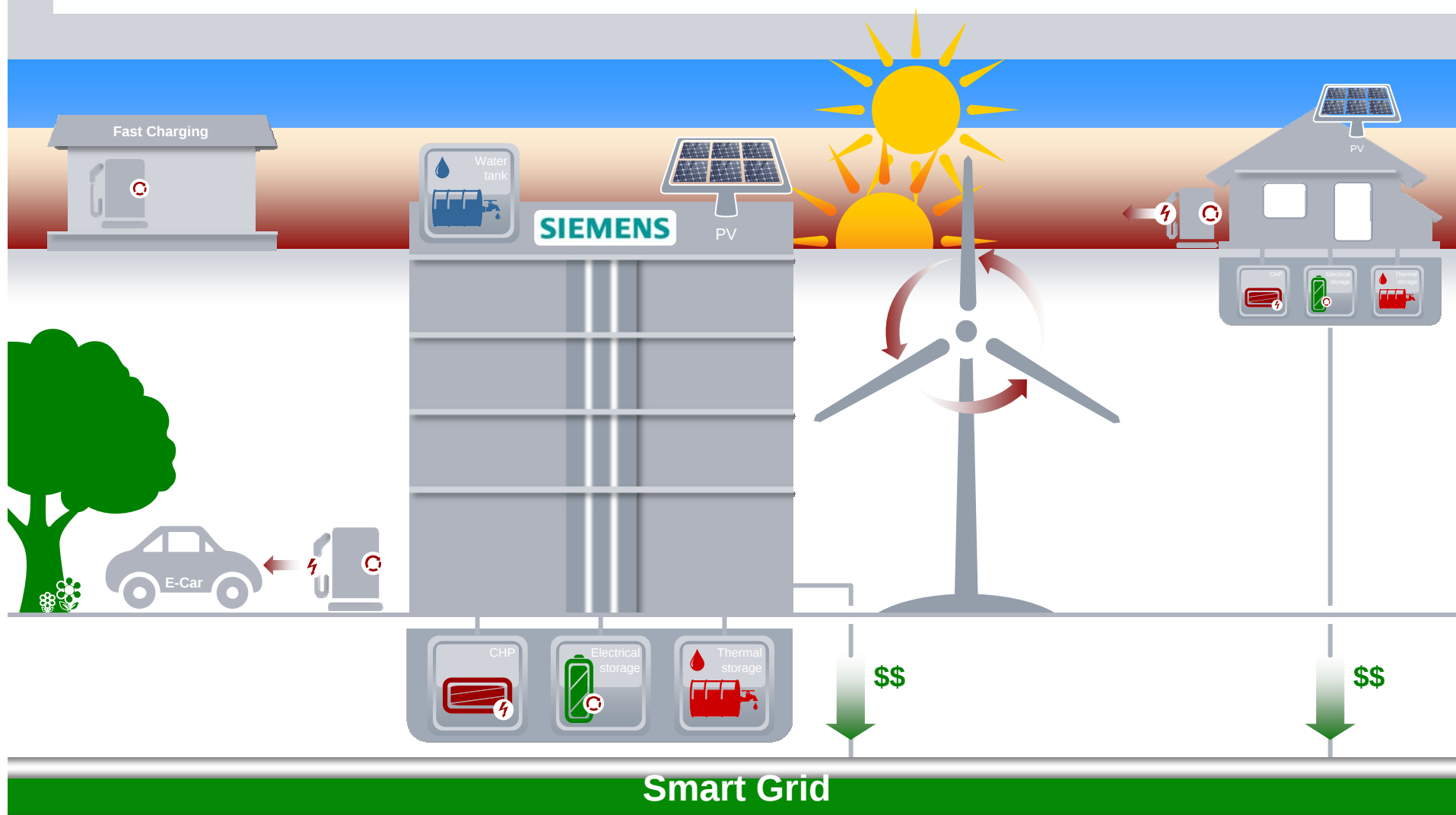
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Example 'Smart Building in a Smart Grid'

