Investor Relations Executive Vice President Ozaki on the "**TEC Brand**"

# The Client Reliance and Individual Capability Supporting the "TEC Brand"

TEC In-depth Contract Received for a

## Next-Generation Clean Energy DME Plant in China

**——The world's first plant to produce DME commercially for fuel use**

TEC In-depth Vigorous Development of

## R&D Engineering Results in Plant Contracts Received

Project Moving-on TEC Receives Contract for

## World's Largest EO/EG Plant in Saudi Arabia




TEC COMMUNICATIONS

# TEC COMM.

Vol. 4 Jan. 2003

Toyo Engineering Corporation (TEC)

# The Client Reliance and Individual Capability Supporting the "TEC Brand"

*Accountability*

*"My happiest moments are when I hear from our clients about how much they rely on the results achieved by TEC," says Executive Vice-President Toshiyuki Ozaki, who plays an active role in the front lines of our overseas plant business. From this viewpoint, Mr. Ozaki helps us understand the background of the "TEC Brand" that our clients find to be so reliable.*

## Seeing TEC from Outside and Inside

**Q Mr. Ozaki, you came to TEC after a prolific career at the Export-Import Bank of Japan (currently the Japan Bank for International Cooperation). Has your impression of the Company changed now that you're looking at it from the inside?**

When I was at the EXIM Bank, I was in a neutral position, and my relationship with TEC was limited to sales personnel and such. From the outside, it was very difficult to grasp a complete image of this "engineering business." At first, my impression was that TEC was a very active and interesting company that stretches its business arms all over the world. And then when I actually joined TEC and got acquainted with the people who were active in the business front lines, I found that every one of them was very enthusiastic about their work and responsibility. I really got the feeling that this was a group made up of very capable individuals who are truly dedicated to their work. They seem to have a real sense of purpose, contributing to the economic development of the countries by beating tough competition on the world stage, and carrying out the very difficult task of plant construction.

What's more, human resources development has traditionally been emphasized at TEC, for example the unique educational program called "TEC University" is deeply rooted in the Company. Each project is like preparing an *à la carte* dish: it starts with selecting the freshest ingredients and ends with the cooking and seasoning. In this business, preparing each "dish" deliciously and consistently all the way to the end requires integrated technology, of course, as well as wide-ranging knowledge and experience, not to mention a capability for managing people of many nationalities, and linguistic abilities as well. Without this kind of project management capability, the successful completion of the project can't be achieved. I am confident that this—excellent project managers (PM) equipped with this kind of comprehensive power—is the core of a plant engineering company. Having many PMs designated by our clients is a strong point of TEC, and I think that the emphasis on human resources development and continuous improvement of one's capability are vital for this.

## Distinguishing Characteristics of TEC Business

—The Reliance and Unique Business Model That Form the TEC Brand

**Q Moving on to the subject of business, please tell us again about the characteristics of TEC's business.**

### ● Outstanding results in India, Russia and China

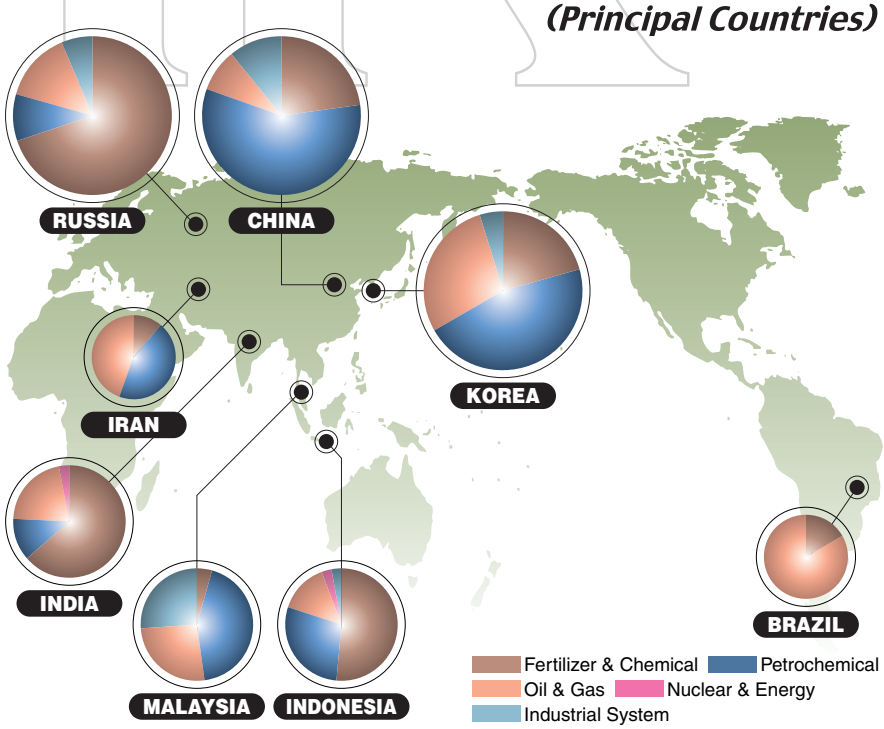
TEC, in its 40-year history, has performed a great deal of work vital to the economic development of many countries throughout the world—extremely large operations, considering TEC's company scale. As far as TEC's business characteristics are concerned, I'd say that all of these operations have a very diverse and international nature. In particular, we recorded outstanding results in plant construction in India, Russia (the former Soviet Union) and China, concentrating on fertilizer plants such as ammonia and urea, as well as ethylene and other petrochemical plants. This is one of TEC's strong points and its advantage can be clearly shown by our record in these three markets: over 30 plants in India, over 60 in Russia, and nearly 100 in China. The fact that we received several consecutive orders in the same country is a strong indication of the large amount of trust and reliance placed on TEC by our clients. At the same time, this reliability and these actual results were the background supporting the continuity of our operations as well as our market expansion into Southeast Asia, South America, and the Middle East, which began in the 1980s.

