

JAPANESE INDUSTRY AND POLICY NEWS

May 2018

LEGISLATION AND POLICY NEWS

Study Group for Enhanced Human Resource Bases in the Space Industry Compiled a Report

In January 2018, the Ministry of Economy, Trade and Industry (METI) established a Study Group for Enhanced Human Resource Bases in the Space Industry to hold discussions on development of specific measures to address the current situation of human resources in the space industry in Japan. Since then, the study group held four meetings and compiled the discussion results into a report, which was published on May 1.

The report analyzes actual supply-demand situation of human resources and the necessity to strengthen human resource base. METI said that, based on the report, it would strive to make maximum efforts to develop specific measures.

http://www.meti.go.jp/english/press/2018/0501_002.html

Business Matching Platform for Space Industry Launched

The Cabinet Office (CAO) and the Ministry of Economy, Trade and Industry (METI) launched on May 31, a web platform called “S-Matching” for business matching to encourage investment in the space industry.” The platform will provide business-matching opportunities between individuals, venture businesses, and other entities having new ideas on the space industry and investors or business entities.

http://www.meti.go.jp/english/press/2018/0531_004.html

METI-MIC Joint Team Continues Discussion on IoT

In March 2017, Ministry of Economy, Trade and Industry (METI) and Ministry of Internal Affairs and Communications (MIC) established a joint director-general-level team, and since then, the joint team has been discussing a variety of topics in the field of internet of things (IoT) and compiled the discussion results into a report on May2.

At the meetings in FY2018, the joint team will discuss seven topics as indicated below on a continual basis. As part of the efforts to promote the fourth industrial revolution, METI and MIC will jointly aim to reflect the results of these discussions

in Japan's future measures while collaborating with the IT Strategic Headquarters and other governmental organizations.

FY2018 discussion topics are (1) Cybersecurity measures, (2) Fostering human resources in the IoT area, (3) Data utilization, (4) Regional efforts, (5) Health care, (6) Digital government and (7) Global deployment.

http://www.meti.go.jp/english/press/2018/0502_003.html

METI Establishes Study Group for Digital Transformation

The Ministry of Economy, Trade and Industry (METI) considers the popularization of digital transformation of businesses in Japan as a necessary foundation on which industrial players will be able to further expand their business in a strategic manner. To this end, METI announced on May 11, establishment of the Study Group for Digital Transformation to discuss the challenges in and measures for this digital transformation.

Facing the recent rapid advance of digitalization, industrial players in Japan must take advantage of new digital technologies to strategically create new added value, and this digitalization is called "digital transformation." Meanwhile, some companies mention that they face significant obstacles to digital transformation, such as aged IT systems and the maintenance and operation costs involved in such IT systems. To overcome this situation, the study group will hold a series of meetings to discuss such challenges and measures for solving them.

According to the METI, the meetings will not be open to the public. However, progress reports of the meetings will be made public.

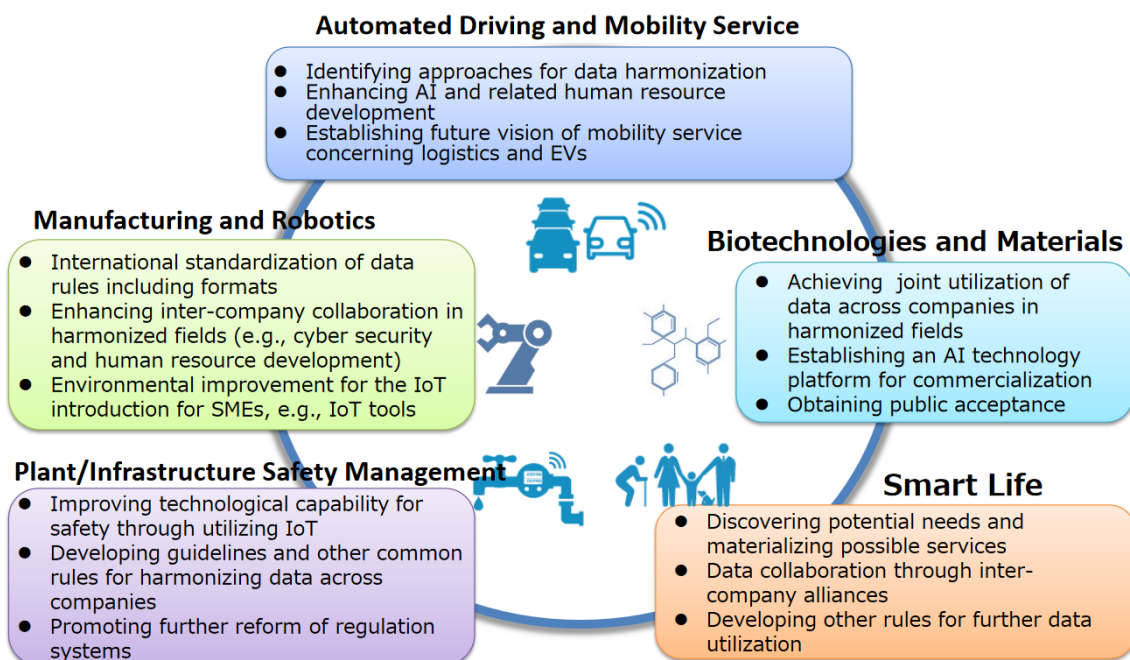
http://www.meti.go.jp/english/press/2018/0511_003.html

