SPOTLIGHT

Supporting overseas expansion of petrochemicals business of Japanese company by equity participation

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JBIC signed in September 2015 a shareholders' agreement on the subscription of preferred shares amounting up to USD50 million with KH Neochem Co., Ltd. (KH Neochem) to participate in Taiwan-Japan Oxo Chemical Industries Inc. (TJOC), a Taiwanese company jointly established by KH Neochem, CPC Corporation, Taiwan (CPC), and Mega International Commercial Bank. This transaction is intended to support the production and sales of isononyl alcohol (INA) by TJOC in Taiwan, which is the KH Neochem's first overseas production base.

JBIC's first equity participation in petrochemicals field by engaging from the project's formation stage

Katayama: This equity participation has been requested by KH Neochem, a Japanese petrochemicals manufacturer, in order to conduct business as an equal partner with CPC, the foremost Taiwanese petroleum company, by each holding a 47% stake.

KH Neochem, established in December 2010, was spun off from Kyowa Hakko Kirin Co., Ltd. as an independent petrochemical company. It was their first time to conduct a transaction with JBIC, so we began from trying to grasp the company's wide-ranging businesses of chemical products as well as their business strategies. INA is a feedstock for plasticizers, but it is not so a common product as other general-use petrochemical products, so its external information we could obtain was very limited. We instead gained a deeper understanding of the market through fieldworks across the value chain, such as by conducting hearings with users of INA and plasticizers, and repeating analyses such as correlation analysis for price forecasting and future cash flows.

It was also the first time for JBIC to support a petrochemical business from an initial stage prior to completion of FEED (front-end engineering design) and conclusion of an EPC (Engineering Procurement and Construction) contract. In many of other petrochemical projects that JBIC supports, project financing is mainly used as the financial instrument and JBIC would typically participate after FEED has been completed and at the stage of selecting EPC. Because JBIC took an innovative approach as an equity investor to prepare for various potential risks and uncertainties relating to the project, the structure and documentation became complex and we had to find solutions without prior precedent to guide us.

Miyahara: I have been assigned to be in charge of monitoring the project, and as the project has just been launched, I will manage monitoring of the project toward the completion with diligent monitoring of progress on the construction, business operation, and market condition of INA. This equity investment is full of "first times," so I will need to carefully clear each new obstacle that arises. It is challenging, but it is a very rewarding project.

Supporting strategic joint project for sales across Asia with JBIC's best effort

CPC's ingredient feeding system next to the INA project site

Miyahara: JBIC signed a memorandum of understanding (MOU) with CPC at the end of 2015 to build a stronger cooperative relationship through regular exchanges of information among the equity partners. We were able to reconfirm our good relationship with CPC at the signing ceremony held in Taiwan, with CPC expressing gratitude for the past collaboration with JBIC. I found that Taiwan has high expectations for this project given that this investment is one of the largest scaled projects by a Japanese company in the Taiwanese petrochemical business and is also recognized as an important project by the city of Kaohsiung, where its factory is located. We at JBIC would like to manage this investment properly coordinating closely with the related parties.

MOU signing ceremony with CPC

As a person in charge of monitoring, I will make my effort towards the smooth progress of the project, always keeping in mind everyone who is involved and also people in emerging countries where demand is highly expected.

Katayama: This project supports KH Neochem, who is the sole Japanese producer of INA that is produced by only six companies in the world such as Exxon Mobile Corporation and BASF, to compete against its mega rivals using its proprietary technologies. It will also be significant for the Japanese petrochemical industry, and I am proud to be one of JBIC's key business developers to have worked on this project.

The deal was made possible thanks to the professionals with whom we conducted hearings. We had meetings night after night developing ideas and plans with our team and actively discussing with related divisions. The deal required a lot of time with many challenges, but I put a lot of thought into living up to the client's expectations, and it proved to be worthwhile.

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JBIC Today

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Special Feature

Growth in Africa and Power Infrastructure

Our Global Challenges

Haso Ltd. (Shinagawa, Tokyo)

Innovating hygiene products to bring more comfort to people across the world

Enhancing overseas production to compete with global peers by turning unique ideas into original products

News in Depth

Supporting the Economic Development of Bangladesh through Buyer's Credit to the Bangladesh Power Development Board

