

JAPANESE INDUSTRY AND POLICY NEWS

October 2019

LEGISLATION AND POLICY NEWS

Winners of the 3Rs Promotion Merit Awards Announced

The Ministry of Economy, Trade and Industry (METI) announced the winners of the FY 2019 3Rs (Reduce, Reuse, and Recycle) Promotion Merit Awards on October 25. The awards program was introduced in 1992 to recognize individuals, groups, schools, enterprises and other entities for their outstanding levels of unique, community-based, and pioneering contributions to promoting the 3Rs. The program is hosted by the 3Rs Promotion Council and supported by seven related ministries, including METI.

This year's major award winners are as follows.

Prime Minister's Prize (Category of individuals, groups and schools): Gunma Prefectural Fujioka Industrial High School - 3R activities in a variety of fields tackled under the Fujiko Environmental Activities Project

Prime Minister's Prize (Category of businesses, municipalities and other entities) : Kao Corporation - Continuous efforts for reducing plastic materials used for packaging containers by enhancing condensation, refill and replacement of products

METI Minister's Prize: Toyoda Iron Works Co., Ltd. - Automobile interior components with user and environmental friendliness and smooth touch - Development of components having surface materials in injection molding to achieve an approach to reducing material loss to zero -

https://www.meti.go.jp/english/press/2019/1025_001.html

SURVEY AND BUSINESS DATA

Forecast of Global Supply and Demand Trends for Petrochemical Products Compiled

The Study Group on Global Supply and Demand Trends for Petrochemical Products has been organized by the Ministry of Economy, Trade and Industry (METI) with the mission of surveying and analyzing domestic and overseas supply and demand trends for petrochemical products under the changing

circumstances surrounding the Japanese petrochemical industry.

METI announced on October 17 that the study group has completed a study on trends for the period from 2010 to 2017 and produced a forecast for the period from 2018 to 2023 concerning global supply and demand for petrochemical products,

Global demand for ethylene derivatives (ethylene equivalent) in 2017 steadily increased by 5.4% from the previous year to reach 149.7 million tons while prices of crude oil and petroleum products continued fluctuating.

Regarding the forecast, global demand (ethylene equivalent) is estimated to reach 182.5 million tons in 2023 (up by 32.8 million tons from 2017), with the estimated average annual growth rate being 3.2% for the period from 2018 to 2023.

Demand for petrochemical products (ethylene equivalent) in Asia as a whole is estimated to expand continuously as the average annual growth rate is expected to account for 4.0% for the period from 2018 to 2023. In 2023, demand in Asia is expected to account for over 50% of total global demand.

https://www.meti.go.jp/english/press/2019/1017_001.html

Public Opinion on Plastic Litter Surveyed

According to an opinion survey report that the Cabinet Office published on October 25, Japanese people expressed concern about plastic litter problem. Asked about the problem, 89.0% of respondents showed their concern (33.5% "Strongly" and 55.5% "To a certain extent"). It is observed that the senior generation showed stronger interest than the younger people in this matter, i.e. 47.4% of respondents aged older than 70 years showed "Strong concern" about plastic litter, but only 10.5% of 18-29 years group indicated similar answer.

As for knowledge on plastic litter problem, "Pollution of ocean" (84.0% of respondents) was most frequently referred to, followed by "Marine lives suffer" (78.2%) and "Ecosystem of marine life receives negative impact" (66.5%).

As for conditions to buy alternate products to plastic products such as bags, etc. "Equal price and quality" (35.5%) was most frequently mentioned while 22.9% said they "tolerate a little bit higher price if the quality is the same or better", and 20.8% answered "Ready to accept slightly inferior quality goods if the price is the same or cheaper".

The survey was conducted in August 22 – September 1. Total number of respondents was 1,667 people.

<https://survey.gov-online.go.jp/r01/r01-kankyou/index.html> (in Japanese)

