

### In This Issue

*NA: Daimler Pursues Fuel Cells*

*NA: On-Highway Batteries Provide Backup Power*

*NA: Electric Commercial Vehicles*

*NA: Powersport Industry Leading Economic Comeback*

*NA: DataPoint: Tillers*

*Euro: Stage V Emissions Delayed*

*Brazil: CE Sales To Grow 15% Despite COVID*

*Brazil: AG Equipment Sales Drop*

*Brazil: Sanitation Regulation Will Boost CE Sales*

*China: Battery Use Program Planned*

*Japan: OEMs Research e-Fuel*

*Korea: Hyundai Exports Fuel Cell Trucks To Europe*

*SE Asia: Super App Strategy Is at a Crossroads*

*India: Rural Economy Helps Ride Out COVID*

*Russia: Hyundai Plant Can Produce 300,000 Car Engines*

*Russia: Plan Supports Switching Vehicles to NG Fuel*

### About Us

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中国語や日本語で読みたいという読者様のニーズに応えるために、アジアから中国語と日本語の記事を提供しています。中国語をご希望の方は**こちら**を、日本語をご希望の方は**こちら**をクリックしてください。

 [Click Here To Go To Page 1](#)

## North America Report

### Daimler Pursues Fuel Cells on Multiple Fronts

By *Tyler Wiegert*, Project Manager and Power Generation Analyst

In a statement released June 30, Daimler announced it will be investing “a very substantial sum” in achieving a CO2-neutral future for the transportation sector. Hydrogen fuel cell production facilities are currently in development, with an eye toward mass production of fuel cells and their component parts.



*Tyler  
Wiegert*

Some of the hurdles Daimler is working to overcome are the needs for highly-filtered air and stable ambient temperature and humidity. The materials and components used in fuel cell production do not allow for an easy transfer in process from conventional engine manufacturing.

While Daimler has a deep knowledge base itself, it is also drawing on the expertise of other major players in the industry. In April, Daimler and Volvo took another step toward establishing a joint venture for fuel cell development and marketing in the on-highway market. Their goal is to have long-haul solutions to market after 2025.

On-highway is not the only avenue by which Daimler is seeking to enter the fuel cell market. They have also announced a pending partnership with Rolls-Royce, which they seek to make official by the end of the year. Daimler plans to leverage the fuel cell systems from their joint venture with Volvo to create emergency power generators with Rolls-Royce’s MTU for data centers, an already fast-growing market that may soon accelerate further as the cloud becomes decentralized.

**Source:** *The Trucker*. [Read The Article](#)

**PSR Analysis:** A person could be forgiven for thinking that Tesla and Nikola were the only major players in the on-highway alternative power market. My internet alerts made sure I was aware, and then made sure again and again, that Nikola’s fuel cell byproduct will be drinkable water, chilled before it is served to you while you drive.

But the old OEMs are not letting the fuel revolution pass them by, and they are creating some powerhouse joint ventures to make sure that they keep up with the newer entrants.

It should be clear by now that while the goal for many governments and manufacturers is carbon neutrality by 2050, the developments in technology and equipment to get there are happening now.

Power Systems Research’s OE Link™ Production database has both historical data and forecasts for on-highway, down to the model-variant level, that are meticulously researched and maintained by our global team of analysts.

The COVID-19 pandemic has many feeling like they just need to stand still and get through this, but the market leaders are still moving, and anyone that lets a year

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## North America Report

Continued from page 2

*Utilities have been struggling with the perverse problem that excess generation from renewable sources has been slowing adoption, as surges from those sources can disrupt the stability of power grids.*

go by because of the pandemic is going to find themselves substantially behind in a very different world when we come out of this. Let us work with you to identify what you need to stay relevant. **PSR**

## On-Highway Batteries Serve as Emergency Backup

By *Tyler Wiegert, Project Manager and Power Generation Analyst*

Audi and the utility EnBW are pioneering an energy storage facility built on retired electric vehicle (EV) batteries. This partnership is being billed as the solution to a major problem in each industry.

For automobile manufacturers, the question of how to recycle retired batteries has been pressing for some time. Utilities have been struggling with the perverse problem that excess generation from renewable sources has been slowing adoption, as surges from those sources can disrupt the stability of power grids.

EV batteries have a functional life of 3-10 years after they are retired from vehicle use, making them a ready tool for use by utilities.

Portland General Electric Company (PGE) also is seeking to create a more resilient grid for the utilization of renewable energy sources. They are launching a pilot program to incentivize the installation of home battery systems to act as a virtual power plant.

In addition to utilizing this extra storage to balance energy production and demand, PGE is hoping that the residential network can eventually be used to provide power to customers even in the event of a central outage. This pilot system is also being used to test a more-refined control system that seeks to use data on inconsistent energy generation from renewable sources and sudden, less-predictable energy consumption, like from EV charging, to inform an active management system of power distribution.

**Source:** *New York Times.* [Read The Article](#)  
*Yahoo Finance.* [Read The Article](#)

**PSR Analysis:** Whenever I am speaking with people who are skeptical about the future of battery-powered vehicles and renewable energy sources, I invariably hear two things. The first is that batteries are terrible for the environment, because when they are dead, you are left with a dead battery as garbage, not to mention the environmental impact of mining for raw materials.

The second is that renewable energy sources are not viable because we don't have the storage systems in place to make them a stable source of power. Innovations like those being made by Audi and EnBW, and by PGE are just examples of how a rapidly-evolving industry seeks to address these critics.