SPOTLIGHT

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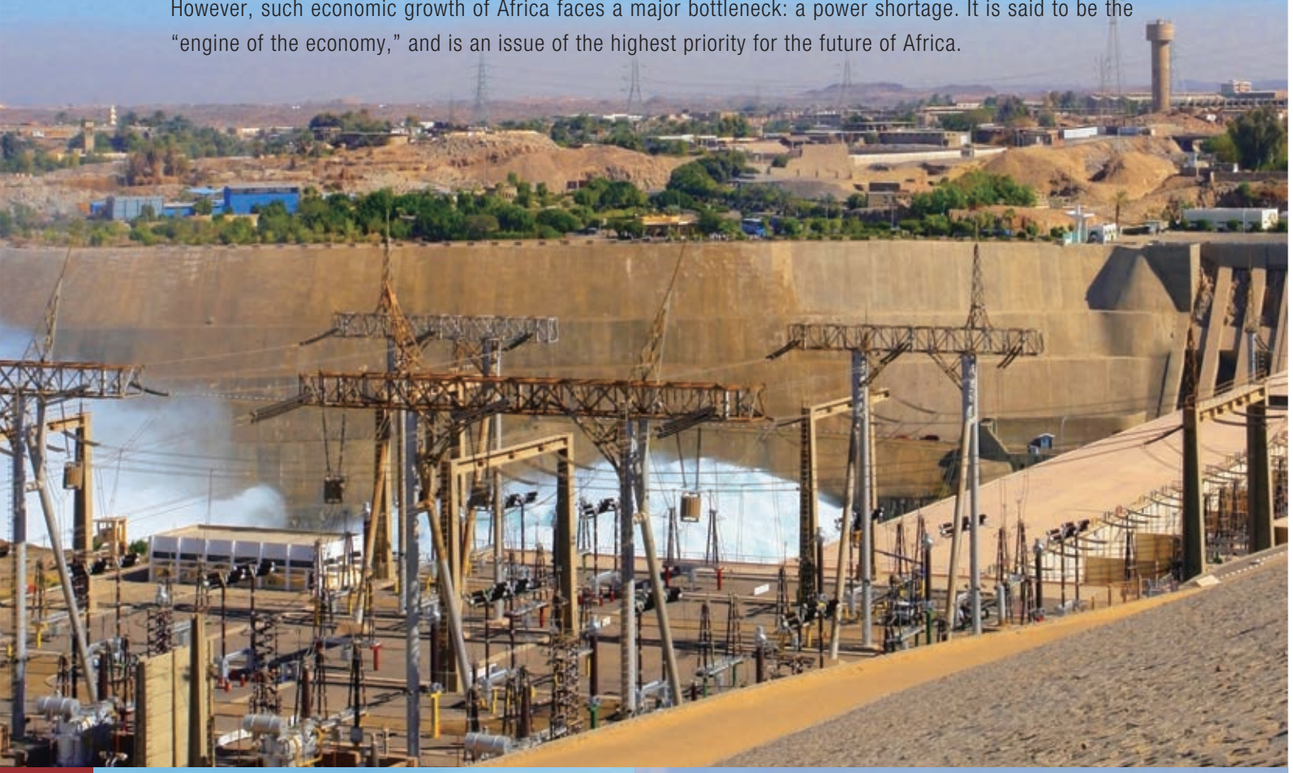
JAPAN BANK FOR INTERNATIONAL COOPERATION
JBIC

日本の力を、世界のために。
Supporting Your Global Challenges

Growth in Africa and Power Infrastructure

The immense land of the African continent is as big as the United States, Europe, China, India, and Japan put together. It is estimated that its population will be about 2.5 billion by 2050 and that a massive market will emerge from the middle-income group that is expanding due to economic growth. With the Sixth Tokyo International Conference on African Development (TICAD VI) scheduled to be held in Kenya's capital city of Nairobi in August this year, Africa is attracting a growing interest also among Japanese companies. However, such economic growth of Africa faces a major bottleneck: a power shortage. It is said to be the "engine of the economy," and is an issue of the highest priority for the future of Africa.



Growth in Africa: Business Opportunities for Japan

Teruaki Kotaka
Senior Economist (in charge of the African region)
Country Credit Department
Credit, Assessment, and Systems Group

— There seems to be a growing interest today in Africa.

It was not until the 2000s that Japanese companies began to cast a spotlight on Africa. Since around the third and fourth Tokyo International Conference on African Development (TICAD) (held in 2003 and 2008, respectively), Japanese initiatives in Africa had begun to be mulitilayered not only from perspectives being associated with "aid" but broadened to the context of business, such as "trade and investments." Africa is the "last frontier," and it has become vital for Japanese companies to focus on the continent as the "next growth center after Asia."

— Africa has been growing by leveraging natural resources since the past. Does the recent fall in resource prices have an impact on the growth?

Africa has undoubtedly been growing by tapping into its abundant resources. So the declining price of such resources may be concerning for the growth in Africa, but from a medium-term standpoint, the region will still continue to be the next promising investment destination after Asia. According to the IMF's latest *WORLD ECONOMIC OUTLOOK, April 2016*, the Sub-Saharan African region is expected to grow at a rate of 3.0% in 2016, 4.0% in 2017, and 5.0% in 2021, and thus remains as the second-fastest growing region (see table below).

One of the factors leading to Africa's high growth is that it has the world's fastest-growing population. In the *World Population Prospects: The 2015 Revision*, the UN estimates that the region's population of 1.19 billion in 2015 will increase to 4.39 billion in 2100, and its ratio to the total world population will also increase from 16.1% to 39.1%. Moreover, there have been inflows of funds from abroad since Africa was captured by the global fiancial flow, not only in the form of aid but also investments, foreign bonds, loans, and migrant remittances, and these support the growth of Africa while the resource prices decline. Such investments and skills from overseas will help increase demands for employment requiring advanced skills and raise the levels of income, eventually forming the middle-income group. This will expand the markets for automobiles and electronic appliances and make road and power infrastructure indispensable.

— But we haven't seen much change in the amount of Japanese investments in Africa.

European countries, which are especially active in investing in Africa, once colonized Africa in the past and are geographically close to the continent, so they obtain more experiences and interactions with the region. For Japan on the other hand, Africa had been a "distant land across the sea" and the Japanese hadn't grasped its actual details until recently. That must be the main reason why the Japanese investments have not significantly increased.

Another reason for the slow progress of Japanese investments in Africa is because of the relatively high country risks in general, and the difficulty in managing them. There are some countries whose governments do not even have proper governance. Fumbling through ways to communicate with those governments, and manage the risks of sudden changes in policies, terrorism, and strikes, pose high hurdles for Japanese companies.

