## JAPANESE INDUSTRY AND POLICY NEWS November 2019

#### **LEGISLATION AND POLICY NEWS**

#### Task Force for Promoting Public Usage of Robots Launched

The Ministry of Economy, Trade and Industry (METI) and the New Energy and Industrial Technology Development Organization (NEDO) jointly launched on November 12 a body called the "Task Force for Promoting Establishment of Implementation Models of Robots" (hereinafter referred to as the "TF"). Through the TF, robot users, system integrators and other experts will collaborate in determining common challenges in the fields of facility management, retail sales/restaurants and food manufacturing, and will strive to find solutions to such challenges under the leadership of the robot users toward the public implementation of robots applicable to these fields.

Corporate members of the Task Force



Note: In addition to corporate members, Aoyama Gakuin and Tokai University participate from the academic world.

In May 2019, METI, jointly with the Cabinet Office, the Ministry of Health, Labour and Welfare (MHLW) and the Ministry of Education, Culture, Sports, Science and Technology (MEXT), launched the Council for Promoting Social Change Taking Advantage of Robots and since then, the council has been holding discussions on cross-sectoral measures and in July 2019 they compiled the discussion results into a Plan for Promoting Social Change Taking Advantage of Robots. This plan includes specific goals including: (1)

establishment of an ecosystem toward public implementation of robots which involves not only robot manufacturers but also system integrators and users, (2) human resource development targeting teachers and students of technology-focused colleges and industrial high schools, as an initiative which will ensure collaboration between academic and industrial sectors, and (3) establishment of systems for basic and applied research, which should be undertaken collaboratively by the industrial and academic sectors, in order to address midto long-term challenges. The TF will compile and release implementation models for robots in the three fields by around the end of FY2019. https://www.meti.go.jp/english/press/2019/1112 002.html

# FIT-Based Purchase Contracts between Household Consumers and Electricity Companies Start to Expire Sequentially

Under the Feed-in Tariff Scheme for Renewable Energy (FIT), which started in November 2009, contracts between household consumers and electricity utilities concerning the utilities' purchasing of excess photovoltaic power generated by facilities owned by the consumers are predetermined to expire after a ten-year period. These FIT-based ten-year contracts will start to expire sequentially from November 2019. The number of household facilities for photovoltaic power generation whose FIT-based ten-year contracts will expire in 2019, is approximately 530,000. Total number of such facilities from 2019 to 2023 is expected to reach approximately 1.65 million, while the amount of photovoltaic power generated by such facilities is estimated to be 6.70 million kW.

There are two options for household consumers concerning their facilities for photovoltaic power generation whose FIT contracts have expired: (1)Consume generated photovoltaic power for private use at home, etc. by connecting their facilities to electric vehicles, storage batteries or other devices; or (2)Conclude a new individual-based contract with an electricity retailer or other electricity utility on a direct or freelance basis and sell the excess amount of generated power to the utility.

According to a press release of the Ministry of Economy, Trade and Industry (METI) dated November 1, the Agency for Natural Resources and Energy (ANRE) will open a website for providing relevant consumers with information on electricity retailers wishing to purchase excess photovoltaic power; or raising awareness of problems among such consumers and will also open a

consultation counter to provide information on the expiration of FIT contracts

Number of household facilities for photovoltaic power generation whose FIT-based ten-year contracts will expire



Note: Line graph indicates the number of household facilities in 10 thousands. Bar graph shows the total of related power generation in 10 thousand kilowatt.

https://www.meti.go.jp/english/press/2019/1101\_001.html

ANRE website for information provision: "What to do after the expiration of FIT contracts" (in Japanese)

### Partial Revision of the Patent Act, etc. Takes Effect Next April

Ministry of Economy, Trade and Industry (METI) announced on November 1 that the Cabinet approved the Cabinet Order for Stipulating the Enforcement Date of the Act for Partial Revision of the Patent Act, etc. (hereinafter referred to as the "Revised Act"). As a result, the Revised Act will go into effect on April 1, 2020.

