



September 11, 2009, Zurich, Switzerland

Beyond the cycle

Positioned for long-term leadership

Part 1: Joe Hogan, Peter Leupp

Safe-harbor statement

This presentation includes forward-looking information and statements including statements concerning the outlook for our businesses. These statements are based on current expectations, estimates and projections about the factors that may affect our future performance, including the economic conditions of the regions and industries that are major markets for ABB Ltd. These expectations, estimates and projections are generally identifiable by statements containing words such as “expects,” “believes,” “estimates,” “targets,” “plans” or similar expressions. However, there are many risks and uncertainties, many of which are beyond our control, that could cause our actual results to differ materially from the forward-looking information and statements made in this presentation and which could affect our ability to achieve any or all of our stated targets. The important factors that could cause such differences include, among others, business risks related to the financial crisis and economic slowdown, costs associated with compliance activities, the amount of revenues we are able to generate from backlog and orders received, raw materials prices, market acceptance of new products and services, changes in governmental regulations and currency exchange rates and such other factors as may be discussed from time to time in ABB Ltd’s filings with the U.S. Securities and Exchange Commission, including its Annual Reports on Form 20-F. Although ABB Ltd believes that its expectations reflected in any such forward-looking statement are based upon reasonable assumptions, it can give no assurance that those expectations will be achieved.

Agenda

- ABB: Beyond the cycle
- Changing the way energy is supplied
- LUNCH
- The next level of industrial efficiency
- The emerging market opportunity
- Summary and Q&A

ABB: Beyond the cycle

Positioned for long-term leadership

ABB's markets face an historic, long-term shift in demand

- Climate change and rising energy demand have risen to the top of political, economic agendas
- This fuels increasing demand for renewable energies and industrial efficiency
- Emerging markets, rapidly outgrowing G7 economies, will play a decisive role in both areas
- Infrastructure spend will increase to keep pace
- Technology enables new ways to deliver and use power efficiently and reliably

ABB is positioned for long-term leadership in this new market reality

Market forces are converging towards a low-carbon, high-efficiency economy

Market forces

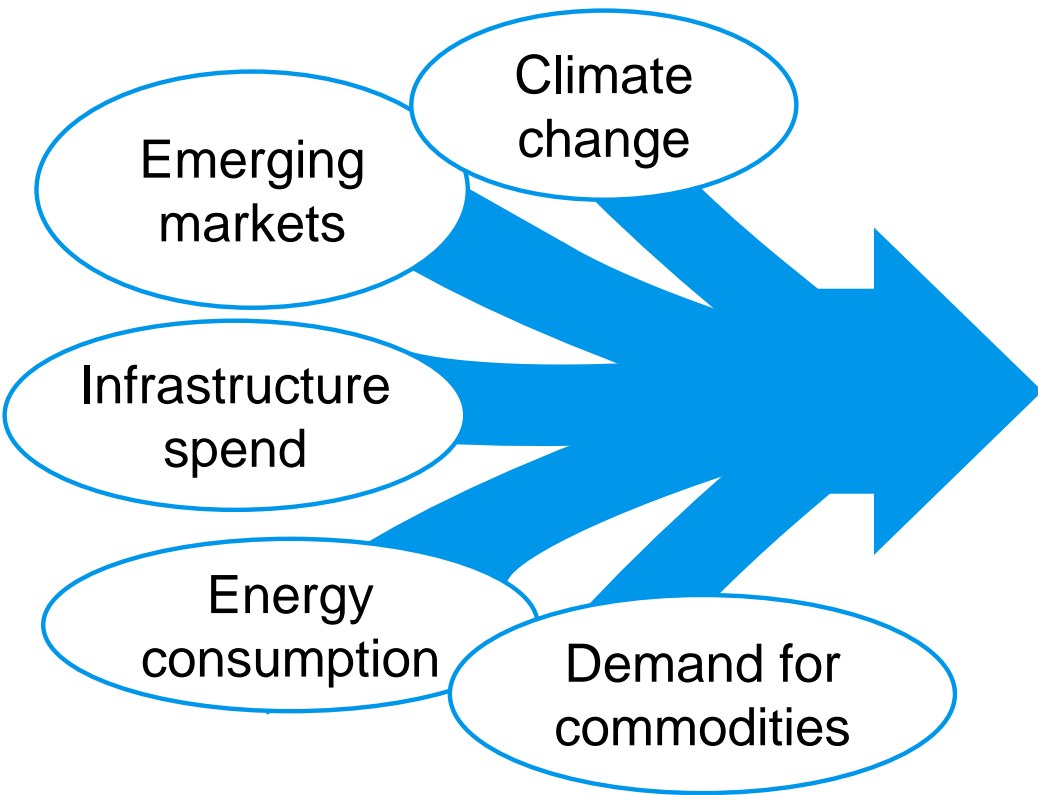


Chart 5

ABB's businesses take advantage of these opportunities

Market forces

ABB strengths

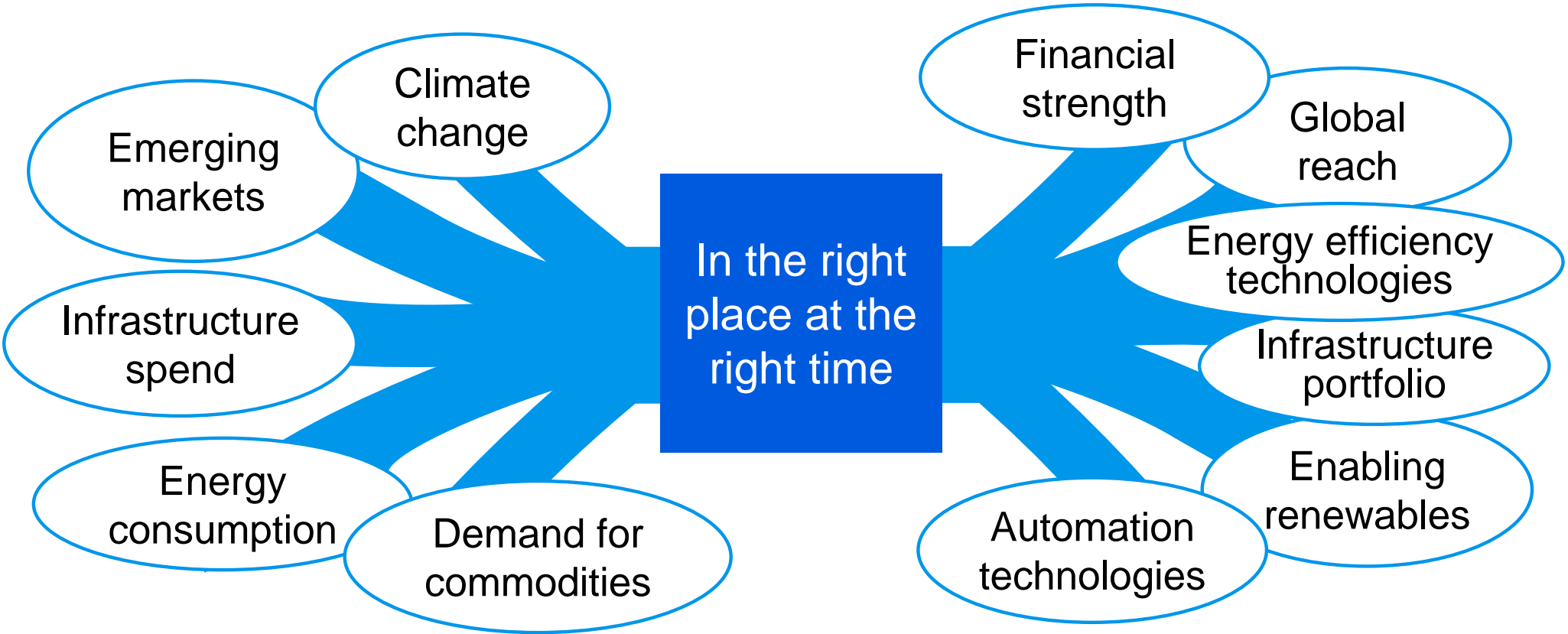
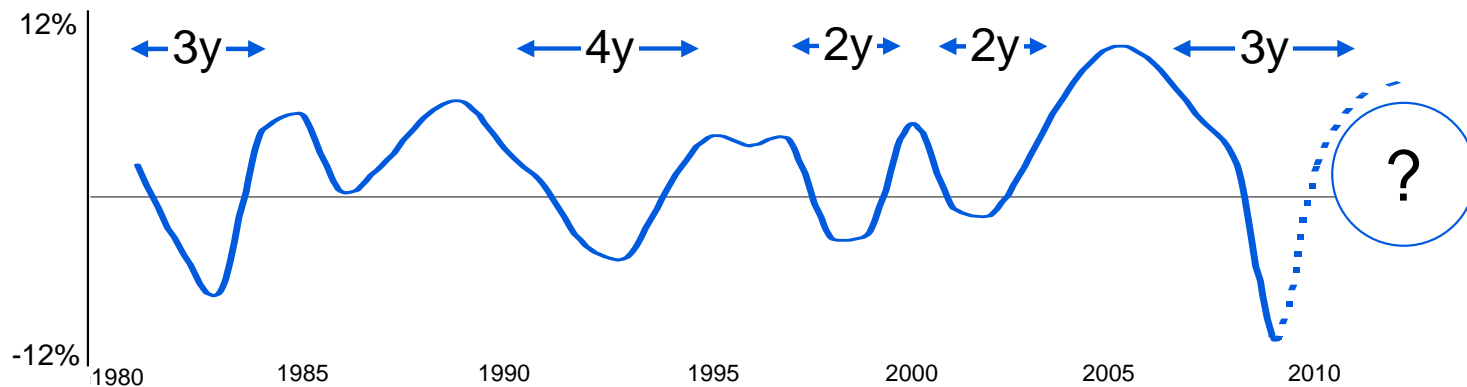


Chart 6

What's new this time around?