### ● Client reliance on the "TEC Brand"

When I visit our operations in each country, what makes me proudest is hearing the voices of our clients expressing their high evaluation of our work and their gratitude for the results we have achieved. In fact, just the other day, I was attending a plant completion ceremony in China, and I received words of gratitude from the client's top management for TEC's accomplishments in completing ahead of schedule while maintaining plant quality. Also last summer, I received words of gratitude from the president of Petroleo Brasileiro S.A. (PETROBRAS), a Brazilian national oil company, thanking us for completion as promised. This of course made me extremely proud.

The unrelenting Company-wide efforts and the high capabilities of each individual member of the project support the execution of successful projects such as these. Thus the reliance and high evaluation were obtained not by one country but by the broad worldwide base that forms the "TEC Brand." As for our operation's diversity, if we are doing a lot of business with developing nations, as opposed to doing work for the oil majors, we will be required to deal with a variety of plant items

## RECORD OF PROJECTS WORLDWIDE
(Principal Countries)




such as oil, gas, petrochemical, infrastructure and industrial facilities. We may also be asked to establish a structure for consistent operation, which makes full use of our comprehensive engineering and project-management capabilities. I think this ability that TEC has cultivated, to be able to deal with a variety of plant items, is another special characteristic of our business.

### ● A unique business model that corresponds to the sociality and expansion of our operations

One more point I'd like to touch on is the sociality and expansion of operations. In order to fulfil the huge task of plant export in the course of expansion of the client or partner nation, close cooperation with the great number of related parties involved in the realization of the project is indispensable. In particular, our collaborative relationships with trading companies on the marketing side, and our coordination with financial institutions centering on the Japan Bank for International Cooperation and Nippon Export and Investment Insurance, are what I would call our business model. Without it, it would be impossible to put TEC's technology to its best possible use.

In contrast to other engineering companies, you might say that TEC has a rather unique character. Because over 80% of our plants are constructed overseas, mainly in developing countries, this business model is indispensable. For example, if we are doing work for the oil majors, a business model such as this is unnecessary because the client will arrange the financing by itself. If, on the other hand, the contract is for a developing country with insufficient funds and high risks, realization of the project depends on whether financing and risk management are feasible when utilizing public support in a form the client desires.

Recently, the scope of our contracts has been getting larger, and so has the accompanying risk. The work style is changing from sole plant export to JV- and partner-type operations, and our EPC business, under the circumstances of rapid change and complexity, has become more and more difficult. But it is not too much to say that the superiority or inferiority of the business model depends on whether you can catch the change in client needs, and continue to provide satisfaction. Conversely, the strong point of TEC that makes us superior to the rest is that we have recognized the value of this process, and have created a structure that allows us to respond to these needs.

