

JAPANESE INDUSTRY AND POLICY NEWS

March 2022

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Legislation and Policy News

Household income in the mid-30s to mid-50s has decreased by more than JP¥ 1 million compared to more than 20 years ago

At the government's Council on Economic and Fiscal Policy held on March 3, a survey result reported that the income of households in their mid-30s to mid-50s had decreased by more than JP¥ 1 million compared to the same generation 20 years ago. Prime Minister Kishida emphasized the idea of meticulously investing in people to raise incomes.

In this Council, a Cabinet Office official reported the results of a survey comparing changes in household income by age group between 1994 and 2019 after the burst of the bubble economy. According to this, the median income of households decreased by JP¥ 1.04 million in the generations aged 35 to 44, including the so-called "employment ice age" generation, and decreased by JP¥ 1.84 million in the generation aged 45 to 54.

In addition, among single-person households of the younger generation aged 25 to 34, the proportion of households with relatively low income in the JP¥ 2 million range is increasing, and the proportion of non-regular employment households is increasing significantly. The government analyzes it as the main factor.

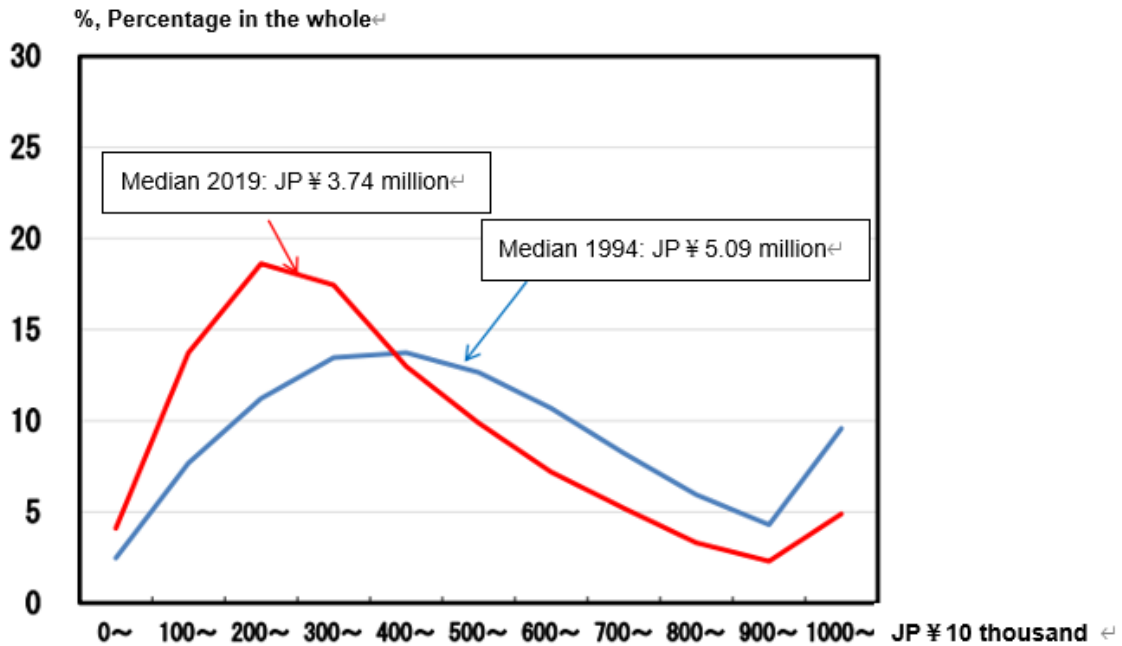
In response to these results, Prime Minister Kishida emphasized that he will work on detailed" investment in people "according to each life stage to raise income and strengthen human capital.

Cabinet office website (in Japanese):

<https://www5.cao.go.jp/keizai-shimon/kaigi/minutes/2022/0303/agenda.html>



All households / income distribution



Data source: Cabinet office

Survey and Business Data

Household financial assets, over JP¥ 2,000 trillion for the first time at the end of 2021

According to the Bank of Japan's flow of funds accounts statistics (preliminary report) for the October-December period of 2021 released on March 17, household financial assets increased 4.5% year-on-year to JP¥ 2,023 trillion as of the end of December 2021. It has exceeded 2,000 JP¥ trillion for the first time.

The increase is for 7 consecutive quarters. With the COVID-19 disaster, personal consumption continued to be curtailed, cash and deposits accumulated, and the year-end bonus payment was also a boosting factor.