Another challenge lies in the small size of each country as well as their local markets. Along with low income levels in the Sub-Saharan African region, the fact that Nigeria is the only country that has a population exceeding 100 million makes it difficult for companies to conduct businesses in one country and obtain investment returns. To expand businesses in Africa, the host countries need to develop infrastructures effi-

■ Map of Sub-Saharan Africa

There are 49 Sub-Saharan African countries which account for approximately a quarter of the world's total number of countries and approximately one fifth of the world's area.

■ Economic growth rate of Sub-Saharan Africa

The Sub-Saharan African region has the second-highest growth rate after Asia.

	2010	2011	2012	2013	2014	2015	Forecast 2016	Forecast 2017	Forecast 2021
Asia (emerging countries)	9.6	7.8	6.9	6.9	6.8	6.6	6.4	6.3	6.4
Sub-Saharan Africa	6.6	5.0	4.3	5.2	5.1	3.4	3.0	4.0	5.0

Source: created from IMF's WORLD ECONOMIC OUTLOOK, April 2016

ciently not as individual countries but as a whole region. This would, however, require a long time as the issue needs coordination between governments. The realistic way for foreign companies to build up businesses in Africa would be to first focus on (a few) specific countries, with a medium-term goal to expand businesses extensively in the region. For example, while developing your business in South Africa as your hub, you can plan a strategy to expand throughout the southern African region.

— Which industries are more promising as business opportunities for Japanese companies?

The first is obviously the resource sector. The sector is currently facing a harsh condition due to the declining prices, but in a long-term perspective, the existing variety of energy and mineral resources in Africa along with many newly discovered ones, will still offer great opportunities for businesses in the resource sector.

The second is businesses for the increasing middle class and local companies in the region. In the eastern African region, which continues to grow rapidly, there is high demand for second-hand cars, and Japanese-made cars are highly praised for their durability and for being less prone to breakdowns. With the growing middle class in the whole of Africa, markets of motorcycles and cars will continue to increase. Not only vehicles, but many other products, including food, daily necessities, and electronic appliances, have great potential needs. Japanese companies have already experienced in Asia the expansion of businesses in line with a similar level of the rapidly-growing economy.

Businesses in the infrastructure sector are promising as well. Japanese companies have a long history of investments and exporting to emerging countries, and have built up businesses in various sectors including power, transport, and water in Asia, the Middle East, and Latin America. I believe Africa will also offer plenty of opportunities, and with its growth anticipated to continue into the future, the lack of infrastructure will become an even bigger issue to address. Furthermore, the infrastructure sector has an advantage of adapting to the peculiarity of the African market which is divided into smaller markets. While one negotiation for, let's say, a power generation plant can result in a project of a significant scale, the project can be expected to develop beyond borders.

In the power infrastructure, power shortage is particularly an urgent issue to be addressed as it is pointed out as one of the growth restriction factors in Africa. Japanese companies can use their past experiences in overseas projects to control the complex part of investments in Africa. For example, in IPP (see Note) power projects, we establish a power supply mechanism and control the project including country risks while holding dialogues with the government and electric utility of the country. The basic mechanism in Africa is not particularly distinct, and should not be so different from the ones that we have experienced in Asia, Latin America, and the Middle East.

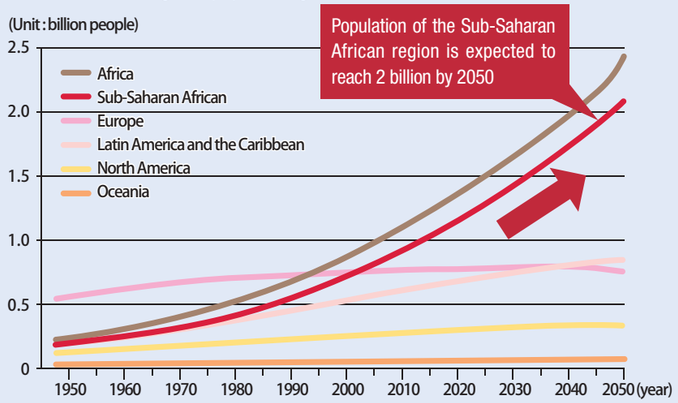
The wide range of Japanese power generation technologies is an advantage as well. The presence of natural resources, as well as needs for power sources, differs considerably among African countries. Japanese companies can meet their needs by providing a variety of power generation technologies, such as highly-efficient coal-fired or gas-fired power generation, or environmentally-friendly renewable energy sources such as wind and geothermal power.

– You mentioned the high levels of trust and expectations that African people have for Japan. Does this give a better opportunity for Japanese companies in the global competitions?

African people indeed have high expectations for Japanese companies, but there will be a fierce competition in the actual business. One of the "hints" for expanding business is that there are many people in Africa who have used and highly praise Japanese products, such as Japanese cars, even in the form of second-hand cars as I mentioned before. It might be a good idea for Japanese companies to create business opportunities by building such kind of "experience value" that would be appreciated by African people. Meanwhile, other business issues, such as risk management, have to be addressed one by one on the Japan side.

Note: IPP is an independent power producer who sells the electricity generated from its own generation plant to electric utilities.