## Catching Change and Connecting to New Paradigms

— The Further Evolution of EPC

**Q In your view, Mr. Ozaki, how then should the Company take advantage of this special characteristic in order to move forward, and how should it cope with the tasks at hand?**

Up until now, TEC has achieved a track record of over 1,300 contracts throughout more than 60 countries. When working together with people of many different nationalities and cultures, each individual member must cultivate a sense of internationalism. For the project manager in particular, an outstanding talent for high risk-management is required. We need to aim for a wide range of vision, always keeping an eye on quickly changing political and economic trends in the world, as well as communicating broadly with all involved parties. Nevertheless, because drastic market changes also open opportunities for expansion of our

operations, we need to avoid becoming too comfortable with so-called "conventional thinking" and "common sense" regarding such changes, but rather expend a great effort to think and connect to new EPC paradigms. Taking China as an example, right now it is in the process of converting from a plant importer to a plant exporter. In such a drastic environmental change, which may result in the emptying-out of EPC business, it becomes more important than ever to be able to promote "added-value EPC" that only we are capable of. I believe that we should always renew this recognition, that the mission we take upon ourselves is to apply our wisdom to create new worlds of EPC business one after another.

This fiscal year marks the final year of our renovation plan, whose goal is to establish stability of operations. In these three years, through the efforts of everyone from the top management to all TEC personnel, we have aimed at reforming our operations and reinforcing our financial structure, as well as introducing new systems of human resource and corporate management, while slimming down the entire organization. We have even put the traditional culture of TEC on the "operating table" and carried out drastic reforms, which has led to an increase of contracts received and profitability achieved in our main business. Now that the basic framework for stable operations has been completed, and having made a shared sense of emergency our internal motivation, I think we should now continue to reinforce our foundation, and take on the challenge of "New EPC."

## A View of the Future

—Taking Advantage of Greater Differentiation through Prioritization and Concentration that Leverages Our Strengths

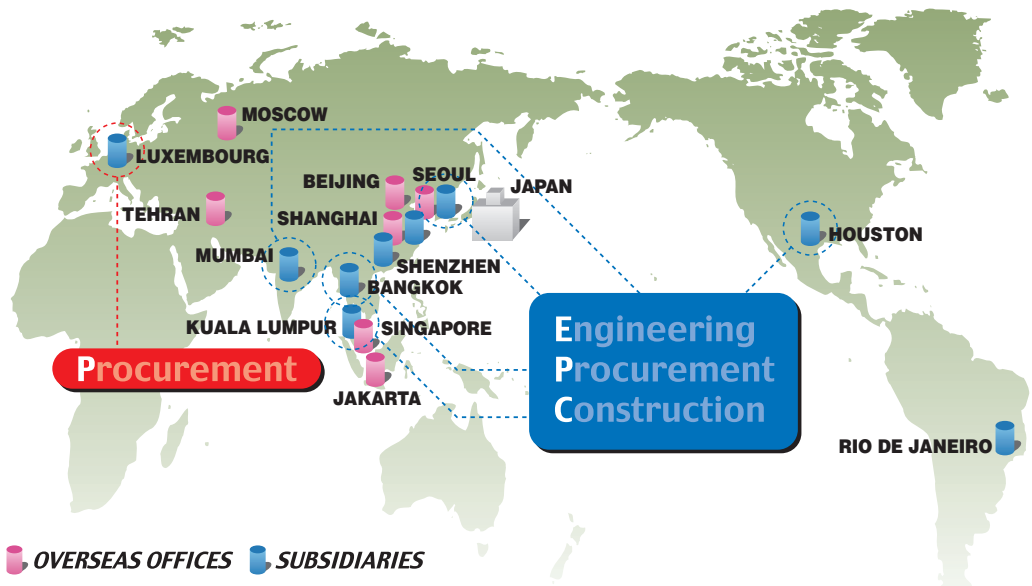
**Q Can you tell us about any specific plans that TEC should be predominantly reinforcing from now on?**

Well, as you know, TEC has organized its operations into the two pillars of EPC business and e-Solution business. First of all, irrespective of overseas or domestic, I'd like to raise three points concerning the question of how to enhance competitiveness in EPC business.

The first point is strengthening of the technological development capability. This is a source of differentiation in an engineering company, literally putting its technology up for sale. Since coming to TEC, I have clearly realized the company tradition of cherishing technology, but in particular I think the ability to further strengthen the technology of a strategic field makes this differentiation stand out even more. Examples of important fields include urea technology such as our proprietary ACES-21 process, as well as synthetic gas manufacturing technology applied to next-generation energy sources such as gas-to-liquid (GTL) and dimethyl ether (DME). As a matter of fact, just last year TEC was able to sell DME technology to China for energy purposes before any other company. These are original technologies that TEC is very proud of, and you could say that they will provide the impulse for our future growth.

