JAPANESE INDUSTRY AND POLICY NEWS October 2018

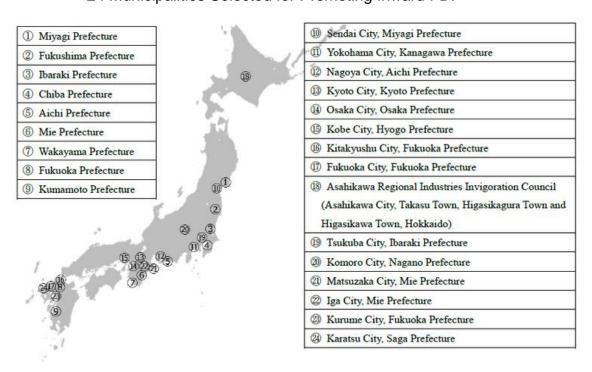
LEGISLATION AND POLICY NEWS

Municipalities Selected for Promoting Inward FDI

The Ministry of Economy, Trade and Industry (METI) and the Japan External Trade Organization (JETRO) announced on October 4 that they jointly selected 24 municipalities (for the first round) to be covered by the Support Program for Regional Foreign Direct Investment in Japan, where municipalities that make efforts to attract foreign-based companies to their regions are supported by the entire government.

Together with the selected municipalities, METI and JETRO assess the strengths of different regions in order to formulate strategies for attracting foreign-based companies by demonstrating latent strengths, and to support the utilization of relevant measures and specific promotional activities to promote direct investment in Japanese regions.

24 Municipalities Selected for Promoting Inward FDI



http://www.meti.go.jp/english/press/2018/1004_001.html

Winners of the FY 2018 Awards for Resources Recirculation Technologies and Systems Selected

The Ministry of Economy, Trade and Industry (METI) announced on October 4 the winners of the FY 2018 Awards for Resources Recirculation Technologies and Systems, an award program supported by METI.

This awards program was launched in 1975, with the aim of extensively calling for and recognizing outstanding projects and efforts by companies and other industrial groups with excellent technologies that contribute to waste reduction, reuse and recycling, thereby encouraging and fostering such efforts and creating new business. The program is organized by the Japan Environmental Management Association for Industry (JEMAI), with the support of METI.

The winners and the winning projects are as follows.

METI Minister's Award (one project)

Retread project of trucks' and	Bridgestone BRM Corporation (Kazo City,
busses' used tires	Saitama Prefecture)

Award of the Director-General of the Industrial Science and Technology Policy and Environment Bureau (three projects)

Producing free ceramides from soy sauce meal for the first time in the world	Genuine R&D Co., Ltd. (Fukuoka City, Fukuoka Prefecture)		
Global development of construction equipment parts recycling business for resource efficiency and circular economy	Hitachi Construction Machinery Co., Ltd. (Taito Ward, Tokyo)		
Reduction of scrap using double-acting molds and product beads	Honda Engineering Co., Ltd. (Haga Town, Tochigi Prefecture)		

http://www.meti.go.jp/english/press/2018/1004_002.html

Winners in the Eighth Robot Awards Program Announced

The Ministry of Economy, Trade and Industry (METI) and the Japan Machinery Federation (JMF) held the Eighth Robot Awards in collaboration with the Ministry of Internal Affairs and Communications (MIC), Ministry of Education, Culture,

Sports, Science and Technology (MEXT), Ministry of Health, Labour and Welfare (MHLW), Ministry of Agriculture, Forestry and Fisheries (MAFF), and the Ministry of Land, Infrastructure, Transport and Tourism (MLIT). They announced on October 12 that METI and JMF selected the winners.

From among the 161 applicants that applied for the Eighth Robot Awards program during the period of the call from April 23 to June 29, a special committee for the Eighth Robot Awards program, chaired by Dr. Sadao Kawamura, professor, Ritsumeikan University, examined and selected the robots for the awards.

From among these winners, a robot technology titled "ZDT (Zero Downtime)" developed by FANUC Corporation was selected as the winner of the program (METI Minister's Award). ZDT is an IoT technology which realizes a centralized management system of industrial robots operating in a factory. This technology networks those robots, collects data such as their mechanical condition and process status to a server, and comprehensively manages those robots. It also realizes preventive maintenance and prediction of failures so that the user factory can reduce downtime to zero.



