

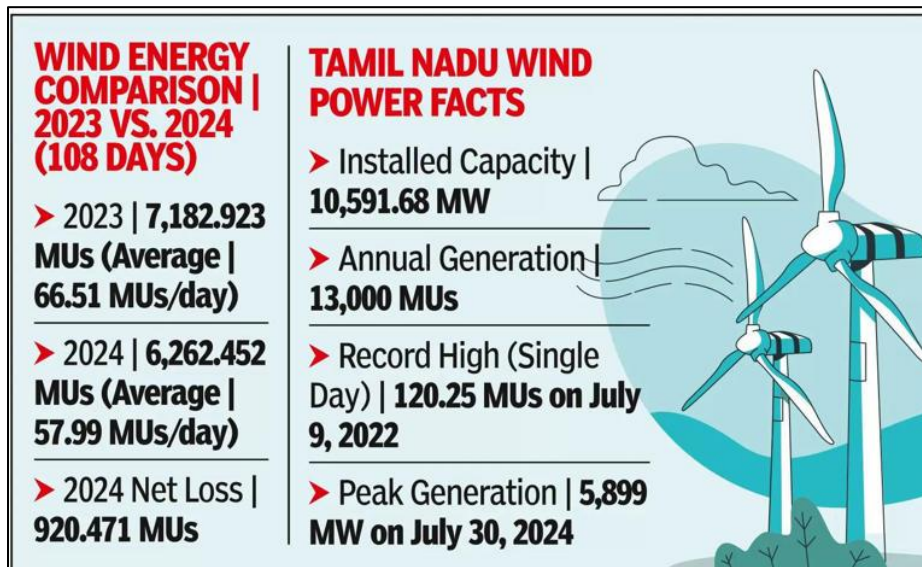
August - 24

TNPSC BITS

- ❖ Bharat Petroleum Corporation Limited (BPCL) has launched India's first biofuel blend High Flash High Speed Diesel (HFHSD) bunker at Mumbai Port.
- ❖ India has started negotiating with the United Kingdom (UK) to expand critical minerals collaboration under the newly-signed UK-India Technology Security Initiative (TSI).
- ❖ The Food Safety and Standards Authority of India (FSSAI) has launched a project to assess microplastic contamination in food products and develop methods for its detection.
- ❖ Gaza has recorded its first polio case in 25 years.
- ❖ Sudan has been stricken by a cholera outbreak with at least 22 people have died from the disease, and that at least 354 confirmed cases.
- ❖ World Photography Day is celebrated annually on August 19th.
 - The theme for 2024 is "An Entire Day".

TAMIL NADU

Total installed power capacity July 2024

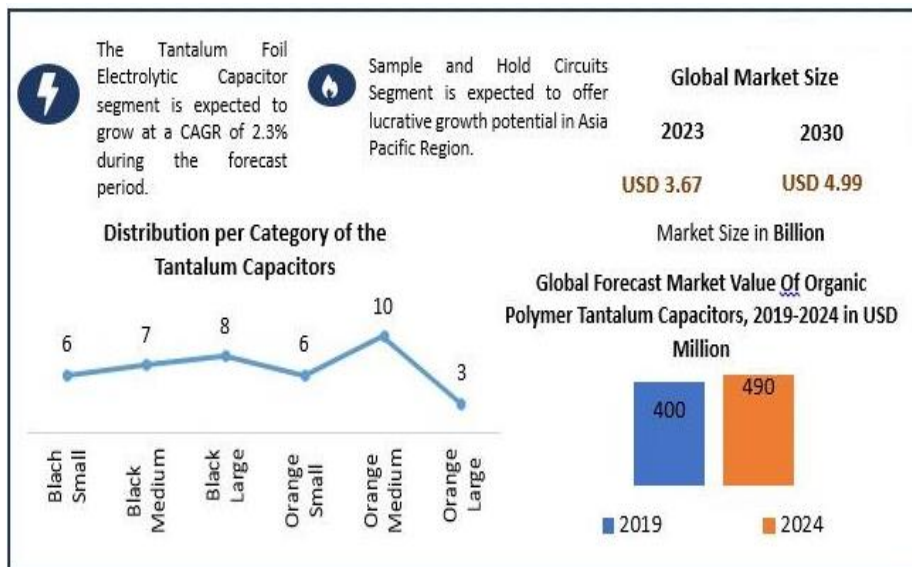


- ❖ Tamil Nadu's total installed power capacity was 40,527.24 MW as on July 31, 2024, according to data from the Central Electricity Authority (CEA).
- ❖ The coal-fired power capacity stood at 12,771.99 MW.

