

JAPANESE INDUSTRY AND POLICY NEWS

June 2018

LEGISLATION AND POLICY NEWS

Future Approach for Developing Small Satellites and Small Rockets Indicated

In December 2017, the Ministry of Economy, Trade and Industry (METI) established a Study Group for Development of Technology Strategies for Small Satellites and Small Rockets Expecting the Arrival of the Era of Constellation Business to hold discussions on challenges faced by Japan in business involving small satellites and small rockets, an industry expected to expand in the near future, and Japan's efforts required to solve such challenges. Since the establishment, the study group held 7 meetings for these purposes. METI announced on June 1 that the study group compiled the discussion results into a report.

The report brings out challenges to Japan's small satellite and small rocket business and recommendations for addressing them. As efforts to overcome these challenges, the report recommends (1) promoting the development of parts and components for small satellites and small rockets, (2) promoting the improvement of manufacturing environments including those for mass manufacturing of small satellites and small rockets, and (3) further expanding opportunities for demonstrations in orbit.

METI said that it would strive to make maximized efforts to realize specific measures based on the report.

http://www.meti.go.jp/english/press/2018_06/0601_001_00.html

METI Launches New Initiative, "J-Startup" Program

The Ministry of Economy, Trade and Industry (METI) starts a new initiative called the "J-Startup" program, aiming to incubate internationally competitive and winning startups and encourage them to provide new value to the rest of the world through their innovative technologies and business models.

Under the program, METI will select promising startups that experts have nominated and the public and private sectors will unite their efforts to provide selected startups with intensive support measures, including those for their business development overseas. As part of this program, METI will establish a J-

Startup Supporters system in which large companies, venture capitals and accelerators, collectively called “J-Startup Supporters,” will collaborate with METI in providing these measures. METI will promote this program in collaboration with other ministries and agencies.

http://www.meti.go.jp/english/press/2018_06/0611_003_00.html

A Guide to Licensing Negotiations Involving Standard Essential Patents Released

The Japan Patent Office (JPO) released on June 5, “The Guide to Licensing Negotiations Involving Standard Essential Patents.” The Guide aims to enhance transparency and predictability, facilitate negotiations between rights holders and patent users, and help prevent or quickly resolve disputes concerning the licensing of standard essential patents (“SEPs”) which are essential in implementing standards in the field of wireless communications and similar technologies.

http://www.meti.go.jp/english/press/2018_06/0604_001_00.html

METI Formulates "Contract Guidance on Utilization of AI and Data"

The Ministry of Economy, Trade and Industry (METI) has formulated the “Contract Guidance on Utilization of AI and Data” to summarize issues and factors to be considered when drafting a contract on the utilization of artificial intelligence (AI) or data, with sample clauses provided. This Guidance is intended to be used as a reference when private businesses conclude contracts related to data utilization or development and utilization of AI-based software.

This Guidance consists of two sections: 1. Data Section and 2. AI Section. Data section categorizes data utilization contracts into three types, i.e. data provision, data creation and data sharing (platform type), and explains structures, main legal issues and proper contract preparation processes for each contract type. This section also provides model contract clauses for data provision and data creation-type contracts.

The AI Section first explains the basic concepts of AI technology and features of software development using AI technology. The AI Section then proposes “Exploratory Multi-phased” AI development processes which consists of (1) the assessment phase, (2) the proof of concept (PoC) phase, (3) the development phase and (4) the retraining phase. The AI Section further describes types of contracts and factors to be considered in contract preparation, with sample

clauses provided.

http://www.meti.go.jp/english/press/2018/0615_002.html

Expert Study Group on Ideal Approaches to CCS Demonstration and Research Projects Established

The Ministry of Economy, Trade and Industry (METI) has been engaging in efforts for the practical use of carbon dioxide capture and storage (CCS), a technology expected to serve as a key to mid- to long-term countermeasures against global warming. As part of this, METI decided to establish an Expert Study Group on Ideal Approaches to CCS Demonstration and Research Projects in order to study future approaches to demonstration and research projects. First meeting of the study group was held on June 11.

http://www.meti.go.jp/english/press/2018_06/0607_002_00.html

JPO Strengthens Cooperation with USPTO on Industrial Designs

On June 14, the Japan Patent Office (JPO) signed the Memorandum of Cooperation (MOC) in the field of industrial designs with the United States Patent and Trademark Office (USPTO). The JPO and the USPTO will collaboratively work together aiming at developing an environment to ensure appropriately protecting the excellent industrial designs of both countries domestically and internationally.

