

# TOYO TIMES

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**TOYO**  
ENGINEERING



# Securing Quality is Top Priority under the TOYO Revival Plan

## Shifting Gears Toward a Sustainable Growth Track

### Shifting Swiftly to Project Realization by Enhancing Proposal Ability and Getting Involved from the Planning Stage

■ TOYO recorded an operating loss in the Company's consolidated results of fiscal 2016 (the year ended March 31, 2017), and both ordinary income and net income were significantly lower than in the previous fiscal year. What caused this to occur?

At the beginning of fiscal 2016, the second year of the Revival Plan, we were aiming for net income of ¥6 billion, but fell far short due to a large cost increase at an ethylene project in the U.S. Also, additional costs were posted due to the rectification of some equipment trouble after the completion of the Nigerian fertilizer project, and those costs worsened the downturn. As we were unable to produce the anticipated results and move the Revival Plan forward, I must offer my apologies to our stakeholders.

■ Fiscal 2016 also saw a downturn in orders. Is this a result of having concentrated on high revenue projects?

With project revenue having deteriorated in fiscal 2014, we set forth a fundamental strategy in the Revival Plan to not simply pursue high turnover, but rather focus on ensuring appropriate profit when receiving orders. As of April 2016, there was a backlog of contracts worth more than approximately ¥800 billion, and we decided to prioritize allocating our resources to ongoing projects instead of overextending with new orders.

However, due to sluggish oil prices, the deceleration of the Chinese economy and other factors, the environment for new orders became unexpectedly difficult. As a result, new orders for that period stalled at ¥116.7 billion, and we were unable to reach the ¥250 billion target. Because a lower order backlog will influence financial results for several successive years, we are striving to secure the orders we target by enhancing our proposal ability and getting involved from project planning.



**Kiyoshi Nakao**  
President and CEO

## TOYO's MVV as the Guideline for Revival

### ■ In the two years of the Revival Plan, what sort of results have you seen in frameworks for business promotion?

**T**he P-74 FPSO\* project in Brazil is making steady progress and, other than the U.S. ethylene project, ongoing projects are generally maintaining planned profitability. Risk management in some individual projects in the previous financial year needed to be improved, but we have obtained significant positive results through improving the mechanisms in the organization, such as reforming executive committees and making the decision-making process more transparent. Currently, along with confirming project management strategy from a company-wide perspective in the newly established Business Strategic Committee, we are also discussing and working through issues and risks involved with individual projects in the Proposal and Project Strategy Committee. The results of establishing a multilayered check system are becoming more visible every day.

\*FPSO : Floating Production Storage and Offloading

### ■ Has there been a change in employee awareness and approach to work over these two years?

**U**nder the Revival Plan, one of the fundamental reforms is changing our corporate culture, and we made a strong commitment to promoting all-around communication. In February of this year, we revisited the Revival Plan and decided on the strategy for fiscal 2017. Changing our corporate culture, however, is a continuing theme.

As for employee awareness and approach to work, I feel there has been a great change, especially in this fiscal year. Through sharing the causes and countermeasures for the losses in the U.S., every employee adopted a heightened sense of urgency and was reminded of TOYO's fundamental principle, MVV.\* This inspired a spirit of unity in working to overcome the challenging situation. Rather than passively carrying out reforms because it is company policy, everyone is getting involved with an attitude of personal responsibility. I am heartened to have seen this come about naturally.

\*MVV: Mission, Vision and Values

## Revival Plan Third Year Priorities: Ensuring Quality and Improving Productivity

### ■ The Revival Plan is now entering its third year. What is TOYO's strategy for this period?

We have decided on “Enhancing the Revival Plan” as our third year business strategy, and improving quality is at its core. There was a quality issue behind the deterioration in the profitability of some projects, such as the one in the U.S. We could not maintain the required level of our quality in engineering, in procurement of equipment and materials from suppliers, or in construction. In order to successfully execute the Revival Plan, we must not fail in securing quality and improving productivity. While working to appropriately deploy and utilize human resources, we will pursue the sophistication of every engineer's work and achieve thorough project management.

TOYO has successfully expanded the group's scope over its 56-year history, but at the same time, rules and work procedures have become complicated, hampering business management efficiency. In my view, it is absolutely necessary to streamline every department to improve productivity and, consequently, the absolute requirement of quality.

### ■ The goal for orders in fiscal 2017 was set at ¥250 billion. What is your assessment of the market environment in the three core business areas that hold the key to achieving this goal?

The market environment is continuing to trend positively. First, let's look at the plant business market. Oil-producing countries held production volume negotiations in autumn of last year, and a fix was put in place to curtail price decreases. On the other hand, the expansion of the shale gas and oil markets in North America is suppressing a speculative increase in the price of oil. Stable oil prices invigorate downstream investment, and this will likely have a positive effect for TOYO's plant business. In fertilizer-related business, expansion is continuing on a global scale, and in the last few years TOYO has been working on urea projects in places such as Indonesia, India, Nigeria and Bolivia.

