



Special Feature

Japan-Australia Collaboration Aims for a New Stage of Economic Cooperation

JBIC established a new representative office in Australia's economic center
Supporting Japanese companies' overseas business ventures

Private sector's technology and wisdom are the keys to resolving mounting global-scale challenges
Cooperation between Japan and Australia Promotes Decarbonization and the Resilience of Supply Chains

Our Global Challenges - Holus Co., Ltd.

Production of frozen vegetables and processed foods in Vietnam
Supporting the world's food supply with a "Made by Japan" model

Project Frontline Our People and Their Work

Contributing to semiconductor supply chain resilience through M&A support
Opening up the future of hydrogen through investment in overseas fund



JAPAN BANK FOR
INTERNATIONAL COOPERATION

Japan-Australia Collaboration Aims for a New Stage of Economic Cooperation

Amid mounting challenges around energy supply, the securing of mineral resources, and tackling climate change, there is growing attention being focused on Australia and the Pacific region. What kind of potential do these regions offer? We asked TAKAHASHI Naoki, Chief Representative of JBIC's Representative Office in Sydney, for his insights.

Australia's Economic Outlook: Five key trends

- 1 Steady economic growth and infrastructure development
- 2 National Hydrogen Strategy
- 3 CCS potential
- 4 Leading mineral resources producer
- 5 Collaboration with neighboring regions

Population growth of over 300,000 every year Increasing energy needs with renewables expected to play a bigger role

Australia is a key partner for Japan in the realization of a "free and open Indo-Pacific." Although some 20 times larger than Japan in land area, its population, at 25.75 million, is only about 20% that of Japan. However, due partly to its migrant intake, Australia's population is growing by 300,000 to 400,000 every year, leading to growth in household consumption expenditure and housing investment. The population is expected to continue growing, with some forecasts showing that the population will reach approximately 37-49 million by 2066 (Australian Bureau of Statistics, 2018). The Australian government has announced that it will invest AUD120 billion over ten years to build new infrastructure.

"Population growth in Sydney is particularly remarkable, with that city expected to grow by 60% from 5 million today to 8 million in 40 years' time. With construction of the new Western Sydney International Airport underway, the Australian government intends to develop a new urban zone that incorporates advanced technologies, with the new airport at the center. Although there are no concrete plans as of yet, there are expectations that Japanese companies with cutting-edge technologies will be involved," TAKAHASHI explained.

It is also inevitable that, as the population grows, demand for electricity will also increase. Installed generation capacity in Australia in 2019 was 71GW, and this will be increased to 132GW in 2030 (Source: Australia's emissions projections 2021). These projections include the expansion of renewable energy use such as solar and wind power, as well as the closure of coal-fired power stations that have reached the end of their service life.

"One of the major policy drawcards of the new Albanese

administration, which was sworn in May 2022, was to lift Australia's 2030 emissions reduction target from 26-28% below 2005 levels to 43%. As a means of achieving this goal, it has significantly increased the 2030 target for the percentage of renewables in power generation from 69% to 82%. These figures have been set as ambitious, yet realistic targets. The Australian government will likely employ a variety of measures, including strengthening the power grid, to eliminate bottlenecks in power supply," TAKAHASHI described.

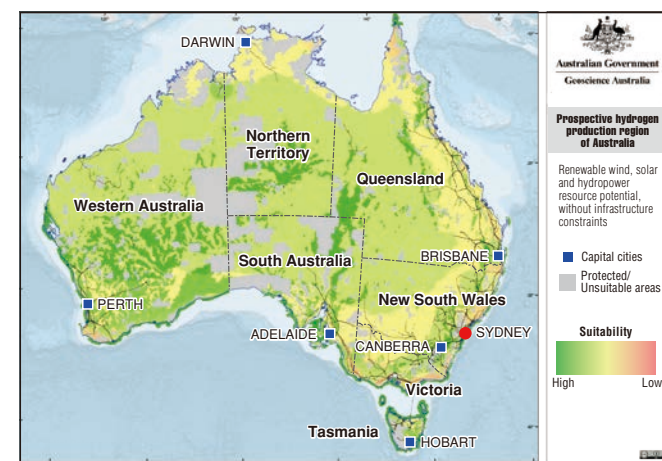
Active promotion of hydrogen as a new energy carrier, in combination with CCS

Given Australia's vast land area, resources and energy circumstances vary from state to state. For example, Queensland and New South Wales have abundant coal deposits, while Western Australia and the Northern Territory are rich in natural gas. However, in response to the recent decarbonization trend, coal and gas operators are looking for ways to survive, such as decarbonizing through converting these resources into blue hydrogen. In hydrogen-related developments, Australia's National Hydrogen Strategy, announced by the Australian Federal Government in 2019, is well known. Interestingly, however, the individual states have also developed their own unique strategies based on the characteristics of their respective regions.

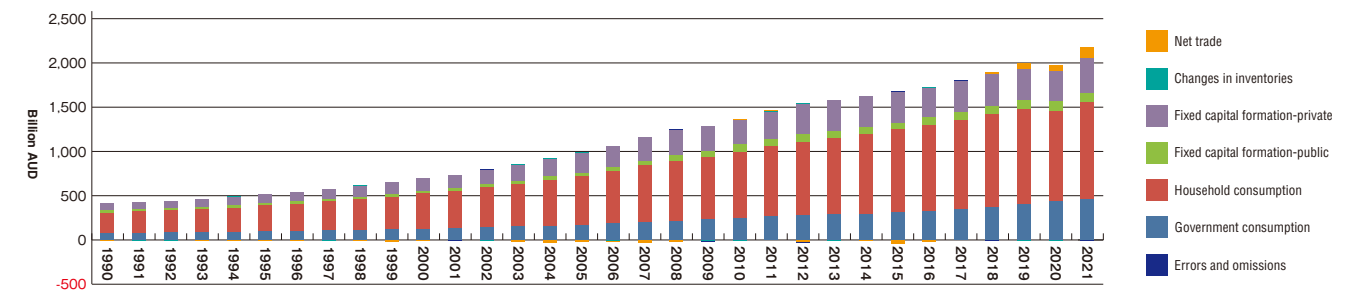
TAKAHASHI explained, "South Australia and Tasmania have not previously had major resource export industries, but they are now aiming to become major production and export bases for hydrogen, making use of abundant renewable energy potential. Each state is competing with others to attract investment by establishing a stable and conducive business environment, including opening up new demand for hydrogen within their own states."