The second point is a greater improvement in cost competitiveness. TEC is surpassing other companies in developing overseas bases, and Malaysia now joins India, Thailand and South Korea to become the fourth pillar in our transnational (TN) structure. I should especially mention that, through the establishment of an infrastructure for an advanced transnational network, and intensive on-the-job training of many of their engineers in Japan, each of these overseas bases are expanding as engineering bases, independent

## WORLDWIDE OFFICE NETWORK



PROFILE

**Toshiyuki Ozaki**

Executive Vice President

Born in 1936 in Kanagawa Prefecture, he graduated from the Tokyo University of Foreign Studies in 1959, entering the Export-Import Bank of Japan (currently the Japan Bank for International Cooperation). Throughout his 35-year career at the EXIM Bank, he was active in a number of fields, beginning with research and extending into loan approval, overseas business, finance, personnel and others. During this time he also served at overseas offices in Brazil and Mexico, and in 1991 he was promoted to the position of senior executive director. In 1994 Ozaki joined Toyo Engineering Corporation. After advancing through the positions of advisor and senior executive director, he attained his present post in 1996.

"I first became acquainted with TEC around 1972," Vice President Ozaki recalls. "The opportunity came about because I was involved with negotiating a bank loan for exporting a fertilizer plant to the former Soviet Union. I was really impressed that everyone on the TEC side seemed to be burning with a passion to bring this project to fruition." Last year, along with a tour of Brazil, China, Indonesia, Singapore and other areas, where he vigorously met with the top decision-makers among TEC's clientele, the vice president also gave a presentation in the fall at the Japanese-Russian Economic Summit, highlighting TEC's achievements in Russia.

of the conventional subcontractor position, and are growing as profit centers. At each base, business is increasing without depending on TEC Japan, and operations using horizontal collaboration that takes advantage of the merits of each base in the inter-base network occur on a daily basis.

All four overseas bases above have acquired ISO9001 certification, and they can advantageously develop operations in the best combination to meet clients' needs, functioning with the cooperation of supply bases in Luxembourg, Houston and Seoul like the intertwined mesh of a net. Expansion and improvement of this TN structure, which currently contains the same volume of human resources as Japan in total, will not only greatly enhance the cost competitiveness of the TEC Group but will also facilitate total solutions on a worldwide scale in the Age of Globalization.

The third point is that through prioritization and concentration that takes advantage of TEC's differentiation, we can focus on markets and items to be applied as our specialty, thereby promoting development of the business model that most quickly meets the needs arising from environmental change. In addition to the three markets mentioned above, we can list markets such as Brazil, Indonesia and Malaysia, and raise business items such as the application of a plant lifecycle viewpoint and an increase of PMC-type and soft jobs. Taking advantage of this TEC differentiation, we must step into advancement of EPC suitable for the profit of the client from a lifecycle point of view, and pursue the ideal of "high added-value EPC."

As for the other pillar of our operations, the IT business: TEC is potentially equipped with the capability to provide a special solution through connecting its project management capabilities with its IT knowledge. We are now concentrating our resources into e-Solutions business operations in order to turn this capability into a saleable item as a solution, and are currently running at full power. We place a realistic dream here, and we are achieving a synergistic effect with Toyo Business Engineering Corporation, which became an independent subsidiary and was listed on the JASDAC (over the counter) exchange last year. This business will contribute to the progress of sales and profits in this field in the near future, while aiming to attain stabilization of our operations.

*TEC's comprehensive engineering capabilities and our clients' reliance upon us are certainly consistent with our company mission statement "Providing Total Solutions to Realize Customer Satisfaction." I feel that it is absolutely vital to keep responding quickly to client demands, even as they become more and more complicated and diverse. I am confident that if customer satisfaction and trust are built up through our possession of a wide view and broad knowledge, profits are sure to follow. The capital resource of an engineering company is its people. I believe that for TEC as a whole to become a group of diversely talented people able to meet the needs of the client will be crucial for remaining victorious from now on.*

Next-Generation Energy

## Contract Received for a Next-Generation Clean Energy DME Plant in China
### ——The world's first plant to produce DME commercially for fuel use

In August 2000, TEC completed work on a large-capacity (2,000 tons/day) urea granulation plant for Lutianhua Group Inc., one of the leading fertilizer manufacturer in China. At the end of July 2002, TEC signed a new contract with Lutianhua for construction of a 10,000 tons/year dimethyl ether (DME) plant. This plant will be the first step in the company's construction plan for a large methanol and DME complex to be built in the new industrial development region at Luzhou, Sichuan province. TEC's service range includes licensing, process design and catalyst delivery, as well as technical service. Engineering is presently progressing at the site, and plant completion is scheduled for the second quarter of 2003.

