Setting New Goals, Meeting New Challenges

THE NEW CENTURY MANAGEMENT PLAN

Over the past three fiscal periods, the Penta-Ocean Group has adopted new accounting principles. In order to do this, it has been necessary to write off losses still held by the Company since the Japanese economy began its downward slide in the mid 1990s. This process of adjustment has made the Penta-Ocean Group financially stronger and more resilient to change. It is also considered to be a model for other companies in the industry. The continuing decline in the number of public works projects, coupled with increasing price competition in the private sector has made for an extremely difficult business environment. With an aim to meeting this challenge, the Company began to implement its New Century Management Plan during the term under review.

Civil Engineering Group

The Civil Engineering Group set three goals for itself during the period of the 3-year plan — to compensate for the fall off in public works projects by increasing its competitiveness, to develop new construction systems, processes and materials, and to more effectively utilize its human resources and accumulated expertise.

To attain these goals, the group will work to improve its sales performance by more systematically highlighting achievements in its research and development activities, and make the general public and potential customers aware of Penta-Ocean's prowess as a technology based construction company.

Architectural Engineering Group

The Architectural Engineering Group set as its primary goal for the 3-year plan to complete current projects in progress and eliminating the unprofitable business activities in which it is engaged. The group will also promote its consulting services in areas of expertise, primarily real estate development and taxation with an aim to increasing recognition for Penta-Ocean's formidable construction related consulting capabilities. It will also strive to increase the number of orders it receives for construction of medical, social welfare, and environmental related structures and facilities.

International Business Group

As a leading comprehensive construction company, Penta-Ocean is actively engaged in the construction of both largescale and very-large-scale civil and architectural engineering projects in Japan and overseas. Our architectural engineering achievements encompass a broad range of structures, including schools and hospitals, industrial plants, office buildings, cultural centers and transportation related facilities. It is also working to improve efficiency at every level of operations and enhance the contribution of individual staff members in both technical and business fields.

New Business Promotion Group

This Group is charged with establishing new operations that will eventually equal the Company's core civil and architectural engineering businesses in terms of scale and revenues. The group is expected to become an independent division within the next three years.

The group is currently engaging in four types of businesses: recycling of construction sludge, the demolition of old waste incinerating facilities, the development of guidelines for eliminating soil contamination, and the introduction of commercial wind power generation in Japan. Since many of our competitors have already established their own task

enta-Ocean works actively with its subsidiaries and affiliate companies to improve communication and the level of expertise of each member of the Group. With an aim to enhancing its standing as a technology based comprehensive construction company, we strive to improve our design and planning, project implementation, construction, and after service maintenance capabilities. In fiscal 2000, we also focused more closely on improving communication with our clients and developed more effective information gathering skills in order to keep abreast of rapidly changing market demand and individual client needs.

We believe our New Century Management Plan, a 3-year business scheme inaugurated in 2001, will make the Penta-Ocean Group more resilient to change and more creative and innovative in meeting the challenges of an increasingly competitive business environment both at home and abroad. The plan encompasses six basic strategies.

forces for dealing with soil contamination and the development of wind power generation for commercial use, we are anticipating an uphill battle in these areas. In this endeavor we are not entirely unequipped, however, and backed by Penta-Ocean's formidable research and development capabilities, we expect to be a major force in these areas in the near future.

In Japan, the Group is working to reinforce our sales system for redevelopment of properties located in coastal areas, and to increase the number of new orders for environment-related projects, for building and facility upgrades, and the development of comprehensive support systems for hospitals and social welfare facilities. Currently, Penta-Ocean is involved in projects aimed at reducing or eliminating environmental pollution, recycling construction sludge, and the development of other services based on our advanced technological capabilities.

Overseas, we intend to improve profitability further by concentrating our efforts in areas in which we have achieved a high level of expertise. Our affiliates and subsidiaries involved in new business development will also strive to reinforce their competitive edge in their respective fields.