The Revised Act stipulates introduction of new system of verification by neutral technical expert to conduct onsite survey in case of possible patent infringement. The Revised Act also includes article to extend the validated

period of design right from 20 years of registration to 25 years from application date.

https://www.meti.go.jp/english/press/2019/1101\_002.html
https://www.jpo.go.jp/system/laws/rule/hokaisei/tokkyo/tokkyohoutou\_kaiei\_r010
517.html (in Japanese)

### **Product Safety Awards Winners Announced**

The Ministry of Economy, Trade and Industry (METI) announced on November 8 that it has selected 8 enterprises and organizations as winners of the FY2019 Best Contributors to Product Safety Awards. The awards program was inaugurated in FY2007, aiming to raise companies' awareness of product safety, firmly establish product-safety culture in Japan.

Winners of FY2019 are as follows.

(1) METI Minister's Awards

[Small & Medium Manufacturer and Importer Category] Yamamoto Kogaku Co., Ltd. ( <a href="https://www.yamamoto-kogaku.co.jp/en/">https://www.yamamoto-kogaku.co.jp/en/</a>)

(2) Director-General for Technology Policy Coordination and Industrial and Product Safety's Awards

[Large Manufacturer and Importer Category] Ricoh Co., Ltd. (https://www.ricoh.com/)

(3) Excellence Awards (Committee Awards)

[Large Manufacturer and Importer Category] Samantha Thavasa Japan Limited (<a href="https://www.samantha.co.jp/">https://www.samantha.co.jp/</a>)

[Large Retailer Category] CAINZ Corporation (<a href="https://www.cainz.co.jp/en/">https://www.cainz.co.jp/en/</a>) [Small & Medium Manufacturer and Importer Category] IRIS OHYAMA Inc. (<a href="https://www.irisohyama.co.jp/english/">https://www.irisohyama.co.jp/english/</a>)

[Small & Medium Retailer Category] Futon no Nishinaka (<a href="https://nishinakafuton.com/">https://nishinakafuton.com/</a>)

(4) Special Awards (Committee Awards)

NTT TownPage Corporation (<a href="https://www.ntt-tp.co.jp/">https://www.ntt-tp.co.jp/</a>)

Enomoto Kinzoku Seisakusho Co., Ltd. (<a href="http://www.enomoto-k.com/">http://www.enomoto-k.com/</a>)

https://www.meti.go.jp/english/press/2019/1108\_003.html

## Draft Action Plan on Promoting Electrified Vehicles Use in Disaster Prepared

In case of disasters, electrified vehicles (xEVs), such as electric vehicles (EVs)

and fuel cell electric vehicles (FCEVs), can work as emergency power sources taking advantage of in-vehicle storage batteries or electricity generators. In light of this advantage,the Ministry of Economy, Trade and Industry (METI) inaugurated a Council for Electrified Vehicle Society (CEVS) in July 2019, aiming to raise public awareness and promote dissemination of xEVs. The number of CEVS members is 127 organizations as of November 29, including automobile manufacturers, energy-related companies and user companies of xEVs. Under the CEVS framework, a Working Group on Promoting Utilization of Electrified Vehicles held its first meeting on November 27, held discussions on approaches to making use of xEVs in disaster situations and compiled the discussion results into a Draft Action Plan for Promoting Utilization of Electrified Vehicles (xEVs) in Disaster Situations.

