

## JAPANESE INDUSTRY AND POLICY NEWS

April 2019

### LEGISLATION AND POLICY NEWS

#### **Automated Driving-related IT Human Resources Strategy Compiled**

In consideration of the shortage of IT human resources in the field of automated driving, the Ministry of Economy, Trade and Industry (METI) has promoted deliberations among the government, industry and academia at the Human Resources Strategy Working Group of the Connected Industries Automated Driving Subcommittee. The Working Group compiled the Automated Driving-related IT Human Resources Strategy which the METI published on April 8. The Automated Driving-related IT Human Resources Strategy stipulates that the automotive industry should expand various events, like the Japan Automotive AI Challenge (hosted by the Society of Automotive Engineers of Japan, Inc.), that may attract students majoring in IT and leading human resources in other industries for the purpose of picking out and fostering leading human resources (well-versed in AI, etc.). Additionally, the strategy clarifies the plan to facilitate the development of lectures and teaching materials to be used at universities and in the private sector based on the Skill Standards, with the aim of creating a human resources eco-system combining the automotive industry and IT.

[https://www.meti.go.jp/english/press/2019/0408\\_005.html](https://www.meti.go.jp/english/press/2019/0408_005.html)

#### **Council for Promoting Electrified Vehicles to be Launched**

Japan urgently needs to take global-level measures against climate change and disseminate electrified vehicles (xEVs)\* from the viewpoint of energy conservation. In particular, Japanese society has high hopes for utilizing technology for charging or supplying electricity for battery electric vehicles, plug-in hybrid electric vehicles, and fuel cell electric vehicles not only in case of disasters but also as part of the energy system.

\*Electrified vehicles (xEVs) include: battery electric vehicles (BEVs), plug-in hybrid electric vehicles (PHEVs), hybrid electric vehicles (HEVs) and fuel cell electric vehicles (FCEVs).

Against this backdrop, the Ministry of Economy, Trade and Industry (METI) announced on April 8 that, in collaboration with car manufacturers, energy companies, municipalities and other entities proactively engaging in efforts for

utilizing of xEVs, decided to launch a new body called the “Council for Promoting Society Utilizing of Electrified Vehicles” to advance dissemination of xEVs and address such social expectations. Through this effort, METI aims to establish a society in which low carbonization, dispersed energy sources, robust vehicles and energy are integrated.

The Growth Strategy 2018 released by the government of Japan sets the following numerical targets for achieving the dissemination of clean energy vehicles across Japan by 2030. Moreover, the interim report compiled by the Strategy Meeting for the New Era of Automobiles in July 2018 upholds a long-term goal that Japan should achieve environmental performance of Japanese vehicles in global markets at the world’s highest level by 2050.

Numerical targets for achieving the dissemination of next-generation vehicles across Japan by 2030.

		2030
<b>Conventional vehicles</b>		30-50%
<b>Next-generation vehicles</b>		50-70%
	HEVs	30-40%*
	BEVs	20-30%*
	PHEVs	
	FCEVs	Up to 3%*
	Clean diesel vehicles	5-10%*

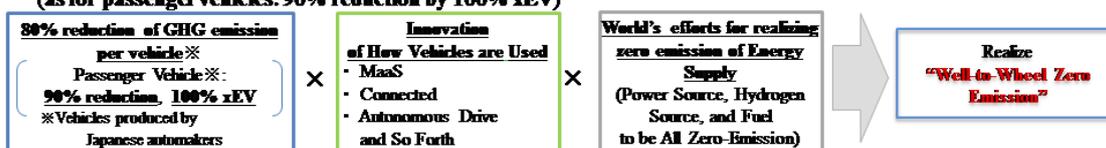
\*These figures are numerical targets for dissemination of these vehicles stipulated in the Next-Generation Automobile Strategy 2010 compiled by the Industrial Society for Next Generation Vehicles in April 2010.

Interim report compiled by the Strategy Meeting for the New Era of Automotive (released on July 24, 2018)

**Long-term goal: by 2050**

**Achieve environmental performance of Japanese vehicles in global markets at the world’s highest level (world’s first goal set for vehicles in global markets)**

= Aim to reduce greenhouse gas emissions by 80% per vehicle (as for passenger vehicles: 90% reduction by 100% xEV)



Through sharing information on best practices and collaboration between member companies, the council will advance discussions on: methods, technologies and uncovering challenges therein for efficient and effective use of xEVs; ; expansion of secondary use of recycled batteries mounted on xEVs; and use cases involving effective utilization of xEVs as commercial vehicles.