Starting Salaries Keep Upward Trend

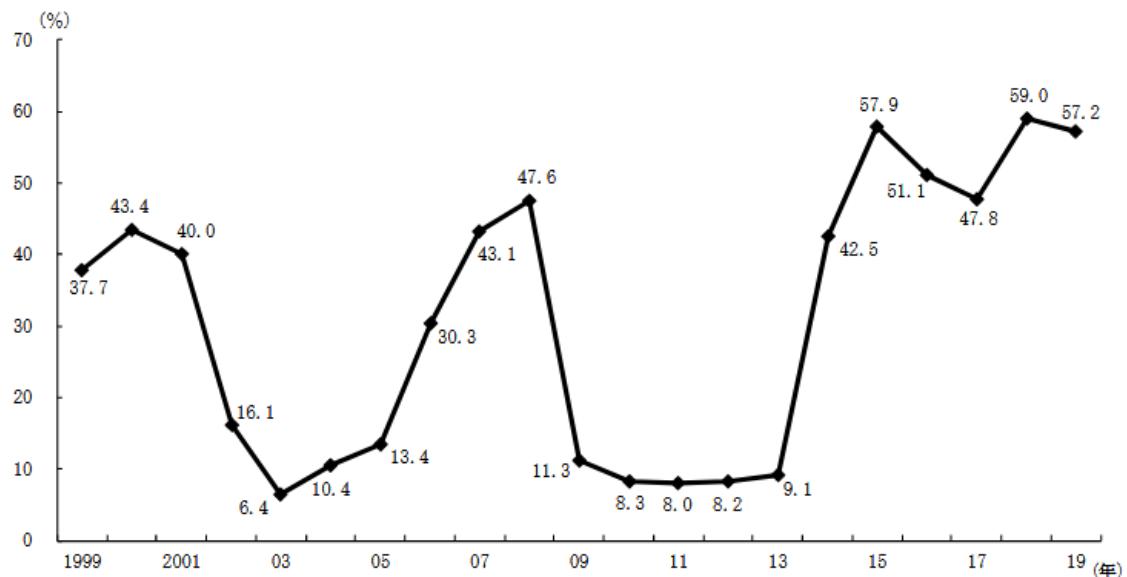
According to a joint survey of Keidanren (Japan Business Federation) and Tokyo Employers' Association published on October 29, the level of starting salary maintains upward trend. The survey was conducted in June-July 2019, compiling the responses of 498 companies.

Average starting salary in 2019 was 217,981 yen per month for white-collar university graduates while that for technical course university graduates was 217,834 yen. It is an increase of 0.76% and 0.80% respectively as compared to the previous year.

Salary increase remained very low until 2013, then showing an upward trend. In 2019, slightly below 60% of respondents increased starting salaries.

Among the factors considered to decide starting salaries, "Market trend" remained the most important, as indicated by 27.9% of respondents while "Consideration for securing qualified personnel" shows a constant increase from 7.7% in 2012 to 20.9% in 2019, reflecting a trend that a shortage of labor becomes serious, the survey says.

Ratio of respondents having increased starting salary



<https://www.keidanren.or.jp/policy/2019/088.pdf> (in Japanese)

Rugby World Cup Contributed to the Increase of Foreign Visitors

According to a monthly statistic of the Japan National Tourism Organization (JNTO) published on October 16, the number of foreign visitors to Japan in September was estimated at 2.27 million people, which is an increase of 5.2% as compared to the same month of the previous year. Although a reduction of Korean visitors continues, the visitors from the participating countries to the rugby world cup (RWC 2019) which started on September 20 contributed to the overall increase of visitors.

By country of origin, China was the leading country with 819,100 people which corresponds to an increase of 25.5% as compared to the same month of the previous year. As for Europe, the United Kingdom registered a historically highest number of monthly visitors with 49,600 people (+84.4%) while France, Germany, Italy, Russia and Spain recorded the highest number of visitors for September. Cumulative number of foreign visitors for January-September 2019 is estimated at 24.42 million people which is an increase of 4.0% as compared to the same period of the previous year.

https://www.jnto.go.jp/jpn/statistics/data_info_listing/pdf/191016_monthly.pdf

COMPANY NEWS

Tokyu Corporation Joins RE100 as the First Japanese Company with Railway Operations

Tokyu Corporation announced on October 25 that it had joined the RE100, a global corporate initiative bringing together influential businesses committed to 100% renewable electricity.

Tokyu Corporation is a major private railway company, land developer, hotel and retail store operator in the Greater Tokyo Area. As a Japanese company with railway operation, Tokyu is the first participant to the RE100.

Tokyu Corporation has set a target to achieve 100% renewable electricity by 2050.