Series of Round Table Conferences on Connected Industries Organized

Ministry of Economy, Trade and Industry (METI) held a series of round table conferences between Mr. Hiroshige Seko, Minister of Economy, Trade and Industry, and industrial players and experts in the field of connected industries designated in the "Connected Industries' Tokyo Initiative 2017" of October 2017. As the initiative stipulates five priority fields, METI established five field-based working groups, and these working groups have been intensively discussing specific actions to achieve the initiative.

Five Priority Fields Tackled under the “Connected Industries”

Outline 1



Round table conferences were held on May 21 for biotechnologies and materials as well as plant/infrastructure safety management, May 28 for autonomous driving, manufacturing, and robotics, June 11 for smart life. On each occasion, participants received briefing on specific efforts in the relevant field and held discussions on related issues.

http://www.meti.go.jp/english/press/2018/0521_002.html

http://www.meti.go.jp/english/press/2018/0528_003.html

http://www.meti.go.jp/english/press/2018/0611_001.html

Keidanren Calls for the Creation of “Ministry of Digital Economy”

Keidanren (Japan Business Federation) released on May 15 a political recommendation for the establishment of integrated international strategy for promoting digital economy. In the recommendation, Keidanren stresses the importance of establishing a comprehensive national strategy, streamlining strategies, visions and concepts published by various ministries. In doing so, Keidanren recommends the creation of a ministry specialized in information society (“Ministry of Digital Economy”), integrating relevant sections of Cabinet Office, Ministry of Internal Affairs and Communications (MIC), Ministry of Economy, Trade and Industry (METI) and Ministry of Education, Culture, Sports, Science and Technology (MEXT).

<http://www.keidanren.or.jp/policy/2018/041.html> (in Japanese)

Robot Performance Evaluation Manuals Compiled

The Ministry of Economy, Trade and Industry (METI) and the New Energy and Industrial Technology Development Organization (NEDO) jointly compiled the Performance Evaluation Manuals that explain test methods and other relevant details for evaluating the fundamental performance of robots, with the aim of accelerating the usage of robots for infrastructure inspections and disaster response.

The manuals which were published on May 30 reflect the results of discussions at the Robot Performance Evaluation Committee held by academics and experts specialized in robot technology, infrastructure inspection, disaster response measures, etc.

The manuals covering following three fields are published in Japanese.

Drones for Bridge Inspections; Underwater Robots for Dam and River Inspections; Land-mobile Robots for Responding to Tunnel/Plant Disasters.

http://www.meti.go.jp/english/press/2018/0530_001.html

“Declaration of Design Management” Compiled

Japan Patent Office (JPO) announced on May 23 that the Study Group on the Relation between Industrial Competitiveness and Designs which the JPO established in July 2017 compiled the discussion results into a report titled “Declaration of Design Management.” The study group members are prominent designers, executive management responsible for designs, personnel responsible for intellectual property, management consultants and academic experts.

