

Analysis of today Assessment of tomorrow



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The richest lithium deposit in the US - a turning point in China's previous dominance



Lithium deposits in the McDermitt volcano crater between Nevada and Oregon have waited 16 million years to be discovered and be ready for exploitation. This would have lasted longer if lithium had not become necessary for technology and business.

The recent confirmation that the lithium deposits in Nevada's McDermitt Caldera are the largest ever found in the world heralds a significant shift in the global race for one of the most sought-after raw materials.

A three-expert study published in the September issue of the Science Advances journal suggested that there could be between 20 and 40 million metric tonnes of lithium, which is by far the largest single deposit in the world.

The lithium deposits in Nevada many times exceed Bolivia's salt flats, which were considered the richest in the world - according to some estimates, even by up to 12 times.

The study, funded by Canada's Lithium Americas Corporation, whose subsidiary manages the research in Nevada, has concluded that there is a global race for new lithium deposits to meet expectations of demands reaching one million metric tons by 2040 - 8 times more than annual production in 2022.

Profitable exploitation

Exploration of the deposits beneath the McDermitt volcano crater has been ongoing for a long time, and it is no surprise that they are substantial, which has been verified by the study.

However, given that lithium is a principal component in the production of electric vehicles, study results have already offered new frameworks for the global lithium race.

Chevron started drilling in the McDermitt Caldera area in the 1970s, searching for uranium and found lithium instead, which was not necessary for the industry then. But it is today.

Besides significant deposits, the lithium from McDermit Caldera is "one of the most highly mineralised calderas in the world", said Alexi Zawadzki, CEO of Lithium Nevada, a subsidiary of Canadian Lithium Americas.

The exploitation of lithium will be profitable because the mine spreads over a relatively small area, and the ore is at a shallow depth with a high concentration. Experts claim that commercial exploitation could start in the second half of 2026.

Confirmation of Nevada's lithium deposits as by far the largest ever discovered, could be a game-changer in the global race for a crucial raw material in the fast-growing electric vehicle market.

Eliminating fears of lithium shortages

This confirmation is particularly significant for the US, which currently has only one active lithium mine: Silver Peak, also in Nevada, which has been operational since the 1960s.

Earlier estimates of the new lithium field in McDermitt Caldera projected it would provide as much as 25% of global demand and operate profitably for about 40 years.

The magnitude of this discovery relieves many previous US fears regarding the prospects of crucial industries, particularly that the country did not have enough potential mineral reserves to meet the growing needs of industry.

Another relief regards catching up with China, which has been leading the race in controlling the source of raw materials for the electric vehicle industry, since it dominates the production of batteries.

Lithium in the US is treated as a critical raw material for an industry that will reduce dependence on fossil fuels and stop global warming. In this respect, China is its main rival in global supremacy.

However, the confirmation of lithium deposits in Nevada drastically changes the current global lithium order, in which China still dominates but pays a high price for it.

Bad Chinese strategy

Being insufficiently rich in lithium itself, with only about 8% of global reserves, China's strategy for dominating the EV sector has been to win the race to control the sources of raw materials - lithium mines throughout the world.

However, it has been confirmed that lithium is not a rare metal and that its exploitation depends only on investments. This represents a problem for China and shows that it has had the wrong strategy for years.

In the past 2 years alone, China has spent about \$4.5 billion for ownership participation in 20 lithium mines, primarily in Africa and South America. However, such investments became risky because some are in unstable countries, such as Mali. In other countries, local authorities do not want to hand over the mines lightly to Chinese investors but seek control over them, as is the case in Zimbabwe, Mexico and Chile.

Chinese leader Xi Jinping has criticised his investors' chaotic rush for new lithium sources because they did not accurately examine the business climate before investing money. Lithium is an essential raw element for the growing EV battery business. China's dominance in this area has only pushed other competitors to become more proactive and build out their supply chains, from which the Chinese links will simply disintegrate.

The exploitation of lithium in Nevada also resolves significant national security concerns since the dependence of the critical industry on Chinese suppliers has been drastically reduced if not completely vanished. This happened in the short term.

Last January, General Motors allocated \$650 million to Lithium Americas to have exclusive access and take all the lithium produced from the Thacker Pass mine over the next 10 years.

This also means lithium production has a longterm secure placement, which could only speed up the exploitation and opening of new mining fields.