



TERI/NEDO/JBIC/IGES Symposium

Partnership between Japan and India Towards a Low-Carbon Economy

**Business Opportunities in India:
Energy Efficiency and Renewable Energy**

Summary Report

21 November 2008

Hamagin Hall VIA MARE
(Yokohama, Japan)

Organisers:

The Energy and Resources Institute (TERI)
New Energy and Industrial Technology Development Organization (NEDO)
Japan Bank for International Cooperation (JBIC), Japan Finance Corporation
Institute for Global Environmental Strategies (IGES)

Special sponsor:

Kanagawa Prefectural Government, Japan



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TERI/NEDO/JBIC/IGES Symposium

Partnership between Japan and India Towards a Low-Carbon Economy

Business Opportunities in India: Energy Efficiency and Renewable Energy

Objectives

The Government of India announced in June 2008 the National Action Plan on Climate Change with eight pillars such as promotion of solar power generation, which will activate climate change related markets in India. Under these circumstances, the formulation and promotion of a partnership between Japan and India is expected to bring in business opportunities for relevant industries in both countries.

From this point of view, a symposium focused on critical areas, such as renewable energy and energy efficiency, for shifting to a low carbon economy. Information was presented such as the current state of Indian environmental policies, the future outlook of India's energy situation and Japan-India partnership options, leading to discussions on challenges, barriers and measures to be solved to promote business development in both countries towards a low carbon economy.

Outline

Date & Time	21 November 2008 (Fri.) 13:00 - 17:45
Venue	Hamagin Hall VIA MARE (Yokohama, Kanagawa, Japan)
Organisers	The Energy and Resources Institute (TERI) New Energy and Industrial Technology Development Organization (NEDO) Japan Bank for International Cooperation (JBIC), Japan Finance Corporation Institute for Global Environmental Strategies (IGES)
Special sponsor	Kanagawa Prefectural Government, Japan
Co-hosting organisations	Japan India Partnership Forum (JIPF), JETRO Yokohama, Yokohama India Centre
Supporters	Ministry of the Environment of Japan, Yokohama City, Japan Institute for Overseas Investment, Nikkei Ecology
Language	English and Japanese
Participants	300



Programme

13:00 - 13:05	<p>■ Opening Remarks</p> <p>Rajendra Pachauri Director-General, TERI / Chairman, Intergovernmental Panel on Climate Change (IPCC)</p>
13:05 - 13:25	<p>■ Guest Speeches</p> <ul style="list-style-type: none"> ■ Kazuhiko Takemoto Vice-Minister for Global Environmental Affairs, Ministry of the Environment, Japan ■ Shigefumi Matsuzawa Governor of Kanagawa Prefecture, Japan ■ Aftab Seth Chair, Japan India Partnership Forum (JIPF) / Former Ambassador Plenipotentiary of India to Japan ■ Jairam Ramesh Minister of State for Power, India
13:25 - 15:10	<p>■ Keynote Session</p> <p>"Towards a Low Carbon Economy - Partnership between Japan and India"</p> <p>Chairman: Prof. Hironori Hamanaka Chair of the Board of Directors, IGES</p> <p>Keynote Speeches :</p> <ul style="list-style-type: none"> ■ Rajendra Pachauri Director-General, TERI / Chairman, IPCC ■ Kazuaki Koizawa Executive Director, NEDO ■ Hiroshi Shimizu Professor, Faculty of Environment and Information Studies / Graduate School of Media and Governance, Keio University
15:10 - 15:30	<p>■ Coffee Break</p>
15:30 - 16:10	<p>■ Presentation</p> <p>"Energy Efficiency and Renewable Energy Policies and Market Trends in India"</p> <ul style="list-style-type: none"> ■ Namrata Kala Research Associate, TERI <p>"Role of Finance towards a Low Carbon Economy"</p> <ul style="list-style-type: none"> ■ Takashi Hongo Special Advisor and Head, Environment Finance Engineering Department, JBIC
16:10 - 17:40	<p>■ Panel Discussion</p> <p>"Towards a Low Carbon Economy: Business Opportunities and Partnership between India and Japan"</p> <p>Coordinator: Mr. Shigenori Jimbo Chief Editor, Nikkei Ecology</p> <p>Panelists:</p> <ul style="list-style-type: none"> ■ Pramod Chaudhari Chairman, Praj Industries Limited ■ Tantra Narayan Thakur Chairman and Managing Director, PTC India Ltd. ■ Seigou Mizunuma Executive Managing Officer, Deputy Head of International Business Division, Electric Power Development Co.,Ltd. (J-POWER/EPDC) ■ Takeshi Sekiyama General Manager, International Cooperation Department, The Energy Conservation Center, Japan (ECCJ) ■ Takashi Hongo Special Advisor and Head, Environment Finance Engineering Department, JBIC
17:40 - 17:45	<p>■ Closing Remarks</p> <p>Hironori Hamanaka Chair of the Board of Directors, IGES</p>
18:00 - 19:00	<p>■ Reception</p>