[https://www.meti.go.jp/english/press/2019/0408\\_006.html](https://www.meti.go.jp/english/press/2019/0408_006.html)

### **Smart Mobility Challenge to Start**

The Ministry of Economy, Trade and Industry (METI) and the Ministry of Land, Infrastructure, Transport and Tourism (MLIT) announced on April 8 that they would jointly start a new project titled “Smart Mobility Challenge.” Based on the forecast of the future realization of autonomous driving society, this initiative aims to: solve challenges in mobility and vitalize regional areas through implementation of new mobility services in society; and encourage such areas and companies to proactively take on such challenges through their cooperation. Under the project, METI and MLIT will establish a council in which a broad range of people from regional areas, companies and other entities participate. The council will encourage participants to share information on specific demands and solutions, will analyze leading efforts by regional areas to determine the business feasibility of the efforts in such areas and other initiatives, and will advance extracting of best practices and streamlining of cross-sectoral challenges.

Moreover, the ministries will conduct measures for supporting regional areas taking on pioneering efforts called “pilot areas” in formulating business plans and analyses of potential business effects. For details of the call for pilot areas and the program for selecting them, METI will announce them soon after they are fixed.

As for other efforts, MLIT will implement a Project for Promotion of New Mobility Services (FY2019 new project) in collaboration with the Smart Mobility Challenge Project. The MLIT Project aims to support demonstration tests for new mobility services across Japan, e.g., efforts involving Mobility as a Service (MaaS), and to establish role models to solve challenges in regional transportation services.

[https://www.meti.go.jp/english/press/2019/0408\\_007.html](https://www.meti.go.jp/english/press/2019/0408_007.html)

### **Cyber/Physical Security Framework Formulated**

The Ministry of Economy, Trade and Industry (METI) aims to ensure security in the new supply chains (value creation processes) under “Society 5.0,” a national

policy achieved by integrating cyberspace and physical space in a sophisticated manner, and “Connected Industries,” another national policy for creating new value added by connecting a variety of goods, industries and people. As part of the efforts to this end, METI formulated the Cyber/Physical Security Framework (CPSF), an overview of security measures that industries are required to take. According to METI’s press release dated April 18, the CPSF presents an overview of security measures for industrial society and targets all entities involved in the value creation process as readers. Furthermore, with an eye on future revision or modification of the CPSF in line with changes in technologies and other situations, METI composed the main section of the CPSF from three parts focusing on concept, policy and method, respectively.

[https://www.meti.go.jp/english/press/2019/0418\\_001.html](https://www.meti.go.jp/english/press/2019/0418_001.html)

### **Five New Projects Adopted for Encouraging Overseas Companies to Directly Invest in Regional Areas of Japan**

The Ministry of Economy, Trade and Industry (METI) and the Japan External Trade Organization (JETRO) will hold a series of Regional Business Conferences (RBC) projects in which municipalities and other entities will invite senior management and other representatives of overseas companies to Japan, explain the synergies between such companies and the regions, and hold business matching events between these companies and regional companies. METI announced on April 16 that METI and JETRO adopted new RBC projects involving such business matching event as follows.

- (1) Promotion of a Model for Regional Revitalization through an Initiative of “Adventure Tourism” (Hokkaido Prefecture, June and October)
- (2) Project for Encouraging Overseas Companies to Directly Invest in Japan in the Field of Disaster Prevention and Damage Reduction (Sendai City, November)
- (3) Taking on Business Challenges in “Yokohama City, an Innovation City” (Yokohama City, October)
- (4) Connected and Created: A Global Scrum of AI, IoT and Manufacturing Industries in Greater Nagoya (a broad-area collaboration mainly consisting of Aichi Prefecture, Mie Prefecture, Gifu Prefecture and Nagoya City, October)
- (5) Regional Business Conference (RBC) in Kyoto, an Effort to Encourage Overseas Companies to Directly Invest in the Field of Life Science (Kyoto City, July)

