
FOREST SCIENCE LIBRARY
DEPARTMENT OF CONSERVATION
AND LAND MANAGEMENT
WESTERN AUSTRALIA

*Report on Meetings in Japan
to Discuss*

Carbon Sequestration

and

Forestry Investment Issues

5 March 2000 to 15 March 2000

By Dr S R Shea and Dr A Radomiljac

EXECUTIVE SUMMARY

1. Seventeen companies in Japan were given a comprehensive briefing on the opportunities in Western Australia to develop large carbon sinks by the establishment of tree crops (see presentation notes, appendix 1).
2. In contrast to companies in North America, there was a high level awareness of the greenhouse gas issue and considerable interest in using tree crops to offset greenhouse gas emissions by carbon sequestration.
3. There was a considerable level of concern about the implications of the Kyoto Protocol to the Japanese economy in all of the companies that were briefed, but the willingness to invest in tree planting programs varied according to the nature of the various companies. Broadly speaking, there were four categories of responses:
 - (a) The trading houses and companies involved in the pulp and paper industry, for example Itochu, Mitsui, Nippon Paper and Oji, had already formed alliances with companies concerned with greenhouse gas emissions. They were aggressively promoting the opportunities for these companies to invest in bluegum plantations and formal joint ventures have already been negotiated. There is obviously a measure of self-interest in this approach since, regardless of the outcome of negotiations on carbon trading, companies that are investing in plantations for the prime purpose of producing wood fibre for pulp and paper production will benefit from investment by companies seeking carbon credits.
 - (b) The very large carbon dioxide emitters, for example power companies such as Tokyo Electric Power and Kansai Electric Power, are extremely concerned about the implications of Kyoto to their own operations and see carbon sequestration of one of the few options in the short term they can pursue to alleviate their problems. Consequently, even though they have limited knowledge of forestry and the forest product industry they are prepared to invest in plantations. These companies were particularly receptive to the presentations that were made to them because up until now the only advice they had received was from companies associated with the pulp and paper industry.
 - (c) There are a number of middle-sized companies which recognise that they could have problems with the Kyoto Protocol, but at this stage are not prepared to take any decisive steps because of the uncertainty surrounding the implications of the Kyoto Protocol, and particularly the rules regarding carbon trading and carbon sequestration.
 - (d) There are a number of companies, principally the trading houses, who are interested in participating as "traders" and coordinators. These companies see the opportunity for new business.
4. Almost without exception the companies that were briefed raised issues relating to the way Australia would deal with carbon trading and in particular whether Australia would

have the legal framework in place to allow external companies to participate in carbon sequestration projects. All of the companies were very aware of the New South Wales legislation which they saw as being very positive because it provided a clear legal process to purchase and own carbon created by the establishment of tree crops.

Notwithstanding the fact that they were advised that common law provisions in Western Australia provided for clear ownership of carbon rights and that BP were comfortable with the legal arrangements that had been made for their project in the Albany region, all companies expressed strongly the view that States that established legislation which removed any doubt about ownership of carbon would be favoured.

5. The future preparedness of Japanese companies to invest in tree planting programs will depend on the outcome of international meetings in May where the rules governing the use of tree crops to establish carbon sinks will be clarified and the outcome of COP 6 in November. However, there is no doubt that a number of companies could be prepared to invest within the next 12 months, at least at a pilot scale, if they were presented with attractive tree planting projects.
6. Sumitomo Corporation indicated that despite the adverse economic conditions in Japan they still maintained an interest in participating in the laminated veneer lumber project. They were in the final stages of negotiating an arrangement with Wesfi which, subject to Wesfi's assessment of the economic liability of the project, could lead to initiation of this significant manufacturing facility in Western Australia. The potential to link this project with an investment in tree crops for carbon sequestration was raised with Sumitomo and they expressed significant interest in this approach.
7. Meetings with the pulp and paper companies associated with tree planting projects managed by CALM in Western Australia were very positive. All of the companies expressed their appreciation that these projects had been extremely successful. The general view, however, that the level of planting that had been undertaken by these companies in Western Australia would be reduced in part because of the relatively adverse economic climate in Japan but also because of the existence of large areas of plantations in Western Australia which had been established by private Australian companies, principally via tax effective management effective schemes. All of the companies briefed drew attention to the fact that because of the high level of investment by private companies in Australia large volumes of wood fibre, which currently has no market, would be produced over the next 10 years. Given the existence of this large plantation estate which will generate large volumes of wood fibre within the next two to three years, it is not improbable that the market price for globulus wood fibre could significantly decrease. It also follows that the price of woodchips derived from native forest operations could also decline significantly.

