

**125**  
Years



**Bosch**  
1886–2011

## **The history of the future**

Uwe Glock, President of the Board of Management of the Thermotechnology Division

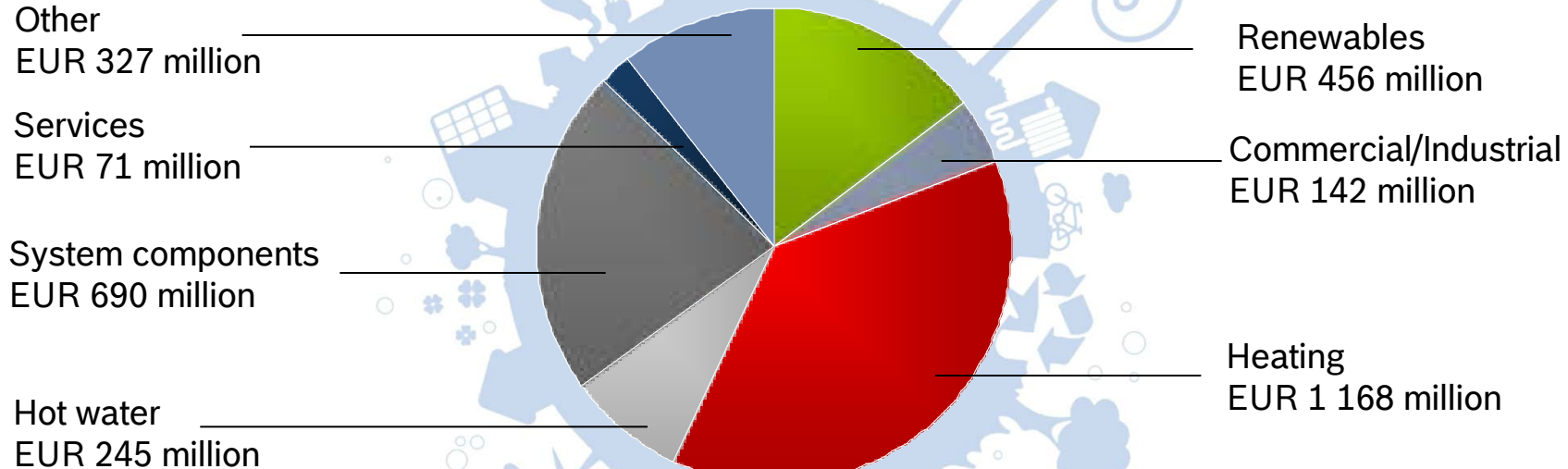
ISH Press Conference  
Frankfurt/Main, March 15, 2011