This plant will be the first in the world to produce DME commercially for fuel use, and this project is expected to make a meaningful contribution to eliminating the energy shortages of China's inland regions. DME is becoming attractive as a clean alternative energy source for domestic Japanese use as well, and demand for DME as a diesel- and LPG-substitute fuel is expected to expand on a large scale in the future.

Using our proprietary technology for enlargement of plant scale, TEC has the capability to handle DME plants with capacities up to 2,500,000 tons/year. Taking advantage of this contract, we aim to vigorously deploy new uses of natural gas such as DME and gas-to-liquid (GTL) as next-generation clean energy sources for industry.


**Lutianhua Group Inc.**
Location: Luzhou City, Sichuan Province, People's Republic of China

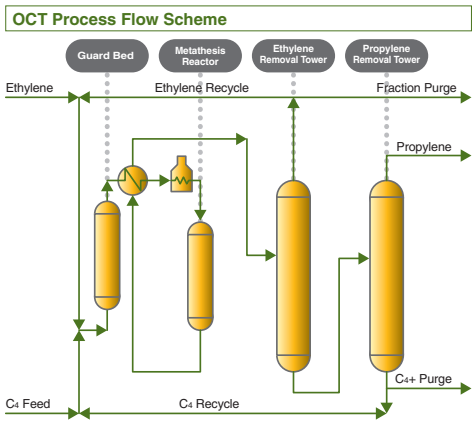
OCT Process Technology

## TEC Receives Contract from Mitsui Chemicals for the First Plant in Japan to Produce Propylene by OCT Technology

In September of 2002, TEC received a contract from Mitsui Chemicals, Inc. (MCI) for construction of a plant to produce propylene from butene and ethylene, in line with MCI's plan for increasing annual propylene production at their Osaka factories from 280,000 tons to 420,000 tons. TEC is the main contractor for this project, which utilizes the Olefins Conversion Technology (OCT) process developed by ABB Lummus Global Inc. of the U.S., and completion of the plant is scheduled for August 2004.

LGI's OCT process for increasing propylene production uses a catalyst to produce propylene from butene and ethylene. The factor that led to TEC being awarded this contract was reliability, based on the economic efficiency of plant investment, our world-leading record of success for commercial plants, as well as TEC's and LGI's history of technical collaboration spanning over 40 years (exclusive tie-up in Japan).

Taking advantage of the actual results from this project, TEC aims to vigorously promote the OCT process to both Japanese oil and petrochemical companies wishing to increase propylene production, at the same time deploying our operations in the Southeast Asian region, where demand is expected to increase in the future.



XY Router Technology

## TEC's Proprietary XY Router Technology Improves Sanitary Control for Food Plant Engineering

TEC has delivered the XY Router, an automated line-changeover unit developed by TEC itself, to the latest dairy plant built by Meiji Dairies Corporation (one of Japan's leading dairy companies) in Yame, Fukuoka Prefecture. The XY Router was developed to overcome the disadvantages of conventional valve block line-change systems, while featuring excellent advantages for sanitary control as well as extensive suitability for multi-product manufacturing applications.

In the dairy industry, integration of the production facility often leads to a vast increase in the number of tanks used. This situation demands a quick and flexible changing operation among many lines between tanks and associated equipment. The dairy industry is also known for having the most stringent sanitary standards. Comprehensive consideration was required to eliminate the possibility of cross contamination, and the XY Router is satisfactorily meeting these requirements.

Based on this success with Meiji, TEC will vigorously promote and deploy the XY Router as one of its key technologies, targeting not only the dairy industry but the entire food industry as well. The safety of food is the industry's primary concern and ultimate goal, to which TEC is proud to contribute.

The first dairy industry-use XY Router

R&D Engineering Technology

## Vigorous Development of R&D Engineering Results in Plant Contracts Received

TEC uses its own engineering technology, experience and know-how to efficiently assist our clients in planning their commercialization process based on the technology they have developed. To this end, we are vigorously developing what we call R&D Engineering, which has resulted in reduced time to commercialization, cost reduction through process optimization, and quality improvements including aspects of safety and environmental protection.

TEC performs data analysis, analysis model implementation and, process optimization, while incorporating cost reduction and energy saving into the basic engineering specifications required for scaling up a pilot plant for commercial plant, based on seed technology developed by the client. Because it is beneficial for clients to concentrate on research and development with a reduced engineering staff, this will result in the commercialization most suited to the needs of the market. Furthermore, taking advantage of the close relationship we have built with that client from the initial stages of development, after R&D Engineering is completed TEC proposes the optimal plant for the client in terms of safety and efficiency. This has resulted in subsequent EPC orders from the client.