SUMITOMO CORPORATION 6 MARCH 2000

Sumitomo Corporation was founded in 1919 and has its head offices in Tokyo and Osaka. It has grown over the years to become one of the leading Japanese trading companies. Sumitomo is capitalised at about US\$1.4 billion, and in fiscal 1999 net sales were approximately US\$94 billion. Sumitomo has about 8,500 employees around the world.

Because of its global presence, Sumitomo is able to bring together producers and consumers in every part of the world. To accomplish this, Sumitomo have 162 offices in 88 countries, with 32 offices throughout Japan. Sumitomo also has an extensive worldwide network comprising hundreds of subsidiaries and affiliated companies. As well as conducting a wide variety of other business activities, Sumitomo acts as a key intermediary in all kinds of global trading. With subsidiaries and offices cooperating in virtually every major global market, Sumitomo is in a position to handle any business.

In fiscal 1999, our gross trading volume stood at about US\$94 billion. The majority, or just over 42%, of Sumitomo's sales are generated by machinery, electronics and media business. In addition to machinery itself, this core segment incorporates electric systems, ships, large plant and transportation projects, power and telecommunications, automotive and construction equipment, electronics and aerospace.

Just over half, or 55%, of Sumitomo's sales are generated domestically. Exports account for nearly 19% of sales, followed by imports, with around 14%, and offshore trade close to 12%. Although Sumitomo's key business activities consist of two major components, trade and business investments, Sumitomo's environmental business is playing an increasingly important corporate role. This includes such diverse efforts as major reforestation projects, developing technology for recycling waste paper, plastics and aluminium.

Contacts

Mr Junya Maruoka, General Manager - Global Environment Department

Mr Shigeru Sonehara, Manager, Planning & Development Team, General Products & Development

Mr Ron Takahashi, Assistant General Manager, Lumber & Building Materials Department

Discussions

A presentation was given to Sumitomo on the potential for carbon sequestration and plantation investment opportunities in Western Australia.

The Sumitomo Corporation has various activities under its broad umbrella which result in significant greenhouse gas emissions and there may be some potential in the future to attract business units within this corporation into carbon sequestration programs in Western Australia. However, the principal interest that Sumitomo expressed at this meeting was in the potential to develop a role as carbon trader on behalf of other Japanese companies. It is possible that in the

future Sumitomo may act as a broker for Western Australian companies or government agencies which have created carbon sinks.

Discussions were held with Sumitomo regarding the proposed LVL project in Western Australia. Dr Shea was responsible for initiating this project three years ago. Initially, Sumitomo had intended to be a major equity partner in the project with Wesfi but as a consequence of adverse economic conditions they indicated that they would have to withdraw from the project. However, recent discussions between Wesfi and Sumitomo resulted in the potential for Sumitomo to re-enter the scheme as an equity partner. The discussions on the LVL plant were, despite Sumitomo's partial withdrawal from the project, very positive. The potential of linking this project to carbon sequestration was raised and Sumitomo expressed a significant interest in this approach. It may be possible to stimulate a more proactive role for Sumitomo in the project if the plantation establishment that is required to sustain the proposed LVL plant was linked to energy companies in Japan interested in developing carbon sinks to offset greenhouse gas emissions.

OJI PAPER CO LTD AND ITOCHU CORPORATION 6 MARCH 2000

Founded in 1873, Oji Paper Co Ltd has played a leading role in the development of Japan's pulp and paper industry through more than a century. The Oji Paper Co Ltd manufactures a comprehensive range of products for both general and specialised applications. Moreover, following two major mergers – with Kanzaki Paper Mfg. Co Ltd in October 1993 and with Honshu Paper Co Ltd in October 1996 – Oji Paper has established itself as Japan's largest manufacturer of paper and paper products, while at the same time expanding its international role.

Oji Paper is attempting to restructure its company so that it can continue to thrive in the century ahead by satisfying its traditional Japanese customers and competing successfully in the international marketplace as a responsible global citizen.

Oji Paper's major business lines include: production, conversion/processing and sales of printing, writing and related papers; packaging and wrapping papers; carbonless papers; household products; containerboard and boxboard. Production and sales of such end-use products such as corrugated board and boxboard containers; paper-board containers; plastics; thermal paper; self-adhesive paper and disposable paper diapers. Production and sales of chemicals for paper making and packaging equipment. Reforestation inside Japan and overseas, and the maintenance of Company-owned forests.

Itochu Corporation is a US\$153 billion globally integrated corporation with headquarters in Japan. It is amongst the largest trading houses in the world with a focussed vision of commitment to global good. Itochu has a world-wide presence in a vast variety of fields including general trading, textile machinery, aerospace, energy, chemicals, metals, food products, construction and finance. Itochu Corporation has 123 companies worldwide.

