Industrial and artisanal cobalt mining in the DRC

Bossissi Nkuba
University of Antwerp
USOS 2022
GLOBAL SOLUTION, LOCAL PROBLEM

Cobalt plays a key role in the global transition toward a low carbon economy
GLOBAL SOLUTION, LOCAL PROBLEM

• Electrification of transport

• Mobile electronics
EU ban on the sale of new petrol and diesel cars from 2035 explained

All new cars and vans sold in the EU as of 2035 should not produce any CO2 emissions. What does this mean in practice? Check our FAQ to find out.

Canada to ban sale of new fuel-powered cars and light trucks from 2035

By Steve Scherer

California bans the sale of new gas-powered cars by 2035

PUBLISHED THU, AUG 25 2022-4:51 PM EDT | UPDATED THU, AUG 25 2022-8:33 PM EDT

KEY POINTS

- California, the country’s most populous state and the center of U.S. car culture, is banning the sale of new gasoline-powered vehicles starting in 2035, marking a historic step in the state’s battle against climate change.
- The rule will force automakers to speed up production of cleaner vehicles beginning in 2026.
- The policy will not ban people from owning and driving conventional vehicles or from selling them on the used market.
LITHIUM-ION BATTERY MARKET SIZE, 2021 TO 2030 (USD BILLION)

- 2021: $58.61
- 2022: $69.45
- 2023: $82.36
- 2024: $97.76
- 2025: $116.14
- 2026: $138.08
- 2027: $195.69
- 2028: $233.25
- 2029: $278.27

Precedent Research
Figure 1: Volume-weighted average lithium-ion battery pack and cell price split, 2013-2022

Source: BloombergNEF. All values in real 2022 dollars. Weighted average survey value includes 178 data points from passenger cars, buses, commercial vehicles and stationary storage.
GLOBAL SOLUTION, LOCAL PROBLEM

LIMITED RESERVES

Cobalt:

DRC 70%

Nickel:

Lithium:

Cobalt: DRC 70%
History

• 1900s: UMHK

• 1970s: GECAMINES
History

• 1990s: Bankruptcy

• 2000s: minority partner in 12 joint ventures
“What GECAMINE has extracted for more than 100 years is much less than what Chinese companies are extracting in only a few years”
While sites like these are common, they do not tell the entire stories
Industry with artisanals

Due to the reputation damage the company fears, the pilot program of CHEMAF has been ended and miners dislocated.
Gender discrimination making it even harder for women

Women are often excluded from underground activities

Unfortunately they are “allowed” to perform tasks that represent as much, if not more risks than underground mining
“We have the artisanal miner. He’s part of the Cooperative. When they have the products, they have to channel their products into a trading center (near Kolwezi).
Reinforced bikes used to transport large amounts of bags of cobalt to wash and/or sell

“I prefer working with my bike, because I am so afraid of the risks of the pit. All you need is a heavy rainfall, the roof collapsing and everybody is buried in there”
“Nevertheless, when miners from the cooperatives have their products, they go to the processing entities. These are Chinese companies.”
Industries buying form artistanal miners

• More often than not, prices are well displayed on the wall and miners are present when their product is being weighed.

• However, that is just one part of the story...
The concentration can still be falsified on the expense of the miners

“Compared to Americans and South Africans, the Chinese also do not negotiate copper well. For example, when the former buys a ton of copper at $500 or $600, the Chinese can buy the same quantity at $100”
Once cobalt is transformed, packed on a track and ready to leave the country, there is no way to determine how it has been mined, how many injustices have occurred nor how many people have been unfairly treated.

It all goes straight to our phones and cars.
Documentary

“Cobalt Rush” (20’)

The stories of
  a miner,
  a washer &
  a transporter

Contact www.cegemi.com
  or www.bath.ac.uk
Thanks!