## Positive performance due to economic recovery



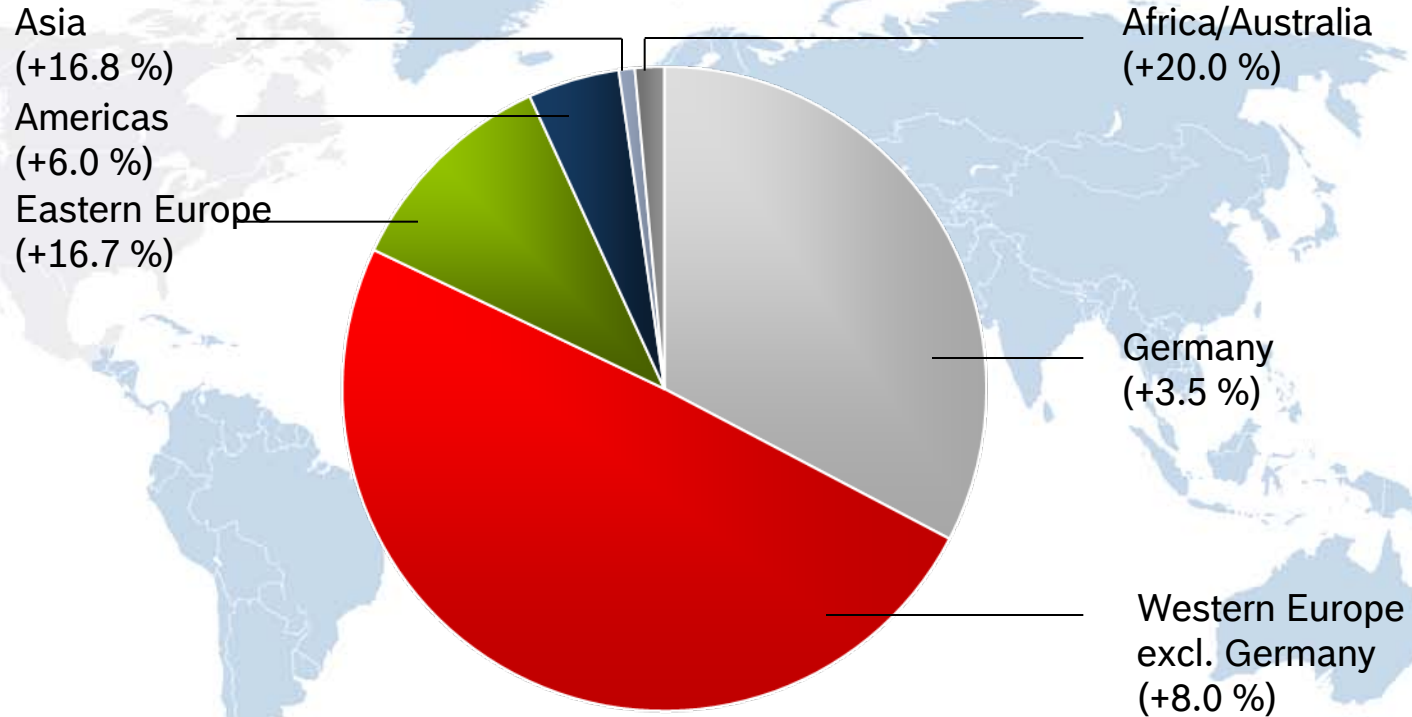
	2010
<b>Sales</b>	EUR 3.1 billion
<b>Sales share of renewables systems</b>	15 %
<b>Research and development</b>	EUR 115 million
<b>Capital expenditure</b>	EUR 40 million
<b>Associates</b>	13,449
thereof in Germany	5,906
thereof outside Germany	7,543