■ Trends in each regional population growth of the world



Source: created from data collected by the United Nations, Population Division

Power Infrastructure and JBIC's Support in Africa

Kohei Toyoda
Director for Division 4,
New Energy and Power Finance Department I, Infrastructure and Environment Finance Group

Investing in the reinvigorating power sector of Africa

According to the International Energy Agency (IEA)'s *Africa Energy Outlook* report (2014), nearly 630 million people of the 920 million in Sub-Saharan African countries live without access to electricity. Severe power shortages have led to unavoidable rolling blackouts that frequently occur in 25 out of 49 countries on the African continent. In order to provide access to electricity to every urban household in Africa and to have the current number of planned blackouts, an estimated USD450 billion will need to be invested by 2040.

Such circumstances have prompted international community such as governments and international agencies to invest and finance in the African power sector. A notable example is the private sector-led Power Africa initiative which was launched by the U.S. in June 2013. It announced its commitment to invest USD7 billion over five years, starting from 2013, and a goal to increase the generation capacity by 10,000MW through expanding support for power projects in Africa by inviting various industries, in addition to public organizations such as the United States Agency for International Development (USAID), Overseas Private Investment Corporation (OPIC), and Export-Import Bank of the United States. International agencies, the European Union, and its member states, as well as private-sector companies, have responded by contributing funds, raising as much as USD43 billion of commitment so far.

The Japanese government has also announced, at TICAD V in June 2013, its commitment to support the growth of Africa through public-private funding of maximum JPY3.2 trillion over five years starting from 2013. Of this, a total of USD5 billion worth of support is planned over the same period under the *JBIC Facility for African Investment and Trade Enhancement (FAITH)*, which was established in concurrence with TICAD V.

Supporting Japanese businesses through IPP and sovereign support

Amid the intensifying global competition in the power market in Asia and the Middle East, Japanese companies have also begun to focus on the African market given its huge potential as a new investment destination, and JBIC actively supports such trend.

JBIC has two types of support for the African power sector. First is Overseas Investment Loans for IPP projects in which Japanese companies participate, and many of them take the form of project finance (PF). Another is Export Loans (buyers' credit) that provides loans for receiving countries' power company or power board to purchase Japanese-made power generation equipment upon constructions of power plants. Specific examples include the Safi power generation project in Morocco for the former, and export of power generation facility to TANZANIA ELECTRIC SUPPLY COMPANY (TANESCO), a state-owned power company of Tanzania, for the latter.

As an example of investment to IPP projects, I would like to talk about the Safi power generation project. The rapid economic growth in Morocco has led to a serious power shortage and they have had to import part of their electricity to meet the demand. To address this issue, the Moroccan government took steps to introduce renewable energy to the country, and at the same time decided also to introduce coal-fired power generation as the base load power source to meet the increasing demand, adding to gas-fired power generation which has been the conventional source of power since the past. Upon the decision, they chose the highly-efficient Ultra Super

JBIC's support①

Ultra Super Critical Coal-fired Power Plant project in Morocco, the first for the African continent – supporting Japanese companies' participation by project financing

JBIC signed a loan agreement in September 2014 totaling up to approximately USD718 million and EUR147 million (JBIC portions) respectively, in project financing, with Safi Energy Company S.A. (Safi) invested by Mitsui & Co., Ltd., Electrabel S.A., a Belgian company which is a subsidiary of French company, ENGIE, and Nareva Holding S.A., a Moroccan company, for financing the project (overall cofinancing amount is equivalent to approximately USD2.107 billion).

In this project, Safi constructs and operates an ultra-supercritical coal-fired power plant with a capacity of 1,250MW (625MW x 2 units) in the city of Safi located approximately 300km South-west of Rabat, the capital of Morocco, and will sell the electricity generated by this power plant to the Office National de l'Electricité et de l'Eau Potable for a period of 30 years after the completion of the construction. This is the first Ultra Super Critical Coal-fired Power Plant project for JBIC and for the African continent, and a support under the FAITH initiative.

Critical Coal-fired Power generation technology (see Note) in order to reduce the impact on the environment.

In the Safi power generation project, a Japanese company and two other companies set up an entity as the borrower to which JBIC's loan is made in project financing. More specifically, this form of finance enables the entity to sell the electricity to the Office National de l'Electricité et de l'Eau Potable (ONEE) over a period of 30 years and the payment made by the ONEE to be the main source of funds for the debt repayment, without increasing the external debt of the Moroccan government.

For an example of export financing, there is the buyers' credit which was provided to the government of Tanzania. Tanzania is another country which had been experiencing a severe power shortage. TANESCO was suffering growing deficits from buying expensive electricity without making use of their own natural gas, as well as from generating power using expensive fuels. The Tanzanian government responded by making a decision to reduce power generating cost by utilizing home-produced natural gas, and to construct a gas-fired combined cycle power plant (240MW) and to purchase Japanese-made highly-efficient power plant equipment in order to meet the increasing demand for electricity. JBIC provided the funds necessary for the government to procure the equipment.

Using two financing cases as role models

The difference between the above forms of financing is: the Safi power generation project increases the power supply by utilizing private funds and know-how through public-private partnership (PPP), without increasing external debt of the government. On the other hand, the export financing for the Tanzanian government is a sovereign support, responding to an urgent power shortage through external lendings to the government.

In the PF for IPP projects like the Safi project, loan repayment and investment return come from revenues from the sale of electricity over a period of 20 to 30 years. Thus, it is important to make sure that the business environment is appropriately developed for the project to be carried out over the period of time. More specifically, without proper systems of laws and regulations, tax, accounting as well as the government's long-term commitment to the project, such as guarantee on the power and water companies' payment, private funds and know-how cannot be utilized. On the other hand, the export financing for the Tanzanian government was provided through the direct loan to the government for the country's power company to purchase the equipment and build the power plant, in order to respond promptly to the high demand for electricity.