Opening Remarks



In his opening remarks, Dr. Rajendra Pachauri (Director-General, TERI/Chairman of the IPCC) noted that we are living in a world that is interrelated as never before in all areas of economy and society, and our one common issue is that of climate change. He stated that we must be totally aware of this reality in the formation of various policies, including, for example, poverty reduction. He hoped to consider what opportunities and possibilities there were for Japan-India cooperation to bring about a transformation to a low carbon economy. He also mentioned that discussion on this topic must not end with this symposium and hoped that there could be a partnership among the organisers to build on this event and work on ways to find a solution.

Following this, there were speeches by four guest presenters (one of these was a video message). A summary of each speech is given below.

Guest Speeches

Kazuhiko Takemoto Vice-Minister for Global Environmental Affairs, Ministry of the Environment, Japan

At the Japan-India Summit in October 2008, a joint statement was agreed on the strategic global partnership. The statement confirmed close coordination between the two countries in the international negotiations on climate change. Over the past five years, Japanese investment in India has increased tenfold, and the number of businesses has doubled. This symposium is an occasion to explore the possibilities and new business opportunities for the two countries' cooperation toward a low carbon society. By making use of this event, the two countries will be able to further develop their cooperation through public and private partnership. I believe that the outcome of this event will be of great benefit not only to Japan and India, but to the whole of international society.



Shigefumi Matsuzawa Governor of Kanagawa Prefecture, Japan



In the promotion of environmental policies and efforts to achieve a low carbon economy, there are limits to what government alone can do, which is why relations with businesses and the private sector are important. Kanagawa Prefecture issued the Cool Renaissance Declaration in January 2008 calling for the restoration of the earth. We are putting the most effort into projects promoting electric vehicles, with the participation of Nissan Motors, among others. With growing interest in India among the business community in Kanagawa, it is also hoped that there will be an increase in business dealings in the environmental sector, such as energy efficiency technology and infrastructure formation including solar power generation. There are preparations

underway centred around local business groups for the establishment by Spring 2009 of the Yokohama India Centre which is expected to conduct a wide range of exchange and interaction between Kanagawa and India.

Aftab Seth

Chair, Japan India Partnership Forum (JIPF) / Former Ambassador Plenipotentiary of India to Japan

The Japan-India partnership began 1500 years ago in the days of Shotoku Taishi. The important message from India to the Japanese people at that time was traditional Hindu and Buddhist teaching – that mankind should live in harmony with nature. India fully understands the importance of the transformation to a low carbon economy within a global framework and it has common but differentiated responsibilities to act on climate change issues. In October 2008, this point was recognised in the agreement signed by Prime Minister Aso, and Indian Prime Minister Singh. There is great value in the words “business opportunities” that are in the title of this symposium. I myself, through the Japan-India Partnership Forum will continue to increase cultural and business exchanges between our two countries.



