

Trends in Solar Heating and Cooling Industry and Markets

Author: Bärbel Epp, solrico

Email: epp@solrico.com, www.solrico.com



Solrico – global solar research network
focusing on the solar thermal sector

- ▶ Trends in the global industry
- ▶ Market development 2015/2016
- ▶ Promising applications by 2020

- ▶ 200 news annually on solarthermalworld.org, monthly newsletter

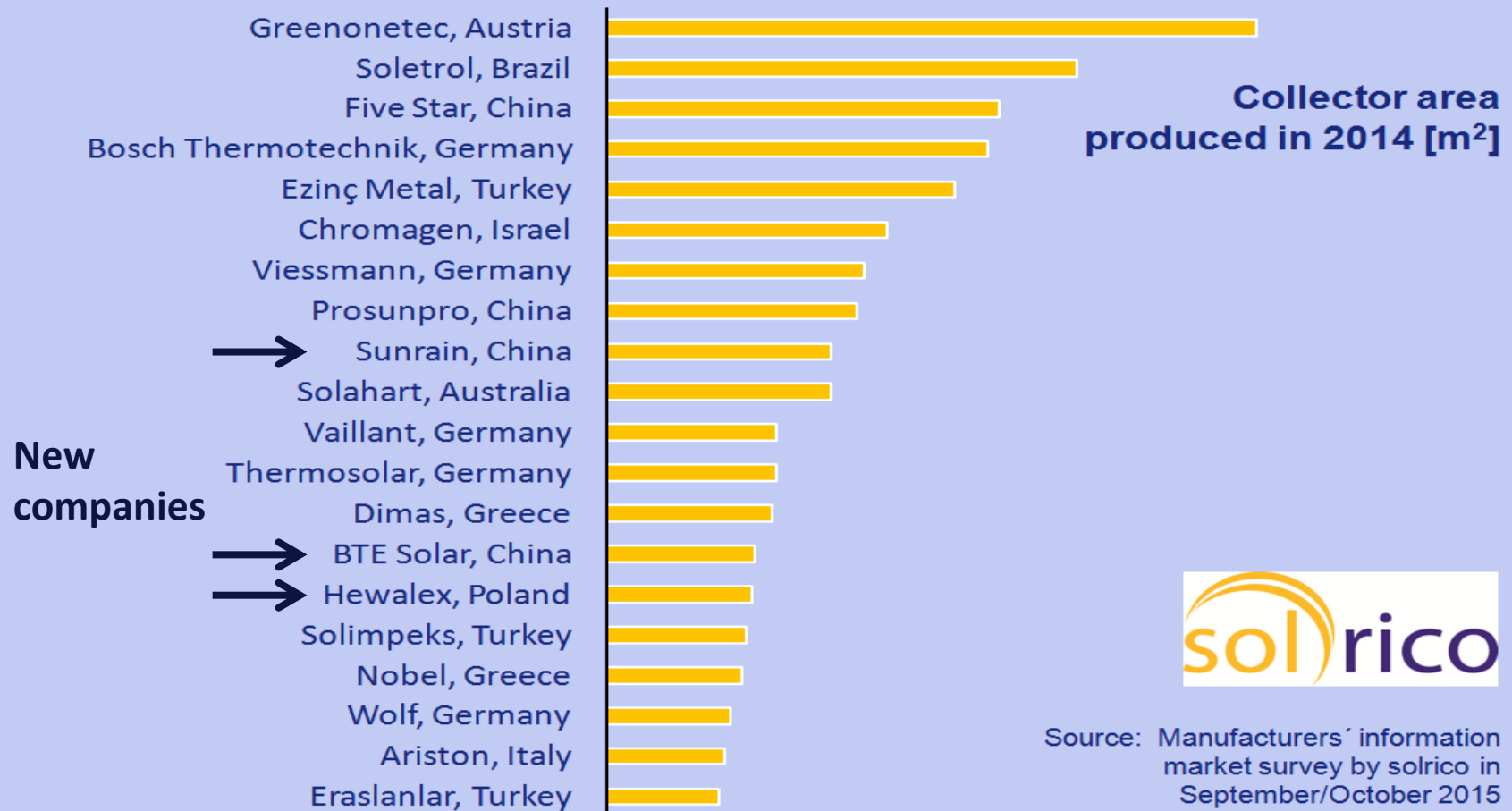


1,500 news about SHC from 50 countries worldwide

- ▶ 200 news annually on solarthermalworld.org, monthly newsletter
- ▶ Survey among the solar thermal industry in September/October 2015 for the world maps published in S&WE 6/2016 (250 companies)
- ▶ Analysis of the Climate Business Index ISOL in 18 key solar thermal markets worldwide (344 filled-in questionnaires) including an assessment for the market development in 2016 and technology and market trends up to 2020

CHAPTER 1: TRENDS IN THE GLOBAL INDUSTRY

Ranking of the largest flat plate collector manufacturers 2014 worldwide



- ▶ 2014 was a difficult year for all flat plate collector manufacturer. The volume of the 20 largest producers decreased by 8 % from 4.75 to 4.37 million m²
- ▶ The five German companies in the ranking (Bosch, Vaillant, Viessmann, Wolf and Thermosolar) lost 6 % from 10.4 to 9.8 million m²
- ▶ Turkish flat plate collector manufacturers dropped significantly in the ranking besides Ezinc. In contrast, the new vacuum tube industry profits from a strong national demand (838,280 m² in 2014) and is ready for export.
- ▶ Mexico develops as a production hub in Latin America: vacuum tube production from Frantor to start 2018 with 80,000 tubes per months and Modula Solar, Mexico, and Aquatherm, USA, founded a joint venture in June 2015 to produce polymer flat plate collectors.