As specific areas of cooperation under this MOC, the JPO and the USPTO agree to regularly hold Design Examination Meetings to further enhance their mutual understanding of examination practices at the offices; and to speed up the creation of the United States-Japan Common Classification System for Industrial Designs.

http://www.meti.go.jp/english/press/2018/0615_003.html

SURVEY AND BUSINESS DATA

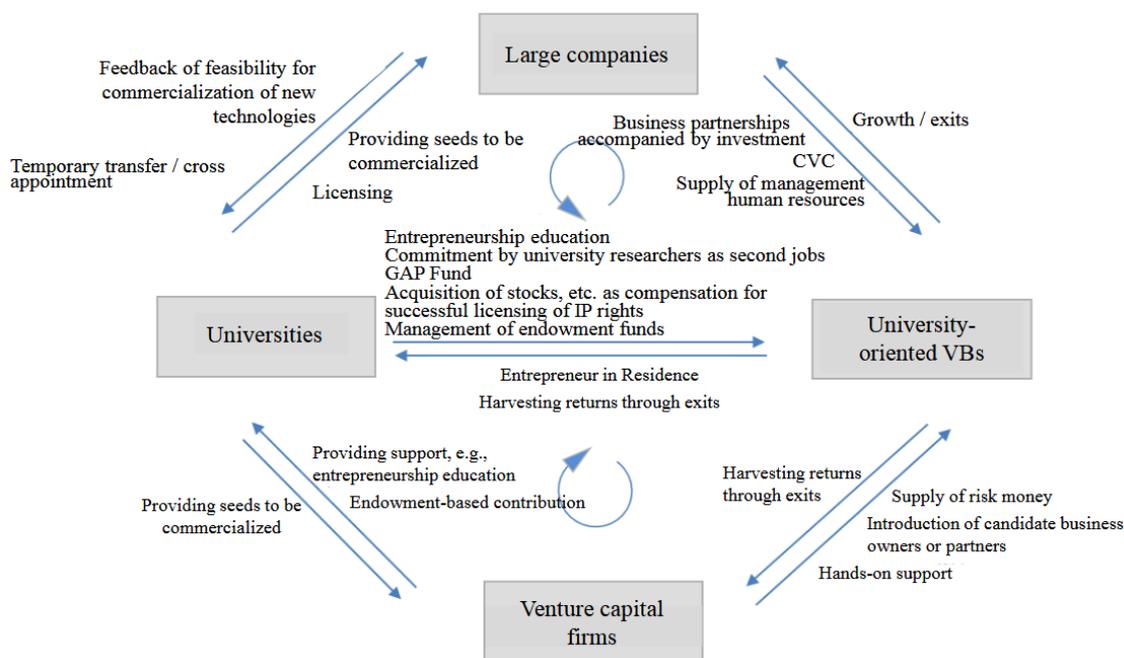
METI Releases a Study Report on Ideal Approaches to University-Oriented Venture Businesses

The Ministry of Economy, Trade and Industry (METI) established a Study Group on Ideal Approaches to University-Oriented Venture Businesses in February 2018. Since then, the study group held five meetings and compiled the

discussions summary into a report on an ecosystem to improve university-oriented venture businesses in Japan in terms of quality and quantity.

The report which was published on June 19 states challenges in (a) human resources, (b) funds and (c) intellectual property and knowledge, aiming at the establishment and growth of university-oriented venture businesses, and also offers recommendations to solve these challenges. In addition, the report also focuses on the perspective of cultivating an ecosystem for such establishment and growth across Japan, and from this perspective, offers ideal approaches to developing ecosystems in regional areas and on roles that universities and large companies are expected to play in related efforts.

Ecosystem for establishment and growth of university-oriented venture businesses



http://www.meti.go.jp/english/press/2018/0619_002.html

Second Edition of the White Paper on Open Innovation Compiled

On June 27, the Ministry of Economy, Trade and Industry (METI) published the second edition of the White Paper on Open Innovation which is an update from the first edition issued in July 2016.

The second edition shows the related data and successful case examples involving open innovation and it uncovers the purpose of open innovation and

intended and anticipated outcomes from open innovation, contains an organized compilation of promising efforts, and highlights noteworthy points of interest in pursuing such efforts in a well-organized format.