Looking at the breakdown of household financial assets, cash and deposits increased 3.3% to JP¥ 1,092 trillion, followed by insurance, pensions and standard guarantees at JP¥ 540 trillion. From October to December 2021, the recovery of personal consumption was sluggish and cash and deposits swelled, although the behavioral restriction measures to control the infection of the COVID-19 were temporarily relaxed.

High stock prices and the depreciation of the JP¥ have also inflated personal financial assets. Stock holdings increased 15.5% year-on-year to JP¥ 212 trillion, and investment trusts increased 20.4% to JP¥ 94 trillion. As of the end of December 202, the Nikkei Stock Average was JP¥ 28,791, up 4.9% from the same month of the previous year, while the JP¥ exchange rate was JP¥ 115 per US\$, which was weaker and stronger than the JP¥ 103 level in the same month of the previous year. Individual investors holding investment trusts and assets denominated in foreign currencies have benefited.

Investment trusts that incorporate foreign stocks such as the United States are becoming more popular year by year. According to the Investment Trusts Association, the total net assets of investment trusts of overseas stocks was about JP¥ 19 trillion at the end of 2021, an increase of more than JP¥ 7 trillion from the previous year. The strong US stock market drove the popularity of overseas stocks.

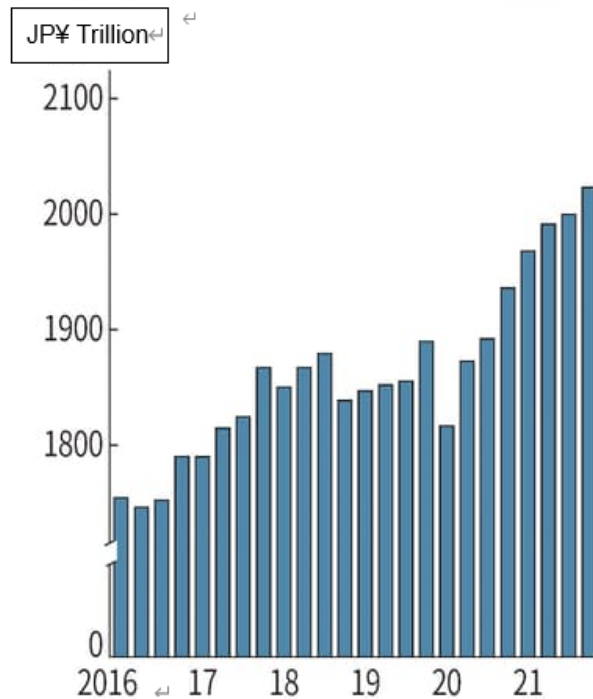
The financial assets of companies increased by 5.9% year-on-year to JP¥ 1,279 trillion. Cash and deposits increased by 3.9% to JP¥ 319 trillion, and foreign direct investment also increased by 15.7% to JP¥ 168 trillion. The BOJ had the highest share of JGB holdings in the entire market at JP¥ 530 trillion , 43.4%. The holdings themselves were down 2.9%, but they are still outstanding. The holding ratio of depository institutions such as banks was 13.4%, and overseas was 14.3%.

Private consumption has been weakening since the beginning of 2022, and cash and deposits may be further retained. In January 2022, behavioral restriction measures were reintroduced due to the re-expansion of the COVID-19, reducing consumption opportunities. There is a concern that the deterioration of the situation in Ukraine will also have an adverse effect on consumer sentiment through high prices. On the other hand, financial assets such as stocks and investment trusts may shrink due to the global stock price depreciation after the beginning of the year.

Bank of Japan website:

<https://www.boj.or.jp/en/statistics/sj/sj.htm/>

Household financial assets (4th Quarter 2021, Preliminary Figures)



Data from Bank of Japan website

Annual increase in whole-atmosphere mean methane concentration for 2021 marks the largest since 2011

According to the observation data of the greenhouse gas observation technology satellite GOSAT (nickname: IBUKI), the annual increase in the average concentration of methane in the whole atmosphere in 2021 has been the largest since the start of observation in 2011. The National Institute for Environmental Studies and the Ministry of the Environment announced on March 10. The average annual increase from 2011 to 2020 was 8 ppb, while the annual increase in 2021 was 17 ppb, doubling compared to the past 10 years.

The recent increase in methane concentration has been confirmed by observations other than GOSAT, and they focused on changes in methane emissions from biological and fossil fuel sources and changes in the amount of disappearance due to chemical reactions in the atmosphere in order to clarify the cause. Research is currently being actively pursued around the world. It will take some time to clarify the cause, but it may become a big problem in predicting

future methane concentration and confirming the implementation status of emission reduction measures in each country based on the Paris Agreement.

