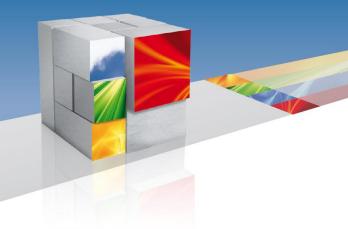
"Surface heating and cooling in Europe: Perspectives and Potentials"

> Paolo Basso Bundesindustrieverband Deutschland Haus-, Energie- und Umwelttechnik e.V.











- Represents and promotes the common interests of 40 market leaders producing thermal comfort equipment (heating systems, burners, boilers, components, radiators, surface heating and cooling and renewable energy systems) and 14 industrial associations from the EU Member States, Liechtenstein and Switzerland.
- Founded on 11 June 2002 as result of the merger of the former CEB (European Burner Committee), EBA (European Boiler Association), and AFECI (Association of European manufacturers of instantaneous gas water heaters and wall-hung boilers)





A brief history of industry collaboration in Europe

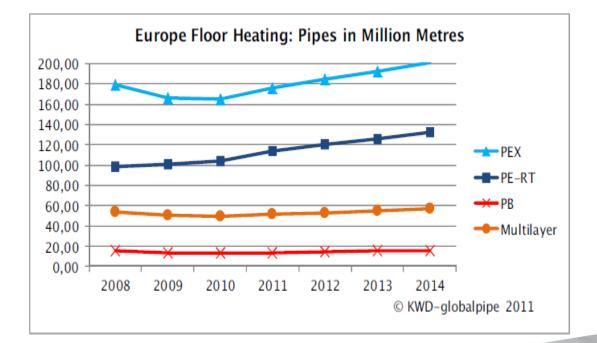
- EU-Ray in formal existence since 1996 as a discussion forum for promoting surface heating and cooling industry in Europe
- Good progress in the beginning, but turned reactive and passive during the 2000s
- Missed opportunities to influence
 - Energy Performance of Buildings Directive
 - ecodesign and energy labelling legislation
 - ⇒ etc
- Restructuring process started in 2010, with initiative taken by Wavin, Rehau, Rettig and Uponor





Radiant heating and cooling business

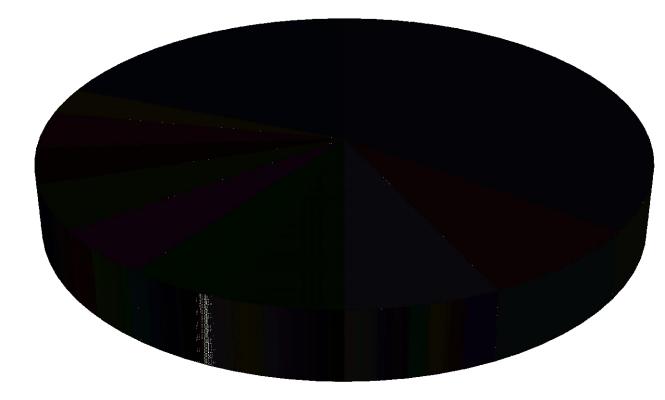
- Approximately 2.0 billion EUR system business in Europe (incl. UFHC, TABS and chilled ceilings)
- Small number of branded global players
- Wholesaler private label brands for UFH
- Large number of local players on the market
- Large differences in penetration levels between markets and construction segments



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Radiant heating and cooling business