# Boilers replaced by system solutions



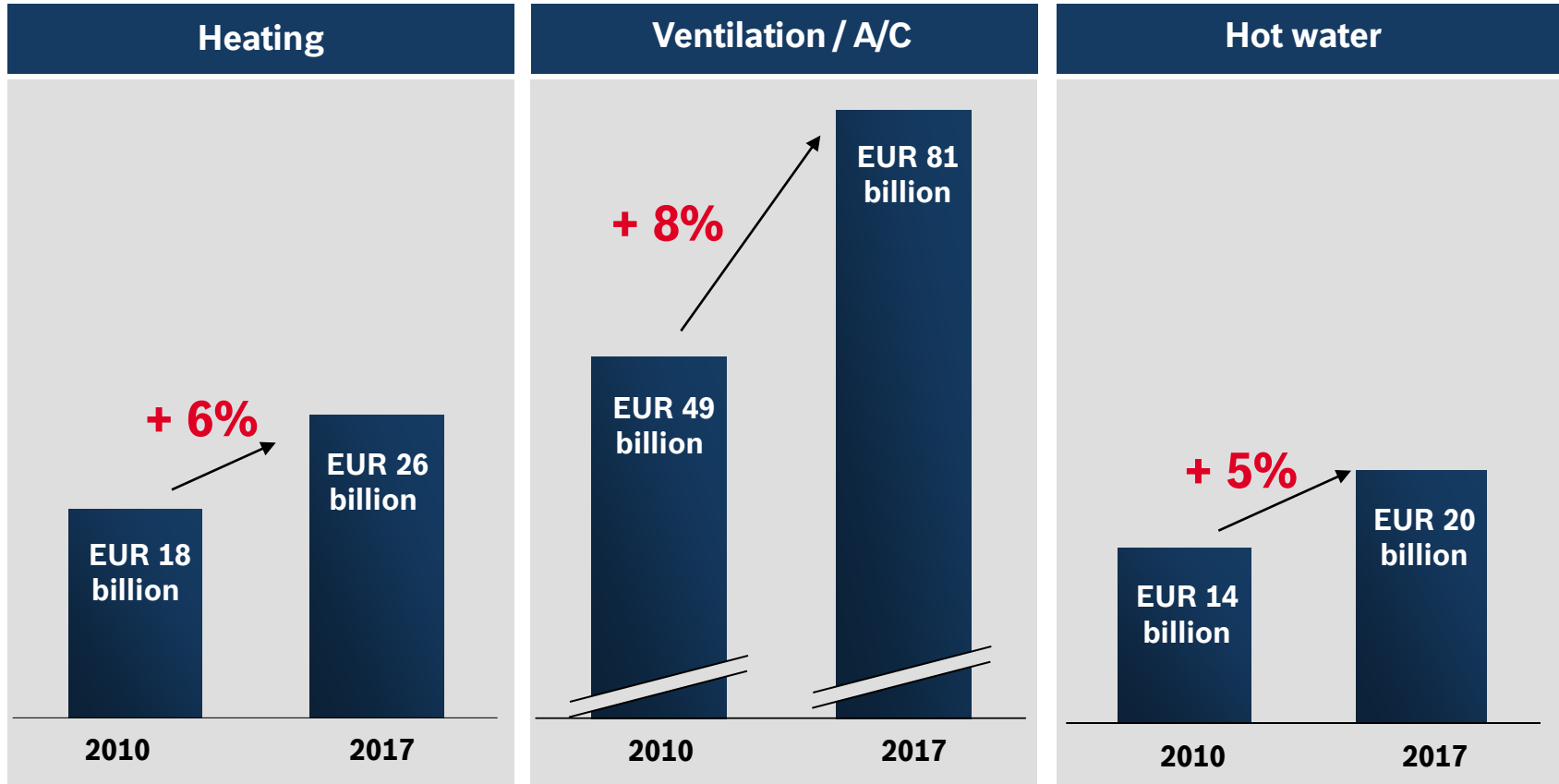
Focus on growth fields

## Regional sales breakdown



Strong growth in Latin America, Eastern Europe and Asia

## HVAC core markets



Ventilation and A/C offer strongest long-term growth

## Drivers of change

### Buildings structure

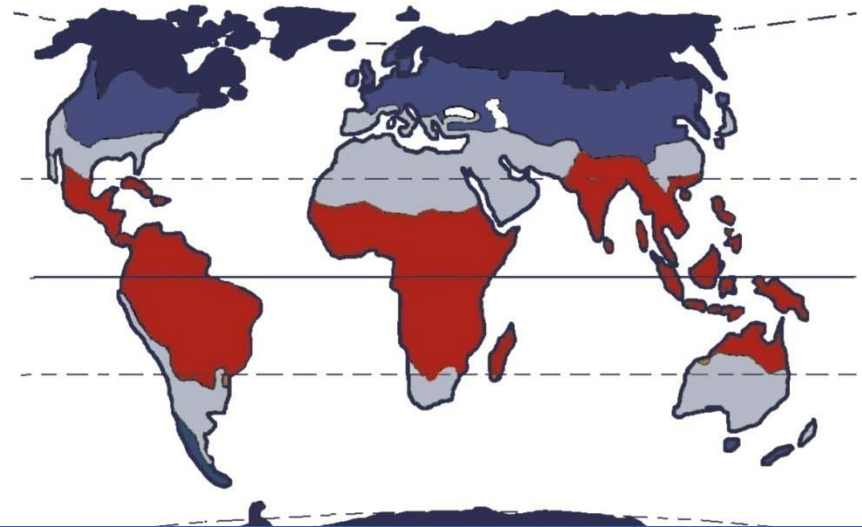
- Residential / light commercial
- Commercial / industrial

### Market structure

- **Newly built:** 15-20%
- **Existing:** 85-80%
  - Replacement
  - Modernisation

### Climate zones

- Cold
- Temperate
- Subtropical
- Tropical



- Market and customer requirements
- Political environment
- Technology
- Competition

