

JBIC Today

Japan Bank for International Cooperation

SPECIAL
ISSUE

Organizational Realignment

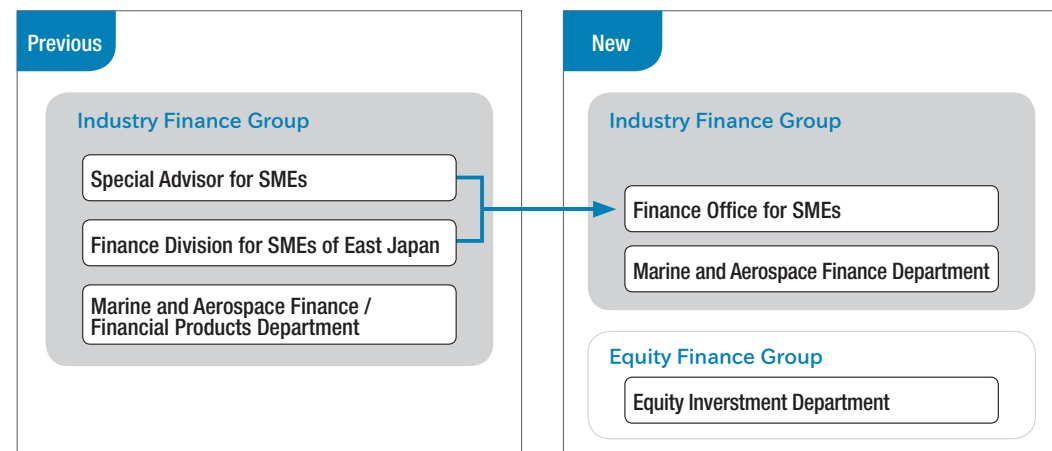
1. Establishment of Equity Finance Group and Equity Investment Department, as well as renaming of Marine and Aerospace Finance/Financial Products Department

On October 1, 2016, JBIC newly established the Equity Finance Group and the Equity Investment Department, and renamed the Marine and Aerospace Finance/Financial Products Department to Marine and Aerospace Finance Department. The objective of the establishment of the Equity Finance Group and Equity Investment Department is to strengthen its institutional capacity of equity investments in line with various government's initiatives. The Marine and Aerospace Finance/Financial Products Department was renamed upon the transfer of fund investment operations to the Equity Investment Department.

2. Realignment to Strengthen Support for Mid-Tier Enterprises and SMEs

On October 1, 2016, JBIC set up the Finance Office for SMEs. On the basis of the "Economic Measures for Realizing Investment for the Future" (decided by the cabinet on August 2, 2016), the consultation and loan operations, the former of which had been conducted under the supervision of the Special Advisor for SMEs and the latter of which had been handled by the Finance Division for SMEs of East Japan, are integrated into the Finance Office for SMEs. This is intended to strengthen our support for Japanese mid-tier enterprises and small and medium-sized enterprises (SMEs) to assist their overseas business.

Meanwhile, West Japan Office continues to be in charge of the support for mid-tier enterprises and SMEs located in western Japan as before.



* The above chart describes only where the changes are made.

Rising Global Demand for Infrastructure Development – Challenges and Contributions of Japan

Interview

Turning Infrastructure Demand into New Business Opportunities

Tadashi Maeda CEO, Executive Managing Director, JBIC

Our Infrastructure Projects Overseas

- Intercity Express Railway Project in UK
- World's First South Atlantic Submarine Cable System

Partners' Voice

Embassy of the Kingdom of Morocco
Asian Development Bank



The global infrastructure market is projected to continue growing at a significant rate, backed by such factors as the economic growth of emerging countries. Countries across the world are fiercely gearing up to enter the market, fueling the mega-competition for infrastructure businesses amongst nations.

The Japanese government is also actively supporting the export of infrastructure systems, as a strategy to capture the economic growth of emerging countries. In respect of Asia, which shows particularly strong demand, the government announced in May 2015 the Partnership for Quality Infrastructure, which provides approximately 110 billion US dollars for quality infrastructure investments over the next five years in cooperation with the Asian

Rising Global Demand for Infrastructure Development

– Challenges and Contributions of Japan

Development Bank (ADB). In light of these initiatives, the amendment of the Japan Bank for International Cooperation Act was enacted in May 2016 with the aim to strengthen its functions, allowing JBIC to take further risks related to overseas infrastructure businesses.

Furthermore, subsequently at the G7 Ise-Shima Summit, the Japanese government announced the Expanded Partnership for Quality Infrastructure, which included an aim to enhance the supply of risk money for infrastructure projects worldwide. It set out a target to supply funds of approximately 200 billion US dollars over the next five years for infrastructure projects across the world, widening its scope from Asia to the whole world, as well as broadening the field of infrastructure to include natural resources and energy to its support.

JBIC takes part in said initiative by supporting a wide array of infrastructure development, including power, railway, and water. Utilizing its experiences and knowhow attained over the years, as well as relations with foreign governments and governmental agencies, JBIC will continue to actively support the overseas infrastructure projects promoted by Japanese companies. Through such efforts, JBIC is moving forward to translate the Japanese government's policies into action and contribute to the stability and development of the global and Japanese economies.



Interview

Turning Infrastructure Demand into New Business Opportunities

Tadashi Maeda

CEO, Executive Managing Director, JBIC



Growing Demand for Infrastructure vs. Shortage of Bankable Projects

— Please explain the trend of global demand for infrastructure.

Global demand for infrastructure continues on its course of growth. In addition to new demand seen mainly in emerging market countries, there is an increasing demand for renovation in developed countries, as well as rapidly growing infrastructure development projects which enhance regional connectivity, such as those in the Mekong Delta connecting roads, railway and ports between Vietnam, Cambodia, Thailand, and Myanmar. The world is experiencing such growth of demand that outstrips past estimates.