In response to this, METI will prepare a manual on how to use xEV batteries for power supply as an easy-to-understand compilation and will embark on actions under the plan, including raising public awareness and dissemination of approaches to xEV batteries for power supply among municipalities, welfare facilities for the elderly and other facilities.

https://www.meti.go.jp/english/press/2019/1129\_001.html http://www.cev-pc.or.jp/xev\_kyougikai/xev\_pdf/xev\_kyougikai\_wg01-1\_action\_plan.pdf (in Japanese)

#### **SURVEY AND BUSINESS DATA**

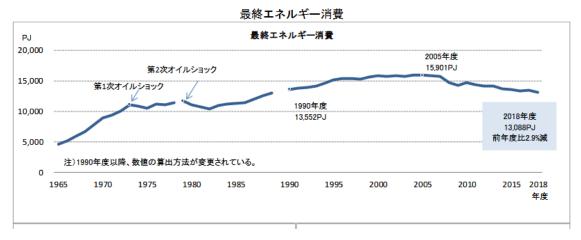
### FY2018 Energy Supply and Demand Report Published

The Agency for Natural Resources and Energy (ANRE) released on November 15, preliminary figures on the FY2018 Comprehensive Energy Statistics and compiled a preliminary version of the FY2018 Energy Supply and Demand Report. As for energy demand, overall final energy consumption decreased by 2.9% on a year-on-year basis. By sector, petroleum decreased by 4.1%, electricity and coal decreased by 2.0%, town gas decreased by 1.7%, heat decreased by 1.1%. As for supply, the overall domestic supply of primary energy shows a decrease by 1.9% on a year-on-year basis. Supply of fossil fuels has been decreasing for five consecutive years, while that of non-fossil fuels, such as renewable energy and nuclear energy, have recorded increase by 0.6% and 1.4%, respectively. Energy-oriented carbon dioxide emissions recorded a decrease by 4.5% on a

year-on-year basis, resulting in a decrease for five consecutive years and a decrease by 14.2% from FY2013.

Transition of Final Energy Consumption (FY 1965 – FY 2018)

Unit: Peta-Joule



https://www.enecho.meti.go.jp/statistics/total\_energy/pdf/stte\_027.pdf (in Japanese)

## Increasing Number of Companies Raise Wage, But Lesser Amount

According to an annual wage survey report that the Ministry of Health, Labour and Welfare published on November 26, more companies increase wages with smaller amount from the previous year in 2019. The ratio of companies answering that they increase wage is 90.2%, up from 89.7% in 2018. As for amount, average of monthly wage increase is 5,562 Yen, slightly less than 5,675 Yen of the previous year.

https://www.mhlw.go.jp/toukei/itiran/roudou/chingin/jittai/19/index.html (in Japanese)

#### Report on Corporate Law and International Competitiveness Compiled

The Ministry of Economy, Trade and Industry (METI) announced on November 19 that the Study Group for Development of Ideal Approaches to Legal Functions in Japanese Companies to Enhance International Competitiveness has compiled a "Report on Corporate Law and International Competitiveness - Focusing on approaches to legal functions and legal human resources required in the Reiwa Era -," aiming to encourage managements to "create new business, (e.g., embark on new projects), fully taking advantage of legal functions, and to endeavor to

improve and increase corporate value.

This report, which enriches the details of the previous report released in April 2018, clearly describes how legal functions contribute to creating new business, shows measures for effectively introducing legal functions into organizations and presents specific case examples of leading companies, recommendations on approaches for fostering legal human resources who are involved in corporate management and play a leading role in creating new business. In addition, the study group prepared two appendices to the report: "Skill Map for Management Legal Human Resources," describing the legal skills required for each position, ranging from general staff to top management; and "Collection of Case Examples of Management Legal Human Resource Career Paths Models." Along with these documents, METI compiled "Guidelines on Seven Actions for Management's Full Utilization of Legal Functions" as a reference to raise awareness among companies, including top management, and encourage them to change conventional business models.

https://www.meti.go.jp/english/press/2019/1119\_001.html

#### Recycling Ratio of Used PET Bottles was 84.6% in FY2018

According to an annual report of the Council for PET Bottle Recycling, recycling ratio of used PET bottles was 84.6% in FY2018. It is a decrease by 0.3% point as compared to the previous year. The Council sees the negative impact of Chinese waste import ban on the Japanese recycling ratio was rather small, reflecting an increase of reuse in domestic market. The Council aims at maintaining recycling ratio above 85%.