Need for a global view

## Key topics and outlook

- Expand local presence around the globe
- Globalisation: Set up new locations in Brazil, India, China
- Continue to increase investment in the future through research and development
- Expansion of Commercial/Industrial business, development of new Waste Heat business field



2011: Worldwide growth and investment in new fields of business

# China: Expansion of R&D, production and sales

- Own production plant for gas instantaneous water heaters and condensing boilers in Malu near Shanghai
- Expansion of R&D activities
- Strengthening of sales activities
- Production planned to start in May 2011



## Expansion of activities in Asia

# Brazil/India: Set up R&D + solar-thermal production

- In both countries: Set up development and production for regional markets
- Production to start in 2012 in both countries
- Brazil: solar hot water provision to bring relief for local power grids
- India: Solar-thermal technology to enable hot water comfort for the first time



Solar-thermal production in Germany, Portugal, China, Brazil, India

# Utilisation of waste heat

- Turning waste heat from industrial processes into electricity
- Organic Rankine Cycle in 65-200 kW<sub>el</sub> range
- Interesting options also for biogas facilities and landfills
- First pilot facility to be commissioned in Frankfurt in April 2011



## Expansion of service portfolio

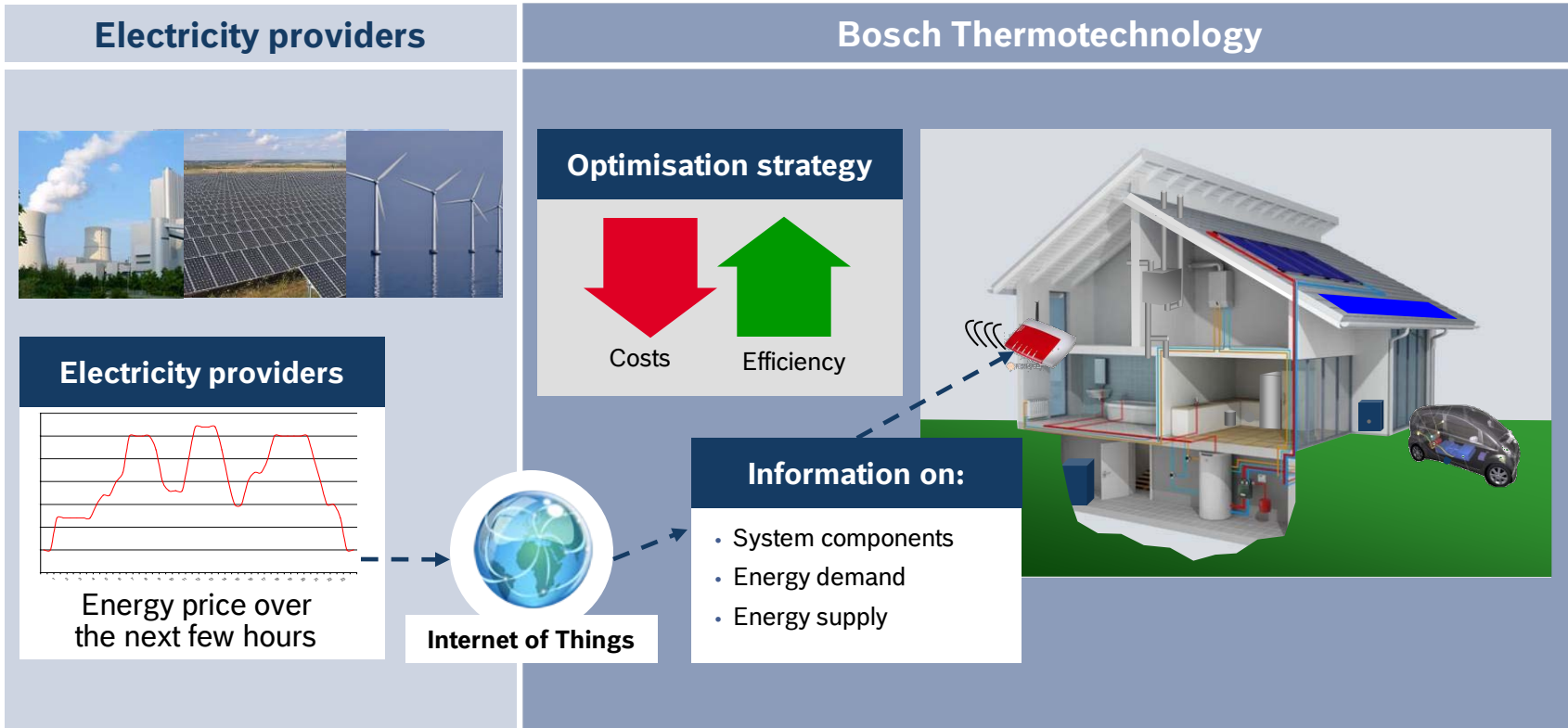
# Energy Plus Home: Decentralised energy transformation