Asia has formerly been the center of infrastructure demand, but with the slowdown of the Chinese economy foreseen to be a long-term phenomenon, it is becoming difficult to hope for the same explosive demand seen in the

past. It can be said that demand will spread throughout the world given the increasing investments for renovation in developed countries and the anticipated steady economic growth in Africa.

— Is the current supply of funds meeting such worldwide expansion of demand?

The fund supply continues to see a surplus backed by global monetary easing, but despite the liquidity, the funds are not reaching the projects. That is, the formation of bankable projects is not catching up with demand.

This was caused by tightened financial regulations (Basel III), restricting excessive risk taking and placing quantitative liquidity requirements on international transactions. This has made it difficult for the supply side to put full commitment into infrastructure projects. Another factor is that it has been less feasible for the governments of developed countries to in-

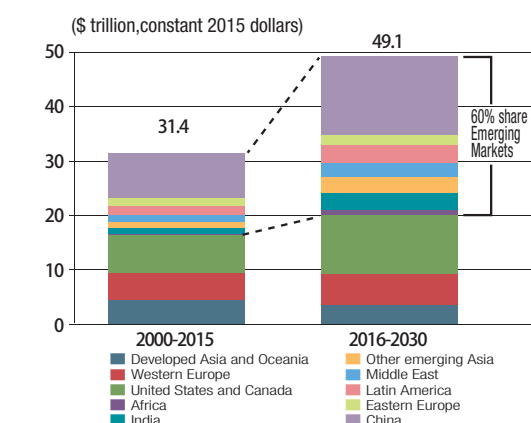
crease the supply of funds while they tend to face structural budget deficits. Furthermore, we need to keep our eyes on the US policy interest rates, as their change may further increase the capital inflows from Japan and Europe into the US which are already active, increasing the gap between supply and demand for infrastructure funds.

Japan's Strength Lies in High Quality, while Corporate Alliances Need Improvement

— Please tell us about the strengths and challenges of Japanese companies, along with their past infrastructure achievements.

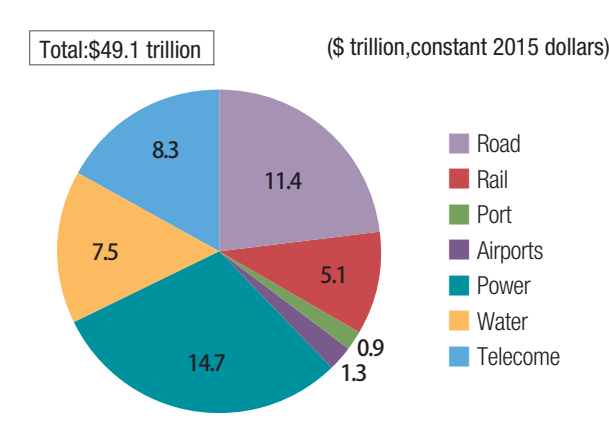
The Japanese government has set the target to reach approximately 30 trillion Japanese yen by 2020 for infrastructure orders, and promoting initiatives actively under the infrastructure systems export strategy. We have seen steady

■ World's Infrastructure Investment Forecast



Source: McKinsey Global Institute "Bridging Global Infrastructure Gaps June 2016"

■ World's Infrastructure Investment by sector in 2016-30



Source: McKinsey Global Institute "Bridging Global Infrastructure Gaps June 2016"



Supplying More Risk Money and Engaging from a Project's Initial Stage to Promote Export of Quality Infrastructure

growth from about 10 trillion Japanese yen in 2010 to 16 trillion in 2013, then to 19 trillion in 2014.

The biggest strength of Japanese companies producing such strong results lies in high-quality infrastructure facilities. This level of quality swells up the initial investment costs, but infrastructure facilities need maintenance given that they are used for the long term. Regular maintenance for power stations required the temporary suspension of operations in the past, but modern Japanese technologies allow maintenance to be done without suspending operations, which has the advantage of reducing the maintenance cost while maintaining the plant operation rate.

It has been pointed out that, although the quality is high, Japanese products tend to be expensive, and each of the products is indeed more expensive compared to those made by China and Korea. However, even with cheap initial costs, it will cost more in the end if the products easily break down. In other words, Japanese products have advantages also in terms of life-cycle costs.

Meanwhile, Japan faces the challenge of collaboration between companies. Japanese companies are not always experienced in collaborating amongst themselves as they had only been competing mainly in the domestic market until recently. Collaboration between companies, regardless of country and even between different industries, is vital for the export of infrastructure systems overseas. It is crucial for the operation of infrastructure development as businesses to form alliances among companies which each have their own strengths and knowhow, and to establish the best project operating framework encompassing a complete workflow from infrastructure design and construction to operation and maintenance, as well as fund procurement.

Engaging in Projects from the Initial Stage, and Supporting with Local-Currency Loans

— What support has JBIC provided for Japanese companies' infrastructure export?

The role of JBIC in the export of infrastructure systems is not only to provide official funding support, but to strengthen the final competitiveness of projects by being actively involved in project formation from the initial stage. By utilizing close relationships built with foreign governments over many years and its experiences of negotiations with key players overseas, JBIC has been putting effort into providing intellectual support to project operators and host countries from the initial stage, including advice and capacity building.

In the past, JBIC used to be consulted by project operators in the final stage of project formation, but as a result of our efforts, we are receiving more consultations at the initial stage. JBIC holds high-level policy dialogues periodically with host countries, such as Indonesia, Mexico, Vietnam, Turkey, and India, committing to prepare the environment for forming bankable projects and to maintain relationships.

Furthermore, as a measure to support securing the feasibility of infrastructure projects whose payback

periods are long and whose revenues will be in local currencies, JBIC provides loans in local currencies in order to mitigate currency risks related to foreign currency borrowing by Japanese companies (the project operators) and to support steady long-term operation.

Further Support for Infrastructure Export by Enhancing Institutional Capacity for Risk Money Supply

— What new initiatives has JBIC embarked on to enhance the support for infrastructure export?