Europe Floor Heating 2011: Plastic and Multilayer Pipes 360 million metres

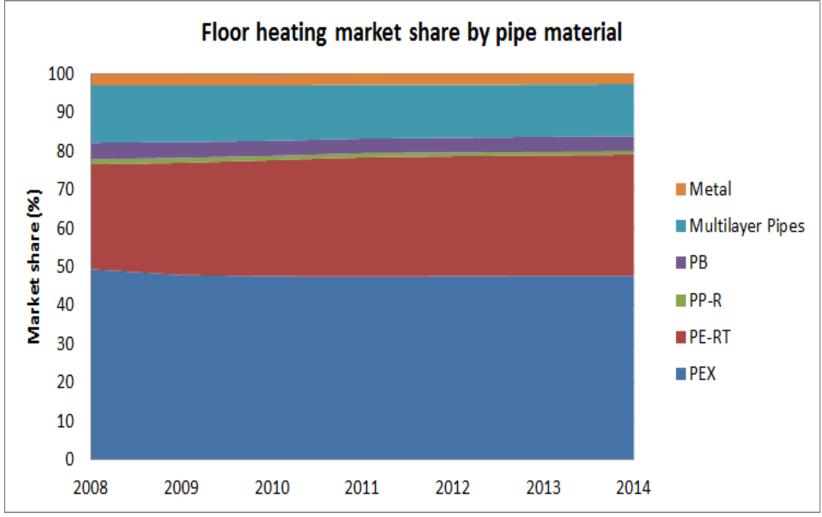


Bundesverband der

Deutschen Heizungsindustrie

- Germany 35%
- France 8%
- Italy 7%
- Netherlands 5%
- Switzerland 5%
- Austria 5%
- Poland 5%
- Great Britain 4%
- Sweden 4%
- Belgium 3%
- Other 19%

Radiant heating and cooling business



BDH Bundesverband der Deutschen Heizungsindustrie

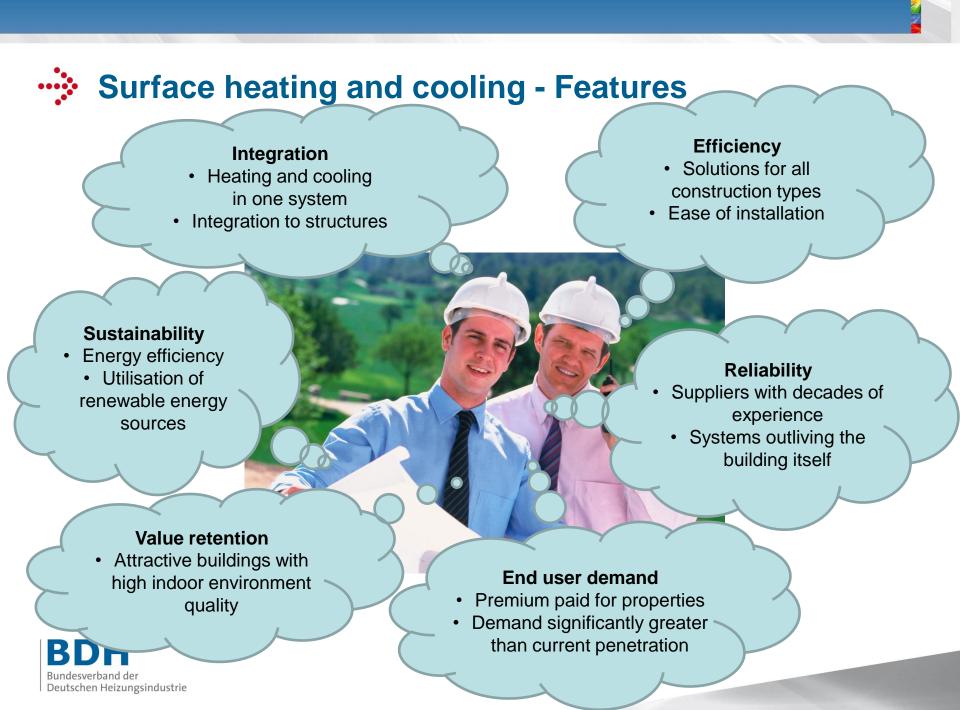


EHI Department 12

Common platform for European surface heating and cooling industry

- New Surface Heating and Cooling department established
- Main working areas
 - Technical issues
 - Marketing and promotion
 - ⇒ Policy influence
- All industrial players are invited to contribute and take part
 - Large pan-European companies and national UFH associations through direct membership in EHI
 - Smaller local companies through
 - national EHI member associations
 - Interim transition period through EU-Ray