There is no blue hydrogen without CCS, the capture and storage of CO2 generated during the hydrogen production process. With its long

Regions with large potential for hydrogen production

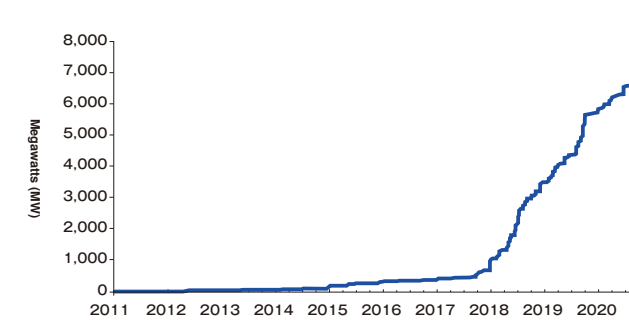


Source: AUSTRALIA's NATIONAL HYDROGEN STRATEGY, COAG Energy Council



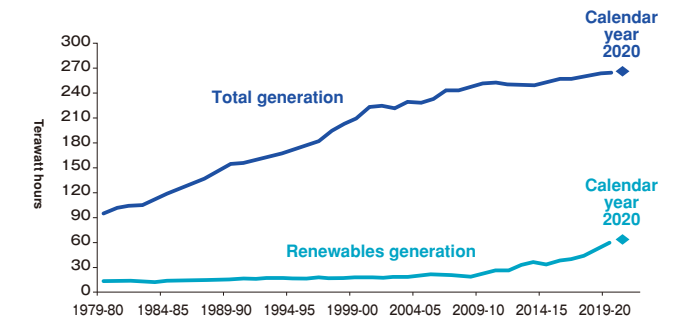
Changes in nominal GDP (seasonally adjusted)

Source: Australian Bureau of Statistics
The economy remains strong due to the expansion of household consumption expenditure and fixed capital formation, supported by population growth. Although GDP growth in 2020 fell into negative territory due to the impact of COVID-19, it recovered in 2021 due to steady household consumption expenditure and increases in exports.



Rapid expansion of solar power generation capacity

Source: Australian Energy Update 2021
There is high potential for solar power generation in all regions of Australia. The recent expansion of the market is clear from the trends in solar power generation capacity, and market growth has been particularly remarkable since 2018.



Changes in total generation and renewable generation

Source: Australian Energy Update 2021
Australia's energy mix varies from state to state, with hydro-electricity accounting for nearly 80% of power in some states, while other states are focused on wind and solar power generation. The share of renewables in total electricity generation is on the rise overall.

history of gas-field development, Australia has many spaces that would be suitable for CCS, making it an area with high potential even in global terms. Making CCS profitable has so far been a challenge, but the Australian Government has launched a new Carbon Credit scheme in which tradable Carbon Credits are granted to operators according to the volumes of CO2 they have stored underground with CCS. Once the relevant laws and regulations have been developed, there is also potential for the establishment of a new business in which CO2 generated in Japan could be transported to and stored in Australia.

"To be exported, hydrogen needs to be converted to liquefied hydrogen, ammonia, or methyl cyclohexane (MCH). Japan has considerable technological strengths in this area as well. The Hydrogen Energy Supply Chain (HESC) project, whose partners include a major Australian energy firm and multiple Japanese companies, has attracted a great deal of attention by becoming the world's first large-scale demonstration project to successfully transport liquid hydrogen internationally. MCH can be transported and stored at normal temperature and pressure, which means that existing oil-related infrastructure can be used for its transport and storage. In this way, advanced technologies cultivated from many years of research and development by Japanese companies are attracting the attention of Australian companies."

Critical mineral industry essential for batteries Government providing full support for industry development

Demand for batteries is growing against the backdrop of decarbonization, but the regional maldistribution and oligopolization of supply of critical minerals, such as lithium and nickel, which are essential for battery production, present challenges.

"With its abundant reserves of critical minerals, Australia has already established a certain position in the market, but it has not yet established the processing and refining facilities for supplying refined minerals to an adequate degree. To this end, as well as developing upstream mining for lithium, nickel, and copper, the Australian government intends to nurture midstream and downstream industries, such as ore refining and battery manufacture, for the further expansion of those industries."

Australia's exports of lithium, nickel and copper were valued at AUD12 billion in 2020, with the Australian government aiming to expand this figure to AUD84 billion by 2050. Alongside the development of industries in other critical minerals such as rare earths, this is expected to create 52,000 new jobs. The new administration's flagship AUD15 billion National Reconstruction Fund also focuses on adding higher value to the resources sector.

"Compared with base metals such as iron ore, the markets for individual critical metals are relatively small, and future demand may fluctuate significantly depending on trends in technological development. This makes it difficult for companies to make investment decisions, but Chinese and Korean companies have already started investing in Australia in this area. As this sector has strong support from the Australian government and is one that JBIC has also positioned as a priority area, we really hope that Japanese companies will also consider investing."