JBIC's functions have been enhanced by the amendment of the Japan Bank for International Cooperation Act (JBIC Act) enacted in May 2016, enabling JBIC to give even stronger support for the overseas infrastructure businesses of Japanese companies, in particular, the Special Operation. This was set up on October 1st, 2016 for Japanese companies to win infrastructure business orders. This will enable JBIC to provide risk money even for projects which are expected to generate enough revenues but entail risks, by exempting the requirement to ensure certainty of repayment for each project while maintaining the principle of securing sufficient revenue to cover expenses as a whole account for the Special Operation.

JBIC will also strengthen its equity participation operations in the future although this is not the result of the amendment of the JBIC Act. We have made equity investments in the past, but they have been limited to "mezzanine" which includes preferred stocks or subordinated loans. JBIC will be fully engaged in investments for foreign entities together with Japanese companies, as part of the aim to increase the supply of funding for projects with relatively high risk profiles, which the Japanese government states in the Partnership for Quality Infrastructure. JBIC will also engage in more advanced risk management from now onwards, on the basis of our project formation skills attained over time and methods and knowhow of risk management.

As many Japanese manufacturers relocate their production bases outside of Japan, the support for social infrastructure development in developing countries has significant advantages for Japanese companies which have already started operating in those countries. JBIC will put more efforts than ever before in infrastructure development in order to turn growing demand into business opportunities for Japanese companies, while contributing to the social and economic development of host countries.

JBIC's Case Example

PPP Promotion in the Environmental Sector: JBIC Holds Policy Dialogue with the Ministry of Planning and Investment of Vietnam in August 2016

JBIC has regularly held similar dialogues since an agreement was signed between JBIC and the Ministry of Planning and Investment (MPI) in March 2013, setting up a framework to hold specific discussions on a system for facilitating PPP activities in Vietnam. The theme of this 6th working-level meeting was the promotion of PPP in the environmental sector, including renewable energy.

Vietnam has been developing its policy related to reducing climate change, in order to promote the use of renewable energy, such as solar and wind, in the power sector in Vietnam. On the basis of this effort, JBIC presented, in addition to its activities in environmental preservation, the respective roles of the host country government, project operator, and financial institutions in the project formation stage. Meanwhile, MPI presented its efforts in developing a PPP-related policy, as well as renewable energy projects in the country, and indicated their expectation for JBIC's future cooperation in forming PPP projects. The presentations were followed by a number of questions from the participants, resulting in an active Q&A session.



Presentation by MPI of Vietnam

Dialogues with host countries to form feasible projects

Through periodic dialogues and discussions with foreign governments, JBIC commits to building mutually trusting relationships, developing a sound business environment support for Japanese companies, as well as resolving various issues.



Vietnam
Policy dialogue for PPP project formation and promotion with the Ministry of Planning and Investment of Vietnam (held in August 2016)
(N.B.: See JBIC's Case Example on P5)



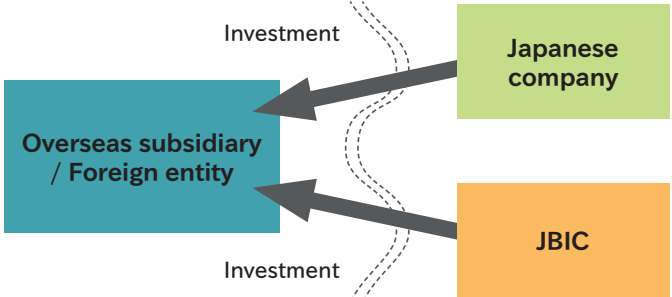
Indonesia
Financial policy dialogue with Indonesia's Ministry of Finance (held in April 2016)



Mexico
The third annual meeting for policy dialogue with the Mexican government (held in December 2013)

JBIC's investment facility

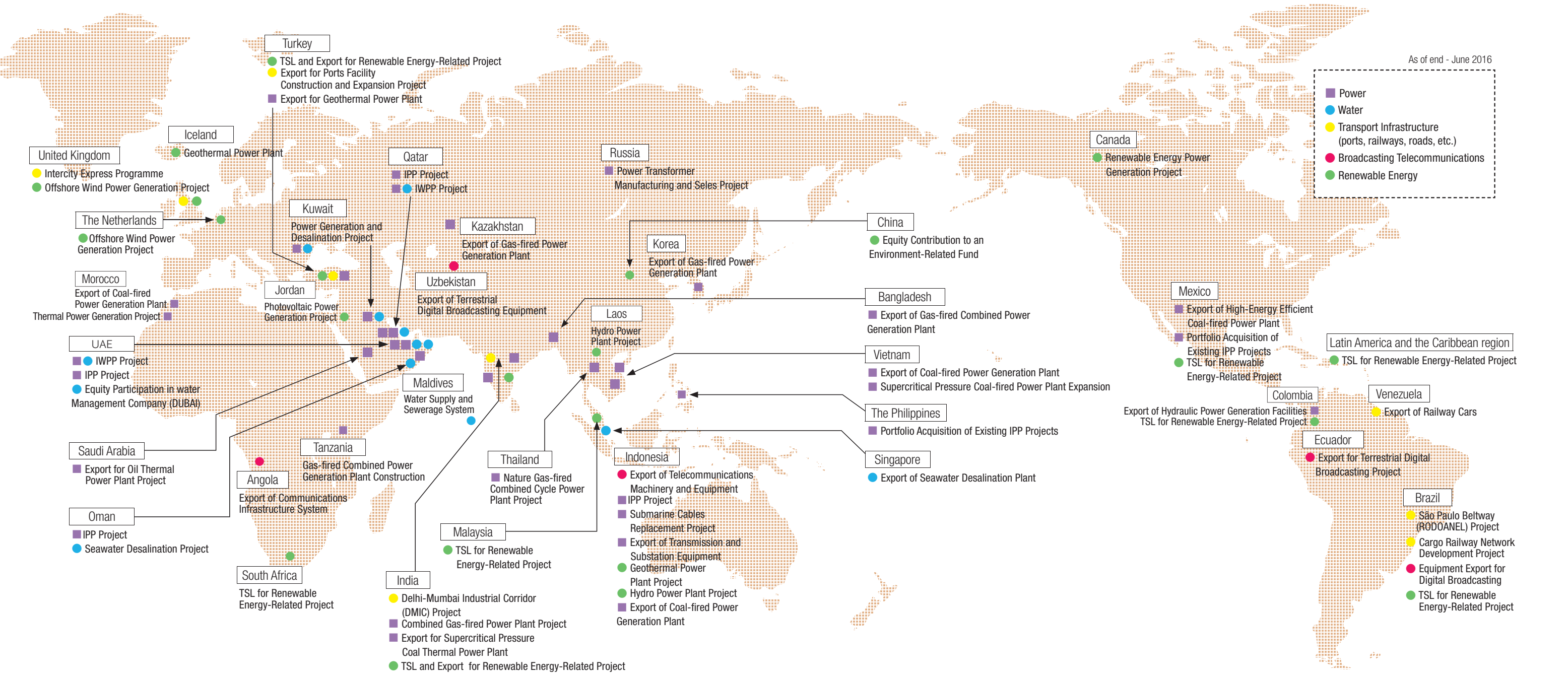
JBIC supports overseas expansion of Japanese companies by further utilizing JBIC's investment facility in overseas M&A and the sectors of infrastructure and natural resources.