[https://www.meti.go.jp/english/press/2019/0416\\_001.html](https://www.meti.go.jp/english/press/2019/0416_001.html)

## **Whole of Hokkaido Added in Support Program for Regional Foreign Direct Investment in Japan**

The Ministry of Economy, Trade and Industry (METI) and the Japan External Trade Organization (JETRO) have been advancing the Support Program for Regional Foreign Direct Investment in Japan (“support program”) to support municipalities that proactively intend to attract overseas companies by uniting the efforts of all ministries and agencies of the government. METI announced on April 16 that Hokkaido Prefecture was added as a municipality to be supported under the support program.

When METI and JETRO selected 24 municipalities as first round to be supported under the program in October 2018, only Asahikawa Regional Industries Invigoration Council was selected from Hokkaido region. This time the whole Hokkaido Prefecture was selected to be supported.

[https://www.meti.go.jp/english/press/2019/0416\\_002.html](https://www.meti.go.jp/english/press/2019/0416_002.html)

## **SURVEY AND BUSINESS DATA**

### **Revised FY2017 Energy Supply and Demand Report Published**

The Agency for Natural Resources and Energy (ANRE) has prepared the Revised Report on the FY2017 Comprehensive Energy Statistics based on the results of studies including a variety of energy-related statistics to describe Japan’s energy supply and demand situation.

Highlights of the revised report which was released on April 12 are as follows.

Overall final energy consumption increased by 0.9% on a year-on-year basis, showing an increase for the first time since the occurrence of the Great East Japan Earthquake. Electricity consumption also increased by 1.5% on a year-on-year basis. The households sector shows a dramatic increase in energy consumption due to the impact of the severe winter. The final energy consumption by the business sector increased on a year-on-year basis for the first time in four years thanks to active economic activities.

The overall domestic supply of primary energy increased by 1.2% on a year-on-year basis. Supply of fossil fuels has been decreasing for four consecutive years, while that of non-fossil fuels, such as renewable energy and nuclear energy, have been increasing for five consecutive years.

The amount of generated electric power increased by 0.7% on a year-on-year basis, while the ratio of zero-emission power supply is 19.1%, up by 2.8 percentage points (%p) on a year-on-year basis. The energy self-sufficiency rate is 9.6%, up by 1.4%p year-on-year (based on the IEA data).

Energy-oriented carbon dioxide emissions decreased by 1.6% on a year-on-year basis, showing a decrease for four consecutive years and a decrease by 10.1% from FY2013. The basic unit of carbon dioxide emissions for electricity improved by 4.8% year-on-year to 0.51 kg-CO<sub>2</sub>/kWh, the smallest unit after the occurrence of the Great East Japan Earthquake.

[https://www.meti.go.jp/english/press/2019/0412\\_004.html](https://www.meti.go.jp/english/press/2019/0412_004.html)

### **Report on Current Situations of Japanese Cross-border M&A Compiled**

In the summer of 2018, the Ministry of Economy, Trade and Industry (METI) started conducting interviews with overseas companies and foreign-affiliated investment funds with rich experience in M&A and holding workshops, including group discussions with Japanese companies, and other events. Through these efforts, it collected fresh opinions from domestic and overseas companies playing leading roles at the forefront of M&A and compiled them into a report on challenges related to cross-border M&A by Japanese companies.

The report which was published on April 9 categorizes the challenges that Japanese companies are facing in cross-border M&A into three groups: “shortage of global-scale management capability” and “undeveloped global-scale management systems” that companies face in developing business overseas, and “insufficient preparation of frameworks for execution of M&A that take into account the entire M&A process.”

[https://www.meti.go.jp/english/press/2019/0409\\_001.html](https://www.meti.go.jp/english/press/2019/0409_001.html)

### **Report on Blockchain Technology Applicability to Universities and Research Institutes Released**

The Ministry of Economy, Trade and Industry (METI) released on April 23 a report on a survey on the applicability of blockchain technologies to universities and research institutes. The survey focused on two subjects: (1) academic degrees, courses and career certifications and (2) securing reliability of research data, and was conducted to uncover applicability of blockchain technology to these subjects through holding discussions in seminars and an open-style hackathon.

