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| Description: | <i>Providing an overview of installation costs for solar thermal systems monitored among installers in Europe. Trying to analyse the structure of these costs.</i> |
| Date: | 15/09/2018 |
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| Download possible at: | http://task54.iea-shc.org/ |

Introduction

Task 54 has permitted to investigate installation costs among installers by distributing questionnaires in Austria, Switzerland, France, Romania, Denmark, the Netherlands and Germany. Besides, complementary data have been provided by German Authorities to deepen this database. From this work, several indicative lessons can be presented in terms of costs.

Average costs of installed ST systems in Europe

- Perimeter of investigations (7 countries in Europe)
- 194 systems so far (12 for Austria, 5 for France, 2 for Romania, 2 for Denmark, 167 for Germany, 2 for the Netherlands and 3 for Switzerland)
- DHW-Multi Family Houses: 8 systems, DHW Single Family Houses: 113 systems and Combi systems: 73 systems

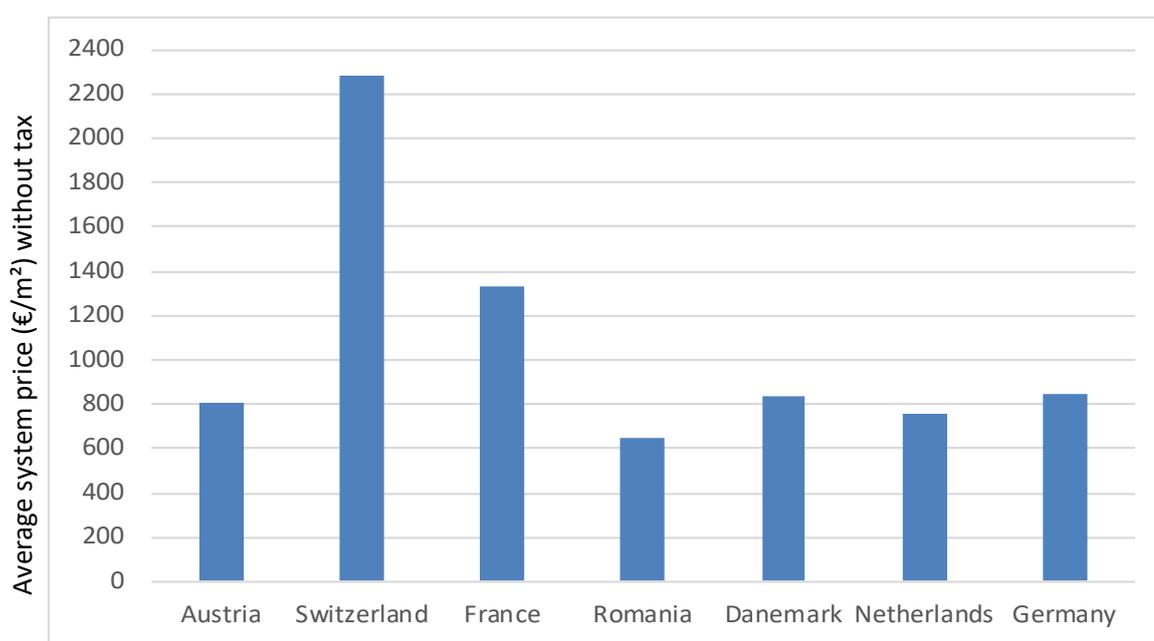


Fig 1. Average system price per m² of solar collector area.

Large heterogeneity between countries but with an average at nearly 800€/m²

Specific statistical focus in Germany

- Thanks to the nearly 170 investigated installations (distributed between DHW-SFH and Combi systems), a statistical approach can be made :
 - Average DHW system size : 5,2 m²
 - Average DHW system price : 940 €/m²
 - Average Combi system size : 13,4 m²
 - Average Combi system price : 680 €/m²
- Analysis of installation cost share compared to total installed costs

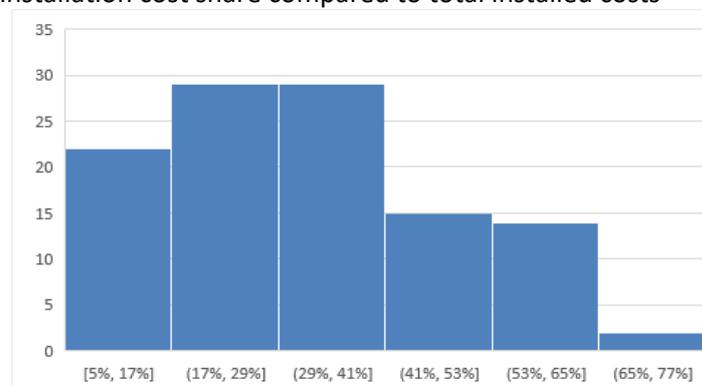


Fig 2. Number of solar systems by class of relative installation cost

This graph (Fig. 2) clearly shows that the average installation cost per system in Germany is representing in the order of 30% of the total cost. The larger systems, meaning Combi systems are found at lower values, while the smaller DHW systems usually have higher relative installation costs.

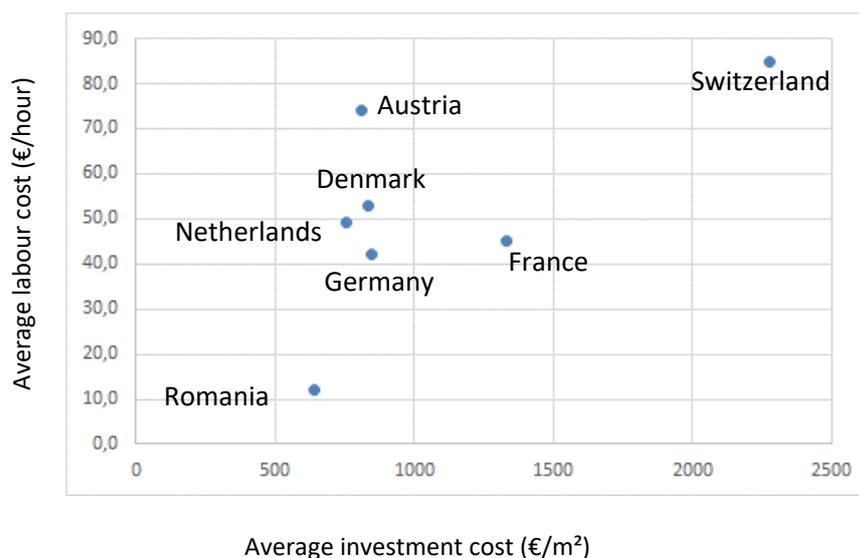


Fig 3. Positioning of average investment cost vs. average labour cost in the different countries

Figure 3 shows that there is a trend for a correlation between investment cost level and average labour cost (€/h) in the studied countries. As high is the labour cost as expensive are the solar systems.