Joint Statement on the occasion of the 7th India-Japan Energy Dialogue between the Planning Commission of India and the Ministry of Economy, Trade and Industry of Japan

- H.E. Mr. Montek Singh Ahluwalia, Deputy Chairman of the Planning Commission of India and H.E. Mr. Toshimitsu Motegi, Minister of Economy, Trade and Industry of Japan held the 7th meeting of the India-Japan Energy Dialogue on September 12, 2013 in New Delhi.
- 2. Senior officials of the relevant ministries and departments of both sides participated in the discussions. Both sides welcomed the progress achieved so far in the previous six rounds of the Energy Dialogue and in the deliberations of the various Working Groups. They appreciated the sector-specific discussions by experts of both sides and the progress made in various areas of cooperation.
- 3. During the dialogue, both sides recognized that it is important to hold the India-Japan Energy Dialogues annually, and that the issues of energy security and global environment are high priority challenges requiring continuous and effective action. In particular, to overcome challenges such as the global-scale changes in the energy demand structure seen in recent years and soaring energy prices, both sides confirmed to strengthen consumer-producer dialogue on LNG and deepen cooperation in energy conservation and renewable energy sectors. In addition, both sides decided to strengthen programs to further disseminate and expand model business projects that have thus far been implemented by both sides, and to enhance cooperation in upstream development of petroleum and natural gas.
- 4. Both sides recognized the need to promote industrial cooperation to expand bilateral energy cooperation on a commercial basis, based on the Joint Statement issued at the 6th India-Japan Energy Dialogue. Specifically, both sides welcomed the fact that New Energy and Industrial Technology Development Organization (NEDO) and The Energy and Resources Institute (TERI) held the Japan-India Energy Forum after making further improvements to the contents. Both sides also welcomed the fact that the forum contributed inputs to this dialogue. Both sides commended each other for conducting

research on Smart Community and renewable energy, and for the forum's suggestions regarding the future of bilateral cooperation in these fields between India and Japan. Moreover, both sides welcomed the fact that NEDO and Japan External Trade Organization (JETRO) held the technology exhibition and convention in India to showcase Japanese technology in the energy sector for wider dissemination in India. Both sides welcomed the memorandum between the Confederation of Indian Industry (CII) and NEDO in the promotion of Japanese technologies that may help resolve energy issues in India.

5. The two sides engaged in discussions in the following areas:

Cooperation in energy efficiency and conservation

- 6. Both sides recognized that it is important for them to cooperate with each other in the energy efficiency and conservation sector, and welcomed that the meeting of Energy Efficiency and Conservation Working Group under the India-Japan Energy Dialogue framework was held in New Delhi on September 2, 2013. Both sides reaffirmed the need to strengthen bilateral relationship in the energy sector, focusing on energy conservation and environmental issues, and the need to expand the consultation process between the government and the private sector.
- Both sides welcomed the progress, including organization of workshops, in cooperation among Bureau of Energy Efficiency (BEE), Petroleum Conservation Research Association (PCRA) and Energy Conservation Centre of Japan (ECCJ). Both sides also welcomed cooperation to spread energy conservation by using audit manual developed by PCRA and ECCJ for the textile industry.
- 8. Both sides confirmed to continue the capacity building program further for State-Designated Agencies (SDAs), Small and Medium Enterprises (SMEs) and energy managers/energy auditors.
- 9. Both sides reconfirmed the importance of the projects carried out by the Regional Energy Efficiency Center (REEC) set up in Chennai with technical assistance from the Ministry of Economy, Trade and Industry (METI of Japan) in promoting energy conservation at the working level in India. In addition, both sides welcomed the training of trainers at Dr. Ambedkar Institute of Productivity

for hands-on training of energy-using equipment such as furnaces, motors, compressors, etc. which is being implemented as part of the capacity-building project by NEDO. Both sides also welcomed the fact that the facility continues to be utilized, with the Government of India taking the lead in implementing training for over 120 people.