Placing eyes on some new cases overseas to which blockchain technology has

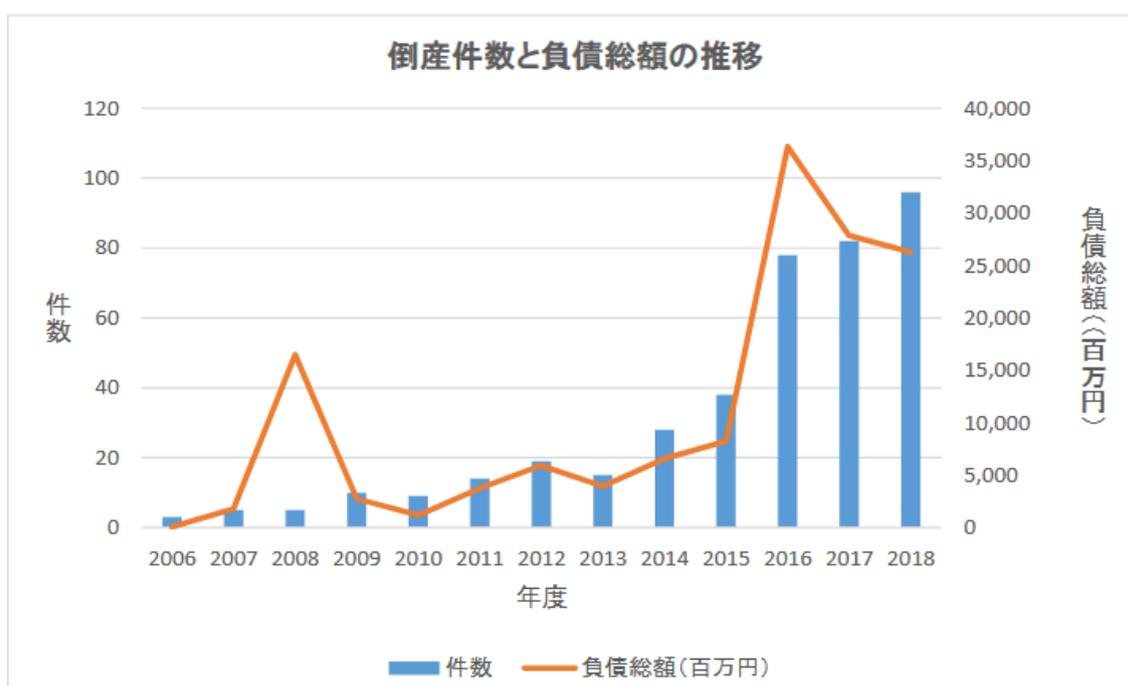
been applied and based on the challenges uncovered in the survey, METI believes that it should continue to provide opportunities, e.g., hackathons, for industries to conduct demonstration tests like this survey and to make efforts for developing environments that contribute to standardization of blockchain technology.

[https://www.meti.go.jp/english/press/2019/0423\\_001.html](https://www.meti.go.jp/english/press/2019/0423_001.html)

### Biggest Number of Bankruptcies Recorded in Solar Energy Sector in FY2018

According to a press release that Teikoku Databank published on April 4, the number of bankruptcies recorded in solar energy sector was 96 in fiscal 2018. It is an increase of 17.1% as compared to the previous year. The number of bankruptcies remains high since 2016, reaching the worst level in 2018.

Transition of bankruptcy cases and total amount of liabilities



Number of bankruptcies in blue color, on the left scale. Total liabilities (million yen) in orange on the right scale

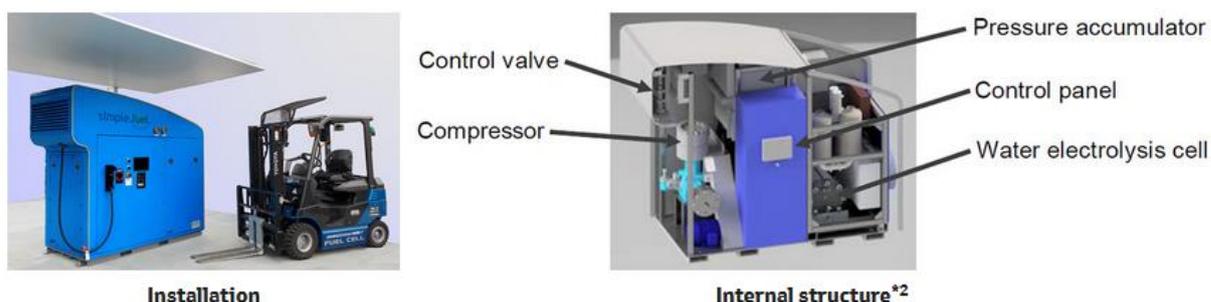
<https://www.tdb.co.jp/report/watching/press/pdf/p190402.pdf> (in Japanese)