Key points of the report as regard to the challenges and measures to address such challenges in enhancing the competitiveness of Japanese companies through design are as follows:

- (1) Design that connects invention to innovation
- (2) Era in which networks and data overwhelm all things
- (3) Investment effects derived from designs
- (4) Implementation of design management
- (5) Policy recommendations

Based on the discussion results of the study group, the JPO said that it would further exchange views with experts and industrial players taking a variety of

opportunities, such as meetings of the Industrial Structure Council, and endeavor to discuss related issues toward the formulation of concrete policies.

http://www.meti.go.jp/english/press/2018/0523_002.html

http://www.meti.go.jp/english/press/2018/pdf/0523_002a.pdf

The Corporate Governance System Study Group Compiled an Interim Report

In March 2017, the Ministry of Economy, Trade and Industry (METI) formulated the Practical Guidelines for Corporate Governance Systems (CGS Guidelines), which incorporate significant matters to be reviewed by respective companies. In December 2017, METI conducted a questionnaire survey and established the second term CGS Study Group as part of the follow-up activities concerning the CGS Guidelines. The Corporate Governance Code is scheduled to be revised by in 2018, and there has been a demand for ideas and best practices to be referred to by companies when they make adjustments in response to the revision be compiled and presented.

Given these circumstances, the second term CGS Study Group compiled its interim report concerning the matters deemed significant in advancing the corporate governance reform.

The interim report makes proposals as outlined below, including the review of the CGS Guidelines as part of the future direction of actions.

- (1) Utilization of outside directors
- (2) Utilization of a nominating committee and a compensation committee
- (3) Appointment of the president and CEO, etc. and other plans concerning successors
- (4) Compensation and performance evaluation of the top management
- (5) Board of directors

METI indicates that the CGS Guidelines will be revised by around the summer of 2018, based on the future direction of actions presented in the interim report.

http://www.meti.go.jp/english/press/2018/0518_002.html

Business Conference Plans of 4 Regions Selected for Promoting Inward Direct Investment

The Ministry of Economy, Trade and Industry (METI) and the Japan External Trade Organization (JETRO) jointly selected four projects for the Regional Business Conferences (RBC). In these projects, municipalities and other entities

will invite senior management and other representatives of foreign-based companies to Japan, giving them firsthand knowledge on attractiveness of the region and hold business matching between foreign-based and regional companies. This is the first selection of RBC projects which are scheduled to continue until 2020.

Four selected projects are as follows.

(1) Project for promoting direct investment in Japan in collaboration with the Medical Creation Fukushima 2018 program (scheduled in October 2018), inviting medical equipment companies from Germany and Thailand.

Organizer: Fukushima prefecture; Project theme: medical care-related industry

(2) Project for attracting companies of Sweden and Finland to Fukuoka prefecture (scheduled in October 2018)

Organizer: Fukuoka prefecture; Project theme: IoT-related industry

(3) Regional Business Conference in IBARAKI (scheduled in February 2019)

Organizer: Ibaraki prefecture; Project theme: cluster of R&D bases

(4) Inviting Investors for Global Innovation Conference “HackOsaka”(scheduled in March 2019)

Organizer: Osaka prefecture; Project theme: venture startups

http://www.meti.go.jp/english/press/2018/0516_001.html

<https://www.jetro.go.jp/news/releases/2018/cfed6b070db2122a.html>

(in Japanese)

SURVEY AND BUSINESS DATA

Report on Shopping Receipt Potential Published

In 2017, the Ministry of Economy, Trade and Industry (METI) established a Study Group for Ideal Approaches to Management and Utilization of Purchase History Data, and since then, the study group has been discussing various issues concerning utilization of digital shopping receipts.

The study group reached a consensus about the potential of digital shopping receipts and the significance of standardization of receipts. It compiled the details of the agreement and other discussion results into a report which METI released on May 11.

The study group reached a consensus that the digitalized shopping receipts are

so significant that Japan should popularize them across society. While pursuing this popularization, individual-company-based development of unique specifications may cause problems for future data utilization. To avoid this situation, popularization of standard specifications is important. While businesses are able to freely decide when to introduce digital shopping receipts, they are required to adopt a standard format and API* for such receipts at their own stores and e-commerce sites if they intend to introduce such receipts.