At some point, maybe people will be able to convert their EV batteries into a home battery system that operates as part of a virtual power plant. Maybe automakers will eventually not be required as middlemen supplying those used batteries to

[↑ Click Here To Go To Page 1](#)

## North America Report

Continued from page 3



utilities, and residential owners will be able to sell the batteries directly to the utility, helping to reduce the lifetime cost of an electric vehicle to a point that makes them more affordable for a larger segment of the population.

I wrote last month about the risks of future hype, but it is just as risky for industry actors to sit on the sidelines of the energy revolution because they think that the hurdles in front of them today will never be overcome by the ingenuity present in the market. **PSR**

## The Current Status of Electric Commercial Vehicles

*Chris Fisher, Senior Commercial Vehicle Analyst*

During the past decade, PSR has followed the progress of alternative fuels and technologies such as gas and diesel hybrid, natural gas, and electric along with other renewable fuels. To date, alternative fuels have been relegated to more niche segments and have not penetrated the larger end of the market.

Segments such as transit and school buses along with short distance segments



*Chris  
Fisher*

like refuse have been the primary adopters of natural gas since they tend to be close to their terminals for refueling and recharging. The bus market along with pickup and delivery trucks are the target segments for electric vehicles in the near term.

Late last year, Amazon placed an order for 100,000 light commercial “Prime” vans from Rivian that will likely be the beta test for the viability of light electric commercial vehicles. These vehicles are expected to begin deliveries next year.

Within the medium and heavy truck segment, electric and hydrogen fuel cell trucks are still in the testing phase. Barriers to adoption such as upfront cost, charging infrastructure, reliability, resale value, vehicle range and the impacts of extremely cold or extremely hot temperatures certainly will have to be addressed before the vehicles can be adopted on a large scale.

Large scale adoption will reduce up front cost and provide support for additional charging infrastructure, which would likely benefit other vehicle segments, as well. Large scale adoption should also help improve the battery technology as the manufacturers continue to learn and improve the equipment.

The advantages of electric vehicles include elimination of fuel cost and reduced maintenance cost, since EV’s have significantly fewer moving parts than the traditional commercial vehicle. However, electric commercial vehicles will continue to compete with other technologies such as natural gas and eventually hydrogen fuel cells. Fuel economy improvements to the traditional engines will also impact electric vehicle adoption rates.

Aside from the fact that most of the electricity to power these vehicles is derived from fossil fuels such as coal or natural gas, the “zero emission” vehicles will likely benefit from government financial incentives and government mandates.

[Click Here To Go To Page 1](#)

## North America Report

Continued from page 4

In California, CARB recently approved a measure that will require the truck manufactures to transition a percentage of their sales in the state from diesel trucks to electric zero-emission vehicles. **PSR**

## Powersport Industry Leading Economic Comeback

*Michael Aistrup, Senior Analyst*

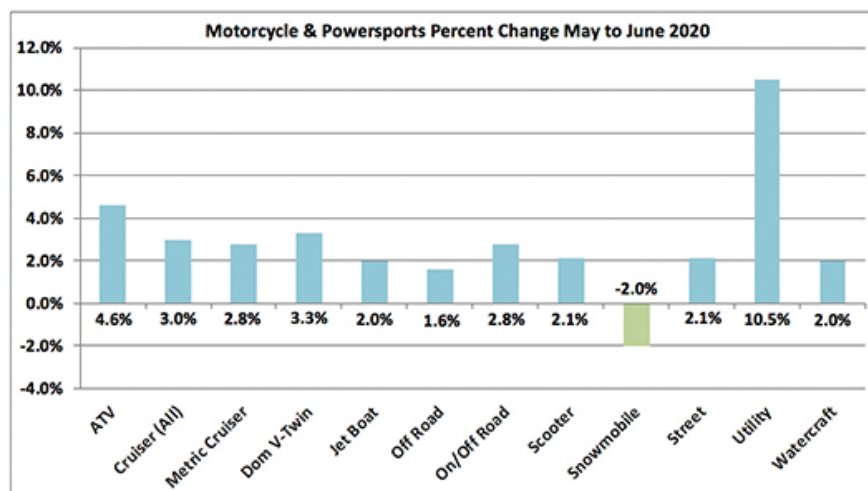


*Michael Aistrup*

The Powersports industry--featuring ATVs, motorcycles and watercraft--appears to be leading the way on the road to economic recovery. According to Motorcycle & Powersports News magazine, this increased demand for powersports is helping values bounce back from historic lows.

According to Scott Yarbrough, senior analyst for motorcycle and powersports at Black Book: "After the first month of the COVID-19, shutdowns put a freeze on powersports values during the beginning of the spring selling season, and the second month saw dramatic declines. This month values are up across the board, some by the largest amounts we have ever seen in a monthly update. A combination of surprisingly strong demand, coupled with drops in availability of units, has led to this resurgence in values,"

### Percent Increase of Value



Source: Black Book

The largest increase is the utility vehicle segment, which is up 10.5% compared to May. ATVs are up 4.6% and Snowmobiles are showing a decline of (-2%).

Increased demand is being driven by a desire by consumers to find a social distancing activity while having fun with family and friends.

According to the National Marine Manufacturers Association (NMMA), new boat sales rebounded sharply in May, up 59% compared to April, and up 9% from pre-pandemic levels on a seasonally adjusted basis. Total sales in May were the highest they've been in a decade with increases across all segments.