Industrial capex 1980-2012



Key differences in today's downturn

- Widespread acceptance of climate change and unprecedented willingness to support renewables
- Huge focus on infrastructure in emerging and developed areas
- Strong emerging country rebound on solid financial footing
- Potential commodity inflation as economies rebound

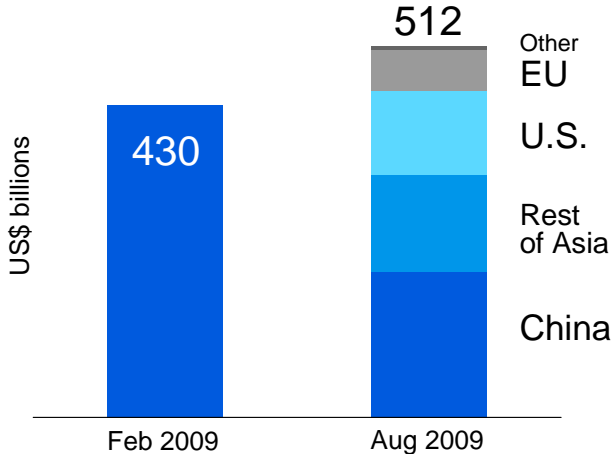
These differences are creating opportunities for ABB

What's new: The global economic crisis has sparked massive stimulus packages aimed at climate change

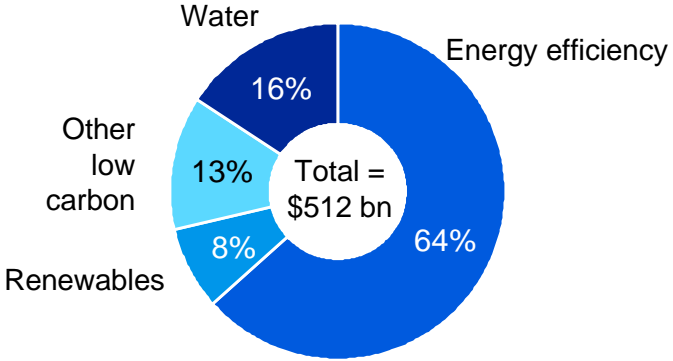
Example: Fiscal stimulus spending aimed at climate change investments

Source: HSBC, Climate Change, August 2009

Planned climate change investment growing



Investments by type

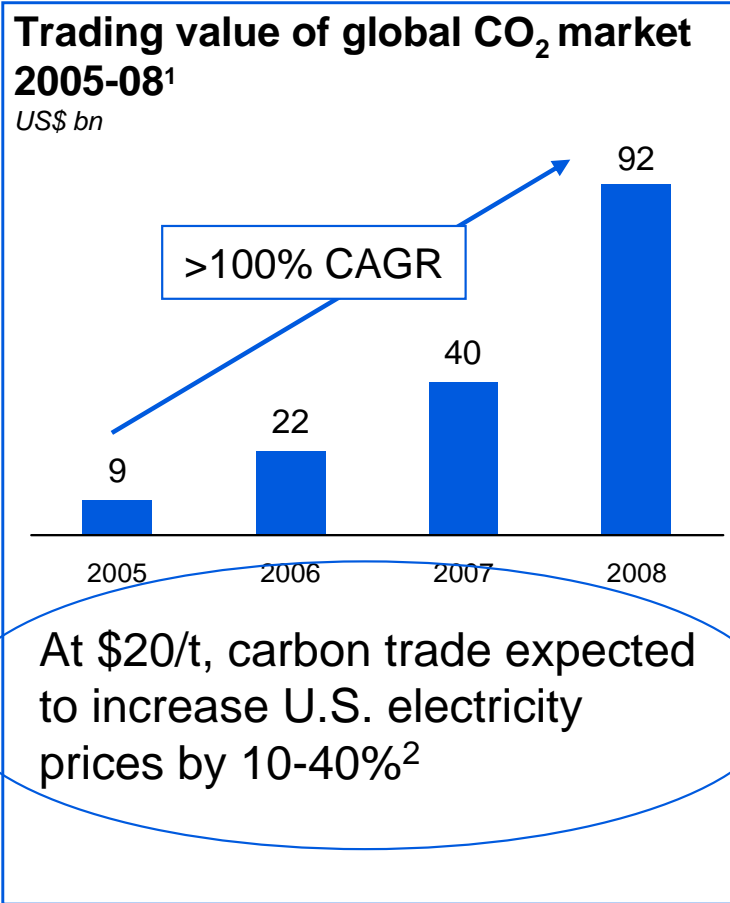


- Planned climate-change investments up 20% since Feb 09
- 50% aimed at power grid, renewables and rail
- >50% in China & rest of Asia
- G8 commits to cut CO₂ emissions 80% by 2050
- China to include carbon targets in national development programs

Chart 8



What's new: Climate change is driving carbon schemes, energy prices heading higher



¹ McKinsey 2009; ² Wall Street Journal Feb 27 2009, Business Week March 5 2009

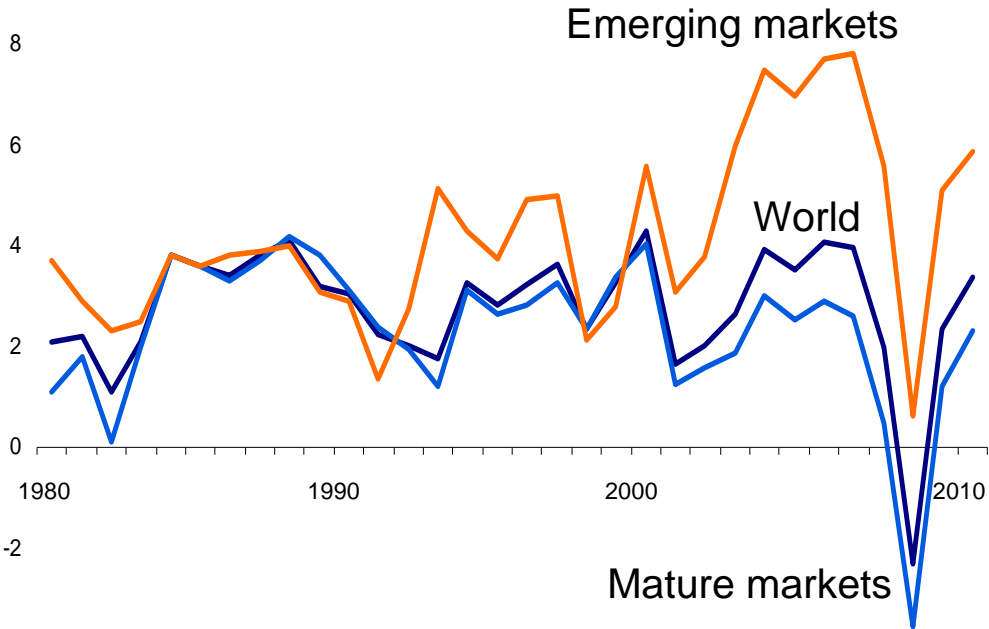
Examples of carbon taxes

- Sweden – per-ton tax on fossil fuels
- U.K. – fuel tax
- Canada – gasoline tax (British Columbia)
- U.S. – electricity tax, industrial carbon emission tax (municipal level only)

Cap-and-trade schemes	Targets
EU	21% vs 2005 by 2020
U.S.	83% vs 2005 by 2050
Australia	60% vs 2000 by 2050
New Zealand	1990 level by 2012

Emerging markets are leading the rebound, widening the growth gap

Real GDP growth 1980-2011
 % IMF estimates



- Emerging economies growing >3x mature economies

Forecast Real GDP growth 2010
 %

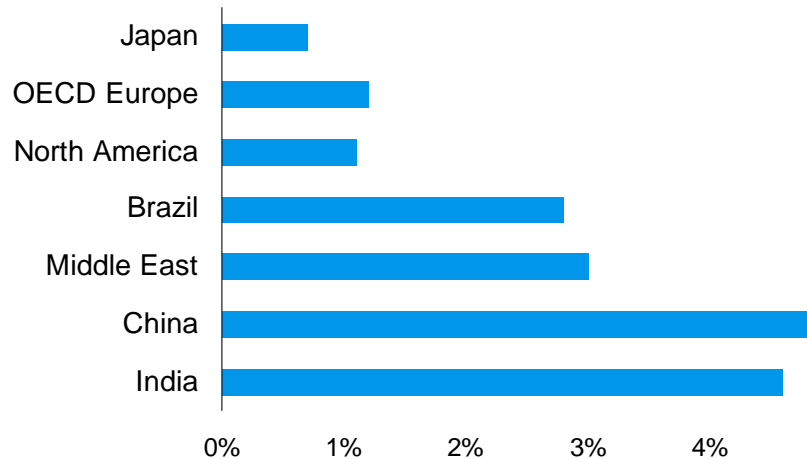
China	10.1%
India	7.0%
Egypt	4.3%
Brazil	3.9%
U.S.	1.8%
EU	0.6%

Source: Global Insight

More than 50% of global CAPEX invested in emerging markets

Infrastructure growth driven by new capacity in emerging economies, refurbishment in mature markets

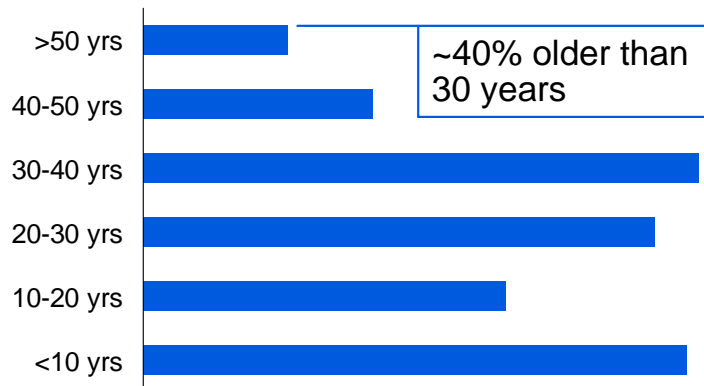
Electricity consumption growth/yr 2006-30
by country/region



- Electricity consumption to grow 2x faster than total energy to 2030
- Emerging market power demand grows up to 3x OECD

Requires the equivalent of 1 large fossil fuel power plant and all related infrastructure every week for the next 20 years

Age distribution of OECD power plants
2006

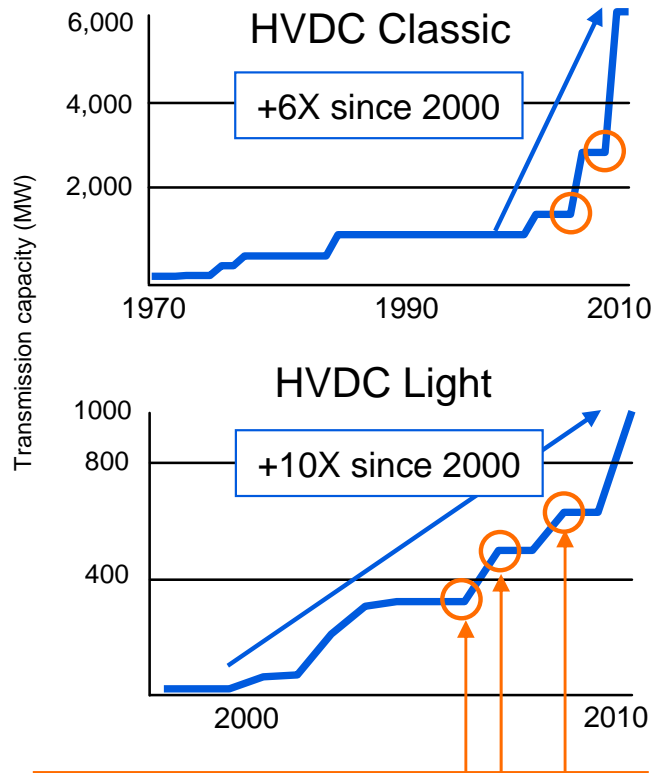


- Grid upgrades in mature markets will fuel significant further investments
- E.g., \$900 bn in T&D spend needed to upgrade U.S. grid 2010-2030*

* *Transforming America's Power Industry*, Brattle Group/Edison Foundation Nov 2008, incl forecast smart grid investments

What's new: Technologies that enable integration of renewables

Example: HVDC



Innovation in thyristors, valves, heat dissipation enable long-distance power transmission, renewables integration

Example: Inverters

- 3-phase solar inverter
- Simplified grid connection
- Global lifecycle service



Example: Generators

- Gearless wind generator for 1.5-3 MW
- High efficiency, low maintenance costs



Example: Circuit breakers

- Compact HV circuit breaker for wind applications



New products to meet the demand for more efficient and intelligent infrastructure