Itochu not only brings experience of the international automobile industry but also brings valuable systems, procedures and lending experience from a range of countries. Itochu has 44 offices in Japan and 179 abroad.

The Food, Forest Products & General Merchandise Company works with an extremely diverse array of goods: fresh and processed food products, marine products, lumber, paper and pulp, and general merchandise such as glass, cement, tires and natural rubber. To cater to a wide array of clients, Itochu maintains streamlined production, distribution and sales systems.

Today, Itochu is establishing a global base for handling food products from raw materials to the end users. Overseas, for example, the company participates in foodstuff manufacturing and processing businesses in Asia, a building materials manufacturing plant in the U.S.

Itochu's forestry operations are resource-efficient and environment-friendly. Itochu has been developing commercial forests to use resources efficiently and to ensure a stable supply of products to the world. In a joint venture in Brazil, the company produces wood pulp from eucalyptus trees grown on its own land. Parts of the forest are designated for preservation, some in perpetuity, thereby helping sustain the local environment. Itochu also makes woodchips from

eucalyptus and acacia trees, chiefly in Australia, in a manner that protects natural resources while ensuring a renewable supply of products.

Oji Contacts

Mr Kenji Kanda, General Manager, Overseas Forestation Dept., Raw Materials & Purchasing Div.

Mr Akira Tanooka, Deputy General Manager, Overseas Forestation Dept, Raw Materials & Purchasing

Mr Hideki Sannabe, Overseas Forestation Dept, Raw Material & Purchasing Div.

Itochu Contacts

Mr Jimmy Nakamura, General Manager - Wood Chip Department, Food, Forest Products & General Merchandise Company

Mr T. Kitagawa, Manager of Timber Section, Wood Products & Materials Dept, Food, Forest Products & General Merchandise Company

Mr Tadahiro Kiyosu, Oceania & South African Section, Woodchip Dept, Food, Forest Products & General Merchandise Company

Mr Masayuki Obuchi, Section Manager, Oceania & South African Section, Woodchip Dept, Food, Forest Products & General Merchandise Company

Discussions

A presentation was given to Oji and Itochu on the potential for carbon sequestration and plantation investment opportunities in Western Australia. APFL, the joint venture company that operates the Albany bluegum project has already entered into an agreement with a Japanese power company (Tohoku Electric Power Corporation). This corporation has taken a 5% equity in the APFL project which it is assumed is because of the potential for the bluegum project to provide carbon credits in the future. Both Itochu and Oji are independently negotiating with power companies in an attempt to attract investment in their existing tree planting projects in other parts of Australia and in other countries. As a consequence, at this stage it is unlikely that these companies would be interested in making further investments in Western Australia in tree planting projects.

Discussions were held with Oji regarding the future of the APFL project and the high level of uncommitted bluegum resource that is currently being planted. The representatives of the company indicated they were extremely happy with the Albany project which CALM initiated 10 years ago. They also indicated, however, that they proposed to reduce the current planting rate over the next 3-5 years. This is in part a reflection of the adverse economic conditions in Japan, but also as a consequence of the fact that extensive tree planting by private companies in the Albany region has caused land prices to increase substantially. The existence of a large uncommitted wood fibre resource in this region undoubtedly also has contributed to the decision to reduce the planting rate.

WEYERHAEUSER JAPAN LTD 7 MARCH 2000

Weyerhaeuser is the largest exporter of forest products in the United States. Approximately 16% of the company's sales are shipped to more than 60 countries worldwide, and demand from international customers is increasing. As international demand grows, Weyerhaeuser plans to increasingly satisfy it from timberlands and production facilities outside of North America as well as from operations in the United States and Canada.

Asia and Europe are the leading destinations for Weyerhaeuser exports. In Asia, Japan has traditionally been the company's largest customer, while China is an emerging market. Sixty per cent of what Weyerhaeuser exports to Japan is manufactured products: pulp, newsprint, paperboard, containerboard, lumber, oriented strand board and woodchips. Customers in Europe import pulp, containerboard, lumber and plywood. Weyerhaeuser has sales offices in Japan, China, Korea, Hong Kong, Singapore, Taiwan, Switzerland and Belgium. Much of Weyerhaeuser's exports across the Pacific are carried in ships operated by Westwood Shipping Lines, a Weyerhaeuser subsidiary.

Weyerhaeuser has served customers in Asia for more than 70 years. In 1998, the company's total export sales to all markets from the United States totalled \$1.1 billion, or 10% of the company's total sales. Weyerhaeuser sells pulp and paper products and building materials in Asia.