Since TEC first began offering R&D Engineering in 1991, it has been directly responsible for our receiving 14 contracts, including a biphenol plant for the Honshu Chemical Industry Co., Ltd., at their Wakayama factory (see photo). In December 2002, TEC received a contract for a 5,000 tons/year specialty bisphenols plant in eastern Germany for Hi-Bis GmbH, a Japanese-German joint venture company mainly comprising Honshu Chemical Industry Co., Ltd. From now on, TEC will vigorously develop this R&D Engineering business, targeting foreign companies and the overseas development of our clients.

## Joint Exhibit at Logis-Tech Tokyo 2002

TEC and Toyo Business Engineering (B-ENG) presented a joint exhibit at the International Material Handling, Storage and Distribution Exhibition (Logis-Tech Tokyo 2002), held October 15–19 at Makuhari Messe in Chiba Prefecture, east of Tokyo. The event featured a record number of exhibitors –about 300 foreign and domestic companies– as well as a total of 145,000 visitors.

TEC's exhibit promoted its Global SCM with "China" as the keyword, presenting five themes and proposing concrete solutions for each: (A) The Global SCM of TEC; (B) Real-Time Information Integration; (C) The Internet: Procuring Anything for Every Engineer; (D) The IT Situation of China, Factory for the World; and (E) Cutting Distribution Costs by One Billion Yen.

Throughout the event, over 3,000 guests visited the TEC booth. The TEC-sponsored seminars in another hall were completely filled, and visitors left with a high regard for TEC's vigorous efforts toward global SCM.


## TEC and U.K. ALSTECH Company jointly promote sales in Japan of the Vault Dry Store System for Spent Nuclear Fuel

TEC has finalized a contract with British company ALSTECH Ltd. that will promote the introduction and sales in Japan of a spent nuclear fuel storage facility using ALSTECH's proprietary Vault Dry Store System technology. This Vault Dry Store System is a dry storage technology that contains spent nuclear fuel rods from nuclear power plants inside metal canisters and stores the canisters inside a reinforced concrete cave-like structure called a vault, hence the name "vault system." Compared to other systems in current use, such as the metal cask storage system in Japan or the concrete cask storage or silo storage systems in other countries, the vault storage system allows higher-density storage. It is expected to be the most advantageous domestic storage system in terms of location and cost.

Based on its record of success with domestic nuclear power plants, TEC aims to accumulate the technology necessary for actual utilization and cost reduction in order to bring storage facilities using this system into reality, answering the expected increase in domestic demand for spent nuclear fuel storage in the future.

Above: Vault dry store facility in Hungary
Below: Mega-vault dry store system exterior

Oil & Gas Project

## Phase One of the Cabiunas Project in Brazil Completed

Project Completion

The first phase of the Cabiunas Gas and Transfer project was completed in June 2002, meeting the deadline stipulated by the contract. This project, handled jointly by TEC and major local engineering company Setal Engenharia Construcoes S.A. (Setal), involves the construction of a large gas-processing plant and transport pipeline in Rio de Janeiro State for Petroleo Brasileiro S.A. (PETROBRAS).

The Cabiunas Project involves conversion of equipment for collecting surplus gas emitted from 18 platforms in the Campos oilfields offshore from Rio in Brazil then re-pouring it into a gas field. The converted equipment that will carry the increased production of gas consists of a submerged pipeline, a gas-processing station with a daily throughput of 314MM SCFD (see photo), and 177km of aboveground pipeline.

Furthermore, this project is being handled on a build-lease-transfer (BLT) basis, and Phase 1 was completed right on schedule; this surely contributed to TEC's project execution capabilities being regarded even more highly by the client. We plan to push the project forward in a similar fashion, aiming for completion of Phase 2 by the middle of this fiscal year, and of Phase 3 by the middle of the following year.

The client's high esteem of TEC resulted in a yet another joint contract with Setal being awarded in July 2002, for a delayed coker plant at the company's REDUC refineries in the Duque de Caxias suburb of Rio de Janeiro.

Petrochemical Project

## TEC Successful Award for Two Large EPC Project Contracts from BASF-YPC Company Ltd. in Nanjing, China

New Orders


In the fourth quarter of 2002, TEC was successful in receiving two simultaneous orders from BASF-YPC Company, Ltd., a joint venture company of BASF and SINOPEC. The orders are for two plants in Nanjing, in the Jiangsu province of China: one with a capacity of 160,000 tons/year of acrylic acid (AA) and 215,000 tons/year of acrylic acid ester (AE), the other producing 250,000 tons/year of oxo-alcohol (OXO).