- Three steps to convert energy-consuming buildings into producers of heat and electricity:
- Reduce the energy demand of the building
- Meet its residual energy demand as efficiently as possible
- Generate as much electricity as possible
- Homes can be small “power stations” with good efficiency ratings



The Energy Plus Home is easy to realise already today

## Smart grids



Thermotechnology needs to be web-enabled



## Ways to the future

Klaus Huttelmaier, Member of the Board of Management of the Thermotechnology Division

ISH Press Conference

Frankfurt/Main, March 15, 2011

## The first app for heating control

Consumers



Junkers Home



MB 100-LAN



Buderus EasyControl



Logamatic web KM200

Installers



Junkers Scan

Spare parts scanner



Buderus EasyScan

Spare parts scanner

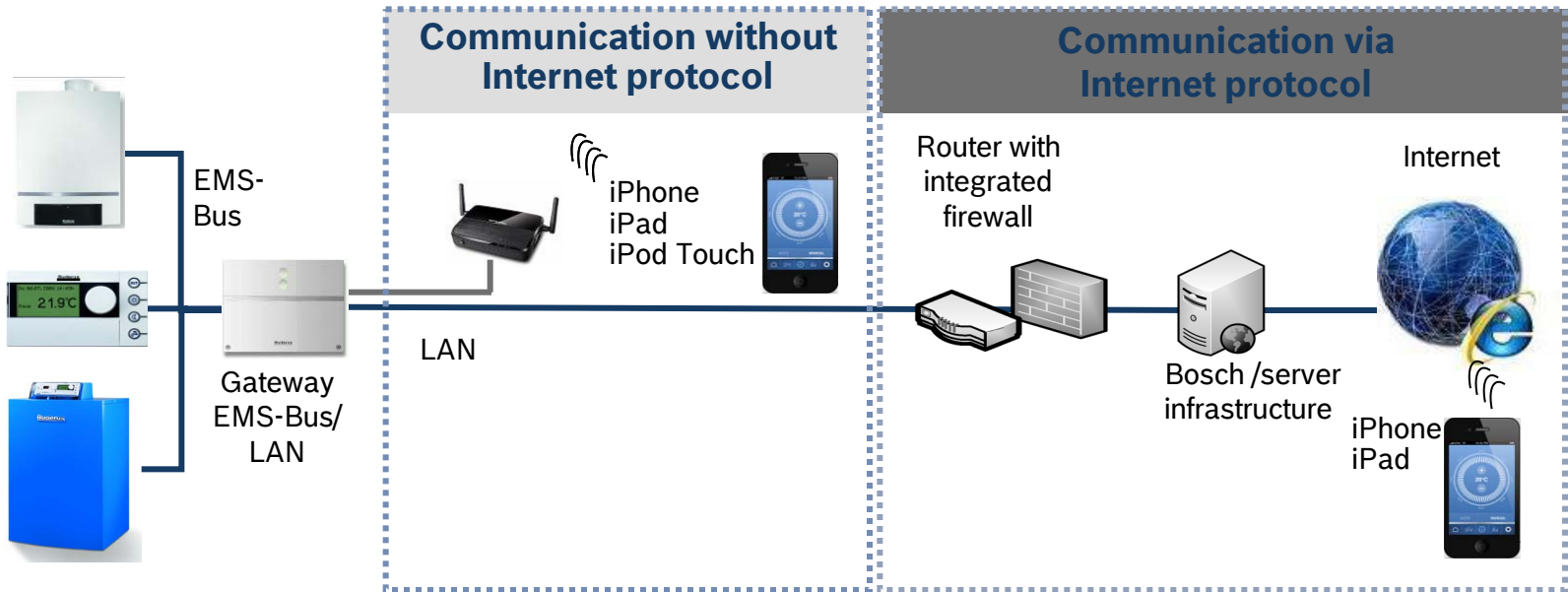


Buderus Easy

Radiator dimensioning assistant

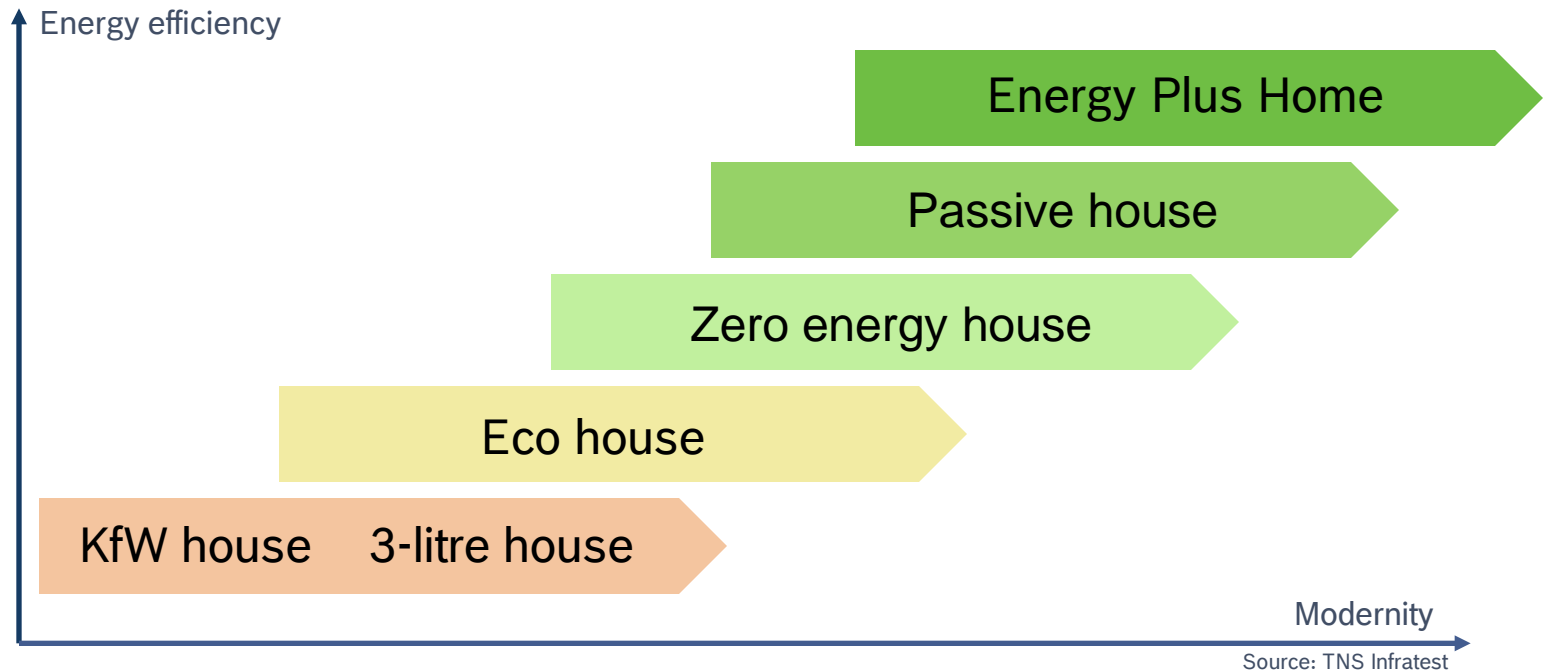
### More apps to support installers

## The first step into the Internet of Things



All systems must be web-enabled in the medium term

## Good image among house buyers and owners



Energy Plus Home: emotional, inspiring, lively and open

# Energy Plus Home systems at ISH



## Bosch Thermotechnology brand strategy

Global			
Regional / National	 Bosch Group		  
			
			

