

NEWS TODAY

INDIA'S FIRST HYBRID-SOUNDING ROCKET BY PRIVATE PLAYERS LAUNCHED FROM CHENGALPATTU, TAMIL NADU

- Martin Foundation, in association with Dr. APJ Abdul Kalam International Foundation and Space Zone India, launched the **Dr. APJ Abdul Kalam Satellite Launch Vehicle Mission- 2023**.

➤ Rocket can be used for research in **weather, atmospheric conditions and radiations**.

- Sounding rockets are **one or two stage solid propellant rockets** used for probing **upper atmospheric regions (Aeronomy)** and for **space research**.

➤ They can also be used to test or prove prototypes of new components or subsystems intended for use in launch vehicles and satellites.

➤ Sounding rockets take their **name from the nautical term "to sound,"** which means to take measurements.

➤ **Hybrid-rocket** uses **different propellants**, i.e., **one solid** and other being either **gas or liquid**.

- In **1963, Indian Space Programme** started with **first sounding rocket launch** from **Thumba Equatorial Rocket Launching Station (TERLS), Kerala**. Thumba was selected as it is **close to magnetic equator**.

- In **1967, ISRO launched its own version** of sounding rockets - **Rohini RH-75**.

➤ In **1975, ISRO consolidated** all sounding rocket activities under **Rohini Sounding Rocket (RSR) Programme**.

About Rohini RH- 200

- **RH-200** (meteorology purpose) is one of three sounding rockets **currently operational with ISRO**, the other two being **RH-300 Mk 2** and **RH-560 Mk 2** (both for Aeronomy).

➤ **200** in the name **denotes rocket's diameter** in millimeter (mm).

- RH-200 rocket used **polyvinyl chloride (PVC) based propellant**. In 2020, **First RH-200 used a new propellant based on hydroxyl-terminated Polybutadiene (HTPB)**.

SECURITIES AND EXCHANGE BOARD OF INDIA (SEBI) PROPOSES FRAMEWORK ON ESG (ENVIRONMENTAL, SOCIAL AND GOVERNANCE) DISCLOSURES, RATINGS AND INVESTING

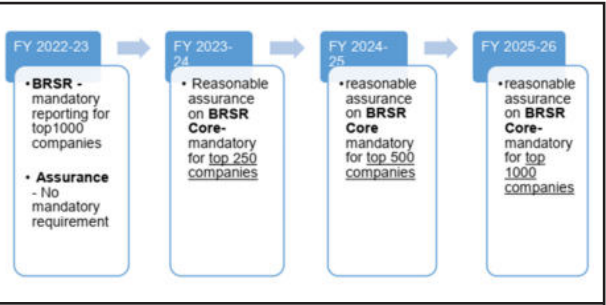
- Proposed **ESG disclosures** by listed entities, **ESG Ratings** in securities market and **ESG Investing** by Mutual Funds will **facilitate balance between transparency, simplification and ease of doing business** in ESG domain.

➤ ESG is a framework that helps stakeholders **understand how an organization is managing risks and opportunities related to environmental, social, and governance criteria**.

- **Key provisions of proposed framework**

Related news

- **National Stock Exchange (NSE)** has listed its **first green bond** from **Indore Municipal Corporation**.
- **Green bonds** are **debt securities** designated to **finance environment- friendly projects**.

ESG Disclosures	<ul style="list-style-type: none"> • Updating Business Responsibility and Sustainability Reporting (BRSR) to incorporate missing Key Performance Indicators KPIs in BRSR core. ➤ BRSR establish links between financial results of a business with its ESG performance. • Mandating reasonable assurance of KPIs in BRSR core through glide path approach (see image). • Introduce a limited set of ESG disclosures for supply chain. 	
ESG Ratings	<ul style="list-style-type: none"> • Inclusion of 15 ESG parameters with an Indian context by ESG Rating Providers (ERPs) in ratings. ➤ This includes Indian standards like Extended Producer Responsibility (EPR) scheme, more comprehensive gender diversity, etc. • ERPs also provide Core ESG rating based on information/reports that are assured/audited/verified. 	
ESG Investing	<ul style="list-style-type: none"> • Asset Management Companies (AMCs)/Mutual Funds should provide better clarity on 'in favor' or 'against' votes cast on resolutions due to any ESG reason. • To mitigate mis-selling and Greenwashing, an ESG scheme should invest at least 65% of its asset under management (AUM) in companies reporting on comprehensive BRSR and providing assurance on BRSR Core disclosures. 	

HEAT DOME OVER NORTH-WEST INDIA MAY START RETRACTING: INDIA METEOROLOGICAL DEPARTMENT (IMD)

- **Heat-spewing anticyclone over North-West India** has led to **unusual heat in February**.