TEC has a long history of successful projects for SINOPEC in China and of a good business relationship with BASF that includes a project in Malaysia, and TEC's outstanding technical expertise and project execution skills has resulted in a high degree of customer trust. It was this trust that resulted in TEC being simultaneously awarded these large EPC project contracts, in spite of intense international bidding competition from European and South Korean companies.

TEC's service range for these lump-sum turnkey contracts covers detailed design, procurement of equipment and materials, and plant construction. Both plants are slated for completion in the fourth quarter of 2004.

These contracts will serve as a tremendous launch pad for TEC's active sales promotion for petrochemical investment projects in China by European and American companies.

Petrochemical Project

## TEC Receives Contract for World's Largest EO/EG Plant in Saudi Arabia

New Orders

TEC, in cooperation with Mitsui & Co., Ltd., received a contract in the middle of May 2002 from Jubail United Petrochemical Company (UNITED), a wholly-owned subsidiary of the Saudi Arabian Basic Industries Corporation (SABIC), for the construction of the world's largest ethylene oxide/ethylene glycol (EO/EG) plant. The plant will be located in the Al-Jubail Industrial City on Saudi Arabia's eastern coast and will produce over 630,000 tons of ethylene glycol annually. Based on technology from U.S. company Scientific Design, the scope of TEC's responsibilities includes engineering, procurement of equipment and materials, and construction of the plant on a lump-sum turnkey basis. Completion of the plant is scheduled for the third quarter of 2004.

After intense international bidding competition from Europe and South Korea, TEC received this contract largely based on its actual results in EO/EG using Scientific Design's world-leading technology, as well a high degree of customer trust and reliance. Once again, TEC's superb technology, know-how and record of success has borne fruit: winning the contract for this project was due to our confident operational activities in the Middle East, one of TEC's most important overseas markets.

Oil & Gas Project

## TEC Supports New LNG Facility Construction in Osaka Area as an Owner's Consultant

Project Under Way

The new liquefied natural gas (LNG) receiving terminal for Sakai LNG, Ltd., for which TEC is providing support as an owner's consultant, is currently progressing smoothly. Site reclamation and piling work for LNG tanks for this terminal (capacity: 2,700,000 tons/year, three 140,000kl storage tanks; construction order received by: Mitsubishi Heavy Industries, Ltd.) has been completed, and the project is slated for completion in January 2006.

This LNG receiving terminal will serve the South Port, Osaka, and Sakai Port power stations operated by Kansai Electric Power Company (KEPCO). Sakai LNG (a joint corporation comprising KEPCO, Iwatani International Corp., Ube Industries, Ltd., and Cosmo Oil Co., Ltd.) performs construction and operation.

This project represents the first lump-sum turnkey project for KEPCO. It was due to KEPCO's high regard for TEC's extensive lump-sum turnkey project experience that led to TEC's nomination as an owner's consultant in August 2000, when the project was at the invitation-to-bid (ITB) preparation stage.

TEC supports its clients by reducing costs and ensuring the smooth execution of all projects it undertakes through ITB preparation assistance that fully utilizes its expertise, as well as providing design review and research of market prices both domestically and overseas, and overall project support to ensure the client's success.

**Business Trends at Overseas Bases**

# Business Operations and Focus of Seoul Office

(Toyo Engineering Korea Ltd.)