Multi-brand strategy aligned with sales channels

# Expansion of project business

- Starting 2012, large boilers and CHP will be sold under the Buderus brand in Europe (incl. Germany) and under the Bosch brand outside Europe.
- Consistent international presentation of our product range for this market segment
- Strengthening our position as a world-leading supplier



Building and expanding our large boiler and CHP business

## USA: Expansion of market position

- Expand strong market position in the geothermal heat pump segment
- Push forward growth in the hot water and ventilation and A/C segments
- Transform regional FHP brand into Bosch brand
- Leverage Bosch's high profile in the USA



125 Years Bosch 1886-2011

# American Energy?

It's right under your feet.



Geothermal Technology • The smarter way to heat and cool your home is right under your feet.  
To learn more about the Bosch Geo line of geothermal heat pumps visit our website.  
Consumers visit: [bosch-climate.us](http://bosch-climate.us) • Trade visit: [boschwaytogrow.com](http://boschwaytogrow.com)



**BOSCH**  
Invented for life



International growth through specific market approaches

## ISH 2011 – News Buderus (I)



### Logamax plus GBH172

Condensing/solar hybrid unit (14/24 kW) with gas condensing boiler, integration of a solar system and system control

### Logatherm WPLSH

integrates an EMS boiler and an air/water heat pump (7 kW) with a single control system – up to 25 kW

# ISH 2011 – News Buderus (II)

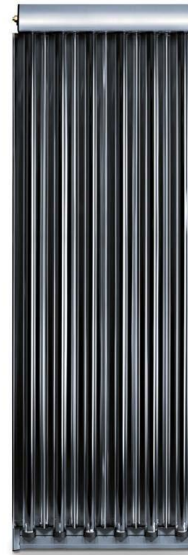


**Logatherm GWPL**  
Air/water gas heat pump (40 kW)  
optimal system integration

# ISH 2011 – News Buderus (II)



**Logasol SKN**  
Compact flat collector



**Logasol SKR**  
Vacuum tube collector

# ISH 2011 – News Buderus (IV)



### Logano S161

Wood gasification  
boiler  
18/24 kW



### Logano S261

Wood gasification  
boiler  
18/20/30/40 kW



### Logano SP261

Pellet boiler  
65/99/101 kW

# ISH 2011 – News Junkers (I)



## CerapurAero

Air/water heat pump (2 kW)  
with gas condensing technology (14/24 kW)  
and “OptiEnergy”

## Supraeco SAS

Split air/water heat pump (7/10/12 kW)  
for heating, air conditioning  
and water heating

# ISH 2011 – News Junkers (II)



**FCC**  
Compact flat collector



**VK 140-1 / VK 280-1 / VK 230-1**  
Vacuum tube collector



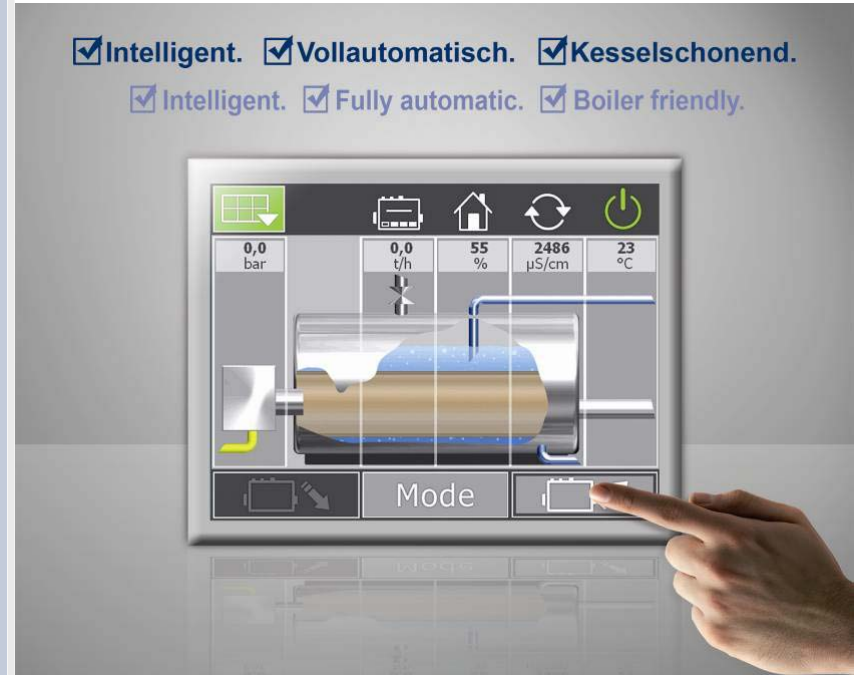
**Supraclass SW**  
Wood gasification boiler  
18/24 kW Version