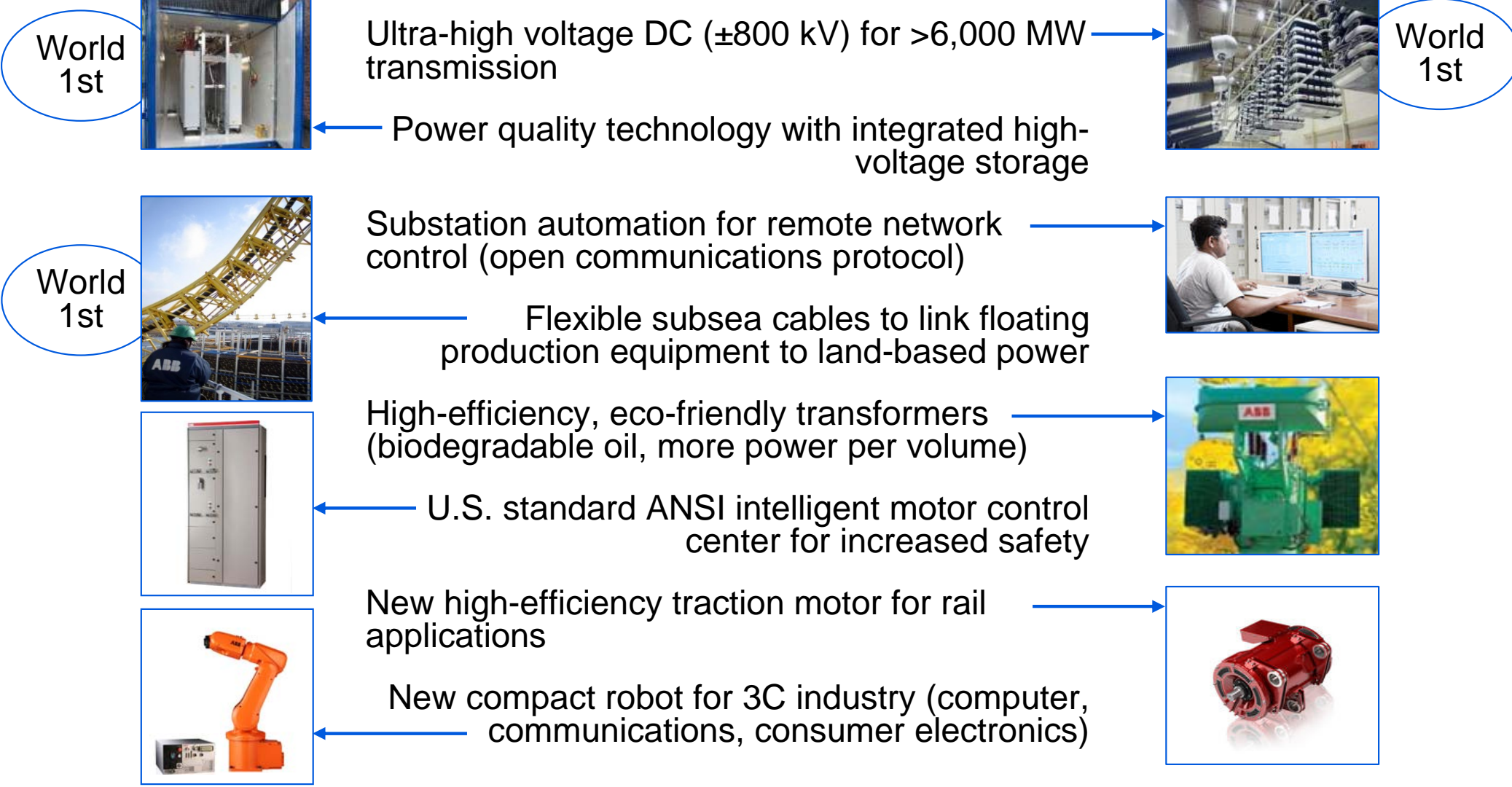


Chart 13



Evolution of the power grid poses opportunities and challenges

Smart transmission	Smart distribution
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- Connections to remote sources (hydro, wind, solar) ✓
- Stable integration of renewables ✓
- Market management, e.g., energy trading ✓
- Overall grid stability for multiple power sources ✓
- Low-loss transmission ✓

Integrate new sources of power, maintain grid stability, maximize existing power assets

✓ ABB leading in smart transmission

- Substation automation ✓
- Data management ✓
- Remote diagnostics ✓
- Real-time pricing
- Home automation
- Two-way power flow

Evolving market with a large potential

Smart distribution will vary by country/region



Energy efficiency already plays a key role in ABB revenues today

Share of total ABB revenues generated from demand for energy efficiency

Based on 2008 revenues

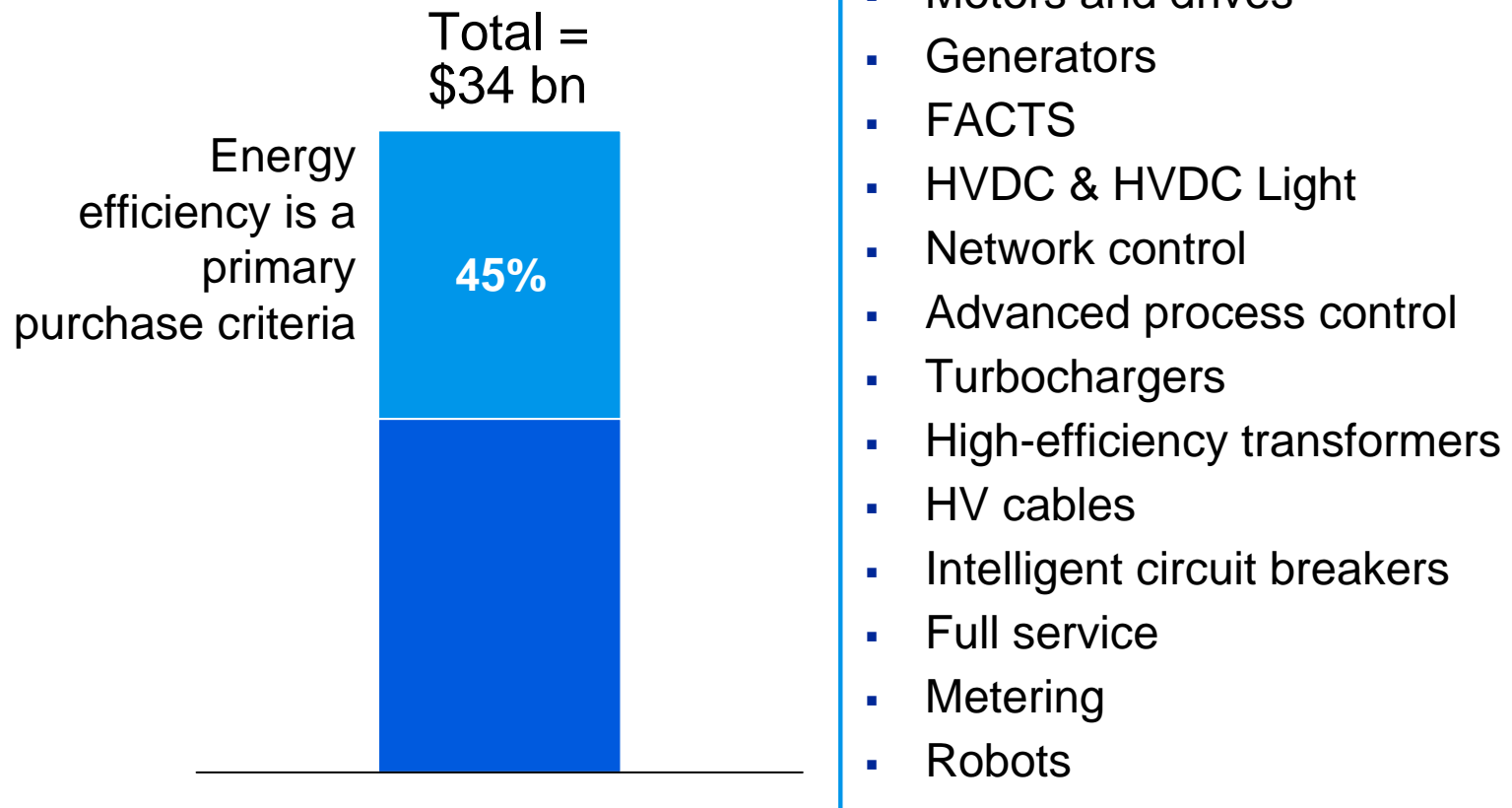


Chart 15

As energy prices rise, efficiency will become an even more important purchase criterion

Share of total ABB revenues generated from demand for energy efficiency

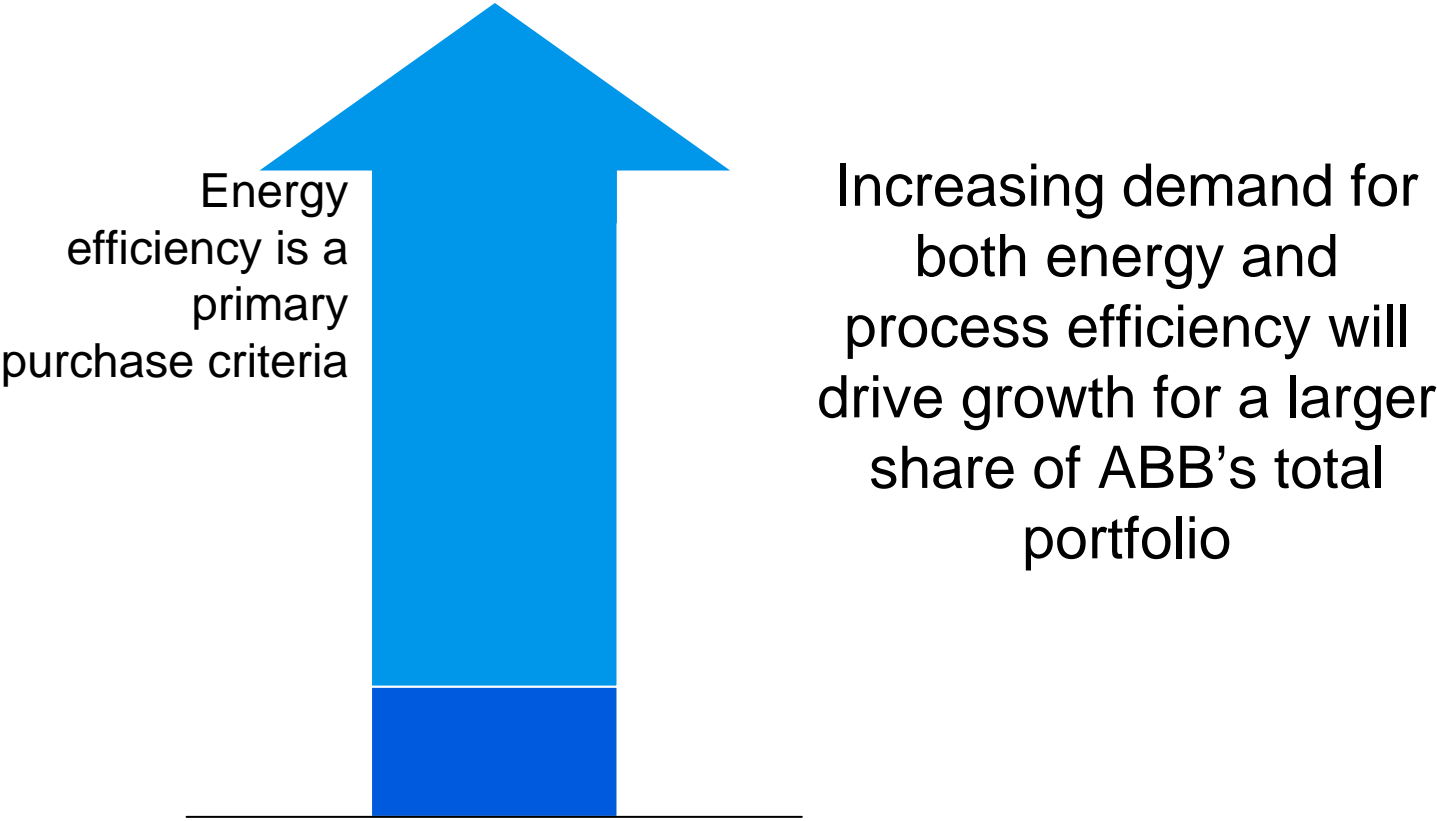


Chart 16

ABB's power and automation businesses are converging across many infrastructure industries

