

> LITHIUM: WHITE OIL



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With the world mired in an oil depression, lithium could be the remedy for this and other international upheavals. Can one mineral change the balance of power in the world? With oil, a mixture of hydrocarbons, the lines of the geopolitical maps of the 20th century were drawn. The history of oil has taken place behind the scenes of world political and economic power.

Climate change and the condition of a non-renewable resource are putting an end to the reign of oil. The end of the oil era does not seem near, but the oil crisis that began in 2013 was the straw that broke the camel's back of the certainties of a world ruled by oil, forcing the search for other energy sources that lack the weaknesses of the invincible black gold. Among the aspirants to the title, there is one that has been on its way to the throne for more than two decades: Lithium. Lithium is a silver-white metal in its pure state, a condition in which it is not found in a natural environment due to its high reactivity, since it reacts easily with water, oxygen and other substances in the air to form other compounds.

Chile, Bolivia and Argentina concentrate more than half of the planet's proven lithium reserves. The three countries are called to manage the lithium market in the world and have been baptized by Forbes magazine as the new Saudi Arabia of White Oil. The main use of lithium today is for the manufacture of rechargeable electric batteries. The greatest potential of this industry comes from the use of these batteries in electric vehicles and energy storage systems.

Before the mineral boom of this century, lithium was a strategic resource in the military industry. Until the 1980s when the first functional rechargeable lithium-ion batteries were developed. In the early 1990s, the Japanese company Sony commercialized the first rechargeable lithium-ion battery. The decisive impetus came with the rise to prominence of clean energies at the beginning of the 21st century. The spread of the use of renewable energy generation was made possible by the confluence of several factors, including the improvement and lower cost of the necessary technological components, and rechargeable lithium-ion batteries, which allowed the electricity generated to be stored more efficiently and then distributed through the consumer networks. The efficiency of lithium-based batteries caught the attention of the automotive industry. It took Tesla Motors, a company that manufactures and sells electric cars, nearly a decade to convince the world of the viability of the electric car.