Mechanical condition check





Process status check



System health check



http://www.meti.go.jp/english/press/2018/1012_002.html

Interim Report on New Mobility Services Brought About by IoT and Al Released

From the viewpoint of Japan's economic growth and industrial sophistication, the Ministry of Economy, Trade and Industry (METI) considers it important to vitalize new mobility services or Mobility as a Service (MaaS) as a new service that industries are able to provide thanks to taking advantage of IoT and AI. Based on this awareness of this problem, in June 2018, METI launched a Study Group on New Mobility as a Service Brought About by IoT and AI, and since then, the study group has been advancing information and opinion exchanges with experts and companies and holding repeated discussions on current situations and challenges, future directions of efforts and other issues. METI released on October 17 the interim report which summaries the discussion results by the study group.

The interim report organizes the global trends in new mobility services and, based on this, provides well-organized current situations and challenges in comparison with global trends. The interim report streamlines the future directions of efforts that Japan should take, focusing on three key points as below:

- 1. Development of infrastructure for promotion of digital investment as well as further collaboration and utilization of data
- 2. Promotion of business collaboration between conventional businesses and startups or different industries
- 3. Support of regional areas that intend to take on new efforts in collaboration with companies

http://www.meti.go.jp/english/press/2018/1017 004.html

METI to Launch Study Group on Encouraging Japanese Companies to Address International Initiatives on Climate Change

According to the Ministry of Economy, Trade and Industry (METI) Japan needs to discuss approaches to encouraging Japanese companies, under existing Japanese systems, to calculate their greenhouse gas (GHG) emissions that meet international initiatives on climate change and also to acquire and claim the value of renewable energy electricity, i.e., renewable energy value. In light of this, METI announced on October 18 that it would convene a Study Group on Encouraging

Japanese Companies to Address International Initiatives on Climate Change. The first meeting of the study group was held on October 29. The chair of the study group is Dr. Kenji Yamaji, Director-General, Research Institute of Innovative Technology for the Earth (RITE).

http://www.meti.go.jp/english/press/2018/1018_006.html

SURVEY AND BUSINESS DATA

Survey of Factory Location Trends in the First Half of 2018 Released

The Ministry of Economy, Trade and Industry (METI) released on October 30 a preliminary result of the Survey of Factory Location Trends, targeting businesses in the manufacturing, gas supply, heating supply, and electricity supply sectors (the "manufacturing sector and other sectors") that acquired 1,000 m2 or more of land in the first half of 2018 (January-June) for the purpose of constructing factories.

The number of new factory locations acquired by the manufacturing sector and other sectors in Japan between January and June 2018 was 527 (up by 0.4% on a year-on-year basis), covering a total area of 635ha (down by 1.5% on a year-on-year basis), showing a slight increase in the number and the largest in the number since the collapse of Lehman Brothers in 2009, while showing a decrease in the total area acquired from the previous year.

Locations (number)

	2013	2014	2015	2016	2017	2018
First half	361	511	478	467	525	527
Second half	487	525	592	559	510	n.a.
Annual total	848	1036	1070	1026	1035	527

Total areas (ha)

	2013	2014	2015	2016	2017	2018
First half	442	639	570	623	645	635
Second half	758	670	638	674	839	n.a.
Annual total	1,200	1,309	1,208	1,297	1,484	635

Looking at the trends of new factory locations by sector, the metal products, chemical engineering and other sectors showed a significant increase in both the number and area of new locations from the previous year, while the food sector showed a decrease in both number and area from the previous year.

The top five prefectures in the region-based number of new factory locations and the total area are as follows:

Locations (top 5 prefectures)

Prefecture	Locations		
Gunma Prefecture	34		
Aichi Prefecture	34		
Hyogo Prefecture	31		
Ibaraki Prefecture	27		
Shizuoka Prefecture	27		

Total areas (top 5 prefectures)