*API, or Application Programming Interface, is one of the interface specifications used for transactions of data from digital shopping receipts.

METI is now undertaking the creation of a standard format for such receipts under a separate project. It will release the format soon after its completion.

According to METI, it will continue to endeavor to develop a safe market for data distribution (e.g. purchase history data) that assures data providers of their security, and through this effort, it will also aim to develop an environment in which businesses are able to develop products and provide services based on more accurate understanding of customer behavior.

http://www.meti.go.jp/english/press/2018/0511_002.html

COMPANY NEWS

Monitoring Coral Reefs by Surface Floating Drone

Kajima Corporation announced on May 9 that it had developed a drone which could land on the water and carry out underwater life and geography observation. Kajima calls it SWANS which stands for System of Water and Aerial Nearshore Survey.

Since 2013 Kajima is engaging in the protection of coral reefs in Okinawa, using an artificial base called “coral net”. According to Kajima, SWANS is very effective in monitoring situation of restoration of coral reefs with coral net.

Kajima will study the possibility of using pictures and data obtained by SWANS to make a 3 dimensional map of underwater geography and improve ocean observation technology by measuring water quality and flow speed of sea water.



SWANS floating on the water



Under water picture shot by SWANS

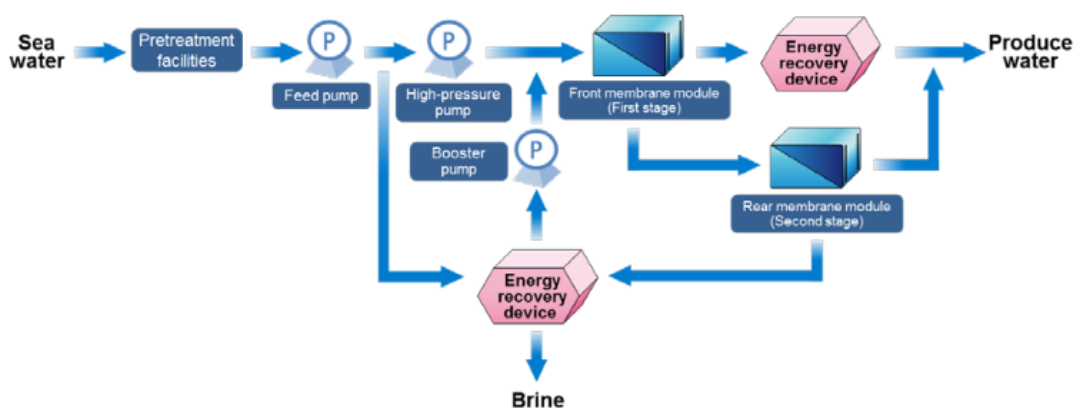
<https://www.kajima.co.jp/news/press/201805/9c1-j.htm> (in Japanese)

Hitachi and Toray Implement the Demonstration Project for an Energy Saving Seawater RO System in Saudi Arabia

Hitachi, Ltd. and Toray Industries, Inc. announced on May 14 that they have been commissioned to implement the "Demonstration Project for an Energy Saving Seawater Reverse Osmosis (RO) System in the actual scale in the Kingdom of Saudi Arabia" within the framework of "International Project for Increasing the Efficient Use of Energy and System Demonstration Project" by the New Energy and Industrial Technology Development Organization ("NEDO").

Hitachi and Toray will work together with Saline Water Conversion Corporation ("SWCC"), a Saudi Government owned seawater desalination company, in designing, constructing, and operating facilities for demonstrating an energy saving seawater RO system in the city of Ummluji, Saudi Arabia, and testing the performance of the system and studying the business model to put the system to practical use, aiming to expand the operation in the country and to its neighboring countries. The period for the demonstration project is scheduled to be approximately five years from April 2018 to March 2023.