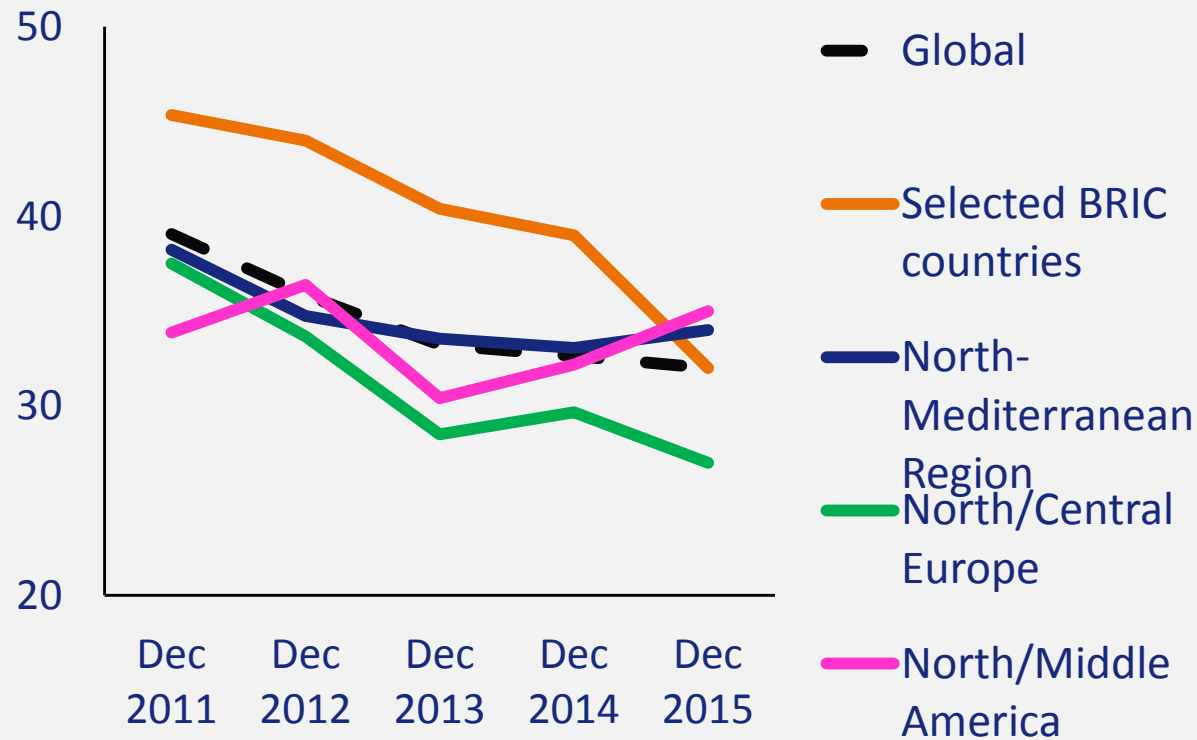
CHAPTER 2: MARKET DEVELOPMENT 2015/2016



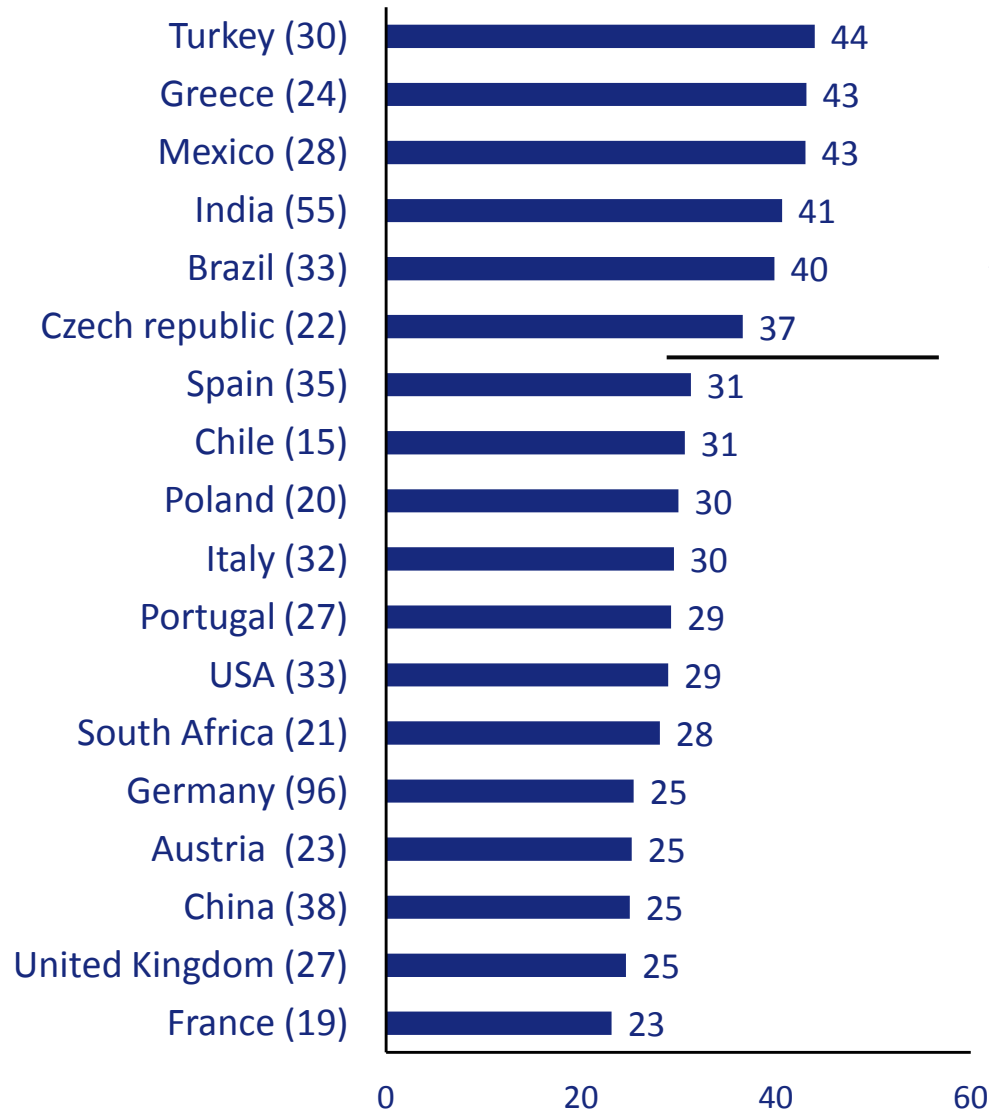
 Each company index ranges between 0 and 100 points (343 companies participated in Dec 2015)