In the infrastructure business field, renewable energy power plant projects for solar and biomass have been increasing, mainly in Japan and Southeast Asia. Improving infrastructure in areas such as power generation and transportation is a national issue in emerging countries, so I also expect to see a growth trend in this market.

In the energy development business field, companies are considering the increase of production through the



reinvigoration of depleted oil and gas fields all around the world. TOYO will work to expand opportunities for involvement in project planning with the technologies and know-how we have cultivated in energy development.

## Diversifying our Revenue Base Through Infrastructure O&M

### ■ While oil prices have stabilized, geopolitical risks in East Asia and the Middle East have grown. How are changes in the global situation affecting TOYO's business operations?

The East Asian and Middle Eastern regions have historically been important markets for TOYO. However, due to issues such as sanctions on Iran and conflicts in Iraq, we are still unable to make predictions about the markets there. Because there are safety concerns in executing projects in these regions, our policy is to carefully correspond by taking risks into consideration. On the other hand, TOYO has completed many successful projects in CIS and Russia. The know-how and human networks developed through executing these projects still remains, and we are seeking opportunities to get involved in project planning while monitoring movements in the politics and the economy. We are also focused on the U.S. and sub-Saharan Africa, but both areas have some difficulties in implementing an EPC\* lump sum approach. While observing growth trends in the market and conducting risk management, we will expand our field of operations and take alternating approaches through both technology and services.

\*EPC: Engineering, Procurement and Construction

### ■ TOYO has evolved mainly from EPC lump sum projects. Will you be expanding the business model in the future to include technology/ services and investment business?

For engineering companies in the contracting business, pursuing risk mitigation and generating

stable income are constantly ongoing management challenges. For TOYO as well, we must provide not only EPC, but also services for our clients' entire value chains.

I feel there is potential in operations and maintenance (O&M). In infrastructure projects such as large-scale photovoltaic power plants, there are various works and services additional to EPC, such as facility operations as well as facility and equipment maintenance. By integrating these types of services into our projects, we can stabilize income and diversify our revenue base.

### Striving to Create the “Fourth Pillar” Through TOYO’s Rich Experience, Knowledge and Technology

#### ■ What is TOYO’s mid- to long-term growth strategy?

For fiscal 2017, we set targets of ¥370 billion consolidated net sales, ¥6.5 billion operating income, and ¥2 billion net income. In line with the Revival Plan, we aim to secure ¥300–400 billion in orders every year and establish a management system that produces income. When we achieve these goals, we will shift gears and take new steps toward growth.

Under the mid-term business plan, which follows the completion of the Revival Plan, the main subject will be establishing a “fourth pillar” in addition to our three core business areas of plants, infrastructure and energy development. Making use of the experience, knowledge and competitive advantages TOYO has accumulated over many years in the engineering business, we will pioneer next-generation income streams. And, in developing new business areas, we will also push forward proactively in alliance with our partner companies. By working to bring together management assets from inside and outside the Company, maximize synergies, and build win-win relationships with our collaborators, I believe we can look forward to sustainable growth.

#### ■ In addition to developing new business areas, the fiscal 2017 management policy mentions improving added value in existing business fields. Could you give us some specifics about this?

We are progressing with a variety of initiatives, but in particular I would like to introduce two activities. First is TOYO’s entry into the realm of IoT. In December 2016, TOYO signed an agreement with GE, U.S., on co-developing digital solutions for fertilizer and petrochemical industries. Here, IoT-based methods are used at clients’ plants in services such as monitoring and diagnosis.