Flow of the low pressure multi-stage high recovery seawater RO system



<http://www.hitachi.com/New/cnews/month/2018/05/180514.html>

Trial Production of “Green” Hydrogen Started in Soma, Fukushima

Asahi Kasei announced on May 22 that it began trial operation of an alkaline water electrolysis plant for the production of green hydrogen using renewable energy, jointly with IHI Corp. in Soma, Fukushima prefecture. The plant uses a large-scale alkaline water electrolysis system having the world’s largest electrodes developed on commission by Japan’s New Energy and Industrial Technology Development Organization (NEDO), which continues to support its trial operation.

Previous tests by Asahi Kasei have confirmed that the system enables high energy efficiency of over 90% and outstanding responsiveness with fluctuating output. The trial operation announced this time is expected to verify the practicality of the plant employed in an integrated configuration with an actual photovoltaic power generation facility. The period of trial operation is April 2018 to March 2020.

Asahi Kasei will utilize the know-how gained through this trial operation to advance the commercialization of an alkaline water electrolysis system featuring the world-leading scale of 10 MW in a single unit.



The large-scale alkaline water electrolysis plant

<http://www.asahi-kasei.co.jp/asahi/en/news/2018/e180522.html>

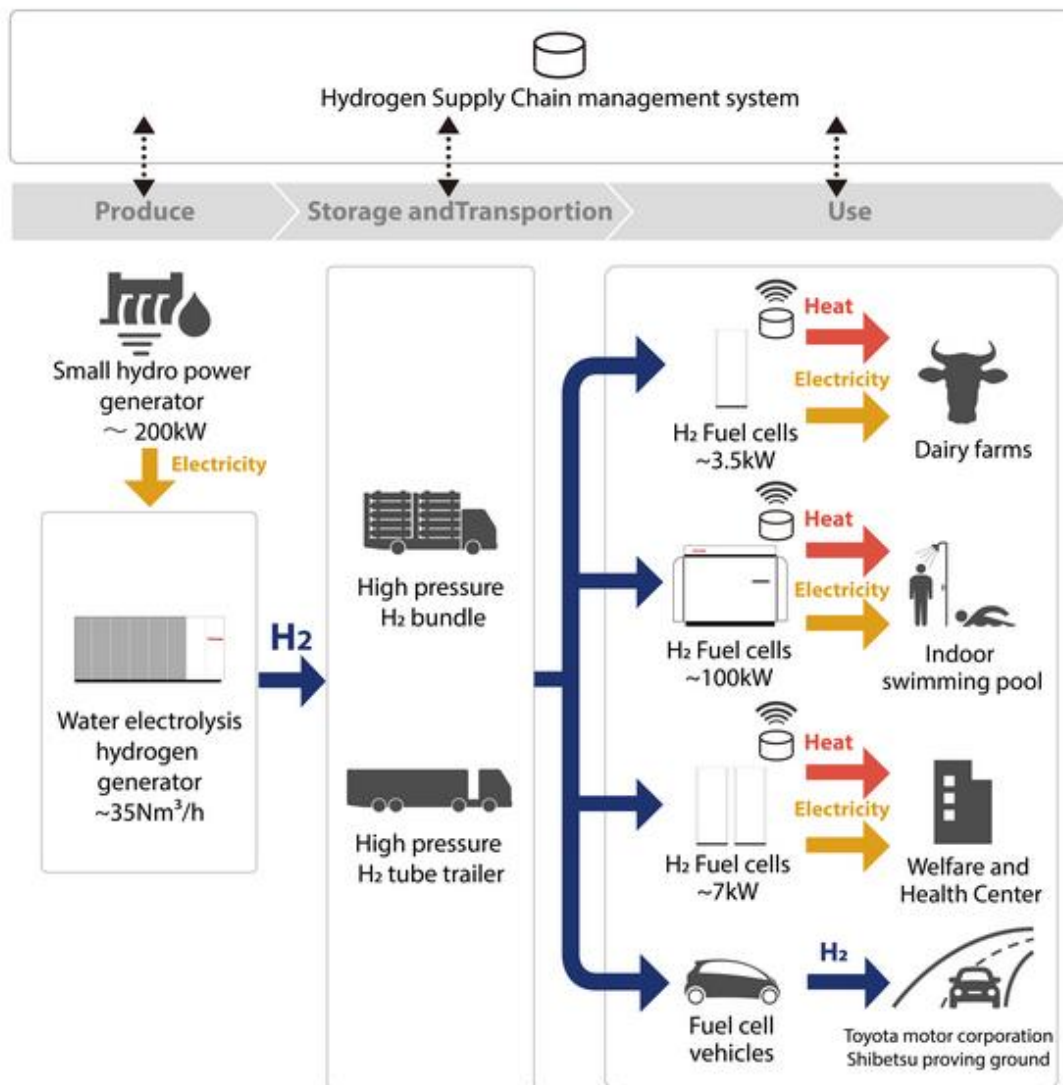
Toshiba to Start Demonstration Project with Iwatani to Establish Low-Carbon Hydrogen Supply Chain in Hokkaido