Prefecture	Total area (ha)
Gunma Prefecture	45.9
Niigata Prefecture	43.3
Ibaraki Prefecture	36.9
Gifu Prefecture	31.0
Aichi Prefecture	30.2

http://www.meti.go.jp/english/press/2018/1030_003.html

COMPANY NEWS

Mazda Announced Electrification and Connectivity Strategies for Cars

Mazda Motor Corporation announced on October 2 electrification and connectivity strategies. According to the press release, Mazda will strive to reduce carbon dioxide emissions and enhance the joy of driving by deploying compact, lightweight electrification technologies while further refining the internal combustion engine, which is forecast to be equipped in the majority of new cars for many years to come. The company will introduce electric vehicles as the optimal solution in regions that generate a high ratio of electricity from clean energy sources or restrict certain vehicle types to reduce air pollution. With a view to achieving a 90-percent reduction versus 2010 levels in its corporate average "well-to-wheel" carbon dioxide emissions by 2050, Mazda will deploy some form of electrification in all production vehicles by 2030. By 2030, Mazda expects that internal combustion engines combined with some form of electrification will account for 95 percent of the vehicles it produces and battery electric vehicles will account for 5 percent.

http://www2.mazda.com/en/publicity/release/2018/201810/181002a.html

ITOCHU Announces Establishment of Joint Venture Plant of Cellulose Fibers with Finnish Metsa Group

ITOCHU Corporation announced on October 3 that it has agreed with Metsa

Group, a leading company in the Finnish forest industry, to set up a pilot plant of cellulose fibers through a joint investment with Metsa Spring Oy, a new company established by Metsa Group for the purpose of investing in new forest based bioeconomy businesses. The total investment will be approximately €40 million.

Metsa Group has been undertaking research and development to create new businesses from sidestreams of pulp production and further processed softwood pulp, with the aim of boosting the sustainable bioeconomy and circular economy based on wood raw material. Meanwhile, ITOCHU has been working to expand the trading of eco-friendly materials following the trend of sustainability, particularly among Western brands in the fashion industry. Recognizing this, Metsa Fibre, which has succeeded in the basic research and development of an innovative cellulose fiber using its own manufacturing method, asked ITOCHU to provide cooperation.

Äänekoski Mill of Metsa Fibre, which plans to establish a pilot plant on its site.



https://www.itochu.co.jp/en/news/press/2018/181003.html

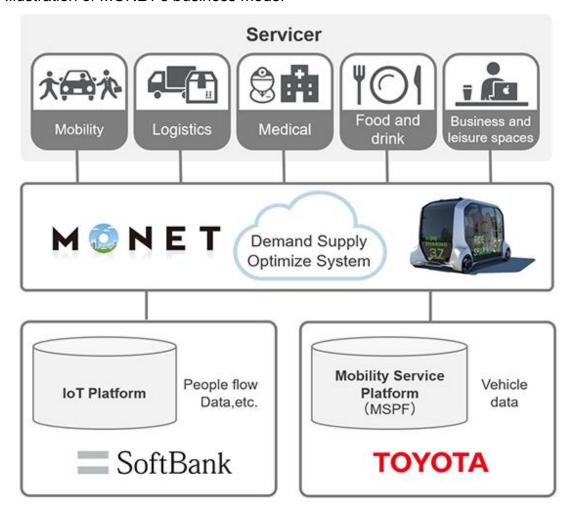
Toyota and SoftBank Agreed on Strategic Partnership for New Mobility Services

Toyota Motor Corporation and SoftBank Corp. announced on October 4 that they have agreed to form a strategic partnership to facilitate the creation of new mobility services, and plan to establish a joint venture company, MONET Technologies Corporation, before the end of the 2018 fiscal year (April 2019). The objective of MONET is to help realize a safer and more comfortable mobility society by combining SoftBank's corporate philosophy, "Information Revolution — Happiness for everyone," with Toyota's vision of "Mobility for All." The name "MONET" combines the first letters of the words "mobility network," and was chosen to embody the desire of both companies to build a mobility

network that provides safer and more comfortable mobility to everyone.

MONET will provide coordination between Toyota's Mobility Services Platform ("MSPF"), Toyota's information infrastructure for connected vehicles, and SoftBank's Internet of Things Platform, which was built to create new value from the collection and analysis of data acquired from smartphones and sensor devices.