- 10. Both sides confirmed that the construction work of the demonstration project for a sinter cooler waste heat recovery system, currently being implemented by NEDO based on the energy conservation cooperation of industries which consume large amounts of energy, would be definitely completed within this fiscal year, although there has been a significant delay in the progress. Both sides also welcomed the achievements of the demonstration project utilizing a coke dry quenching facility, and the demonstration project for cement exhaust heat recovery, both of which were implemented by NEDO, and confirmed their continued cooperation in promoting those projects.
- 11. Both sides decided to share information in the sectors where consumption of energy has been growing in recent years, such as steel, cement, machine tools, inverter air conditioners and transport, including in relation to SMEs. In addition, based on the fact that demand for energy is increasing in the transport sector in line with India's economic growth, both sides decided to explore the possibility of further cooperation in the said area. Both sides welcomed the implementation of further public-private partnership between Japan and India based on the customized list of 17 Japanese energy conservation technologies in iron and steel sector, which was prepared in the Public and Private Collaborative Meeting between the Indian and Japanese Iron and Steel Industry after its discussion for about two years.
- 12. Both sides welcomed the exchange of opinions regarding the Joint Crediting Mechanism (JCM) since the 6th India – Japan Energy Dialogue held on 10th October, 2012. Both sides shared the view to continue consultations regarding the JCM.
- 13. The Japanese side commended India's initiatives to promote energy conservation such as the implementation of the Perform, Achieve and Trade (PAT) scheme and National Manufacturing Policy. To ensure the effective and

efficient implementation of these initiatives, both sides acknowledged the importance of further cooperation. From this point of view, especially regarding the areas of steel, cement, machine tools, transportation, and inverter air conditioners, both sides confirmed their intentions to share information and exchange views on a regular basis through the Energy Efficiency and Conservation Working Group under the India-Japan Energy Dialogue and various research projects. They also confirmed their intentions to discuss challenges in promoting advanced energy-saving technologies and actions to be taken to address the challenges.

14. Both sides confirmed the importance of conducting vigorous activities under the International Partnership for Energy Efficiency Cooperation (IPEEC) framework. In this light, they praised the activities of Global Superior Energy Performance Partnership (GSEP) with the aim of promoting best practices and spreading high-efficient and low-carbon technologies in the industrial sectors (steel, cement and power) under public-private partnership. Both sides will continue to collaborate and aim to further expand its activities.

Cooperation in renewable energy

- 15. Both sides recognized that bilateral cooperation is important in the renewable energy sector. They welcomed the fact that a meeting of the Working Group on Renewable Energy, established under the India-Japan Energy Dialogue framework, was held on July 23, 2013 in Tokyo.
- 16. Both sides welcomed the smart community projects in the Delhi-Mumbai Industrial Corridor (DMIC) that utilize Japan's environmental system technologies and IT technologies such as solar power, smart grids, smart urban transportation, as well as water management, recycling and treatment in order to develop next-generation energy infrastructure, noting that it is important, among other things, from an energy perspective. Both sides confirmed that all necessary steps will be taken by the Indian side as well as the Japanese side for an early realization of the demonstration project of the micro-grid system using large-scale photovoltaic power generation in Neemrana Industrial Park in the state of Rajasthan and its related cutting-edge technologies from Japan under the memorandum signed in April 2012 among the Ministry of New and

Renewable Energy, the Department of Economic Affairs of the Ministry of Finance, and the Delhi-Mumbai Industrial Corridor Development Corporation and NEDO. Both sides will study ways to disseminate these technologies widely throughout India.