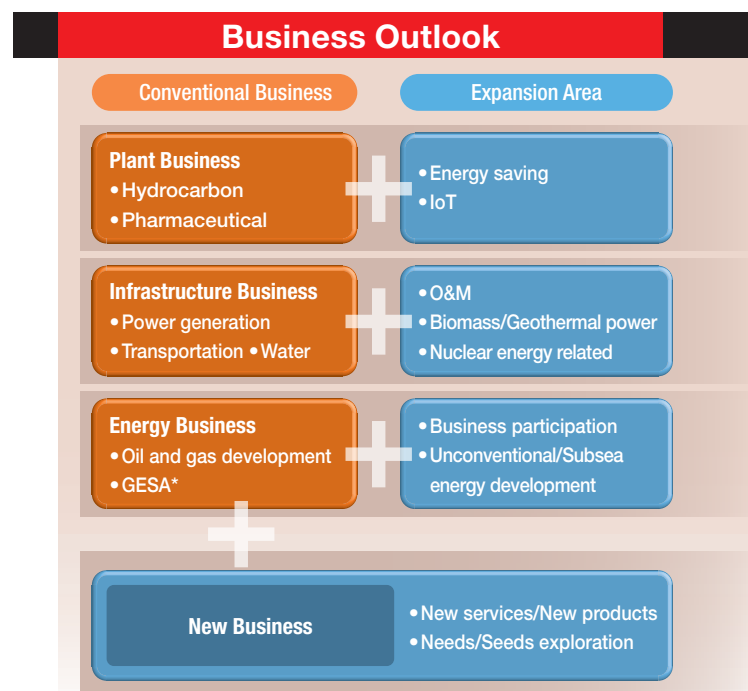
Last year, commercial operation started at a Maruzen Petrochemical Co., Ltd., plant that utilizes TOYO’s *SUPERHIDIC*<sup>®</sup> energy saving distillation system. Compared with conventional distillation towers, our system achieves over 50% energy saving. Taking this success as a starting point, we hope to expand with the strategic business model of providing energy-saving technologies. This will reinforce TOYO’s competitiveness in the existing plant business field.

### Becoming Recognized as a Valued Corporate Group by Our Stakeholders

#### ■ Finally, could you give a message to your stakeholders?

Since the beginning of the Revival Plan, starting from improving the profitability of ongoing projects by thorough risk management, we have seen a proliferation of positive factors such as the change in employee awareness. Making the most of the revival in fiscal 2017, I am determined that we will shift gears toward the next period of growth in the coming fiscal year.

By concentrating the group’s full strength, TOYO will overcome these challenging times. We will drive innovation in all areas of the company’s activities, including in management systems, project execution, and technology, and thereby will evolve to meet the expectations of all stakeholders. I want to offer my most heartfelt wish for your continued understanding and support.



\*GESA: General Engineering Service Agreement



**Expanding TOYO's Global Operations: Indonesian Group Company IKPT**

# Capturing Local Needs and Adapting Flexibly

TOYO's group companies are rooted in Southeast Asia. This edition of In Depth introduces

With vigorous demand for infrastructure, IKPT is constructing photovoltaic and biomass power plants on remote islands, and also carrying out the Jakarta Transportation project, which is Indonesia's first mass rapid transit system with a subway.

With increased demand for petrochemical products, such as automobiles and consumer electronics, IKPT is now executing plant construction projects to produce ethylene, synthetic rubber and others.

With rapid growth of FMCG,\* IKPT is providing technical services for the construction, optimization and expansion of several factories for global FMCG companies.

IKPT is always ready and willing to support clients in their business expansions along with regional economic development.

\*FMCG: Fast-Moving Consumer Goods

## Indonesia's Growing Demand for Infrastructure

Indonesia has a population of approximately 250 million. That massive population, with its vital domestic demand, has supported stable economic growth since 2004, with further growth of 5.1% projected for 2017. Spurred by the infrastructure investment promotion policies of President Joko Widodo's administration, a great number of projects are being executed or coming up for new infrastructure development in power generation and transportation.

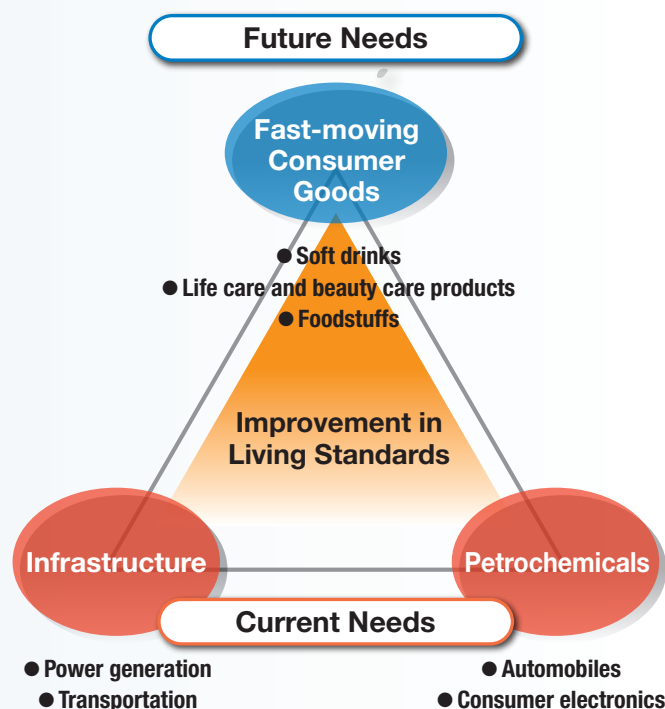
As Indonesia consists of over 13,000 islands, government policy plans for an efficient maritime transportation network under the vision of "global maritime axis," which will expand our business opportunities.