Sales to Japan began in 1923 when Weyerhaeuser lumber helped rebuild Tokyo and Yokohama following a severe earthquake. The company opened its first Asia-based office in Tokyo in 1963 as part of a marketing effort for trees blown down by a severe storm in 1962 in Washington State. Other Asian offices opened in the 1960s and 1970s as the company's reputation, product quality and long-term commitment became known around the Pacific Rim. When the U.S. officially normalised partial relations with China in 1971, Weyerhaeuser was the first U.S. forest products company to begin developing business there, and the first Chinese order for an American product was Weyerhaeuser linerboard in 1972.

Contact

Mr Michihiko Ueda, Manager, Oriented Strand Board

Discussions

A presentation was given to Mr Michihiko Ueda on the potential for carbon sequestration and plantation investment opportunities in Western Australia.

Discussions were held with Mr Michihiko Ueda regarding the future prospect of an OSB manufacturing plant near Mt Baker utilising the currently uncommitted *Pinus radiata* resource. Three years ago, Dr Shea initiated negotiations with Itochu who had plans to establish an oriented strandboard plant using new technology in Chile. Dr Shea was successful in inducing Itochu to carry out an evaluation of the potential to establish the plant at Mt Barker using the uncommitted *Pinus radiata* resource that had been established by CALM. The attempt to attract

Itochu failed but the subsequent decision by Itochu to establish the plant in New South Wales was never consummated because of difficulties Itochu encountered in establishing a satisfactory joint venture with CSR.

Consequently, it was still possible that Itochu could have been encouraged to re-evaluate the Albany OSB proposal. The potential for the establishment of an OSB plant in the Albany region was raised with Weyerhaeuser in January. Consequently, Dr Shea arranged through his contacts in Itochu to discuss the prospect with the CEO of Weyerhaeuser Japan. At this stage there is no interest in establishing the plant primarily because there is not sufficient resource available to provide feedstock to an OSB plant at the scale that is required to make it economical. Notwithstanding this there still remains the potential to establish an oriented strandboard plant in the Albany region in the future.

NIPPON PAPER INDUSTRIES CO LTD AND MITSUI & CO LTD 7 MARCH 2000

Nippon Paper Industries (NPI), is a leader in the Japanese paper industry. In addition to newsprint, printing and writing paper, and a wide variety of other paper products, it also produces and sells pulp, liquid containers, synthetic chemicals, film products. Aside from this, its affiliates in the NPI Group are also engaged in paperboard, household paper goods, building materials, transport, and many other businesses.

Mitsui & Co. is Japan's largest trading house, or general trading company. Mitsui & Co has general and integrated business activities: firstly because of the exceptionally wide range of products and services the Company handles, covering virtually all industries, and secondly because of the broad range of functions the Company can perform.

The Company has two principal roles: to facilitate its clients' international trade-related activities and—making use of its substantial resources, human, financial, and other resources—to create new trade flows, new enterprises, and new industries around the world.

Mitsui's activity is acting as an intermediary between buyers and sellers who want to import, export, or engage in offshore or domestic trading activities. For example, for exporters Mitsui cultivates markets overseas and for importers locates raw materials or product sources that meet their needs. Typically, Mitsui is involved through the course of its clients' transactions, assuming risks accompanying the transfer of goods and collecting payments. To facilitate smooth customer transactions, Mitsui draws upon the capabilities described here—capabilities that are an integral part of its transaction services.

Mitsui provides a broad range of useful information services to clients to assist them in identifying and taking full advantage of business opportunities. Through its global network, and drawing on its long experience in carrying out trade transactions, Mitsui is able to gather and analyse information quickly and accurately, providing updates on business trends, market conditions, and individual commodities and products as well as advice on legal matters and local business customs to assist clients in realizing the full potential of their products.

Nippon Paper Contacts

Mr Ikuo Kuwajima, Managing Director, General Manager, Raw Materials & Purchasing Div
Mr Kazuhiro Sakai, General Manager – Forestry Dept, Raw Materials & Purchasing Div
Mr Fumio Manoshiro, General Manager - Tree Farm Development Office, Forestry Dept., Raw Materials & Purchasing Div.
Mr Toshi Eguchi, Manager, Forestry Dept. Tree Farm Development Office, Raw Materials & Purchasing Division
Mr Tetsuya Inoue, Manager, Forestry Dept. Tree Farm Development Office, Raw Materials & Purchasing Division

Mitsui Contact

Mr Ken Arakawa, General Manager - Woodchip & Raw Materials Dept, General Merchandise Group

Discussions

A presentation was given on the potential for carbon sequestration and plantation investment opportunities in Western Australia. Nippon and Mitsui have already made joint venture arrangements with Japanese companies who are interested in acquiring carbon credits by sequestration. Consequently, it is unlikely that either of these companies would be interested in expanding their current tree planting operations in Western Australia. It is possible, however, that Mitsui may be interested in the future in acting as a broker for companies or government agencies who have carbon credits available for trading.