Japan and Australia have long enjoyed an excellent relationship and have worked together in many different areas. In addition to the formation of the Australia-Japan-United States Trilateral Infrastructure Partnership in November 2018, there has also been active discussion among the three countries and India (the Quad) in recent years. It could be said that Japanese companies are being given a further boost to encourage the development of business in Australia and the Pacific region.



The use and application of hydrogen energy requires technologies for production, transportation, storage, and utilization. Progress is being made on the development of a large liquefied hydrogen carrier in Japan. (Photo courtesy of Kawasaki Heavy Industries)

JBIC established a new representative office in Australia's economic center Supporting Japanese companies' overseas business ventures



TAKAHASHI Naoki, Chief Representative of JBIC's Representative Office in Sydney, explains: "Japanese companies have a long history of investing in Australia in sectors such as minerals, including major industrial minerals such as iron ore and coal, energy resources, primarily LNG, and in food, particularly beef. Even while companies from other parts of the world were reducing their investment balances due to the pandemic, Japanese companies actually increased their direct investment balances in Australia. For these reasons, Australia views Japanese companies as highly reliable and secure partners. Japanese companies, meanwhile, hold Australia's stable investment environment underpinned by a robust regulatory framework in high regard. Establishing a new representative office in Sydney has made it easier for us to work together with DFAT and EFA. Going forward, we hope to actively promote the formation of collaborative projects between Japan, the United States, and Australia."

Infrastructure projects, particularly local infrastructure projects in Australia, require not only close communication but also an understanding of Australian business practices, such as the need for quick decision-making, in order to be executed successfully. For this reason, it is vital to form relationships with Australian companies that have an established track record in the sector. The main roles of JBIC's Representative Office in Sydney include building relationships with local stakeholders and researching the potential of individual businesses. To achieve the most effective outcomes, the office will collaborate with organizations and institutions that are familiar with local circumstances to deliver beneficial information to Japanese companies.

TAKAHASHI remarks, "In addition to areas such as iron ore and natural gas that have long been and will continue to play an important role, we will also focus on areas that—despite their considerable business potential—we have not engaged in very much to date, such as hydrogen, renewable energies, critical minerals, and social infrastructure, in our efforts to support Japanese companies in new challenges."



Members of Representative Office in Sydney
From left: TAKAHASHI Naoki (Chief Representative), Montana Clapton (researcher), WADA Sachie (administrative staff), TAKAHASHI Kento (Representative)
The team's main missions are to build relationships with local stakeholders and conduct research.

Communication is critical in the infrastructure sector New office provides support that only local representation can offer

In March 2022, JBIC established a representative office in Australia's largest city of Sydney, New South Wales. Through this new office, JBIC will strengthen its financial support for Japanese companies' business activities in Australia, New Zealand, and Pacific island nations. A major factor behind the new office's establishment was JBIC's signing of the Australia-Japan-United States Trilateral Infrastructure Partnership (TIP) with the United States International Development Finance Corporation (USDFC), Australia's Department of Foreign Affairs and Trade (DFAT), and Export Finance Australia (EFA).

In recent years, demand for infrastructure development has been growing in the Pacific and the rest of the Indo-Pacific region, and Australia seeks to promote private-sector investment in the region for the sake of sustainable economic development. However, due to the limited number of Australian companies which are actively investing in overseas infrastructure development projects, Australia has called for participation from Japan and the United States. JBIC is in a position of providing financial support for Japanese companies' overseas business expansion, and the United States is also proactive in its support of infrastructure investment. For these reasons, consensus was quickly reached between these three nations, resulting in the finalization of the TIP in November 2018.

Private sector's technology and wisdom are the keys to resolving mounting global-scale challenges

How to address the global agenda? Possibilities created by multilateral cooperation

The world's economy has grown significantly with the progress of globalization. In order to continue this trend, it will be necessary to find solutions to global-scale challenges, otherwise known as the global agenda.

One easily understood example is action to counter climate change. The climate knows no national borders, and climate issues cannot be resolved by a single country or region alone. In addition to conventional collaborative economic support and assistance to developing countries, the technologies, expert knowledge, and wisdom of private-sector companies will be essential in aiming toward long-term targets such as achieving net zero greenhouse gas emissions by 2050. Moreover, it is only when actions are sustainable as businesses that they will truly become solutions.

In the promotion of private-sector investment, policy-based financial institutions such as JBIC have a major role to play. Just as the challenges faced by different countries differ, different companies have different approaches to investment and face different challenges. With a full understanding of the technologies or investment sentiment of the companies as well as the recognition of the policy agenda each country prioritizes, Policy-based financial institutions are in a better position to work quickly to connect the private sector with solutions to address the global agenda. These kinds of moves to promote investment have become a global trend.

