

Hampering and Promoting Factors for Energy Efficiency Improvements from the Perspective of SMLEs: The Case of the Turkish Industry

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Abstract

The industry contributes the most to the world's energy savings in all sectors through more efficient energy use (IEA, 2018). Yet, the literature provides evidence that the potential energy efficiency gains in the industry are not fully achieved. The gap between the potential energy efficiency measures and the actual implemented measures is called "the energy efficiency gap". This study aims to reveal the reasons for the energy efficiency gap by focusing on the factors that affect the energy efficiency implementations in the Turkish industry. To this end, we developed a questionnaire, which consists of questions that if the implementer of an energy efficiency improvement considers an indicator as a hampering and a promoting factor. The list of the indicators is based on the literature review. We conducted a questionnaire survey with 135 industrial enterprises (small and medium-sized [SME] and large-sized [LE]) that have completed at least one state-funded Energy Improvement Project (EIP). 86 of them responded to the survey. We ranked their responses according to the average responses. The results show that the level of energy intensity and scale of enterprises take the lead in the importance of perceived barriers and drivers. This study also suggests that the average scores of the perceived barriers in SMEs are mostly higher than those in LEs. This finding reveals that the tendency of considering an indicator as a barrier diminishes as the scale becomes larger.

Keywords: Industrial energy efficiency, Barriers, Drivers, SMLEs

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