<https://www.tokyu.co.jp/image/news/pdf/20191025-1.pdf> (in Japanese)

<http://there100.org/companies>

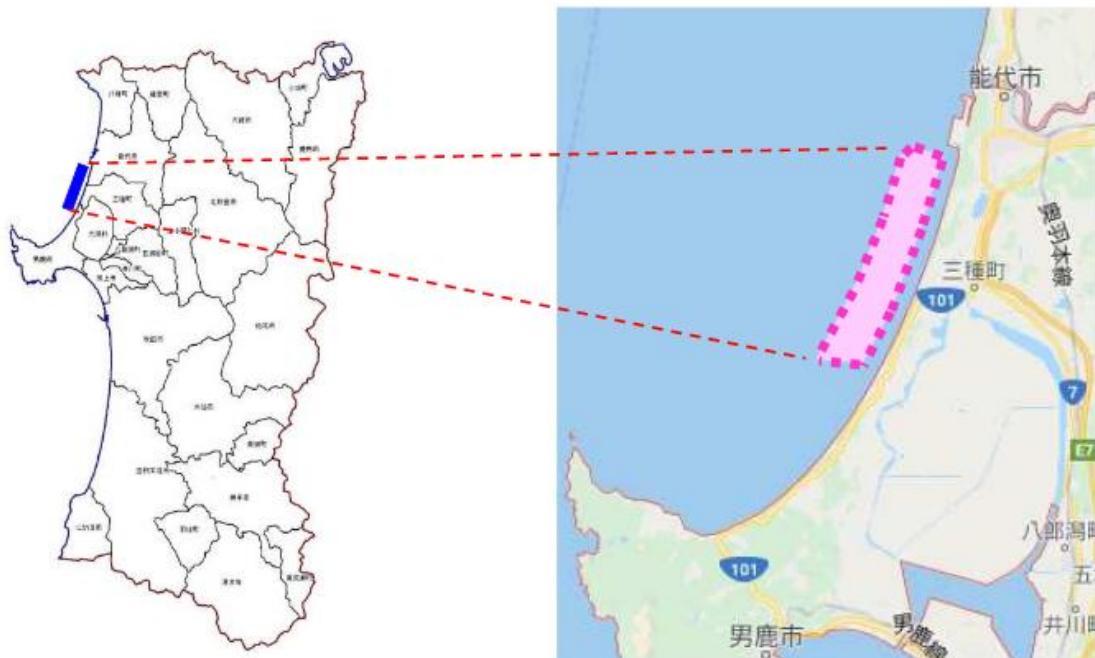
Tohoku Electric Power to Participate in a Large Offshore Wind Project

Tohoku Electric Power Co., Inc. announced on October 17 that it would

participate in the Northern Akita Offshore Wind Farm Project lead by Obayashi Corporation. The project aims at building off-shore wind power generating station with a maximum capacity of 455MW. Commercial operation is planned to start in 2024, or later.

Tohoku Electric Power is not the only participant as electric power company. The Kansai Electric Power Company, Inc. (KEPCO) also decided to participate in this project a little bit earlier.

Obayashi forms partnership with Siemens Gamesa Renewable Energy for this offshore wind farm project



Site for the Offshore Wind Farm project that Tohoku Electric to Participate

http://www.tohoku-epco.co.jp/news/normal/1203528_1049.html (in Japanese)
https://www.obayashi.co.jp/en/news/detail/news20190620_1_en.html

Toyota to Provide Automated Mobility to Tokyo 2020 Athletes

Toyota Motor Corporation announced on October 9 that it would supply up to 20 specially-designed "Tokyo 2020 Version" e-Palette vehicles to support athlete mobility at the Olympic and Paralympic Games Tokyo 2020, where it would provide automated, loop-line transportation in the Olympic and Paralympic

villages for athletes and related staff.

The battery-electric, automated vehicles have been adapted specifically for use during the Games based in part on feedback from athletes about their mobility needs in the past games.



Toyota e-Palette “Tokyo 2020 Version”

https://global.toyota/en/newsroom/corporate/29933371.html?_ga=2.252487817.1206739609.1574061505-829025929.1570759420