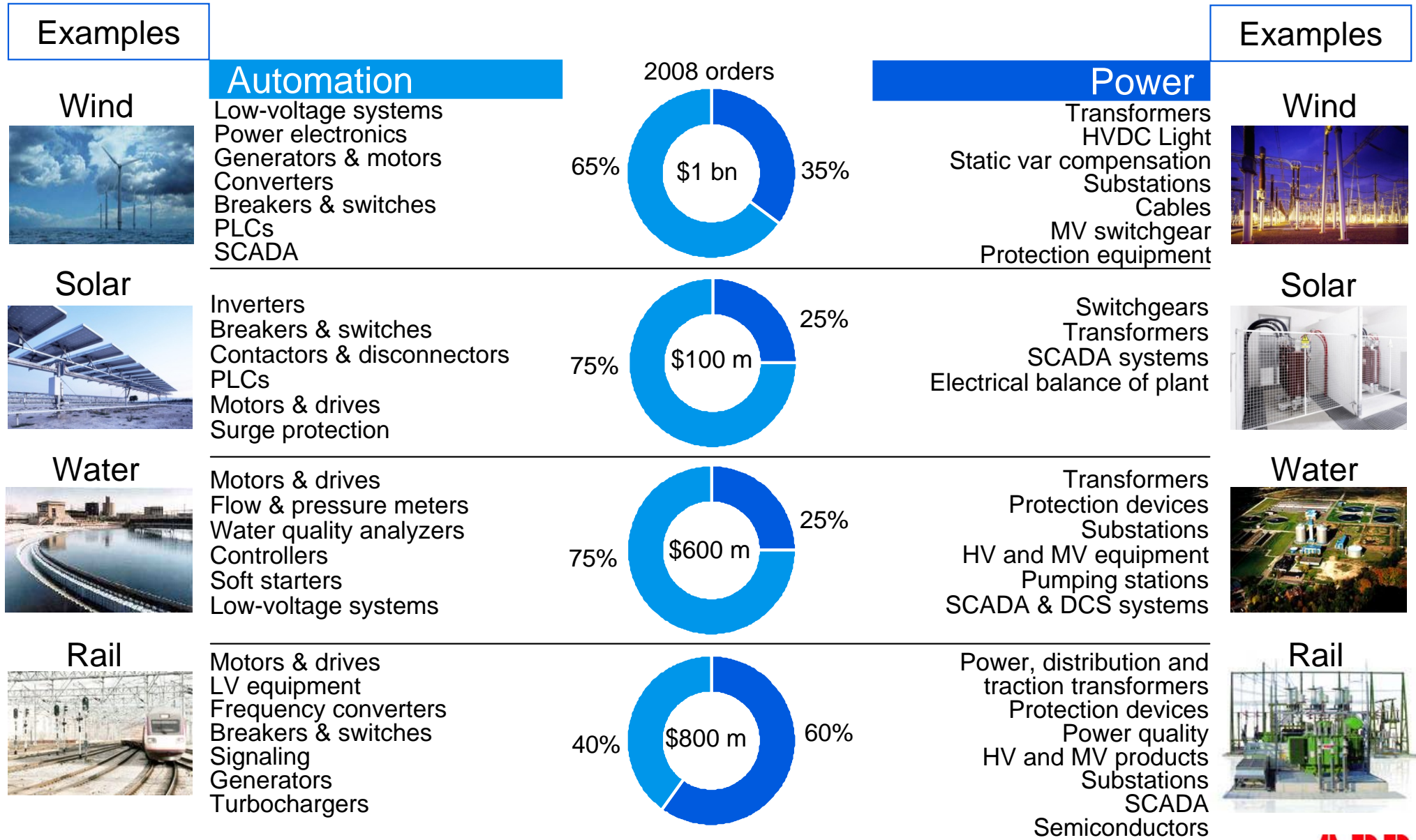


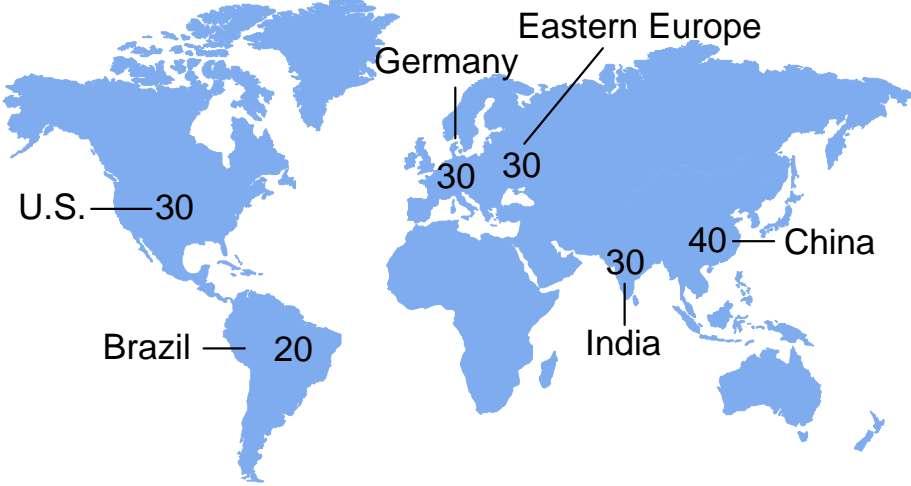
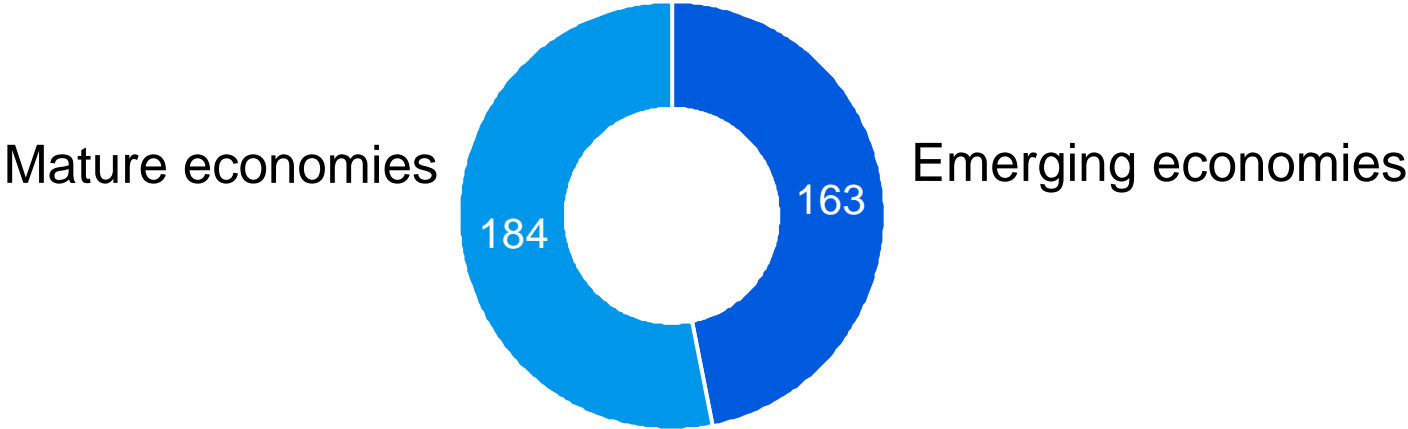
Chart 17

ABB's global reach is the most balanced in the sector

Advantages for both growth and cost

No. of operating units with more than 50 employees

By region, 2008



No. of units in selected countries/regions

ABB is playing in the right markets with the right offering for long-term growth

- ABB is a high-tech infrastructure company
- Power and automation are the right markets to be in
- Our offerings cover the whole value chain from power supply to consumption
- We have a strong footprint in high-growth emerging markets
- ABB has the technology and market leadership on which to build

Timing is open, but both private and public funding for energy efficiency, renewables and commodities development will increase – ABB in a great position

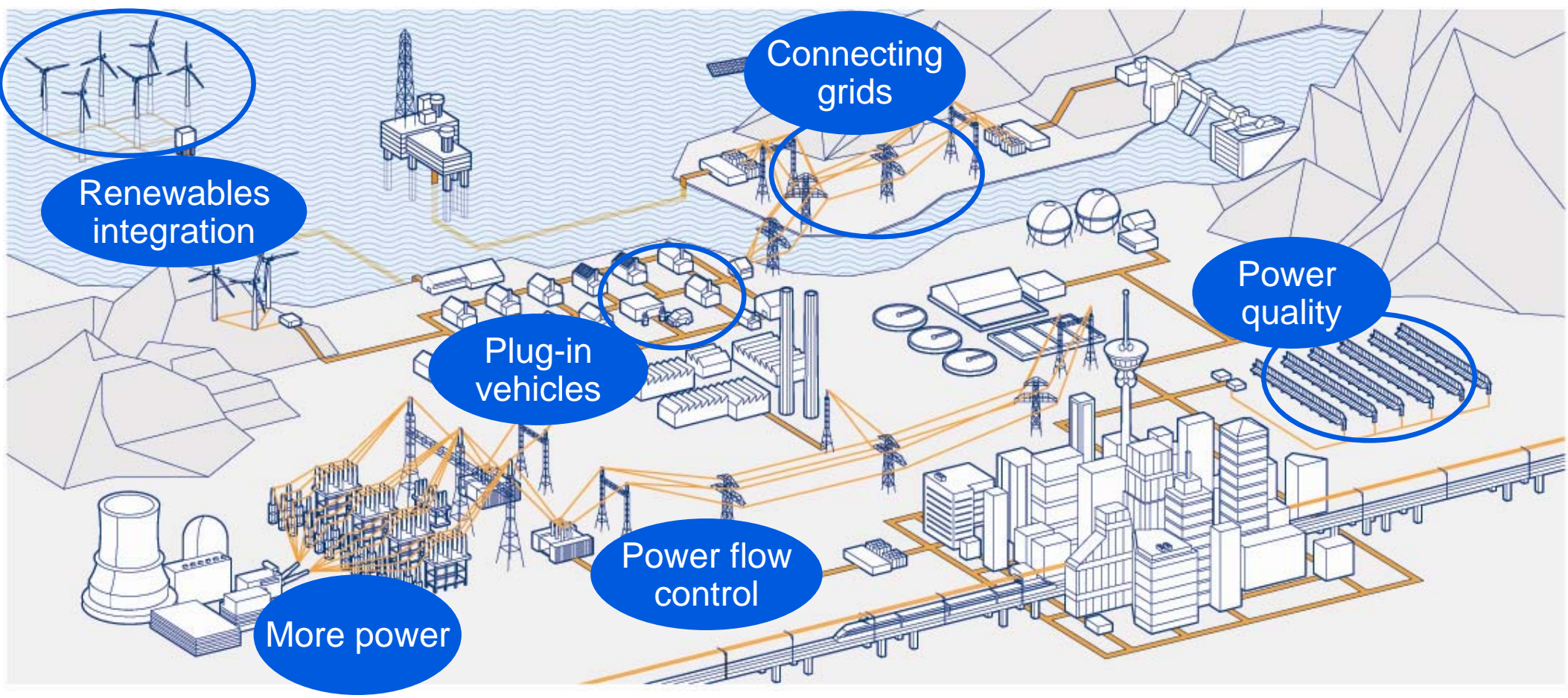
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LUNCH