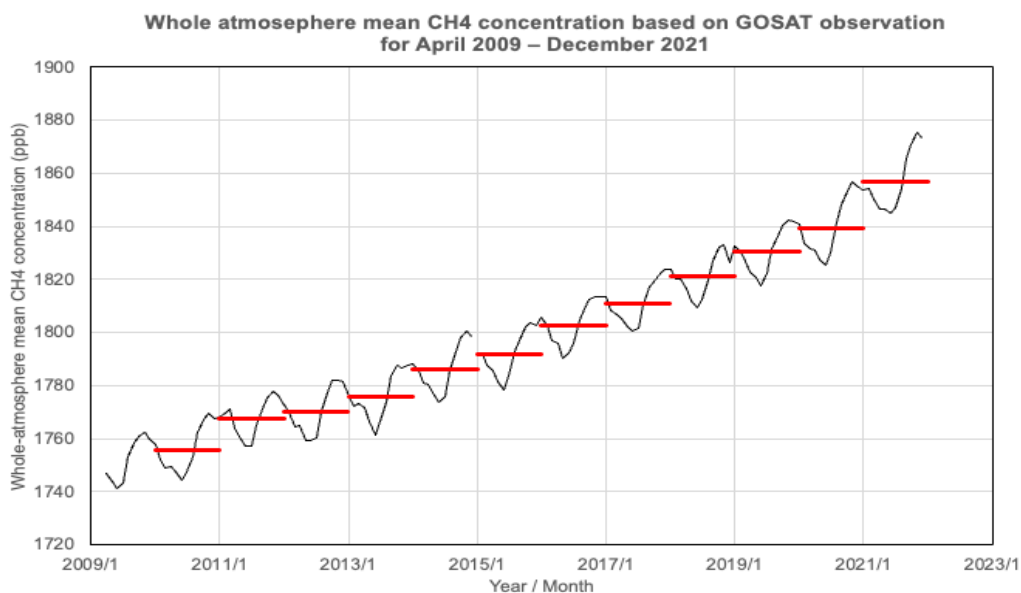
Analysis of the US National Oceanic and Atmospheric Administration has revealed that the concentration of methane on the ground surface surged from 2019 to 2020. On the other hand, the results of GOSAT this time suggest that the increase in methane concentration extended not only near the ground surface but also to the entire earth's atmosphere.

The National Institute for Environmental Studies and the Ministry of the Environment said they do not know at this time whether the increase in methane concentration observed in 2021 will continue after 2022, or whether the rate of increase will accelerate in the future. So, the global methane concentration observations need to be continued in the future.

At the COP26 held in November 2021, the "Global Methane Pledge" was created with the aim of reducing methane emissions by 30% compared to 2020. The importance of concentration monitoring and emission control of methane has been attracting attention again.

The National Institute for Environmental Studies website:

<https://www.nies.go.jp/whatsnew/20220323/20220323-e.html>



From the National Institute for Environmental Studies website

Company & Organization News

ITOCHU invests in world's first large clean hydrogen infrastructure investment fund

On March 25, ITOCHU Corporation announced that it has acquired shares in Clean H2 Infra Fund. SLP (France), the world's first large-scale clean hydrogen infrastructure investment fund, through a 100% owned special purpose company (SPC).

At the same time, an agreement was reached with Tokyo Century on a third-party allotment of SPC shares, and as soon as approval was obtained from the relevant authorities, the fund will be jointly held. After the SPC capital increase, the investment ratio will be 50% for ITOCHU and 50% for Tokyo Century.

The SPC will invest up to €20 million in the fund.

The fund will be managed as a general partner by Hy24, a joint venture between Ardian, Europe's largest private investment company, and FiveT Hydrogen, an investment management company specializing in investment in clean hydrogen. The company plans to invest in clean hydrogen production businesses and hydrogen infrastructure projects such as hydrogen stations, which are expected to be commercialized at an early stage in the hydrogen value chain.

In October 2021, the fund was established under the leadership of Air Liquide (France), one of the major international gas companies, Total Energies (France), a comprehensive energy company representing Europe, and VINCI, the world's third largest in infrastructure management and construction.

From Japan, Japan Bank for International Cooperation (JBIC) plans to invest up to € 100 million, as well as Lotte Chemical (Korea), Baker Hughes (USA), energy, chemicals, infrastructure, hydrogen technology, insurance and finance, etc. It is said that it has already raised more than € 1 billion with the participation of international companies that have strengths in Japan.