- ❖ Of this, 4,320 MW was from the State sector; 5,426.67 MW, the private sector; and 3,025.32 MW, the Central sector.
- ❖ Tamil Nadu's lignite-based thermal capacity stood at 1,959.16 MW, with a contribution of 1,709.16 MW from the Central sector and 250 MW from the private sector.
- ❖ Gas-based power plants' capacity was 1,027.18 MW, with 524.08 MW coming from the State Sector and 503.10 MW from the private sector.
- ❖ The private sector accounted for diesel-based power capacity of 211.70 MW, while 1,448 MW of nuclear power capacity came from the Central sector.
- ❖ The overall conventional power installed capacity in the State was 17,418.03 MW.
- ❖ The State's renewable energy installed capacity stood at 23,109.21 MW.
- ❖ Of this, 2,178.20 MW was of hydro power; 10,881.34 MW, wind; and 8,831.86 MW, solar.
- ❖ Biomass, and co-generation bagasse power plants, among others, accounted for the rest of the renewable energy capacity.

NATIONAL

List of Critical and Strategic minerals 2024



- ❖ The Central Government has notified a list of 24 minerals including Tantalum, in Part D of the First Schedule of the MMDR Act, 1957 as Critical and Strategic minerals.
- ❖ Tantalum is a rare metal with the symbol Ta and atomic number 73.



- ❖ The Geological Survey of India has taken up 6 projects on exploration for Tantalum and associated minerals in different parts of the country.
- ❖ Raw tantalum rarely occurs in nature.
- ❖ It is typically found in the ore columbite-tantalite (usually referred to as coltan).
- ❖ It has an extremely high melting point, exceeded only by tungsten and rhenium.
- ❖ Democratic Republic of the Congo, Rwanda, Brazil, and Nigeria are the Major Producers of Ta.

INTERNATIONAL

75th anniversary of Geneva Conventions

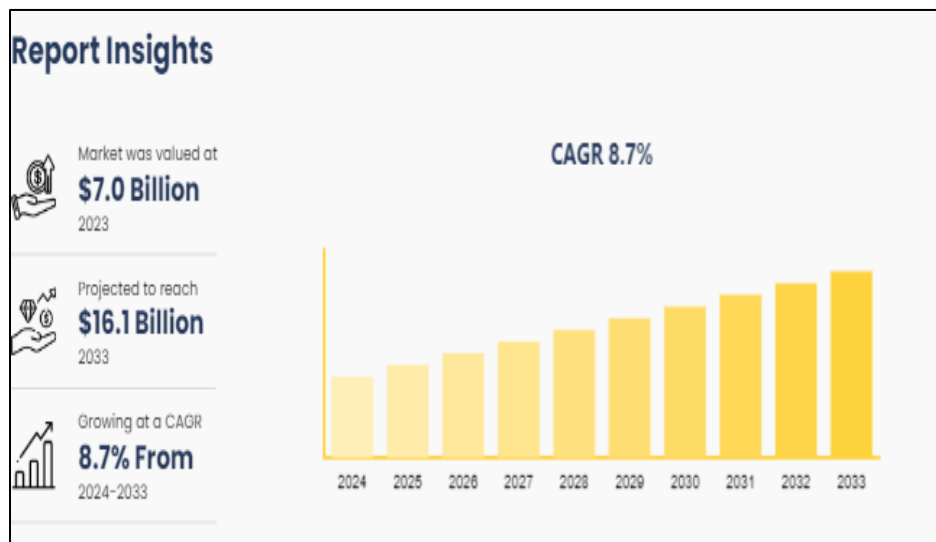


- ❖ 2024 commemorate the 75th Anniversary of the adoption of the Geneva Conventions of 1949.
- ❖ The Geneva Conventions are a set of international treaties that establish legal standards for humanitarian treatment during war.
- ❖ The first Geneva Convention was adopted in 1864 to protect wounded soldiers on the battlefield.
- ❖ The Four Conventions:
 - 1st Convention: Protects wounded and sick soldiers on land during war.
 - 2nd Convention: Extends protection to wounded, sick, and shipwrecked military personnel at sea.
 - 3rd Convention: Focuses on the treatment of prisoners of war.