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Balancing the need for more power with lower climate impact



The evolving grid is a significant opportunity for ABB

Enabling integration of renewables

- Adding sufficient capacity without disturbing the grid

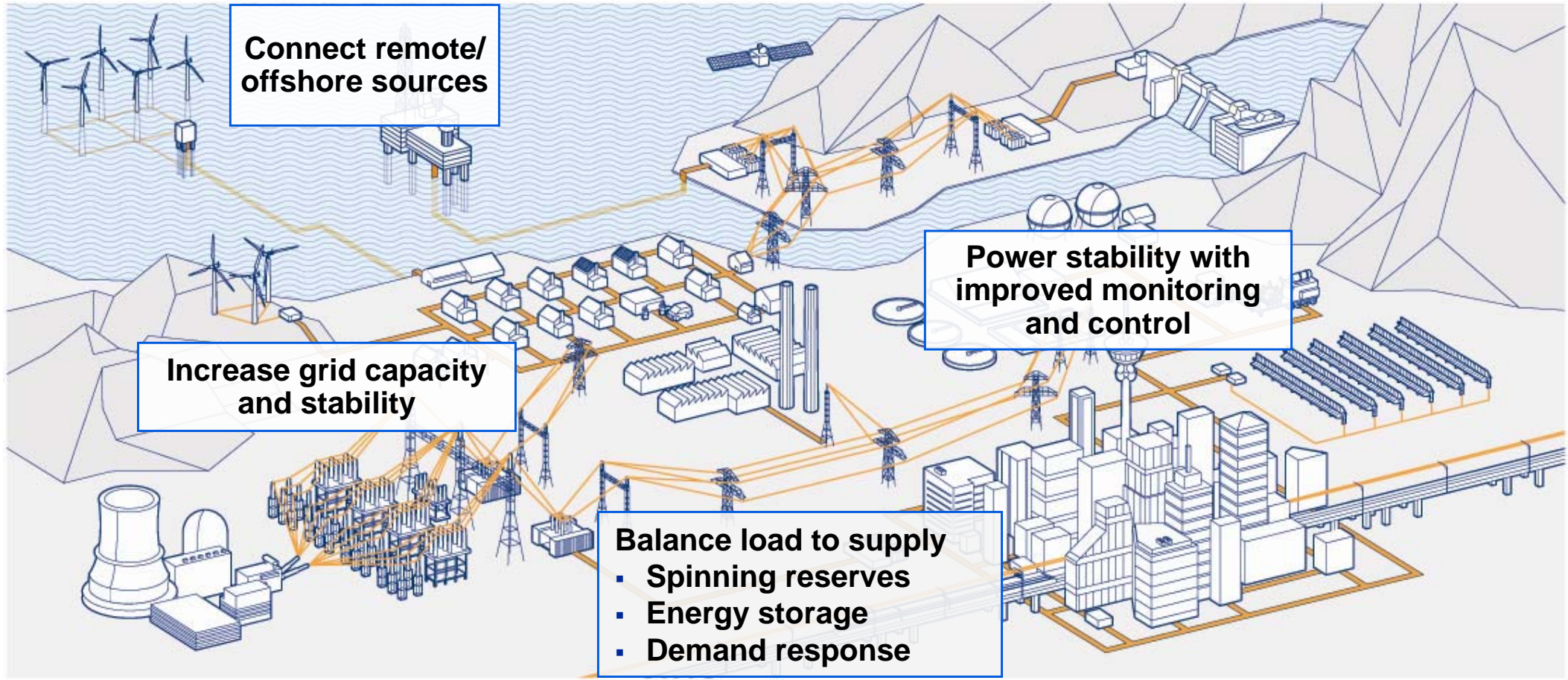
Reliability and efficiency

- Growing complexity
- Need to improve existing grid reliability
- More power over longer distances
- Interconnections

Emerging trends

- Demand response
- Integration of electric vehicles

Integration of renewables



Renewables: a fast-growing market opportunity

Global wind power market 2007-13

Source: MAKE Consulting March 2009

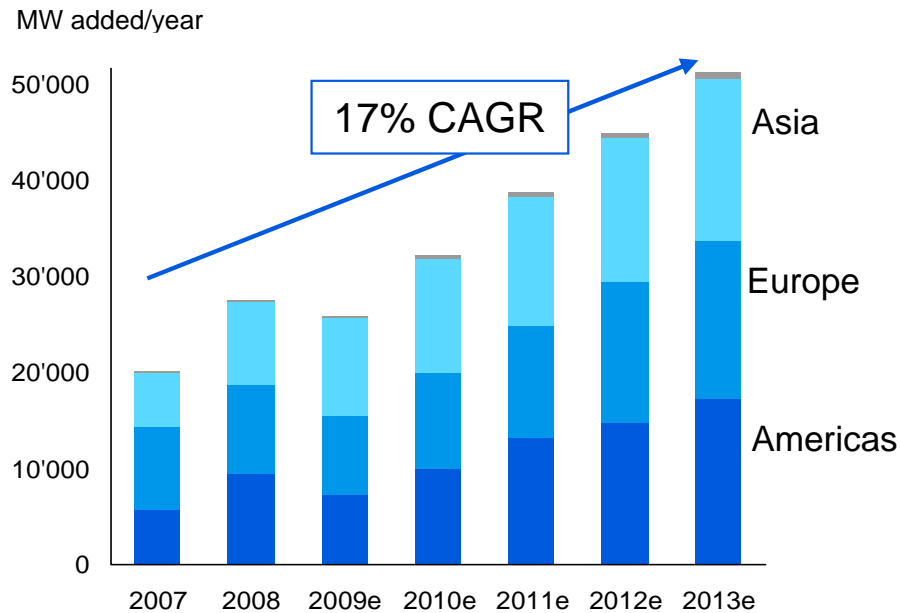


ABB is leading supplier of products and systems to onshore and offshore wind

Global photovoltaic market 2007-13

Source: EPIA 2009

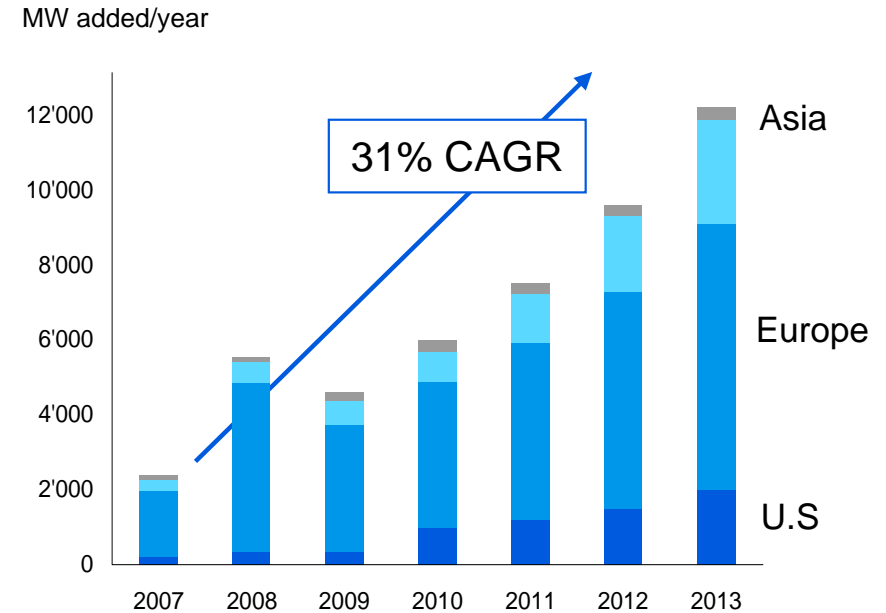


ABB adapting proven technology for solar applications

ABB technology opportunities in wind power

Full system approach across multiple businesses

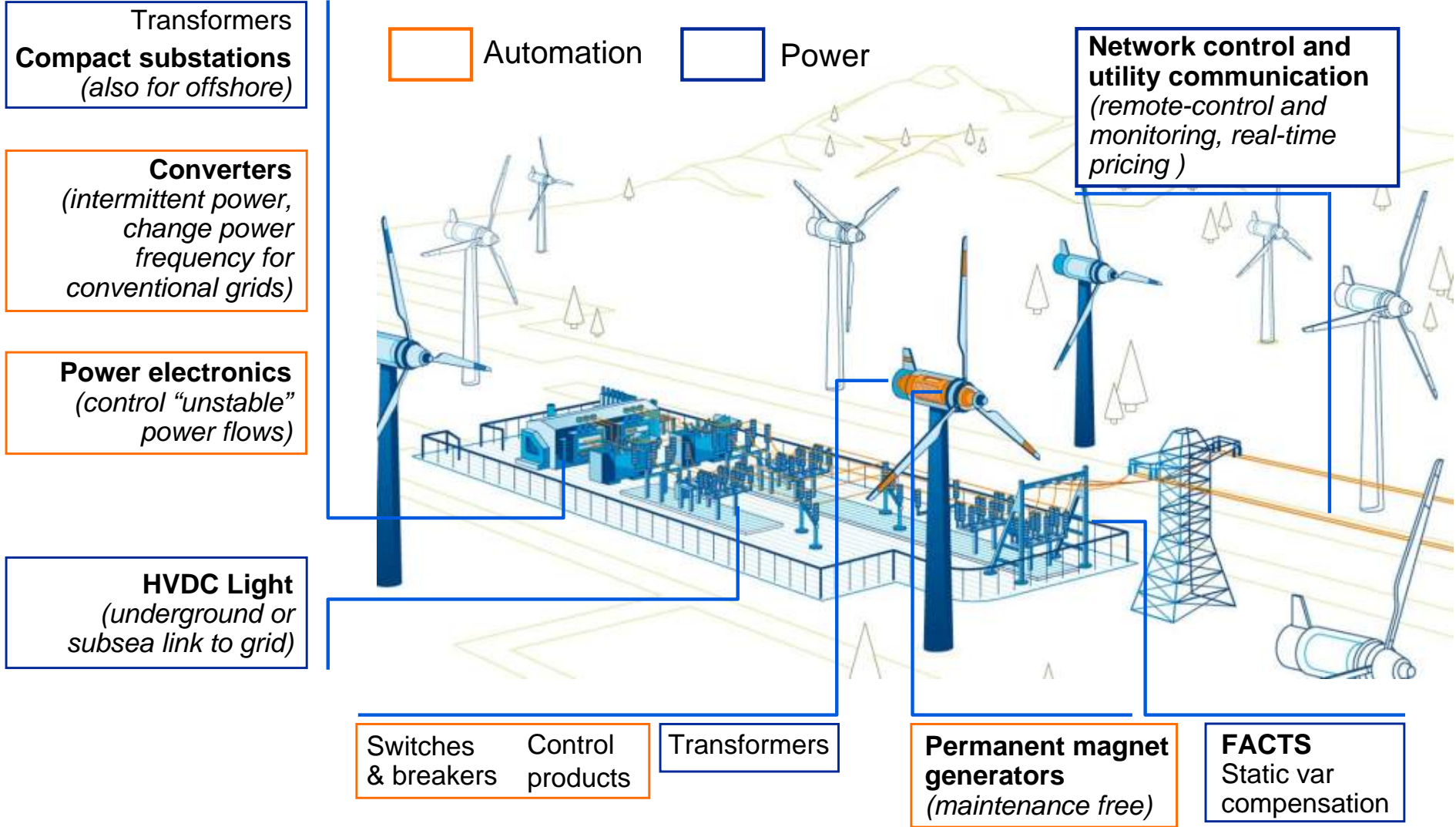
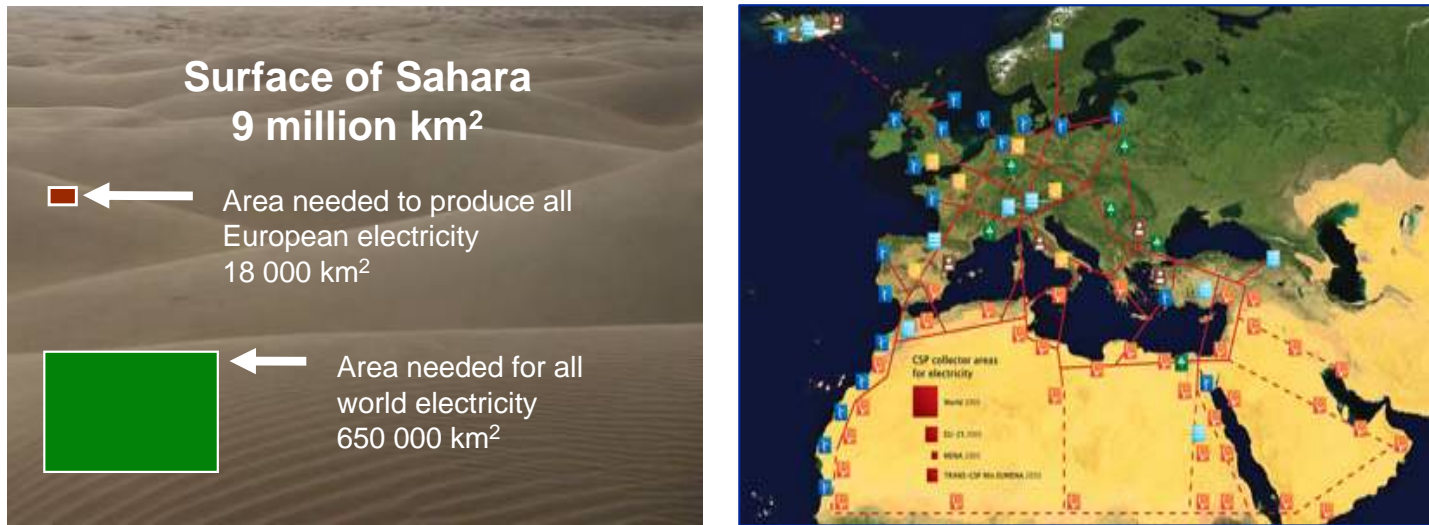