Key Examples of JBIC's Recent Support for Infrastructure Projects

JBIC has supported diversification and promotion of worldwide infrastructure development by Japanese companies, utilizing its experiences in infrastructure projects across the globe, as well as the trusting relationships built over time with host countries. JBIC's recent support activities have expanded beyond the limitations of countries, regions, and financial schemes particularly in the power sector, and its commitment in social infrastructure projects, such as railway and water, has increased. JBIC is also actively committed to environmental preservation including the measures against global climate change.



Example 1
Gas-fired power generation and desalination project
January 2016

Project finance for facility D natural gas-fired power generation and desalination project in Qatar

JBIC financed up to approx. **USD1,269 million**



Example 2
Water project
July 2014

Equity participation in Metito Holdings Limited in Dubai, United Arab Emirates

JBIC invested up to approx. **USD92 million**



Example 3
Express railway project
July 2012 (Phase 1)
April 2014 (Phase 2)

Project finance for Intercity Express Programme in the UK

JBIC financed a total of approx. **GBP1.86 billion**



Example 4
Renewable energy project
March 2016

Project finance for offshore wind power generation project in the Netherlands

JBIC financed up to approx. **EUR244 million**

TOPICS

Amendment of the Japan Bank for International Cooperation Act

Enhancing JBIC's functions to support the overseas business expansion of Japanese companies

Following economic growth and rapid urbanization in emerging economies, global demand for infrastructure development is expected to continue expanding. Responding to this trend, the Japanese government announced the “Partnership for Quality Infrastructure.” This initiative intends to promote “Quality Infrastructure Investment,” referring to infrastructure investment under which life-cycle costs,* safety, resilience against natural disasters, the environmental and social impact, and contribution to the local society and economy are adequately taken into account.

As part of this initiative, the Act for Partial Amendment of the Japan Bank for International Cooperation Act was enacted on May 11, 2016, to further support the overseas business expansion of Japanese companies by strengthening JBIC's functions. Three primary enhancements were made to JBIC's functions by this amendment.

Overview ① Establishment of Special Operations

The Operations enable JBIC to take further risks to support overseas infrastructure projects.

Overview ② Expansion of JBIC's operations in local currency

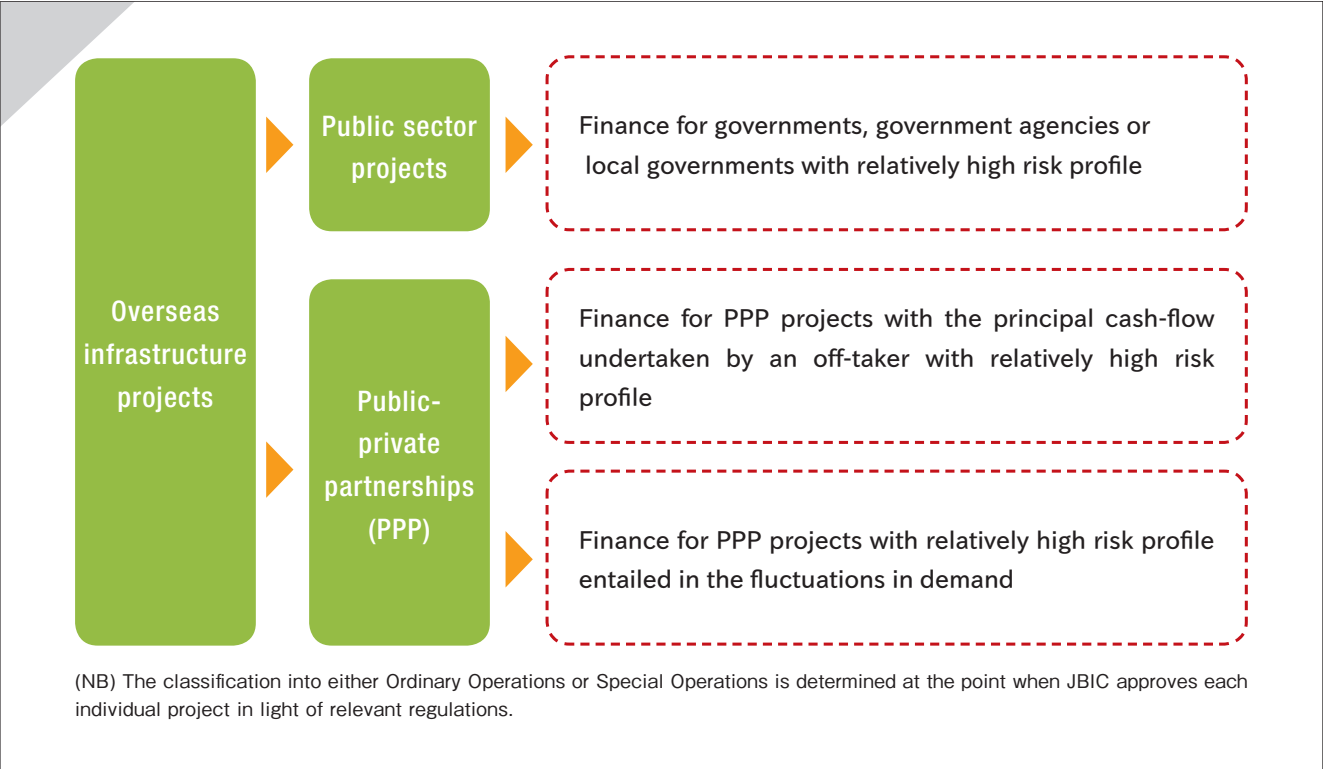
JBIC has introduced long-term borrowings in foreign currencies to further promote loans denominated in local currencies, for which there is strong demand from infrastructure projects carried out in developing countries.