- 4th Convention: Protects civilians, including those in occupied territories, from inhumane treatment.
- ❖ These four Conventions were adopted on 12 August 1949.
- ❖ Two Additional Protocols were adopted in 1977 to strengthen protections in both international and non-international armed conflicts.
- ❖ A third protocol was added in 2005 to recognize the Red Crystal as an additional emblem alongside the Red Cross and Red Crescent.

ECONOMY

Seaweed Value Chain Development



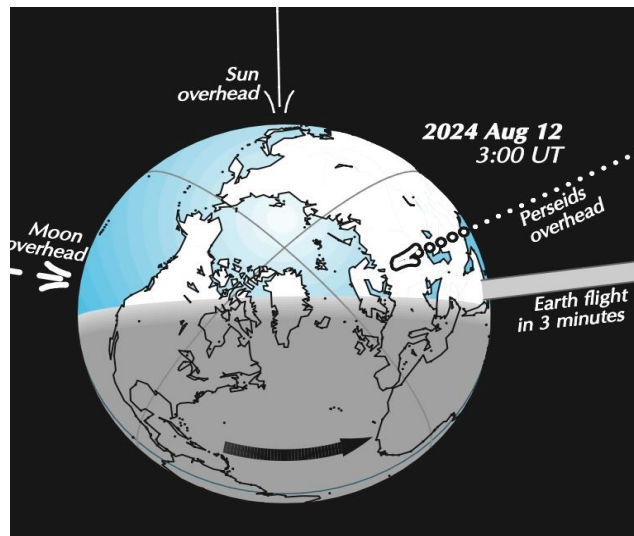
- ❖ Recently, NITI Aayog has laid down a comprehensive roadmap to promote the seaweed cultivation in India.
- ❖ It published a report titled “Strategy for the development of Seaweed Value Chain”.
- ❖ Seaweeds are the primitive, marine non-flowering algae without root, stem and leaves and play a major role in marine ecosystems.
- ❖ Large seaweeds form dense underwater forests known as kelp forests.
- ❖ India harvests approximately 33,345 tonnes (wet weight) of seaweeds annually from natural beds, primarily in Tamilnadu.
- ❖ India’s annual seaweed revenue, around Rs 200 crores, contributes less than 1% of global production.
- ❖ The government aims to increase the allied sector’s share of gross value added in agriculture to 9% in 2024-25 from 7.28% in 2018-19.

- ❖ In 2021, the global seaweed market stood at USD 9.9 billion.
- ❖ Major trading countries included China, Indonesia, the Philippines, the Republic of South Korea, and Malaysia.

SCIENCE AND TECHNOLOGY

Perseid Meteor Shower 2024

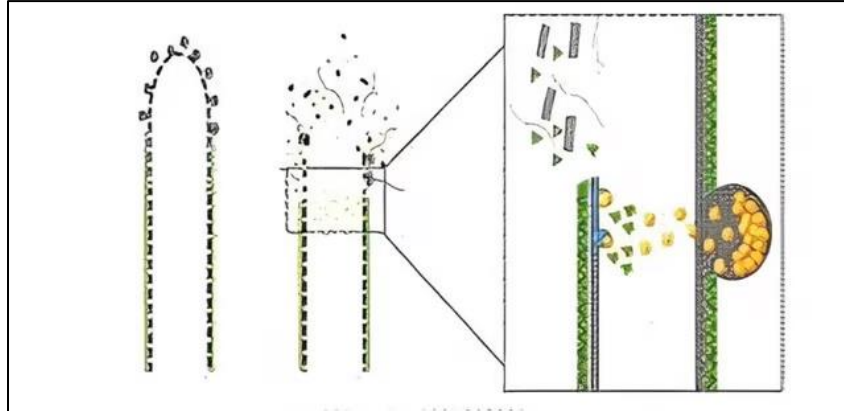
- ❖ The Perseids, one of the year's most prolific meteor showers, are raining dozens of "shooting stars".
- ❖ The Perseid meteor shower is active from July 17 to August 24, it was peak on the night of August 12, before dawn on August 13th.
- ❖ Under ideal conditions, 50 to 100 meteors can be seen per hour.
- ❖ So-called shooting stars are not really stars but tiny bits of rock plunging through Earth's atmosphere at more than 130,000 mph (210,000 km/h).
- ❖ The only satellite ever destroyed was the Olympus communications satellite during a Perseid outburst in 1993.