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## North America Report

Continued from page 5

*Shutdowns of manufacturing facilities due to supply issues and COVID-19 concerns have stopped powersports equipment shipments.*

Highlights from the latest New Powerboat Registrations report and Monthly Shipment Report:

- **PWC sales** reached record monthly highs for the second consecutive month in June, up 41% from a year ago, on a seasonally adjusted basis and have fully recovered from pandemic-related losses in March and April.
- **Saltwater fishing boat sales** were up 9% in May on a seasonally adjusted basis, compared to a year ago.
- **Jet boat sales** were up 31% in May on a seasonally adjusted basis, compared to a year ago.
- **Outboard engine sales** in June were up an average 28% from pre-pandemic levels on a seasonally adjusted, monthly basis.

**PSR Analysis:** Consumers seem to have decided that powersports provide a safe and affordable way to socially distance in today's new health environment.

Shutdowns of manufacturing facilities due to supply issues and COVID-19 concerns have stopped powersports equipment shipments. Industry manufacturers will need to increase production to meet consumer demand or consumers will look to other ways to safely social distance. **PSR**

## DataPoint: NA Tillers

**261,100**

By *Carol Turner*, Senior Analyst, Global Operations

The 261,100 units is the estimate by Power Systems Research of the number of tillers to be produced in North America (Mexico and the U.S.) in 2020.

This information comes from industry interviews and from two proprietary databases maintained by Power Systems Research: **EnginLink™**, which provides information on engines, and **OE Link™**, a database of equipment manufacturers.

**Market Share:** With combined plant totals of 52%, MTD leads in production of Tillers in North America. In second position is Schiller Grounds Care with 33%, and in third place is Honda Power with 5.5%.

**Exports:** Mexico exports up to 65% of its production, and the U.S. ships up to 35% of its production worldwide.

**Trends:** Production of Tillers in North America decreased nearly 16% in 2019, compared to 2018. Production is expected to drop an additional 10% in 2020. The decline is attributed to Husqvarna discontinuing their line of tillers along with a lull in demand for new products.

In recent years, there has been a steady demand for tillers in both the commercial and residential sectors. Driven by an acceleration in GDP growth, consumers will be increasingly willing to spend their disposable incomes on durable goods,

[Click Here To Go To Page 1](#)

**North America Report**  
*Continued from page 6*

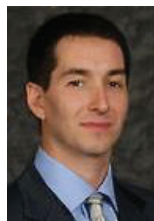
landscaping services, and recreational activities, thereby boosting demand for both consumer and commercial outdoor power equipment.

It's possible that COVID-19 may cause a production decline, but this impact may be only minor because homeowners are keeping up their yards and creating flower beds, etc. Expect production to increase 10% by 2025. **PSR**

**Europe Report**

*By Emiliano Marzoli, Senior Business development Manager - Europe*

**Stage V Emissions Standard Officially Delayed**

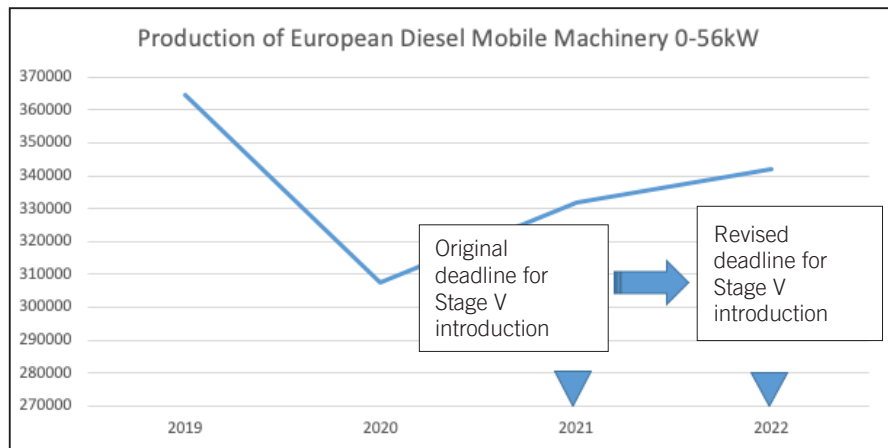


*Emiliano Marzoli*

Regulation (EU) 2020/1040 to amend Regulation (EU) 2016/1628 on Stage V emissions from non-road mobile machinery (NRMM) was published July 17 in the Official Journal of the European Union. This final step of the legislative process confirms that the 12-month extension of certain transitional provisions is officially EU law and is applicable retroactively from July 1, 2020.

This amendment to the Stage V Regulation extends by 12 months the June 30, 2020, and December 31, 2020, deadlines for the production and placing on the market of NRMM and tractors fitted with transition engines <56kW and ≥130kW.

**Read The Article**



Source: PSR OE Link™

**PSR Analysis:** The European industry associations representing NRMM manufacturers, namely CECE, CEMA, EGMF, United Municipal Equipment & Cleaning, European and FEM have been actively lobbying the EU institutions for several months, following the COVID pandemic in order to obtain postponement of the Stage V emissions standards. This news has a significant impact on all

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[↑ Click Here To Go To Page 1](#)

## Europe Report

Continued from page 7



applications, but above all on the <56kW ones. In fact, the impact on machine cost in this power band would have been particularly substantial with increases up to 30% compared to Stage IV Final equal machines.

As reported in our OE Link™ production database, some 360,000 mobile machines were produced in 2019 in the <56kW powerband. Following the impact of the COVID pandemic and its repercussion on the industry we are forecasting this number to shrink to 330,000 for 2021, the year of original implementation of the new Stage V emissions regulations.