Two cases illustrates how JBIC supports each African country's power infrastructure development taking account of the investment environment and power sector development stage of each country. Not a few countries have the economic development bottlenecked by power shortages. We will continue to expand our infrastructure support in other African countries as well, together with Japanese companies by using our knowledge and experiences.

■ Trends of power demand in Africa

(Unit: TWh)

	2000	2012	2020	2030	2040
Africa	385	621	852	1,258	1,869
North Africa	116	253	338	447	572
Sub-Saharan Africa	269	368	514	812	1,297
West Africa	29	61	107	216	417
Nigeria	14	37	68	146	291
Central Africa	9	16	26	45	74
East Africa	9	23	44	95	177
Southern Africa	222	268	337	456	630
Mozambique and Tanzania	4	16	30	60	99
South Africa	190	212	248	298	364

Source: based on IEA's World Energy Outlook, 2014

Note : Ultra-supercritical coal-fired power generation increases the efficiency and reduces emissions, such as carbon dioxide, by rotating the turbine using steam converted from water that is super-pressured and superheated to a temperature (approx. 600℃) that are far beyond the critical point of water (occurs at 374.2℃ and under a pressure of 213.3 atmospheres).

JBIC's support②

Supporting export of power generation equipment to TANESCO – JBIC's first buyers' credit for the Government of Tanzania

JBIC signed in March 2015 a loan agreement in buyer's credit (export loan) totaling up to approximately USD175 million (JBIC portion) with the Government of Tanzania (total cofinancing amount is approximately USD292 million).

The loan is intended for the TANZANIA ELECTRIC SUPPLY COMPANY (TANESCO) to procure a whole set of machinery and equipment for a gas-fired combine cycle power plant (240MW) in Dar es Salaam, Tanzania to be constructed by SUMITOMO CORPORATION including gas turbines made by MITSUBISHI HITACHI POWER SYSTEMS, LTD. This is the first export loan that JBIC is to extend to the government of Tanzania, and is also a support under the FAITH initiative.

INTERVIEW

Tadashi Yokoyama
Head of External Representation
Office for Asia
African Development Bank Group

Addressing the Power Supply Challenge, the Highest Priority in African Development

—— Realizing universal access to energy by 2025

The African Development Bank (AfDB), as a regional multilateral development bank, has the mission to promote sustainable and inclusive growth of Africa, where various development issues exist along with a high poverty rate. Under AfDB's new president Akinwumi Adesina, who assumed office in 2015, we are now focusing on five top-priority agendas. These "High 5s" are to: Light up and Power Africa; Feed Africa; Industrialize Africa; Integrate Africa; and Improve the Quality of Life for the People of Africa. Of these challenges, the access to power is the basis of solving the other four challenges. That is why AfDB has set out a new strategy, the *New Deal on Energy for Africa*, which aims to achieve universal access to energy in Africa by 2025.

Efforts need to be made in the following four areas by the *New Deal*: the first is to increase on-grid (interconnected) generation; the second is to develop grid transmission networks and increase on-grid-connected households; the third is to increase off-grid (independent) generation; and the last is to utilize renewable energy. In order to meet increasing demand for power, however, each country will need to implement an energy mix policy. AfDB is going to support projects with utilizing both renewable energy to the extent possible and fossil energy in its steps to achieving the 2025 target.

Such development of power infrastructure would need to mobilize more than an additional USD50 billion annually until 2025. Securing these financial resources is a major challenge. One promising method would be the public-private partnership (PPP). However, utilizing it would need each country to establish a workable PPP institutional framework and schemes to manage various risks. AfDB plans to provide policy advice for establishing such frameworks and power masterplans for regional member countries, as well as for other environments for mobilizing private funds. Meanwhile, AfDB will invest about USD12 billion between 2016 and 2020, and leverage about USD50 billion in public and private financing for investments in the energy sector.