Targeting business owners and employees of private companies who intend to promote or have already started open innovation programs, the second edition of the white paper presents a thorough, quantitative analysis of the current situation of and challenges in Japanese companies and contains opinions from consultants, business insiders and academics that have succeeded in open innovation, collected through personal interviews.

http://www.meti.go.jp/english/press/2018/0627_002.html

https://www.joic.jp/joic_members/open_innovation_hakusyo (in Japanese)

Enforcement Status of the Home Appliances Recycling Law Announced

On June 7, the Ministry of Economy, Trade and Industry (METI) and the Ministry of the Environment (MOE) announced the amounts of four designated types of waste home appliances collected in FY 2017 by manufacturers and importers at the designated collection sites across Japan, pursuant to the Law for Recycling of Specified Kinds of Home Appliances (Home Appliances Recycling Law).

In FY 2017, approximately 11.89 million units of the four designated types of waste home appliances were collected in total. Breaking down the results, there were 2.83 million air conditioners, 1.04 million CRT TVs, 1.49 million LCD and plasma TVs, 2.98 million refrigerators and freezers, and 3.54 million clothes washers and dryers.

The waste home appliances transported to home appliance recycling plants went through a recycling process to recover valuable materials, such as iron, copper, aluminum, glass, and plastic. All the manufacturers and importers successfully achieved recycling rates higher than the legal requirements. The recycling rates for the four types of designated waste home appliances are indicated in the following table.

Recycling rates (actual results from the last three years)

	FY2015	FY2016	FY2017
Air Conditioners	93%	92%	92%
CRT TVs	73%	73%	73%
LCD and Plasma TVs	89%	89%	88%
Refrigerators and Freezers	82%	81%	80%
Clothes Washers and Dryers	90%	90%	90%

http://www.meti.go.jp/english/press/2018_06/0607_001_00.html

Results of the 2017 Survey on Selected Service Industries Compiled

On June 21, the Ministry of Economy, Trade and Industry (METI) released a result of the Survey on Selected Service Industries as of July 1, 2017.

Looking at 21 industrial sectors providing services to establishments, the sales in software services were the highest at 14.3745 trillion yen, followed by those in advertising services at 8.4697 trillion yen and those in data processing and information services at 7.6658 trillion yen.

As for the seven service industries providing services to individuals, the sales in ceremonial occasions were the highest at 2.0784 trillion yen, followed by those in sports facilities at 1.8062 trillion yen and those in performances and theatrical companies at 951.8 billion yen.

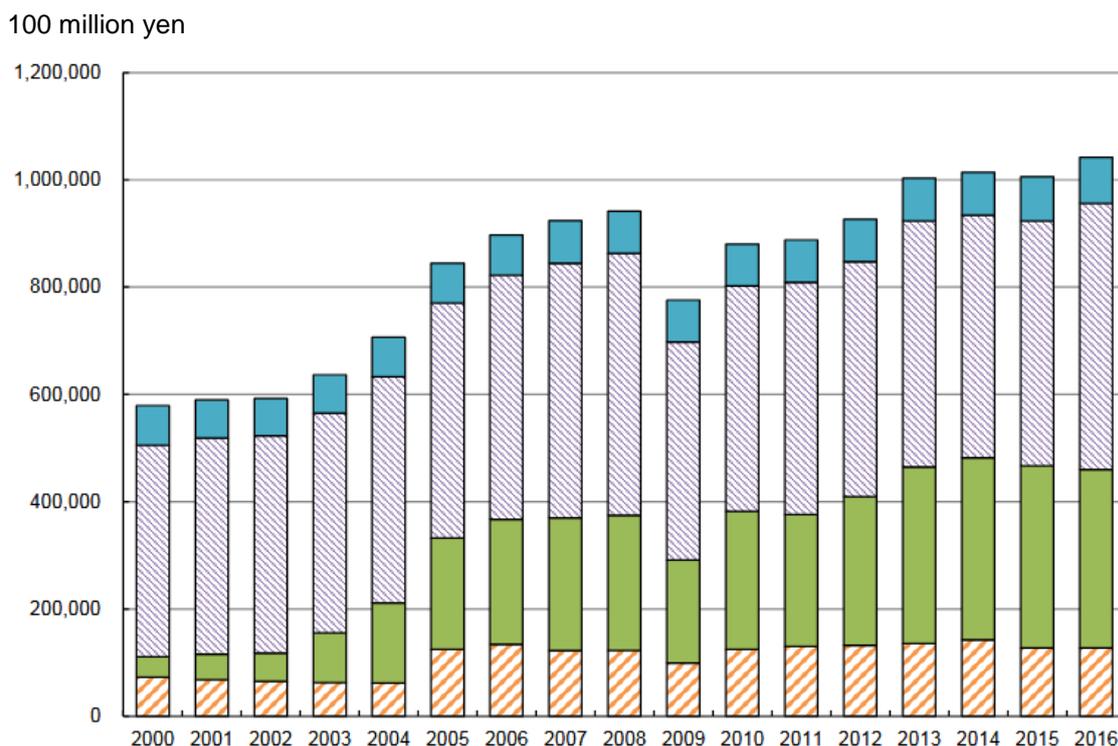
http://www.meti.go.jp/english/press/2018/0621_001.html

