

13.1 **Jordan Oil Shale Energy Company (JOSECO): A Vision Toward Oil Shale Commercialization**

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The unusual situation in the global energy prices gives serious reasons to immediately act toward oil shale utilization to substitute for the depleted conventional fuels which will no longer be available as a source of sustainable energy in the quantities known today. At current levels of conventional crude oil prices of >\$100/bbl, producing oil from shale becomes economically feasible.

The Jordanian National Energy Strategy prepared by a Royal committee highlighted the importance of immediately implementing programs to increase reliance on local energy sources, mainly oil shale. Jordan's long experience in attempting to use oil shale as a future and promising source of energy is highlighted by the creation of Jordan Oil Shale Energy Company (JOSECO)

In Jordan, oil shale is the most abundant fossil energy resource discovered to date, putting Jordan in the third rank after USA and Brazil in terms of oil shale reserves. The identified reserves of more than 100 billion tons are sufficient to satisfy the national energy needs for hundreds of years.

The main paper will focus on Jordan's Oil Shale Development Strategy, and explains the main objectives and plans of JOSECO, which will participate in making Jordan energy independent and make it a pioneer country in commercial applications. The Microwave Conversion Process will be explained and its features compared with other retorting technology.

Under the first phase of the strategy, several agreements were signed with companies investigating the potential of oil shale extraction across the country. The second phase is heralded by memoranda of understandings to carry out feasibility studies and assessments of the Wadi Maghar area. After the submission of feasibility studies, the government will negotiate a concession agreement with the interested companies, and then send the agreement to the Cabinet for endorsement.

The new findings showed that the cost of extracting one barrel of oil by a new retorting technology will range from US\$ 30 to US\$ 40 compared to the price of conventional crude oil at present time (more than US\$100).