 The average of the 343 company indices makes up the global ISOL Index December 2015 with 34 points

Regions: Current Business Index 2015

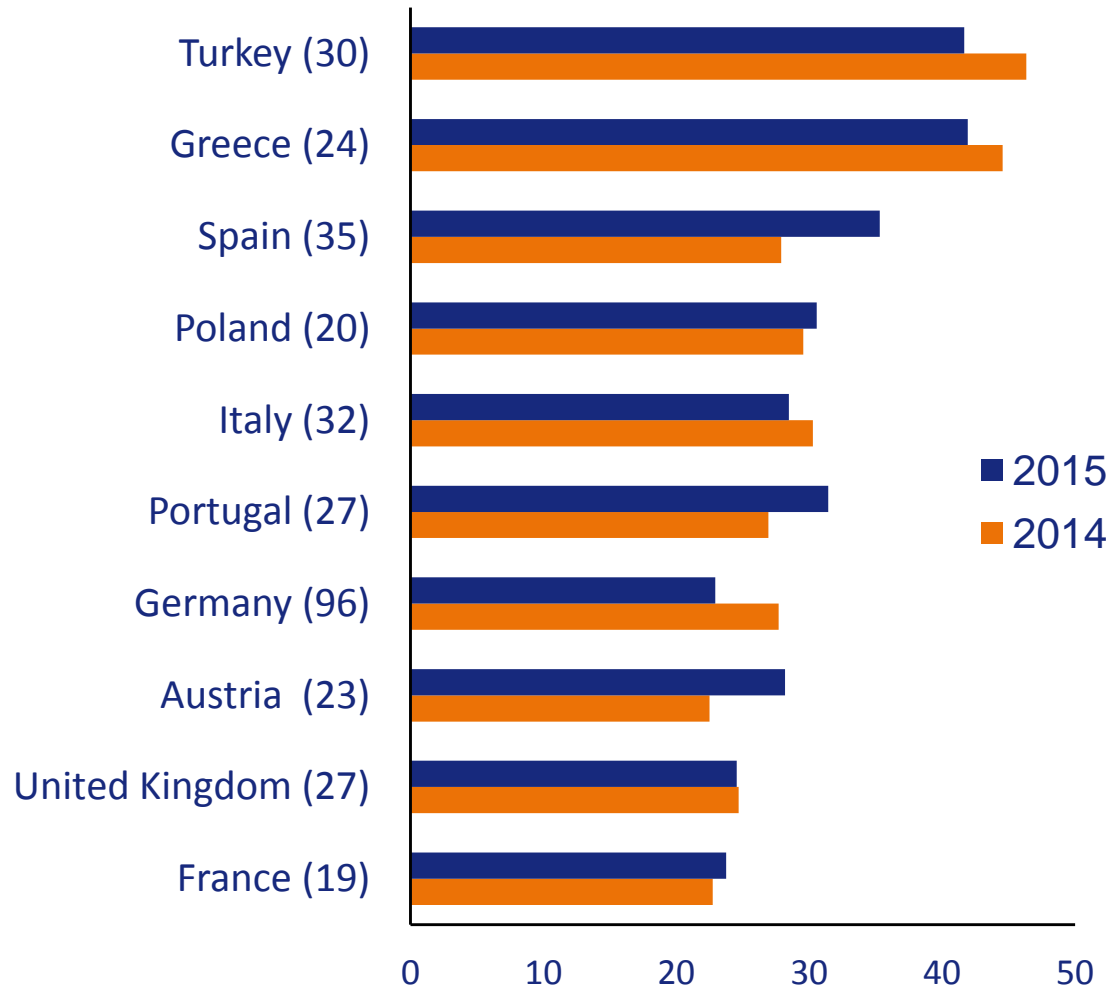