Yamaha Motor develops TY-E 2.0 electric trials bike

On March 24, Yamaha Motor introduced the new electric trial bike "TY-E 2.0" and "EPS (Electric Power Steering)", which is a power steering for motorcycles,

and announced that it takes part in the 2022 World All Japan Championship with two technologies.

"TY-E 2.0" is an electric trial bike developed for competition. In 2018 and 2019, the company participated in the electric division of the trial world championship series "FIM TRIAL E-CUP" with the first generation "TY-E" and won the second place in the annual ranking for the second consecutive year. "TY-E 2.0" was developed in the form of brushing up based on the actual battle data at this time.

In the new "TY-E 2.0", many parts have evolved from the previous generation, from the chassis to the battery and power unit. The chassis uses a monocoque frame made of laminated material, which has many advantages such as weight reduction, optimization of rigidity, and harness protection. The layout of the power unit and battery was reviewed to significantly lower the center of gravity.

In addition, the battery is regarded as "the most evolved element", and they succeeded in suppressing the weight to 20% while increasing the capacity by 2.5 times compared to the previous generation. By improving the cooling performance, it has become possible to continuously exert high output, and with these updates, "it has reached a level that general trial riders can practically enjoy."

In addition, the power unit was "matured with a combination of mechanical clutch, flywheel, and electric motor control." By focusing on weight reduction, the maximum output is not as good as the existing internal combustion engine trial bike, but advanced motor control has been added to make up for the difference. A new road surface that focuses on the ground contact load of the tires and improves running performance with a mechanism that "reads changes in grip that are difficult for even top riders to react to and controls the driving force accordingly to improve traction performance".

On the other hand, "EPS", which the company calls "steering support system", is, so to speak, power steering for motorcycles. Specifically, it uses a "magnetostrictive sensor," which is also used in electrically power assisted bicycles, to detect the torque of the rider's steering wheel operation, and then supports the steering wheel operation with an actuator. It is assumed that there are two main



elements here, the "steer damper function" and the "steer assist function".

The "steer damper function" "adjusts various disturbances caused by changes in road surface conditions by control" and mainly contributes to improving stability at high speeds. In addition, the "steering assist function" "supplements the steering operation according to the rider's intention", and mainly contributes to the improvement of lightness at low speeds.

Yamaha website:

<https://global.yamaha-motor.com/news/2022/0324/corporate1.html>

TY-E 2.0 Feature Map



From Yamaha website

Sumitomo Rubber Industries develops "wear estimation technology" for tires using "power generation technology in tires"

Sumitomo Rubber Industries announced on March 24 that it has developed a tire wear estimation technology using in-tire power generation technology in collaboration with Kansai University.

In collaboration with Kansai University, the company is working on the development of a power generation device (energy harvesting) that can generate electric power by rotating the tires and supply power to the sensors mounted

around the tires without a battery.

Energy harvesting refers to a technology that collects and utilizes a small amount of environmental energy such as light, vibration, and heat around us.

With the newly developed "tire wear state and contact patch shape measurement method", it is possible to calculate the tire contact length, rotation cycle, and voltage value from the voltage waveforms obtained from each power generation device during tire rotation contact. It is said that it has become possible to estimate the amount of tire wear by calculating.

They have also developed a method for measuring the shape of the tire contact patch by acquiring information in the width direction of the tire contact patch by mounting multiple miniaturized power generation devices inside the tire. It is expected that these technologies can be utilized for tire solution services and at the same time, knowledge that will lead to future tire development can be obtained

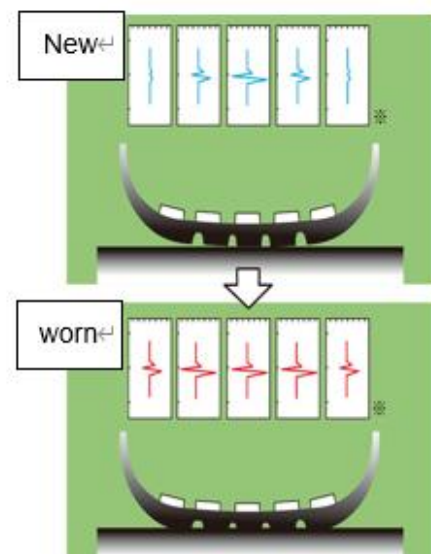
Sumitomo Rubber Industries website:

https://www.srigroup.co.jp/newsrelease/2022/sri/2022_023.html



Power generation device installed in the tire

Measurement of wear condition



From Sumitomo Rubber Industries website

IHI begins studying ammonia co-firing at Indian thermal power plant

IHI Corporation announced on March 22 that it will work with Adani Power Limited (APL), India's largest private power generation company, and Kowa to reduce CO2 emissions from coal-fired power plants in India. The three companies have signed a MoU to jointly verify the technology and economics of applying ammonia co-firing to APL-owned Adani Power Mundra coal-fired power plants.