- The first will improve sales performance by adopting a client-first approach and facilitate the steady commercialization of new construction related technology to will keep Penta-Ocean's competitive edge razor sharp.
- The second will bring down overall operating costs by reducing out sourcing expenses and eliminating unnecessary expenditures.
- The third will strengthen the capabilities of our affiliate companies so that they can increase their individual contributions to the Group as a whole.
- The fourth strategy is designed to cultivate creative thinking in the development of our environment related business and new business areas, by expanding the activities of our new Business Promotion Room, and the formation of the Institute of Environment and Construction Renewal Division.
- The fifth will strengthen the Group's financial base by paying down interest bearing debt and increasing our internal reserves.
- The sixth and last strategy of the plan is designed to revitalize our corporate culture by focusing on the growth of the individuals that make up the Penta-Ocean Group. Key to this goal will be the establishment of more open communication internally and among Group members and the removal of barriers between the ranks. New information technology based formats are expected to play a major role in accomplishing these objectives.

Under the plan, all business groups will work to set up criteria for differentiating themselves from competitors, in terms of their ability to respond decisively to rapid changes in client needs, and to create sustainable profitability.



Technological innovation is at the heart of Penta-Ocean's drive to enhance its position as a global-scale comprehensive construction company, and in all our business activities our goal is simple: To build continuous growth for a sustainable prosperity that benefits our customers, our shareholders, and society.

>> Penta-Ocean is setting new standards for innovation and cost efficiency in large-scale civil engineering projects in Japan and overseas.

Civil Engineering Projects

A ground breaking ceremony was held on August 19, 2000 for the Chubu International Airport, 30 years after the first proposals for construction of the facility were made public. The facility is being constructed in Aichi Prefecture near Tokoname City, on the Chita Peninsula, and is expected to become an important hub for international travel. The opening of the airport is scheduled to coincide with the Aichi Exposition, in March 2005.

The Penta-Ocean Group is participating in this gigantic project and is engaged in the construction of sea walls and other substructures. The construction of the massive sea wall that will surround the airport's artificial island will be divided into 4 phases. Penta-Ocean is charged with constructing the only section that requires full-fledged caisson-type piers, for a tanker berth of 302 meters, and construction of a temporary caisson-type pier 815 meters in length. This section of the wall also involves major land improvement work requiring a high level of technological expertise.

Owing to repeated delays in beginning the project, construction time has been shortened in order to have the airport operational by the time of the Aichi Exposition. The time constraints placed on individual contractors is



Construction of Chubu International Airport at Ise Bay, Aichi

expected to present a unique challenge and Penta-Ocean is prepared to meet all expectations for completion of our portion of the project. The pillars will be constructed utilizing the riprap-type tilted bank system, which has been proven to exhibit far less negative impact on the immediate marine environment than do conventional marine structures.

Fiscal 2000 saw an end to the economic slump that had gripped many Asian countries in recent years, and a return to robust economic growth, particularly in the Southeast Asian region. Investment in construction projects by both the public and private sectors continued to grow steadily. During the term, Penta-Ocean won yet another bid to continue massive reclamation and construction work for Singapore's Jurong Town Corporation. The \(\frac{4}{2}\)20 billion (US\(\frac{1}{2}\)1,775 million) project, includes the Jurong Island Phase IV and Tuas View Extension projects. The landfill area amounts to 1,464 hectors, or



Queen of Penta-Ocean engaged in dredging work in Singapore

2.2% of Singapore's total land area.

This final mega-project of the 20th century, represents the largest overseas construction project ever handled by a Japanese general construction company. The work involves the creation of 547 hectors of new land adjacent to Jurong Island and 917 hectors in the Tuas View area. Penta-Ocean's state-of-the-art, ocean-going dredger, the Queen of Penta-Ocean, used in the Jurong Island Phase III-B phase work, will also be used to complete the new project.



Komagata interchange on the North Kanto Highway, Gunma

Penta-Ocean received orders for additional Kiosks and other facilities at Lok Ma Chau Boundary Crossing, from the Hong Kong government. We also received orders for repair work on the Colombo Port North Pier from the Sri Lankan Port Authority, and on the Takatik fishing port facility from the Government of Micronesia.

