



Daily Current Affairs

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Dangers from Plastic recycling

News: A recent report by Greenpeace Philippines titled "Forever Toxic: The science on health threats from plastic recycling" was published which suggested that recycling may not be the solution to Plastic Pollution as it is often believed to be.

Key Findings:

- Recycled plastics often contain higher levels of chemicals such as toxic flame retardants, benzene and other Carcinogens.
- With an increase in plastic stockpiles, the risk of large fires at recycling facilities has gone up, especially in those that hold e-waste plastics with used batteries.
- Plastic production is forecast to triple by 2060, with only a minimal increase in recycling predicted. Only 9% of plastic is recycled but even they end up with higher concentrations of toxic chemicals, multiplying their potential harm to human, animal and environmental health.
- Plastic production, disposal and incineration facilities are most often located in low-income, marginalized communities across the world, which suffer from higher rates of Cancer, Lung Disease and adverse birth outcomes associated with their exposure to the toxic chemicals.

Key Recommendations:

- Plastics have no place in a circular economy and the only real solution to ending plastic pollution is to massively reduce plastic production.
- There is a need for an ambitious, legally binding Global Plastics Treaty that accelerates and provides the conditions needed for a just transition away from dependence on plastic.

Steps taken in India to minimize Plastic waste/usage:

• Plastic Waste Management (Amendment) Rules, 2022; Extended Producer Responsibility (EPR); National Dashboard on Elimination of Single Use Plastic and Plastic Waste Management; India Plastics Pact and Project REPLAN.

Overturning Circulation

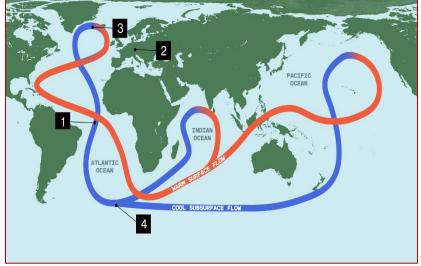
News: The deep ocean currents (called 'Overturning Circulations') in Antarctica, which play a crucial role in redistributing heat, carbon, and nutrients around the globe, are slowing down earlier than predicted.

What are the Overturning Circulations? Why are they slowing?

- Overturning Circulations refers to the global network of ocean currents that redistribute heat, carbon, and nutrients. They play a crucial role in regulating Earth's climate, maintaining oxygen levels, and shaping ocean currents.
- The Overturning Circulations are slowing due to melting Antarctic ice, which freshens surface waters and reduces their density, hindering the sinking process and disrupting the circulation pattern.

Impact of 'Slowing Deep Ocean Currents'

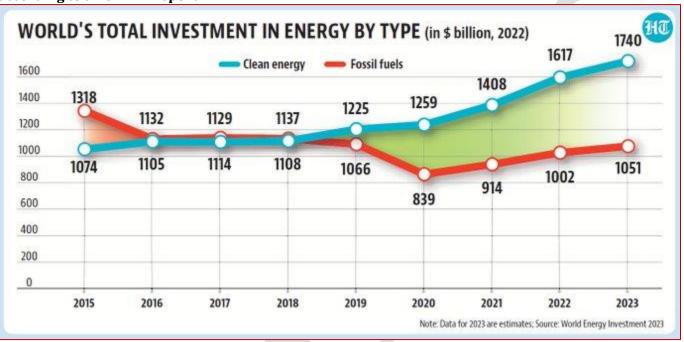
- It can lead to reduced oxygen levels in the deep ocean, affecting marine organisms.
- Lower oxygen levels may lead to behavioral changes, migrations, and disruptions in the marine food chain.



- Moreover, the slowdown increases global warming as the ocean's capacity to store carbon dioxide and heat diminishes, intensifying the greenhouse effect.
- It can contribute to rising sea levels due to the thermal expansion of warmer waters

World Energy Investment Report 2023

News: Investment in clean energy technologies is significantly outpacing spending on fossil fuels as affordability and security concerns triggered by the global energy crisis strengthen the momentum behind more sustainable options, **according to a new IEA report**.