Environment-related Industry Continues to Grow

According to an annual survey report that the Ministry of the Environment published on June 19, the domestic market size for environment-related industry was estimated at a record high of 104.2 trillion yen in 2016, up by 3.6% from the previous year. Employment in this sector reached 2.6 million (up 2.6%) in the same year, also recorded a historical high (Note: Data up to 2015 were revised). Exports were 11.3 trillion yen, lead by “eco cars”. Imports were 3.9 trillion yen, the most important items of which were photovoltaic power generation systems.

Development of Japanese Environment-related Market

Protecting natural environment	■ 自然環境保全
Waste treatment/effective use of resources	▨ 廃棄物処理・資源有効利用
Measures against climate change	■ 地球温暖化対策
Measures against environment pollution	▨ 環境汚染防止



<https://www.env.go.jp/press/105605.html> (in Japanese)

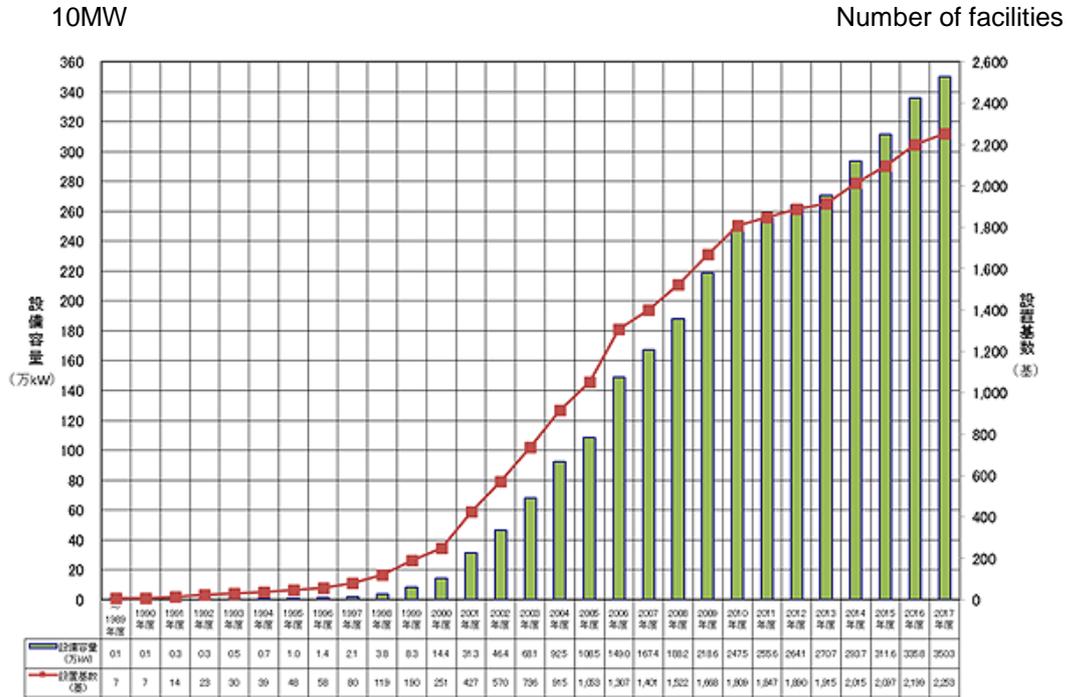
<https://www.env.go.jp/press/files/jp/109327.pdf> (in Japanese)