## COMPANY NEWS

### Toyota Introduces Station for the Production and Supply of Hydrogen from Renewable Energy

Toyota Motor Corporation announced on April 4 that it had newly introduced SimpleFuel™ to its Motomachi Plant in Toyota City, Aichi Prefecture. SimpleFuel is a simplified hydrogen station that uses electricity from solar panels at the plant site to produce low-carbon hydrogen from the electrolysis of water, which is then supplied to fuel-cell forklifts (FC forklifts) after it is compressed and pressurized. It can produce up to 99 Nm<sup>3</sup>/day (approx. 8.8 kg/day) of hydrogen, enough to fuel seven or eight FC forklifts. Its compact size means it can be installed in small spaces, making it suitable for refueling FC forklifts within the plant.

#### Outline of SimpleFuel™



To reduce CO<sub>2</sub> emissions at its plants, Toyota intends to replace existing conventional forklifts with fuel cell forklifts. This year, the Ministry of the Environment's "Subsidy for Business Costs, etc. for Measures Combating Carbon Dioxide Emissions (Project to Promote Low Carbon Social Infrastructures that Utilize Renewable Energy-based Hydrogen)" makes possible the introduction of SimpleFuel and an additional 50 FC forklifts. Through the Aichi Low-Carbon Hydrogen Supply Chain Promotion Association, along with Aichi Prefecture and related local authorities and companies, Toyota is promoting the low-carbon footprint of the hydrogen supply chain as a whole through use of renewable resources and the concept of "production, transportation, and use." This plan to use hydrogen produced from electricity from renewable sources generated at Motomachi Plant has now been certified through Aichi Prefecture's Low Carbon Hydrogen Certification System.

<https://global.toyota/en/newsroom/corporate/27528557.html>

## **Toyota and Kenworth Unveiled Jointly Developed Fuel Cell Electric Heavy-Duty Truck in Los Angeles**

Toyota, Kenworth, the Port of Los Angeles and the California Air Resources Board (CARB) unveiled on April 22 the first of Toyota and Kenworth's jointly developed fuel cell electric heavy-duty trucks during a special event held at the Port of Los Angeles. The new generation zero-emission truck expands on the capabilities of Toyota's first two Project Portal Proof-of-Concept trucks through enhanced capability, packaging, and performance while offering an estimated range of more than 300 miles per fill, twice that of a typical drayage trucks average daily duty cycle. Toyota and Kenworth will deploy a total of 10 trucks as part of the Zero and Near-Zero Emissions Freight Facilities Project (ZANZEFF), hauling cargo received at the Ports of Los Angeles and Long Beach, throughout the LA Basin.



CARB has awarded \$41 million dollars to the Port of Los Angeles for the ZANZEFF project as part of California Climate Investments, a California initiative that puts billions of Cap-and-Trade dollars to work reducing greenhouse gas emissions, strengthening the economy and improving public health and the environment—particularly in disadvantaged communities. Since operations began in April 2017, the Project Portal "Alpha" and "Beta" Proof of Concept Class 8 trucks have logged more than 14,000 miles of testing and real-world drayage operations in and around the ports of Los Angeles and Long Beach while emitting nothing but water vapor. The first Kenworth/Toyota Fuel Cell Electric Truck (FCET) under the ZANZEFF project will begin drayage

operations in the fourth quarter, increasing the ports' zero emission trucking capacity and further reducing the environmental impact of drayage operations.

<https://global.toyota/en/newsroom/corporate/27882744.html>

#### **Four Motorcycle Manufacturers Formed a Consortium for Electric Bikes**

Honda Motor, Kawasaki Heavy Industries, Suzuki Motor and Yamaha Motor jointly announced on April 4 that they had formulated a consortium for the diffusion of electric bikes. They will study the standardization of exchangeable batteries and search for synergies and scale merit.