Key Findings:

- About USD 2.8 trillion is set to be invested globally in energy in 2023, of which more than USD 1.7 trillion is expected to go to clean technologies renewables, EVs, grids, nuclear power, low emission fuels etc.
- The remainder, slightly more than USD 1 trillion, is going to coal, gas and oil.
- For every dollar spent on fossil fuels, \$1.7 is now allocated to clean energy, a significant increase from the 1:1 ratio observed five years ago.
- Annual clean energy investment is expected to rise by 24% between 2021 and 2023.
- But more than 90% of this increase comes from advanced economies and China, presenting a serious risk of new dividing lines in global energy if clean energy transitions don't pick up elsewhere.
- The report also highlights the influence of recent geopolitical events on the energy market. It points out that Russia's invasion of Ukraine has led to substantial instability in the fossil fuel markets. This volatility has inadvertently accelerated the

COMPOSITION OF EXPECTED **ENERGY INVESTMENTS IN 2023 BY** ECONOMIC GROUPING (in \$ billion, 2022) 360 Clean energy **Fossil fuels** 1000 800 889 220 600 441 566 400 200 250 Advanced China economic

deployment of various renewable energy technologies, despite triggering an immediate scramble for oil and gas resources.

What does the report mention of India and other developing economies?

• The **biggest shortfalls** in clean energy investment are in emerging and developing economies. There are some bright spots, such as dynamic investments in solar in India and in renewables in Brazil and parts of the Middle East.

What are challenges faced by developing economies in transitioning to clean energy?

- Investment in many countries is being held back by factors including higher interest rates, unclear policy frameworks and market designs, weak grid infrastructure, financially strained utilities, and a high cost of capital.
- Much more needs to be done by the international community, especially to drive investment in lower-income economies, where the private sector has been reluctant to venture.

Source - IEA website

Article 299 of Indian Constitution

News: In a recent decision, the Supreme Court ruled that the government cannot claim immunity from the legal provisions of a contract entered into under the President's name under Article 299 of the Constitution.

Background:

• **Glock Asia-Pacific Limited Vs Government of India** - The case dealt with an application filed by Glock Asia-Pacific Limited, a pistol manufacturing company, against the Centre regarding the appointment of an arbitrator in a tender-related dispute.

What are Constitutional provisions?

- Article 298 grants the Centre and the state governments the power to carry on trade or business, acquire, hold, and dispose of property, and make contracts for any purpose, while Article 299 delineates the manner in which these contracts will be concluded.
- Articles 298 and 299 came after the Constitution came into effect and the government entered into contracts even in the pre-independence era. According to the **Crown Proceedings Act of 1947**, the Crown could not be sued in court for a contract it entered into.
- Article 299 It provides that "all contracts made in the exercise of the executive power of the Union or of a State shall be expressed to be made by the President or by the Governor of the State" and that all such contracts and "assurances of property made in the exercise of that power shall be executed" on behalf of the President or the Governor by persons in a manner as directed and authorised by them.
- Under Article 299 (1) means that there must be a deed or contract in writing and that it should be executed by a person duly authorised by the President of the Governor on their behalf

On what grounds did the court decide to hear the case?

- **Arbitration and Conciliation Act, 1996** The act says that notwithstanding any prior agreement, any person whose relationship with the parties or counsel of the dispute falls under any of the categories in the Seventh Schedule will be ineligible to be appointed as an arbitrator.
- As per the **Seventh Schedule of constitution** The Seventh Schedule includes relationships where the arbitrator is an employee, consultant, advisor, or has any other past or present business relationship with a party.
- **Appointment of an Arbitrator** The 246th Law Commission Report, which dealt with the issue of contracts with government entities, the court observed that when the party appointing an arbitrator is the State, "the duty to appoint an impartial and independent adjudicator is even more onerous."
- Thus, the court rejected the Centre's reliance on Article 299, saying, "Article 299 only lays down the formality that is necessary to bind the government with contractual liability" and not "the substantial law relating to the contractual liability of the Government", which is to be found in the general laws of the land.

