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Ask the right questions, and nature will open the door to her secrets
- Dr. C.V. Raman, The Nobel Prize in Physics 1930

MNRE Implemented Rooftop Solar Programme Phase-II

Ministry of New and Renewable Energy (MNRE) Implemented Rooftop Solar Programme Phase-II and under this Programme 4000 MW rooftop solar (RTS) capacity addition is targeted in residential sector through Central Financial Assistance (CFA). The Programme is demand driven and capacities are allocated based on demand received from Distribution Utilities and other state implementing agencies. Ministry has so far allocated 3162 MW of capacity for the residential sector and a total 1252 MW capacity has been reported installed as on 28.02.2022.

India Semiconductor Mission (ISM)

India Semiconductor Mission (ISM) has been setup as an Independent Business Division within Digital India Corporation having administrative and financial autonomy to formulate and drive India's long term strategies for developing semiconductors and display manufacturing facilities and semiconductor design ecosystem. ISM would serve as the nodal agency for efficient, coherent and smooth implementation of the schemes. Following four schemes have been introduced:

i. Scheme for setting up of Semiconductor Fabs in India
ii. Scheme for setting up of Display Fabs in India
iii. Scheme for setting up of Compound Semiconductors / Silicon Photonics / Sensors Faband Semiconductor Assembly, Testing, Marking and Packaging (ATMP) / OSAT facilities in India
iv. Design Linked Incentive (DLI) Scheme

IIT-Madras Researchers Developed New Technique to Provide High Resolution Ultrasound Images

Researchers at the Indian Institute of Technology (IIT)-Madras developed a new technique 'Filtered Delay optimally-weighted Multiply and Sum (F-DowMAS)' which would provide images that have a higher quality compared to existing technologies. The F-DowMAS technique could provide a clear and high-quality visualisation through reconstructed ultrasound image, which is demonstrated to outperform other existing techniques and yields the best image resolution throughout the field of view. The technique could facilitate better diagnosis of diseases, detection of minute abnormalities and better real-time image-guided biopsy procedures

Ministry of Earth Sciences Launched Deep Ocean Mission (DOM)

The Ministry of Earth Sciences launched the Deep Ocean Mission (DOM) with the collaboration of Indian Space Research Organisation (ISRO) who is implementing the DOM from 2021-2026. National Institute of Ocean Technology (NIOT), an autonomous institute under the Ministry of Earth Sciences is developing a manned submersible with a capacity to carry three human beings to 6000 m ocean depth. The Vikram Sarabhai Space Centre (VSSC) of ISRO is involved in developing a titanium alloy human sphere of 2.1 m diameter for the manned submersible.

Special Update: Indian Scientists Developed Touch-less Touch Screen Technology

Indian scientists at Centre for Nano and Soft Matter Sciences (CeNS), and Jawaharlal Nehru Centre for Advanced and Scientific Research (JNCASR), an autonomous institutes of the Department of Science & Technology (DST), Government of India developed a low-cost touch-cum-proximity sensor popularly called touchless touch sensor through a printing technique. Scientists further added that the novel low-cost patterned transparent electrodes has tremendous potential to be used in advanced smart electronic devices like touchless screens and sensors and this touchless touch sensor technology could assist in preventing the spread of viruses that spread through contact. CeNS, JNCASR and DST set up a semi-automated production plant for the production of printing-aided patterned (resolution of around 300 µm) transparent electrodes, which has the potential for being utilized in advanced touchless screen technologies.