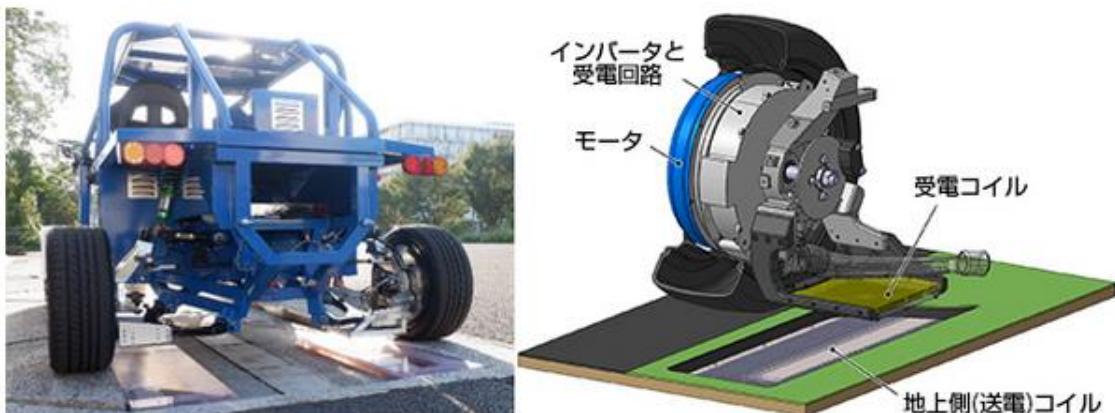
3rd Generation Wireless Power Supplying In-wheel Motors Developed

NSK Ltd. announced on October 10 that a research group consisting of researchers of the Graduate School of Frontier Sciences of the University of Tokyo lead by Associate Professor Hiroshi Fujimoto, Bridgestone Corporation,

ROHM Co., Ltd., Toyo Denki Seizo K.K. and NSK developed the “third generation wireless power supplying in-wheel motors (IWM) “ for supplying power from the road to a running electric vehicle (EV).

The research group developed an IWM unit which accommodates all of power receiving circuits as well as drive unit consisting of a motor and inverters inside of wheel.

Compared to the second generation model released in 2017 (reported in the April 2017 issue of the Japanese Industry and Policy News), the third generation system can realize higher power per wheel (25kW as compared to 12kW of the former model). Also, wireless power supplying capacity improved from 10kW/wheel to 20kW/wheel.



Experimental vehicle and system composition

<https://www.nsk.com/jp/company/news/2019/1010c.html> (in Japanese)

http://www.k.u-tokyo.ac.jp/info/entry/22_entry772/ (in Japanese)

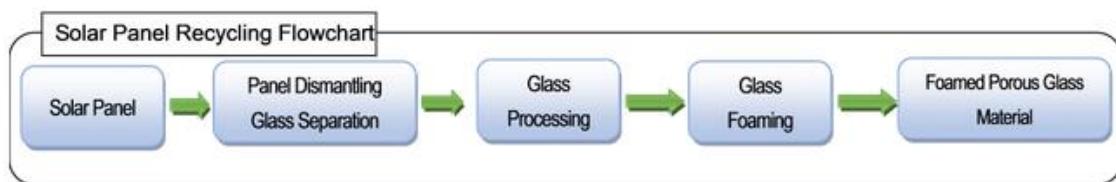
<https://www.eu-japan.eu/publications/april-2017-japanese-industry-and-policy-news>

Tottori Resource Recycling Entered into a Strategic Partnership for Solar Panel Recycling with Marubeni Group

Tottori Resource Recycling, Inc. and Marubeni Corporation, Marubeni Tetsugen Co., Ltd, Marubeni Metals Corporation have entered into a strategic partnership agreement to jointly undertake a solar panel recycling business by utilizing the patented glass foaming technology of Tottori Resource Recycling.

According to their joint press release dated October 25, solar panels are dismantled and recycled for each part. However, tempered glass, which accounts for more than 70% of the panel weight, is difficult to recycle, and is

currently disposed of in landfills. It has been pointed out that disposal of tempered glass will become a major social problem in terms of the environment. Tottori Resource Recycling and Marubeni Group will collect solar panel and use tempered glass as raw materials to manufacture foamed porous glass material. This glass foaming technology makes it possible to detoxify and immobilize harmful substances such as heavy metals contained in glass. The manufactured foamed porous glass material enhances the soil by increasing the water retention capacity in the soil, and in the water, it improves the water quality by becoming a habitation for microbes that purify water, their press release says.