➤ IMD predicts that it is likely to **recede from land and back off into Central Arabian Sea** soon, making way for **moisture-laden western disturbance and associated cloud cover with rain or snow in Western Himalayas** and adjoining plains.

- Heat dome is a **high-pressure circulation in atmosphere** which acts like a dome or cap, trapping heat at surface and favoring heatwave formation

➤ It occurs when **hot ocean air is trapped over a large area**.

- Typically, **heat domes are tied to the pattern of jet stream** (fast winds high in atmosphere that generally runs **west to east**).

➤ Normally, **jet stream has a wavelike pattern**, meandering north and then south and then north again.

➤ When these meanders in jet stream become bigger, they move slower and can become stationary and resulting into heat domes.

➤ **Hot air typically rises into atmosphere**, but dome's lid causes air to sink. As air sinks, it **compresses and becomes warmer** that causes temperature in dome to rise continually.

- **Impact of heat dome:** Affect sessional agricultural products; Increased risk of wildfire, heat-related illnesses such as heat rash, heat stroke, heat exhaustion etc.

INDIA, SINGAPORE LAUNCH UPI (UNIFIED PAYMENTS INTERFACE)-PAYNOW LINKAGE

- UPI-PayNow integration will **enable people in both countries to send money real-time via QR-code based** or simply by entering mobile numbers linked to bank account.

➤ With this, **Singapore** became the **first country** to allow **cross-border Person to Person (P2P) payment facility**.

➤ Earlier, at selected merchant outlets in Singapore, UPI payments through QR codes were made available.

- **Significance of UPI-PayNow linkage**

➤ **Benefit Indian diaspora**, especially migrant workers, and students by **allowing faster and cost-efficient funds transfer**.

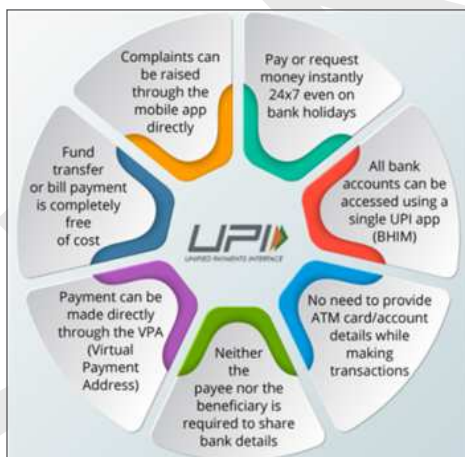
➤ **Enable users to transfer funds instantly** without the need to get on board the other payment system.

- UPI is a real-time payment system **developed by National Payments Corporation of India (NPCI)** in 2016 which facilitates inter-bank financial transactions.

➤ UPI supports both **P2P and Person-to-Merchant (P2M) payments**.

➤ NPCI is an **initiative of RBI and Indian Banks Association under Payment and Settlement Systems Act, 2007**. It is an umbrella organization for operating retail payments and settlement systems in India.

- PayNow is a **fast payment system in Singapore**. It enables **peer-to-peer funds transfer service**, available to retail customers through participating banks and Non-Bank Financial Institutions (NFI) in Singapore.

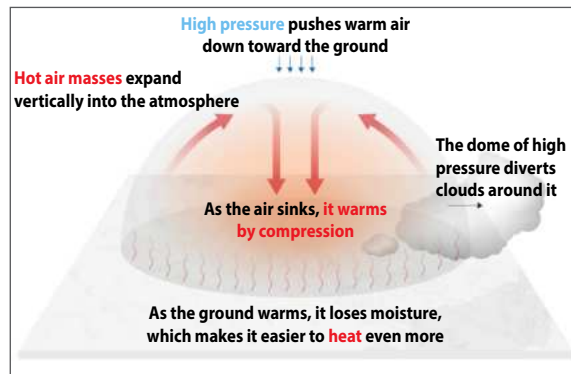


Related news

- RBI allowed **UPI-based transactions to all in-bound travellers for local payments**, starting from **G-20 countries**.

- Eligible travellers would be **issued Prepaid Payment Instruments (PPI) wallets linked to UPI** for making payments at merchant outlets.

➤ **PPI Examples:** Smart cards, Online accounts, Online wallets, Stripe cards, Paper vouchers, etc.



MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE (MOEFCC) SHARED DETAILS OF PROGRESS MADE UNDER EXTENDED PRODUCER RESPONSIBILITY (EPR) FOR PLASTIC PACKAGING

- **Key details stated by MoEFCC**

➤ **2.26 million tonnes of plastic packaging** have been **covered under EPR** for year **2022-23**.

- Total plastic waste generated in country during year 2019-20 was around 3.4 million tonnes.

➤ **Number of Producers, Importers and Brand Owners (PIBOs)** registered on centralized EPR portal on plastic packaging has **increased**.

