Alternative Power Report

June 22, 2026

News on Alternative Power Sources

Power Systems Research
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www.powersys.com | +1-651-905-8400 | info@powersys.com

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.

EV Investment May Be At Risk In Europe

EU Uncertain About Vehicle Emissions

By Guy Youngs, Forecast & Adoption Lead

The rapid growth of the EV market has led to a huge level of investment in new models, batteries, chargers and other components that have supported this growth. As the EU continues to dither about vehicle emissions (encouraged by the oil lobby and some legacy car makers), all this investment is now being put into question.

On one hand, EV vehicles have been the growth engine for the European Automotive industry (and also for the global automotive market) which has led to billions of Euros in investment, and on the other hand, the oil lobby and some legacy automotive manufacturers are pushing back against emissions legislation.

But if Europe holds its course on EV manufacturing — including all the related / supported components (batteries, power electronics, and critical components) it can rebuild its industrial base and secure growth and jobs.

Source: *CleanTechnica* **Read The Article**

PSR Analysis: The EU is once again proposing to revise its 2030–2035 car CO2, with the new Commission proposal weakening both the 2030 and 2035 targets, and the auto industry wants to reduce that ambition even more. The real danger here is while legacy automotive manufacturers would "buy" time to sort out their issues, the rest of the world (apart from the USA) is not standing still, and EU automotive manufacturers will find themselves further behind, with even less time to sort out their issues before bankruptcy looms. What this boils down to is that if EU does not embrace the EV revolution, they will lose out and the EU's auto industry will enter a period of rapid decline / loss. **PSR**

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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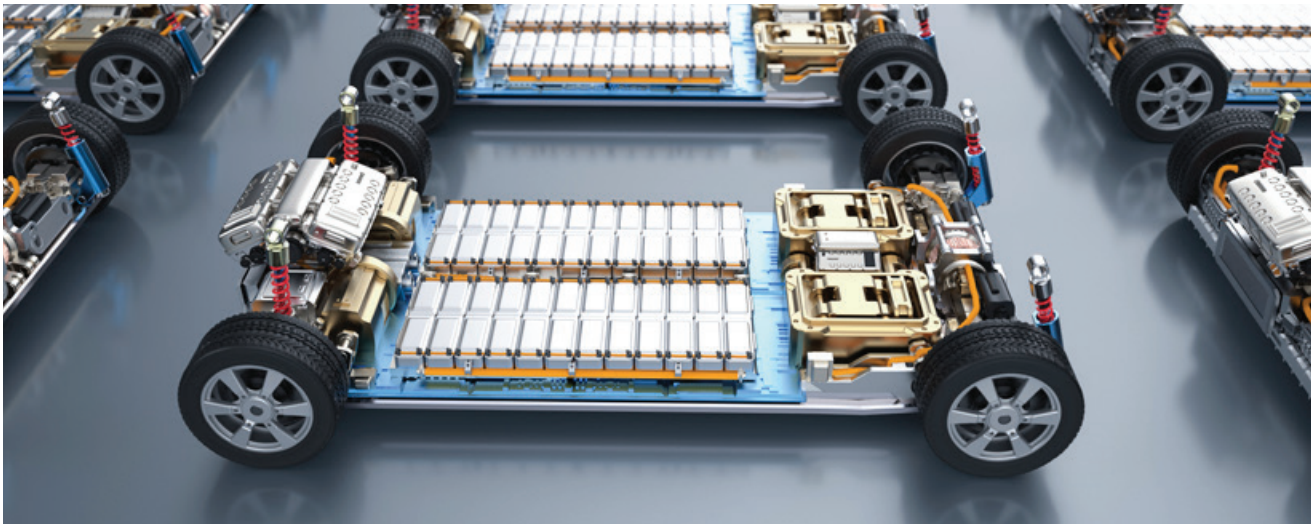

Electrifying Your Fleet Isn't Just About Going Green

On the face of things, when you read this title, your thoughts move to TCO (Total Cost of Ownership) but actually this article is more about sustainability – sustainability in the sense that the business needs to stay in business in the longer term, and it's about stability.

Sustainability and Stability are two core ideals for businesses.

According to YMX, a US company which specializes in sustainable, optimized enterprise yard and transportation services and solutions for all sized yards across retail, manufacturing, and distribution sectors, "Electrifying yard operations is often framed as a sustainability initiative. But that framing is incomplete, it is also a risk management strategy."

As of March 31, 2026, oil markets have been rattled by conflict involving Iran and severe disruption around the Strait of Hormuz, one of the world's most important oil chokepoints. Oil prices soared and these are not marginal increases. They represent rapid cost repricing across the entire supply chain. And this volatility is a severe risk to businesses

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

PSR Analysis: The electrification of logistics and businesses in general is not just about cost savings. It's about stability and reducing dependency on one of the most volatile inputs in the business model (ie Oil). **PSR**

Toyota Pulls Plug on One of its Most Important EVs

Toyota is scraping its plans to launch a next-generation luxury EV, the Lexus LF-ZC electric sedan, which was expected to enter production later this year with advanced new batteries that would delivery significant range improvements, and a dedicated platform.

The model was planned to use the gigacasting production technique that would split the vehicle body into three parts, front, center, and rear, to cut costs.

On paper, this car would have been brilliant, but like many Toyota promises over the years, it's not going into production. In model terms, Toyota promises much but delivers so little. Toyota is the latest Japanese automaker, following Honda and Nissan, to discontinue development of a major EV project, blaming changing market conditions.