<https://www.t-rrl.jp/en/2019/10/marubeni/>

<https://www.marubeni.com/en/news/2019/release/20191025E.pdf>

Toshiba Group Develops Inspection Technology for Plant Facilities and Equipment in High Inaccessible Places

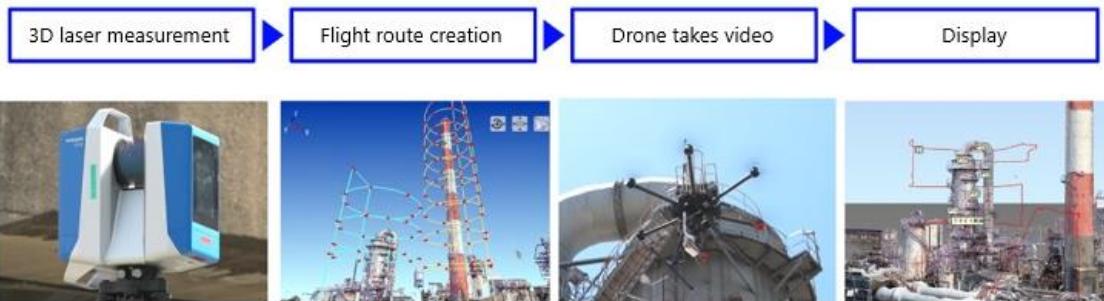
Toshiba Corporation (Toshiba) and Toshiba Energy Systems & Solutions Corporation (ESS) have developed a drone-based inspection technology for complex industrial facilities, such as power plants, oil refineries and chemical manufactures. The new solution comprises 3D laser measurement technology, a drone-mounted video camera, optimized flight route creation technology for the drone, and image recognition technology to identify the condition of plant structures and check for signs of fatigue and deterioration.

The process ends the need for people to carry out perilous inspections in dangerous places, and Toshiba and ESS are currently refining the technology to application level through verification testing in Japan.

According to their press release dated October 29, many of Japan's plants and facilities were built during the period of high economic growth. After some 50 years of operation, they are increasingly in need of inspections that can identify problems and be used to plan measures to deal with structural deterioration, corrosion in pipes, and other results of aging. Other problems include the

difficulty of securing sufficient number of qualified people to carry out inspections, and ensuring their safety and efficient deployment; this is made all the more pressing by a shortage of younger workers and the aging of the current generation of inspectors.

Overview of the drone-based inspection service



https://www.toshiba.co.jp/about/press/2019_10/pr2902.htm

R&D Facilities for Bioplastic Material Constructed in Shimane Prefecture

Shimizu Corporation announced on October 29 that research and development (R&D) facilities for lignophenol that it had been building in Okinoshima-Town, Shimane Prefecture was completed. It is a joint project with Fujii consulting & associates, Kobelco Eco-Solutions Co., Ltd. and Shinsho Corporation to extract and produce lignophenol from wood. Lignophenol is a raw material for producing bioplastics, developed by Mr. Masamitsu Funaoka, Professor Emeritus of Mie University.

The four companies will examine an economical manufacturing process of lignophenol at the newly constructed R&D facilities, planning to build a commercial production plant in 2021.





Research facilities on bioplastic materials

<https://www.shimz.co.jp/company/about/news-release/2019/2019023.html> (in Japanese)

Toyobo and Saudi Arabian Saline Water Conversion Corporation Sign MOU on Joint Pilot Test

Toyobo Co., Ltd. has signed a memorandum of understanding (MOU) on joint pilot test with Saline Water Conversion Corporation (SWCC) of Saudi Arabia to realize the practical application of a new brine concentration (BC) membrane technology that efficiently uses concentrated brine discharged by seawater desalination plants. Toyobo's consolidated subsidiary Arabian Japanese Membrane Company, LLC (AJMC) also joined the two companies in signing the MOU on October 9.

The three companies aim to put into practical use a "BC membrane technology" for treating highly concentrated brine. BC membrane, which was developed based on Toyobo's hollow fiber RO technology, is capable of separating concentrated brine discharged from seawater desalination plants into diluted seawater and highly concentrated brine. Using diluted seawater for desalination again will help make more fresh water, while the process of evaporation and crystallization is expected to efficiently collect useful substances from the highly concentrated brine. The BC membrane technology, therefore, will boost efforts to fully reuse concentrated brine from desalination plants.

Following the MOU signing, Toyobo, SWCC and AJMC will start operating pilot

test unit at SWCC's seawater desalination plant in Al Jubail soon.

https://www.toyobo-global.com/news/2019/release_108.html

Renewable Energy Collaboration in Nigeria Announced

Shizen Energy Inc. announced on October 8 that it had concluded a memorandum of understanding (MOU) with the Community Energy Social Enterprise Ltd. (CESEL) of Nigeria. They agreed to establish a 50-50 joint venture to develop a total of 25 “mini grids” of natural energy in Nigeria with a possibility of further cooperation in bigger projects in future.

