

Alternative Power Report

May 19, 2025

News on Alternative Power Sources



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Moving from ICE To Alternative Power

As manufacturers continue to shift their equipment production from ICE to alternative power sources, they need the latest information. That's why analysts at Power Systems Research continue to revise our global data and forecasts to provide the freshest picture available.

Volvo Announces World's First Electric Articulated Hauler

A30 Electric articulated hauler is game changer

By *Guy Youngs*, Forecast & Adoption Lead



The star of the recent Bauma-Germany 2025 show is arguably the game-changing A30 Electric articulated hauler. It's the first vehicle of its kind in what is both a key industrial segment for Volvo and a world's first for a series production BEV in its

class - 60-years since Volvo revolutionized the construction industry with the launch of Gravel Charlie, the world's first articulated hauler.

The Volvo A30 Electric offers a 64,000 lb. (32 ton)/23.3 cubic yard payload capacity and "full day" operation thanks to its 245 kWh li-ion battery.

Source: *Electrek* [Read The Article](#)

PSR Analysis: Mining companies really want to see this tech emerge and mature. Reducing the reliance on diesel reduces the environmental impact of projects and makes them easier to license. But the question here is whether or not the battery size at 245 kWh is sufficient.



Editor's Note: This monthly report includes news and analysis about EV and alternative power sources such as batteries and fuel cells from analysts at Power Systems Research.

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New power source installations vary across industry segments. Contact PSR for data on your specific application needs.

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Aeson Power Unveils Sodium Battery Products

At EES Europe 2025, one of the leading events for the energy storage industry, Aeson Power debuted its sodium battery energy storage product line, including the SIBPOM-4850 for telecommunications, the SIBPOM-12100 for UPS, and the SIBPOM-125kWh energy storage cabinet for C&I-scale use.

The Australian energy storage manufacturer also introduced sodium-ion batteries for the automotive sector. For the vehicle sector, Aeson Power introduced two series of sodium-ion batteries—the NaForce and NaPulse—each of which includes both a start-stop option and a starting option. The batteries provide instant starting at extreme temperatures, are fast charging, and have a lightweight design and long service life

Source: *PV Magazine* [Read The Article](#)

PSR Analysis: These batteries are much safer than Lithium Ion, they offer high-temperature resistance superior rate performance, high charge-discharge efficiency and a long life, so it's easy to see why people are so excited about them.

IMO Votes First-Ever Global Carbon Price on Shipping

The International Maritime Organization (IMO), a UN agency which regulates maritime transport, has voted to implement a global cap on carbon emissions from ocean shipping and a penalty on entities that exceed that limit.

The agreement makes the shipping industry the first sector to agree on an internationally mandated target to reduce emissions along with a global carbon price. The agreement includes standards for greenhouse gas intensity from maritime shipping fuels, with those standards starting in 2028 and reducing through 2035. The end goal is to reach net-zero emissions in shipping by 2050

Source: *Electrek* [Read The Article](#)

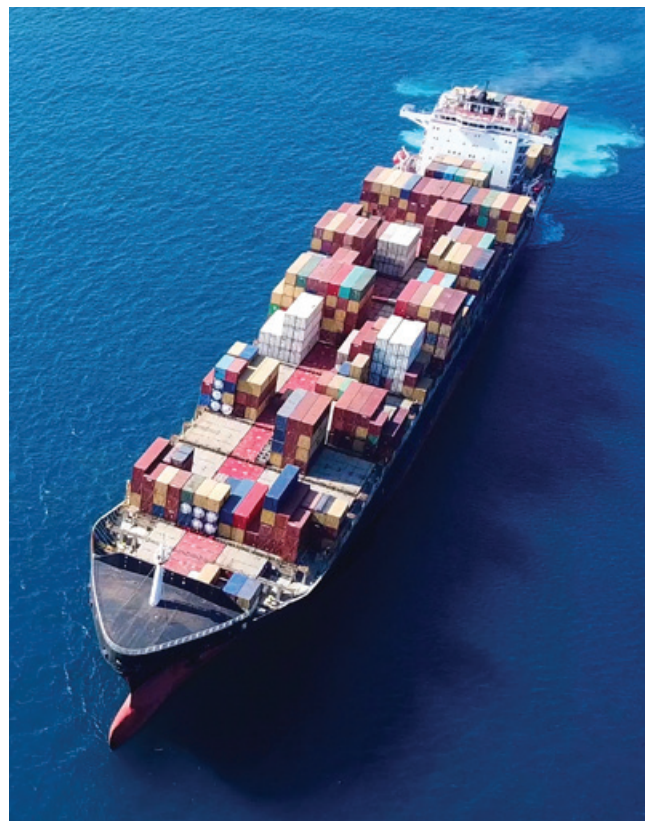
PSR Analysis: Given that international shipping contributes 3% of global carbon emissions (or 4% depending on your source) this is an important first step. It will however, need to be expanded and improved upon in order to reach the 2050 target.