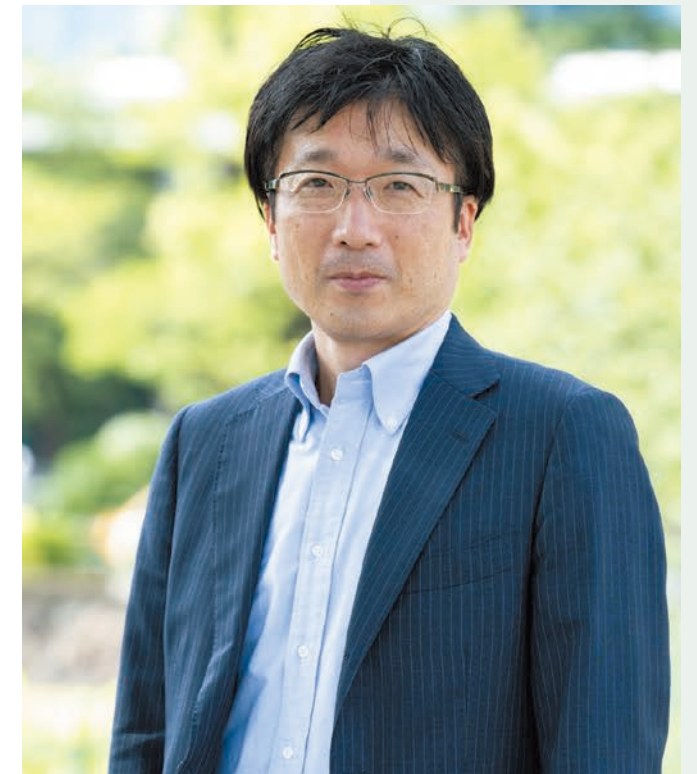
The Australia-Japan-United States Trilateral Infrastructure Partnership (TIP) has been established to address the common challenges in the field of the infrastructure development, particularly in the Indo Pacific region. In addition, cooperation among policy-based financial institutions in the Quad, which comprise Japan, Australia, India, and the United States, has also been strengthened to allow them to address solutions to issues under the concept of a "free and open Indo-Pacific."

In May 2022, ahead of the Quad Leaders' Meeting held in Tokyo, JBIC hosted a roundtable involving Export Finance Australia (EFA), the Australian Infrastructure Financing Facility for the Pacific (AIFFP), Export-Import Bank of India (India Exim Bank), and U.S. International Development Finance Corporation (USDFC) to discuss enhanced collaboration to better connect the Indo-Pacific region.

Japan, the United States, and Australia share a common



Signing of the Memorandum of Understanding on the Australia-Japan-United States Trilateral Infrastructure Partnership (November 2018)



SEKINE Hiroki

Special Advisor for Operation Policy and Strategy, Corporate Planning Group

geographical feature in that they all face the Pacific Ocean. More importantly, these three nations complement each other in various ways. Regarding climate change, for example, Japan has strengths in energy conservation and has developed proprietary technologies in the areas of secondary batteries and hydrogen. Australia, meanwhile, has great potential in terms of clean hydrogen export capacity and has abundant reserves of critical minerals that are indispensable for electric vehicle secondary batteries. Similar to Japan, the United States also has strengths in technological areas, such as semi-conductor chips and other advanced technologies in particular. By combining these respective characteristics of Japan, the United States, and Australia, they can be expected to offer solutions that could not be achieved by one country alone. This would include the combination of various solutions for difficult issues such as climate change action and building an entire value chain as a package from upstream to downstream processes.

India is the fourth member of the Quad alongside these three nations. India's participation as a partner will expand the regions and areas for which solutions can be provided. India has strengths in fields such as medicine and manufacturing, and its market is expected to grow as its population increases. On the other hand, it also faces mounting challenges that are typical of developing countries. How to reduce dependence on fossil fuels to get close to net zero? How to improve the food situation by making agriculture more efficient? India is a microcosm of global issues, and it also has a huge market. For this reason, I believe that resolving India's challenges will be a first step toward resolving the global agenda.

Instead of adapting past success stories to developing countries, we need to identify business opportunities in areas with challenges

Over the years, JBIC has provided financial support for Japanese companies' overseas business expansion in Australia and Pacific island countries. In January 2021, we signed a buyer's credit (export finance) agreement with Belau Submarine Cable Corporation (BSCC), a state-owned public submarine cable corporation of the Republic of Palau. This became the first project under the TIP. As tourism is a major industry for Palau, the establishment of reliable telecommunication infrastructure is essential. This loan has been co-financed with Sumitomo Mitsui Banking Corporation and is intended to provide the funds necessary for BSCC to purchase submarine cable-related equipment from a Japanese company. At the same time, the United States and Australia are also providing financial support related to this infrastructure development. The TIP enables the three countries to bring their own offerings to the table and to support infrastructure development according to what is needed.

Also, in March 2021, JBIC signed a shareholders' agreement for joint investment with the Chugoku Electric Power Company in Energy Fiji Limited (EFL), which is a vertically integrated electric utility that generates, transmits, and distributes electricity throughout Fiji. This is a medium- to long-term initiative that has the future in mind, and by assisting the provision of expert knowledge from Japan, JBIC intends to help Fiji to realize carbon net zero. JBIC does not believe that its role ends with the joint investment of funds with the Japanese company. Rather, JBIC is aware that its key role is to be actively involved in Fiji's transition to renewable energy going forward. Through cooperation with Australia and the United States, we plan to promote this vision steadily by bringing the tools and expert knowledge of each country together.

I mentioned climate change action as an example of such cooperation, but the world is facing many different challenges. I believe that if Japanese companies were to seek out business opportunities even first of a kind project in countries and regions facing such challenges, instead of trying to extend their successful businesses in Japan to other countries, it will present them with many new opportunities. What is important is that they see solutions to challenges as opportunities. Single companies selling their own technologies will merely lead to price competition, so it is important that multiple companies and organizations join forces to propose solutions. The TIP and the Quad are unprecedented tools for such collaboration. To support Japanese companies in such endeavors, in addition to conventional financial tools, JBIC will strive to provide functions that will connect them to the strengths of companies in the individual countries.