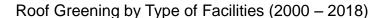
http://www.petbottle-rec.gr.jp/nenji/2019/p08.html (in Japanese)

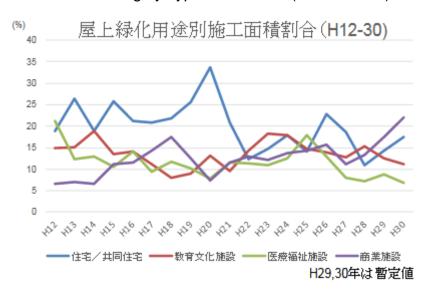
#### **Greening of Roof and Wall Advances in Commercial Facilities**

According to an annual questionnaire survey that the Ministry of Land, Infrastructure, Transport and Tourism (MLIT) published on November 27, share of the commercial facilities in roof and wall surface greening shows increasing trend.

In 2018, a total of 16.1 hectares green roof and 4.6 hectares green wall were constructed. The cumulative greening since the start of the survey in 2000 reached 519 hectares for the roof and 95 hectares for the wall. Average size of greening remain stable in the past ten years, i.e. 200  $\rm m^2$  for the roof and 150  $\rm m^2$  for the wall.

Recently, the share of the commercial facilities tends to increase in roof greening, surpassing that of residential facilities and reached more than 20% share for the first time in 2018.

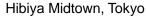




Note: Residential facility in blue, educational facility in red, medical/welfare facility in green, commercial facility in purple. Data for 2017 and 2018 are provisional.

### Examples of roof/wall surface greening







Nagasaki Prefectural Government building

http://www.mlit.go.jp/report/press/content/houdou.pdf (in Japanese)

#### **COMPANY NEWS**

#### MOL Group to Build Japan's 1st LNG-fueled Ferries

Mitsui O.S.K. Lines, Ltd. (MOL) and its group company Ferry Sunflower Limited announced on November 20 plans to construct the first two LNG-fueled ferries in Japan, the Sunflower Kurenai and the Sunflower Murasaki (Vessel names are tentative).

MOL plans to order the vessels from Mitsubishi Shipbuilding Co., Ltd. in December, 2019. Ferry Sunflower will charter the ferries after delivery and launch them on its Osaka-Beppu route from the end of 2022 through the first half of 2023, as replacements for vessels currently in service.

The ferries will be equipped with high-performance dual fuel engines and will provide passengers with comfortable accommodations and reliable schedules., According to the joint press release, they will be quieter than current vessels, ensuring smoother, more relaxing travel. The use of LNG fuel will achieve excellent environmental performance, reducing carbon dioxide (CO2) emissions by 20% compared to current vessels, and virtually eliminating sulfur oxides emissions.

Comparison between the "Sunflower Ivory" and the "Sunflower Cobalt" currently in service

	<i>Kurenai  Murasaki</i> (Newbuilding)	lvory  Cobalt
Passenger capacity	763	710
Loading capacity (trucks) (converted to 13m)	136	92
Speed	22.5knots	22.4knots
LOA	199.9m	153.0m
Gross tonnage	About 17,300tons	9,245tons



Computer Graphics of LNG-fueled ferry

https://www.mol.co.jp/en/pr/2019/19076.html http://www.mlit.go.jp/report/press/content/001317169.pdf (in Japanese)

## BYD and Toyota Agree to Establish Joint Company for Battery Electric Vehicle R&D

Chinese BYD Company Ltd. and Toyota Motor Corporation announced on November 7 that they have signed an agreement to establish a joint company to research and development (R&D) for battery electric vehicles (BEVs). The new R&D company, which will work on designing and developing BEVs and its related parts, is anticipated to be established in China in 2020, with BYD and Toyota to evenly share 50% of the total capital needed. Additionally, BYD and Toyota plan to staff the new company by transferring engineers and the jobs currently involved in related R&D from their respective companies.

https://global.toyota/en/newsroom/corporate/30565932.html

## Sumitomo Corp to Invest in Taiwan's Largest Electric Bus Manufacturer

Sumitomo Corporation has reached an agreement with RAC Electric Vehicles Inc., Taiwan's largest electric bus manufacturer, to acquire a stake in RAC. Air pollution has become a serious problem in Taiwan, and the government there has undertaken a number of measures to promote the renewable energy industry, with the electrification of buses being one measure the government is actively pursuing. The government has announced plans to replace all 10,000 or so route buses and about 5,000 inter-city buses with electric buses by 2030. RAC is the only Taiwanese company with official certification from the Taiwanese government pertaining to electric buses, and it specializes in the

development, manufacture and sale of electric buses.

