



## SCIENTIFIC & RESEARCH PROJECTS

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### Project Title:

Long Run Energy Demand in Iran: A Scenario Analysis

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### Abstract:

**Purpose** – Iran as an energy-rich country faces many challenges in the optimal utilization of its vast resources. High rates of population and economic growth, a generous subsidies program, and poor resource management have contributed to rapidly growing energy consumption and high energy intensity over the past decades. The continuing trend of rising energy consumption will bring about new challenges as it will shrink oil export revenues, restraining economic activities. This calls for a study to explore alternative scenarios for the utilization of energy resources in Iran. The purpose of this paper is to model demand for energy in Iran and develop two business-as-usual and efficiency scenarios for the period 2005-2030.

**Design/methodology/approach** – The authors use a techno-economic or end-use approach to model energy demand in Iran for different types of energy uses and energy carriers in all sectors of the economy and forecast it under two scenarios: business as usual (BAU) and efficiency.

**Findings** – Iran has a huge potential for energy savings. Specifically, under the efficiency scenario, Iran will be able to reduce its energy consumption 40 percent by 2030. The energy intensity can also be reduced by about 60 percent to a level lower than the world average today.

**Originality/value** – The paper presents a comprehensive study that models the Iranian energy demand in different sectors of the economy, using data at different aggregation levels and a techno-economic end-use approach to illuminate the future of energy demand under alternative scenarios.