ILYA BASKAKOV. DEVELOPMENT OF RARE EARTH METALS AND LITHIUM INDUSTRIES IN IRAN AS A FACTOR OF NATIONAL ENERGY AND TECHNOLOGICAL SECURITY

*Keywords: Iran; resistance economy; rare earth metals; lithium; modernization; sanctions; energy; technologies; mining sector.*

**Ilya Baskakov**,
Research Associate
Department of Middle and Post-Soviet East
INION RAN
e-mail: ilya_baskakov00@mail.ru
ORCID: 0000-0002-2842-4804

*Citation:* Baskakov I. Development of Rare Earth Metals and Lithium Industries in Iran as a Factor of National Energy and Technological Security // Russia and the Moslem World, 2026, № 3 (333), P. 77–93. DOI: 10.31249/rmw/2026.03.05

*Abstract. In recent years, global political and academic circles have shown a significant increase in interest regarding the problem of countries' access to critical materials and the know-how required for their exploitation, in particular lithium and rare earth metals, which are essential for progress in high-tech industries. The article examines the development of the rare earth metals and lithium industry in Iran in the context of the national modernization model implemented by the state. The dynamics of the formation and evolution of the Iran's national rare earth metals and lithium industry are traced, taking into account domestic scientific and technological developments and opportunities for international cooperation. The factor of the U.S. sanctions pressure on Iran's mining and metallurgical industry is also taken into account. The author argues that the development of the rare earth metals and lithium industry can contribute to achieving of a number of key principles of the "resistance economy" doctrine: ensuring high rates of economic growth, preventing the negative impact of sanctions on the relevant industry, utilizing domestic capacities, achieving self-sufficiency in strategic goods, reducing dependence on oil revenues, and contributing to the creation of an innovative economy. Given the significant control of rare earth metals and lithium markets by certain states or company cartels, Iran is interested in developing national industries for these critical materials, which in the long term is key to achieving the state's strategic goals.*

## Introduction

Rapid scientific and technological development is one of the factors of contemporary world politics. Technologies determine the internal socio-economic landscape of states and the orientations of their foreign policy. At the same time, the implementation of technological projects requires both access to engineering developments and to the resources for their realization. Under conditions of global turbulence and growing geopolitical tension, critically important materials necessary for maintaining the operability of the industrial ecosystems of the world's leading countries acquire special significance. The group of critically important raw materials whose role became prominent in the 2020s includes, among others, rare earth metals and lithium.

The issue of access to critically important materials and the possibilities for their exploitation also affects Iran – a state situated in complex foreign policy conditions of confrontation with the U.S. and the bloc of countries allied with it. At the same time, a characteristic feature of Iran, its domestic and foreign policy, is the close intertwining of idealism and pragmatism, ideological aspirations and considerations of ensuring national security. Therefore, the question of such a part of the Iranian economy as the state of the rare earth metals and lithium industry is simultaneously a conceptual and a practical question, a question that should be examined through the prism of the "resistance economy" concept and considerations of national energy and technological security.

## "Resistance Economy" as a Tool to Protect the Iranian Model of Modernization

The Islamic Republic of Iran, as a rising regional power aspiring to the status of a center of force in the new world order [Kuznetsov, 2022, p. 112], relies on its own national modernization project. In Iran's history after the 1979 revolution, two major stages in the implementation of this project can be distinguished: the early post-revolutionary stage (1979–1988) and the contemporary stage (since 1989). Undoubtedly, the contemporary stage of implementing the Iranian national modernization project is heterogeneous and also includes models and approaches to its realization that vary in their time frames.

The Islamic regime in Iran, "carrying out a 'sacred-collectivist' (David Apter) modernization," "combines Islamic ideas with the foundations of democracy as a procedural form and demonstrates a