Objectives and actions

- Pro-active influence to European policies and regulatory developments
 - Nearly Zero Energy Building, NZEB
 - Product Safety and Market Surveillance
 - Energy Performance of Buildings Directive, EPBD
 - Eco Design / ErP and Labelling
 - Construction Product Regulation, CPR
 - Directive on Waste of Electric and Electronic Equipment, WEEE, and RoHS Directive
- Contributing and influencing European standardization
 - Focus on system level standards



Objectives and actions

- Define and execute a common precompetitive research strategy for surface heating and cooling in Europe
 - defining a common research agenda for supporting the joint promotion and messaging, standardisation and legislation influencing work
 - defining precompetitive research questions to be answered based on the strategy
 - identifying potential research institution partners and currently ongoing research
 - ⇒ identifying funding opportunities
- Market analysis
 - Creating a common view on the size and development of the European surface heating and cooling market in line with the competition law rules
 - Gather external information about markets for surface heating and cooling



Surface heating and cooling - Benefits

Health, comfort and productivity

- Best thermal comfort
- Less air movement and dust circulation

Safety

- Low operating temperatures
- Reliable components and connections

Low running cost

 Energy cost reduction Low maintenance

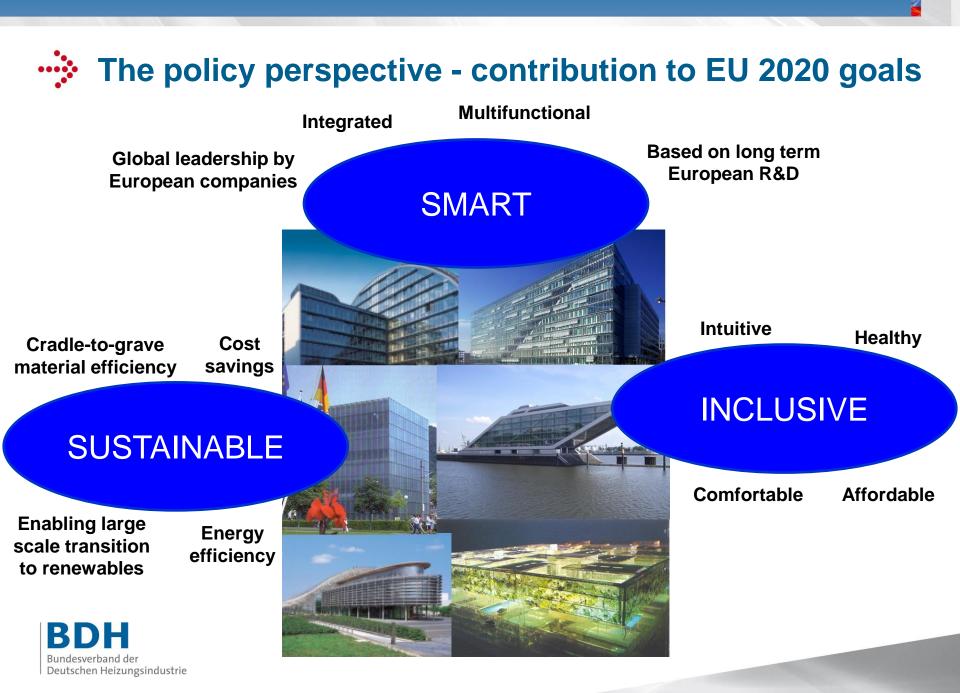
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Peace of mind

Reliable performance over the life of the building

Freedom of choice

- Complete freedom for space use with no visible system components
- Works with all energy sources



Main focus areas of EHI Department 12

- Influencing the development and implementation of European policy, directives and regulations
- Direct work on <u>standardization</u> of surface heating and cooling systems
- Ensuring a visible role for surface heating and cooling solutions in public research and education
- Promotion of surface heating and cooling solutions and their benefits for energy efficiency, comfort to the end-user, multifunctionality (combined heating and cooling) and renewable energy integration
- Pre-competitive <u>market monitoring</u> with special emphasis on emerging markets and low penetration segments in line with EHI competition law rules



Vielen Dank für Ihre Aufmerksamkeit Thank you for your attention

Paolo Basso Bundesindustrieverband Deutschland Haus-, Energie- und Umwelttechnik e.V.



