Production of the lithium batteries that power electric vehicles—the "environmentally conscious" status symbol for those who can afford them—is taking a huge toll on impoverished indigenous people around the world, according to the latest report in an investigative series by *The Washington Post*. In the third report of their series, the *Post* examines the impact of lithium mining in Argentina, which is netting mining companies billions while "indigenous people are left poor as tech world takes lithium from under their feet." According to the *Post* investigation, one lithium company, a joint Canadian-Chilean venture named Minera Exar, "is expected to generate about $250 million a year in sales while each [of six aboriginal communities] will receive an annual payment — ranging from $9,000 to about $60,000 — for extensive surface and water rights." The *Post* also reported that there are concerns that the vast amount of water that lithium plants use "will deepen existing shortages in the region, which receives less than four inches of rain a year." In their earlier pieces, the *Post* described how tens of thousands of men and boys in the Congo crawl through tunnels into unsafe "mines" and use hand tools to dig for cobalt, a mineral that is essential to making lithium batteries. This all-but unregulated mining has polluted local water supplies, resulted in countless injuries and deaths among the miners, and is suspected of causing an alarming increase in rare birth defects. Similarly, in China the extraction and refining of graphite—another key ingredient in lithium batteries—is causing pollution and health problems, according to The Post. As the *Post* reported:

Without systems of tarps and fans to keep [graphite] under control, the resulting fine-particle pollution can cause an array of breathing difficulties, such as aggravating lung disease or reducing lung function, and has been linked to heart attacks in people with heart disease, according the U.S. Environmental Protection Agency.

Graphite operations can also lead to pollution because their chemicals leak into local waters. According to industry sources, the purifying process, especially in China, is commonly done with acids, often hydrofluoric acid, a highly toxic substance.

As we recently reported, the international consulting firm Arthur D. Little last month released a report that exposed the hidden costs of electric vehicles compared to internal combustion engine vehicles [ICEV]. According to the report:

- Over a 20-year vehicle lifetime, a 2015 BEV [battery electric vehicle] generates enough human toxicity potential to impact human health by 20 days lost to death or disability;
- The production of lithium-ion battery packs creates more damaging pollution to human life than ICEVs generate over the course of a vehicle's lifetime; an
- While the BEV driver reduces their local contribution to greenhouse gas emissions, they create a more diffuse set of environmental impacts spread across the globe, the consequences of which are largely borne by rural and often disadvantaged communities near the mines from which BEV suppliers source raw materials for battery pack manufacturing.

Everybody wants to make the world a better place. But it's important to understand the consequences

of your actions and to make sure your decisions are grounded in fact.

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