<https://www.honda.co.jp/news/2019/2190404.html> (in Japanese)

#### **MHI Thermal Systems Developed Demonstration Unit of the World's First Small-Capacity Residential Air-Conditioner Adopting the Low Global Warming Potential Refrigerant**

Mitsubishi Heavy Industries Thermal Systems, Ltd., a group company of Mitsubishi Heavy Industries, Ltd. (MHI), is adopting R454C, a refrigerant with an extremely low global warming potential for the first time in the world, in a 1-horsepower class residential air-conditioner, MHI announced on April 18. The conventional shortcomings of the R454C, for example; inferior heat exchanger performance attributable to it being a mixed refrigerant have been overcome through the use of proprietary technology that optimize the heat exchanger's flow volume and other measures. The company has already developed a demonstration unit of the residential air-conditioner featuring R454C and preparations are underway towards mass production with an eye on an initial launch into the European market, where environmental regulations are particularly stringent.



<https://www.mhi.com/news/story/190418.html>

### **Toyota Tsusho Establishes Japan's Largest Recycled Plastic Processing Company with Veolia and Kojima Sangyo**

Toyota Tsusho Corporation announced on April 5 that it had established PLANIC Co., Ltd. together with Veolia Japan K.K. and Kojima Sangyo Co., Ltd. The new company, which is to be Japan's largest recycled plastic processing company, will collect mixed plastic from recycling and other facilities, sort and compound mixed plastic based on material type to recycle them back into plastic raw materials.

PLANIC will not only recycle used plastic from automobiles and home appliances, but will also carry out the material recycling of product plastic, which includes used palettes and containers, and packaging materials from distribution centers and shopping centers, to return them to their raw material state. As the collected plastic is a mixture of various different types of plastics, one issue is that they have to be sorted by material. Galloo Plastics S.A., which possesses a plastic Car to Car recycling technology, licensed the necessary technology, (Machinery provider is Ad Rem N.V.). PLANIC's goal is to process high quality recycled plastic at a low cost by being the first in Japan to utilize an advanced gravity separation technology.

PLANIC aims to launch operations in 2021, with the goal of annually recycling roughly 40,000 tons of plastics, taken mainly from automobiles and home appliances.

[https://www.toyota-tsusho.com/english/press/detail/190405\\_004358.html](https://www.toyota-tsusho.com/english/press/detail/190405_004358.html)

### **Kaneka and Seven & i Holdings Cooperate in Tackling Problem of Microplastics by Using Biodegradable Polymer**

Kaneka Corporation announced on April 15 that it had agreed with Seven & i Holdings Co., Ltd. to pursue a more sustainable society and aim for solutions of global environmental issues through joint product development. Seven & i Holdings Co., Ltd. which owns 7-eleven convenience stores and Ito-Yokado supermarkets among others will develop a variety of products using "Kaneka Biodegradable Polymer PHBH" ("PHBH"), the material Kaneka developed to solve the problems associated with microplastics. As a start, new straws for "SEVEN CAFÉ" run by Seven-Eleven Japan Co., Ltd. and other group companies will be introduced to the market by the autumn of 2019.

PHBH is a 100% plant-based biopolymer developed by Kaneka and has an excellent biodegradability under different environmental conditions. With “OK Biodegradable MARINE\*” certification that guarantees biodegradability in seawater, PHBH would be able to contribute to the reduction of marine pollutions, Kaneka says.

Product Samples



<http://www.kaneka.co.jp/wp-kaneka/wp-content/uploads/2019/05/%E3%80%90Kaneka%E3%80%91kaneka-Biodegradable-Polymer-PHBH-.pdf>

### **Paper Cup Using Mitsubishi Chemical-developed Biodegradable Polymer Receives Innovative Cup Liners Award**

Mitsubishi Chemical Corporation (MCC) announced on April 2 that PTT MCC Biochem Company Limited, a 50-50 joint venture between MCC and PTT Global Chemical Public Company Limited whose head office is located in Bangkok, was a winner of the NextGen Cup Challenge for their New Gen BioPBS™ Coated Cup, a paper cup coated with BioPBS which has unique recyclability and compostability.