It is said that various technologies will be examined on the premise that 20% ammonia co-firing will be carried out in the existing coal-fired boiler at the power plant, and that the co-firing rate will be expanded to full-scale combustion in the future.

The Government of India is considering the utilization of hydrogen and ammonia in thermal power plants with the aim of achieving zero greenhouse gas emissions by 2070. Based on this policy, APL and Kowa were investigating the technology for utilizing hydrogen and ammonia applied to APL-owned coal-fired power plants. IHI is also aiming to implement the world's first 20% ammonia co-firing demonstration at a domestic commercial coal-fired power plant.

As a result of discussions between the three companies, it was decided to carry out technical studies and economic verification in order to further accelerate the co-firing of ammonia in India. The three companies are also looking to expand this study on ammonia co-firing to other coal-fired power plants owned by APL and other coal-fired power plants in India.

In addition, this initiative matches "Japan-India Clean Energy Partnership (CEP)" aimed at ensuring energy security, carbon neutrality and achieving economic growth, which is announced on March 19 by the governments of India and Japan. Through this initiative, it will contribute concretely to carbon neutrality in India as a whole.

IHI Website:

https://www.ihico.jp/en/all_news/2021/resources_energy_environment/1197687_3360.html



Adani Power Mundra coal-fired power plant in India

ITOCHU invests in Aquafil, Italy to expand nylon recycling business

On March 16, ITOCHU announced that it has decided to invest in Aquafil, an Italian company that develops a recycled nylon brand "ECONYL (R)" made from waste nylon such as fishing nets and carpets in order to promote and expand the business related to nylon circulation recycling.

ITOCHU is one of the world's largest dealer of caprolactam (CPL) and nylon chips, which are raw materials for nylon. Taking the opportunity of the business alliance announced in February 2021 with Aquafil, it has been promoting the collection of waste nylon, the sale of ECONYL, and the development of new applications. Since each project is already underway, it has decided to participate in Aquafil in order to further deepen and accelerate the collaboration.

ITOCHU will utilize the group's network to further promote the worldwide collection of waste nylon and the sale and development of ECONYL for applications such as fashion, carpets, automobile parts, packaging materials, and fishing materials. In addition, in order to further accelerate the collection of waste nylon generated in the supply chain in existing transactions, it will promote sustainable nylon circulation throughout society by promoting "monomaterialization" that manufactures products on the premise of recycling. It aims to build a recycling scheme.

Aquafil is an advanced company in the field of nylon recycling with its own chemical recycling technology, and started production of recycled nylon ECONYL (R) made from waste nylon in 2011. Aquafil has realized nylon circulation recycling by chemically recycling waste nylon to recycle CPL, which is a crude raw material, and to manufacture ECONYL that maintains the same quality as ordinary nylon.

In addition, ECONYL is recycled from 100% waste nylon, which makes it possible to reduce CO2 emissions by up to 90% compared to ordinary petroleum-derived nylon. ECONYL has been adopted by more than 2,000 brands worldwide, mainly in the fashion industry and carpet industry, as an environmentally friendly material. Especially in the fashion industry, it has been adopted by fashion brands such as Gucci, Burberry, and Prada, and is attracting attention as an environmentally friendly material.

Itochu website:

<https://www.itochu.co.jp/en/news/press/2022/220316.html>

The “ life cycle thinking ” approach



Image from Aquafil S.p.A. website

Sony and Honda collaborate to launch jointly EV in 2025

Sony Group and Honda announced on March 4 that they will establish a joint venture to jointly develop an electric vehicle (EV) by the end of this year. The EV planned and developed by the new company will be produced at Honda's plant, and the initial model will be sold by 2025. Sony, which announced its entry into the EV market at the "CES 2022" held in Las Vegas in January this year, will work with Honda to launch an ambitious EV shift, which will lead to the commercialization of competitive EVs.

Although there are cases overseas such as Hon Hai Precision Industry (Hon Hai) and Stellantis, efforts to produce EVs in collaboration with different industries and automobile manufacturers, this is the first time that domestic manufacturers have collaborated with each other.

The new company will jointly develop high-value-added EVs by combining Sony's image sensing technology, communication technology, and entertainment know-how with Honda's body manufacturing technology, mobility development, and after-service know-how. A new company will be established within 2022 with the approval of the authorities.