Chart 25

Desertec: Capturing solar power for Europe and Africa



Connecting large-scale solar generation e.g. deserts, with distant load centers via an efficient transmission system like HVDC

ABB's solar portfolio is aimed primarily at large-scale power generation

Solar inverter – The core of the PV power plant



ABB's new 3-phase solar inverter

- Launched Q2 2009
- Based on proven technology
- Targeted at large PV power plants, industrial / commercial buildings
- From 100 kW up to megawatts
- Global market ~ \$1.2 bn

Solar power plant and subsystems



Totana PV solar plant, Spain

- Produces 2.2 GWh/yr, displaces 2,200 t of greenhouse gas emissions/yr
- DC & AC cabinets, transformers, switchgears, equipment housing, system optimization, control and SCADA

Hydro will remain a key renewable and involves transmission distances of 2,000-3,000 km

Potential additional hydro capacity by country/region 2006-2030

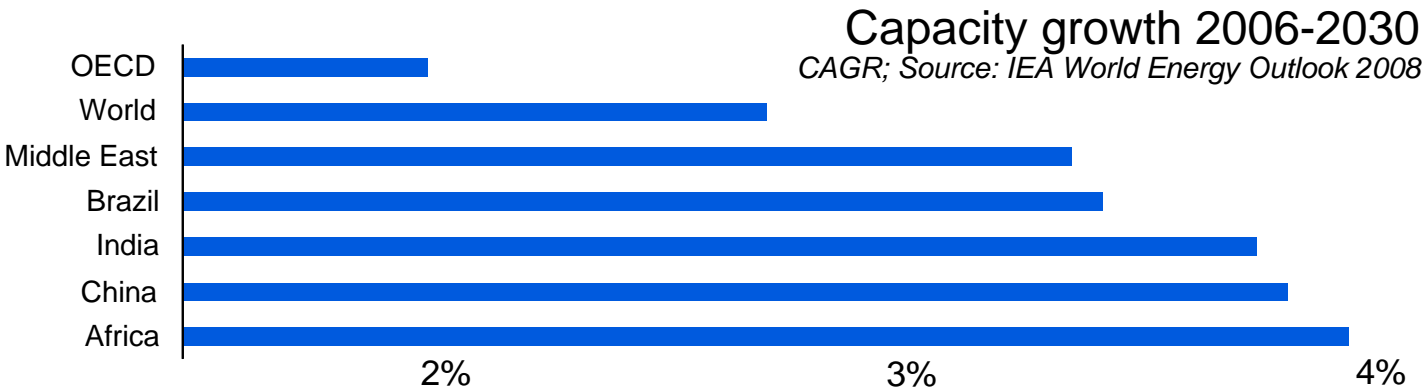
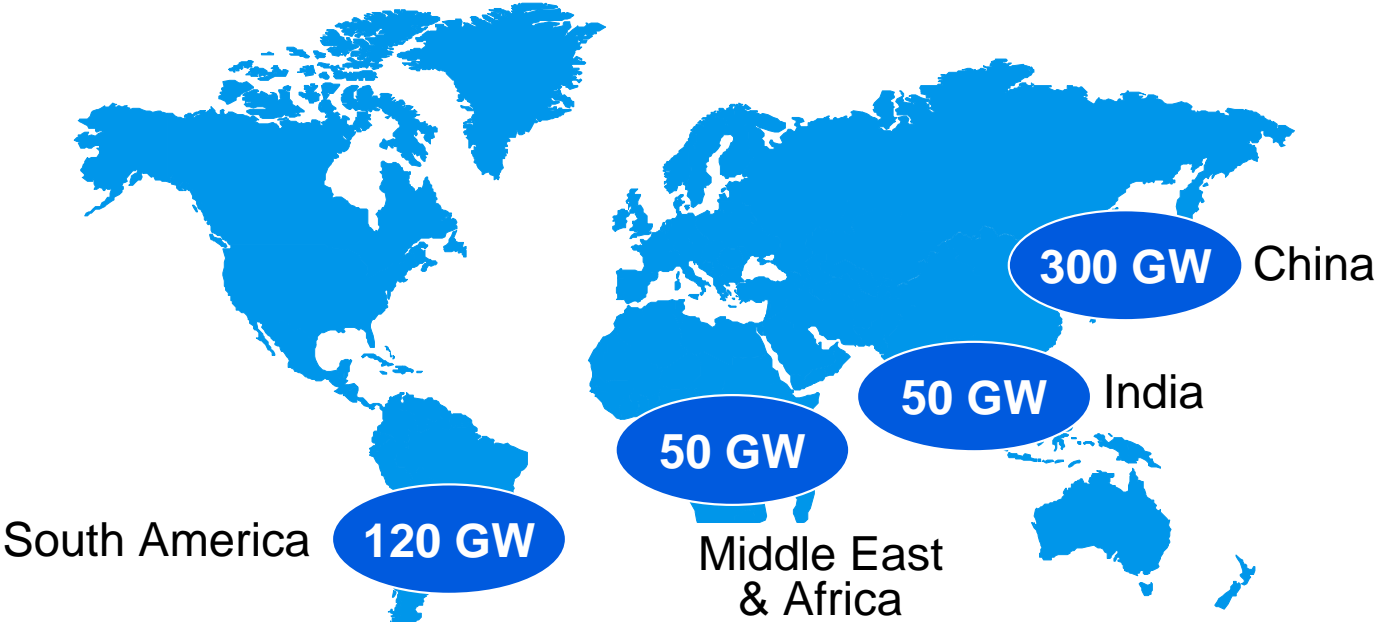
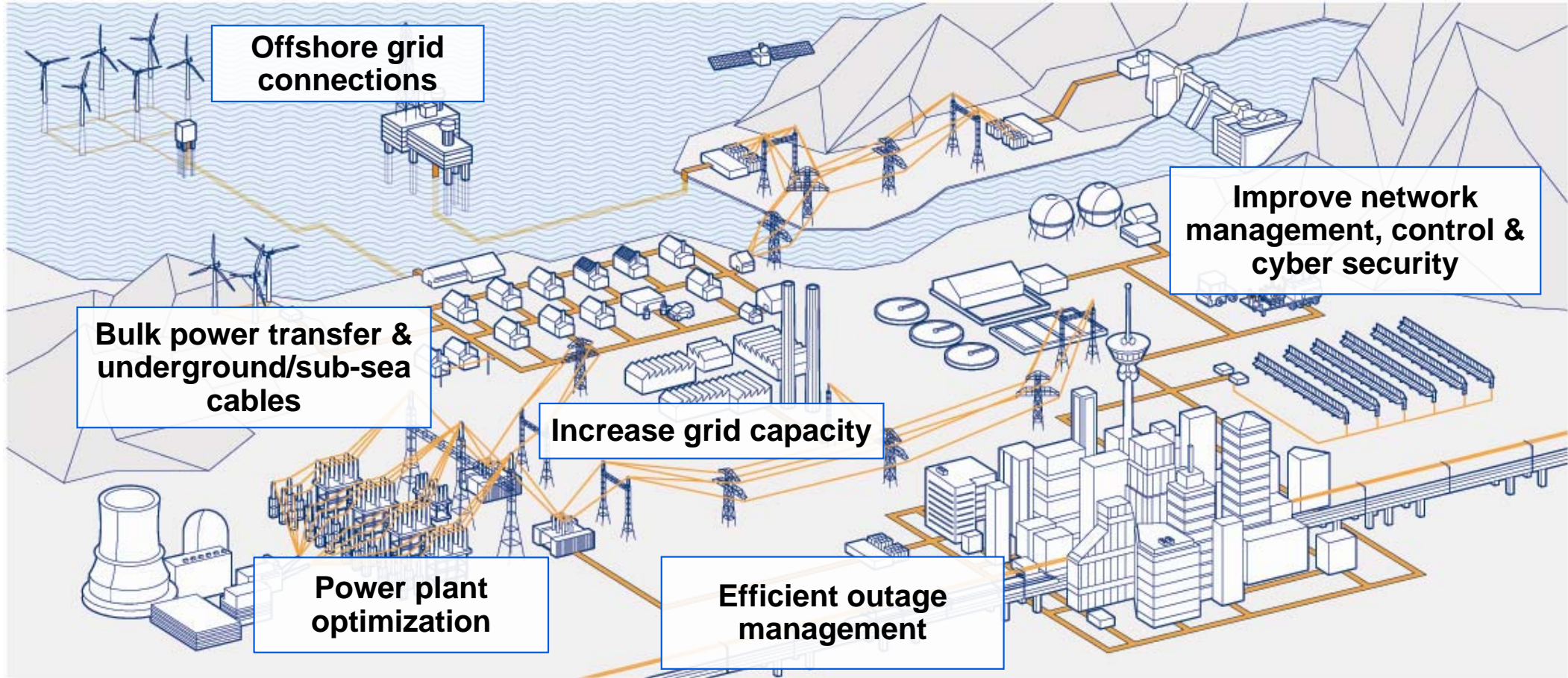