Jairam Ramesh

Minister of State for Power, India

Video message

Due to improved lifestyles, economic growth in India has grown by an average of 7 % to 8% over the past decade, and it is expected to sustain this rate of growth over the next decade or two. India should make efforts on climate change issues a priority, being a country with a high rate of CO₂ emissions. On the other hand, we understand our common but differentiated responsibilities that must be taken internationally. Thus we are demanding the use of sustainable and highly efficient energy. In practical terms, we require vital technological development in coal, efficient electric power transmission, nuclear power and reusable energy. There are areas of cooperation with added value for both Japan and India, which will have important implications for our region and for the rest of the world.



Keynote Session

Towards a Low Carbon Economy - Partnership between Japan and India

At the beginning of the session, the moderator, Prof. Hironori Hamanaka, Chair of the Board of Directors of the Institute for Global Environmental Strategies (IGES), said that, in consideration of the actual situation of India and the possible future direction toward a low carbon economy, the keynote session intended to provide an opportunity for experts to discuss such topics as India-Japan cooperation, and among others, promotion of environmental technology transfer and diffusion in the areas of energy efficiency and renewable energy, as well as as opportunities and challenges for the business sector which could be built on the India-Japan cooperation. Prof. Hamanaka's opening remarks was followed by the three keynote speeches.



Keynote Speech 1: India today- National Action Plan on Climate Change

Rajendra Pachauri, Director-General, TERI/Chairman, IPCC

The warming of the global climate system is unequivocal. To stabilise the greenhouse gases, emissions must peak no later than 2015. India is vulnerable to climate change and it faces many serious concerns such as the impact on agriculture, as well as heat waves, floods, storms, droughts and glacial melting. India has common but differentiated responsibilities and must search for sustainable pathways for equitable economic



growth. In June 2008, India announced its National Action Plan on Climate Change which identifies eight missions dealing with such topics as solar energy and enhancing energy efficiency. India needs large investments in its energy infrastructure by 2030 and this gives rise to an enormous market opportunity. It is this situation that calls for the creation of a technological partnership between Japan and India and the development of actual cooperative projects.

Keynote Speech 2: India-Japan Energy Partnership

Kazuaki Koizawa, Executive Director of the New Energy and Industrial Technology Development Organization (NEDO)

NEDO conducts research and development with a strong emphasis on energy and environmental technologies, including renewable energy and energy efficiency. For example, the organisation has been promoting solar power generation for the past 30 years, with the result that Japan possesses world-class photovoltaic technologies. NEDO is continuing its technological development in this field to achieve further cost reductions. Research on energy efficiency is conducted from the fundamental level to the practical application phase, with technologies applicable to a wide range of fields, from steel to chemicals to residential applications and automobiles. NEDO also implements international projects to transfer these technologies to other countries in Asia.



India is a country to which NEDO attaches great importance. In addition to promoting model projects related to energy efficiency and clean coal technology, NEDO organises information exchanges, such as the "India-Japan Energy Forum," to facilitate interaction among energy-related enterprises in Japan and India. NEDO opened a new office in New Delhi in September 2008 and we welcome any project-related inquiries.

Keynote Speech 3: Required Technologies towards a Low Carbon Economy

Hiroshi Shimizu, Professor of Keio University



Efficient and innovative low carbon technologies are increasingly being established such as solar energy, lithium ion batteries, and electric automobiles. In the midst of the emergence of various new technologies, priorities must be made and the most important criteria are "maximum effect" and "marginal cost". In the process of pursuing and commercialising these technologies, it is necessary to cross the Darwinian Sea so that products can then burst on to the market. The electric automobile "Eliica" which is currently being developed surpasses the conventional internal-combustion car in terms of acceleration feel, spaciousness and comfort so that one can experience the change to a new era. If, in the 21st century society, we can widely disseminate the technologies generated from 20th century's innovation and investigation to solve the global warming issues, then all human

beings can equally enjoy a wealth of energy.

Discussion

Following the keynote session, the speakers exchanged views on how Japan and India could work together to shift to a low carbon economy and how specifically Japan's environmental technologies be promoted.