Overview ③ Improvement of JBIC's financial tools

JBIC has introduced new financial tools to further support the overseas deployment of Japanese companies.

*A life-cycle cost (LCC) is the sum of all costs accumulated throughout the project life, including not only the initial costs (such as those for planning, design, and construction), but also the cost of operation and maintenance, final dismantling and other cost.

Examples of Projects under Special Operations (see NB)



Message

JBIC's Support for Infrastructure — What we value now and expect in the future

Mr. Eizo Kobayashi

Chairman of Japan Foreign Trade Council, Inc. (JFTC)

JBIC's support for infrastructure business of *shosha*

Among a great variety of businesses in which *shoshas* are engaged across the world, the power, railway and other infrastructure development, particularly in emerging and developing countries, are vital in laying the foundations of countries' industrial growth. *Shoshas* prepare to participate in such infrastructure projects by examining regional needs and attributes, selecting a suitable business model, and forming a highly competitive consortium that exerts the strengths of partner manufacturers and local companies.

However, infrastructure businesses cannot be managed by private-sector companies alone, given their close ties with the host country's policies, as well as the enormous amount of funds required by each project and the risks peculiar to the infrastructure sector. That being the case, we request JBIC to support our projects in various forms, including financing and risk allocation, as well as support tailored to the strategy and direction of each *shosha*.

One such example is the Safi thermal power generation project in Morocco, operated by Mitsui & Co., Ltd. This was the first ultra super critical coal-fired power project to be carried out in the African continent after the Japanese government announced their commitment to promote the region's development at the Tokyo International Conference on African Development (TICAD).

Another example is the Sarulla geothermal power plant project in Indonesia by ITOCHU Corporation. This project, financed in 2014, represents the world's largest-ever project finance deal for a geothermal power station, and its operation is scheduled to commence this year.

Among recent projects, there has also been financing for those in developed countries, such as the Dutch offshore wind power generation project by Mitsubishi Corporation. Infrastructure projects in

the European Union (EU) invariably involve fierce competition, and it has never been easy for Japanese companies to participate. Given such conditions, it was profoundly important to receive JBIC's support for a project in which a Japanese company competes in one of the latest fields of renewable energy.

What do we expect from JBIC in the future?

As the scales of infrastructure projects and M&As have become larger in recent years, the environment surrounding commercial banks has become harsher. Thus the expectations for JBIC are increasing to complement in areas where the private sector alone cannot fulfill its own needs.

Following the Amendment of the JBIC Act, the establishment of Special Operations strengthened JBIC's risk-sharing function for projects involving the development of overseas social infrastructure. *Shoshas* are anticipated to further enhance their engagement across the entire value chain of the infrastructure sector and increase their investment in overseas businesses. Promotion of such businesses will require a firm cooperation framework between JBIC and the *shoshas*, in order to share accurate information for extensive risk analyses before proceeding with risk-sharing.

Looking ahead, project risk structure will likely diversify, demanding prompt decision-making within tight schedules. I would ask JBIC to continue to reinforce its organizational structure including workforce enhancement to respond to these needs.

With a huge demand for funds anticipated to continue, JBIC's support in various financial schemes remains critical for overseas business expansion of Japanese companies. We look forward to JBIC's broad-based support by making the best use of the Special Operations to take further steps, as well as to provide financing as a competitive advantage against our global rivals.



Shinya Mitsudomi

Chief Strategy Officer
for Railway Systems Business Unit
Hitachi, Ltd.

Intercity Express Railway Project

—The Largest Ever UK Railway Project
by Public Private Partnership

A prominent example of overseas railway infrastructure development by a Japanese company is the Intercity Express Programme (IEP), an express railway project in the United Kingdom (UK) won by Hitachi, Ltd. in July 2012. IEP extensively replaces aging railcars running along the Great Western Main Line (GWML) and the East Coast Main Line (ECML), which connect London and other major UK cities. This is the largest-ever project in British railway history, with a total project cost of 4.5 billion Pounds Sterling. Hitachi will provide 866 railcars, as well as maintenance service over a period of 27.5 years, after constructing railway depots for maintenance. As part of the project, Hitachi built a local train manufacturing plant in September 2015, and prepared the railcar supply system for IEP.

JBIC provided project financing, consisting of loans totaling approximately 1.86 billion Pounds Sterling (JBIC portion) in two phases. First to Agility Trains West Line Limited (ATWL) in 2012 (for GWML), and then to Agility Trains East Limited (ATEL) in 2014 (for ECML); two UK entities set up specially for IEP and for which Hitachi serves as the top shareholder. The overall co-financing amount was approximately 4.2 billion Pounds Sterling.