Toshiba Energy Systems & Solutions Corporation (Toshiba ESS) announced on May 24 that they have started a demonstration project in partnership with Iwatani Corporation in Kushiro, Hokkaido prefecture for establishing a hydrogen utilization model suitable for the local characteristics of Hokkaido. This project is proceeding as a result of a proposal submitted to the Ministry of the Environment under the Ministry's "Low-Carbon Hydrogen Supply Chain Demonstration Project."

For this project, Toshiba ESS has constructed a small hydropower plant at the Shoro Dam in Shiranuka town on Hokkaido's Pacific coast. Electricity from the dam will be used to electrolyze water and separate hydrogen at the production facility made by Toshiba ESS, which produces about 35Nm³ of hydrogen every hour.

The hydrogen will be transported by Iwatani to generate electricity with Toshiba ESS's pure hydrogen fuel cell systems which were installed at dairy farms and indoor swimming pools in Shiranuka, welfare and health center in Kushiro, and

use as fuel for fuel cell-powered vehicles at Toyota Motor Corporation's Shibetsu proving ground.



Ministry of the Environment, Japan,

“Low-Carbon Hydrogen Supply Chain Demonstration Project” (from 2015 to 2019)

https://www.toshiba-energy.com/en/info/info2018_0524.htm

Johnan Shinkin Becomes the First Japanese Financial Institution to Join RE100

Johnan Shinkin Bank announced on May 24 that it had become the first financial institution from Japan to join RE100 initiative. Johnan is targeting to procure renewable energy equivalent to 50% of its consumption by the year

2030 and make it 100% by 2050.

<http://www.jsbank.co.jp/about/newsrelease/pdf/2018-05-24-1-re100.pdf> (in Japanese)

<http://there100.org/news/14278411>

ADDITIONAL TOPICS

MFA Targets at 100% Renewable Energy

Mr. Taro Kono, Minister for Foreign Affairs revealed during the press conference on May 15 that the Ministry of Foreign Affairs (MFA) had decided to pursue RE100 approval that aims for 100% use of renewable energy at the Ministry. It will thoroughly consider how this could be done through the climate change task team with participation by the financial affairs division. He also indicated that the way in which the Ministry would achieve RE100, the target fiscal year, and interim targets must be addressed within the context of budget constraints.

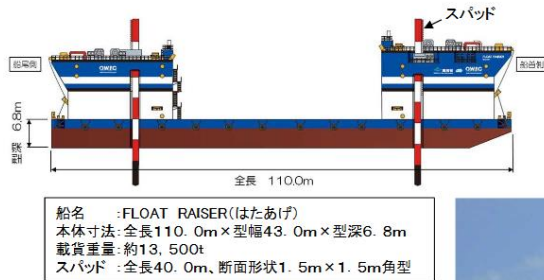
https://www.mofa.go.jp/press/kaiken/kaiken4e_000501.html

Special Ship for Effectively Installing Offshore Wind Power Generation Device Made Public

Construction of a special ship for effectively installing floating-type offshore wind generation device was completed and presented to the people concerned on May 12 in Goto city, Nagasaki prefecture.

The ship, “Float Raiser” was constructed by a joint venture of Toda Corporation and Yoshida-gumi. Co., Ltd. with support from Ministry of the Environment. In using Float Raiser, it is possible to install the generating device more economically. By way of using ballast, it can adjust the height of deck from the water, enabling the device to be rolled on to the ship at the wharf without using crane. Also, it can float off the generator offshore by diving the ship as deep as 7.4 meters. Float Raiser can accommodate up to 5,000 tons of cargo.