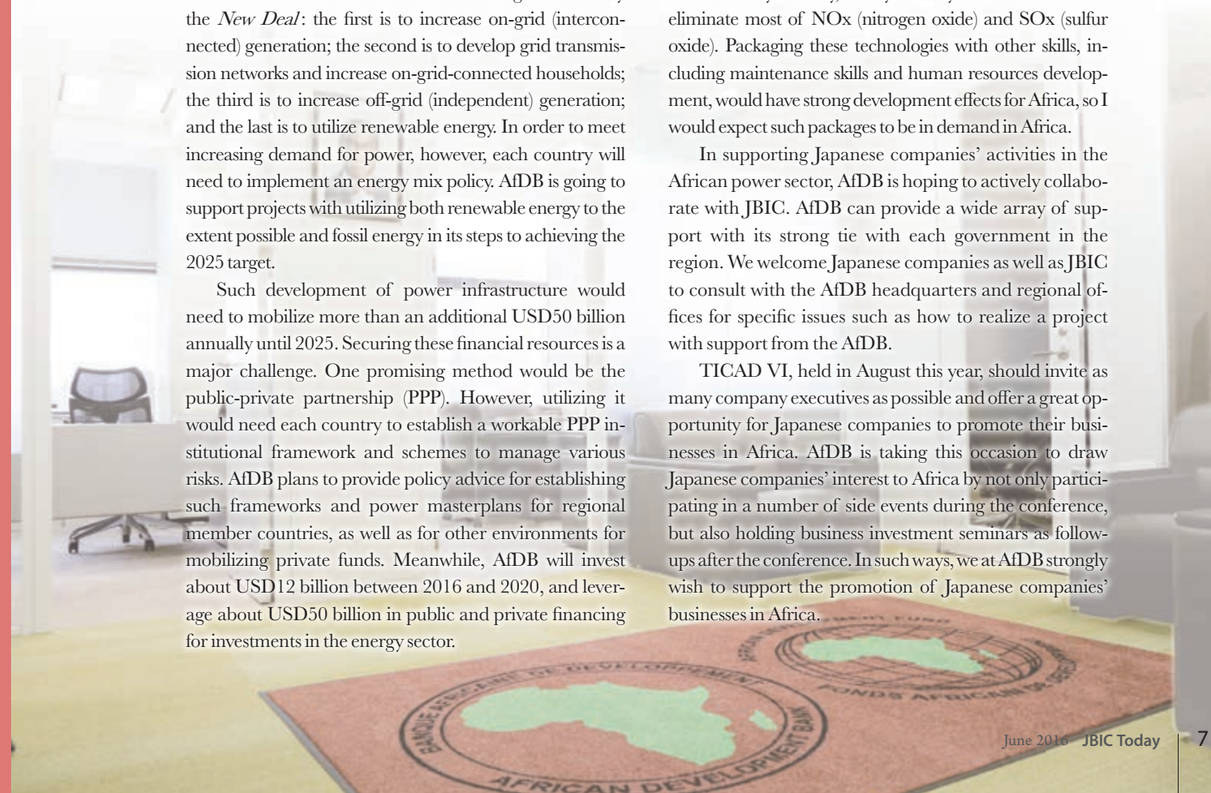
—— Supporting Japanese companies in active cooperation with JBIC

In developing future power infrastructure, one of Japanese companies' strengths is the high competitiveness of their products. In the field of geothermal power generation, in particular, turbines made by Japanese companies account for 60-70% of the global share. Japanese companies would be able to demonstrate their capabilities in developing geothermal power generation over the Great Rift Valley, running 7,000km in length through the eastern African region.

Coal-fired power generation continues to be expected in coal-producing countries. Japan has advanced ultra-supercritical thermal power generation technology and Japanese technologies are well-trusted. This reliability is vital for ensuring steady power supply. The technologies are also environmentally-friendly, as they not only reduce CO_2 but also eliminate most of NOx (nitrogen oxide) and SOx (sulfur oxide). Packaging these technologies with other skills, including maintenance skills and human resources development, would have strong development effects for Africa, so I would expect such packages to be in demand in Africa.

In supporting Japanese companies' activities in the African power sector, AfDB is hoping to actively collaborate with JBIC. AfDB can provide a wide array of support with its strong tie with each government in the region. We welcome Japanese companies as well as JBIC to consult with the AfDB headquarters and regional offices for specific issues such as how to realize a project with support from the AfDB.

TICAD VI, held in August this year, should invite as many company executives as possible and offer a great opportunity for Japanese companies to promote their businesses in Africa. AfDB is taking this occasion to draw Japanese companies' interest to Africa by not only participating in a number of side events during the conference, but also holding business investment seminars as follow-ups after the conference. In such ways, we at AfDB strongly wish to support the promotion of Japanese companies' businesses in Africa.



Innovating hygiene products to bring more comfort to people across the world

Enhancing overseas production to compete with global peers by turning unique ideas into original products

Haso Ltd., a Japanese small and medium-sized enterprise (SME), holds a number of patents for its key products such as handy wipers and wet tissues. With its advanced skills, it designs and manufactures hygiene and cleaning products which are highly praised. Haso supplies its products to major Japanese manufacturers, mass retailers, drug stores, and major overseas daily commodity makers as an OEM (original equipment manufacturer). Also active in expanding overseas businesses, the company built production and sales bases starting from China in 2001, then Thailand in 2012, and the U.S. in 2014. This year, Haso has launched a new epoch-making product using unique materials, while moving forward with enhancing its own brand, setting their goal to compete in the global market with their original products.

Expanding to the Chinese market with high ambition

"I was seriously aiming to achieve an annual turnover of 500 billion yen and get our shares to be listed. We didn't have much money but I had the confidence that we could develop one new product after another."

This is the big target with which Haso Ltd.'s CEO, Mr. Yamada, started the business. But he says it was not easy to operate his business in China, where he chose as the company's first production base. "Because we didn't have any funds, we had to rent the factory, and because we didn't understand any Chinese, we constantly relied on interpreters. We could not pay our ingredient suppliers on time as our deposits of proceeds were delayed for the first two years or so. I can't count how many times we were saved by the local Chinese people," Mr. Yamada looks back with a smile.

It was not until 2005 that Haso reached a turning point. The company's patented product, the "Handy Wiper" drew the attention of major companies both in Japan and overseas who successively ordered for OEM supplies, so Haso expanded its facilities to increase production. This is when Haso's track record suddenly began turning positive. After Haso gained momentum when it co-developed a product with a major Japanese manufacturer, the company began producing toilet cleaners in Thailand in 2012, then wet tissues in the U.S. in 2014.

