Alternative Power Report

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News on Alternative Power Sources

Power Systems Research
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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.

France and Germany Endorse Electric Trucks Over Hydrogen

Economic Councils Study Numbers

By Guy Youngs, Forecast & Adoption Lead

French Conseil d'Analyse Économique (CAE) and the German Council of Economic Experts (GCEE) finally weighed in on the EV vs. Hydrogen debate. And they didn't fall for the hydrogen fantasy. Instead, they did what economists do best: they looked at the numbers, ran the models, and calmly declared that battery-electric trucks are not just viable—they're the smart bet

In the EU, transport accounts for nearly 30 percent of greenhouse gas emissions. Within that, freight—specifically, the legions of trucks barreling down highways—is responsible for more than 30%

Source: *Clean Technica* **Read The Article**

PSR Analysis: France and Germany transport some 4.5billion tons of freight on their roads every year, most of the trucks using diesel. The joint report states that the total cost of ownership, the holy grail of fleet decision-making, is hitting parity with diesel for BETs in France and Germany today, and lays down 6 recommendations which also criticize bio fuels and hydrogen.

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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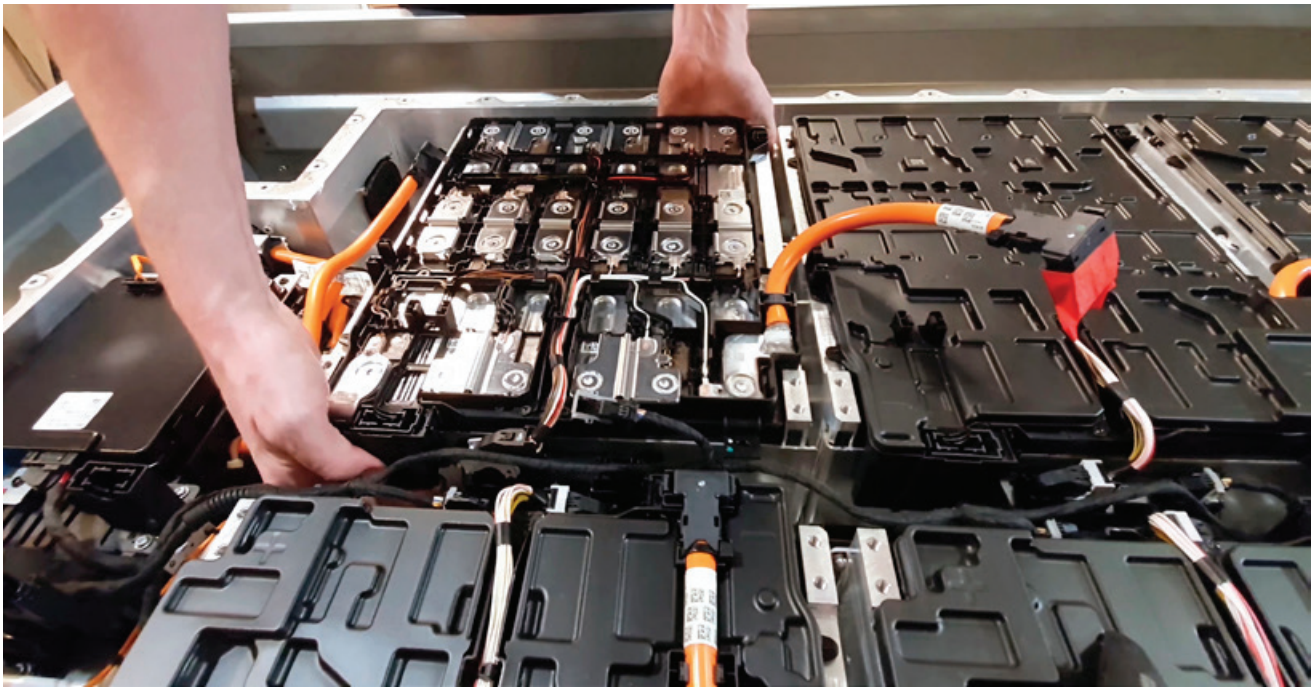