## IKPT

Established in 1982, IKPT has a remarkable track record in the completion of a wide variety of projects in fields such as oil and gas, petrochemicals and chemicals, infrastructure, offshore development, LNG and geothermal power generation. IKPT has developed a positive relationship with TOYO through more than 20 years of cooperation in fertilizer plant and other projects. In January 2012, TOYO obtained a 47% share in IKPT, becoming its major shareholder.

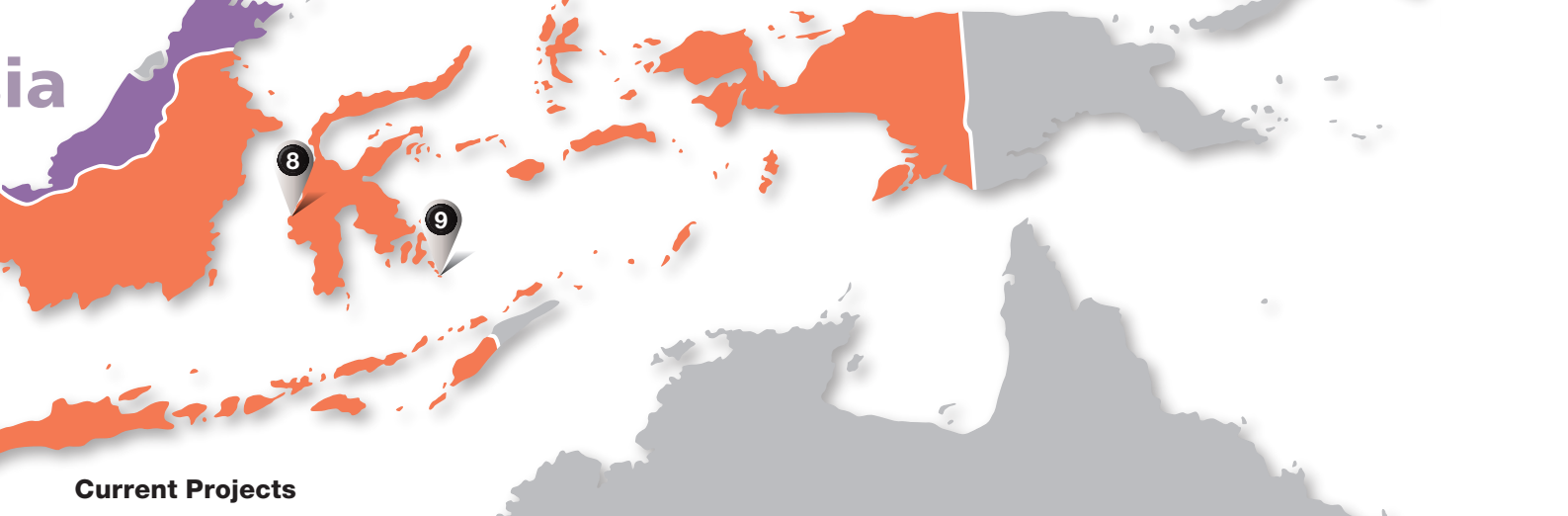


### Needs in Indonesian Markets



Company Name	PT. Inti Karya Persada Teknik (Abbreviation: IKPT)
Location	Jakarta, Republic of Indonesia
Number of Employees	Approximately 1,100 (as of 2017)

ed firmly in their regions and execute projects in ways ideally suited to local needs.  
s IKPT, a company based in the economically growing country of Indonesia.



### Current Projects

No.	Facility	Location	Collaborators	Year of Award
①	Steam Cracker Complex	Pengerang, Southern Johor, Malaysia	TOYO group companies	2014
②	Jakarta Mass Rapid Transit System and track work	Jakarta	Toyo-Japan and Japanese companies	2015
③	Synthetic rubber plant (120,000 tons per year)	Cilegon, Banten	Toyo-Japan	2015
④	Butadiene plant expansion (137,000 tons per year)	Cilegon, Banten	Toyo-Korea	2017
⑤	Gas compression facilities (770 MMSCFD)	Suban, South Sumatra	Local companies	2017
⑥	Geothermal power plant (55 MW)	South Sumatra	Japanese companies	2017
⑦	Biomass power plant (700 kW)	Siberut Island, West Sumatra	None	2016
⑧	Photovoltaic power plant (600 kW)	Karampuang Island, West Sulawesi	Local companies	2016
⑨	Photovoltaic power plant (800 kW)	Wakatobi Island, Southeast Sulawesi	Local companies	2016

### Spotlight



Local  
Project

#### IKPT Independent Locally Based Project —Power Plants on Remote Islands—

IKPT is currently constructing photovoltaic power plants on the islands of Karampuang and Wakatobi near Sulawesi, as well as a biomass power plant on Siberut Island near Sumatra. These power plants will provide electrical power for approximately 3,000 households on those islands, boosting the standard of living and vitalizing the region.