Other new orders for civil engineering work received during the term included construction work on the Konan Tunnel on Meishin Highway No. 2, from the Japan Highway Public Corp. and water intake openconduit construction work for Fukushima Nuclear Power Plant No. 2, from the Tokyo Electric Power Co., Ltd. These non-consolidated orders resulted in a 26.8% increase over the previous term, to ¥316,348 million (US\$2,553 million).

Civil engineering projects completed in Japan in fiscal 2000 included the Komagata section of the North Kanto Highway for the Japan Highway Public Corp., construction of the Wakamatsu-Yanagicho section of the Metropolitan Subway's Loop Line No. 12, and the Gamagori-Otsuka landfill for the Gamagori Ocean Development Co., Ltd.



MRT502 Expo station on the Changi Airport line, Singapore (picture by courtesy of SMPT)

As part of an international consortium involved in the construction of Singapore's MRT Subway System, Penta-Ocean handled design and construction work of the EXPO station building and a 1.4 km length of elevated rail lines leading to and from the facility. The unique design of the structure has already made it a landmark in Singapore, with its 150-meter massive platform, enormous Y-shaped pillar supports and spectacular scallopshaped roof. Construction of this facility required two and a half years to complete.

Non-consolidated sales from domestic civil engineering works, in the term under review amounted to ¥195,538 million (US\$1,578 million), a 10.8% decline from the level in the previous term. Overseas, civil engineering works amounted to ¥55,398 million (US\$447 million), 8.2% up from the previous term's level. As a result, the carryover in the account for domestic civil engineering works to the subsequent term, amounted to ¥197,817 million (US\$1,596 million). The carryover from overseas projects was ¥171,751 million (US\$1,386 million), and together, non-consolidated total carryover amounted to ¥369,568 million (US\$2,983 million).

>> A wide range of challenging projects at home and abroad showcase Penta-Ocean's superior architectural engineering capabilities.

Architectural Projects

Large-scale architectural engineering projects under construction during the term included Penta-Ocean's first highrise building in Japan, the Urban View Grand Tower in Hiroshima. At 155.9 meters, it is the highest in western Japan. The landmark building is scheduled to open in March 2004. In Singapore, Penta-Ocean moved closer to completion of the spectacular Esplanade Theatre. When completed, the facility will house, two large concert halls as well as commercial and retail space in a beautiful waterfront setting. Large-scale projects such as these are showcases of the Company's architectural engineering prowess.





Shimonoseki Aquarium Kaikyo-kan, Yamaguchi

New orders received during the term included repair work on the Naka Plant in Hiroshima City, construction of the Urban View Grand Tower from the Hiroshima City Urban Corporation, mentioned above, and construction of the Shonandai Condominiums for Ito-Chu Urban Redevelopment Co., Ltd., and others.

Shimonoseki City, famous for its natural beauty and marine products, is the sight of the newly completed Kaikyo-kan Aquarium. Completed by Penta-Ocean during the term under review, the beautifully designed facility is expected to draw more tourists to the city and positively effect economic growth in the region. The main structure was designed to imitate the curves and lines of a large whale, and houses a dolphin aquarium, and various visitor amenities. The building directly faces the sea, and so special care was taken to protect it from corrosion. Because of its location, the project posed many challenges, and required a trial and error process which allowed the Company to select the perfect design and building materials to complete the project.

Other projects completed by Penta-Ocean in fiscal 2000 included a waste disposal facility, the SunLive Munakata, for SunLive Co., Ltd., in Munakata City in Fukuoka Prefecture. SunLive is a supermarket chain of about 200 stores in the Kyushu and Chugoku regions. The Mihara Plant Building C for Dai Nippon Printing Co., Ltd. was also completed during the term.

The Tin Shui Wai community facility, commissioned by Hong Kong's Housing Authority, encompasses commercial space, a bus terminal, a community center, kindergarten and nursery facilities, parking areas, and residences for the elderly. The complex has 80,000 square meters of floor space and required two years to complete.