Increase of Wind Power Generation Continues

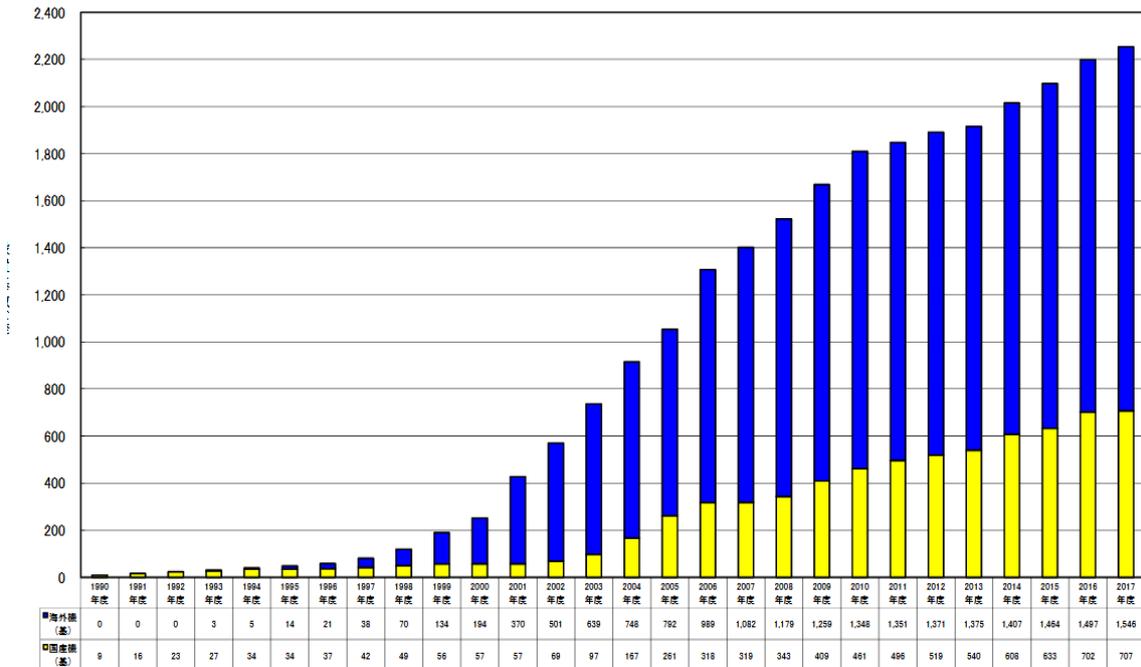
According to the statistics released by the New Energy and Industrial Technology Development Organization (NEDO) on June 28, the generating capacity of wind power totaled 3,500 Mega Watt at the end of March 2018. It is an increase of 4.3% from the previous year. As regard to the number of facilities, a total of 2,253 power stations (+2.5%) were in operation.

By the origin of generators, 68.6% (1,546 facilities) are equipped with foreign machines. As for locations, Aomori, Akita and Hokkaido, all in the northern area are the top three prefectures with bigger generating capacities, followed by Kagoshima prefecture in the south west of Japan.

Development of Japanese Wind Power Capacities



Accumulated Installation of Wind Power Generators between 1990 and 2017 (Blue=Imports, Yellow=Japanese)



http://www.nedo.go.jp/news/press/AA5_100984.html (in Japanese)

Share of New Entrants in Household Power Supply Surpassed 10%

The Ministry of Economy, Trade and Industry (METI) announced on June 18 that a total share of “new entrants” in the household power supply market surpassed 10% in March.