- EPR is strategy used to **promote reuse, recycling, and eco-friendly disposal of waste** by assigning the responsibility of disposal of waste to manufacturer/producer of goods.

➤ In India, EPR was introduced as an important feature in **e-waste (Management and Handling) Rules, 2011**, and **Plastic Waste Management Rules, 2011**.

➤ EPR shall be applicable to both **pre-consumer and post-consumer plastic packaging waste**.

- **Benefits of EPR:** Promotes **polluters pay principle** by holding producer accountable for entire life cycle of product; reduce burden on government agencies; promote circular economy etc.

- **Steps taken to tackle plastic waste**

➤ **MoEFCC's two pillars strategy:** Enforcement of **ban on identified single use plastic items**, which cannot be collected; and **Implementation of EPR** on plastic packaging.

➤ **National Level Taskforce constituted** for effective implementation of **Plastic Waste Management Rules, 2016**.

➤ India Plastic Challenge Hackathon, 2021.

NEGOTIATIONS ON UN HIGH SEAS TREATY BEGIN IN NEW YORK

- Negotiations aims to produce a **unified agreement for conservation and sustainable use of vast marine ecosystems.**
- Biodiversity beyond national jurisdiction (BBNJ) treaty, also known as Treaty of High seas is a **proposed international agreement on conservation and sustainable use of marine biological diversity of High seas.**

➤ **Areas beyond national jurisdiction comprise 95% of ocean** and provide invaluable ecological, economic, social, cultural, scientific, and food-security benefits.

- BBNJ will be another instrument **under framework of United Convention on the Law of the Sea (UNCLOS), 1982.**

➤ **UNCLOS (India is also a state party) laid foundation of ocean governance,** with first single set of rules for oceans and seas.

➤ **Other instruments under UNCLOS:** 1994 agreement on implementation of Part XI of UNCLOS and 1995 UN Fish Stocks Agreement.

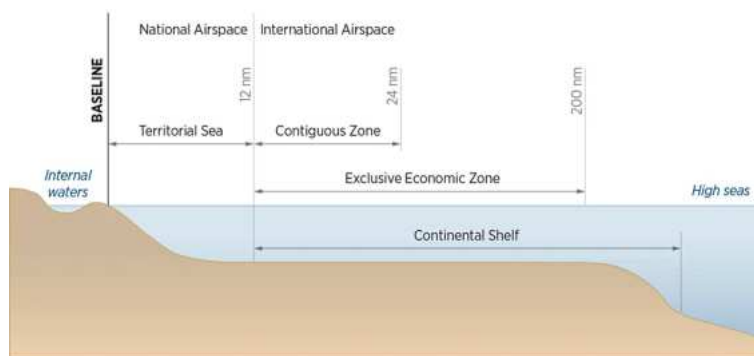
- **Need for BBNJ/ Treaty of High Seas**

➤ **Enforce UN Biodiversity Conference's pledge** to protect 30 percent of world's oceans by 2030 i.e., **Achieving 30x30 Goal.**

➤ **Only 1.44 percent of BBNJ areas/ high seas are protected.**

➤ Highly vulnerable to impacts of climate change, marine pollution, overfishing etc.

U.N. Convention on the Law of the Sea: Defined Waters



MARITIME BOUNDARY DEFINITIONS

Territorial Sea. Sovereign territory of the state. Foreign civilian and military vessels have right to innocent passage.

Contiguous Zone. State may exercise control necessary to prevent infringement of its customs, fiscal, immigration, or sanitary laws.

Exclusive Economic Zone (EEZ). Sovereign rights for exploring and exploiting resources, preserving marine environment, establishing artificial islands and structures.

High Seas. All parts of the sea that are not included in the EEZ, the territorial sea, or in the internal waters of a state. No exclusive rights.

ALSO IN NEWS



Children Identity and Right to Privacy

- SC ruled that **Children's right not to have their legitimacy questioned frivolously is part of their Privacy Rights. It also ruled that**
 - **Genetic information is personal and intimate,** and
 - **Family courts should direct for a DNA test to ascertain paternity of a child** only in expedient situations and in interest of justice, as a last resort.
- Right to Privacy is an **intrinsic part of the right to life and personal liberty under Article 21** (Justice K.S. Puttaswamy (Retd) vs Union of India).
 - **UN Convention on Rights of the Child** also recognises **rights of privacy, autonomy and identity of children.**








New START (Strategic Arms Reduction Treaty)

- Russia is suspending its participation in New START, last remaining major military agreement with US.
- New START is a **treaty between US and Russia for reduction and Limitation of Strategic Offensive Arms.**
 - It entered into force in 2011, and placed verifiable limits on intercontinental-range nuclear weapons.
 - START-I was signed between US and erstwhile USSR in 1991. It was expired in 2009.
 - **2002 Strategic Offensive Reduction Treaty (SORT, or Moscow Treaty)** entered into force in 2003, **followed by 2010 New Strategic Arms Reduction Treaty (New START),** which entered into force in 2011.