The new company will also provide mobility services that make use of the EV that it has developed. The mobility service platform developed by Sony will be provided to the joint venture.

Sony announced the EV concept car "Vision-S" at "CES2020" two years ago. After that, it continued development and announced its entry into the EV market earlier this year. EV production was expected to collaborate with automakers and others. It seems that Honda was selected among them because Honda is actively promoting the EV shift and has a close relationship with the corporate culture.

Honda website:

<https://global.honda/newsroom/news/2022/c220304beng.html>



SONY VISION-S 01(right) and VISION-S 02 at CES 2022
from SONY website

MOL participates in Taiwan's offshore wind power generation business

MOL announced on March 4 that it will participate in the offshore wind power generation business in Taiwan. Along with Toho Gas (Nagoya City) and Hokuriku Electric Power Company (Toyama City), it has agreed with Macquarie, an Australian financial group, to acquire a 25.0% stake in Formosa I International Investment.

Formosa I International Investment, in which the three companies will acquire the shares, is operating a landing-type offshore wind power plant "Formosa 1" with a power generation capacity of 128,000 kW off the coast of Miaoli County, Taiwan.

The shares will be acquired through a special purpose company jointly established by the three companies in Taiwan. MOL and Toho Gas will each have a 37.5% stake in this special purpose company, and Hokuriku Electric Power will have a 25.0% stake. The three companies have already started the application procedure for the establishment of this special purpose company, and after obtaining approval from the Taiwanese authorities and other procedures, the transaction will be completed.

This is the first time that the three companies have participated in the offshore wind power generation business overseas. By participating in Formosa 1, the three companies will acquire knowledge in the field of offshore wind power

generation and work to further expand the renewable energy business.

Formosa 1 is Taiwan's first commercial-scale offshore wind farm, with 22 landing-type offshore wind turbines installed approximately 2 to 6 km off the coast of Miaoli County. Sales of electricity to Taiwan Power Company under the feed-in tariff (FIT) for 20 years started in April 2017 in Phase 1 (88,000 kW) and in December 2019 in Phase 2 (120,000 kW).

The Formosa 1 project is operated by Ørsted which the world's leading offshore wind power generation companies of Denmark, JERA of Japan and Swancor of Taiwan. On the other hand, Macquarie of Australia is participating in many offshore wind power generation businesses, including the development of Formosa 1, Formosa 2 and 3 in Taiwan.

MOL website: <https://www.mol.co.jp/en/pr/2022/img/22028.pdf>

Overview and location of Formosa 1

Company Name	Formosa I Wind Power Co., Ltd.
Location	Miaoli County, Taiwan
Generation Type	Offshore Wind Power (bottom-fixed)
Generation Capacity	128MW
Number of Generators	22 Units
Off-taker	Taiwan Power Company
Commercial Operation Date	Phase 1 (8MW): April, 2017 Phase 2 (120MW): December, 2019



From MOL website

NYK completes concept design of LNG carrier that can be converted to ammonia fuel

NYK, Group MTI, and Finnish ship technology consulting firm Elomatic announced on March 3 that they have completed the concept design and development of an LNG (liquefied natural gas) fueled ship on the premise of switching to ammonia fuel.

In September 2021, the three companies started a design and development project aiming to build an "ammonia ready LNG fuel ship" that can efficiently convert an LNG fuel ship into an ammonia fuel ship. During Phase 1 from the same month to the end of February 2022, the concept design of the Ammonia Ready LNG fuel ship of Post-Panamax Bulker, a car carrier that uses LNG fuel as the main fuel, was carried out. This time, it mainly researched the following items, and at the same time, extracted issues that require future technological establishment.

- Material of the tank to be loaded
- Considering the placement of additional tanks for ammonia, which has a larger volume than LNG
- Hull structural strength and stability due to the addition of tanks
- A device that supplies ammonia to the main engine and onboard
- Confirmation of the maintenance status of rules such as ship classification rules for safe use of ammonia fuel, etc.

In the future, with Phase 1.5 as the period until June 2022, the same concept design will be carried out for Capesize bulk carriers and ultra-large crude oil tankers that use LNG as the main fuel. Furthermore, as Phase 2, the optimum fuel tank layout, ammonia fuel supply device, and hull structural strength obtained in the concept design will be incorporated into the actual design by the end of 2022, and the actual ammonia Ready LNG fuel ship will be designed.