Related press releases

JBIC signs MOU with Overseas Private Investment Corporation of the U.S., Department of Foreign Affairs and Trade, and Export Finance and Insurance Corporation of Australia
<https://www.jbic.go.jp/en/information/press/press-2018/1112-011585.html>

Equity Participation in Energy Fiji Limited
<https://www.jbic.go.jp/en/information/press/press-2020/0326-014423.html>

Untied Loan to Export-Import Bank of India
<https://www.jbic.go.jp/en/information/press/press-2022/0523-016310.html>



Representatives of the Australia-Japan-United States Trilateral Infrastructure Partnership meet with the Communist Party of Vietnam's Central Economic Commission to discuss directions for problem-solving in Vietnam under the TIP. (October 2020, January 2022)



Signing of the buyer's credit (export finance) agreement with Belau Submarine Cable Corporation of the Republic of Palau (January 2021)



In joint investment with the Chugoku Electric Power Company, shares in Energy Fiji Limited were acquired from the Fijian government. (Shareholders' agreement signed in March 2021)

What Australia Expects of Japanese Companies and JBIC

Cooperation between Japan and Australia Promotes Decarbonization and the Resilience of Supply Chains

Strong Support for Small and Medium-sized Enterprises in Addition to Strategically Important Projects

What is the role of Export Finance Australia (EFA)?

Export Finance Australia (EFA) is Australia's export credit agency. We have been supporting Australian exports for 65 years. In this time, we have undergone some changes as the export credit landscape has changed, including exiting the short-term credit insurance and establishing dedicated small and medium-sized enterprise (SME) business teams and products.

However, our most significant transformation has occurred over the last 5 years. During this time, we provided our largest amount of support to date for SME businesses. We have been entrusted by the Australian Government with strategically important mandates in critical minerals, infrastructure development in the Pacific and broader Indo-Pacific region and in defence. We now also have an equity capability.

It seems that the governments of Japan and Australia have been deepening the extent of economic cooperation undertaken between the two nations when it comes to carbon neutrality and energy.

At the Quad Leaders' Meeting held in May of 2022, Australian Prime Minister Anthony Albanese announced that by 2030, Australia would be reducing its greenhouse gas emissions by 43%. This demonstrates that our countries have immense potential to cooperate in moving towards carbon neutrality. Achieving carbon neutrality will require major adjustments. We will need to collaborate and share resources and expertise. Australian and Japanese businesses have been working together for decades. For example, EFA has supported an Australian business, Atlas Renewables, to export wood pellets to Japan to help the power sector meet its emissions targets. Japanese cooperation, through important investments is helping to develop Australia's hydrogen sector which will be important to a low carbon future.

Are there any other areas garnering your attention?

Australian exporters have traditionally had great strengths in areas such as agriculture and high value manufacturing, for example aerospace components. We are also seeing Australian businesses in fast-growing sectors such as cyber security, space, and medical technology. Australia has immense resources to power emerging technologies that are important globally. Sectors such as renewable energy and critical minerals are growing extremely fast in Australia.



Swati Dave Managing Director and CEO, Export Finance Australia (at time of writing)*
*Export Finance Australia's new Managing Director and CEO, Mr John Hopkins, commenced on 1 August 2022.

Appreciation for LNG Investments Made by Japanese Companies Anticipation of Support for Critical Minerals and Hydrogen

What are you expecting of Japanese companies?

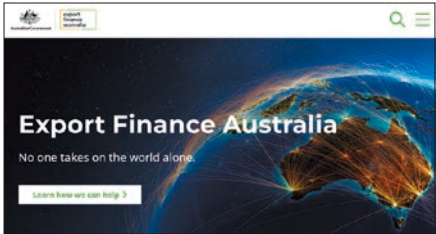
Australia we have a strong appreciation of the care with which Japanese companies make their partnership and investment decisions. Japanese companies were vital to providing long term investments to drive the growth of our LNG sector decades ago, an industry which has proved important to Australia's economic success. We see wonderful opportunities for Japan to bring this same approach to assist in growing sectors such as critical minerals and hydrogen. Regionally, we also want to work more with Japanese companies. Japan has deep links throughout our region, and a track record of helping countries to develop. I see immense potential for EFA to work with Japan to pursue joint financing opportunities in areas such as renewable energy and encourage Australian companies to lend their expertise abroad.

What are the roles and responsibilities of government agencies when it comes to global issues such as climate change?

To address issues such as decarbonization and supply chain resilience, EFA and JBIC need to use our track records of helping new sectors to develop and anticipating future needs. In addition to direct support, we also play a role in facilitating cooperation. I believe that EFA and JBIC can play significant roles by striving to encourage business cooperation and alignment for the purpose of achieving the targets of the governments of Japan and Australia.



Swati Dave, Managing Director and CEO of EFA (at time of writing), and HAYASHI Nobumitsu, Governor of JBIC, at a meeting in Sydney.



EFA's website
<https://www.exportfinance.gov.au/>

Production of frozen vegetables and processed foods in Vietnam

Supporting the world’s food supply with a “Made by Japan” model

Holus Co., Ltd.

Based in Vietnam, Holus produces, imports, and sells frozen vegetables and processed foods with carefully selected ingredients. The company aims to become a supporter of the world’s food supply with a “Made by Japan” model that uses Japanese technology and expertise.

Insistence on safe, reliable produce

Realizing “Japan-quality agriculture” through farm business coaching

Holus plays a role in Japan’s food supply through the production, import, and sale of frozen vegetables and processed foods. Company President ABE Hideaki’s aim is to establish sustainable agriculture through business. “Although food is an important foundation that supports our daily lives, many farmers and producers are not being adequately compensated for their role in its supply. We are progressing our business with a strong ambition to improve the status of farmers and producers,” said Mr. ABE.

Holus handles many different vegetables, including eggplant, okra, paprika, sweet potato, and zucchini. It sells

foods that have been pre-processed, such as fried, grilled, and steamed, to Japanese business operators, including food processing companies, foodservice chains, and supermarkets. Production of these processed foods takes place in Vietnam. Holus procures agricultural produce from more than 2,000 partner farms and processes them at its factory in Vietnam.