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

PSR Analysis: While Japanese automakers continue to delay the inevitable shift to electric by cancelling projects, Toyota will likely fall even further behind Chinese brands, which own nearly every aspect of its supply chain. **PSR**

New Battery Could Last 16 Years Without Capacity Loss

Researchers from the Institute of Metal Research in China, say they have developed an electrolyte that allows an alkaline all-iron flow battery to run through

more than 6,000 cycles without measurable capacity decay. Researchers have equated this to running for approximately 16 years.

At the same time, as Iron is more than 80 times cheaper than lithium as a raw material, large scale storage costs will be cheaper. The use of water based electrolytes also means that the battery is inherently safer than most lithium alternatives

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

PSR Analysis: Flow Batteries are, generally speaking, large and not mobile, so this new development (if it translates into the commercial world) will only apply to stationary power sources such as industrial power generation. **PSR**

PV Equipped Vehicles May Cover 80% of Electricity Needs

In Germany, the Fraunhofer Institute for Solar Energy Systems ISE (Fraunhofer ISE) has demonstrated that the integration of photovoltaics (PV) into vehicle roofs, hoods and side panels significantly reduces pressure on power grids, reduces charging costs, decreases the need for external charging and provides significant proportions of their energy use.

The researchers found that cars in Central Europe could generate up to 55% of their annual electricity demand and in Southern Europe, the share could rise to 80% (this assumes relatively low annual mileage and large roof surfaces, such as those found on SUVs)

The study found that truck trailers equipped with a roof PV can generate up to 55 kWh per day during summer months. If solar modules are also integrated into the side walls, daily yields could increase to between 90 kWh and 110 kWh, enough to fully power cooling or hydraulic systems.

Source: *PV Magazine* **Read The Article**

PSR Analysis: We have reported about this technology being used on trucks before, and the Toyota Prius even has (or had) and option of a roof mounted solar panel, so all of this is not news, but this is yet more evidence of the way things will probably move in the future., especially with oil prices so high. **PSR**

Gotion Unveils Sodium Battery Products With 20,000 Charge Cycles

The new Mercedes AMG GT Coupe features a lot of high-tech advances such as its aluminum-jacketed, laser-welded, silicone-anode NMCA cells that provide a battery

rated at 298 Wh/kg. This is at the very high end of what Lithium batteries are capable of in today's market.

Sodium batteries on the other hand have much lower energy densities with Alsym's new grid-scale sodium-ion battery storage systems (that require no heating or cooling) have an energy density of 160 Wh/kg. Sodium-ion batteries suffer from one significant disadvantage: they have a relatively low energy-density.

At the 15th Global Technology conference, Gotion, a Chinese company backed by Volkswagen Group, said it is ready to start large scale production of sodium-ion batteries that are rated at up to 261 Wh/kg.

Source: *CleanTechnica* **Read The Article**

PSR Analysis: Given the advantages of sodium batteries (lower cost of materials, greatly reduced risk of fires, less need for thermal management systems, faster charging, and better cold weather performance), it makes you wonder if sodium batteries are the new Lithium? **PSR**

Honda Pursues New Blended Silicon-Carbon EV Batteries

Honda has just become a shareholder in the UK firm Nexeon. You may not have heard of Nexeon, but it is a global leader in the development and manufacture of groundbreaking silicon-based anode materials, capable of dramatically enhancing the performance of lithium-ion batteries, and they have strategic partnerships with several major players in the battery world.

Graphite is currently the most commonly used material for anodes, but Silicon materials are key to boosting battery performance because their theoretical capacity is about 10 times that of graphite.

With Honda investment in its pocket, Nexeon may continue developing its new anode with its Korean manufacturing plant now ready for full scale production.

Source: *CleanTechnica* **Read The Article**

PSR Analysis: Improvements in battery components like this silicon/graphite mix, enable great energy density and faster recharging, which are big pluses in the battery marketplace. **PSR**

Basquevolt Launches Lithium-Metal Battery Cell for EVs

Based in Northwest Sapin, Basquevolt has launched a next-generation lithium-metal battery cell for electric vehicles, and claims it has an energy density of 402Wh/kg. The battery reportedly is fully compatible with existing gigafactory manufacturing infrastructure.

The energy density compares very well with current Lithium batteries such as the Mercedes AMG GT Coupe, with a battery rated at 298 Wh/kg.

Basquevolt said the cell uses a lithium-metal anode combined with what it calls a "proprietary composite electrolyte." The company also stated that the technology could reduce capital expenditures and energy consumption during cell manufacturing by around 30%.

Source: *BEST Magazine* **Read The Article**

PSR Analysis: Two real questions arise from this – first, is this actually a solid state or semi-solid state battery, in which case the range is fairly normal for that type of battery, and second, what are the cost implications, given lithium is so expensive (certainly vs sodium batteries). **PSR**

A Final Note

Poland Bought Hydrogen Buses. Then The Fuel Bills Arrived – **Click Here**…**Hydrogen Buses** Work. That Is Not The Procurement Question - **Click Here**…**CATL** Developing 12,000 Wh Per Kg Lithium-Air Battery - **Click Here**…**GM** Pitches New LMR EV Battery On Earth, New EV On The Moon - **Click Here**. **PSR**

CONTACT US

Purchasing and Inquiries

Headquarters
St. Paul, USA
+1 651 905 8400
info@powersys.com

Detroit, USA
+1 248 444 0545
infode@powersys.com

Beijing, China
infocn@powersys.com

Campinas, Brazil
+55 19 3305 5657
infosa@powersys.com

European Headquarters
Brussels, Belgium
+32 2 643 2828
infobr@powersys.com

Frankfurt, Germany
+49 160 1807 044
infoge@powersys.com

Pune, India
infoin@powersys.com

Tokyo, Japan
+81 90 9139 0934
infojp@powersys.com

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