Current Business ISOL Index 2014/2015

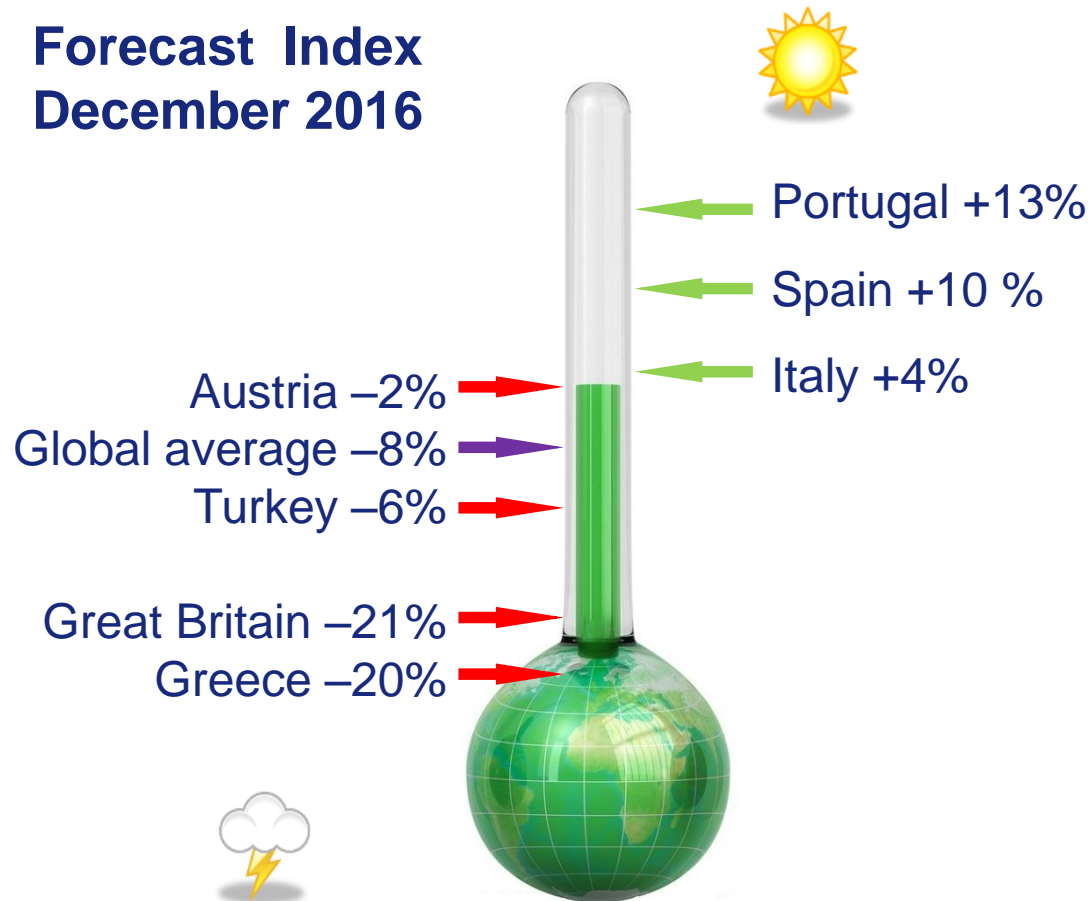


An attractive market should reach at least 35 points in the Current Business ISOL Index