This project will be completed when the design of the actual shipbuilding is finished. But in the future, it will propose to customers and business partners a transportation service that can transition from an LNG fueled ship to an ammonia fueled ship without any trouble, aiming contract in 2023 and completion in 2025. The NYK Group has positioned LNG fuel vessels as one of the "bridge solutions"



that can convert fuel to ammonia, and in the future, it will introduce zero-emission vessels that use marine fuels with lower environmental impact such as ammonia and hydrogen.

https://www.nyk.com/english/news/2022/20220303_01.html

Concept design of ARLFV from NYK website



Kansai Electric Power participates in Germany's largest offshore wind power generation business with an output of 1.9 million kW

Kansai Electric Power (KEPCO, Osaka City) announced on February 25 that it has participated in the Balk Murifgrund 3 offshore wind power generation business in Germany together with Grennmont Partners. The project is planned to have an output of 1.9 million kW, and when completed, it is expected to become Germany's largest offshore wind power generation project. Commercial operation is scheduled to start in 2025.

Germany is actively promoting the expansion of renewable energy, including offshore wind power, with the aim of achieving carbon neutrality by 2045. The business was developed by Ørsted, and Kansai Electric Power acquired a 3.5% stake in the business through Capic Netherlands (Financial company 100% owned by Kansai Electric company). As a result, the total equity capacity of the company's overseas renewable energy power generation business was approximately 1.087 million kW, and the total equity capacity of the overseas power generation business was approximately 2.876 million kW.

The company intends to work with Grennmont Partners to participate in the



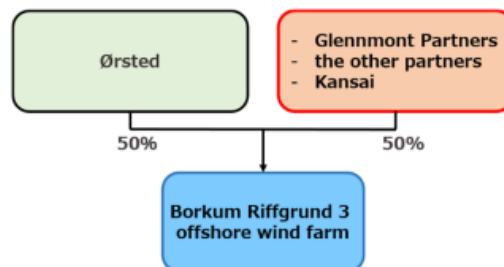
renewable energy power generation business in the Asia-Pacific and North America regions in addition to Europe, and contributes to zero-carbon overseas through participation in this business. At the same time, the company plans to utilize the experience and knowledge in Japan's offshore wind power generation business.

Kansai electric power website:

https://www.kepco.co.jp/english/corporate/pr/2022/pdf/feb25_1.pdf

Overview of the Borkum Riffgrund 3 Offshore Wind Farm Project in Germany

- (1) Project Country: The Federal Republic of Germany
- (2) Type of Generation: Offshore Wind Generation
- (3) Name: Borkum Riffgrund 3 Offshore Wind Farm
(approx. 70 km off the northwest coast of Germany)
- (4) Total Export Capacity: 900 MW
- (5) Project Partners
 - Ørsted A/S: 50%
 - Glennmont Partners and the other partners: approx. 46.5%
 - The Kansai Electric Power Co., Inc.: approx. 3.5%
(KPIC Netherlands B.V.)



from Kansai electric power website

Other topics

China sets real GDP growth target for 2022 around 5.5%

The 5th meeting of China's 13th National People's Congress (NPC) began on March 5 in Beijing. In the Congress, Prime Minister Li Keqiang made a "Government Activity Report", summarizing the economic situation in 2021 and announcing the main economic goals and priority initiatives for 2022. The economic growth rate (real GDP growth rate) target for 2022 has been set at

around 5.5%. Japan External Trade Organization (JETRO) reported on March 8.

Prime Minister Li explained that the economic situation was in the process of recovering from the impact of the COVID-19 in 2021, and as many changes appeared in domestic and overseas situations, it became more difficult to maintain economic stability. However, it achieved the desired target of macroeconomic indicators and continued to maintain the top position in the world.

On the other hand, he reiterated the recognition that China's economic development is facing triple pressure (Note 1) and the challenges; the local outbreak of the COVID-19, the recovery of consumption and investment is slow, exports are unstable, energy and raw materials are tight, production and management of small and medium-sized enterprises are in a difficult situation, and it is difficult to stabilize employment. He pointed out that there are weak innovations in core fields, and that the financial balance of some regions is deteriorating.

Prime Minister Li set the growth rate target for 2022 at around 5.5%, considering the need for employment stability and public welfare security, as well as the average economic growth rate for the past two years (Note 2). He explained that it was in line with the goals (Note 3) of the 14th Five-Year Regulations (2021-2025) (Note 4) and also said that in 2022 it must achieve high growth while the growth rate of the previous year was so big (Note 5).