With the new Regulation (EU) 2020/1040, OEMs will have an extra year to produce the new machines. More importantly, the market will have one extra year to absorb the disastrous consequences of COVID-19 and be ready to switch to Stage V in 2022, when we predict 350K machines will be manufactured in this range. **PSR**

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## Brazil/South America Report

### Brazil CE Sales To Grow 15% Despite COVID

By *Fabio Ferraresi*, Director Business Development South America



*Fabio  
Ferraresi*

Construction Equipment Internal Sales in Brazil from January thru May grew 35% over the same period of 2019. The Brazilian Machinery Builders' Association (ABIMAQ) expects 2020 sales to hit 20,000 machines, 15% more than in 2019.

**PSR Analysis:** The Construction segment was the less affected by the pandemic than some other segments. The interest reduction directed investment to real state, especially housing, and some measures, such as the new regulation for sanitation, recently approved by the parliament, will boost the Construction business in 2020 and more significantly in the coming years. **PSR**

### Brazil AG Equipment Sales Drop in H1 2020 but Growth Seen for 2020

**Source:** *G1* [Read The Article](#)

From January to June 2020, the total sales reported by the National Association of Motor Vehicle Manufacturers (ANFAVEA) dropped 1.3% compared with same period in 2019, with 196,000 units. Tractors sales dropped 5% while Combines dropped 9% and Sugar Cane Harvesters grew 24%. The reviewed expectation of ANFAVEA is 3% growth in 2020 over 2019.

**PSR Analysis:** First, it is necessary to consider that ANFAVEA covers only a small part of the equipment and OEMs. Second, sales of tractors should be boosted by the new "Safra Plan" with reduced interest rates combined with the good momentum of the agricultural business in Brazil.



[Click Here To Go To Page 1](#)

## Brazil/South America Report

Continued from page 8

*The new regulation will allow higher participation by the private sector in water supply and sewage collection and treatment services.*

A shortage of parts and a shutdown of plants reduced the offer during the pandemic period, but it will be recovered through the year. The impact on production will be more significant due to the loss of exports, since other South America countries are suffering more than Brazil in Ag Business. **PSR**

## New Sanitation Regulation Will Boost CE Sales and Production into 2035

A new legal framework for sanitation was approved by Parliament and sanctioned by the President in July. The new regulation will allow higher participation by the private sector in water supply and sewage collection and treatment services. It also set targets to reduce the population percentage without access to water supply and sewage collection from 30 million and 100 million people to zero and 20 million, respectively.

**Source:** *Revista Grandes Construções* [Read The Article](#)

**PSR Analysis:** With the current investment level, it would be reached in 2060. The level of investment will increase by US\$ 5 Billion per year and a significant amount of this investment will be directed to Construction Equipment in the coming years. **PSR**

## China Report

By *Qin Fen*, PSR Business Development Manager-China.

### National Grid Joins Switch-on Mode Team

In July, MIIT (Ministry of Industry and Information Technology) summoned a meeting with local governments, industry associations and automotive companies on battery switch-on implementation. People attending offered thoughts on implementing battery switch-on operations, sharing recommendations for policy and discussing challenges of proposed actions.

**Source:** *D1 EV* [Read The Article](#)



*Qin Fen*

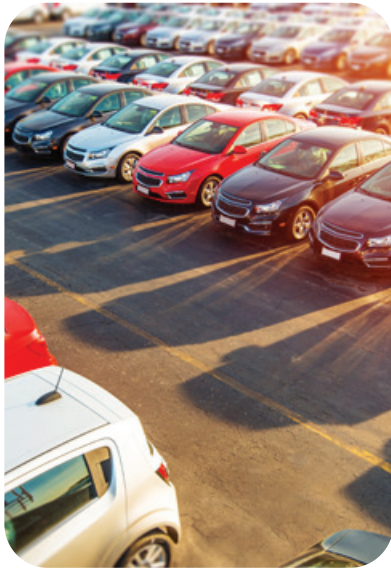
**PSR Analysis:** Electric vehicle development is facing several different technology roadmaps. While the automotive industry prefers plug-in and charging, grid companies are more inclined to favor the battery switch-on mode based on grid reliability. Such debate is good for advancing electrification in the auto industry, it is vital to have all participants' input before promoting electric vehicles on a larger scale. **PSR**

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 [Click Here To Go To Page 1](#)

## China Report

Continued from page 9



## 换电模式加入“国家队” 国家电网回归/换电标准正在制定

2020年7月16日—7月8日，工信部召集地方政府部门、行业机构、北汽蔚来等相关车企，召开新能源汽车换电模式推广应用座谈会，听取各方对推动换电模式发展的政策建议，研讨换电模式推广应用中存在的主要问题和困难。

**新闻来源：**第一电动网 - [阅读原文链接](#)

**PSR分析：**电动车的发展和推进也面临不同的技术路径，车企倾向插电和充电，而电网从电网稳定的角度，更偏爱换电，这样的争论对推进汽车行业电动化，不是坏事，在更大规模推广电动车之前，各个参与方的充分讨论对于电动车以后健康发展，至关重要。 **PSR**

## Far East: Japan Report

By *Akihiro Komuro*, Research Analyst, Far East and Southeast Asia

### Toyota, Nissan and Honda Research e-Fuel as New Fuel

Toyota, Nissan, and Honda each are preparing for stricter environmental regulations in 2030 by focusing on research and development of e-fuel, a synthetic liquid fuel made from carbon dioxide (CO<sub>2</sub>) and hydrogen (H<sub>2</sub>).



*Akihiro  
Komuro*

e-Fuel is a liquid hydrocarbon chain fuel made from the catalytic synthesis of H<sub>2</sub> and CO<sub>2</sub> from the electrolysis of water.