Illustration of MONET's business model



https://www.softbank.jp/en/corp/group/sbm/news/press/2018/20181004_01/

Vietnam's First Mega Solar Power Plant Starts Operation

According to a press release of Sharp Corporation dated October 10, the first mega solar power plant in Vietnam began commercial operation on September 25. This plant which is located in Thua Thien Hue Province, was a joint construction project involving Sharp Energy Solutions Corporation, the Thanh

Thanh Cong Group, and the Gia Lai Electricity Joint Stock Company operating under the umbrella of the TTC Group.

The new plant has an output of approximately 48 MW-dc. This is equivalent to the amount consumed in a year by 32,628 average Vietnamese households. Under a joint project with the TTC Group and others, Sharp is also constructing two other solar power plants in Vietnam: one in Binh Thuan Province and one in Long An Province. Each of these new plants will have a capacity of approximately 49 MW-dc.



Completed Mega Solar Power Plant

http://www.sharp-world.com/corporate/news/181010.html

Toshiba to Build New Production Facility for Lithium-ion Rechargeable Battery in Yokohama

Toshiba Corporation announced on October 16 that it would reinforce production of its SCiB[™] lithium-ion rechargeable battery with the construction of a new production facility in Yokohama, Kanagawa prefecture.

Toshiba Infrastructure Systems & Solutions Corporation (TISS), a key Toshiba Group company that specializes in the social infrastructure business, currently manufactures SCiB at its Kashiwazaki Operations facility in Niigata prefecture and promotes the SCiB in Japan and overseas.

Anticipating strong future demand for SCiB, Toshiba has decided to build an additional production plant in Toshiba's Yokohama Complex. The facility will also serve as a production technology development center, positioning TISS to respond positively to future expansion of the lithium-ion rechargeable battery

market.

http://www.toshiba.co.jp/about/ir/en/news/20181016_1.pdf

Toshiba to Cooperate with German Senvion in Wind Power Generation Business

Toshiba Energy Systems & Solutions Corporation and German wind turbine equipment manufacturer Senvion GmbH announced on October 29 that they signed a mutually non-exclusive strategic cooperation agreement for the distribution of onshore and offshore wind power generation systems. Through this collaboration, Toshiba ESS will sell Senvion's wind power generation system in Japan.

According to their press release, the global wind power generation market is expected to expand to 9.7 trillion yen by 2030 owing to its highly competitive power sources.*1 In addition, the wind power generation market in Japan is expected to grow to 216 billion yen by 2030 with new laws regarding wind power, creating a ready market environment. In particular, the market size of offshore wind power is expected to grow to 76 billion yen by 2030.*1 *1 Source: Fuji Keizai

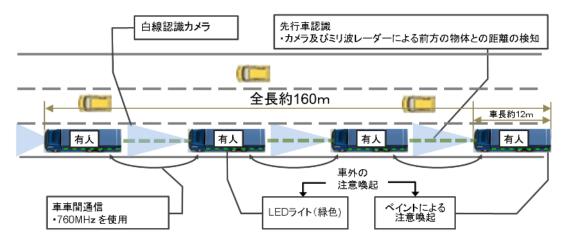
https://www.toshiba-energy.com/en/info/info2018 1029.htm

ADDITIONAL TOPICS

Public-Road Demonstration Tests of System for Driverless Trucks Traveling in Caravan with Drivers in the Second and Following Trucks to be Held

The Ministry of Economy, Trade and Industry (METI) and the Ministry of Land, Infrastructure, Transport and Tourism (MLIT) have been advancing a project titled "Research and Development/Demonstration Project for Implementation of an Advanced Autonomous Driving System in Society." As part of this effort, they will launch public-road demonstration tests of a system for driverless trucks traveling on expressways in a caravan in which the second and following trucks are driven by humans, taking advantage of CACC (Cooperative Adaption Cruise Control *1) and other technologies. These tests would start on a part of the Joetsu Expressway on November 6, 2018, and on part of the Shin Tomei Expressway on December 4, 2018.

Outline of the Demonstration Tests Explained by the Ministry of Land, Infrastructure, Transport and Tourism (MLIT)



【車両外観】



http://www.meti.go.jp/english/press/2018/1017_005.html http://www.mlit.go.jp/common/001257630.pdf (in Japanese)

MoE to Start "Plastic Smart" Campaign

Ministry of the Environment (MoE) announced on October 19 that it would start the Plastic Smart Campaign in order to encourage and expand various initiatives to fight against the marine plastic waste.