The Sumitomo Corporation Group will be collaborating with RAC in this new business domain of electric bus manufacturing and sales to provide solutions to electric bus users in Taiwan and develop other businesses peripheral to electric buses. It will also be coordinating more closely with RAC to expand this venture to other regions where increased demand is anticipated.



RAC-made electric buses

https://www.sumitomocorp.com/en/jp/news/release/2019/group/12670

### JAPAN POST to Introduce New EV Delivery Vans

JAPAN POST Co., Ltd. (JP) announced on November 13, a newly designed electric vehicles (EVs) to be used in delivery service in big cities. It is an EV mini cab/minivan "miev" of Mitsubishi Motor, painted in JP's corporate color of red. JP plans to introduce a total of 1,200 EV mievs by March 2020. Then, approximately 1/3 of delivery minivans in Tokyo area will be EVs, JAPAN POST says.



https://www.post.japanpost.jp/notification/pressrelease/2019/00\_honsha/1113\_0 1\_01.pdf (in Japanese)

# Penta-Ocean Announced Construction of New Multipurpose Self-Elevating Platform for Large-scale Wind Power Generation

According to a press release of Penta-Ocean Construction Co., Ltd. dated November 20, it have agreed with Kajima Corporation and Yorigami Maritime Construction Co., Ltd. to jointly construct a multipurpose self-elevating platform (SEP) equipped with a 1,600t lifting capacity crane for construction of bottom-fixed foundations and wind turbines for 10-12 MW class wind power generation facilities. The SEP ship holding company will be established as a subsidiary of Penta-Ocean Construction Co., Ltd. and it will be operated jointly by the three companies.



Conceptual Image of new SEP

The basic design will be undertaken by a specialist company, GustoMSC (Netherlands), which delivers design solutions for about 70% of all SEPs around the world. PaxOcean Engineering (Singapore), which is part of Kuok Family, the largest international conglomerate group in Malaysia, will be responsible for the overall building of the SEP. The vessel will be equipped with a main crane built by Huisman (Netherlands). The SEP is scheduled to be completed and

delivered in September 2022 and become operational in March 2023, with an investment of approximately JPY 18.5 billion.

According to the press release, the development of offshore wind power generation projects have gained considerable momentum across the nation in light of the enactment of relevant regulations which promote offshore wind power generation in the general sea areas in addition to the port and harbor areas.

http://www.penta-ocean.co.jp/english/updates/2019/191120.html

### Taiwan's First Commercial Offshore Wind Power Project Completed

JERA Co., Inc. announced on November 12 that installation of all wind turbines of "Formosa 1," Taiwan's first commercial offshore wind power project in Miaoli County was completed in October. JERA is a 50-50 joint venture of TEPCO Fuel & Power, Inc. and Chubu Electric Power Co., Inc., participating in the Formosa 1.

Phase 1 (8MW) of the Formosa 1 project began operation in April 2017, and construction of Phase 2, a large-scale offshore wind power plant of 120MW, has been underway since June 2018.