After working at a Japanese company that handled food products, Mr. ABE relocated to Vietnam about 20 years ago. In the hope of producing food that he would feel confident feeding to children, Mr. ABE established a company jointly with a local company, and that joint venture engages in shrimp farming, frozen vegetables, and processed foods. Since becoming a listed company in Vietnam in 2008, it has grown to become one of Vietnam’s largest companies dealing in agricultural products. However, wanting to put more effort into social contribution and improving the status of producers, Mr. ABE established Holus in 2013 to pursue his personal philosophy.

Holus focuses on vegetable production in the belief that ingredients are the decisive factor in how good food products taste. Operating company-owned farms in both Japan and Vietnam, Holus establishes farming methods and techniques for growing vegetables that are safe and reliable. Japanese farmers who endorse Mr. ABE’s ambitions have moved to Vietnam to instruct local partner farmers on farming techniques and knowhow. The aim is the realization of “Japan-quality agriculture” in Vietnam.

A typical example of these efforts is the grafting of eggplant plants. In general, Japanese farmers use splice grafting to graft eggplant plants to prevent soil-borne diseases and produce delicious eggplants. Holus has introduced this method to its partner farms in Vietnam.

It has also implemented farming methods that use as few chemicals as possible. Farms in Vietnam have very acidic soil, making it difficult for the soil to retain fertilizers. To improve the soil, Holus experimented with manure from livestock such as cows and pigs and with biofertilizers made by using natural bacteria to ferment coconuts, shrimp scraps, etc. They also planted marigolds and spread chili peppers around the crops as natural insect repellents. These and other ingenious methods helped to reduce the use of agro-chemicals to about a third of previous levels.

Japanese-style farming methods and techniques have improved the quality of the produce grown by Holus’s partner farms and helped them to achieve stable yields. Mr. ABE

pointed out, “In Vietnam, factory workers earn about JPY30,000 to 35,000 a month. Holus’s partner farmers are achieving income of about twice that amount. Only about 20% of the children of farmers attended school 20 years ago, but that rate is now 100% for the children of our partner farmers.” The improvement of the status of farmers and producers that is Holus’s goal is steadily producing results.

Japan-quality produce is processed at a local partner factory, where Japanese staff are permanently stationed, under meticulously controlled time and temperature conditions. “At the beginning, due to difference in customs, some local staff were bewildered by the hygiene measures and other policies that we enforced, but through extensive worker education, they now share our awareness of the importance of such measures,” said Mr. ABE proudly.

Innovative processing techniques to use produce without wastage

Final products made at company-owned factory

The partner factory has honed its processing techniques to use up all of the ingredients without waste. In many cases, strict specifications, such as size, shape, and color, apply to products destined for the Japanese market. The aim is to eliminate waste by improving technical capabilities and implementing flexible approaches.

Mr. ABE explains, “For example, the specified standard for sweet potatoes used for baked potato is ‘160-200g in size, skin not too red, and a root depth of no more than 1 mm.’ Only about 30% of the produce supplied to the factory meet these standards. We strive to use up all of the farm produce supplied through various measures, such as cutting any potatoes that are too large, peeling the skin of those that are the wrong color, and frying them in oil.” These efforts have helped to improve farm productivity.

Demand in the foodservice industry has dropped dramatically since 2020 due to the pandemic. In addition, strict lockdowns in Vietnam restricted the operations of the partner factories. Holus was also affected in various ways, but, as Mr. ABE describes, “We transported unused farm produce and other products to towns that were in lockdown and donated them to the local people, as I believed that this was precisely the time when we needed to think of others.” Throughout the pandemic, Mr. ABE maintained the intentions toward social contribution and the producer-oriented approach that he has held since Holus was first founded.

Mr. ABE established AGRIEX CO., LTD in Vietnam in 2021 and opened a company-owned factory near the production region in 2022. “This is our flagship factory that will demonstrate our resolve to continue to make good products in Vietnam even in the face of the adversity brought by the pandemic,” Mr. ABE explained. Various initiatives have been taken in this new factory, such as emphasizing freshness more than ever, shortening the time from harvest to processing, and further improving processing technologies with the introduction of cutting-edge facilities. In addition to frozen vegetables made with carefully selected ingredients, AGRIEX has embarked on the production of finished products, such as pre-fried tempura, and sweet potato that can be eaten immediately after thawing.

When Mr. ABE decided to build the new factory, he was initially concerned about whether they would be able to recruit enough workers, given the labor shortage in Vietnam. Ultimately, however, because the name of AGRIEX was well known due to its volunteer activities, he received a flood of applicants. “We plan to provide healthy, delicious lunches at the factory’s canteen under the guidance of a registered



Completion ceremony of AGRIEX factory



Established a local subsidiary, AGRIEX, in Vietnam in 2020



Sweet potato snack and grilled eggplant produced by AGRIEX

dietitian from Japan. In the future, I hope to make this a place where employees can come to enjoy lunch with their families even on their days off,” says Mr. ABE. He aims to make it a factory with deep roots in the local community and that is loved by local residents.

JBIC, the Bank of Fukuoka, and the Shoko Chukin Bank extended a syndicated loan of JPY180 million in total for the construction of AGRIEX’s factory. “We’ve been promoting business based in Vietnam. Bank of Fukuoka, our bank of account, introduced us to JBIC, saying that JBIC would support us in our overseas business development. I am very grateful for JBIC’s support in backing our significant decision to build our own factory. I hope that JBIC will continue to provide us with speedy and timely support in the future.”

From this new factory, Holus will strive to expand its business with the intention of supporting part of the food supply in Japan, Asia, and even the world. Holus currently sells its products to Japan and Vietnam, as well as some products to Taiwan. It has also received inquiries from Singapore, Malaysia, and Thailand and intends to pursue exports to those countries. Holus supports the supply of food to the world with a “Made by Japan” model.