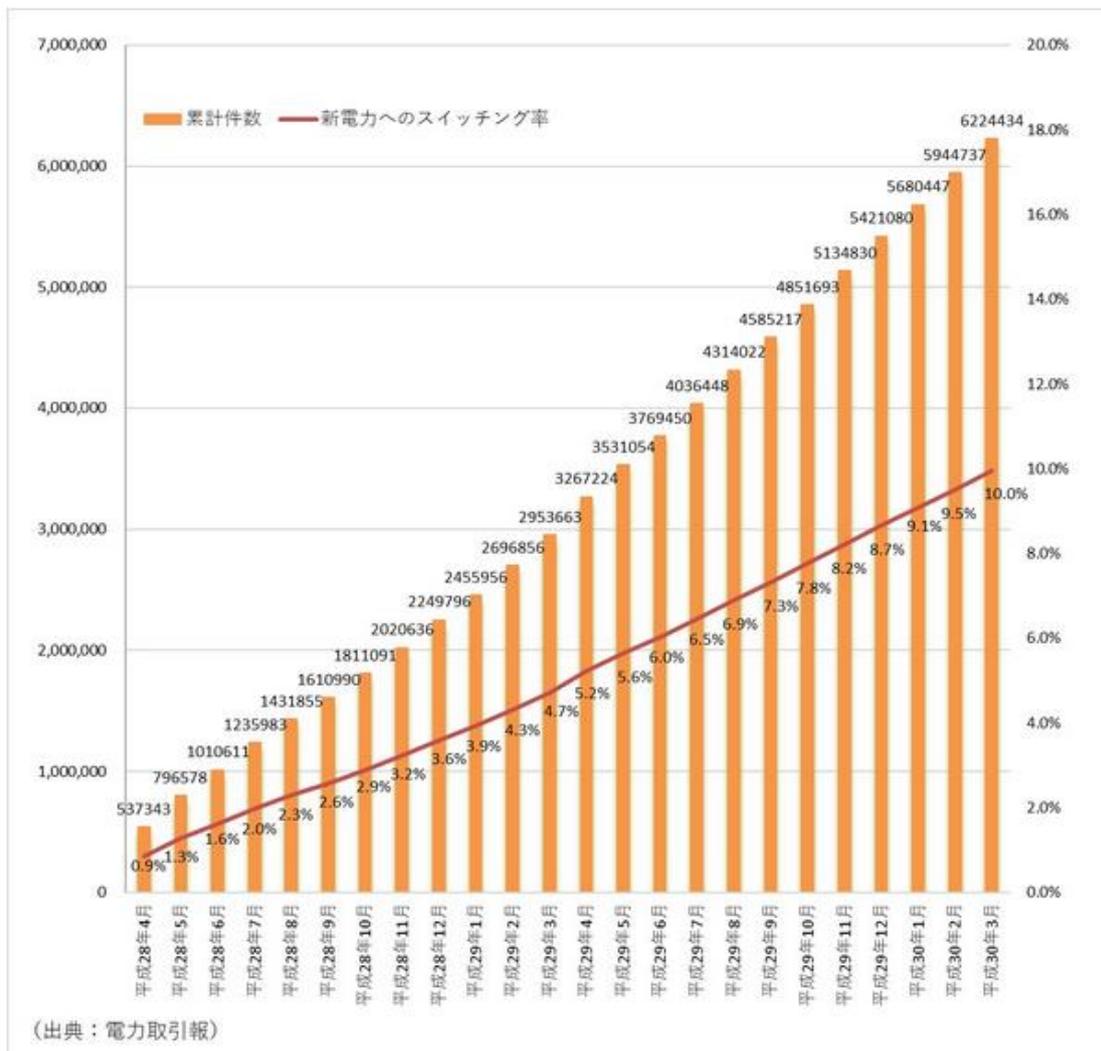
The number of households which switched (changed) electricity suppliers to the new entrants from existing power providers since the liberalization of retail market in April 2016 reached 6.22 million in March 2018 and the “switching ratio” surpassed 10% for the first time.

As regard to individual company, Tokyo Gas Co., Ltd. secured the biggest share of 20% among the new entrants, followed by KDDI Corporation (13%) and Osaka Gas Co., Ltd. (10%).

Switching to New Entrants

cases

share of new entrants



<http://www.meti.go.jp/press/2018/06/20180618003/20180618003.html>

(in Japanese)

Summer Bonuses Expected to Have Reached the Highest Level

According to an initial survey result of KEIDANREN (Japan Business Federation) compiled in mid-June, average amount of summer bonus of its members, consisting of large scale companies were calculated at 967,386 yen, the highest recorded in initial compilation. It corresponds to an increase of 60,830 yen (+6.71%) from the previous year.

<http://www.keidanren.or.jp/policy/2018/045.pdf> (in Japanese)

COMPANY NEWS

Italian Virtual Sunlight for the Basement

Toppan Printing Co., Ltd. announced on June 8 that it would start selling the “CoeLux Exp Sky” lighting systems, which reproduce a virtual experience of the sun and sky, especially in a below-ground environment.