Current Business ISOL Index



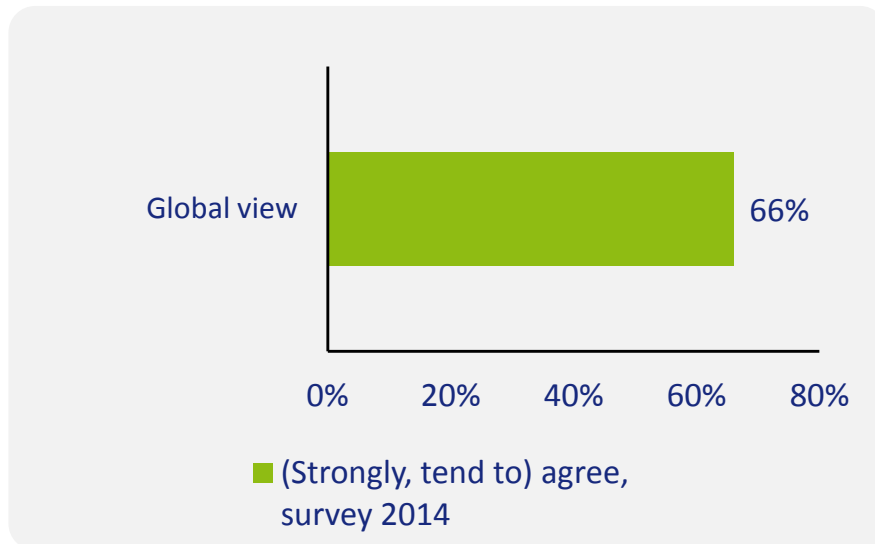
Forecast Index December 2016



CHAPTER 3: PROMISING APPLICATIONS BY 2020

Do you agree with the following statement?

The commercial segment (multi-family, tourism, industry) will surpass the market share of single-family homes in 2020.