Generated from renewable energy sources, they are "carbon neutral," which means they emit and absorb the same amount of CO<sub>2</sub>. The e-fuel can be mixed with gasoline or diesel fuel.

The three Japanese companies each have begun researching efficient synthesis and use methods and business models. The reason for researching e-fuel is that, in addition to complying with regulations, the degree of penetration of e-fuel will have a significant impact on the ratio of EV and HEV sales. If the use of e-fuel becomes widespread, there is a high possibility that the ratio of HEVs will increase. It influences the direction of powertrain development, which requires huge investments.

One of the first to take the lead in e-fuel research and development was Audi Germany. The company announced in 2017 that it had established an e-fuel research facility in Germany. They believe that it is risky to develop only EVs, which are likely to remain a challenge due to cost and range.

The e-fuel system uses hydrogen in the production process and is compatible with Japan's energy strategy, which advocates a hydrogen society. Converting gaseous, hard-to-carry hydrogen into liquid e-fuel is a technology that improves

[↑ Click Here To Go To Page 1](#)

## Far East Report

Continued from page 10

*e-fuel is a fuel produced by a chemical reaction between carbon-free hydrogen, which is produced from water with surplus renewable energy power, and CO<sub>2</sub>, which is emitted from factories.*

the portability of hydrogen energy. The problem with e-fuel is its high cost, which is estimated to be around 500 yen per liter. Considering that the price of gasoline fuel, excluding taxes, is 50-60 yen per liter in Japan, this is nearly 10 times that amount. With the current cost competitiveness, there is little hope for the widespread use of e-fuel.

If a solution to this problem can be found, the next generation of environmentally friendly and low-cost powertrains for vehicles could be a popular option.

**Source: Nikkei Cross Tech** (The original article was partially revised by the author.)

**PSR Analysis:** e-fuel is a fuel produced by a chemical reaction between carbon-free hydrogen, which is produced from water with surplus renewable energy power, and CO<sub>2</sub>, which is emitted from factories. Waxes and chemicals are produced during the formation of e-fuel, which can also be a carbon minus fuel.

When mixed with gasoline or diesel fuel, it turns a car into an eco-friendly vehicle. This means that you can continue to use existing engines. The e-fuel contains no impurities and is not dependent on crude oil. These elements seem to be exactly the fuel of our dreams, but the challenge is that they are carbon-plus without the use of renewable energy and, as the article mentions, they are expensive.

However, if various studies are carried out in the process of spreading the use of these technologies, we can expect to accumulate technologies that will lead to the suppression of greenhouse gases. However, it is possible that the PHVs and EVs in the vanguard today will be able to overcome the current problems as they mature.

**PSR**

## 極東 > 日本レポート:

小室 明大 – 極東及び東南アジア リサーチアナリスト

### 新燃料e-fuelをトヨタ・日産・ホンダが研究

トヨタ自動車や日産自動車、ホンダはそれぞれ、二酸化炭素 (CO<sub>2</sub>) と水素 (H<sub>2</sub>) の合成液体燃料「e-fuel」の研究開発に本腰を入れて、2030年に一層厳しくなる環境規制に備える。e-fuelは、水を電気分解したH<sub>2</sub>とCO<sub>2</sub>を触媒反応で合成した液体の炭化水素鎖 (燃料) のこと。再生可能エネルギーを利用して生成することで、CO<sub>2</sub>の排出と吸収を同じにする「カーボンニュートラル」を実現する。e-fuelはガソリン燃料やディーゼル燃料に混合して使える。日系3社は、効率的な合成法や使用法、事業モデルなどの研究にそれぞれ取り組み始めた。e-fuelの研究に取り組むのは、規制対応に加えて、その普及度合いがEVとHEVの販売比率に大きな影響を及ぼすとみるからだ。e-fuelが普及すれば、HEVの比率が高まる可能性は高い。莫大な投資が必要なパワートレイン開発の方向性を左右する。

e-fuelの研究開発で先行したのが、独アウディだ。2017年にe-fuelの研究施設をドイツに設立したと発表した。コストや航続距離などで課題が残りそうなEVの「一本やり」で規制に臨むのは、リスクが高いと考えられているだろう。

[↑ Click Here To Go To Page 1](#)

## Far East Report

Continued from page 11



e-fuelは生成過程で水素を利用し、水素社会を標榜する日本のエネルギー戦略と相性が良い。気体で運びにくい水素を液体のe-fuelに変えることは、水素エネルギーの可搬性を高める技術といえるからだ。欧州勢に技術を囲い込まれると、日本における水素社会の実現に支障が生じかねない。e-fuelの課題は、コストが高いこと。1リットル当たり500円前後との試算がある。日本では税金を除いたガソリン燃料の価格が50～60円と考えれば、その10倍近い。現状のコスト競争力ではe-fuelの普及は到底望めない。この課題の解決にめどが付けば、環境に優しく低価格な次世代自動車パワートレインはエンジンとなるかもしれない。

**出典: 日経クロステック** (一部筆者により元記事内容を改編しました)

**PSR 分析:** e-fuelとは、再生可能エネルギーの余剰電力で水から生成されるカーボンフリー水素と、工場から排出されるCO2を化学反応させて生成する燃料だ。e-fuelの生成過程でワックスや化学薬品が生成され、カーボンマイナス燃料にもなり得る。ガソリンやディーゼル燃料に混入すると自動車をエコカーに変える。つまり、既存のエンジンを使用し続けることが可能になる。e-fuelには不純物が全く含まれず、原油に依存しない。これらの要素はまさに夢の燃料と言えそうだが、課題としては、再生可能エネルギーを使用しないとカーボンプラスになることと、記事でも触れられているように高コストであることだ。ただ、普及に至る過程で、様々な研究が進められれば、温暖化効果ガス抑制につながる技術蓄積が期待できる。もちろん、現在先行しているPHVやEVなども成熟していけば現在の課題を克服できる可能性はあるが、水素やe-fuelも並行して研究を進める意義は、環境に対しての最適解の探求である。 **PSR**

## South Korea Report

By *Akihiro Komuro*, Research Analyst, Far East and Southeast Asia

### Hyundai Exports Fuel Cell Trucks To Europe

South Korea's Hyundai Motor announced on July 6 that it has begun exporting commercial hydrogen fuel cell vehicles (FCVs) to Europe. The company shipped 10 trucks to Switzerland, and it plans to export 1,600 units by 2025 using a long-term lease contract system.