The company continued to grow, and finally reached a revenue of 5.2 billion yen in 2015. It expects to achieve 15 to 20 billion in two years from now. Even with this accomplishment, Mr. Yamada is still girding up his loins: "we only achieved our initial goal and reached the stage when we can finally begin what we originally wanted to do. This is only the beginning."

Aiming for the global market with unprecedented ideas and epoch-making products

Developing unique products – that is what Mr. Yamada wanted to do. "Until now, we focused on creating products that satisfy customers by just adding a bit of ingenuity to existing products. But what I really wanted to do was to develop products that we can sell under our own brand. For the first time, we have the foundation for developing and delivering products that never existed before."

Disposal diapers using revolutionary functional materials created a sensation at exhibitions

What the company developed was a disposable underwear-shaped diaper for infants and the elderly using epoch-making functional materials. They have revolutionized the conventional style of diapers – fashionably designed, thin and light, comfortably fitting with excellent elasticity, added with a pad which has high absorbing and deodorizing functions. The replaceable pad makes it highly economical and reduces waste, so the product has many advantages. They received a great response at product exhibitions and are already attracting orders from major Japanese drugstores as well as major American retailers.

With the increasing population in emerging countries and aging population in developed countries, the diaper market continues to expand across the world. On the company's future development, Mr. Yamada says, "the global diaper market is worth 6 to 7 trillion yen. Our company can target 100 to 200 billion yen. We will make the new product at the China plant whose facilities were expanded with the loan from JBIC, and we plan to eventually expand to Thailand."

Bringing Haso brand to the world

Fifteen years have passed since Haso began its production in China. Mr. Yamada reconfirmed the importance of being able to procure funds for a company to grow and pointed out that JBIC's loans have helped raise their credibility. Mr. Yamada says, "We have used JBIC's loans twice for expanding the production facilities of our main plant in China. Each loan improved the recognition of Haso as 'a company supported by JBIC.'"

Haso plans to enhance its own brand of products within this year toward their big goal. "We will always be the best in creating one new product after another. We want to become a company that has vast networks and supporters across the world, however small we are. Our goal is to achieve a revenue of 15-20 billion yen with 15% profits in two years, and then compete in the global market." Mr. Yamada takes steps forward each day to turn his dream into reality, envisioning the Haso brand bringing joy and comfort to people across the world.

Kikuo Yamada
CEO of Haso Ltd.

Company Profile

Name	Haso Ltd.
Established	2001
Capital	50 million yen
CEO	Kikuo Yamada
Business lines	Manufacturing and sales of hygiene and cleaning products
Headquarters	2-19-3 Nishi-Gotanda, Shinagawa-ku, Tokyo 141-0031, Japan
Factories	Ishikawa factory (domestic), China factory, Thai factory, and the U.S. factory (overseas)

The China factory where the new product is being produced

Relationship with JBIC

In March 2016, JBIC signed a loan agreement amounting to USD3.5 million (JBIC portion) with HASO Ltd. (HASO). The loan is cofinanced with THE CHIBA BANK, LTD., with the overall cofinancing amount reaching USD5 million. It is intended to finance HASO for expanding production facilities of hygiene and cleaning products produced by its Chinese subsidiary, HASO SANITARY MATERIALS (SUZHOU) CO., LTD. (HSM). JBIC also signed in October 2014 a loan agreement amounting to USD1.4 million (JBIC portion) with HASO for expanding HSM's production facilities.

Supporting the Economic Development of Bangladesh through Buyer's Credit to the Bangladesh Power Development Board

With the population exceeding 150 million, Bangladesh has been experiencing strong economic growth which is expected to continue into the future. Meanwhile, the country's chronic power shortage has been one of the major impediments to this economic growth. To address this issue, the Bangladeshi government is striving to enhance its power supply capability under its Power System Master Plan. JBIC has responded by providing buyer's credit for constructing a gas-fired combined cycle power plant in Bangladesh, which in turn supports the export of key facilities made by Japanese companies. Let's take a closer look at the scheme and objective of this financing.

An article related to this project was published in the morning edition of The Nikkei on February 29, 2016.

F-series gas turbine made by MITSUBISHI HITACHI POWER SYSTEMS

Buyer's Credit for Bangladesh Power Development Board

Supporting Export of Facilities for 400 MW Gas-Fired Combined Cycle Power Plant by Japanese Company

The Japan Bank for International Cooperation (JBIC; Governor, CEO: Hiroshi Watanabe) signed a loan agreement on February 29th in buyer's credit (export loan) totaling up to approximately JPY18.5 billion (JBIC portion) with the Bangladesh Power Development Board (BPDB), a national power development entity in Bangladesh. The loan is cofinanced with The Bank of Tokyo-Mitsubishi UFJ, Ltd. (BTMU), bringing the total cofinancing amount to approximately JPY30.8 billion, with Nippon Export and Investment Insurance (NEXI) providing insurance for the portion cofinanced by BTMU.

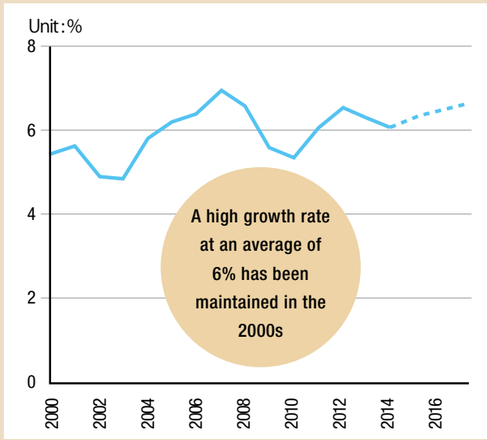
The loan is intended to provide financing for BPDB to purchase a complete set of facilities, including gas turbines (MITSUBISHI HITACHI POWER SYSTEMS, LTD.) and steam turbines (FUJI ELECTRIC CO., LTD.) from Marubeni Corporation for the construction of a new 400 MW gas-fired combined cycle power plant in the northeast of Bangladesh.