TOYO is aiming to enrich the futures of people living even on remote islands with its technical strength and expertise.



Global  
Project

#### Global Operations on Large-scale Project —Jakarta Mass Rapid Transit System—

In April 2015, a consortium of Mitsui & Co., Ltd., Kobe Steel, Ltd., Toyo-Japan and IKPT was awarded a project for integrated railway systems and track work for the North-South Line of the Jakarta Mass Rapid Transit System. Construction work commenced in February 2017 and will be getting in full swing soon. IKPT is proud to take part in this prestigious project to contribute to the people of Jakarta.

# Taking on a Range of Business Models Aiming for a Stable Revenue Structure



**Eiji Hosoi** President Director of IKPT

Appointed in 2012, Eiji Hosoi always takes an active stance in moving IKPT forward. In 2015, he assumed the position of President Director of IKPT and Executive Officer of Toyo-Japan.

## Business Expansion Built on a Local Base

IKPT is collaborating with various companies to create new networks with regions, clients and business fields. IKPT is actively developing its business by forming alliances with Indonesian domestic companies, O&M companies, trading companies and Korean/Japanese/European engineering or construction companies in addition to TOYO's group companies.

IKPT is capable and confident in covering a full range of business fields while maintaining cost competitiveness. This includes service from small-scale consultancy work to large-scale full EPC\* lump-sum projects, even including O&M through alliances. IKPT's locally based position expands business opportunities for TOYO as a whole.

\*EPC: Engineering, Procurement and Construction

## Increasing Management Strength by Developing Human Capital

IKPT has a staff of 1,100, and is one of the largest engineering companies in Indonesia. Among the staff, 80% are involved in project execution, and many are dispatched to construction sites to obtain the management/leadership skills and comprehensive, all-around knowledge required for EPC business.

Every year, IKPT sets up a human capital development program with a unique theme highlighting project operation. Training, workshops, lectures, examinations, contests and more are carried out throughout the year. This year, for example, the theme of the program is "Enhancement of Presentation Skills."

Another focus of reinforcement at IKPT is using feedback from past projects as a management strengthening strategy. IKPT earnestly pursues trouble-free project operations, which involve forecasting anticipated troubles ahead of the project and always having countermeasures ready.

## Stabilizing Management Through Reforming Revenue Structure and Seeking New Possibilities

Stable company operation with steady growth is always a management target. However, a company like IKPT is completely exposed to fluctuations in the domestic economy. Our risk mitigation method is to diversify our business. IKPT is shifting its focus from its conventional hydrocarbon-based business of oil, gas and petrochemicals to infrastructure-related business such as power generation, transportation and logistics, as well as consumer-oriented business like FMCG. IKPT, in particular, has widened its focus in the power business field to not only gas-fired or coal-fired but also hydro, geothermal, photovoltaic and biomass power plants. In the future, IKPT will also enter the pharmaceuticals and hospitals businesses.

Instead of just waiting for the result of a bid, IKPT needs to seek and participate in projects in which we act as a partner with clients.

IKPT is now collaborating within the TOYO group, with Toyo-Korea on polymer plants and with Toyo-India on the FMCG business. In this way, IKPT is working to create an ideal formation for providing optimum solutions in the TOYO group. I am confident this vibrant stance will result in raising the value of TOYO.



## Construction Completed on Fertilizer Project in Indonesia



The completed fertilizer plant

In April 2017, TOYO completed construction on a fertilizer plant and handed it over to the client, PT Pupuk Sriwidjaja Palembang (PUSRI), Indonesia. The project was executed by a consortium of TOYO and Indonesian engineering company PT Rekayasa Industri (REKIND). TOYO provided ACES21® technology for the facility to produce 2,750 tons of urea per day and constructed the urea plant, while REKIND was responsible for the construction of the 2,000 ton per day ammonia plant and the utilities facility. By using coal, which is produced in large quantities in Indonesia, as the boiler fuel needed to produce a large volume of steam, natural gas can be effectively utilized as feedstock in order to increase fertilizer production. Since the 1970s, TOYO has successfully constructed and revamped projects at PUSRI's four plants, and has established a good relationship with REKIND as a partner.

Currently, TOYO, together with Indonesian affiliate IKPT, is executing a synthetic rubber plant project for PT Synthetic Rubber Indonesia; a butadiene expansion project for PT Petrokimia Butadiene Indonesia; and an integrated railway system and track construction project for the North-South Line of the Jakarta Mass Rapid Transit System as part of a four-company consortium with Mitsui & Co., Ltd., and Kobe Steel, Ltd. Recently, IKPT is collaborating with a local company on a gas compression facility project for Indonesia's ConocoPhillips (Grissik), Ltd.