Hyundai has set up a joint venture company to build a hydrogen infrastructure in Switzerland; it also plans to develop hydrogen stations and other infrastructure in cooperation with a local company. They plan to use Switzerland as a base for expanding their exports throughout Europe.

The South Korean government is also focusing on the spread of the hydrogen-based society and will appeal to the governments of other countries. The trucks exported this time will be used by the food distribution industry. The route for these trucks is fixed, making it easy to set up the infrastructure for refueling. While EVs take a long time to recharge, FCVs are said to be more suitable for transportation trucks because of their shorter refueling time, according to the customer company. In addition to commercial vehicles, Hyundai Motor sells FCVs under the passenger car brand Nexa.

 [Click Here To Go To Page 1](#)

## Far East Report

Continued from page 12

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**Source: Nikkei Business** (The original article was partially revised by the author.)

**PSR Analysis:** There is a risk that the development of next generation batteries will not progress as expected for EVs. Hyundai is also believed to be considering the risk of being too heavily weighted towards EVs. The Hyundai Motor Group's current FCV production capacity is at the 3,000-unit-a-year level, but it has announced that it aims to increase this to 11,000 units by 2020 and to sell 110,000 FCVs by 2025. It will be a big challenge. The target number would be hard to achieve without eating into the demand for EVs.

They are trying to gain a foothold in the CV market in Europe. The first stepping-stone for FCVs to spread to cars will be medium - heavy trucks. It is in this segment that the disadvantages of EVs will have the strongest impact and the benefits of FCVs will be best matched.

Toyota and Hyundai have already released FCVs in the passenger car market, but their sales are extremely limited, hovering around 100 units per year. There is almost no benefit to FCV passenger cars now that the hydrogen infrastructure is not in place. Only when the cost advantages of converting CVs to FCVs become apparent will we be able to move into the popularization phase. The first step is to develop FCV trucks that are practical and durable. **PSR**

## 極東 > 韓国レポート:

小室 明大 – 極東及び東南アジア リサーチアナリスト

### 現代自動車、燃料電池トラックを欧州に輸出

韓国の現代自動車は7月6日、水素を燃料とする燃料電池車 (FCV) の商用車を欧州に輸出し始めたと発表した。まずスイス向けにトラック10台を出荷した。長期間のリース契約方式を使って2025年までに1600台の輸出を目指す。現代自はスイスで水素インフラを整備する合弁会社を設立しており、現地企業と連携して水素ステーションなどのインフラ整備も手掛ける。スイスを基点として欧州全域に輸出を広げる計画だ。韓国政府も水素社会の普及に注力しており、各国政府に働きかけるといふ。今回輸出したトラックは食品流通業が採用する。運行ルートが決まっており、燃料補給のインフラを整備しやすい。電気自動車 (EV) は充電に時間がかかるのに対し、FCVは燃料の補給時間が短いため輸送用トラックに適していると顧客企業は判断したという。現代自は商用車のほか、乗用車ブランド「ネクソ」でFCVを販売している。

**出典: 日経** (一部筆者により元記事内容を改編しました)

**PSR 分析:** EVは、次世代電池の開発が期待通りに進まないリスクがある。EVに偏重しすぎるリスクを考えているとみられる。現代自グループのFCV生産能力は、現行で年3,000台レベルだが、2020年に11,000台に引き上げ、2025年までにFCVを110,000台販売することを目標と発表していた。これはかなり高い目標だ。EVの需要を食わなければ達成しづらい数字であり、実現には大きな困難が伴うだろう。彼らは欧州のCV市場で足がかりを作ろうとしている。

[↑ Click Here To Go To Page 1](#)

## Far East Report

Continued from page 13

*Grab and GOJEK, the two strongest Southeast Asian ride-hiring services, will focus their resources on their ancestral businesses of car dispatch, delivery and payment.*

過去にも書いた通り、FCVの自動車への普及はCV、中～長距離を走るトラックが最初の足がかりになるだろう。EVのデメリットとFCVのメリットが最もマッチするのがこのセグメントである。乗用車においてはトヨタや現代がすでにFCVをリリースしているが、その販売台数は極めて限定的で年100台前後にとどまっている。水素インフラが整っていない現時点ではFCVの乗用車のメリットはほぼ無い。CVをFCVにすることでコストメリットが出てくるようになれば、それで初めて普及フェーズに移行できる。まずは実用に耐えうるFCVトラックの開発が重要だ。PSR

## Southeast Asia Report

By *Akihiro Komuro*, Research Analyst, Far East and Southeast Asia

### Super App Strategy is at a Crossroads for Grab, GOJEK

Grab and GOJEK, the two strongest Southeast Asian ride-hiring services, will focus their resources on their ancestral businesses of car dispatch, delivery and payment. Due to the impact of the new coronavirus, both companies have decided to reduce their workforce for the first time since their founding about 10 years ago and are withdrawing from their non-core businesses. The "Super-app" concept, which provides a full range of lifestyle-related services, was forced to be reviewed.