The MoE indicates that they are broadly seeking the following types of initiatives among companies and organizations that contribute to solving the problem of marine plastic waste.

- · Campaigns for the eradication of littering and illegal waste dumping
- · Events to collect scattered waste and costal flotsam
- Reduce (Reduction of usage of single use plastics)
- Reuse (Usage of reusable dishware at events)

- Recycle (Ex: Recycling plastics instead of incinerating them as before)
- Usage of recycled/recyclable materials and products
- Usage of alternative materials (bio-plastics and paper)

https://www.env.go.jp/press/106073.html (in Japanese) http://plastics-smart.env.go.jp/en/index.html

MoE to Strengthen International Cooperation

The Ministry of the Environment (MoE) signed a Memorandum of Cooperation with the Finnish Ministry of the Environment to strengthen and develop cooperation in the fields of environment. Also, the MoE has declared to participate in the Platform for Accelerating Circular Economy (PACE). These were the developments announced during the World Circular Economy Forum 2018 which the MoE co-organized with the Finnish Innovation Fund Sitra for October 23-24 in Yokohama.

The MoE said that it would provide information on actions, experiences and technologies of Japan's public and private entities registered in its "Plastic Smart" Campaign as part of its contribution to PACE.

http://www.env.go.jp/press/106091.html (in Japanese)

http://www.env.go.jp/press/files/jp/110155.pdf

http://www.env.go.jp/press/files/jp/110157.pdf

https://www.sitra.fi/en/projects/world-circular-economy-forum-2018/

Japan Hosts First Hydrogen Energy Ministerial Meeting

On October 23, the Ministry of Economy, Trade and Industry (METI) and the New Energy and Industrial Technology Development Organization (NEDO) jointly held the First Hydrogen Energy Ministerial Meeting in Tokyo. This was the first ministerial-level meeting to hold discussions on the realization of hydrogen-powered society as its main subject.

The meeting brought together over 300 stakeholders, including ministerial officials, top executives from related companies and representatives from 21 countries, regions and organizations from around the world. Participants confirmed the importance of global collaboration in the field of hydrogen and shared future directions of policies for approaches to utilization of hydrogen across the world.

As an outcome of the meeting, The Tokyo Statement, the chairman's summary of the meeting, was released by Mr. Hiroshige Seko, Minister of Economy,

Trade and Industry as a chair of the meeting. The Tokyo Statement, describes the importance of various efforts toward realization of a hydrogen-powered system -a Hydrogen Society- as outlined below:

- 1. Collaboration on technologies and coordination on harmonization of regulation, codes and standards so as to accelerate a decrease in costs involving hydrogen supply and products, e.g., fuel-cell vehicles (FCVs);
- 2. Promotion of international joint research and development among member countries to expand hydrogen utilization, e.g., ensuring the safety of hydrogen at hydrogen stations and hydrogen storage facilities and establishing supply chains suitable to a variety of regional characteristics;
- Study and evaluation of hydrogen's potential economic effects and CO2
 emission-reduction potential, which contribute to fostering and sharing
 awareness of hydrogen toward the realization of a "Hydrogen Society"; and
- 4. Communication, education and outreach activities to increase the understanding of hydrogen that will lead to the expansion of investment in hydrogen-related business.

http://www.meti.go.jp/english/press/2018/1023_007.html

As Many as 52 MOCs Signed during the First Japan-China Forum on Third Country Business Cooperation

On October 26, the First Japan-China Forum on Third Country Business Cooperation was held in Beijing. As representatives of the Government of Japan, Mr. Shinzo Abe, Prime Minister, Mr. Hiroshige Seko, Minister of Economy, Trade and Industry, and Mr. Taro Kono, Minister of Foreign Affairs, attended the forum, while from the Government of China, Mr. Lilink Keqiang, Premier of the State Council, Dr. Zhong Shan, Minister of Commerce, and Mr. Helink Lifeng, Chairman of the National Development and Reform Commission, attended. The forum brought together approximately 1,400 participants, including top executives of major industrial players in Japan and China, and participants exchanged proactive views.