CATL Next Gen Batteries Coming Soon To An EV Near You!

A few weeks ago, BYD announced new battery technology that allows electric cars to recharge in about 5 minutes. This month, at the annual Shanghai Auto Show, CATL fired back with fast charging news of its own. It claims its second generation Shenxing battery can add 520 kilometers (323 miles) of range in just five minutes of charging time. The BYD announcement claims its batteries can add 400 kilometers (250 miles) in 5 minutes using a Level 3 fast charger

Source: *CleanTechnica* [Read The Article](#)

PSR Analysis: The anti EV lobby has constantly attacked EVs in two main areas, firstly over a less than 300 mile range (that has been blown out of the water by many vehicles) and secondly by long charge times. The fact that you will be able to charge so quickly, blows this argument out of the water, too. It's also become very clear that the talk of Tesla leading the battery revolution is an illusion. The real debate here is actually how practical charging at this high a rate is, and whether or not it will damage the battery long term.



More Headaches For Tesla: Mack Trucks Muscles Into The Class 8 Electric Truck Market

Now that Tesla is finally gearing up for full production of its much-hyped and long-delayed Class 8 Semi electric truck this year, it has run up against a bulldog of a competitor. The legacy truck maker Mack Trucks has just announced plans to produce an all-electric version of its newly launched Pioneer Class 8 diesel truck

Mack Trucks dipped a toe in the electric truck waters way back in 2022, when the LR Electric Garbage Truck went into full production and then in 2023 the company expanded its electric options, announcing the start of production of medium-duty, class 6 and 7.

If all goes according to plan, that means the electric Pioneer will focus like a laser on driver comfort. The comfort angle is particularly important as older truckers age out and shippers scramble after a shrinking pool of qualified drivers

Source: *CleanTechnica* [Read The Article](#)

PSR Analysis: It may be a surprise to some, but Mack is far from the only truck maker to focus its initial electrification efforts on lighter, smaller vehicle classes. While no timeline has yet been announced, Mack has stated that it will be “soon” although some articles have stated a delivery time of 2026. Mack has an advantage here, in that it can utilize the strengths and experience in EV trucks of Volvo Group.

Windrose Delivers First Electric Semi-Truck in America

The Tesla-fighting Windrose electric semi-truck from Belgium is not coming to America ... it's already here. And it's already in customers' hands. The Belgian heavy truck manufacturer announced plans to build its R700 Class 8 electric truck in the US in a bid to sidestep the heavy tariffs and trade restrictions on imported HDEVs last year – and this month, the company delivered the first-ever all electric, long-haul sleeper truck to a US fleet customer.

The trucks are deployed by JoyRide Logistics, a Phoenix-based carrier and the first US regional trucking company to operate fully electric sleeper trucks on long distance routes



that include overnight drives. The initial rollout is happening in Arizona, California, and Nevada, with nationwide expansion already “in sight,” according to both companies.

The R700 packs a 729 kWh battery that is reportedly good for about 420 miles of range on a single charge with a full, 49 ton GVW.

Source: *Electrek* [Read The Article](#)

PSR Analysis: The design of this truck is very interesting in that it appears to be a copy of Tesla’s (right down to the centralized driving position) so the market for electric trucks is warming up with Mack (see previous article) and Windrose going head to head with Tesla.

Tesla Reports Poor Q1 2025 Performance

Tesla reported poor first-quarter financial results with the electric vehicle maker coping with sluggish sales and fallout from its CEO’s prominent role in the Trump administration.

Tesla’s first quarter of 2025 saw total revenue of \$19.3 billion, representing a 9% year-over-year decline, and non-GAAP earnings per share (EPS) of \$0.27, which missed Wall Street expectations

Tesla is fighting an enormous public backlash due to Elon Musk’s leadership of a federal government cost-cutting group that has divided the country and sparked angry protests at Tesla dealerships nationwide. Some analysts have called for Musk to abandon his role in the Trump administration to focus on Tesla

Investors expect Tesla will be hurt less by the Trump administration’s tariffs than most U.S. car companies because it makes most of its U.S. cars domestically. But Tesla won’t be completely unscathed. It sources some materials from abroad that will now face import taxes.

Source: *MSN* [Read The Article](#)

PSR Analysis: Tesla was once the darling of the EV revolution, but poor sales performance, lackluster models falling behind its rivals are all contributing to this collapse. Some analysts are calling on Musk to abandon his role in the Trump administration while others are calling on him to resign as they feel his brand has damaged Tesla to a point that it may not be able to recover.



Two Huge Threats to Tesla Sales No One Is Talking About

We frequently discuss how Elon Musk’s political activities seem to be hurting Tesla sales and how Tesla’s limited and quite old lineup is making it less and less competitive.

Tesla, like other legacy automakers, depends on customer loyalty and selling new vehicles to existing owners. Previous buyers are often likely to buy again from the brand, and many people who buy new cars like to get new ones every 3–5 years.

