

Industrial Energy Productivity Disparities by Iran Provinces

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Energy is one of the primary inputs for the production of goods and services. Higher production and growth requires energy efficiency improvements. Categorizing provinces into homogenous industrial clusters, this study evaluates the energy productivity of industrial energy use of Iran Provinces. Energy efficiency as measured by a non-parametric Data Envelop Analysis model (DEA) for the period of 1385-1393, is used as a proxy for energy productivity. According to the results, there are considerable disparities in industrial energy productivity within industrial provincial clusters. In the cluster consisting of Tehran, Isfahan, and Khuzestan, the highest energy productivity belongs to Isfahan and Khuzestan has the lowest energy productivity. Khorasan Razavi has the lowest energy efficiency in the fourth industrial cluster. Hormozgan has the lowest energy efficiency in the fifth cluster.

Keywords: Energy efficiency, productivity, Data Envelop Analysis (DEA)