In line with the convening of the forum, governmental organizations, companies, economic associations and other entities of Japan and China signed and exchanged 52 memorandums of cooperation (MOCs). These MOCs target a wide variety of fields and activities, including infrastructure, distribution, IT, healthcare, and finance.

http://www.meti.go.jp/english/press/2018/1026 003.html

Japan and India Agree on Partnership in the Digital Industry

On October 29, Mr. Hiroshige Seko, Minister of Economy, Trade and Industry, and Mr. Sujan R. Chinoy, Ambassador of India to Japan, signed a Memorandum of Cooperation (MOC) on a Japan-India Digital Partnership between the Ministry of Economy, Trade and Industry (METI) and the Ministry of Electronics and Information Technology, India.

Highlights of the partnership agreement are as follows.

- 1. Japan-India Startup Initiative: Establishment of the Japan-India Startup Hub in Bengaluru, invitation of Indian startups for the CEATEC exhibition, etc.
- Collaboration between SMEs and large companies: Convening of business matching events, JETRO-led efforts for encouraging Japanese companies to invest in India, measures for supporting Indian companies to invest in Japan, etc.
- 3. Electronics and ecosystems: Cooperation in designing systems in manufacturing software, semiconductors and electronic equipment, etc.
- 4. Human resources expertized in digital: Convening of job fairs, e.g., events by Japanese companies to employ IT human resources from India, issuance of Japanese green cards or visas to highly skilled human resources from India, etc.
- Cooperation in research and development: Research and development in new technologies, including AI that may contribute to realization of the Society 5.0 policy, etc.
- 6. Next-generation networks: Cooperation in cybersecurity, capacity building and human resource development for dissemination of next-generation networks, cooperation in development of marine cables, etc.

http://www.meti.go.jp/english/press/2018/1029_003.html

METI Minister Signs Japan-Germany Joint Declaration of Intent on Economic Policy and Cooperation

On October 30, Mr. Hiroshige Seko, Minister of Economy, Trade and Industry, held a meeting with Mr. Peter Altmaier, Federal Minister for Economic Affairs and Energy, Germany. Both sides exchanged views on the current trade situations and bilateral economic ties, and confirmed the progress in Japan-Germany economic ties under the Hannover Declaration of March 2017, which stipulates a Japan-Germany cooperation framework concerning the Fourth

Industrial Revolution.

In addition, they decided on the further enhancement of comprehensive cooperation between the countries, and signed the Japan-Germany Joint Declaration of intent on economic policy and economic cooperation which covers cooperation in additional fields, such as trade policies, space exploration, startups and energy.

http://www.meti.go.jp/english/press/2018/1030_006.html

Opening of Information Collection Website for the Project for Establishing a Public-Private Joint Demonstration Platform for Dementia Sufferers

The Ministry of Economy, Trade and Industry (METI) has been advancing the Project for Establishing a Public-Private Joint Demonstration Platform for Dementia Sufferers, which is commissioned to the Japan Agency for Medical Research and Development (AMED). As part of the project, a website for information collection was opened on the AMED website, which was announced on October 31.

The website openly accepts information on the following needs and seeds concerning reduction and prevention of risks of dementia and supporting the livelihoods and societal acceptance of dementia sufferers.

[Needs and Seeds]

- (I) Screening (Tests/Evaluation scales)
- Products and services for detecting or verifying dementia and cognitive decline and scales for evaluation
- (ii) Solutions Reduction and/or prevention of risksProducts and services that can reduce and/or prevent risks of dementia and cognitive decline
- (iii) Solutions support daily life of sufferers and societal acceptance
 Products and services that will support daily lives of dementia patients and
 persons suffering from cognitive declines both at home and in public
- (iv) Experts and end-user consultants in the field

Local governments and nursing care providers, etc. that are willing to cooperate with private companies aiming to develop and implement products or services related to topics mentioned in (i) to (iii)

METI will utilize collected information as reference materials for discussions at the expert meetings of the roundtable under the Project for Establishing a Public-Private Joint Demonstration Platform for Dementia Patients. Additionally, collected information will be open to those organizations that have collected information (companies and local governments, etc.), as well as broadly open to the general public, in order to facilitate voluntary and organic matching efforts among academia, private companies, municipalities and nursing care providers. http://www.meti.go.jp/english/press/2018/1031_001.html