Dr. Pachauri pointed out the importance of participation of the local communities, building up systems such as financial mechanisms to allow people to utilise new technologies. As an example, he explained about the solar lantern project. Mr. Koizawa emphasised that, when we consider transferring technologies to India, good preliminary studies of the Indian market and its needs would be inevitable, including industrial structure, lifestyle, pricing system and commercial practice. In addition to the hardware, he pointed out the importance of such software approaches as capacity building of those engineers using technologies in the Indian side. Mr. Koizawa also mentioned that cooperation at various levels, from government to academia, would work effectively, just like this symposium which was organised by four entities. Prof. Shimizu explained that for new technologies such as solar power generation and electric cars to overcome the initial high price, appropriate policy supports have proved effective. To promote electric cars, for example, he proposed the policy of introducing buses as public transportation.

Finally, Dr. Pachauri concluded that to drive forward the Japan-India cooperation, there should be (i) a common understanding of the actual benefits of partnership, (ii) identification of the technologies to be selected and the methods employed for the promotion of each technology, and (iii) appropriate policy initiatives to support the cooperation.



Presentation

Two presentations were provided as background information for the following Panel Discussion Session.

Energy Efficiency and Renewable Energy Policies and Market Trends in India

Namrata Kala, Research Associate, TERI

The National Action Plan on Climate Change announced by the Indian government in June 2008 establishes eight missions. One of the missions is related to energy efficiency, and includes the introduction of a scheme that is similar to the European Union Greenhouse Gas Emissions Trading Scheme (EU ETS), in that it establishes energy intensity targets and issues credits for achieving these targets. India is projected to become the fourth largest consumer of energy in the world by 2030, so energy efficiency is crucial, leading to good opportunities for investment. There are huge energy efficiency potentials in the two sectors of industry and transport in particular. The promotion of sector-to-sector technology transfer or technology partnerships are effective policy recommendations as they can produce concrete technology options and conduct effective monitoring. The Indian government is aware of the need for climate change policies, and the current policy boost means that there is great potential for partnerships between India and Japan, with its high technology in energy efficiency.



Role of Finance towards a Low Carbon Economy

Takashi Hongo, Special Advisor and Head, Environment Finance Engineering Department, JBIC



JBIC signed a memorandum of understanding (MOU) with TERI in September 2008 for cooperation to encourage industry to create a low carbon economy. We believe we can cooperate under this MOU not only in India but also globally.

In terms of the measures to tackle climate change, the private sector plays the most important role. The carbon market, which involves private companies and works as a market-based incentive, is taking hold as an effective finance tool. On the other hand, the current financial crisis has been providing middle/long-term negative impact on the carbon market by making financing by emission trading more difficult. There is also concern that there will be a shortage in the supply of carbon credits.

JBIC has established a finance scheme with an Indian private bank to support small-scale energy conservation and renewable energy projects. JBIC has also established a Carbon Credit

Trading Platform where the information on carbon credits from these projects is provided to Japanese companies in a web-based manner. This kind of finance scheme has also been established in other countries such as the Philippines and Brazil. We are also trying to promote climate related projects by promoting environmental financing as part of global finance and by developing new financial systems such as climate insurance.

Panel Discussion

Under the coordination of Shigenori Jimbo, Chief Editor of Nikkei Ecology, the Panel Discussion Session was conducted with five panelists including Tantra Narayan Thakur, Chairman and Managing Director, PTC India Ltd., Pramod Chaudhari, Chairman, Praj Industries Ltd, Seigou Mizunuma, Executive Managing Officer, Deputy Head of International Business Division, Electric Power Development Co., Ltd. (J-POWER/EPDC), Takeshi Sekiyama, General Manager, International Cooperation Department, The Energy Conservation Center, Japan (ECCJ) and Takashi Hongo, Special Advisor and Head, Environment Finance Engineering Department, JBIC.



At the beginning, Mr. Jimbo, as coordinator, explained that the session focused on the potential of further promoting energy efficiency and renewable energy in India as well as the possibilities for the utilisation of Japanese relevant technologies. He also mentioned that he expected to have discussions on challenges, barriers and measures to be solved to promote partnership between Japan and India as well as how to make them "business opportunities" which would be the keyword of the session.