Grab and GOJEK announced in succession in June that they would be laying off 5% (360 employees) and 9% (430 employees), respectively.

Since February, the business environment has changed dramatically with the COVID-19. The use of the service has plummeted due to restrictions on behavior by governments.

GOJEK will end its lifestyle-related services that require human contact, such as massage and cleaning services, at the end of July, and will also pull out of food court operations.

Grab has also stated that it will withdraw from non-core businesses. Both companies will focus on ride-hiring services as their core business. This is because home delivery and payment, which are part of the core business, would not be possible without drivers. Drivers are responsible for home deliveries as demand for stay-homes surges, and even with cashless payments, drivers are often responsible for cash charge services in Indonesia and other countries. Both Grab and GOJEK have millions of drivers and are forced to deal with the difficult task of retaining passengers while supporting them in terms of infection control and income.

**Source: *The Nikkei*** (The original article was partially revised by the author.)

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[↑ Click Here To Go To Page 1](#)

## Southeast Asia Report

Continued from page 14

*The rate of growth that GOJEK and Grab have shown in Southeast Asia has been very fast, with both companies growing to a market capitalization of \$10 billion in just around 10 years.*

		 An Ojek For Every Need
GRAB	Company	GOJEK
2012	Established	2010 (app released in 2015)
Singapore	Headquarter	Indonesia
\$14.3 billion	corporate valuation	About \$10 billion
Private (9 million people, including restaurant owners in the network)	Number of drivers	2 million people
Ride-hiring, home and office delivery, payment and other financial services, ticket sales, hotel reservations	Main business	Ride-hiring, home and office delivery, payment and other financial services, ticket sales, hotel reservations, and video streaming. (Massage, cleaning and food court services will be closed at the end of July)
Indonesia, Philippines, Vietnam, Thailand, Malaysia, Singapore, Vietnam, Myanmar and Cambodia.	Services provide countries	Indonesia, Philippines, Vietnam, Thailand and Singapore.

**PSR Analysis:** The rate of growth that GOJEK and Grab have shown in Southeast Asia has been very fast, with both companies growing to a market capitalization of \$10 billion in just around 10 years.

Part of the reason why they have been able to grow so much in many Southeast Asian urban areas where infrastructure is still weak is that they have created many business opportunities and jobs, thanks to the high rate of motorcycle ownership and smartphone penetration.

The review of the two companies' businesses will spill over into the food and beverage industry and various service businesses. The demand for their root business, ride sharing and delivery, is strong and the strategy of returning to the ancestral business is the right one.

In the long term, the ride-sharing delivery business will be a growth industry in the new normal era. I predict that this will be the case. And this trend will support demand for motorcycles in Southeast Asia at the bottom. **PSR**

## 東南アジア > 東南アジア全体レポート:

小室 明大 – 極東及び東南アジア リサーチアナリスト

### スーパーアプリ戦略、岐路に グラブとゴジェック

東南アジア配車サービスの2強、グラブとゴジェックは相業の配車、宅配、決済の事業に経営資源を集中する。新型コロナウイルスの影響で、2社ともに約10年前の創業以来初の人員削減に踏み切り、非中核事業から撤退する。生活関連のあらゆるサービスを提供する「スーパーアプリ」構想は見直しを迫られた。グラブは全従業員の5% (360人)、ゴジェックは9% (430人) を解雇すると6月に相次ぎ発表した。2月以降、新型コロナで事業環境が一変。各国政府による行動制限で配車利

↑ Click Here To Go To Page 1

## Southeast Asia Report

Continued from page 15



用が急減した。ゴジェックはマッサージや掃除代行といった人との接触が必要な生活関連サービスを7月末で終了し、フードコート運営からも撤退する。非中核事業からの撤退はGrabも明言している。

両社は今後、配車事業を主力に置く。コア事業の一角に据える宅配や決済はドライバーなくして成立しないためだ。「巣ごもり需要」が急増する宅配は二輪の運転手が担い、キャッシュレス決済でもインドネシアなどでは運転手が現金チャージを担当するケースが多い。Grabもゴジェックも数百万人規模のドライバーを抱え、感染対策や収入面などの支援をしつつ、乗客を囲い込む難しいかじ取りを迫られる。

**出典: 日経** (一部筆者により元記事内容を改編しました)

		
GRAB		GOJEK
2012	創業	2010 (アプリ配信は2015)
シンガポール	本社	インドネシア
143億ドル	企業評価額	約100億ドル
非公開 (ネットワーク内の飲食店主ら含む900万人)	ドライバー数	200万人
配車、宅配、決済など金融、チケット販売、ホテル予約	主な事業	配車、宅配、決済など金融、チケット販売、ホテル予約、動画配信。(マッサージ、清掃、フードコートは7月末で終了)
インドネシア、フィリピン、ベトナム、タイ、マレーシア、シンガポール、ベトナム、ミャンマー、カンボジア	展開国	インドネシア、フィリピン、ベトナム、タイ、シンガポール

**PSR 分析:** GOJEKとGRABが東南アジアで見せてきた成長速度は非常に早く、両社ともにわずか10年前後で時価総額100億ドルの成長を続けてきた。インフラがまだ脆弱である多くの東南アジアの都市部でこれほどまでに成長できた一因は、二輪車の保有率とスマートフォンの普及率の高さを背景に、多くのビジネスの機会と雇用を生み出した点にある。この2社の事業の見直しは、飲食業界や各種のサービス事業などにも波及するだろう。

彼らのルーツビジネスであるライドシェア、デリバリーの需要は強く、そこに立ち返る戦略は正しいと言える。長期的にはライドシェア・デリバリー事業は今後のニューノーマル時代における成長産業になっていくと私は予測している。そしてこのトレンドが東南アジアにおける二輪需要を底で支えていくだろう。 **PSR**

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*With extended lockdowns in most parts of India, the production of all non-essentials was at a halt or at minuscule levels in April and May until the economy was unlocked.*

## India Report

By *Aditya Kondejkar*, Research Analyst – South Asia Operations.