Its manufacturer, CoeLux Srl, is a high-tech company established in 2009 in Como, Italy as an academic spinoff of Universita degli Studi dell’Insubria



https://www.toppan.co.jp/news/2018/06/newsrelease180608_1.html (in Japanese)

Franco-Japanese Collaboration in Power Digital Solution

Marubeni Corporation announced on June 26 that it had signed a Memorandum of Understanding (MOU) with French ENGIE S.A. for a collaboration in the introduction and further development of the digital solution platform system called DARWIN to be applied to renewable power plants. According to their press release, DARWIN is a data management platform which aims to improve the performance of its power generating facilities and develop predictive maintenance.

Marubeni and ENGIE have established and maintained a relationship as global partners in the energy and the power sector for decades. In addition to existing joint operations and businesses, Marubeni and ENGIE will collaborate in the power digital solution area, especially in terms of renewable power plants, to address the global market change driven by digitalization, de-carbonization and decentralization.

<https://www.marubeni.com/en/news/2018/release/00016.html>

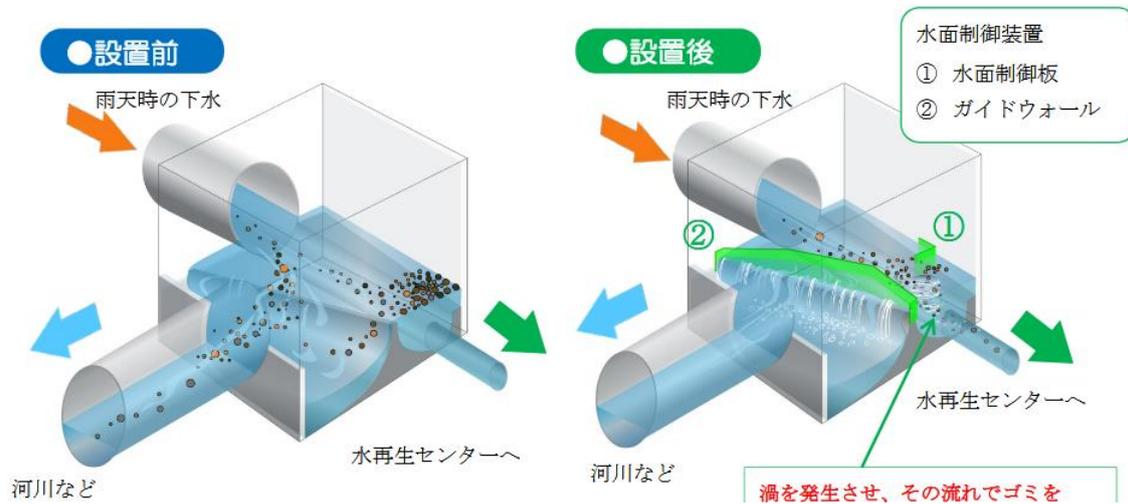
Sewage Equipment Developed in Tokyo Goes to Europe

Tokyo Metropolitan Government announced on May 11 that it would conclude a memorandum of understanding on joint research activities with a German consortium being lead by Steinhardt GmbH, a company of water technology systems, for the purpose of further developing European market for their sewage equipment called “HydroSpin”.

According to an English information provided by Steinhardt, the HydroSpin operates with no extra energy to prevent floatables and suspended solids from escaping out of sewage system, thus contributing to the protection of waters from pollution. The technology was developed in Japan jointly by the Bureau of Sewerage of Tokyo government, Tokyo Metropolitan Sewerage Service Corporation and Nippon Koei Co., Ltd. and is under patent protection worldwide. Steinhardt has held European licensing rights for the marketing and construction of the HydroSpin equipment since June 2010.

In German side, Münster University (WWU) and the city of Taunusstein where the main office of Steinhardt is located participate in the joint research project.

Work of HydroSpin – With and Without



http://www.gesui.metro.tokyo.jp/news/2018/0511_2940.html (in Japanese)

<http://steinhardtgbh.com/tokyo-taunusstein/>

Toppan Printing Develops Electronic Paper Display Working Without Battery

Toppan Printing Co., Ltd. announced on June 19 that it had developed an electronic paper display (EPD) powered by energy harvesting technology. This EPD can be used to provide a display on battery-less Internet of Things (IoT) devices compliant with the EnOcean wireless communication standard. Toppan Printing will launch sample shipments in September 2018 and target collaboration with manufacturers of IoT devices. According to Toppan Printing, EnOcean is a standard for wireless communication without battery based on energy harvesting technology, whereby minute amounts of energy from external sources, such as sunlight, heat, and vibration, are captured and converted into electrical energy.

