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by Emmanuel Hache, Gondia Sokhna Seck, Marine Simoen, Clément Bonnet and Samuel Carcanague



The aim of this article is to study the impact of a massive diffusion of electric vehicles in the world transportation sector on the lithium market.

Lithium, like other strategic materials, has found new markets in the context of the energy transition. Hence, the capacity of those strategic materials to supply these new markets can be questioned. To achieve this goal, we have developed the first detailed global bottom-up energy model, TIAM-IFPEN (Times Integrated Assessment Model-IFPEN) with an endogenous disaggregated life-cycle inventories.

**This study of this particular strategic material shows that the model could be a useful decision-making tool for assessing future raw material market stresses along with energy transition and could be extended to other critical raw materials for more efficient regional and sectorial screening.**



> **Critical raw materials and transportation sector electrification: A detailed bottom-up analysis in world transport** (PDF - 2.85 Mo)

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