Mitsui and Nippon Paper representatives were extremely positive about the success of the Bunbury tree planting project which was initiated by Dr Shea and is being managed by CALM. It is unlikely, however, that this project will expand because of the shortage of available land and the existence of significant private wood fibre resource in the future. Both companies expressed some concern at the level of wood fibre production which would be generated as a consequence of private plantation expansions over the last several years in Australia.

TOKYO SEKISUI INDUSTRIAL CO LTD 7 MARCH 2000

A tour of Sekisui's Tokyo house construction factory was conducted.

Contact

Mr Hideaki Nishijima, President

Discussions

Sekisui had originally intended to become a joint venture partner in the proposed LVL plant. However, a significant decline in the Japanese housing market (Sekisui's housing starts have declined by one-third in the last three years) caused them to withdraw from the project. This company, however, is the largest housing manufacturer in Japan and has the most sophisticated house-building technology in the world. Consequently, in the future they may become a significant buyer of forest products from Western Australia in the future.

TECHNO FOREST CO LTD 8 MARCH 2000

Contact

Mr Katsuya Satoh, President - Techno Forest Co Ltd
Mr Siji Nagaoka, Forester
Mr Taku (Tack) Goto, Senior Forest Engineer

Discussions

Discussions were held on the current and proposed new tree crop plantings throughout the world. Itochu is the major owner of this company. Its role is to evaluate the potential for tree planting in various parts of the world. They are currently evaluating regions of South America and China. While Australia currently provides the best opportunity for Japanese companies for plantation establishment, this premier position is not inviolate. Japanese companies are interested in ensuring that they are not dependent on one country for their future supplies of wood fibre.

The issue of private bluegum plantings in Australia was discussed. Mr Katsuya Satoh gave a brief account of the greenhouse issue in Japan and described reasons for the current interest in sequestration projects as a mechanism for offsetting greenhouse gas emissions.

MITSUBISHI MATERIALS CORPORATION 8 MARCH 2000

Mitsubishi Materials Corporation began in coal mining in 1881. This has remained a core emphasis for Mitsubishi Materials Corporation. That emphasis has included pioneering work in transforming geothermal resources into clean electric power. Mitsubishi Materials Corporation commissioned a 10,000 kilowatt geothermal power plant in Ohnuma, northern Japan in 1974 to supply electricity to Mitsubishi Materials Corporation's own operations. Later, Mitsubishi Materials Corporation engineered a 50,000 kilowatt power plant at Sumikawa.

The Sumikawa plant, which began operation in 1995, supplies power to the grid. Developing business in environmental sectors is a strategic priority for Mitsubishi Materials. At Sumikawa, Mitsubishi Materials is currently appraising their technological capabilities to exercise those capabilities in new lines of business for safeguarding the environment. A good example is a project Mitsubishi Materials have undertaken for generating electricity from municipal waste. Mitsubishi Materials also are developing gasification and melting technology to prevent the release of dioxin and other hazardous substances when incinerating garbage.

Mitsubishi Materials has been conducting research on nuclear power for more than 30 years. Mitsubishi Materials participate in the entire cycle of ensuring clean, safe nuclear-generated power, from mining and processing uranium to processing used nuclear fuel.

Contact

Mr Toshihiko (Mike) Miyagawa, Assistant Manager – Business & Administration Dept

Discussions

A presentation was given to Mr Toshihiko Miyagawa on the potential for carbon sequestration and plantation investment opportunities in Western Australia.

A detailed presentation was also given on the proposed oil mallee integrated power plant near Narrogin. The Mitsubishi representatives expressed a specific interest in this power plant and further material will be supplied to them.

MARUBENI CORPORATION 8 MARCH 2000

Marubeni was established in 1858. Marubeni is one of Japan's leading general trading houses, with operations that encompass domestic, import, export and offshore trade and investment activities, and range from the development of natural resources to the retail marketing of finished products. Marubeni conducts these operations through a worldwide business network.

Contact

Mr Masatsugu Neki, General Manager, Business Development Section, LNG Project
Mr Shigeki Maeda, Assistant General Manager – LNG Project Department
Mr Yugo Kiyofuji, Business Development Section – LNG Project Dept
Mr Yoshie Ozawa, Forestation & Development Team, Wood Chip Dept
Mr Tadashi Watanabe, Assistant General Manager, Forestation & Development, Wood Chip Dept
Mr Koichi Iida, General Manager – Forestation & Development Team, Wood Chip Dept

Discussions

A presentation was given to Marubeni Corporation on the potential for carbon sequestration and plantation investment opportunities in Western Australia.