## Large Steam Cracker Complex in Malaysia Progressing

As of the end of June 2017, a consortium of Toyo-Japan and Toyo-Malaysia completed 80% of the overall project progress for a large scale steam cracker complex of PETRONAS' RAPID Project (RAPID-SCC), located in Johor state, Malaysia. The Refinery and Petrochemicals Integrated Development (RAPID) is the heart of the Pengerang Integrated Complex (PIC), and is supported by six associated facilities. TOYO group companies in Japan, India, Indonesia, Malaysia and Thailand participated in the project and assumed detailed engineering for the various kinds of production units, which was completed as of the end of June 2017. Toyo-India was responsible for the steam cracker and interconnection units; IKPT (Indonesia) oversaw the butadiene extraction, pyrolysis gasoline hydrogenation, and MTBE units; Toyo-Malaysia was responsible for the benzene extraction unit; and TTCL (Thailand) oversaw the utilities.

Inspection and delivery of all process equipment and materials has been completed, and only a portion of the bulk materials remained. Construction work is now in its peak period. As of the end of June 2017, installation of heavy equipment totaling approximately 30,000 tons was completed. More than 50 towers and reactors of various sizes rise over the site like skyscrapers. Over 5,000 workers from more than 10 Asian countries are working onsite with the utmost care for safety and health.

Construction on the RAPID-SCC Project is scheduled to be completed in September 2018, and it will be ready for start-up at the end of November 2018.



A "forest" of towers and reactors

## Fertilizer Project Completed in Nigeria



The completed fertilizer plant

Commissioning of a world-scale fertilizer plant in Port Harcourt, Nigeria, has been completed for Indorama Eleme Fertilizer & Chemicals Limited, the Nigerian arm of the Indorama Group, a major manufacturer of petrochemicals, polyester and fertilizer. This project was to construct a fertilizer plant to produce 2,300 tons per day of ammonia and 4,000 tons per day of granulated urea, and was conducted jointly between TOYO and a Nigerian subsidiary of Korea's Daewoo Group. The project employed the ammonia process technology of KBR, U.S., and the urea process technology of TOYO.

The plant, which produces 4,000 tons of urea in a single train, represents the largest in terms of production capacity out of the more than 100 urea plants on which TOYO has worked. In executing the project, TOYO's scope of work was to provide the license and conduct the development of basic design, detailed engineering, procurement and commissioning service, while Daewoo carried out construction. This project is the first project in the sub-Saharan area for TOYO, and was completed after overcoming many obstacles, such as the outbreak of Ebola virus. In the sub-Saharan area, where economic growth is expected, an increase in demand for fertilizer is projected in conjunction with the expansion of agricultural production, and investment in fertilizers is anticipated in countries that produce natural gas as its feedstock.

## Exhibit at Gastech 2017



TOYO's booth

From April 4–7, 2017, TOYO exhibited at Gastech 2017, an international conference and exhibition held in Chiba, Japan. TOYO presented its solutions and technologies for gas-related businesses, gas field E&P

consulting, subsea oil and gas development services, mid-scale LNG and FLNG\* facilities for small- to medium-scale gas fields, and GTL technology solutions for efficient utilization of associated gas and biomass.

The TOYO booth featured demonstrations of an operator training simulator for COREFLUX®-LNG, a technology applied to an LNG regasification facility in India that enables an increase in the ethane and LPG recovery rate while also saving energy. Regarding subsea development, staff members from collaboration partners Aker Solutions and Baker Hughes joined in introducing solutions, making it a good opportunity to display TOYO's capability and technological strength in the offshore energy development field, one of the areas the Company is focusing on.

\*FLNG: Floating LNG

## Construction Completed on No. 1 Plant of Natural Gas-Fired Power Plant Project in Thailand

TOYO is currently executing a construction project for twelve cogeneration power plants for special purpose companies jointly owned by Mitsui & Co., Ltd. (Mitsui) and Thailand's Gulf Energy Development Co., Ltd. In May of 2017, construction was completed on the GVTP plant (130 MW capacity), which was awarded in February 2015 as plant No. 1.

This project involves the construction of twelve natural gas-fired combined cycle cogeneration power plants near Bangkok (six 120 MW, two 125 MW, and four 130 MW, total generation capacity 1,490 MW), with work beginning on each new plant every two months from February to December 2015 and June 2016 to April 2017. The plants currently under construction are being completed in sequence and commencing operations. Construction of the final No. 12 plant is scheduled for completion in July 2019.