Chart 28

Ensuring power reliability and efficiency

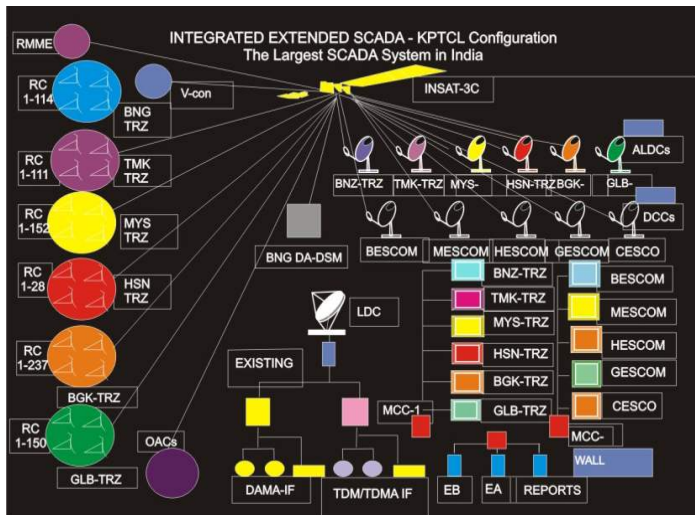


Managing information flow is the primary challenge ABB is No. 1 in \$3-bn network management market



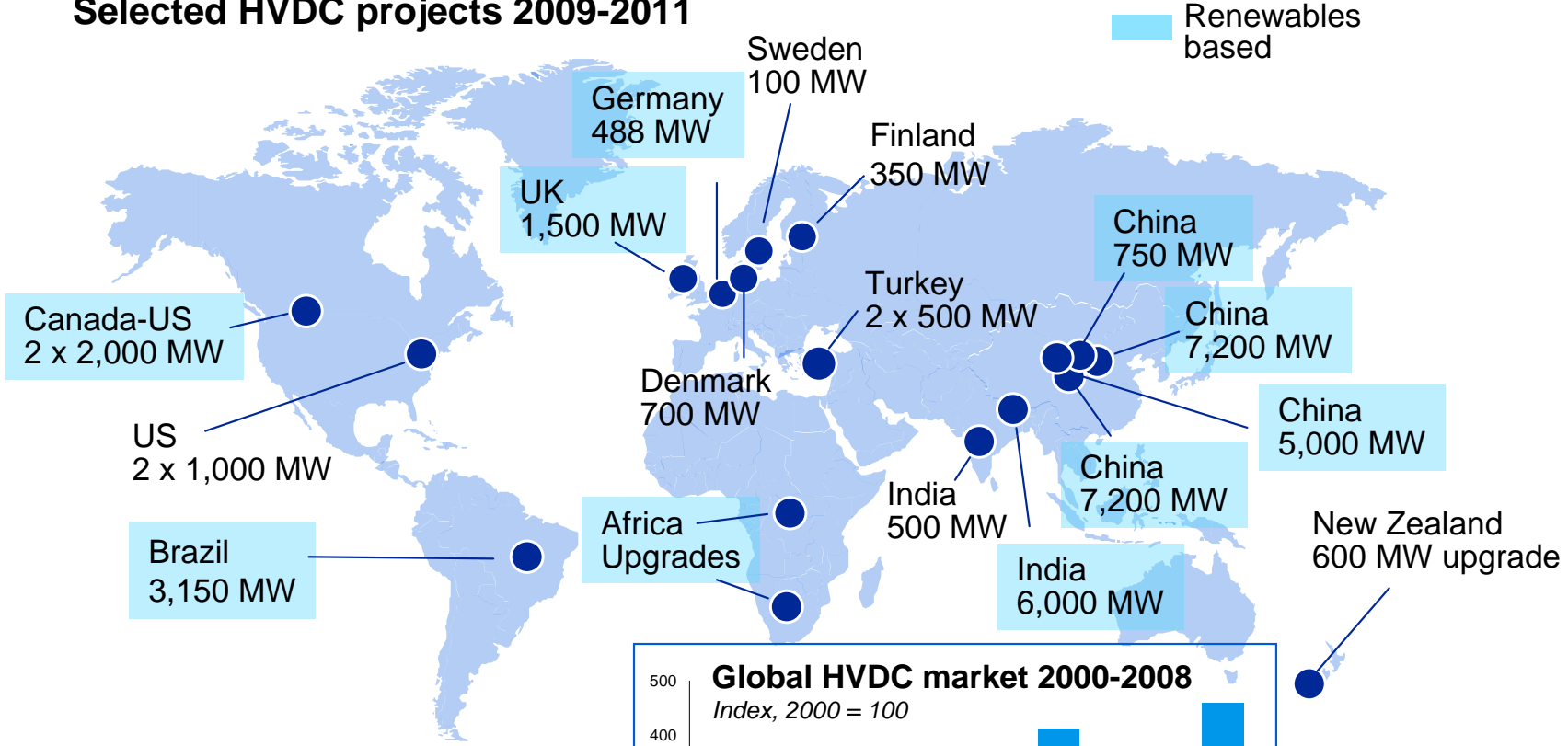
Example: Karnataka, India

- One integrated energy audit & billing solution using Network Manager SCADA/EMS/DMS system
- Satellite & leased line communication for the entire state of Karnataka
- Coverage area: 192,000 km²
- Serving 16 mill. consumers via 16 control centers
- 1 million I/O (input / output) points from one control center
- 867 RTUs (Remote Terminal Units)



Growth in HVDC driven by both grid efficiency (interconnects) and remote renewables

Selected HVDC projects 2009-2011



Each project opportunity avg ~\$500 mill in orders

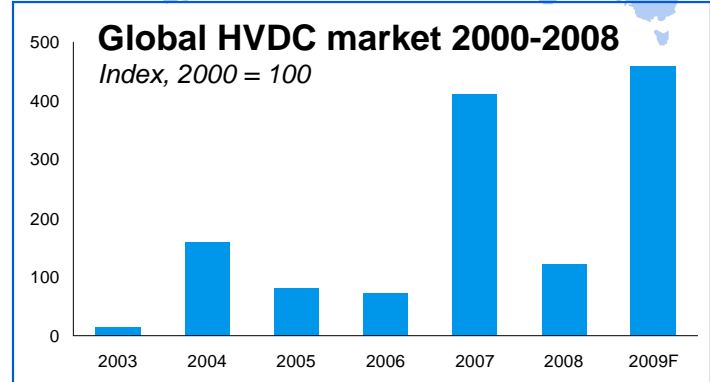


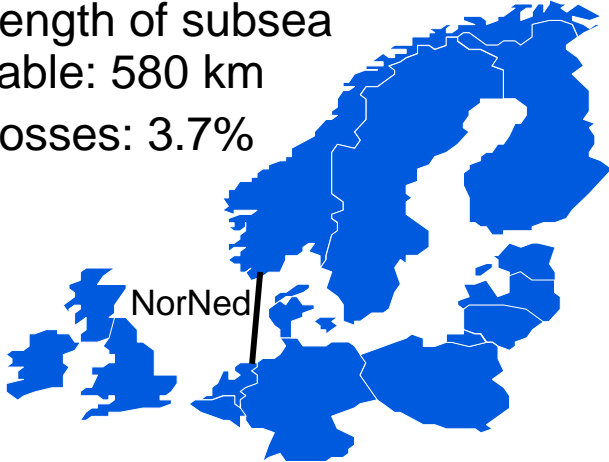
Chart 31



More efficient use of power generation resources, integration of renewables

HVDC Norway to Netherlands link

- Commissioned: 2008
- Power rating: 700 MW
- Length of subsea cable: 580 km
- Losses: 3.7%



Order value:
\$400 mill.

HVDC Light offshore wind park, Germany

- Commissioning: end-2009
- Power rating: 400 MW
- Length of subsea cable: 130 km, underground cable: 70 km
- Lowers CO₂ emissions by ~1.5 mill t/yr by replacing fossil-fuel generation

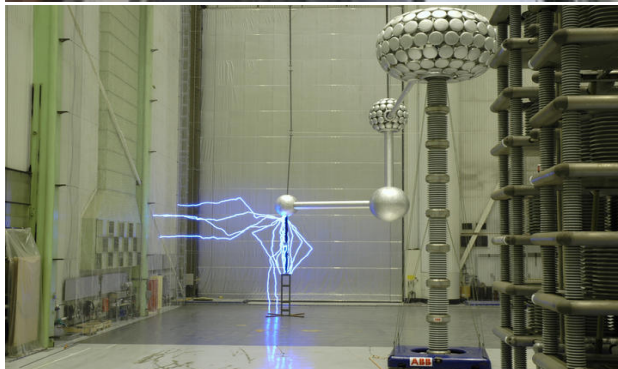
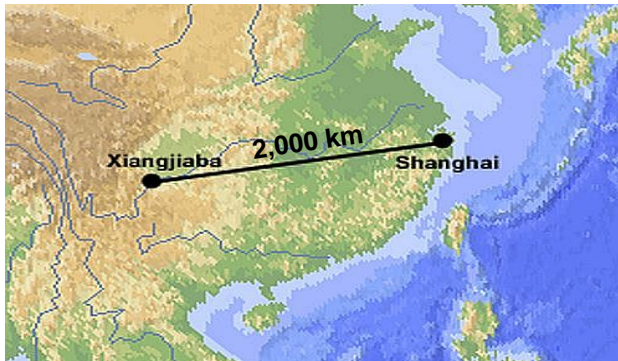


Order value:
\$440 mill.

