

The EU is at risk of long-term dependence on outside nations for batteries, slowing the switch to zero-emission vehicles and extinguishing the bloc's ambition to become a global battery powerhouse, a new European Court of Auditors report has found.

Despite efforts to galvanise the bloc's fledgling [battery industry](#), the EU remains far behind global competitors, with both the US and China ahead in the battery race. Currently, [China](#) accounts for 76% of battery production capacity globally.

The EU faces a number of barriers to its battery industry taking off, including a lack of access to critical raw materials, rising energy costs, and fierce global competition, said the report, published on Monday (19 June).

Auditors decided to look into Europe's battery ambitions following the passage of legislation effectively banning the sale of new petrol and diesel cars across the bloc from 2035, which will see car manufacturers switch primarily to producing electric models.

The dearth of made-in-Europe batteries means that the continent's automotive industry may struggle to find domestically-produced batteries to meet the rising demand for electric vehicles, according to the auditors.

"If you bet so heavily on electric cars and you know that you have a lack of raw materials under the ground, it means that you either will end up not meeting the 2035 goal or being dependent on third countries," **Annemie Turtelboom**, the ECA member who led the audit, told journalists.

This in turn could make electric vehicles made in Europe more expensive, as car makers are subject to prices charged by third countries, according to Turtelboom.

"We warned [in the report] that actually electric cars can become unaffordable for European citizens as you don't have the price editing completely in your hands," she said. Auditors were particularly critical that EU plans to phase out combustion engines did not result in targets for a rise in battery production.

The report questions why the EU's strategy does not quantify the capacity of its battery industry to meet the higher demand from the zero-emission vehicle mandate.

It is expected that 30 million EVs will be on European roads by 2030, with this number growing rapidly following the 2035 cut off for new fossil fuel cars.

Barriers

Despite major progress in ramping up EU battery production, thanks in large part to state subsidies, auditors identified factors that could jeopardise this progress, including battery manufacturers abandoning the EU in favour of regions offering more lucrative economic incentives.

The United States, for example, is directly subsidising battery production, making it an attractive option for manufacturers.

Europe also trails competitors in access to the raw materials necessary for battery production, such as cobalt, nickel, and lithium. Domestic supply of such materials is limited, with the EU reliant on imports.

According to the report, 87% of raw lithium imports come from Australia, 80% of manganese is from South Africa and Gabon, 68% of raw cobalt comes from the Democratic Republic of Congo, and 40% of raw natural graphite is imported from China.

Auditors criticised the slow uptake time for European mining operations to become productive, noting it takes between 12 to 16 years from the discovery of mining reserves to production.

Rising energy prices and spiralling costs of raw materials may also undercut EU competitiveness, the report warned. In the last two years, the price of lithium has shot up by 870%, while nickel has risen by over 70%.

Battery regulation

To partially address Europe's lack of domestic critical raw materials, the EU has set strict recycling targets for batteries, with the aim of keeping imported raw materials in Europe's supply chain loop.

The EU battery regulation, officially adopted on 14 June by the European Parliament, aims to make European batteries the most sustainable in the world.

Under the law, new batteries must contain a set percentage of recycled materials: 16% cobalt, 85% lead, 6% lithium, and 6% nickel. The collection rate for electric vehicle batteries is set at 100%.

Policymakers hope the new rules will lessen the need for imported virgin raw materials. Asked by EURACTIV about this recycling strategy's ability to diminish third-country dependence, Turtelbloom said that it will only become effective "maybe within 20 or 30 years", much after the 2035 deadline for the zero-emission vehicle switch.

"It's not a silver bullet yet. It might become a silver bullet. But before you can start with recycling, you need to have enough material to recycle," she said.

"If you look at the total amount of [electric cars](#) on the streets, it's still a very limited amount, which means that recycling is not a solution yet."

Should the EU fail to boost its [domestic battery production](#) capacity in line with its needs, the bloc would repeat the disastrous mistakes of the past, Turtelboom warned.

"The EU must not end up in the same dependent position with batteries as it did with natural gas, as its economic sovereignty is at stake," she concluded.

Lack of EU-made batteries could delay end of fossil fuel cars

Source: Euractiv