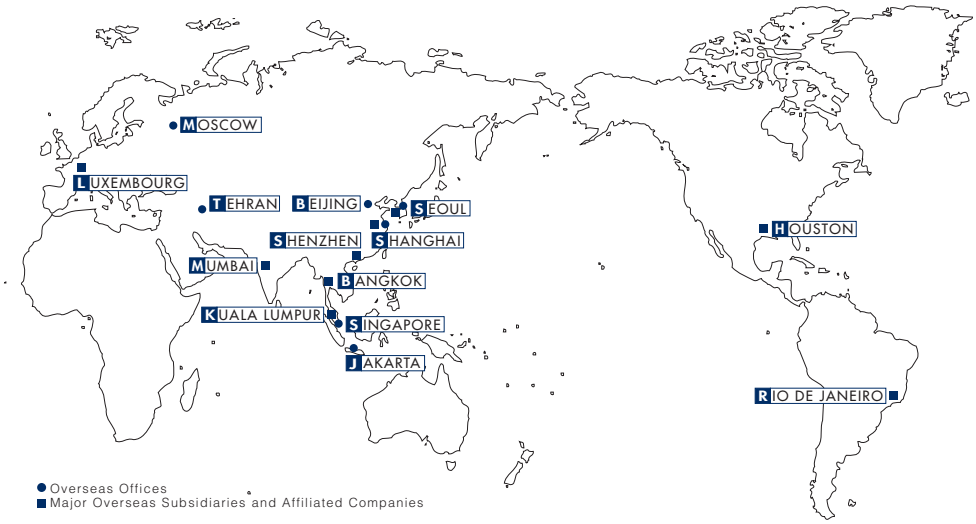
The building of our Seoul Office

South Korea, which was able to rapidly overcome its economic crises in 1997 through introduction of foreign capital and implementation of structural reforms, is today a nation struggling to create new value throughout the world. The environment surrounding its engineering industry is such that it has managed to shake its image prevalent in the past of "low price, yet low quality," and gain recognition for "high competitiveness and high quality" in the world markets.

In December 1987, TEC-K was launched as TEC's engineering base in South Korea, and it is striding in concert with the burgeoning Korean engineering industry. Since then, it has been involved in over 180 plant construction projects for TEC, primarily in South Korea but also overseas, and has become a vital component of TEC's overseas strategy. TEC-K currently has about 200 employees, and it has developed into an organization capable of vigorously and consistently providing engineering services from basic design to construction management work and operation assistance. Its importance will continue to increase in the future, not only in its own area of operations but within TEC's entire transnational structure. Moreover, a materials procurement service, the basis on which opinion and actual sales results of equipment makers in South Korea depends, is also offered and has been very highly evaluated.

In August 2002, TEC-K completed its relocation to a new office, from which it will continue to strive towards offering even higher-quality service and obtain even greater customer satisfaction.

## Worldwide Network




# TOYO ENGINEERING CORPORATION (TEC)

### HEAD OFFICE
2-8-1 Akanehama, Narashino-shi, Chiba 275-0024, Japan
Tel: 81-47-451-1111 Fax: 81-47-454-1800
URL: http://www.toyo-eng.co.jp/

### TOKYO HEAD OFFICE
Kasumigaseki Bldg., 3-2-5 Kasumigaseki, Chiyoda-ku, Tokyo 100-6007, Japan
Tel: 81-3-3592-7411 Fax: 81-3-3593-0749

### RESEARCH CENTER
1818 Azafujimi Togo, Mobara-shi, Chiba 297-0017, Japan
Tel: 81-475-24-4551 Fax: 81-475-22-1338

### KANSAI BRANCH
6-1-1 Nishi-Nakajima, Yodogawa-ku, Osaka 532-0011, Japan
Tel: 81-6-6390-1101 Fax: 81-6-6390-1201

### OVERSEAS OFFICES

#### Singapore Branch
81 Anson Road, #08-02, Singapore 079908
Tel: 65-6226-1996 Fax: 65-6226-0293

#### Beijing
E. 7th Fl. Bldg. D, Fuhua Mansion, Chaoyangmen North Avenue No. 8, Beijing 100027, China
Tel: 86-10-6554-4515 Fax: 86-10-6554-3212

#### Shanghai
Suite 211, CIMIC Tower, 800 Shangcheng Road, Pudong, Shanghai 200120, China
Tel: 86-21-5835-6500 Fax: 86-21-6876-3861/3862

#### Jakarta
Midplaza 8th Fl., Jl. Jendral Sudirman Kav. 10-11, Jakarta 10220, Indonesia
Tel: 62-21-570-6217/5154 Fax: 62-21-570-6215

#### Moscow
Room No. 605, World Trade Center, Krasnopresnenskaya Nab., 12, Moscow 123610, Russia
Tel: 7-095-258-2064/1504 Fax: 7-095-258-2065

#### Seoul
Toyo Bldg. 677-17, Yeoksam-1 Dong, Kangnam-ku, Seoul, 135-081, Korea
Tel: 82-2-557-7098 Fax: 82-2-539-5867

#### Tehran
No. 4 Sixth Street, Ahmad Ghasir Ave. (Ex. Bokharest), Tehran, Iran
Tel: 98-21-873-8414 Fax: 98-21-873-2642

### OVERSEAS SUBSIDIARIES AND AFFILIATED COMPANIES
Luxembourg, Houston, Rio de Janeiro, Shanghai, Mumbai, Seoul, Shenzhen, Bangkok, Kuala Lumpur

** Please see the Overseas Subsidiaries page of our Web site for the current addresses and contact information of our overseas subsidiary companies.*