Non-consolidated orders received in fiscal 2000 amounted to \\$151,291 million (US\\$1,221 million), a 5.0% increase from the previous term. Carryover from projects in Japan totaled ¥142,557 million (US\$1,150 million), with the overseas total amounting to ¥30,626 million (US\$247 million). Non-consolidated total carryover for the term amounted to ¥173,184 million (US\$1,398 million).

Sales from domestic architectural works amounted to ¥147.794 million (US\$1.192 million), a 12.3% increase over the previous term's level. Overseas works accounted for ¥15,513 million (US\$1,255 million). Non-consolidated total sales for this group amounted to ¥163,308 million (US\$1,318 million) a 6.5% increase from the previous term.

In fiscal 2000, overseas, construction related sales amounted to \\$70,911 million (US\\$572 million), a 2.7\% decrease from the previous term, a carryover from the previous period amounting to ¥202,377 million (US\$1,633 million). This represented a year-on-year increase of 61.9%.

Consolidated construction orders received amounted to ¥480,699 million (US\$3,880 million), or 18.1% more than in the previous term. Consolidated construction sales totaled \\440.141 million (US\$3.552 million). 5.1\% down from the previous term's level. The contract backlog was ¥545,246 million (US\$4,401 million), a 12.0% year-on-year increase.



Tin Shui Wai community in Hong Kong

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Molding a century of management know-how and technical expertise into a sustainable force for growth over the long-term future.

New Businesses Promotion Group

During fiscal 2000, this group began full-fledged operations under the guidelines set forth in the Company's New Century Management Plan. Initial goals were to increase the Group's capabilities in the area of coastal property redevelopment, environmental monitoring and the upgrading of old structures and buildings.

In the term under review, construction of the first wind generator facility handled by the group reached completion. The Yasugi Wind Power Project, located in Nakaumi Agricultural Village Park, Yasugi City, Shimane Prefecture, took two years to complete. The blade of the wind turbine is more than 48 meters across and sits on a massive pole 50 meters above the ground. This modern day windmill is of medium scale and has a rated output of 600 kW. The group was responsible for overall project management, system design, construction and start up phases for the new facility.

The New Business Promotion Group also engages in the demolition of waste incinerating facilities. As antipollution laws have become more rigid, it has become more cost effective to scrap the old facilities and build new ones that meet the new standards. During the term under review, it announced the development of a sludge-recycling system. The project was funded by Penta-Ocean and The Environment Public Fund. The sludge generated by foundation, shielding, dredging, and other construction work, considered to be one of the most difficult forms to handle, is refined through a special process and then reused as a ground-improvement material, embankment for roads and highways, and other construction.

In April 2000, Penta-Ocean participated in the International Environment Exposition, held at Tokyo's Bigsite Convention Center. Each year the exposition is held to introduce new waste disposal and recycling technologies and spotlight the most innovative environ-



Yasugi wind power station, Shimane

ment related products and systems. The Company demonstrated a wide range of products based on original technology, including our ecological wallpaper, wind generators, an advanced heat ventilation system, and infiltration and solidification processes developed by Penta-Ocean.

>> Penta-Ocean's diversified approach to growth is guaranteeing it a leadership position in non-construction businesses.

Development and Other Activities

Consolidated sales for this category in the term under review amounted to \$5,934 million (US\$47.8 million), despite a sluggish real estate market. Although this figure represented a 65.9% decline in sales from the previous term's level, operating income amounted to \$864 million (US\$6.9 million) owing to sales of highly profitable real estate holdings. From an operating loss of \$1,033 million (US\$8.3 million) recorded in the previous term, this gain represented an increase of \$1,897 million (US\$15.3 million).

The Other Business Division is comprised of ship-building, construction material and equipment, and vessel leasing businesses. Sales in the term under review amounted to \$14,914 million (US\$120 million), an increase of 15.9%, however, this result accompanied an operating loss of \$81 million (US\$0.6 million). Compared with the \$535 million (US\$4.3 million) operating loss in the previous term, this year's result represents an improvement of \$454 million (US\$3.6 million).