A discussion was held on issues surrounding the current uncertainty about the framework in which sequestration projects may operate. Marubeni may be interested in investing into Western Australian tree planting projects in the future if the uncertainty surrounding the Kyoto Protocol are resolved. Currently Marubeni are negotiating with Japanese power companies with the objective of attracting their investment into existing tree planting projects in Australia.

COMMONWEALTH BANK 8 MARCH 2000

The Commonwealth Bank of Australia operates predominantly in the domestic market and its operations cover both retail financial services and business and corporate banking. The Commonwealth Bank has approximately 7.7 million customers. Its retail financial service products include savings and cheque accounts, demand and term deposits, credit card services, personal loans, business loans and housing loans as well as superannuation, investment and life insurance products.

The Institutional Banking Division focuses on the top 1,000 corporations in Australasia and selected offshore clients engaging in corporate lending, project finance, securities underwriting, payments and transaction services and financial markets activities dealing in products such as foreign exchange, fixed income, futures and derivatives.

The Commonwealth Bank is represented internationally through ASB Bank Limited, a retail bank in New Zealand of which the Commonwealth Bank is a 75% shareholder, and through branches in London, New York, Singapore, Tokyo, Hong Kong and Grand Cayman and representative offices in Beijing, Shanghai, Hanoi and Jakarta

Contact

Ms Debra Hazelton, General Manager, Commonwealth Bank of Australia -Tokyo Branch
Mr Russell Piggott, Head of Structure Solutions Group, Commonwealth Bank of Australia

Discussions

A presentation was given to Ms Debra Hazelton and Mr Russell Piggott on the potential for carbon sequestration and plantation investment opportunities in Western Australia. Discussions were held on issues surrounding the ratification and implementation of the Kyoto protocol.

The Commonwealth Bank in Japan has been attempting to develop a market for carbon with Japanese companies but at this stage have been unsuccessful. They are interested in maintaining contact with Western Australian agencies because if they are successful in developing a market for carbon they will require access for carbon sinks.

The Commonwealth Bank in Australia has been given detailed briefings on the proposed oil mallee integrated power plant and have had discussions with the Oil Mallee Association and Western Power. They have proposed that a "carbon bond" could provide a mechanism for raising private capital for this project and associated mallee plantings.

KYUSHU ELECTRIC POWER CO INC 9 MARCH 2000

Contacts

Mr Hiroshi Ishizaki, Assistant Manager, Environmental Planning Section, Environmental Affairs Department

Mr Kazuo Katsumoto, Senior Officer, General Manager, Environmental Affairs Department

Discussions

A presentation was given to Kyushu Electric Power on the potential for carbon sequestration and plantation investment opportunities in Western Australia. The General Manager of Kyushu's Environmental Affairs Department made an extremely positive response to the presentation and indicated that Kyushu were currently looking for opportunities to establish tree plantations in Australia for the purpose of offsetting carbon dioxide emissions. The General Manager advised that a project team from Kyushu was currently examining carbon sequestration options in Australia:

When Dr Shea returned from Japan, he was advised by the Department of Resources Development that the Kyushu delegation would be visiting Western Australia that week and that it was important that they were briefed by Dr Shea. Unfortunately, when CALM and Western Power were approached to arrange this briefing they declined. Subsequently the DRD officer arranged for Dr Shea to brief the Kyushu delegation immediately prior to their departure. A comprehensive briefing was provided by Dr Shea and the Kyushu project team, who were aware of the fact that their General Manager had been briefed in Japan, were extremely positive about the opportunities that existed for carbon sequestration in Western Australia. Unfortunately they were somewhat confused about the Western Australian position because their visit was not coordinated.

MITSUBISHI PAPER MILLS LIMITED AND TOKYO ELECTRIC POWER COMPANY (TEPCO) 9 MARCH 2000

Mitsubishi Paper Mills Limited was established in 1898. The Mitsubishi Paper Group is restructuring the Company and the other group members to expand their business activities in the areas of paper for printing and business communications, imaging materials, and specialty materials.

As part of this initiative, Mitsubishi Paper Mills Limited started the new phase-six expansion of paper production facilities at its Hachinohe Mill in an effort to ensure stable supplies to customers and to strengthen its business foundations. As the securing of resources is an important issue, in addition to Mitsubishi Paper Mills Limited's ongoing arrangement with the Republic of Chile, Mitsubishi Paper Mills Limited have decided to operate an afforestation project in Tasmania in order to secure future pulp supplies.