Continued Severity After Winning Preferential Negotiating Rights

The bid for IEP was officially announced in 2007, in the public-private partnership (PPP) system that has been led by the UK's Department for Transport. There had not been many PPP achievements for the Japanese railway companies, including Hitachi itself. An even harsher reality was that our competitor was the combined force of two of the Big Three train manufacturers (Bombardier (Canada), Siemens (Germany), and Alstom (France)) – Bombardier and

Siemens. Therefore some at Hitachi were opposed to the challenge when we started.

Following an intense battle between the two candidates, Hitachi Group won the preferential negotiating rights in February 2009. However, even after acquiring the rights, we faced several risks of deal failures for over three years, until we reached the final financial close (the conclusion of a loan agreement) in July 2012.

The financial closure usually occurs within a year after acquiring the preferential negotiating rights, and is followed by the official agreement. But the timing coincided with the



aftermath of the post-Lehman collapse, and rising concerns about financial arrangements prolonged the contract negotiation. Furthermore, the UK general election was coming up in May 2010, so the government put the negotiation on hold in accordance with the customary practice of freezing all large-scale government procurement before general elections. Then a change to the administration occurred, and the spending cuts promoted by the new regime led to IEP being subject to a spending review.

Despite the extremely difficult situation, we continued to put strenuous efforts into resuming the negotiation. We stressed the point that the railcar manufacturing plant and multiple maintenance depots will create substantial local employment, and at the same time launched our sales efforts as a partnership between private and public sectors, including the Japanese government, Japanese Embassy in the UK, and JBIC. Our efforts were rewarded when, in March 2011, the new administration announced it would resume the IEP negotiation, finally shifting the main focus to the financial close.

Financial Close Prompted by JBIC's Decision to Finance

JBIC's loans gave the finishing stroke to the negotiation, during which I was impressed the strengths of JBIC, particularly in two instances.

One of them was that, amid the volatile state of IEP following the change of the administration in 2010, JBIC repeatedly demonstrated their positive attitude for financing to the UK's Department for Transport. I believe this had reassured the UK side that JBIC would be a very reliable supporter for the IEP project.

The second time was when JBIC decided to finance an enormous loan amount (approx. 1 billion Pounds Sterling) after resuming the negotiation for the IEP procurement. At the time, the European Union was going through the sovereign debt crisis that originated out of the Greek debt crisis. This had weakened the financing capacity of European financial institutions, which were originally planning



Railcar production base in Newton Aycliffe, Durham.

to participate in IEP, causing one after another to pull out of the project.

JBIC made the timely, decisive move when dark clouds had again begun to hang over the project, which was just starting to see the light. This was the first project for which JBIC applied the "investment loan for developed countries," which was set up to back the Japanese government's initiative to enhance infrastructure development overseas. Moreover, JBIC went out of its way to provide the loans in Pounds Sterling, when it usually only provides in Japanese yen and US dollar loans in principle; and what is more, that these were long-term loans. Following JBIC's decision, Nippon Export and Investment Insurance (NEXI) and Japanese banks also announced their support. The "All-Japan" financial support powerfully pushed the project forward to the official financial close in July 2012.

JBIC supported our IEP project again in the subsequent Phase 2. The two results were highly praised, leading Hitachi to successfully receive orders for another two projects after GWML and ECML: West of England (173 railcars; 2015) and Transpennine Express (95 railcars; 2016). With a total of four projects, we gained orders for over 1,100 railcars, an increase of Hitachi's presence in the UK, plus maintenance contracts for a period of 27.5 years. Our successful participation in the IEP project has truly brought about a great leap forward for the future of Hitachi's train manufacturing business.

What Hitachi intends to do from now onwards is to combine the knowhow of project order management that was gained through this IEP project, train manufacturing skills of an Italian train company that we acquired in November 2015, as well as the Japanese skills, including train design knowhow, to attain an even higher capability for global project implementation.

Through these projects, I have felt that JBIC gives a great deal of thought to preparations for supporting Japanese companies in expanding their overseas infrastructure businesses. As business operators, we must build up our strengths, products, and competitiveness to be eligible for such support.



Motoyoshi Tokioka

Executive Director-Global Sales
Submarine Networks
NEC Corporation

World's First South Atlantic Submarine Cable System

—Linking Africa and South America

Japanese companies' accomplishments in infrastructure development have also been demonstrated in submarine cable system projects that play crucial roles in international telecommunications. One such project is the South Atlantic Cable System (SACS), a fiber-optic submarine cable system connecting Angola and Brazil. The system construction agreement was signed in November 2014 between NEC Corporation (NEC) and Angola Cables S.A., an Angolan telecom operator partly owned by its government, and came into force in March 2016. SACS is the world's first fiber-optic submarine cable system, which will be laid across the South Atlantic Ocean connecting the African and South American continents. Also, Angola Cables has the plan to connect the cable in Brazil to another submarine cable that will link to the U.S. SACS will therefore provide enormous telecommunications capacities, connecting all the way from Angola to North America via South America.

JBIC provided majority of the funds (approximately USD65.8 million) through Angola's state-owned bank, Banco de Desenvolvimento de Angola (BDA), for purchasing the complete system required for the SACS project (overall co-financing amount reached approximately USD109.7 million). The system is being manufactured and constructed by NEC with its subcontractors, using the latest transmission technologies. SACS construction commenced in April 2016, and it is scheduled to be fully operational by mid-2018.