Holus Co., Ltd.

Head Office	3-4-16 Ebisu Minami, Shibuya-ku, Tokyo
URL	https://holus.co.jp/
Established	April 2013
Capital	JPY11 million
Sales Volume	JPY1,600 million
President and CEO	ABE Hideaki
Employees	15
Business description	Production and sales of processed food, planning, manufacturing, import, and sales of food products, agribusiness in Japan and overseas



ABE Hideaki
President and CEO

Contributing to semiconductor supply chain resilience through M&A support



Director, Division 1,
Corporate Finance Department

KATO Genki

I was involved in a syndicated loan project to support an overseas M&A by Renesas Electronics Corporation. The loan provided part of the funds necessary for Renesas to acquire a British company, Dialog Semiconductor Plc, a provider of analog semiconductors with expertise in connectivity technologies such as Bluetooth.

As many readers would know, Renesas is a leading Japanese manufacturer of

semiconductor. Despite temporary hardships, in part due to 2011's Great East Japan Earthquake, Renesas has worked hard to strengthen its competitiveness through active overseas M&As and other means. The company's strengths lie in the manufacture and sales of products such as microcontrollers, analogue semiconductors, and power semiconductors and in the provision of a wide range of solutions. Dialog specializes in "analogue semiconductors," which control analogue signals such as light, temperature, sound, and vibration and convert them to digital signals. They are widely used in automobiles and industrial equipment and are indispensable for practical applications of IoT. Small lot production of a large variety of products is a feature of these kinds of products. Because they require meticulous fine-tuning of technologies and know-how to suit the customer's required performance, companies with many years of experience in analogue semiconductors have a competitive advantage in this field.

For Renesas, this acquisition forms part of an M&A strategy that it has been pursuing since 2017 to strengthen its analogue semiconductor business. It will enable Renesas to enhance its product portfolio by adding more engineers and other staff and to elevate its ability to offer products and solutions for the fast-growing IoT, industrial, and automotive markets.

The semiconductor is a core technology that supports not just single products, but Japan's overall industrial power. For this reason, it could be described as the "staple food" of Japan's manufacturing industries. Not only will this financing project provide financial support to the Japanese company's overseas expansion,

but it will also contribute toward the strengthening of the manufacturing base of domestic semiconductor manufacturers, a goal declared by the Government of Japan in its "Strategy for Semiconductors and the Digital Industry." Building the resilience of supply chains of key commodities, including semiconductors, is a major theme of Japan-U.S. cooperation. The "Strategy for Semiconductors and the Digital Industry" also states that so-called "legacy semiconductors," such as analogue semiconductors, have a role to fulfill in supporting the global supply chain. From this viewpoint, we believe that strengthening the manufacturing foundations of Renesas, which produces large volumes of legacy semiconductors, will also contribute toward strengthening Japan-U.S. cooperation.

JBIC, as a policy-based financial institution of Japan, needed to accurately identify this kind of political significance of the project and to confirm the risks of extending a long-term loan, which involved a large sum of money, before making a decision on the loan. We held many discussions with a wide range of stakeholders from both the public and private sectors, including Renesas's executives, other co-financing banks, and Japanese government officials, and we also built up consensus within JBIC. Ultimately succeeding in bringing the project together into a satisfactory form through these efforts has been an invaluable experience for me. Going forward, through the provision of long-term loans required for strategic M&As like this project, I hope to continue to support the business expansion and new business development of Japanese companies and contribute toward supply chain resilience for key products such as semiconductors.

Opening up the future of hydrogen through investment in overseas fund

I was in charge of JBIC's equity participation in the Clean H2 Infra Fund S.L.P., which invests in clean hydrogen-related projects around the world.

Today, the use of "hydrogen" is drawing attention in the context of the broader global trend of decarbonization. Fuel cells for automobiles and other machinery is one of the common use of hydrogen. This is because, when electricity and combustion heat that are generated from hydrogen combined with oxygen, only water is vented, and there are no carbon dioxide emissions. Also, hydrogen has the potential to contribute toward decarbonization in a wide range of industries. For example, hydrogen is being used on a trial basis as an alternative fuel to power the engines of ships and aircrafts. Also, the use of hydrogen in the iron ore reduction process, which currently generates CO2 emissions, will realize decarbonization of the iron manufacturing process. In these ways, it is believed that the use of clean hydrogen will make it possible to achieve decarbonization in a wide variety of industries previously considered difficult to reduce CO2 emissions.

On the other hand, there are many hurdles to be overcome at technology and cost to realize the social implementation of hydrogen. For example, upstream green hydrogen production technologies do not come into wide use in upstream processes and establishing the downstream infrastructure is needed for hydrogen supply. A massive investment of JPY50 trillion worldwide will be required by 2030 to overcome these challenges and establish the hydrogen business. However, the public spends that governments of individual countries are planning to inject would not enough to cover that need. Under these circumstances, the Clean H2 Infra Fund was established, mainly by Western companies, with the aim of investing in selected and promising hydrogen-related businesses globally, covering upstream to downstream in

the hydrogen value chain, by mobilizing private capital from around the world.