Mitsubishi Paper Mills Limited has continuously devoted efforts to the utilisation of paper waste, the expansion of afforestation, and environmental protection

TEPCO is the world's largest private electric power company, it is also a pioneer of clean, high-quality power. TEPCO is dedicated to: offering clients technological expertise, assisting the power sector development, involvement in finding solutions for global environmental problems, developing international business partnerships and pursuing technical and information exchange.

For consultancy services, TEPCO is particularly strong in the following fields; Power System Planning (power sources, transmission and distribution system planning), Reliability Improvement (fault reduction, protection relay improvement etc), Power System Operation, Operation and Maintenance of Power Plants, Environmental Protection and Demand Side Management. TEPCO offers a wide range of consultancy services in cooperation with its affiliates, including Tokyo Electric Power Services Co Ltd (TEPSCO), an engineering services company.

For investment opportunities, TEPCO participates in international bidding and develops joint venture projects, capitalising on its expertise in combined cycle power generation, supercritical pressure power plants, and other technologies. To date, partners in international bidding have included Western electric power companies and Japanese trading companies.

Mitsubishi Paper Mills Limited Contacts

Mr Koji Kobata, Forestry Group – Purchasing & Forestry Dept

Mr Takashi Yamaguchi, Forestry Group – Purchasing & Forestry Dept

TEPCO Contact

Mr Mitsunori Watanabe, Business Development Group, International Affairs Department

Discussions

A presentation was given to TEPCO and Mitsubishi Paper Mills Limited on the potential for carbon sequestration and plantation investment opportunities in Western Australia.

TEPCO has already entered into an agreement with New South Wales to invest in a major tree plantation project in that State. One of the reasons why TEPCO chose New South Wales was the existence of legislation which ensured that ownership of carbon was not in dispute. It is possible, however, that TEPCO would be interested in expanding their commitment to plantation establishment in Western Australia in the future if the uncertainties surrounding the Kyoto Protocol were resolved. TEPCO is the largest power company in Japan and has very large greenhouse gas emissions.

OSAKA GAS CO LTD 10 MARCH 2000

In Japan, 72 public and 172 private gas suppliers serve 25 million households. Four major suppliers accounted for 77.8% of the 22,678 million m³ of gas sold in Japan in fiscal 1999. These companies are Tokyo Gas Co, Ltd, Osaka Gas, Toho Gas Co, Ltd, based in Nagoya, and Saibu Gas Co, Ltd, based in Fukuoka.

These four large gas companies provide comprehensive gas-related services, ranging from production and supply to sales of gas equipment. Pipelines are limited to service areas as there is no national network. The companies import liquefied natural gas (LNG) from overseas production bases and ship it to Japan, where it is regasified.

Demand for natural gas has risen in Japan in recent years. Between 1975 and 1997, average electric power consumption and real economic growth in Japan rose 3.6% and 3.3%, respectively. During that period, Osaka Gas expanded gas sales by volume by an average of 5.4% per annum. Demand for gas for industrial use soared. Osaka Gas served 6,210,080 customers at the end of March 1999. Osaka's gas sales by volume in fiscal 1999 were 6,603 million m³, accounting for 29.1% of Japan's natural gas demand. Osaka's two large terminals have sufficient capacity to meet increased demand. With these terminals and Osaka's 52,157 kilometer pipeline network, Osaka is well positioned to meet increased demand for natural gas in Japan in the future.

Osaka Gas serves the Kansai region in central Japan. Today, the Kansai region is Japan's second-largest economic centre after the Tokyo metropolitan area, and is home to 21,530,000 people, or 17.2% of the Japanese population. It contributes ¥84 trillion to Japan's gross domestic product (GDP), or 16.6% of the total, larger than the GDP of Canada and almost equal to that of the United Kingdom (1996 data). Osaka Gas continues to contribute to local development by supplying environment-friendly natural gas.

Contacts

Mr Fumihiko Frank Nakano, General Manager – Environment Department
Mr Mikako Kokitsu, Environment Assessment and Development Dept
Mr Chihoko Homma, International Business Office, Corporate Planning Dept
Mr Toru Kamoi, Assistant Manager – International Business Office, Corporate Planning Dept

Discussions

A presentation was given to Osaka Gas on the potential for carbon sequestration and plantation investment opportunities in Western Australia. Discussions were held on a range of issues, with a particular focus on the potential rules governing the implementation of sequestration projects.

Osaka Gas are concerned about the uncertainty surrounding the Kyoto Protocol and the rules which will be applied to credit carbon sinks formed by tree crops. However, they are extremely concerned that if they do not initiate a carbon sequestration project in the near future they will

not be able to respond rapidly if carbon sequestration becomes a favoured option to offset greenhouse gas emissions.