High energy costs

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Drivkrafter för ett smart nät

Internationellt

- Miljö- och klimatproblematik
- Kraftigt åldrad nätinфраstruktur
 - Leveranssäkerhet
 - Stora investeringar
- Integration av förnyelsebar elproduktion
 - Balansreglering av intermittent produktion
 - Massintroduktion av elbilar
- Ökad elanvändning
- Aktivare konsumenter med vilja att agera **"prosumers"**

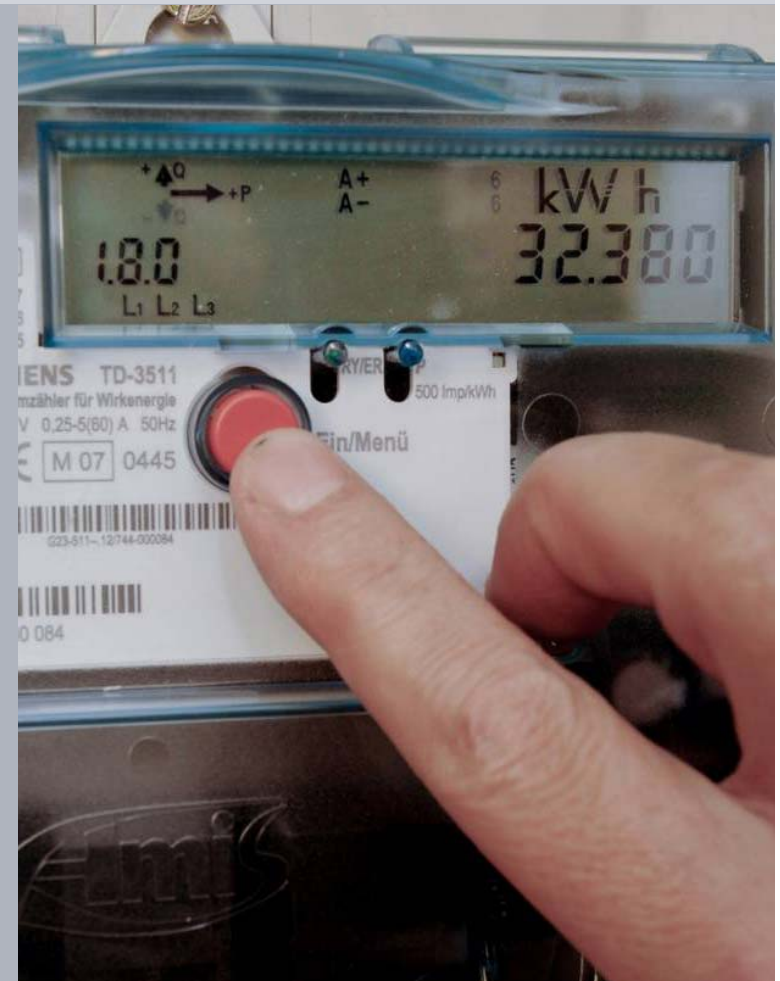
Sverige

- Miljö- och klimatproblematik
(20-20-20 målen)
- Åldrad nätinфраstruktur (Stämmer delvis)
 - Leveranssäkerhet (Ej problem)
- Integration av förnyelsebar elproduktion
 - Balansreglering (Ej stort problem)
- Massintroduktion av elbilar
- Ökad elanvändning (svag ökning)
- Aktivare konsumenter med vilja att agera **"prosumers"**

Our smart grid portfolio

Smart consumption

- Building Management System
- Building Energy Management System (BEMS)
- Demand response
- Energy services for buildings
- Smart metering solutions



Questions and answers



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A photograph of a modern hospital corridor. In the foreground, a woman in a white lab coat and a man in a grey blazer are walking towards the camera. In the background, another man in a white lab coat is walking away, and a man in a grey shirt and dark pants is walking towards the camera. The corridor has large windows on the right side, a glass railing on the left, and a potted plant on the right. A hospital bed is visible on the far right.

Thank You for your attention