From 2010 to 2013, TOYO and Mitsui completed seven cogeneration power plants (five 110 MW, two 120 MW, total generation capacity 790 MW) in the suburbs of Bangkok, and those successes led to these twelve plant projects.



Plant No. 1, commencing operations in May 2017

## Partnering with Koch-Glitsch on *SUPERHIDIC*<sup>®</sup>



Maruzen Petrochemical's MEK production plant

TOYO and Koch-Glitsch have entered a partnership to distribute TOYO's innovative energy-saving distillation system, *SUPERHIDIC*<sup>®</sup>, in the Europe and Middle East markets. Koch-Glitsch is a company of Koch Chemical Technology Group, LLC, headquartered in Wichita, Kansas, U.S., and is a global leader in the design and manufacture of mass transfer, mist elimination, and liquid-liquid coalescing equipment for the refining, chemical, petrochemical and gas processing industries. Through the group's global network, TOYO is promoting sales of *SUPERHIDIC*<sup>®</sup>, while also furthering cooperation in

engineering, procurement and construction.

*SUPERHIDIC*<sup>®</sup> technology is mainly aimed at distillation processes, and offers the potential for large savings in energy consumption at oil refineries and petrochemical plants. Its superior design provides wide-ranging energy saving without the use of specialized equipment. The first commercial application of *SUPERHIDIC*<sup>®</sup> was for the Methyl Ethyl Ketone (MEK) production plant of Maruzen Petrochemical Co., Ltd., (Chiba Prefecture, Japan) in 2014. The plant commenced operations in 2016 and achieves more than 50% energy saving compared to conventional systems. In addition to its high economic efficiency, *SUPERHIDIC*<sup>®</sup> also contributes to reducing greenhouse gas emissions.

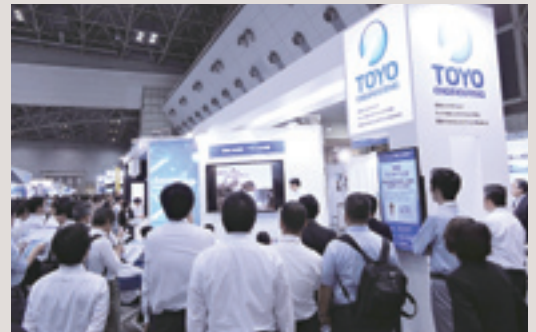
## Kinkai Habitat: Protecting Rare Species at Former Salt Field

Setouchi Future Creations LLC, a special purpose company jointly funded by TOYO, Kuni Umi Asset Management Co. Ltd., GE Energy Financial Services, and Chudenko Corporation, is currently constructing a mega solar plant with capacity of 235 MW, making it one of the largest in Japan. Work is quickly progressing on solar panel installation at the site on the former Kinkai salt field in Setouchi City, Okayama Prefecture, Japan.

The location of the construction was originally saline wetlands, where sea and rainwater mix. The unique environment is home to rare plants and animals. The Setouchi Mega Solar project strives to preserve this environment, and limits its impact on plants and animals to the absolute minimum. In order to coexist with nature, 16 hectares of preserved saline wetlands were allocated as the "Kinkai Habitat." In particular, to protect rare birds of prey, the waterside reed beds were retained and their feeding environment was improved by making use of the existing groves and creeks.

The project will create a stable electric power supply business through renewable energy while also protecting the natural environment.

## TOYO Exhibits at Interphex Japan



TOYO's booth

For three days starting from June 28, 2017, the 30th Interphex Japan was held in Tokyo. This is the largest expo in Japan for pharmaceutical R&D and manufacturing. Representing the TOYO Group, Toyo Engineering, Toyo Business Engineering and TEC Project Services exhibited together.

The theme of TOYO's booth was "Success with TOYO—Integrated Solutions for Diverse Needs." The presentations highlighted TOYO's strengths in advanced primary and secondary containment technologies for high potency API\* manufacturing plants and covered themes of high interest to the industry, such as continuous production, data integrity and middle molecular pharmaceuticals. The booth also featured hands-on exhibits allowing visitors to experience a virtual reality plant and a demo machine for a mobile dust collector under development in collaboration with HORKOS CORP. The event was an excellent opportunity to showcase TOYO's pharmaceutical engineering for the many visitors to the booth.