- 17. Both sides welcomed the feasibility study by NEDO to promote greening of the telecommunication towers in India by installing a photovoltaic system, lithium ion batteries and an energy management system. Both sides confirmed the mutual cooperation for an early commencement of the demonstration. The Indian side confirmed to accelerate working for an early conclusion of the memorandum among the relevant Indian and Japanese agencies for the purpose of implementing the demonstration project. Both sides welcomed the National Solar Mission launched by the Government of India, focusing on building a system for generating 22 GW of solar energy by the year 2022, and decided to study the possibility of contribution to be made by technologies and products through mutual cooperation. Both sides also welcomed the joint research program towards energy access improvement in non-electrified areas by introducing micro hydroelectric generation facilities.
- 18. The Japanese side commended India's initiatives to implement the use of renewable energy such as the Waste to Energy and the "Green Energy Corridor" as well as to develop smart grid. The Indian side acknowledged the support of NEDO and Japan International Cooperation Agency (JICA) in the field of renewable energy. From the perspective of ensuring the stable supply of power and the significant increase in renewable energy in India, both sides confirmed their intentions to enhance cooperation in smartening the power transmission and distribution system.
- 19. For the purpose of promoting the use of renewable energy, which will become more important in the future, both sides confirmed their intentions to cooperate in establishing appropriate investment environment including financing. Moreover, both sides confirmed that they will actively utilize private-sector vitality and know-how, etc., through cooperation with such organizations as the Japanese Business Alliance for Smart Energy Worldwide (JASE-W) and CII. As a specific plan for cooperation with the private sector, both sides confirmed that they will constitute a public-private round table with a particular focus on

enhanced introduction of renewable energy and smart grid development, and hold the first meeting by the end of 2013. Both sides also welcomed the exchange of contact information to facilitate private sector cooperation.

Cooperation in electricity

- 20. Both sides recognized that bilateral cooperation is important in the electricity sector. Both sides welcomed the fact that a meeting of the Working Group on Electricity, established under the India-Japan Energy Dialogue framework, was held on August 23, 2013 in New Delhi.
- 21. Both sides recognized that it is important and beneficial to closely collaborate in the development of infrastructure in the electricity and energy sector such as deployment of high-efficiency coal-fired power generation, pumped-storage power generation, electrical power transmission and distribution systems in order to meet the rapid increase in power demand, and promote sustainable economic growth taking environmental issues into consideration.
- 22. Both sides recognized that coal fired-power plants remain as an important power source in India. Both sides also welcomed the fact that the Japan Coal Energy Center (JCOAL) performed a diagnosis of and made a proposal for the renovation and replacement of equipment and facilities of seven sites (Ramabundam and Dr. Narla Tata Rao in Andhra Pradesh, Wanakbori in Gujarat, Kahalgaon in Bihar, Badarpur in NCT Delhi, Unchahar in Uttar Pradesh, and Durgapur in West Bengal) from fiscal year 2010 to fiscal year 2012, and that JICA also conducted the same for four sites (Parli and Bhusawal in Maharashtra, Satpura in Madhya Pradesh, and Obra in Uttar Pradesh) in fiscal year 2012 in order to improve the efficiency of the plants and environment in India, and the implementation of follow-ups.
- 23. Both sides welcomed the plan that JCOAL will invite Indian experts to Japan in fiscal year 2013 in order to promote the introduction of Super Critical and Ultra Super Critical coal power generation in India. Furthermore, both sides welcomed the completion of study pertaining to pumped-storage power generation in Maharashtra by JICA last year, confirming that they will collaborate in the development of pumped-storage power generation in India.

24. Both sides confirmed that they will discuss technical aspects of Grid Stabilization project and Green Energy Corridors.

Cooperation in coal

- 25. Both sides recognized that bilateral cooperation is important in the coal sector. Both sides welcomed the fact that a meeting of the Working Group on Coal, established under the India-Japan Energy Dialogue framework, was held on August 22, 2013 in New Delhi.
- 26. Both sides recognized that it is important and beneficial to closely collaborate in the coal sector such as the implementation of coal washery technology, the promotion of high-efficiency use of low rank coal and the implementation of communication system for the purpose of securing safety in a coal mine in order to meet the rapid increase in coal demand, and promote sustainable economic growth taking environmental issues into consideration.
- 27. Both sides expressed their strong expectation that the commercial-scale demonstration project by NEDO aiming to reduce ash content of coal in India using highly efficient coal washery technology at Angul, Talcher, Odisha, would be completed in 2013, although there has been a significant delay in the progress, and that said technology would be widely deployed in India. Both sides also welcomed the exchange of technology pertaining to coal washery technology through the invitation of Indian experts to Japan, which has been continuously conducted by JCOAL since 2001.
- 28. Both sides welcomed the smooth implementation of a feasibility study by NEDO concerning a project that combines Upgraded Brown Coal (UBC) technologies using Indian lignite with Ultra Super Critical (USC) coal power generation technologies. They also welcomed the continuous examination among the participants for the purpose of implementing the project after the completion of said feasibility study.