#### Offshore wind power projects in Taiwan

	Formosa 1	(Reference) Formosa 2
Investors	Ørsted (35%), Macquarie	Macquarie (26.0%),
(share ratio*)	(25%), Swancor (7.5%),	Swancor (25.0%), JERA
	JERA (32.5%)	(49.0%)
Location	Approx. 2-6 km off the coast	Approx. 4-10 km off the coast
	of Miaoli County, Taiwan	of Miaoli County, Taiwan
Capacity	128 MW	376 MW
No. of	22 units	47 units
generators		
Commercial	End of 2019 (Target)	End of 2021 (Target)
operation	Except for 2 units that started	
	operations in April 2017, with	
	generating output of 8MW	

<sup>\*</sup>Share ratio for Formosa 2 reflects completion of JERA's acquisition from Macquarie

Since joining the project in February 2019, JERA has helped ensure a smooth launch by dispatching engineers to the operating company while acquiring knowledge and experience in the construction of offshore wind power plants.

Going forward, through the stable operation of Formosa 1 and by taking part in the separate "Formosa 2" offshore wind power project from its initial construction stage, JERA will gain additional experience and work to promote the use of renewable energy.

By participating simultaneously in projects at different stages of development in Taiwan, whose natural conditions are similar to those of Japan, JERA aims to establish a foundation for proactively developing large-scale offshore wind power project both in Japan and overseas.

https://www.jera.co.jp/english/information/20191112\_430

# Shizen Energy and Canada's Northland Power to Establish Joint Venture for Offshore Wind Projects in Japan

Shizen Energy Inc. and Canada's Northland Power Inc. announced on November 18 the signing of an agreement to work together to develop early stage offshore wind development opportunities in Chiba Prefecture, Japan. Under the terms of the agreement, the partners will establish a 50-50 joint venture (Chiba Offshore Wind Inc.), which will serve as the development vehicle for the projects. The joint venture is pursuing projects that have a combined capacity of approximately 600 megawatts (MW).

https://www.shizenenergy.net/pt-br/2019/11/18/shizen-energy-and-northland-power-to-establish-joint-venture-for-offshore-wind-projects-in-japan/

## BASF and NGK to Partner on Developing the Next Generation Sodiumsulfur Batteries

Japanese ceramics manufacturer NGK INSULATORS, LTD. and BASF New Business GmbH, a wholly owned subsidiary of the German chemical company BASF announced on November 7 that they would expand cooperation. In addition to the sales partnership agreement for NAS® batteries announced in June 2019, they have now entered into a joint development agreement (JDA) to develop the next generation of sodium-sulfur batteries.

This JDA will exploit the synergy in know-how of both companies, BASF and NGK. The two companies aim to develop the next generation of sodium-sulfur batteries, making use of BASF's extensive chemistry expertise and NGK's expertise in battery design and manufacturing. The project will allow to expand the performance range of NAS batteries and thus open up new markets. NGK's NAS battery is the world's first commercialized megawatt-class battery

which has the capacity to store large amounts of electricity for hours. The NAS battery system supports the increasing integration of fluctuating renewable energy sources, such as wind and solar, into the grid. It also enables deferral of transmission upgrade, because the electricity does not have to be transmitted immediately after being produced but can be discharged on demand.



NGK's NAS Battery (Container type)

https://www.ngk-insulators.com/en/news/asset/20191107\_2.pdf

#### NGK's Zinc Rechargeable Batteries Obtain UL Verification

NGK INSULATORS, LTD. announced on November 19 that its zinc rechargeable batteries, "ZNB" has obtained verification by the UL. It is the first case that rechargeable battery obtain UL verification. As regard to a marketing claim of NGK INSULATORS, UL verified "No thermal runaway or fire by surface heating, overcharging, over-discharging and nail penetration".

According to NGK INSULATORS, features of the "ZNB" batteries are (1) High safety due to the water-based electrolytic solution, (2) High capacity and (3) Long life. As examples of final use, NGK INSULATORS indicates (a) Residential power storage systems and (b) Indoor-type power storage systems for office buildings, hospitals and retail facilities, etc.