Power resources often remote from demand centers

Very long distances require new solutions

Customer: SGCC
Year of commissioning:
2010, 2011



Customer need

- Develop renewable hydro power 2,000 km from load center

ABB response

- World's longest & largest transmission system
- ± 800 kV UHVDC, 6,400 MW

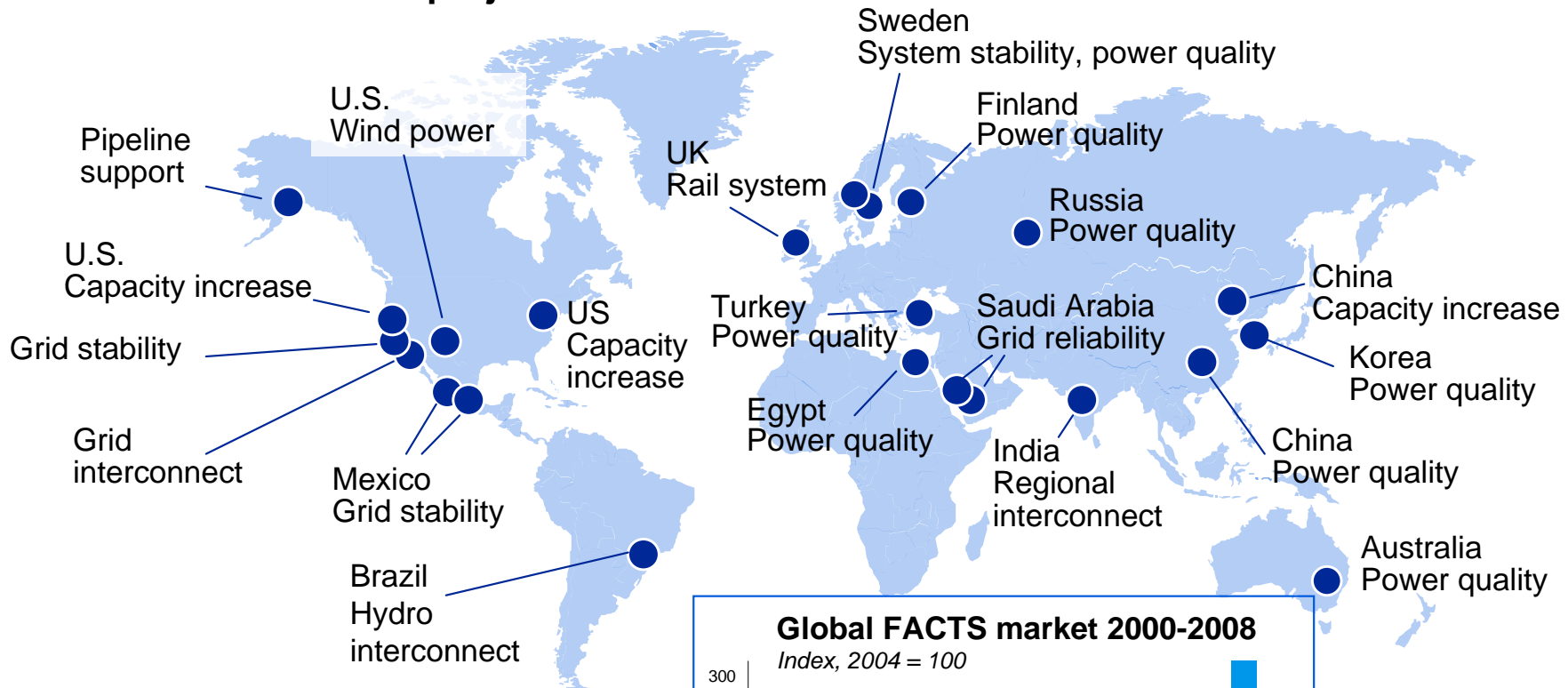
Customer benefits

- High efficiency: 93%
- Savings vs AC line enough to supply power to more than 1 million Chinese
- Uses 40% less land than conventional technologies

Order value: \$440 million

Using existing infrastructure more efficiently FACTS increases existing capacity by up to 40%

ABB FACTS projects 2008-2009



Each project opportunity avg ~\$40 mill in orders

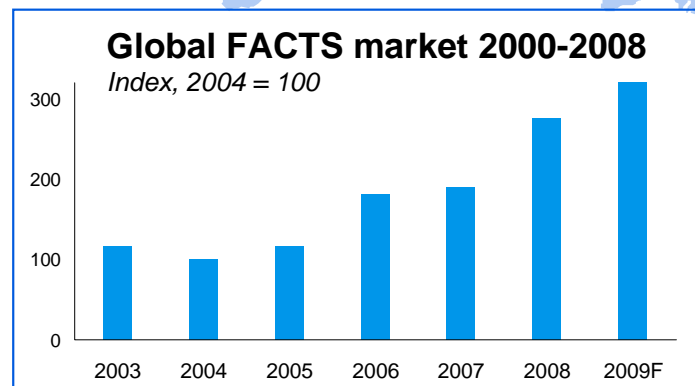


Chart 34

Emerging trends

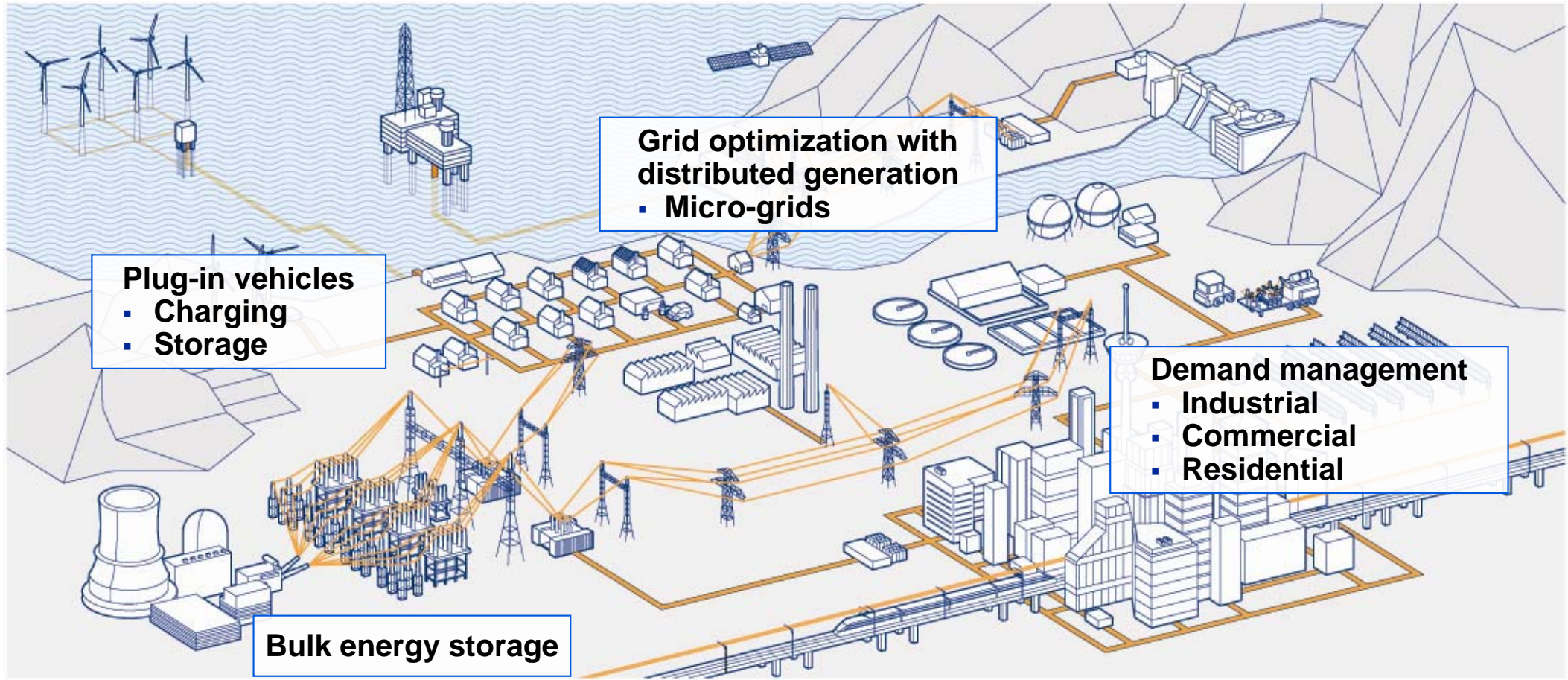
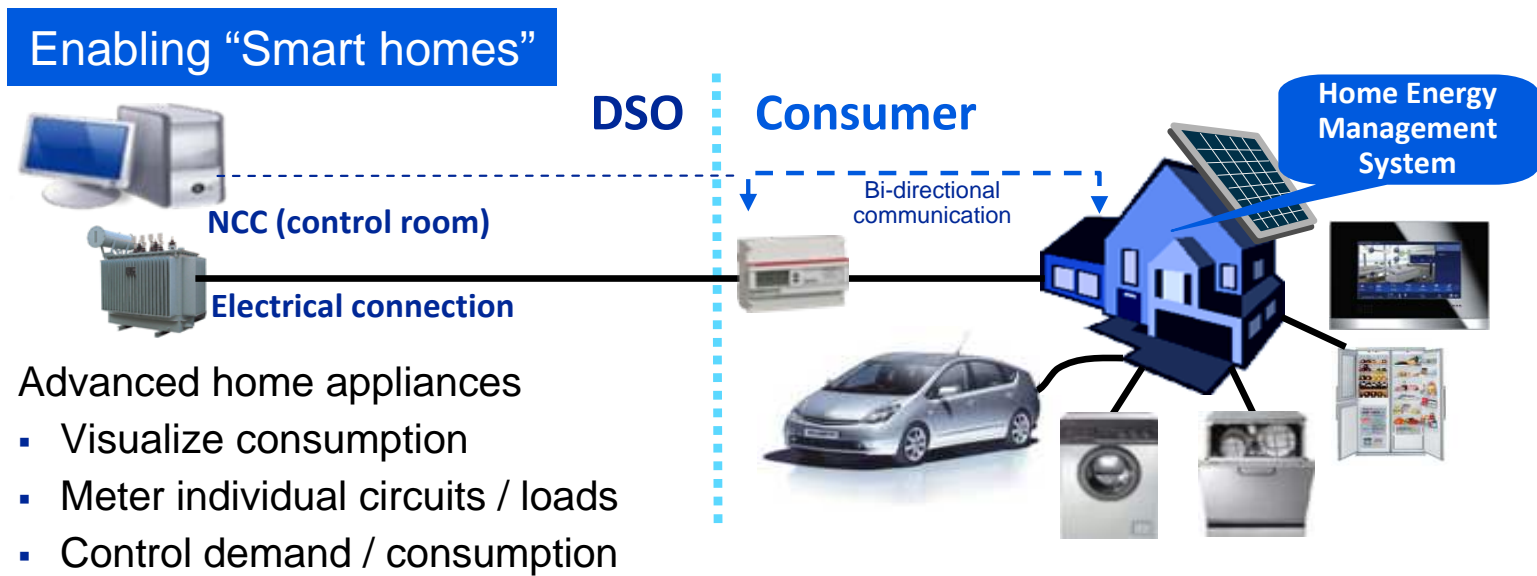


Chart 35

Demand response

ABB has technologies for smart homes and buildings



Singapore National Library

Maximizing building efficiency

- ABB KNX technology cut energy consumption by 17% ~\$370,000/yr
- Monitor, control & maintenance from single control room
- Lighting, shutters, heating, ventilation & air conditioning, security & surveillance

A look into the future: Integration of plug-in electric vehicles and two-way power flow

Charging infrastructure

- Energy storage to offload grid
- Charging time options (10 mins to 5 hrs)
- Billing system for mobile customers
- Business models under evaluation

Network Management

- Load management
 - Charge at times of overcapacity
 - Use vehicles as consumer storage
 - Voltage control for distribution grids
- Real-time pricing

- Currently at pilot stage - different technical solutions, revenue models
- Difficult to predict timing



1.7 mill plug-in hybrids expected worldwide by 2015

- U.S. largest market
- China No. 2

Source: Pike Research 2009

ABB well-positioned in this developing market

ABB will play a key role in the transition to tomorrow's grid

The challenge

- Supply and demand needs to be balanced at all times
- Growing need for electricity, especially in emerging economies
- Imperative to reduce environmental impact gathers momentum
- Aging grids require attention
- Grids need to become more intelligent to handle complexities

	Today	Tomorrow
Supply	<ul style="list-style-type: none">▪ Centralized generation, few players▪ Mainly fossil, nuclear, hydro▪ Relatively easy to control	<ul style="list-style-type: none">▪ More distributed power, more players▪ More renewables, remotely located▪ Unstable supply - more control needed
Demand	<ul style="list-style-type: none">▪ One-way energy flow/communication▪ Metering used for billing only▪ Load-shedding/supply response	<ul style="list-style-type: none">▪ Two-way energy flow/communication▪ More intelligent metering▪ Demand influenced load balancing

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