### Rural Economy Helping Ride Out COVID Impact

With extended lockdowns in most parts of India, the production of all non-essentials was at a halt or at minuscule levels in April and May until the economy was unlocked. This move reduced demand in the short-term, but owing to intrinsic domestic demand, we are optimistic about future business expectations

#### Better Outlook of Rural Economy



*Aditya  
Kondejkar*

However, hope has arisen from India's rural part as the agriculture sector appears to have been relatively less impacted by the lockdown. This part of the country never truly went into a harsh lockdown, and thus procurement, harvest, and consumer activities have remained unaffected. Farming continued during the lockdown, especially for rice and wheat cultivation. The return of migrant workers caused a surplus of agricultural labor. This resulted in the fact - more land was brought under cultivation than ever before. As a result, the country has witnessed a good season of rabi harvest.

#### Rural Auto Demand Helps Avert COVID Impact

##### Read The Article

A better rural economy is driving the overall growth. We are witnessing the demand recovery in two-wheeler and car segments and it is skewed towards the semi-urban and rural markets.

In June 2020, Maruti Suzuki, the country's largest carmaker, witnessed a surge of 40% in rural sales. Hero MotoCorp, the country's largest 2-wheeler maker, sold four times as many two-wheelers in June 2020 as it did in May 2020. The company noted that a significant part of the market demand is emerging from the rural and semi-urban markets

#### Rural Sentiment Lifts Tractor Sales

##### Read The Article

Tractor sales have largely remained strong even during the lockdown period as the government allowed its sales even before other automotive manufacturers could resume their operations. In June 2020, Mahindra tractors, the country's largest tractor manufacturer, saw a 12% YOY growth in tractor sales.

*“The timely arrival of the south west monsoon, combined benefits of a record Rabi crop, Government support for Agri initiatives and very good progress in the sowing of the Kharif crop have led to positive sentiments among farmers. These underlying factors along with better cash flows in rural markets have helped*

 [Click Here To Go To Page 1](#)

## India Report

Continued from page 17

*boost tractor demand during June” - Hemant Sikka, President - Farm Equipment Sector, M&M*

High-frequency indicators like higher cumulative rainfall in the first week of July, improved area sown under Kharif crops, suggest a stable condition of the rural economy. Further, the budget for the Mahatma Gandhi National Rural Employment Guarantee Scheme has been raised to Rs 1 lakh crore due to the COVID-19 crisis.

Hence, we expect a faster recovery in rural India, while the urban part will take a little longer to come back to normalcy. The rural part of India, which has two-thirds of the country's population and 70% its workforce and generates 46% of the national income, will play a pivotal role in moving ahead the Indian economy and auto industry. **PSR**

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## Russia Report

By *Maxim Sakov, Market Consultant, Russia*



*Maxim  
Sakov*

### Hyundai Plant Can Produce 300,000 Car Engines Annually

Hyundai VIA has begun construction on an auto engine plant near St. Petersburg.

The enterprise initially plans to make 240,000 engines per year. Then, the capacity will increase, and the plant will make 300,000 Gamma I engines of 1.6 liters.

The project has been established under a special investment contract. The investors “injected” US\$185 million (13.1 billion Rubles) into the project. The plant will bring about 500 jobs to the city.

Test launch of the plant is planned in Q1 2021, and mass production is scheduled to start in October 2021. **Read The Article**

**PSR Analysis:** The engine building industry is a focus for the Russian Government. One part of its development plan is to concentrate as much engine building as possible inside the country. It looks as though the SPIC (Special Investment Contracts) is a proper tool for this. **PSR**

### New Restrictions for Import of Right-Wheel Engines to Russia Launched

New restrictions for imports of right-wheel engines to Russia became effective July 1. Completely barred from import are machines of the M2 and M3 class – trucks, buses, LCVs and construction machines.

 [Click Here To Go To Page 1](#)

## Russia Report

Continued from page 18



On top of this, the procedure of Custom's clearance of right-wheel passenger cars became more complicated. The owner of such car should obtain technical certificate, confirming compliance of car design to the safety requirement.

According to the Federal Customs Service, the amount of payments will depend on ecological class, production date, engine volume and other parameters. This will include processing fee, custom's tax and utilization fee. **Read The Article**

**PSR Analysis:** The main source of right-wheel vehicles to Russia has been Japan, and there were many businesses importing used vehicles to Russia. One of the consequences of the new restriction is reduction in prices of used cars in Japan by more than 40% (June 2020).

At the same time, the Russian market will not be affected seriously by the restrictions, because actual imports have been significantly reduced by earlier measures (higher taxes). Right-wheel machines are concentrated in Eastern regions of Russia. For passenger cars, the total fleet share of such vehicles is about 7%, for trucks, 3.3%, for buses, 0.6% and about 12% for LCVs. These measures are protectionist measures, and the final goal is to reduce the share of right-wheel vehicles to zero in the Russian market. **PSR**

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