Firstly, Mr. Thakur introduced PTC India Ltd which was established as a company of an intermediary for power trading under the initiative of the Government of India in 1999. In 2004, the company carried out an IPO (Initial Public Offering) and is listed on the stock exchange in India. PTC is actively involved in the finance business in the sector of renewable energy



and energy conservation as well as in the power trading business. Mr. Thakur described the current situation of power supply in India such as big gap between energy demand and supply, steep rise in power price in the short-term market and high dependency on fossil fuel. He also pointed out that the energy conservation market is huge in India. He emphasised it is important to do things on the ground, and said "let us begin with the small cooperations" in the area of technology transfer or project collaboration.

Mr. Chaudhari, Chairman, Praj Industries Ltd introduced the potential of biofuels from the perspectives of GHG emissions reduction, energy securities and employment generation in line with his company's business. He provided his outlook that production and share of biofuels would be greatly increased globally. He also explained about its business development

under the partnership with Japanese companies, and enhancing the partnership, he emphasised that the company is interested in expanding investments and business in Southeast Asia and Brazil.

In the panel discussion that followed, the key phrase “business opportunities” was developed. Whilst maintaining a high rate of growth, India is also following a sustainable path and there are huge business possibilities in the fields of energy efficiency and renewable energy. This has been confirmed in the speeches and presentations so far and the panel discussion featured topics promoting energy efficiency and renewable energy.

Mr. Mizunuma from J-Power stated that estimated CO₂ reductions brought about by incorporating Japanese coal-fired power technology into the US, India and China would be equivalent to the total Japanese emissions of CO₂. This showed that technology introduction could provide the clue to energy efficiency policy. On the other hand, he mentioned his expectations on further efforts in India to make electricity charges more appropriate and to attract foreign investment.



Mr. Sekiyama from the Energy Conservation Centre pointed out that the Japanese government is enhancing international cooperation in energy efficiency for Asia. He explained about the Energy Conservation Centre’s capacity building projects on transfer of proven technology, and touched on the significance of energy management and operational improvements. He also emphasised how important it is to have a combination of both soft (development human resources) and hard (technology) aspects.

From a Japanese point of view, barriers to partnership were raised including the low energy prices in India, the lack of infrastructure, and the fact that 98 % of businesses in India are very small. A lack of expert personnel was also pointed out. On the Indian side, it was brought up in the discussion that energy prices are not as low as they were in the past and the government is seriously working on building infrastructure. Human resource training for energy efficiency is also being promoted, indicating that the situation is changing day-by-day.

In addition, local purchasing power and standards of living must be considered when introducing new technology, so that it can be coordinated with local needs. This is when a local partner can play a very important role. There was also discussion on government support for when a project is started and then needs to scale up. In practical terms, government support is vital, but the actual details must be clarified, market-based subsidies must be formulated, and companies must not be reliant on support in the medium-to-long term.



Closing Remarks

Closing the Symposium, Prof. Hamanaka pointed out that Japan should learn more about the updated facts and situation of India so that companies can develop their business based on what India really requires. In this context, he stated that IGES would like to make efforts to study possible mechanisms for the transfer of relevant technology from Japan and their replication in India. Finally, he emphasised that this symposium was an opportunity to start collaborations to establish a Japan-India partnership towards a sustainable economy with the involvement of both public and private sectors.



Profile of Speakers

Keynote Session

< Chairman >

Hironori Hamanaka

Chair of the Board of Directors, Institute for Global Environmental Strategies (IGES)

Prof. Hironori Hamanaka is professor at Keio University. Before joining Keio University, he was the Vice-Minister for Global Environmental Affairs at the Ministry of the Environment. He served with the Government of Japan for more than 35 years, mostly in the field of environmental policies, before he left in 2004. Over the last 9 years, he has devoted his administrative career to intergovernmental negotiations in areas including the Kyoto Protocol and its implementing rules, major agreements in the field of sustainable development, such as the Johannesburg Plan of Implementation agreed at the World Summit on Sustainable Development in 2002, and the development of national policies to implement international agreements, most notably the Kyoto Protocol. Based on his professional career, he was elected and serves as a Co-chair of the Compliance Committee under the Kyoto Protocol and the Chair of its Facilitative Branch. He has held his present position since April 2007.