In our Medium-term Business Plan, JBIC has set an action plan for contributing to the realization of a decarbonized society by financing projects for promoting production, transportation, and utilization of hydrogen, and we had been seeking opportunities of further involvement in this field. Around that time, we became aware of that the Clean H2 Infra Fund was being established, and we began deliberating an equity participation in the fund. In its "Green Growth Strategy Through Achieving Carbon Neutrality in 2050," the Government of Japan is calling for international cooperation to promote the social implementation of hydrogen. JBIC's equity participation in this fund will contribute toward the promotion of this trend. Also, it is an investment in the sustainable fund* for clean hydrogen projects. For this reason, this investment has a positive impact from the perspective of the protection of the global environment. Having said that, the hydrogen business is an advanced field with many challenges, as mentioned above, and its track record of successful projects is still quite limited. Consequently, we needed to examine its potential closely from a variety of angles. To this end, we conducted research and analysis of the hydrogen market based on the hydrogen policies of many countries and International Energy Agency (IEA) forecasts. We also held numerous discussions with HY24 SAS, the French fund manager of the Clean H2 Infra Fund, about the fund's investment strategies to verify the fund's potential. We had a limited timeframe of about four (4) months to complete our deliberations with the aim of the early realization of social implementation of hydrogen decarbonized society. It was therefore no easy task to build consensus with our stakeholders, but finally our team completed this equity participation.

The Clean H2 Infra Fund is a unique fund in which many enterprises related to the hydrogen



Deputy Director, Division 4,
Equity Investment Department (at time of interview)

TSUCHIYA Tohori

field, including industrial gas and fuel cells, have invested with earnest intention to establish a hydrogen market. Although negotiating online with HY24 SAS in France was a challenge, we shared a strong passion to unlock strategic and large-scale projects under development to accelerate the scaling up of hydrogen markets for the realization of decarbonized society, so they finally welcomed us as their only Japanese anchor investor. Building a trusting relationship in such a short period of time with our counterparts in France and sharing the same passion with them was a valuable experience and left a deep impression on me. I will definitely make use of this experience in my next challenges in new finance fields.

* The investment policy of the fund is to invest in hydrogen-related projects that conform to "climate change mitigation," which is one of the environmental objectives of the EU taxonomy regulation. In accordance with the European Union's Sustainable Finance Disclosure Regulation (SFDR), the fund will make sustainable investment as its objective and will measure how far its objective is attained based on quantitative benchmarks.

Loan for Acquisition of British Company Dialog Semiconductor Plc by Renesas Electronics Corporation

In December 2021, JBIC signed a loan agreement for up to JPY144 billion (JBIC's portion) with Renesas Electronics Corporation. This loan is intended to finance part of the funds necessary for Renesas to acquire British company Dialog Semiconductor Plc. By acquiring Dialog, Renesas aims to provide stronger and more comprehensive solutions for the fast-growing IoT, industrial, and automotive markets. This loan supports overseas business deployment by the Japanese company by providing the necessary long-term funds for overseas M&A. In doing so, it will back up the company's overseas expansion of its existing businesses as well as new business deployment, and contribute toward maintaining and improving the international competitiveness of Japanese industry.



dialog
SEMICONDUCTOR A Renesas Company

Semiconductors handled by Renesas
(Photo courtesy of Renesas Electronics Corporation)



<https://www.jbic.go.jp/en/information/press/press-2021/1223-015680.html>

Equity Participation in Clean H2 Infra Fund managed by Hy24 Globally Investing in Clean Hydrogen-Related Projects under GREEN Operations

In March, JBIC signed an agreement for equity participation in the Clean H2 Infra Fund S.L.P. of France. This fund is targeting EUR1,500 million, toward which JBIC plans to invest up to EUR100 million. The fund will invest in hydrogen-related projects around the world, such as green hydrogen production and refueling station projects. JBIC's participation in the fund is based on its Global action for Reconciling Economic growth and ENvironmental preservation (GREEN). JBIC's equity participation is expected to contribute toward reducing carbon emissions through the investments by the fund.



Team members visiting a hydrogen refueling station in Germany, one of the fund's investees.



<https://www.jbic.go.jp/en/information/press/press-2021/0307-015946.html>

JBIC exchanges views with development finance institutions and agencies of Australia, India, Japan, and the USA ahead of Quad Leaders' Meeting

Discussing enhanced collaboration among the four nations to better connect the Indo-Pacific region

In May 2022, JBIC hosted a roundtable of development finance institutions and agencies from Australia, India, Japan, and the USA. The heads of Export Finance Australia (EFA), the Australian Infrastructure Financing Facility for the Pacific (AIFFP), India Export-Import Bank (India Exim Bank), JBIC, and U.S. International Development Finance Corporation (USDFC) gathered in person and virtually to discuss enhanced collaboration to better connect the Indo-Pacific region, ahead of the Quad Leaders' Meeting held in Tokyo.

The roundtable focused on four areas that the leaders of these organizations see as essential priority areas for the Indo-Pacific region. They are (1) climate change, (2) secure and reliable telecommunication networks, (3) sustainable supply of energy, food and medical security, and (4) global supply chain resilience. The participants exchanged candid views on current initiatives in each area and the possibility of further collaboration among the development finance institutions and agencies of the four countries.

Specifically, they shared their recognition of the importance of (1) green transition technology including

clean hydrogen, (2) telecommunication network projects including 5G rollout, and (3) (4) diverse sources of critical goods and related supply chain. They agreed to make concerted efforts to promote initiatives in these areas.

As a Japanese policy-based financial institution, JBIC will continue to work closely with the development finance institutions and agencies of Australia, India, Japan, and the USA to further strengthen our support for projects in a variety of areas, including (1) to (4) above.



MAEDA Tadashi, Governor (then) of JBIC exchanging views at the roundtable



The heads of the finance institutions and agencies of Australia, India, Japan, and the USA gathered in person and virtually.

Visit the address below for the Joint Media Release by EFA, AIFFP, India Exim Bank, JBIC, and USDFC
https://www.jbic.go.jp/en/information/topics/topics-2022/pdf/0608-016347_1.pdf