The NextGen Cup Challenge is the first initiative by the NextGen Consortium, with Starbucks and McDonald’s as founding partners, other food-service industry leaders as supporting partners and WWF as an advisory partner. The NextGen Consortium aims to give solutions for global issues of single-use food packaging waste. The NextGen Cup Challenge seeks to identify and commercialize the next generation fiber cup to be recoverable on a global scale. BioPBS is a plant derived biodegradable polymer developed by MCC and manufactured by PTT MCC. This environmentally friendly material is broken

down by living microorganisms in soil and decomposes into water and carbon dioxide. In addition, it can be easily processed on facilities for existing resins. Paper cups using BioPBS have been on the market for more than three years and are proven to be industrially compostable and recyclable. It was named as one of the 12 winners from 480 participants in the Challenge.



New Gen BioPBS™ Coated Cup

[https://www.m-chemical.co.jp/en/news/2019/1206374\\_7665.html](https://www.m-chemical.co.jp/en/news/2019/1206374_7665.html)

## ADDITIONAL TOPICS

### English Version of the Contract Guidelines on Utilization of AI and Data Released

The Ministry of Economy, Trade and Industry (METI) released on April 4 the English translation of the Contract Guidelines on Utilization of AI and Data, the Japanese version of which was formulated in June 2018. Concerning contracts for utilization of data or for development and utilization of software using AI technology, the guidelines provide: main issues, points of contention, model contract clauses, factors to be considered in contract preparation and other elements.

The guidelines consist of two sections: (1) Data Section and (2) AI Section. Both

sections of the guidelines aim to provide a reference for contracting parties in determining contract clauses and other necessary points. METI expects parties who intend to make such contracts to prepare their own contracts while referring to the guidelines.

[https://www.meti.go.jp/english/press/2019/0404\\_001.html](https://www.meti.go.jp/english/press/2019/0404_001.html)

### **First Japan-China Innovation Cooperation Dialogue Held**

On April 2, Japan and China held the First Japan-China Innovation Cooperation Dialogue in Beijing. According to a joint press release of Japan's Ministry of Economy, Trade and Industry (METI) and the Ministry of Foreign Affairs, participants held discussions on the following issues.

- (1) Both sides explained their policies for innovation and exchanged views on: development of standards as a source of creating new markets (e.g., harmonization of standards for next-generation chargers for electric vehicles and of standards for or regulations over hydrogen); exchange between venture-business and companies; and cooperation in the field of smart cities toward the convening of the G20 (e.g., interoperability between smart cities).
- (2) They shared recognition on the importance of efforts in the field of intellectual property in both Japan and China to develop the environment for Japan-China cooperation in innovation and explained their policies involving the field of intellectual property. Following this, they exchanged views on a variety of challenges, including: protection of trade secrets, elimination of concerns over forced technology transfer (e.g., recent trends surrounding the Regulations on Technology Import and Export Administration (TIER) and the Foreign Investment Law), and measures against pirated products.
- (3) They exchanged views on exchange and cooperation in universities and research institutes through the existing frameworks.

[https://www.meti.go.jp/english/press/2019/0402\\_001.html](https://www.meti.go.jp/english/press/2019/0402_001.html)

### **Enhancement of Japan-Germany Research and Development Collaboration in Advanced Artificial Intelligence Agreed**

On April 16, Mr. Akimasa Ishikawa, Parliamentary Vice-Minister of Economy, Trade and Industry (METI), and H.E. Ms. Anja Karliczek, Federal Minister of Education and Research (BMBF), Germany, concluded a joint declaration on enhancement of collaboration between the National Institute of Advanced Industrial Science and Technology (AIST) of Japan and the German Research

Center for Artificial Intelligence (DFKI) of Germany, both of which are major research institutes of artificial intelligence (AI) in each country.

They welcome (1) strong cooperation between the AIST and DFKI since their conclusion of the MOU, (2) the joint research and development of AI technologies for autonomous driving and (3) the start of discussions toward the realization of a new concept called “co-evolution AI” or advanced AI, in which both AI and humans evolve their knowledge by interacting with each other.