陸上にて建造した浮体を岸壁から積み込み海上に浮かべるための船舶



<https://www.env.go.jp/press/105475.html> (in Japanese)

<http://www.toda.co.jp/news/2018/20180516.html> (in Japanese)

4 Prefectures Participate in the Global EV Pilot City Programme

Aichi prefectural government announced on May 25 that it would join the Global EV Pilot City Programme (PCP) as an initial participating member and make a presentation on its promotional activities for electric vehicles (EV), plug-in hybrid vehicles (PHV) and fuel cell vehicles (FCV) at the EVI Pilot City Forum 2018 in Helsinki.

PCP is a program launched by the Electric Vehicles Initiative (EVI) which is coordinated by the International Energy Agency (IEA), aiming to build a network of 100 EV-friendly cities. According to the IEA, a total of 30 cities currently committed to participate in the PCP and four more are expected to do so. In addition to Aichi, three prefectures from Japan, i.e. Kanagawa, Kyoto and Tokyo participate in the PCP.

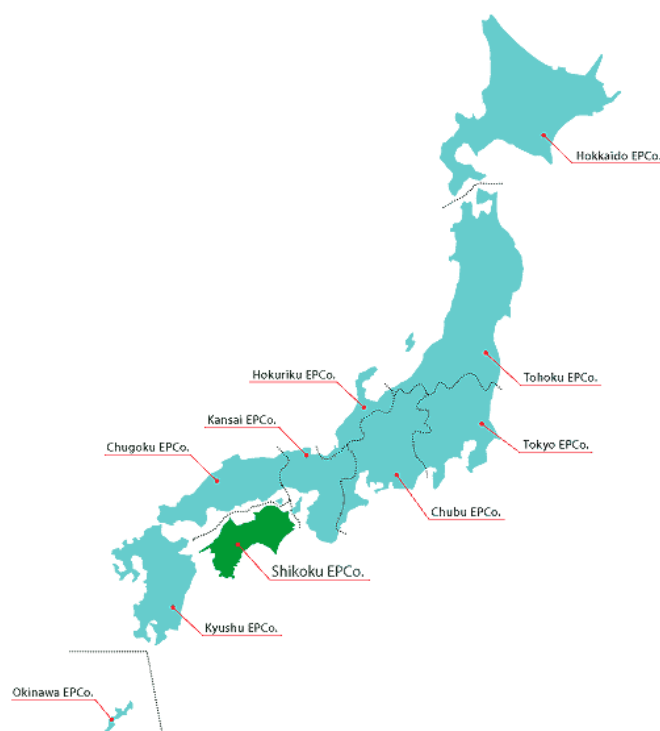
<http://www.pref.aichi.jp/soshiki/ondanka/300525pcp.html> (in Japanese)

<https://www.iea.org/newsroom/news/2018/may/global-ev-pilot-city-programme-launched-at-clean-energy-ministerial.html>

Solar Power Reached 80% of Electricity Demand in Shikoku

Shikoku Electric Power Company announced on May 21 that the solar power

generation covered 80% of local electricity demand on May 5 in Shikoku region. According to the company, solar power generation capacity in the region is 2.29 million kw. Actual solar power generation that Shikoku Electric accepted from outside reached 1.77 million kw between 12 and 13 o'clock on that day, reaching 80% of local demand of 2.21 million kw. In order to accommodate the purchase of solar power, Shikoku Electric made various adjustments centering around reduction of thermal power generation.



<http://www.yonden.co.jp/press/re1805/data/pr009.pdf> (in Japanese)

Japan and Germany to Advance Cooperation in Industrial Cybersecurity

Japan and Germany have been advancing joint expert-level discussions on cooperation in the field of cybersecurity for the manufacturing industry under their bilateral cooperation framework since April 2016. The Ministry of Economy, Trade and Industry (METI) announced on May 16 that the Japan and Germany compiled the discussion results, future policies and other efforts into a joint document. The document was released at the Securing Global Industrial Value Networks: synchronizing international approaches, an international conference held in Berlin, Germany.

http://www.meti.go.jp/english/press/2018/0516_002.html