Tariff Articles

New U.S. tariffs and the world's responses to them have made global headlines. Here is a summary of some of the most noteworthy articles. Trump announces sweeping tariffs ranging from 10 to 49%, will increase cost of everything– **Click Here**. Trump's Tariffs Are Wrecking America's Supply Chain for Critical Minerals- **Click Here**. Americans already losing jobs to tariffs – 900 laid off as Stellantis idles plants– **Click Here**. China Just Turned Off U.S. Supplies Of Minerals Critical For Defense and Cleantech- **Click Here**. **China to impose additional tariffs on US goods - as trade war ramps up – Click Here**

Tesla Done in Germany: 94% Say They Won't Buy Tesla

A survey of over 100,000 Germans revealed that 94% won't buy a Tesla vehicle. It doesn't bode well for the automaker, whose sales had already been falling off a cliff in the important European market.

This has raised red flags about Tesla's future in Germany, but it is nothing compared to Tesla's performance so far in 2025. Tesla's sales were down 70% in the first two months of 2025, and again, that's compared to its already poor performance in 2024.

There are many factors at play, including increased EV competition and the Model Y changeover, but in recent months, industry experts have attributed Tesla's decline in the country to Germans being upset with Tesla CEO Elon Musk's meddling in local elections and promoting the far-right AfD party

Source: *Electrek* **Read The Article**

PSR Analysis: With Musk already under investigation for political meddling, his reputation has crashed in Germany after a couple of Seig Heil salutes at Trump's inauguration, and he has made several questionable posts promoting fascist and Nazi ideologies. All of this means that Elon Musk is directly responsible for the Tesla crash and it makes the future of Tesla 's German plant questionable

Europe Tesla (TSLA) Deliveries Down 43%, EVs Climb 31%

The official numbers from European Automobile Manufacturers Association (ACEA) are out, and they confirmed that Tesla deliveries have crashed by 43% in Europe so far this year.

Based on the main European auto markets already having reported vehicle registrations earlier this month, we already had a good idea of Tesla's performance in the market, but now the ACEA has made it official.

ACEA has released February registration numbers confirming that Tesla only delivered 16,888 units in the EU, EFTA, and UK markets in February 2025, compared to 28,182 units in 2024.

It should be very concerning for Tesla as electric vehicle sales are up 31% during the period.

Source: *MSN* **Read The Article**

PSR Analysis: Die hard Tesla fans are holding on to the idea that this is not a real problem because it is mostly due to the Model Y changeover, but that's simply not true. The shift to the new Model Y design is certainly having an effect, but it cannot account for the 43% drop in deliveries as Model 3 sales are also down despite plenty of inventory.

Magnesium Battery Study Offers Alternative To Lithium EV Batteries

Researchers at the University of Waterloo, Ontario, Canada, have developed a new electrolyte system for magnesium anodes, which they claim demonstrates a potential alternative to lithium-ion electric vehicle batteries through superior performance.

The team suggests halide-free Mg batteries surpass previous batteries in terms of safety, efficiency and stability. The aging effects of energy storage are also apparently mitigated with magnesium, which the team claimed would lead to a longer lifespan of the battery.

The researchers claim that rechargeable magnesium batteries are much safer than lithium-ion batteries, since they are classified as non-flammable products.

Source: *Best Mag* **Read The Article**

PSR Analysis: The researchers say that a flaw with many metal anodes (such as lithium, sodium and zinc) are the formation of dendrites, which is much less likely to happen with magnesium. More research will of course be needed, especially in terms of a cathode which would work well with the electrolyte and anode.

UK Reconsidering Tesla Subsidies After Trump Tariffs

US President Donald Trump imposed tariffs on imported automobiles (again), and one reaction from the UK is to reconsider its policy on electric vehicle subsidies, especially since it is providing so much money to Tesla buyers.