Source - The Indian Express

Lightweight Payment and Settlements System

News: The Reserve Bank of India(RBI) has conceptualized a Lightweight Payment and Settlements System.

What is LPSS?

- LPSS aims to ensure that the processing of transactions continues without disruption during catastrophic events such as natural calamities and war.
- The system is expected to keep the liquidity pipeline of the economy alive and ensure economic stability. This system can be operated from anywhere by a bare minimum of staff.
- It will be independent of conventional technologies used for existing payment systems such as RTGS, NEFT, and UPI.

Need:

- According to RBI, existing conventional payment systems such as RTGS, NEFT, and UPI are designed to handle large volumes of transactions while ensuring sustained availability. As a result, they are dependent on complex wired networks backed by advanced IT infrastructure.
- However, catastrophic events like natural calamities and war have the potential to render these payment systems temporarily unavailable by disrupting the underlying information and communication infrastructure. Hence, it is prudent to be prepared to face such extreme and volatile situations. In this context, a Lightweight Payment and Settlement System (LPSS) is being planned.

How will it help?

- The system is expected to operate on minimalistic hardware and software and would be made active only on a need basis. Hence, it would ensure **near-zero downtime** of the payment and settlement system in the country and keep the liquidity pipeline of the economy alive and intact.
- The system is expected to process transactions that are critical to ensure the **stability of the economy**, **including government** and **market-related transactions**.

Source - RBI website

Facts for Prelims

Chytridiomycosis

News: For the past 40 years, a devastating fungal disease, called chytridiomycosis or chytrid, has been ravaging frog populations around the world, wiping out 90 species. It is called as "panzootic" – Pandemic in the world of animals.

About:

- Chytrid infects frogs by reproducing in their skin, affecting their ability to balance water and salt levels, and eventually leading to death if infection levels are high enough.
- The high mortality rate and the high number of species affected make chytrid unequivocally the deadliest animal disease known to date.
- Chytrid originated in Asia and was unwittingly spread to other continents through global travel and trade in amphibians.
- The disease has led to decline in over 500 frog species worldwide.
- Researchers use a qPCR test to detect chytrid in frogs by swabbing their skin. qPCR stands for quantitative polymerase chain reaction.

Himalayan Brown Bear

News: A Himalayan brown bear was recently captured by the Jammu and Kashmir Wildlife Department, at Rajwara in the North Kashmir district of Handwara.

About:

- It is a **large carnivore** found in the high-altitude regions of the Himalayas.
- They are found above the timberline, between 3,000 and 5,500 meters (9,800 and 18,000 feet) above sea level.
- In India, this species exists in small isolated populations in the fragmented alpine and subalpine habitats of Jammu and Kashmir, Himachal Pradesh, and Uttarakhand.
- It is the largest mammal in the region.

Protection Status:

- IUCN Critically Endangered
- Wildlife (Protection) Act of 1972: Schedule I
- CITES Appendix I



Indigenous groups in Brazil

News: Brazil's lower house of Congress approved on Tuesday night a bill to limit the recognition of new Indigenous reservations, a decision seen by environmentalists and human rights advocates as a setback after intense pressure from the farm lobby.

Which indigenous tribes of Brazil protested? (Remember the names)

- Indigenous groups from across the country planned a week of protests outside Congress in the capital Brasilia.
- Guarani Tribe and Pataxo Indigenous tribes

About Guarani Tribe:

- The Guarani were one of the first peoples contacted after Europeans arrived in South America around 500 years ago.
- In Brazil, there are today around 51,000 Guarani living in seven states, making them the country's most numerous tribes. Many others live in neighbouring Paraguay, Bolivia, and Argentina.

About Pataxo Tribe:

 The Pataxó are an indigenous people of Brazil and live in several villages in the southern part of the state of Bahia and northern part of the state of Minas Gerais.