\*API: Active Pharmaceutical Ingredient



Panorama of the Kinkai Habitat





## Toyo Engineering Corporation

### ● HEAD OFFICE / ENGINEERING CENTER

2-8-1 Akanehama, Narashino-shi, Chiba  
275-0024, Japan  
Tel: 81-47-451-1111  
Fax: 81-47-454-1800

### ● TOKYO HEAD OFFICE

11th Fl., Shin-Marunouchi Building,  
1-5-1 Marunouchi, Chiyoda-ku, Tokyo  
100-6511, Japan  
Tel: 81-3-6268-6611  
Fax: 81-3-3214-6011

## OFFICES

### ● Jakarta

Wisma IKPT, 2nd Fl., JL. MT. Haryono Kav.  
4-5, Jakarta 12820, Indonesia  
Tel: 62-21-835-4170  
Fax: 62-21-835-4149

### ● Dubai

5WA G-16 Dubai Airport Free Zone Dubai,  
United Arab Emirates P.O. Box 54779  
Tel: 971-4-2602-438/439  
Fax: 971-4-2602-440

### ● Tehran

3rd floor, No. 37, East Atefi St., Nelson  
Mandela Blvd. (Jordan Ave.), Tehran,  
1917797515, Iran  
Tel: 98-21-262-00107/00104  
Fax: 98-21-262-90349

### ● Moscow

Room No. 605, World Trade Center,  
Krasnopresnenskaya Nab., 12, Moscow  
123610, Russia  
Tel: 7-495-258-2064/1504  
Fax: 7-495-258-2065

## GROUP COMPANIES

### ● TEC Project Services Corporation

2-6-3 Akanehama, Narashino-shi, Chiba  
275-0024, Japan  
Tel: 81-47-454-1178  
Fax: 81-47-454-1550

### ● Toyo Engineering Korea Limited

Toyo B/D. 11, Teheran-ro 37-gil,  
(Yeoksam-dong), Gangnam-gu,  
Seoul, 135-915, Korea  
Tel: 82-2-2189-1620  
Fax: 82-2-2189-1890

### ● Toyo Engineering Corporation (China)

18th Fl., Shanghai Zhongrong Plaza, No. 1088  
Pudong South Road, Pudong New District,  
Shanghai 200122, China  
Tel: 86-21-6187-1270  
Fax: 86-21-5888-8864/8874

### ● PT. Inti Karya Persada Tehnik (IKPT)

JL. MT. Haryono Kav. 4-5, Jakarta 12820,  
Indonesia  
Tel: 62-21-829-2177  
Fax: 62-21-828-1444  
62-21-835-3091

### ● Toyo Engineering & Construction Sdn. Bhd.

Suite 25.4, 25th Fl., Menara Haw Par,  
Jalan Sultan Ismail, 50250 Kuala Lumpur,  
Malaysia  
Tel: 60-3-2731-1100  
Fax: 60-3-2731-1110

### ● Toyo Engineering India Private Limited

"Toyo Technology Centre," 71,  
Kanjur Village Road, Kanjurmarg (East),  
Mumbai-400 042, India  
Tel: 91-22-2573-5000  
Fax: 91-22-2573-5842

### ● Saudi Toyo Engineering Company

B-604 Mada Commercial Tower 1,  
Prince Turki Street, Corniche District, P.O.  
Box 1720, Al Khobar-31952, Saudi Arabia  
Tel: 966-13-897-0072  
Fax: 966-13-893-8006

### ● Toyo Engineering Europe, S.r.l.

10 Via Alzata, i-24030 Villa d'Adda,  
Bergamo, Italy  
Tel: 39-035-4390520

### ● Toyo Engineering Canada Ltd.

Suite 300, 150-13th Avenue, S.W.  
Calgary, Alberta T2R 0V2, Canada  
Tel: 1-403-266-4400  
Fax: 1-403-266-5525

### ● Toyo U.S.A., Inc.

15415 Katy Freeway, Suite 600, Houston,  
TX 77094, U.S.A.  
Tel: 1-281-579-8900  
Fax: 1-281-599-9337

### ● Toyo Ingeniería de Venezuela, C.A.

Edif. Cavendes, Piso 10,  
Av. Francisco de Miranda c/1ra Av.,  
Urb. Los Palos Grandes, Caracas 1062,  
Venezuela  
Tel: 58-212-286-8696  
Fax: 58-212-285-1354

### ● TS Participações e Investimentos S.A.

Edifício Birmann 12, 1º andar,  
Rua Alexandre Dumas, nº 1.711,  
Santo Amaro, São Paulo,  
SP 04717-004, Brazil  
Tel: 55-11-5525-4834  
Fax: 55-11-5525-4841

### ● TTCL Public Company Limited

27th-30th Fl., Sermmit Tower,  
159 / 41-44 Sukhumvit 21, Asoke Road,  
North Klongtoey, Wattana,  
Bangkok, 10110, Thailand  
Tel: 66-2-260-8505  
Fax: 66-2-260-8525/8526

### ● Atlatec, S.A. de C.V.

Privada San Alberto 301,  
Residencial Santa Barbara,  
San Pedro Garza García,  
N.L. 66266 Mexico  
Tel: 52-81-8133-3200  
Fax: 52-81-8133-3282