

India-Japan Clean Energy Partnership

1. India and Japan acknowledge the need to explore a variety of options to ensure secure and stable supply of energy for achieving both goals of sustainable economic growth and addressing climate change. They share the view that there is no single pathway to achieve low-carbon economy, but rather there are different paths for each country. In this regard, this Partnership shall serve as a basis for the cooperation between two countries. India took note of Japan's Asia Energy Transition Initiative (AETI).

2. India has announced enhanced target including net zero by the year 2070. Japan has also initiated a target to achieve net zero by the year 2050. Both countries are tapping into low-carbon sunrise sectors and exploiting new technologies and business models to reduce carbon emissions. This offers immense potential to enhance bilateral cooperation in the area of clean and sustainable development. India and Japan have made substantial progress in implementing the vision of a secure, efficient, resilient and sustainable energy system. Both countries' energy policies are guided by the principles of energy security, efficiency, environmental sustainability with clean energy transition and safety as a premise.

3. Cooperation under this partnership will build on the work already being covered out by the two sides under the foundation of the 'Japan-India Energy Dialogue' established in 2007 and will substantially expand the areas of collaboration for mutual benefit. It will also encourage innovations and creation of resilient and trustworthy supply chains between India and Japan as they make progress in their respective energy transition plans. Cooperation under this partnership will cover areas including, but not limited to:

- Electric Vehicles (EV), storage systems including batteries, electric vehicle charging infrastructure (EVCI);
- Energy Conservation in Buildings and Industries, Energy Efficient Appliances;
- Development of Solar Energy including Solar PV cells;
- Wind Energy;
- Clean, including Green Hydrogen;

- Clean, including Green Ammonia;
- Greater and cleaner use of LNG;
- Carbon Capture, Utilization & Storage (CCUS)/Carbon Recycling;
- Emerging fuels including Biofuels, CBG
- Strategic Petroleum Reserves etc.
- Clean coal technology.

4. Implementation of the partnership will be undertaken under the existing 'Japan-India Energy Dialogue', among various stakeholders such as Ministries and organizations involved in this mechanism. The existing 5 Working Groups (WGs) will be merged into 4 WGs that are:

- Electricity and Energy Conservation (India: Ministry of Power and Bureau of Energy Efficiency, Japan: Ministry of Economy, trade and Industry (METI))
- New and Renewable Energy (Ministry of New & Renewable Energy, METI)
- Petroleum & Natural Gas (Ministry of Petroleum & Natural Gas, METI)
- Coal (Ministry of Coal, METI)

New WGs may be created and areas reassigned/added as and when required.

5. Under this Partnership, both sides agree that cooperation may also be pursued in other areas including through collaboration between leading research institutions and private sector of both countries for practical steps in accordance with their respective energy transition plans viz.

- Disposal, recycling and reclamation of useful material from batteries, solar panels, turbine blades and electronics;
- Clean steel;
- Clean construction;
- Sustainable urban development;
- Sustainable development of water resources and their utilization etc.

6. The sectors mentioned above are sunrise areas of growth and the biggest business opportunities. To truly capitalize on this opportunity and take innovative technologies from laboratory to factory and, ultimately, to consumers, involvement of the private sector and public sector undertakings is necessary. Both sides may look at

various initiatives to connect their business ecosystems, such as Public-Private Workshops and Business Matchmaking Events.

7. As part of further efforts to build global and resilient supply chains, cooperation should be established on a long-term basis not only in the manufacturing sector but also in Research & Development (R&D), transfer of technology, training and capacity building and low-cost long-term financing.

8. The partnership will lead to clean growth by boosting job creation, innovation and investments. It will also demonstrate to the world that India and Japan are at the forefront in delivering on the ambitious climate and sustainable development goals.