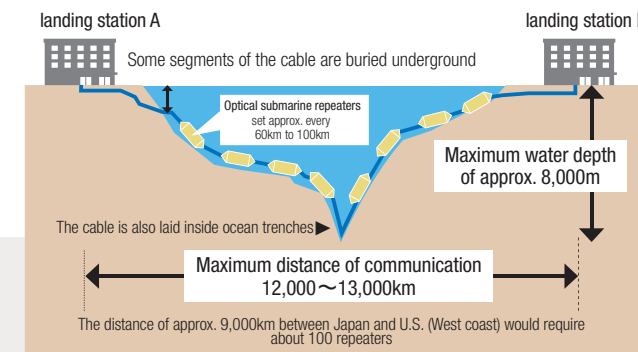
Production Plant of Submarine Cable in Fukuoka, Japan

A Public-Private Partnership Approach to the First Trans-South Atlantic Project

With the growing economies in recent years, Angola and other major African countries have experienced rapid increase in demand for international telecommunications. In such context, new submarine cables connecting the Af-

rican west coast and South America were planned. SACS was among such plans.

While NEC has had many successful achievements with submarine cable projects in the Asia and the Pacific regions, it was the first time for us to compete for a trans-Atlantic project. It was unknown how we would be evaluated in this industry, where emphasis is placed on



A direct telecommunication route from Angola as the hub in Africa to South America Fortaleza, Brazil

experience and track records. Perhaps we were not well evaluated at early stages of the selection process because our bid was deemed less feasible due to the distance from Japan to the project sites.

In late June 2013, at the Fifth Tokyo International Conference on African Development (TICAD V), the Japanese government announced it would commit up to 3.2 trillion Japanese yen to be invested in Africa over the next five years, together with the private sector. Angola was represented by the Foreign Minister in this conference. That was a timely opportunity for Japan and Angola. We introduced JBIC's export loan (buyer's credit), to which the client responded positively, and that helped us to actively exchange dialogues with Angola Cables.

Just before this happened, I visited Angola for the first time. Although the client always made it clear that the project was fully funded, it turned out that finance with competitive conditions would always be welcome for Angola Cables and its share holding companies.

As we promoted the use of the Japanese finance for SACS, the client expressed much more interest in the proposal. Angola Cables was so positive about the finance proposal that, in the autumn of 2013, the CEO himself visited JBIC's Head Office to reconfirm with the bank's executives their willingness to support SACS construction.

Yet the situation went back and forth. Angola Cables wanted to launch the project as soon as possible, and they were concerned that JBIC's financing would take a half year to one full year for completion of various steps before the financing would be approved. Therefore, at that point, Angola Cables chose to procure the funds from major banks in Angola.

Turns of Events Amid Changing Financial Climate

In the meantime, discussions to finalize SACS construction agreement continued, and in November 2014, a construction agreement was finally signed. Since the cli-

ent chose financing using banks in Angola, NEC had to receive a down payment as well as the payment guarantee for the balance in order to make the construction agreement come into force. After waiting for several months, however, those did not arrive. This was in fact due to drastic changes in the financial situations in Angola. The country's economy was hit by the worldwide decline in oil prices. This led to an unstable financial environment, and some projects became frozen. However, SACS project continued to move forward, with expectation to acquire foreign currency when it starts functioning. Soon after it became clear in the beginning of 2015 that Angolan banks would not be able to provide the funds for SACS construction, the country's Ministry of Finance made an official request to JBIC for financing the construction.

JBIC responded to this request by swiftly handling the process, including the environmental assessment which normally takes a long time in infrastructure projects, and came to a decision to provide the bank loan to Angola Cables through BDA. In June 2015, all of the involved parties gathered in the capital city of Luanda, holding a kick-off meeting to materialize the financing. This accelerated the process, and the loan agreement was finally signed and the necessary down payment was made in March 2016, putting into force the SACS project, the world's first trans-South Atlantic project. It was the result of positive collaboration among Angola Cables, BDA, the Angolan government, JBIC, the Ambassador of Japan to Angola and other members of the Embassy of Japan in Angola, as well as members of staff at the Japanese Ministry of Internal Affairs and Communications, Nippon Export and Investment Insurance (NEXI), and Sumitomo Mitsui Banking Corporation, the lead arranger, among others.

Financing plays a remarkably important role in many of overseas infrastructure development projects. Therefore, I am sure JBIC's support, particularly from the project's formation stage, continues to be useful for both purchasers and exporters, addressing rapidly changing business environment.



Power Infrastructure Development —Establishing Morocco as a Gateway to Africa

H.E. Dr. Samir Arrour

Ambassador of the Kingdom of Morocco to Japan

“A gateway to the fast-growing African continent” – Morocco is well on its way to establishing itself as such. Not only Europe but the whole world has its eyes on the country as a destination for direct investment given its steady economic growth and geographical advantages. In order to achieve further economic growth, however, the key lies in the enhancement of power supply and diversification of supply sources.

This year marks the 60th anniversary of diplomatic relations between Japan and Morocco, and over these years, Japanese companies have helped to strengthen the tie through participations in projects. We interviewed H.E. Dr. Samir Arrour, Ambassador of the Kingdom of Morocco to Japan, on Morocco's future demand for infrastructure particularly of power, as well as expectations the country has for Japanese companies.

We continue to experience remarkable economic development in Morocco thanks to the development in the automobile and aircraft industries and tourism, etc. This has led to increasing demand for power not only in the urban areas but also in the rural and other non-electrified areas. The demand has grown by an annual average of 6.5% over the past 10 years which finally reached the annual domestic demand of 34,413GWh in 2015. Almost half of this demand is met by coal, about 17% by natural gas, and 11% by renewable energy, but about 15% still has to be compensated by imports from Spain and Algeria. We expect the power demand to continue rising, so we aim to gradually become less dependent on power imports and enhance the energy infrastructure to increase the supply capacity and diversify the sources.

The Jorf Lasfar 5&6 coal-fired power plant (power generation capacity: approx. 700MW), for which we received support from JBIC in June 2012, provides about 10% of the domestic power, and at present serves an extremely important role as a power source. The Safi project, another project supported by JBIC in September 2014, is the first ever ultra-supercritical coal-fired power project in the African continent and is expected to meet about 25% of the domestic demand by 2018 (power generation capacity: approx. 1,386MW).

