

# **ABSTRACT PAPER REF 53**

## **ENERGY SCENARIOS IN THE MAIN WORLD CERAMIC TILE CLUSTERS**

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### **Summary**

The objectives of this paper are: i) to identify and describe the main characteristics of some of the most important ceramic tile clusters in the world, and ii) to compare the energy scenarios in these clusters.

A brief description of each ceramic cluster is displayed, including general information with regard to the area where they are located and the ceramic tile production features. Moreover, the specific information related to the ceramic manufacturing activities is analysed in depth. The paper focuses on energy issues, describing and comparing the situation in each considered cluster, gathering general information, for instance energy available sources (thermal and electrical energy sources), as well as specific information about the ceramic tile manufacturing in each cluster.

Data on the average energy consumptions and carbon dioxide emissions has been collected for this paper, hence allowing comparisons and analysis on technical and economic data, as well as the most popular energy saving actions implemented in the studied clusters. From the legal viewpoint the carbon dioxide emission control and cogeneration regulations applied in each country are briefly described, enabling comparisons of the main energetic regulations in the different ceramic tile clusters. Moreover, as far as the social issues are concerned, the support activities of each cluster to the ceramic tile manufacturers are identified, considering both institutional and academic support.

Eventually, a SWOT analyses shows that the energetic scenarios present some significant differences, even though the production technology used is quite similar. This is due, among others, to differences in the following factors: production costs, type of manufactured products, end product quality requirements and environmental regulations.