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Analyzing Energy Consumption Behavior of Migrated Population in Turkey Using Bayesian Belief Approach

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Abstract : In Turkey, emigration, especially from Syria, has been continuously increasing together with rapid urbanization. In parallel to this, total energy consumption has been growing, rapidly. Unfortunately, domestic energy sources could not meet this energy demand. Hence, there is a need for reliable predictions. For this reason, before making a survey study for the migrated people, an informative questionnaire was prepared to take the opinions of the experts on the main drivers that shape the energy consumption behavior of the migrated people. Totally, 17 experts were answered, and they were analyzed by means of Netica program considering Bayesian belief analysis method. In the analysis, factors affecting energy consumption behaviors as well as strategies, institutions, tools and financing methods to change these behaviors towards efficient consumption were investigated. On the basis of the results, it can be concluded that changing the energy consumption behavior of the migrated people is crucial. In order to be successful, electricity and natural gas prices and tariffs in the market should be arranged considering energy efficiency. In addition, support mechanisms by not only the government but also municipalities should be taken into account while preparing related policies. Also, electric appliance producers should develop and implement strategies and action in favor of the usage of more efficient appliances. Last but not least, non-governmental organizations should support the migrated people to improve their awareness on the efficient consumption for the sustainable future.

Keywords : Bayesian belief, behavior, energy consumption, energy efficiency, migrated people
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