Through these projects, we have come to recognize the high quality and performance of the Japanese-made equipment used at our domestic power plants. We also noticed as one of the characteristics of Japanese companies that they have much respect for the local employees, as well as a high regard for the local environment. I believe these qualities help

them achieve their excellent adaptability to the local conditions and realize accurate and reliable operations through advanced technologies. Such operational know-how is being steadily transferred to the local employees and contributes significantly to the sustainable growth of Morocco.

In addition to the coal and natural gas, the renewable energy infrastructure will be increasingly important to Morocco in the future. If we manage to prepare large-capacity renewable energy infrastructure systems which take advantage of Morocco's natural resources, such as the abundant solar energy, they will provide power that is much less expensive and thus drive the domestic industries towards further development.

We cannot achieve such development by ourselves. We are very grateful that we have been able to build a good relationship with Japanese companies which own high-quality and sustainable technologies, as well as with JBIC which supports their activities. We look forward to JBIC's support in renewable energy and energy-efficiency projects in Morocco to continue diversifying our energy supply sources. Development of Morocco will lead to the development of the whole of the African continent. We hope to achieve technological innovations that bring better lives to all households in Morocco and to further strengthen our partnership with Japanese companies and JBIC who make this goal possible.



Combining Efforts of JBIC and ADB To Meet Vast Demand for Infrastructure Development in Asia

Mr. Michael Barrow

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Asian Development Bank (ADB) and JBIC have a long history of partnership. Faced with ever-increasing demand for infrastructure development in Asia, the two financial institutions have begun intensifying their financial cooperation, to promote investment in quality infrastructure in the Asia-Pacific region. We interviewed Mr. Michael Barrow, Director General for Private Sector Operations Department, which directly finances projects, on the present state of the Asian infrastructure development and ADB's cooperative relationship with JBIC.

In ADB's “Infrastructure for a Seamless Asia,” we predict an enormous demand for overall infrastructure development in Asia, not only for hard infrastructure but also for soft infrastructure, such as education and health systems. This means that an enormous investment of at least USD8 trillion will have to be made between 2010 and 2020. The governments of Asian countries in general lack the financing capacity as well as the expertise, although there are differences among countries, and this has prevented them from fully responding to infrastructure demands. Each government will have to recognize its financing capacity and expertise and demonstrate even more clearly its desire for infrastructure-supported economic growth. Given that public funds are not enough to meet this enormous demand for infrastructure, the role of the private sector is critical. Also, the landscape of the international financial markets has changed dramatically over the last few years. In the past, the project finance market in Asia was driven by a number of international commercial banks, particularly the western banks. But since the 2008 financial crisis, the number of active long-term international lenders has declined and most of the funds now consist of those from Japanese commercial banks and from the local financial institutions of each country. The market has lost some of its momentum. The key to responding to the escalating need for funds in Asia lies in the active mobilization of private-sector financing through Public-Private Partnerships (PPP).

Given this environment, ADB, under its Strategy 2020, aims to increase infrastructure investment and the growth of the private sector in Asia as strategic priorities. To mobilize more private-sector funds into infrastructure projects, three areas take central roles at ADB. One is the Private Sector Operation Department (PSOD), which directly finances private projects, another is the Office of Public-Private Partnerships (OPPP), which helps governments structure projects and bring them to the market, and the third are ADB's public sector departments that work upstream with host governments to support capacity-building and private sector development. At PSOD, which I am responsible for, we have set targets, based on “Strategy 2020”, to increase our annual commitment to 25% of ADB's general operations. In dollar terms, this means going from some USD2.6 billion in 2015 to well over USD 4 billion by 2020, increasing both the amount of funding and the overall ratio of private sector financing within ADB. ADB finances at a ratio of about one to two with private-sector banks, so increasing the financing amount from ADB means

mobilizing even more from private-sector funds. Furthermore, ADB enhanced its loan capacity by merging two accounts, OCR (Ordinary Capital Reserve) and ADF (Aiding Development Fund), and leveraging based on the total capital. In such a way, ADB plans to continue expanding its operations for infrastructure projects in Asia and the merger of the OCR and ADF has unleashed our private sector operations potential and in particular our ability to invest more by way of equity in infrastructure-related transactions.

Under this growth scenario, ADB proposes to further enhance the support for infrastructure development using advanced and high-quality technologies. However, cooperation with other public-sector banks is vital for us, considering the upper limit set on the amount of loan or investment that ADB can provide for each project. With the Japanese government announcing the “Partnership for Quality Infrastructure” and with Japanese companies expanding their overseas infrastructure business, JBIC is an important partner for ADB. ADB and JBIC have built a cooperative relationship through collaboration in projects such as the Sarulla geothermal power plant project in Indonesia (2014) and the Nam Ngiep hydropower plant project in Laos (2014). In November 2015, a memorandum of understanding (MOU) was signed between JBIC and ADB, confirming the further strengthening of the cooperative relationship in the fields of infrastructure and renewable energy. Taking advantage of this partnership, ADB would like to address the enormous infrastructure needs in Asia together with JBIC. In addition, the amendment to the JBIC Act in May 2016 strengthened its functions, enabling the bank to provide even more support to infrastructure projects through the acquisition of project bonds and increased loans in local currencies. Such methods of support are necessities when promoting infrastructure projects, but they are still “missing pieces” in the current financial market. Thus the strengthening of JBIC's functions, which align very well with the priorities of PSOD, is very significant for us.

It is inevitable that the demand for infrastructure in Asia will continue to grow. We need to think how we can respond to this enormous demand on the basis of the long-lasting relation built between ADB and JBIC and strategies planned by each. Both ADB and JBIC will need to mobilize our own respective functions and promote the growth of the private sector and infrastructure development. Through such efforts, I hope we can both devote even greater energy to development in Asia.