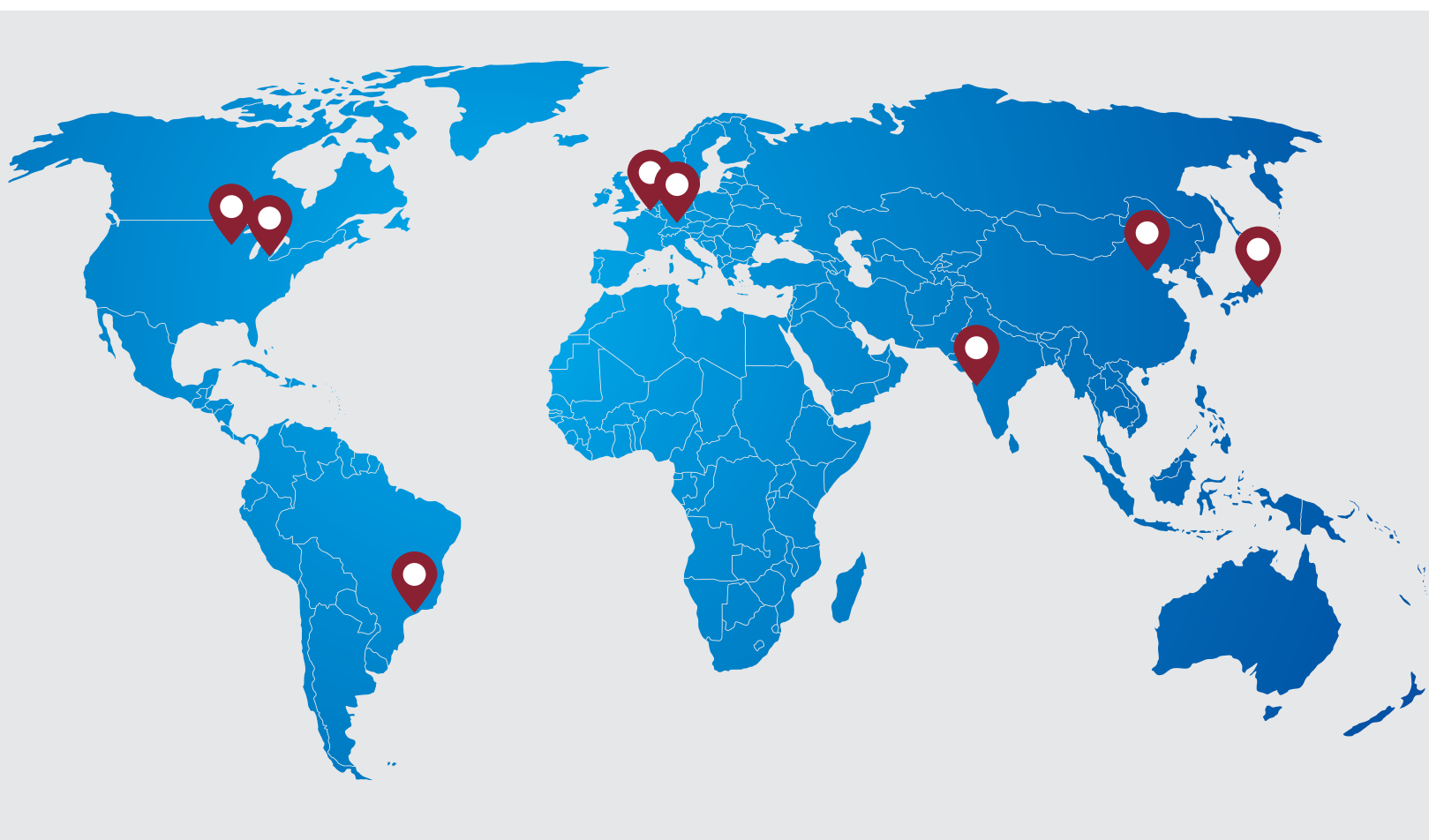
But having alienated its customer base, mostly through Elon Musk’s political activities, second hand Tesla prices have plummeted, making it difficult to upgrade to the latest model, and a large number of potential customers are simply not considering a Tesla when looking for an EV.

Source: *CleanTechnica* [Read The Article](#)

PSR Analysis: It’s difficult to see how Tesla can possibly survive in its current form. If Elon Musk were to resign from his government activities and /or resign from Tesla, there may be a chance for it to survive, but the damage may already have been done. Many companies have gone bust through similar brand damage so we may be watching Tesla’s end game unfold in front of our very eyes.

A Final Note

US and China trade breakthrough as tariffs reduced for 90 days– [Click Here](#)... Global Ferry Electrification Accelerates: 70% Of New Orders Go Electric- [Click Here](#)... China just won the EV race due to Trump – it’s now negotiating closer trade with EU– [Click Here](#)... Tesla’s Loyal Following Has Vanished — Will Musk Capitulate?- [Click Here](#)... Hydrogen’s Harsh Reality: Plug Power, Ballard, and FuelCell Near the End? – [Click Here PSR](#)



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