Despite growing demand for electricity in Bangladesh due to steady economic growth, power supply has not caught up with this demand, and the country has been experiencing a chronic power shortage. Given such circumstances, the Bangladesh government has been promoting the enhancement of power supply under its Power System Master Plan. This loan is expected to support Bangladesh's economic development by realizing steady power supply, and, at the same time, will contribute to maintaining and strengthening the international competitiveness of Japanese industries.

As Japan's policy-based financial institution, JBIC will continue to financially support the export of infrastructure-related facilities as well as the overseas business deployment of Japanese companies, by drawing on its various financial facilities and schemes for structuring projects, and performing its risk-assuming function.

* Press release of JBIC, March 1, 2016

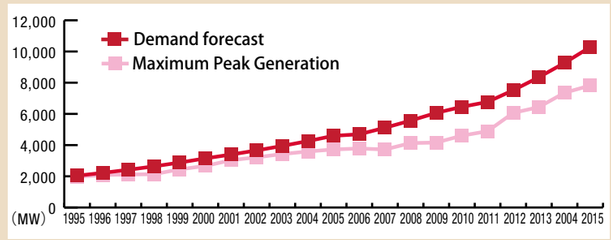
■ Trend in economic growth of Bangladesh



Source: created from IMF-World Economic Outlook Databases (April 2016)

■ Demand and maximum volume of generated electricity in Bangladesh

Power supply is going short against demand that is increasing with economic growth



Source: created from Bangladesh Power Development Board (BPDB)'s data

—What kind of scheme is buyer's credit?

▸**Goto** Buyer's credit provides financing for foreign importers (buyers) to purchase machinery and equipment made and exported by Japanese companies. In this project, the credit provides funds for the Bangladesh Power Development Board (BPDB) to purchase key plant facilities, including gas turbines made by MITSUBISHI HITACHI POWER SYSTEMS, LTD. and steam turbines made by FUJI ELECTRIC CO., LTD. for the construction of a new gas-fired combined cycle power plant.

—What are the distinctive characteristics and significance of this buyer's credit?

▸**Yanagisawa** Its characteristic is that the gas-fired combined cycle power plant will be on the largest scale in the history of Bangladesh. Moreover, because Bangladesh is a natural gas-producing country, the plant can use domestic resources, which places relatively less burden on the environment.

With the population exceeding 150 million, the economy of Bangladesh is growing at an annual average rate of 6% in the 2000s, supported by active domestic demand as well as strong exports, and this steady trend is expected to continue into the future. Demand for electricity is therefore on the increase as well, but there has been a gap in the supply side. Given such circumstances, JBIC's support through this project in enhancing Bangladesh's power supply is expected to contribute also to the economic development of the country.

Furthermore, there has been a continued inflow of Japanese companies, especially in the textile and apparel industries. Given this trend, added with companies transferring their production base from China in pursuit of an abundant and less expensive workforce, this financing will indirectly help the development of power infrastructure that is needed for production by these Japanese companies.

—Did you experience any difficulty given that it has been 15 years since the last financing for Bangladesh?

▸**Yanagisawa** Because of the 15-year gap, we had to investigate the "very basis" of the project upon consideration of the financing – in other words, the present environment of the Bangladesh power sector, structure of BPDB, the price system of electricity which is one of the regulated industries, and the relationships between electricity producers, distributors, and BPDB. We would normally conduct this research by visiting the actual site, but we could not due to worsening public safety of Bangladesh at the time. So we conducted the research using all available information from many sources, from desktop materials to networks of the trading company in charge of the export, as well as JBIC's Representative Office in Singapore. Furthermore, this loan was to be provided when finance in Bangladesh was turning from concessional (financing intended for aid under conditions of low interest rate and long-term repayment plan) to non-concessional, so we needed to negotiate with BPDB while explaining JBIC's financing schemes in detail. Such laborious work may have been an "operational difficulty" that we had not faced for the past 15 years.

—Do you think that Japanese companies will be more motivated to expand to Bangladesh?

▸**Yanagisawa** I think this project did have a certain ripple effect, as I have heard some say, "If JBIC finances Bangladesh, we will consider a project in Bangladesh." Bangladesh is regarded as an attractive market and an investment destination for BOP business (see Note), and I am sure various industrial sectors will increase their level of focus on the country in anticipation of the growing medium income group.

—Amid the continuing economic growth, infrastructure development in Bangladesh seems to still have expectations for JBIC's support.

▸**Goto** I would like to give support that only JBIC can provide, such as long-term finance and needs for large-scale funds, to infrastructure development in Bangladesh and other emerging countries. I believe JBIC can play a complementary role to private banks in terms of both the financing term and funding volume to realize the projects.

Note: BOP is an abbreviation for Base of the Economic Pyramid, which is the group with the largest population and whose income is the lowest in the world. BOP business is a sustainable business that supports the development of companies, while contributing to improving the living standard of relevant countries by providing products and services of benefit to the BOP community.

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