Rhododendrons

- As per Botanical Survey of India (BSI), **Darjeeling and Sikkim Himalayas are home to more than one-third of all types of rhododendrons** found in India.
- Rhododendron, meaning rose tree in Greek, is a genus of flowering plants. It is **native to temperate regions of Asia, North America, and Europe.**
 - It is considered an **indicator species** for climate change.
 - **Habitat range:** Subtropical and temperate to subalpine and alpine ecosystems.
 - **Health benefits:** Prevention and treatment of diseases associated with heart, dysentery, diarrhoea, etc.

 <p>Climate smart varieties of wheat</p>	<ul style="list-style-type: none"> Indian Agricultural Research Institute (IARI) scientists have developed three climate-smart varieties of wheat. <ul style="list-style-type: none"> These varieties are characterised by “mild vernalisation requirement” i.e., need for a certain minimum period of low winter temperatures for initiation of flowering. Three varieties are: HDCSW-18 (officially notified in 2016), HD-3410 and HD-3385. <ul style="list-style-type: none"> HD-3410 (released in 2022), has higher yield potential (7.5 tonnes/hectare) with lower plant height (100-105 cm). Among these, HD-3385 is least lodging-prone and most amenable for early sowing. <ul style="list-style-type: none"> Lodging refers to permanent displacement of aboveground parts of a crop from its upright position.
 <p>Product Linked Incentive (PLI) for pharmaceutical</p>	<ul style="list-style-type: none"> Four pharmaceutical companies have received the first tranche of incentives of up to ₹165.74 crore under PLI scheme of Department for Pharmaceuticals. PLI schemes envisages to accomplish Atmanirbhar Bharat vision by providing on average 4-6% of production value as an incentive to approved investors. PLI for pharmaceuticals was launched in 2021 for a period of six years. To enhance India’s manufacturing capabilities and contributing to product diversification towards high value goods in pharmaceutical sector, 3 different categories of products are being supported under scheme, viz, <ul style="list-style-type: none"> Category 1: Biopharmaceuticals; Patented drugs or drugs nearing patent expiry; Cell based or gene therapy drugs etc. Category 2: Bulk drugs (except those 41 eligible products notified under “PLI Scheme for Bulk drugs”). Category 3: Drugs not covered under Category 1 and Category 2 such as Repurposed drugs; Auto immune drugs, anti-cancer drugs.
 <p>Listing Obligations and Disclosure Requirements (LODR) Regulations, 2015</p>	<ul style="list-style-type: none"> SEBI has proposed changes in LODR Regulations, 2015 to streamline disclosures and strengthen corporate governance by listed entities. This includes <ul style="list-style-type: none"> Timeline for submission of first financial results by newly Listed entities. Freezing of demat accounts of MD(s), Whole-time directors and CEOs on continued non-compliance. Ending Permanent board seats and perpetual special rights enjoyed by certain shareholders by subjecting them to shareholders approval once in every 5 years etc. Listed Entities are companies whose equity securities are listed on a recognised stock exchange(s).
 <p>Traditional Knowledge Digital Library (TKDL) database</p>	<ul style="list-style-type: none"> Eurasian Patent Organization (EAPO) and Council of Scientific and Industrial Research (CSIR) signed TKDL Access Agreement. <ul style="list-style-type: none"> Through Agreement, EAPO shall gain access to TKDL database for purposes of Intellectual Property Rights (IPR) grant. TKDL, first of its kind globally, is a database of Indian traditional knowledge established in 2001, by CSIR and Ministry of AYUSH. <ul style="list-style-type: none"> It contains information related to Ayurveda, Unani, Siddha, Sowa Rigpa, and Yoga in five international languages (English, German, French, Japanese and Spanish). It prevents misappropriation of country’s traditional medicinal knowledge through patenting. It is an effective deterrent against bio-piracy.
 <p>Mercury in skin lightening products</p>	<ul style="list-style-type: none"> Gabon, Jamaica, and Sri Lanka unite to remove mercury from hazardous skin lightening products. Minamata Convention on Mercury has set a limit of 1mg/1kg (1ppm) for mercury in skin lightening products. <ul style="list-style-type: none"> Mercury is a shiny, silver-white metal, referred to as quicksilver, and is liquid at room temperature. Mercury is a hidden and toxic ingredient in skin lightening creams. Other heavy metal in cosmetics: Aluminium compounds are colorants in lip glosses, and nail polishes; Lead in lipsticks etc.