< Keynote Speakers >

Rajendra Pachauri

Director-General, The Energy and Resources Institute (TERI) / Chairman, Intergovernmental Panel on Climate Change (IPCC)

Dr. Rajendra Pachauri has been Chief Executive of TERI since 1981, currently serving as Director-General. In April 2002 he was elected as Chairman of the Intergovernmental Panel on Climate Change (IPCC), which was awarded the Nobel Peace Prize in 2007 along with former US Vice President Al Gore. He has been active in several international forums dealing with the subject of climate change and its policy dimensions. Dr. Pachauri was bestowed the "Officier De La Legion D' Honneur" by the Government of France in 2006. He was also conferred with the "Padma Vibhushan", the second highest civilian award, for his services in the field of science and engineering in January 2008 by the President of India. He also has been a membership of the Economic Advisory Council to the Prime Minister of India. He has Ph.D.s in Industrial Engineering and Economics.

Kazuaki Koizawa

Executive Director, New Energy and Industrial Technology Development Organization (NEDO)

After graduating from the University of Tokyo's School of Engineering, Mr. Kazuaki Koizawa joined the Ministry of International Trade and Industry (now METI) in 1978. His work there was focused on energy, serving various positions in the Agency of Natural Resources and Energy (ANRE), the Agency of Industrial Science and Technology (AIST), at a local bureau of the Ministry, and as a cabinet research officer. He has worked at the New Energy and Industrial Technology Development Organization (NEDO) since 2004. In his initial position as a Director General, he led NEDO's photovoltaic power generation technology development efforts. He currently serves as Executive Director of NEDO's Energy and Environment Technology Center, which is responsible for developing renewable energy, energy efficiency and environmental technologies.

Hiroshi Shimizu

Professor, Faculty of Environment and Information Studies / Graduate School of Media and Governance, Keio University

Prof. Hiroshi Shimizu has been professor at the Faculty of Environment and Information Studies, Keio University, Japan since 1997. Prior to his current position, he worked at the National Institute for Environmental Studies. He earned his Ph.D. in Engineering from the School of Engineering, Graduate Program, Tohoku University in 1976. His major academic area is Electric Vehicle and Environmental Technology. Currently he serves as a technical management leader of the academic-industrial collaborative project "Eliica", the electric vehicle. The project is jointly implemented by 38 companies and Keio University, and Prof. Shimizu carries out the research to make the Eliica commercially viable.

Presentation

Namrata Kala

Research Associate, The Energy and Resources Institute (TERI)

After graduating with an MA in International and Development Economics from Yale University, Ms. Namrata Kala has been working as a Research Associate with the Energy and Resources Institute (TERI) since June 2008. Prior to joining TERI, she worked on environmental economics projects at the Yale Centre for Environmental Law and Policy and at Environmental Defense Fund, as well as working as an energy analyst with Juice Energy, Inc., New York. She holds a BA (Honors) in Economics from Delhi University. At TERI, she has been involved with research projects on sustainable development and climate change, and is working on the carbon finance and international strategy components of the Lighting a Billion Lives programme, which disseminates solar lighting in non-electrified rural areas.

Takashi Hongo

Special Advisor and Head, Environment Finance Engineering Department, Japan Bank for International Cooperation (JBIC), Japan Finance Corporation

Mr. Takashi Hongo works as a Special Advisor and Head of Environment Finance Engineering Department, following positions as Director for the Middle East and Africa, International Finance Department II, Director for the Environment Risk Analysis Department and Chief Representative in Frankfurt. In addition to engaging in financing operations for GHG emission reduction projects, he is helping develop new frontiers, such as carbon trading market in Japan including Carbon Credit Trading Platform and Nikkei-JBIC Carbon Price Quotation, and Market Approach Adaptation. He contributes to a number of committees and task forces in the Climate Change and energy field.