At a press conference, a government officials said that in 2021, China's nominal GDP was CNY 114,376 billion (about JP¥ 2,058.606 trillion, 1 CNY = about JP¥ 18), and 5.5% growth from now is equivalent to 10.5% growth 10 years ago and 7.4% growth 5 years ago. It is comparable to the GDP generated in one year by the countries / regions ranked 11th or 12th in the world economy. He emphasized that achieving the goal is not easy.

(Note 1) Refers to a decrease in demand, supply constraints, and a decrease in market expectations. It was raised at the Central Economic Work Conference in December 2021.

(Note 2) According to the National Bureau of Statistics, the average growth rate of real GDP from 2019 to 2021 was 5.1%.

(Note 3) In the 14th Five-Year (2021-2025) plan, the annual average growth rate target for GDP during the period was not set, but it was stated that it would be "set based on the current situation every year within a reasonable range."

(Note 4) A government official by the State Council has pointed out that the target growth rate this time is in line with the current potential growth rate of China.

(Note 5) The real GDP growth rate in 2021 was 8.1%.

JETRO website (in Japanese):

<https://www.jetro.go.jp/biznews/2022/03/f2c7db02aa10ddc0.html>

Key economic target for 2022 and actual results for 2021 in China

	2019	2020		2021		2022
	Target	Target	Result	Target	Result	Target
GDP in Real terms (%)	6.0-6.5%	-	2.3%	More than 6.0%	8.1%	More than 5.5%
CPI (%)	Around 3%	3.5%	2.5%	Around 3.0%	0.9%	Around 3%
Trade	Equilibrium of balance of payment and promoting imports and exports being qualitative improved	Stable imports and exports, improving quality of products, and equilibrium of balance of payment	Balance of payments was in equilibrium	Stable imports and exports, improving quality of products, and equilibrium of balance of payment	Balance of payments was in equilibrium	Stable imports and exports, improving quality of products, and equilibrium of balance of payment
M2 (%)	Balanced with the nominal growth rate of GDP	Above the previous year's level	10.1%	Balanced with the nominal growth rate of GDP	9.0%	Balanced with the nominal growth rate of GDP
Number of new workers in urban areas (No.)	More than 11 million	More than 9 million	11.86 million	More than 11.00 million	12.96 million	More than 11.00 million
Unemployment rate in urban areas (%)	Less than 5.5%	Around 6.0%	5.2%	Around 5.5%	5.1%	Less than 5.5%

Data source: JETRO report

Awareness of "electricity dependence", but insufficient for long-term and large-scale power outage measures

Although the damage caused by natural disasters is increasing all over the world including Japan, ITOCHU announced on March 7 that the result of conducting a fact-finding survey on disaster prevention measures. It was the survey of 1,000 men and women over the age of 25 with "home evacuation and long-term, large-scale power outages" in the event of a disaster.

The survey highlights that many people are aware of their dependence on electricity, but lack measures in the event of a power outage. "Evacuation at

home" means to live at home as it is when there is no danger of collapse, flooding, landslides, etc. and personal safety is ensured in the event of a disaster.

According to this survey, about 80% of people are taking some measures such as "preparation of consumables such as food, water, and daily necessities" as disaster prevention measures, but during natural disasters and long-term and large-scale measures, about 65% of the respondents said they had never done a behavioral simulation during a power outage. In addition, more than half answered that "disaster prevention measures do not assume long-term, large-scale power outages (minimum 2 days)."

About 40% are aware of "100% electricity dependence", and about 70% including 80% or more. More than 60% of the respondents answered that they would get sick within a day (within) if there was a power outage in summer or winter, or if they or their family members could not use air conditioning.

On the other hand, in addition to "toilet" and "charging smartphones / mobile phones", "air conditioners / heaters / fans and other air conditioners / seasonal home appliances" and "refrigerators", which consume a large amount of power, were ranked high in the list of items to be used in the event of a power outage. Regarding preparations for power outages, 81.1% answered that they were "insufficient." As for the reasons for "insufficient", 45.6% answered "I don't know the specific measures" and 34.6% answered "I don't feel like a long-term power outage will occur".

Recently, due to the improvement in the performance of storage batteries, small mobile batteries, large-capacity portable power supplies, residential storage batteries, etc. have become practical levels, but few households actually have these, and the level of interest is still low. In a preliminary survey of 20,000 people, 74.4% said they hesitated to go to a shelter. The reasons are "privacy and hygiene" and "living with elderly people, infants and pets". This survey was conducted by extracting 1,000 people from these respondents.

PRTIMES website (in Japanese):

<https://prtimes.jp/main/html/rd/p/000000007.000090557.html>



Image of flood damage from MILT website