Some measure of the interest that was generated was indicated by the fact that Dr Shea and Dr Rado were asked to repeat the briefing to other senior Osaka Gas representatives three days after the initial briefing.

ENVIRONMENTAL ENGINEERING CENTER CO LTD (BIOLOGICAL KANSAI ENVIRONMENT INSTITUTE) 10 MARCH 2000

Several of Kansai Electric's affiliated companies are currently in the process of developing innovative eco-business products and services. The Kansai Environmental Engineering Center Co is involved in dioxin research and analysis. To respond to the demand for control of the precision and quality of toxic dioxins analysis, and to obtain accurate data, the Analysis Center in Higashi-Osaka City has installed the latest high-precision, high-sensitivity analysis system and is based on Kansai's experience and advanced technology. Kansai actively engage in research and analysis of dioxins (including Co-planar PCBs), environmental hormones, heavy metals found in soils, exhaust fumes, and waste water

The Kansai Environmental Engineering Centre is also engaged in chip processing. This process of chipping lumber for re-use reduces into powder the scrap lumber that is produced during the construction of power station facilities, as well as driftwood found in dams. After the lumber has been processed into chips, it is then spread in green areas or made into compost. The company has actively been engaged in recycling resources by reducing lumber into powder at construction sites such as the Maizuru Power Station (fossil fuel) construction site and the Nose Substation. Processing lumber in this environmentally friendly way has become an increasingly important task.

Contacts

Dr Makoto Ogawa, Director, Biological Environment Institute
Mr Jiro Suekuni, Senior Researcher, Remote Sensing and GIS
Dr Koji Iwase, Chief Researcher – Mycology
Dr Yasuyuki Okimori, Chief Researcher, Forest Ecology and Silviculture

Discussions

Discussions were held on Kansai's and Western Australia's mutual interest in the manufacturing of activated carbon. Discussions were also held on the proposed integrated oil mallee plant, near Narrogin. The scientists at the Environmental Center have previously visited Western Australia and were particularly interested in the mallee tree planting being undertaken by the Oil Mallee Association. They indicated that senior executives from the Power Company would be particularly interested in this project.

KANSAI ELECTRIC POWER CO INC 13 MARCH 2000

The Company's service area includes Osaka (population: 2.6 million), Kyoto (1.46 million), Kobe (1.42 million) and Nara (0.36 million), four cities known for their various industrial and commercial activities. The Kansai area's varied and extensive industries, which range from manufacturing to processing, account for one-fifth of Japan's total shipments of industrial goods, and for roughly the same percentages of such national economic indices as individual income, working population, retail sales and loans by financial institutions.

Japan is divided into ten electric utility companies' service areas. Kansai Electric Power's service area is only about 8% of Japan's total land area. With 20.7 million residents, it is densely populated, as reflected in its percentages of the nation's total electricity sales (17%) and population (16%). The Company's electricity sales break down into 30% for lighting, which is mainly residential use, 35% for power for small and medium factories and shops, and 35% for large power users.

Contacts

Dr Taiichiro Suda, General Manager – Environmental Affairs, General Office of Plantsiting & Environmental Considerations

Mr Yoshihiro Ogawa, Deputy Manager – Global Environment Group, General Office of Plantsiting & Environmental Considerations

Mr Toru Yamanaka, Manager – Global Environment Group, General Office of Plantsiting & Environmental Considerations

Mr Makoto Suto, General Manager – Global Environmental Affairs

Discussions

A presentation was given to Kansai Electric Power on the potential for carbon sequestration and plantation investment opportunities in Western Australia. Kansai Electric Power indicated that they would take a cautious approach to sequestration options due to uncertainty of the Kyoto Protocol being ratified and the rules governing sequestration projects. However, significant interest was expressed in the mallee tree planting project and the representatives of the company indicated that although they were unsure of the rules surrounding carbon sequestration they were also concerned that they would not have the opportunity to participate in carbon sequestration projects if this became one of the favoured strategies to offset greenhouse gas emissions.

Expression of gratitude

The organization of this visit to Japan was undertaken by representatives of the Australian Embassy and Mr Michael Walker. The assistance provided was exceptional. The following were involved in assisting Dr Shea and Dr Rado.

Mr Robert Boylan, Minister-Counsellor (Marketing), Australian Embassy
Mr Michael Walker, Official Representative - Government of Western Australia,
Mr Minoru Sue, Marketing Manager, Austrade
Mr Eisuke (Eddie) Ishimaru, Senior Investment Manager, Australian Embassy
Mr Michael Gaudion, Second Secretary, Australian Embassy