Panel Discussion

< Coordinator >

Shigenori Jimbo

Chief Editor, Nikkei Ecology

Mr. Shigenori Jimbo graduated from Keio University in 1984 and started working at Nikkei McGraw Hill in 1988, and after a stint with "Nikkei Restaurants", went on to become Chief Editor of "Nikkei Information Strategy" in December 2001. In January 2004, he took up the position of Chief Editor of "Nikkei Ecology" a monthly business magazine focusing on environmental technology and business. "Nikkei Ecology" was first published in 1999, and specialises in support for value-added improvement in the environment for management and business. The publications main editorial themes are environmental management, environmental law, environmental technology, global environmental issues, and overseas trends.

< Panelists >

Tantra Narayan Thakur

Chairman & Managing Director, PTC India Limited (PTC)

Mr. Tantra Narayan Thakur is the Chairman & Managing Director of PTC India Limited (PTC) since October 2000. Mr. Thakur provided sustained leadership to PTC's operations, and devised optimal capital structure and organisational processes. He introduced several market-making initiatives, including the differential pricing for power transactions, in effect differentiating a commodity-like product. Mr. Thakur is an engineering graduate and joined the Indian Audit & Accounts Service in 1973. Before joining PTC, Mr. Thakur served as the Director of Finance & Financial Operations, Power Finance Corporation Ltd. (PFC), New Delhi and held various assignments in the Government including Deputy Secretary in Government of India, Assistant Controller & Auditor General, Secretary to Chief Minister-Bihar and Member-Audit Board.

Pramod Chaudhari

Executive Chairman, Praj Industries Limited, India / Chairman, Praj Group

Mr. Pramod Chaudhari graduated as a Mechanical Engineer from IIT Bombay in 1971. He established Praj Industries Ltd. in 1984, a global leader in biofuels technology. As founder of Praj, Pramod has always sought challenging opportunities. He believes in continuous learning and to refresh his own perspective, he attended Advanced Management Programme at Harvard Business School in 1995. He is the recipient of many awards for entrepreneurship and excellence. He is actively involved with various national and international organisations like the GGC, Confederation of Indian Industry (CII) and MCCIA (Pune). Presently he heads the CII National Committee on Biofuels as its Chairman and is Vice Chairman, CII Maharashtra State Council. He is Executive Chairman of Praj, India which is stepping into its 25th year.

Seigou Mizunuma

Executive Managing Officer, Deputy Head of International Business Division, Electric Power Development Co.,Ltd. (J-POWER/EPDC)

Since Mr. Seigou Mizunuma took office as a leader of the overseas Power Development business division in 2002, he has promoted the expansion of generation service and investment. As a result, J-POWER's overseas power business became the second largest business of J-Power's activities. By the end of September 2008, J-POWER has participated in 18 power projects in operation in six countries/regions. Before engaging in overseas power business, he mainly worked for planning and development division (and also community relations and nuclear division) since he entered into J-POWER in 1978.

Takeshi Sekiyama

General Manager, International Cooperation Department, The Energy Conservation Center, Japan (ECCJ)

Mr. Takeshi Sekiyama graduated from the Tokyo Institute of Technology (Postgraduate degree in chemistry). He worked for Mitsui Chemicals, Inc. for about 30 years, and worked in areas of speciality chemicals such as R&D, research planning & development, establishment of joint ventures and its management etc. He joined the Energy Conservation Center, Japan in 1998, serving mainly in international collaboration affairs to promote energy conservation in developing countries. His main accomplishments up to now in ECCJ are cooperation in various energy conservation projects for developing countries including dispatch of experts for energy audit / seminar / workshop / etc., implementation of training programmes for trainees from overseas, research & analysis related to energy efficiency & conservation in overseas countries and participation as a Japanese representative in international conferences for energy conservation.

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