29. Both sides welcomed the commencement of the examination among the persons concerned regarding the possibility of cooperation in the communication system in a coal mine and the centralized monitoring system that Indian side requested.

Cooperation in petroleum and natural gas

- 30. Both sides recognized that bilateral cooperation is important in the petroleum and natural gas sectors, and welcomed the fact that a meeting of the Petroleum and Natural Gas Working Group, established under the India-Japan Energy Dialogue framework, was held on September 2, 2013.
- 31. Both sides confirmed that Japan, the world's largest consumer of LNG, and India, a country where large increases in consumption are anticipated in the future, would cooperate through, inter alia, participation in the LNG Producer-Consumer Conference, to ensure the stable and competitively priced supply of LNG. Both sides especially welcomed the issuance of the joint statement on the "Joint Study on Pricing of LNG in the Asia Pacific Market" on September 9, 2013, by India and Japan.
- 32. Both sides confirmed that they would strengthen their cooperative relationship in upstream development of petroleum and natural gas. Both sides confirmed to explore possibilities of collaboration in exploration and production activities in India and in third countries and procurement of LNG. Both sides will begin *ad hoc* meetings by the end of 2013, to discuss actual steps to concretize and realize joint exploration and production and joint procurement of LNG.
- 33. Both sides also confirmed to continue cooperation in the study of Indian offshore geo-scientific data for delineation of gas hydrates, to explore further cooperation in gas hydrates research and development and technical information exchange, which would support India's efforts to set up a Gas Hydrates Research Centre in India.
- 34. Both sides reconfirmed to continue to collaborate and jointly work in the field of fuel conservation. In this regard, through the renewed memorandum between PCRA and ECCJ, both sides also confirmed the continuation of cooperation in the field of fuel economy in transport sector through eco-driving programmes.

Cooperation in nuclear energy

- 35. Both sides reaffirmed that bilateral cooperation is important in civil nuclear energy sector. Both sides welcomed the fact that a meeting of the Nuclear Energy Working Group, established under the India-Japan Energy Dialogue framework, was held on September 10, 2013 and information on current nuclear energy policies of both sides were exchanged.
- 36. Based on the experience of the accident at the Fukushima Daiichi Nuclear Power Station of Tokyo Electric Power Company (TEPCO) and the lessons learned from it, both sides reconfirmed the need to cooperate in enhancing the safety of nuclear power plants.
- 37. Both sides reaffirmed the importance of an early conclusion of the negotiations of an Agreement for Cooperation in the Peaceful Uses of Nuclear Energy, taking into account the joint statement of May 29, 2013 between the two Prime Ministers.

Cooperation in the Energy Sector in the international arena

- 38. Both sides recognized the need to promote energy cooperation in the East Asia Summit Energy Ministers Meeting (EAS EMM) as well as to demonstrate leadership for enhancing energy security in East Asia. Moreover, both sides praised the research study on the strategic usage of coal through Clean Coal Technologies and the optimization of the electric power infrastructure, etc., by the Economic Research Institute for ASEAN and East Asia (ERIA), which supports the enhancement of energy cooperation in EAS EMM.
- 39. Both sides expressed hope that progress would be made in discussion on energy security and improvement of the market among countries with large energy consumption at the IEA Governing Board at Ministerial Level to be held in November 2013.
- 40. Both sides stressed that bilateral cooperation in the framework of India-Japan Energy Dialogue should not be limited to the above-mentioned activities, and

such cooperation should be further deepened. Both sides decided to hold the 8th India-Japan Energy Dialogue in Japan at a mutually convenient time in 2014.

New Delhi September 12, 2013

(For the Planning Commission of India)

(For the Ministry of Economy, Trade and Industry of Japan)

Montek Singh Ahluwalia (Deputy Chairman of the Planning Commission of India) Toshimitsu Motegi (Minister of Economy, Trade and Industry of Japan)