ZNB cell and module battery

https://www.ngk.co.jp/news/20191119\_10616.html (in Japanese) https://www.ngk-insulators.com/en/rd/index.html https://verify.ul.com/verifications/274

## Restaurant Chain Skylark to Replace Takeout and Shopping Bags from **Petroleum-based Plastic to Biomass Plastic**

Skylark Holdings Co., Ltd., a restaurant chain operating all over Japan announced on November 27 that it has decided to replace takeout and shopping bags from disposable plastic to eco-friendly biomass plastic. The group began withdrawing disposable plastic drinking straws from December 2018 and completed the withdrawal in the end of July 2019 at all stores. As a next step, the group is to replace takeout and shopping bags from petroleum-based to environmentally friendly biomass plastic bags. Biomass plastics are made from raw materials derived from plants (sugarcane pomace). By replacing petroleum-based plastic to 100% biomass plastic, CO2 emissions can be reduced by approximately 180 tons/year, corresponding to approximately 60%. Subsequently, takeout and delivery cutleries, and containers to be changed from plastic to eco-friendly products. https://www.skylark.co.jp/company\_e/news/info/pk637h000002bleq-

att/pk637h000002blfd.pdf

#### **ADDITIONAL TOPICS**

## First Three National Cycle Routes Designated

The Ministry of Land, Infrastructure, Transport and Tourism (MLIT) announced on November 7 that it has designated three cycling courses as Japan's first "National Cycle Routes" for promoting Japanese cycling environment inside and outside of Japan. Also, the Ministry published a logo selected through a design competition.

The three courses designated are Tsukuba-Kasumigaura ring-ring road (Ibaraki Prefecture), Biwaichi (Go around Biwako Lake; Shiga Prefecture) and SHIMANAMI KAIDO cycling road (Onomichi, Hiroshima Prefecture through Imabari, Ehime Prefecture.

## Three Designated Routes





## Selected logo, designed by Mr. Shohei Ochiai

http://www.mlit.go.jp/report/press/content/001315541.pdf

#### Second Al Edge Contest to be Held

The Ministry of Economy, Trade and Industry (METI) announced on November 18 that it would jointly hold the Second "AI Edge Contest", together with the New Energy and Industrial Technology Development Organization (NEDO), Digital Media Professionals Inc. (DMP) and SIGNATE Inc., aiming to discover outstanding computer technologies, human resources and concepts as well as to encourage promising new human resources to enter these fields for the purpose of creating of innovative AI edge computing technology. In the second contest, the focus is on "autonomous driving and mobility service," one of the priority fields that Japan has specified under the "Connected Industries" policy. Contestants will embed image recognition systems, technology that is indispensable for the realization of autonomous driving, in hardware (FPGAs) and the accuracy of the processing performance in detecting target objects in images will be the basis of the competition. In assessing the outcomes of the contest, the judges will base their decisions on a review of the code, the performance of contestant teams and technology

on a review of the code, the performance of contestant teams and technology and the reproducibility of the performance, and based on the results, conduct strict screening to determine winners of the awards.

Application period is from November 18, 2019, to March 31, 2020.

https://www.meti.go.jp/english/press/2019/1118\_002.html

URL for the contest: <a href="https://signate.jp/competitions/191">https://signate.jp/competitions/191</a> (in Japanese)

# CCS Demonstration Project in Hokkaido Successfully Injects 300,000 Tons of CO2

The Ministry of Economy, Trade and Industry (METI) announced on November 25 that the large scale Carbon dioxide Capture and Storage (CCS)

Demonstration Project in Tomakomai City, Hokkaido reached the goal of successfully injecting 300,000 tons in total of carbon dioxide (CO2) underground. The project has since paused therefore, but continues to monitor CO2 that has already been injected. Moreover, METI will hold discussions by experts to examine the outcomes of the demonstration project and future challenges therein and will release the results of the discussions.

The project will continue monitoring and other efforts, including observing very small oscillations in the areas surrounding the reservoir point, surveying marine environments and checking behaviors of injected CO2, e.g., displacement and spreading. METI will hold discussions by experts to examine the outcomes of the project and future challenges therein and will release the results of the discussions.

https://www.meti.go.jp/english/press/2019/1125\_004.html