Shizen Energy was established in June 2011 in Fukuoka City. Its group engages in various natural energy generation projects in Japan with a total generation capacity of 1GW as of February 2019. It have established a joint venture with German juwi AG in Japan in January 2013.

<https://www.shiznenenergy.net/2019/10/08/se-signs-mou-with-cesel-for-collaboration-in-the-nigerian-renewable-energy-market-jp/> (in Japanese)

ADDITIONAL TOPICS

A Platform for SMEs to “Declare 100% Renewable” Launched

The Green Purchasing Network (GPN), ICLEI Japan (ICLEI), Institute for Global Environmental Strategies (IGES), and Japan Climate Leaders’ Partnership (JCLP) jointly launched “RE Action – Declaring 100% Renewable” on October 9. This initiative targets and supports local governments, educational and medical institutions, and small to medium-sized enterprises to declare conversion to 100% renewable electricity.

In Japan, there is an increasing interest in RE100, the global corporate leadership initiative bringing together multinational companies committed to 100% renewable electricity worldwide. More than 25 Japanese companies have joined in the last two years, sending a positive demand signal to the market. While eligibility to join RE100 is limited to “enterprises over 10GWh electricity consumption”, RE Action will provide a platform for smaller companies and other organizations willing to make the same commitment. There are approximately 4 million organizations of this size, covering approximately 40-50% of electricity needs in Japan.

Japanese Ministry of Foreign Affairs (MOFA) and Ministry of the Environment

(MoE) announced separately that they would participate in the RE Action as “ambassadors”.

https://saiene.jp/wp-content/uploads/2019/10/20191009_RE-Action_Launch_Press-Release_E_Fin.pdf

Autonomous Driving Verification Test Starts in Tokyo Seaside Area

The Cabinet Office announced on October 15 that a series of verification test of autonomous driving cars on the road would start in seaside area of Tokyo. A total of 28 entities including automobile manufacturers, auto parts manufacturers and universities participate in the test. The test is scheduled to take place for the period of October 2019 – March 2021 of which the one in Shuto Expressway is scheduled to start in the spring 2020.

Test participating entities



<https://www8.cao.go.jp/cstp/stmain/20191015jidouunten.html> (in Japanese)

<https://www8.cao.go.jp/cstp/stmain/rinkaijishou.pdf> (in Japanese)

JETRO Releases Collection of Successful Case Examples of Overseas Business Development

The Ministry of Economy, Trade and Industry (METI) announced on October 1 that the Japan External Trade Organization (JETRO) compiled a Collection of Successful Case Examples of Overseas Business Development as its first reference publication explaining best practices of successful companies that have embarked on overseas business development by taking advantage of its Consortium for New Export Nation Program.

The collection presents articles of interviews with business operators and personnel in charge of 100 Japanese mid-ranking enterprises and SMEs that have embarked on overseas business development by taking advantage of the program and explains 100 case examples featuring the approaches that such companies have taken to overcoming their business challenges.

https://www.meti.go.jp/english/press/2019/1001_003.html

<https://www.jetro.go.jp/news/releases/2019/48c3ea6f0bbe6a95.html> (in Japanese)

Strategic Partnership between Japan and Saudi Arabia Enhanced

On October 23, the Ministry of Economy, Trade and Industry (METI) held the Fourth Ministerial Meeting on “Saudi-Japan Vision 2030” with the participation of related ministers of Saudi Arabia, and both countries compiled the “Saudi-Japan Vision 2030 2.0 Updated.”

Since the formulation of “Saudi-Japan Vision 2030” in 2017 as a new compass for strategic partnership between Japan and Saudi Arabia, many cooperation projects have been progressing in a wide range of fields. This meeting brought together Mr. Sugawara Isshu, Minister of Economy, Trade and Industry, and Mr. Suzuki Keisuke, State Minister for Foreign Affairs, from the Japanese side, and H.E. Mr. Mohammad Al Tuwaijri, Minister of Economy and Planning, and H.E. Dr. Majid Bin Abdullah Al Qasabi, Minister of Commerce and Investment, from the Saudi Arabian side. Both sides compiled discussion results concerning the progress in cooperation projects in a wide range of fields, such as entertainment, energy, and specific future actions into “Saudi-Japan Vision 2030 2.0 Updated”.



COMPASS OF NEW PARTNERSHIP

October 2019



https://www.meti.go.jp/english/press/2019/1024_003.html