

## Financial and Executive Mechanisms for Energy Conservation and Renewable Energy Development in Oil-Rich Countries

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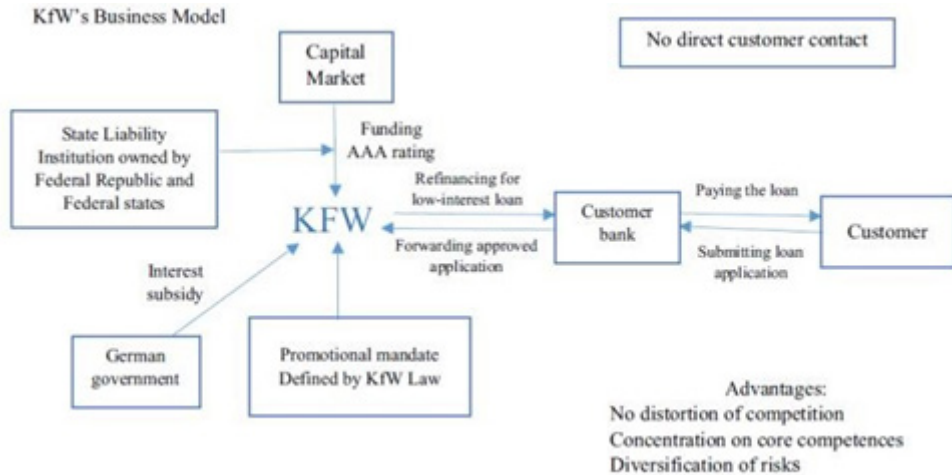
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**Statement of the Problem:** Since the first international summit in 1970 - Also called the earth summit- followed by the global gathering of 1992 at Rio, a serious concern was declared by scientists and approved by world leaders that the earth is facing with serious environmental problems which a significant portion was due to the consumption of fossil fuels. Since then, there have been many meetings such as Kyoto, Rio+20, Copenhagen, and Paris 2015 to increase nations' cooperation to take actions to resolve this critical issue. Accordingly, oil-rich countries targeted to increase renewable energy share in their energy systems and tried to decrease energy intensity. This presentation covers a review of renewable energy consumption and renewable energy as well as energy saving policies for selected oil-rich countries. Also, strengths and weaknesses as internal factors, as well as opportunities and threats of renewable energy deployment as external factors are introduced. Finally, suitable strategies, according to SWOT analysis and reviewing global mechanisms, are suggested to promote renewable energy use in oil-rich countries.

**Methodology & Theoretical Orientation:** Considering the energy consumption, an evaluation of energy-saving potential was made in this presentation by reviewing published papers, as well as related laws and regulations. Cost-benefit analysis approach along with SWOT technique and a comprehensive review of global experiences were applied to introduce proper financial and executive mechanisms to determine the economic and social aspects of energy conservation programs for implementation of energy saving plans and renewable energy development.

**Findings:** In order to cope with climate change impacts, some mechanisms were suggested regarding SWOT analysis and reviewing global experiences. These mechanisms are attractive enough for all stakeholders and actors. The investigation of renewable energy and energy saving co-benefits highlights that low investment is required to implement renewable energy projects in comparison with fossil fuel saving benefits. Accordingly, the required fund to obtain economic, environmental, and social benefits of renewable energy development can be provided by the government and banks. The governments could pay avoided energy subsidies in the form of tax exemption, low- interest loans, etc.



## Biography

Prof Madjid Abbaspour is a faculty member at SUT since 1981. He obtained a Master's degree in Energy from the MIT (Massachusetts Institute of Technology), 1974, degree ME systems for water resources management program co-hosted by the University of MIT and Harvard (1975), Ph.D. in Environmental Systems Engineering, Cornell University, USA (1981). He has a broad range of research interest, including renewable energy systems, sustainable development, ocean engineering, and energy policy. He is the head of Ocean Engineering Group at department of mechanical engineering and has served as advisor to many private and state organizations, particularly presidency of Iran and Ministry of Energy and Environment. He is one of the pioneers in energy in Iran and has published 15 books and over 320 papers in peer reviewed journals and conferences. He has registered over 7 patents and received several awards and certificates of appreciation for his contributions. Also, he is the chief editor of some journals: International Journal of Environmental Science and Technology (IJEST), published by Springer, International Journal of Energy and Water Resources (IJEWR), published by Springer, Journal of Human and Environment (in Persian), Journal of Development and Sustainability (in Persian).