## ISH 2011 – News Loos



### Intelligent Industrial Boiler Management

- Automated start-up, stand-by and shut-down control processes for high-pressure steam boilers
- Relieving operators from comprehensive control tasks
- Intelligent, boiler-friendly and plant-friendly control functions
- SPS-based boiler management system with touchscreen interface



SUC - automated control for boiler start-up, stand-by and shut-down

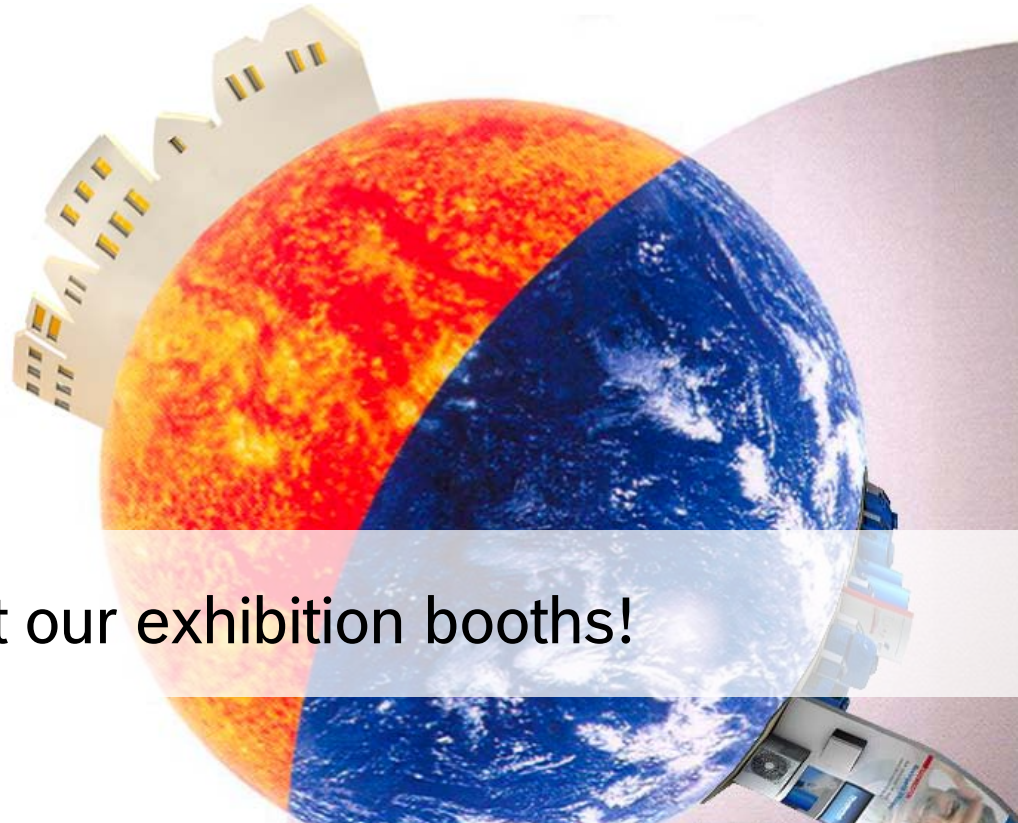
Thank you  
very much!

**ISH**

The world's leading trade fair  
The Bathroom Experience  
Building, Energy, Air-conditioning Technology  
Renewable Energies

Frankfurt am Main, 15 – 19. 3. 2011

messe frankfurt



See you at our exhibition booths!