□ Public sector

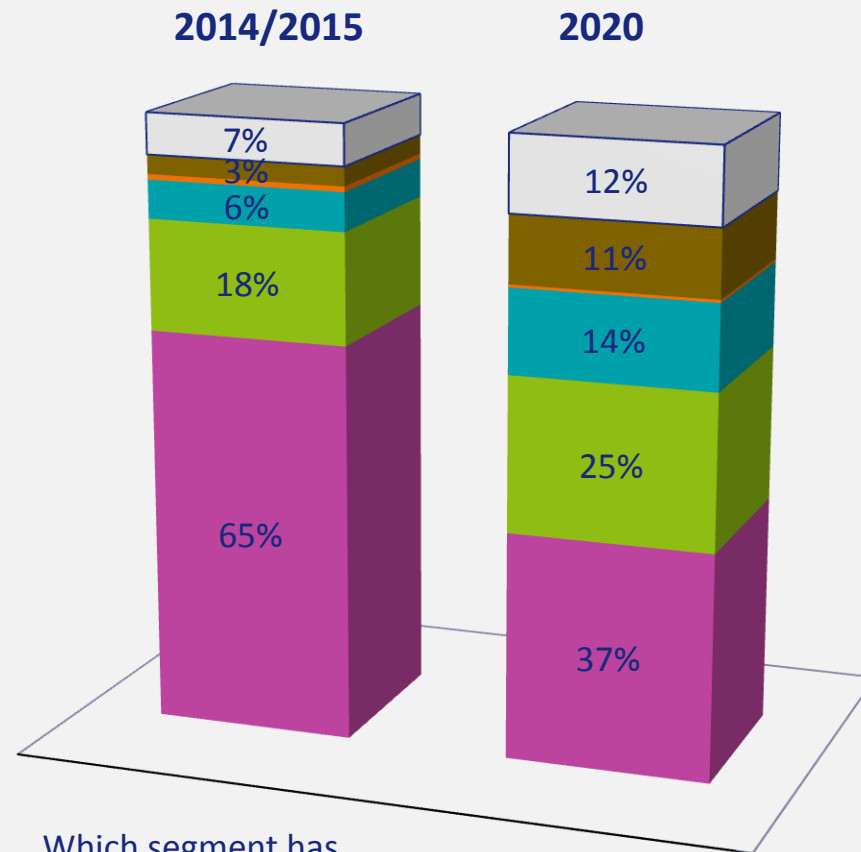
■ Process heat

■ Solar Cooling

■ Tourism sector

■ Multi-family houses

■ Single-family houses

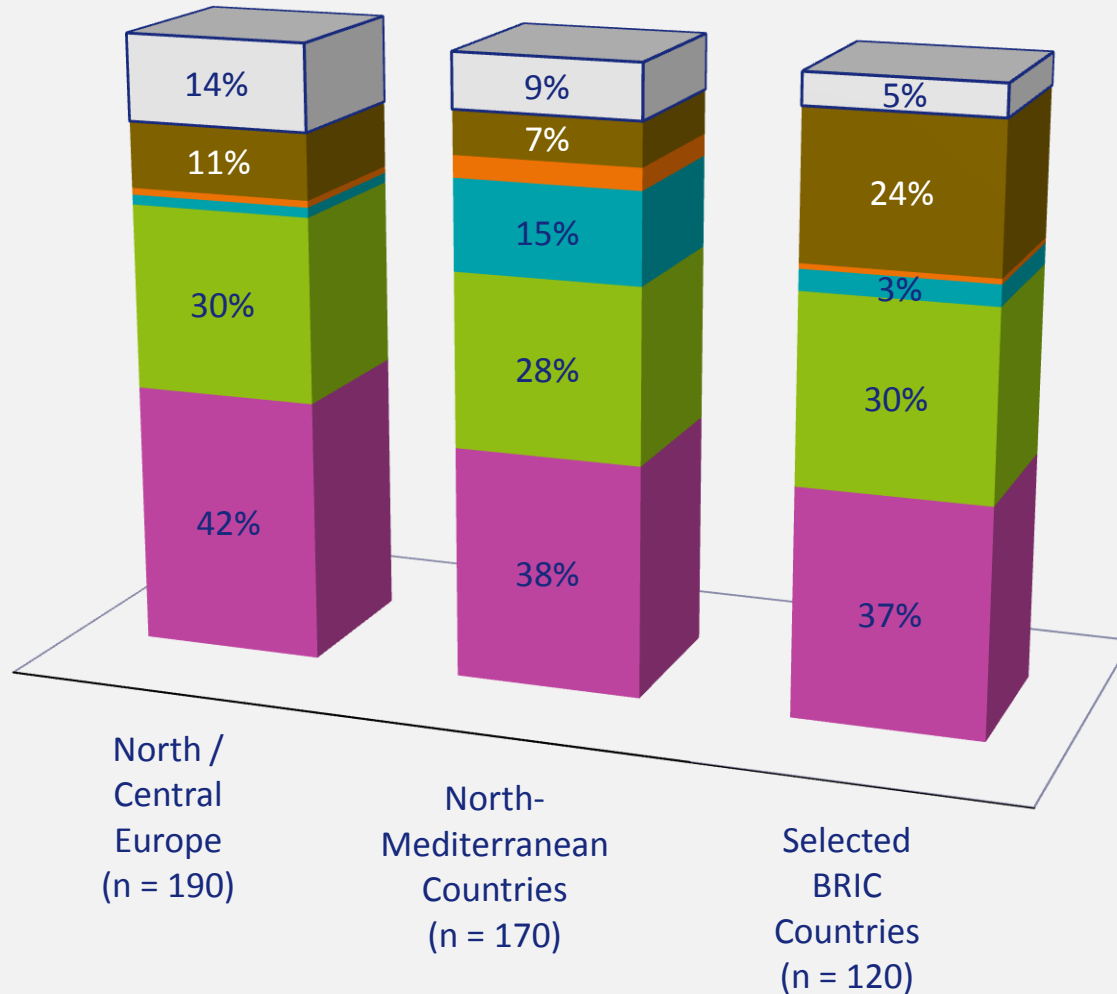


Which segment has the highest share in your sales 2014/2015? (n = 672)

Which segment will dominate your sales in 2020? (n = 648)

Which segment will dominate your sales in 2020

- Public sector
- Process heat
- Solar Cooling
- Tourism sector
- Multi-family houses
- Single-family houses



- ▶ The client group of single-family housing owners becomes less and less important worldwide.
- ▶ The industry expects strong growth in commercial applications (multi-family, tourism and industry) depending on the region.
- ▶ Public orders will increase especially in North / Central Europe.
- ▶ For a successful market transformation the industry needs attractive, competitive turnkey solutions for commercial clients.



Thanks for your attention!

Bärbel Epp, epp@solrico.com

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