Porous composite xerogel

- ❖ Researchers have created a porous composite xerogel dressing that incorporates silica nanoparticles (SiNPs) and calcium.
- ❖ It is designed to help the blood clot rapidly and provide relief for uncontrolled haemorrhage.
- ❖ Xerogel is a solid form of a gel achieved by drying it with minimal shrinkage.

- ❖ Xerogels are nontoxic, cost-effective, biocompatible, have high surface area, and high porosity.




STATES

Juanga Tribe - FRA Act

Rights for the dwellers

What the Forest Rights Act, 2006, entails

- Tenurial security over the forestland under occupation prior to December 13, 2005
- Recognition of community right over forest and forest products
- Protection and conservation of community forest resources
- Conversion of all forest villages and habitation located inside the forestland into revenue villages
- In situ rehabilitation of displaced persons evicted without compensation prior to December 13, 2005
- Recognition of ancestral domain (habitat) right to



Residents of Gunduribadi village in Odisha's Nayagarh district get ready for mapping their land boundaries for the Forest Rights Act implementation. ■ SPECIAL ARRANGEMENT

Particularly Vulnerable Tribal Groups

- Seasonal access to nomadic, pastoral and semi-nomadic communities over forestland

- Conversion of all leases granted by erstwhile governments, zamindars and king into permanent land records

- ❖ The Juangs of Jajpur in Odisha have become the fifth Particularly Vulnerable Tribal Group (PVTG) in the country.
- ❖ They are the second in the state to get habitat rights under the Forest Rights Act (FRA), 2006.
- ❖ The rights will provide the Juangs uninterrupted access and legal recognition to their ancestral land and resources.
- ❖ Habitat rights are given to PVTGs under section 3(1) (e) of The Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006.

- ❖ Juang tribals reside in 13 villages under Sukinda block of Jajpur.

PERSONALITIES, AWARDS, AND EVENTS

World Airline Awards 2024

- ❖ Qatar Airways has reclaimed the top spot, earning the coveted title of the world's best airline in 2024.
- ❖ It was replacing Singapore Airlines, and pushing it to the second position, while Emirates secured third rank.
- ❖ India's Vistara – globally ranked 16th – has emerged as the best airline in India and South Asia for 2024.
- ❖ India has become the third-largest domestic airline market globally, with its capacity doubling from 7.9 million in 2014 to 15.5 million in April 2024.

Rank 2024	Airline Name	Global Hub	Rank 2023
1	Qatar Airways	Qatar	2
2	Singapore Airlines	Singapore	1
3	Emirates	UAE (Dubai)	4
4	ANA All Nippon Airways	Japan	3
5	Cathay Pacific Airways	Hong Kong	8
6	Japan Airlines	Japan	5
7	Turkish Airlines	Turkey	6
8	EVA Air	Taiwan	9
9	Air France	France	7
10	Swiss International Air Lines	Switzerland	12

IMPORTANT DAYS

World Humanitarian Day 2024 - August 19

- ❖ It aims to honour humanitarian workers who risk their lives to provide aid and assistance to people in need.
- ❖ The day is observed to commemorate the 2003 bombing of the United Nations headquarters in Baghdad, Iraq, which killed 22 people.
- ❖ The day is also an occasion to raise awareness of global humanitarian efforts.



- ❖ This day encourage the global action to support those affected by crises, such as natural disasters, conflicts and other emergencies.
- ❖ The theme for 2024 is Act for Humanity.