Parliamentary Vice-Minister Ishikawa, METI, and Minister Karliczek, BMBF  
[https://www.meti.go.jp/english/press/2019/0417\\_002.html](https://www.meti.go.jp/english/press/2019/0417_002.html)

### **International Conference on Carbon Recycling to be Held**

The Ministry of Economy, Trade and Industry (METI) and the New Energy and Industrial Technology Development Organization (NEDO) will jointly organize an International Conference on Carbon Recycling on September 25, 2019. The conference will focus on “carbon recycling,” a system in which carbon dioxide is captured, then utilized and recycled into a variety of carbon compounds, and will bring together stakeholders from industry, academia, and government from worldwide.

The conference will bring together leading experts in all three sectors from around the world, and participants will share global innovative efforts and the latest knowledge, discuss and identify potential for international collaboration, and consolidate networks among participants. Moreover, participants will aim to

enrich further discussions on the Roadmap for Carbon Recycling Technologies, a strategic plan scheduled to be compiled in June 2019, and on challenges to promoting innovation and other issues.

[https://www.meti.go.jp/english/press/2019/0408\\_002.html](https://www.meti.go.jp/english/press/2019/0408_002.html)

### **Study Report on Trucks That Female Drivers Can Handle Easily Compiled**

The Ministry of Land, Infrastructure, Transport and Tourism (MLIT) and the Japan Trucking Association released on April 4, a report on types of trucks that female drivers can handle easily. It is a report prepared by a study committee they jointly established in March 2018. In order to improve a labor shortage situation in trucking, it is believed that various efforts are required to reduce the burden of drivers, especially female ones to handle trucks easily and make trucking more attractive job.

According to the report, recently introduced trucks receive good evaluation both from trucking companies, female and elder drivers. However, information sharing among truck manufacturers and trucking companies is deemed not sufficient because some of the optional equipment that truck manufacturers offer for the convenience of drivers is not well recognized. In addition, trucking companies and drivers request further improvements such as more storage space in cabin, measures against glaring sunshine, easy-to-operate rear doors and improved access to cargo box.

Examples of driver-appreciated equipment and accessories





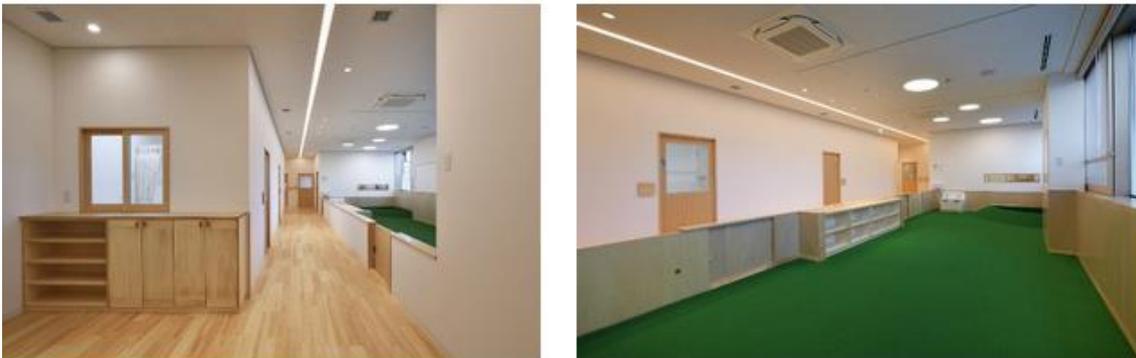
[http://www.mlit.go.jp/report/press/jidosha04\\_hh\\_000182.html](http://www.mlit.go.jp/report/press/jidosha04_hh_000182.html) (in Japanese)

<http://www.mlit.go.jp/common/001284425.pdf> (in Japanese)

<http://www.mlit.go.jp/common/001284410.pdf> (in Japanese)

### **METI Opens Nursery**

The Ministry of Economy, Trade and Industry (METI) announced on April 1 that it had just opened a nursery room in its office for child rearing employees. It is open for 7:30-18:30 with a possibility of extension until 21:00. Its capacity for accepting children is 19, a quarter of which is open to local residents.



METI Nursery's entrance and play room

<https://www.meti.go.jp/press/2019/04/20190401004/20190401004.html> (in Japanese)