The use of energy harvesting for sensors and switches is increasing rapidly, as it eliminates the need to provide a power source or change batteries. EPDs, meanwhile, have various advantages over other types of displays. They are thin and lightweight and offer visibility close to that of paper while consuming very little power.



Newly developed electronic paper display. Segmented EPD technology enables ultralow power consumption.



Example of the EPD applied to a batteryless switch that will be showcased at the 29th Design Engineering & Manufacturing Solutions Expo.

https://www.toppan.co.jp/en/news/2018/06/newsrelease180619_1e.html

FT/IFC Transformational Business Awards Recognize Nissan for Vehicle-to-Grid System and Second-life Batteries

Nissan Motor Co. Ltd. announced on June 15 that it had won the Excellence in Climate Solutions Award for its pioneering work to develop electric vehicle technology and energy services systems.

The accolade is part of the FT/IFC Transformational Business Awards, given by

the Financial Times and the International Finance Corp., a member of the World Bank Group. Nissan was specifically recognized for its Vehicle-to-Grid and second-life battery systems.

Nissan's Vehicle-to-Grid system enables energy from electric cars to be fed back into the electricity grid. This can make the grid more stable and sustainable. It can also help consumers manage their energy supply.

Nissan's second-life energy storage systems use batteries taken from Nissan LEAF and e-NV200 electric vehicles. The batteries are turned into energy storage units for homes and other buildings.

<https://newsroom.nissan-global.com/releases/release-75b19d3a1fdacef5055230314511142c-180615-01-e>

Toshiba's Hydrogen Energy Business wins the Jules Verne Award

Toshiba Energy Systems & Solutions Corporation announced on June 20 that it had received the Jules Verne Award from the International Association for Hydrogen Energy (IAHE) during the World Hydrogen Energy Conference (WHEC) 2018, the world's largest international conference on hydrogen energy, which was held by the IAHE in Rio de Janeiro, Brazil.

The IAHE is an international organization that promotes academic and technological advancements in the field of hydrogen energy. Every two years, the IAHE holds the WHEC and presents five awards to researchers or organizations that have made remarkable hydrogen energy-related achievements, with the Jules Verne Award among the awards presented.

https://www.toshiba-energy.com/en/info/info2018_0620.htm

ADDITIONAL TOPICS

Ministry of the Environment Goes Ahead to 100% Renewables

Ministry of the Environment announced on June 15 that its Minister, Mr. Masaharu Nakagawa had handed over an application to become member to RE100 to Mr. Sam Kimmins, Head of the RE100 of the Climate Group, aiming at 100% use of renewable energy at the Ministry.

<https://www.env.go.jp/press/105631.html> (in Japanese)

METI and Thai Government Sign the Memorandum of Cooperation on Smart Industrial Safety

On June 11, the Ministry of Economy, Trade and Industry (METI) and the Thai Ministry of Industry (MOI) signed a Memorandum of Cooperation (MOC) on Strengthening the Smart Industrial Safety System in Thailand. The MOC, effective for three years, aims to enhance the safety and efficiency of plants and other facilities in Thailand by taking advantage of Japan's smart technologies. Highlights of the cooperation include convening of policy dialogues between METI and MOI, dispatching of experts from Japan to Thailand and Japan's acceptance of trainees from Thailand.

http://www.meti.go.jp/english/press/2018_06/0611_002_00.html

Tokyo 2020 Announces Sustainability Plan and Guiding Principle

The Tokyo Organising Committee of the Olympic and Paralympic Games (Tokyo 2020) published its Sustainability Plan Version 2, together with the Plan's guiding principle on June 12. This constitutes the final strategic plan that will govern sustainability activities for the Tokyo 2020 Games.

The guiding principle reads, "Be better, together – for the planet and the people", and with this, Tokyo 2020 not only aims to ensure sustainable delivery of the Games, it also hopes to contribute to the United Nations' Sustainable Development Goals.



Related goals, targets and measures are specified in the Plan under the following five themes: Climate Change; Resource Management; Natural Environment and Biodiversity; Consideration of Human Rights, Labour and Fair Business Practices; and Involvement, Cooperation and Communications (Engagement).

<https://tokyo2020.org/en/news/notice/20180612-02.html>