"Tesla has benefited from £188m in UK taxpayer subsidies in nine years," The Independent writes.

After imposing a 25% tariff on automobiles exported from the UK to the US, it's quite natural for British people in the auto industry and politicians to say, "Hey, we're spending hundreds of millions of dollars to subsidize your cars, and now you want to slap a tax on ours? Let's reconsider how our EV policies work…." UK Chancellor Rachel Reeves said the government is reviewing its electric vehicle transition rules, amid calls for reciprocal tariffs on Tesla imports,

Source: *Clean Technica* **Read The Article**

PSR Analysis: The backlash against the Trump tariffs is slowly starting to take shape and a lot of this is directed at Tesla because of Elon Musk and his support for Trump. Given that Tesla put an end to the myth that Europeans won't buy American cars, it's a very odd place for Tesla to be in and they probably will remain there until such time as the dump Musk or go bankrupt

Killing IRA EV Tax Credits Could Ruin US EV and Battery Industries

A new study from the REPEAT Project led by Princeton University's ZERO Lab warns that the repeal of the Inflation Reduction Act (IRA) tax credits could decimate the growing EV manufacturing sector.

The report clearly outlines the risks and states that repealing the IRA federal tax credits and the EPA's clean vehicle regulations would sharply reduce EV demand. Specifically, EV sales could drop around 30% by 2027 and nearly 40% by 2030 compared to sticking with the policies implemented by the Biden administration

Source: *Electrek* **Read The Article**

PSR Analysis: Planned expansions for EV assembly plants could be cancelled or shuttered and. battery manufacturing would also take a huge hit, with between 29% and 72% of battery cell production capacity becoming redundant by 2025. This means that factories under construction or those just coming online would be at risk. To date, around US $200 billion worth of investments in EV and battery manufacturing have been announced at 208 facilities around the US, with two-thirds announced since the passage of the Inflation Reduction Act in August 2022.

Chinese Battery Recycling Process Recovers 99.99% Of Lithium

A breakthrough in battery recycling has emerged from a team of researchers in China who have developed an eco-friendly way to recover nearly all valuable materials from depleted lithium-ion batteries. The innovative process uses glycine, an amino acid, to extract 99.99% of lithium and significant percentages of nickel, cobalt, and manganese from old batteries in just 15 minutes. The process achieves remarkable recovery rates: 99.99% of lithium, 96.8% of nickel, 92.35% of cobalt, and 90.59% of manganese.

Traditional methods use harsh chemicals and have the potential for environmental harm.

Source: *Clean Technica* **Read The Article**

PSR Analysis: Advancements such as this one are critical to address the growing e-waste problem, which is being driven by an increasing demand for consumer electronics

and electric vehicles, and it is critical in creating a new supply of lithium.

Red Algae – A Solution to Lithium-Sulfur Battery Problems

The Korea Polar Research Institute, KOPRI, has announced that a team has identified a material from Antarctic red algae at the King Sejong research station. The substance can significantly enhance the performance of lithium-sulfur batteries.

Lithium-sulfur batteries are one of the most promising chemistries for long-term energy storage with a higher theoretical energy density than lithium-ion batteries. But there are still some technical issues to solve. One of them is that sulfur tends to dissolve in the electrolyte and another problem is materials expansion during charging and discharging.

Source: *Best Mag* **Read The Article**

PSR Analysis: Solving the issues with Lithium Sulfur batteries could lead to significantly higher energy density batteries meaning that batteries could be lighter or have more range, however this is some way off.

A Final Note

67% of Americans would not consider buying a Tesla, new poll says– **Click Here**… Economists call for governments to ditch hydrogen, go to fully electric Vehicles - **Click Here**… IEA: Global battery industry has entered new phase– **Click Here**…More hydrogen fails: Doosan, Air Products cancel over $1 billion in fuel cell deals- **Click Here**. **PSR**

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