



DATE: 23 FEBRUARY 2026

1 International Energy Agency (IEA) (Source: *The Indian Express*)

The International Energy Agency is an energy forum comprised of 29 industrialized countries under the Organization for Economic Cooperation and Development (OECD).

What you need to know?

- The IEA was established in 1974, in the wake of the 1973-1974 oil crisis.
- Provides analysis for all fuels, technologies, and the global energy transition, offering data, analysis, and policy recommendations to its 32 member countries.
- Publishes the annual World Energy Outlook which gives forecast on energy trends.
- India is an associate member of the organisation.



Who can become a member?

- Must be a member country of OECD.
- Nations are required to hold crude oil and/or product reserves (strategic oil reserves) equivalent to 90 days of the previous year's net imports.

2 Ionizing Radiation (Source: *The Hindu*)

Ionising radiation refers to radiation that has enough energy to break an electron away from an atom, a process called ionisation.

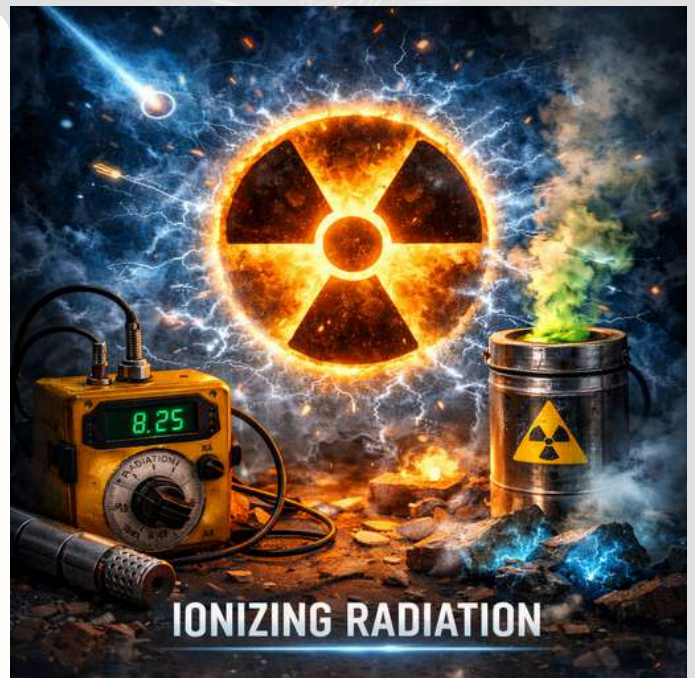
- *Ionizing radiation is high-energy electromagnetic waves (gamma, X-rays) or particles (alpha, beta, neutrons) emitted by unstable atoms.*

What are the features?

- Ionising radiation surrounds us everywhere in everyday life and is completely unavoidable and is safe at low doses.
- There are three main types of ionising radiation: Alpha, Beta and Gamma rays.

Effects on Human Body

- Can cause damage to internal organs and tissues of the body that vital systems cease to function and death may result within days or weeks.
- Can alter the genetic make-up of individuals and also result in mutation.
- Can cause developmental problems such as malformation or reduced IQ in individuals exposed to radiation.



What more need to be known?

- If radioactive materials are stored in lead boxes the impact of radiation can be very much minimised.

3 BharatNet Programme (Source: *The PIB*)

BharatNet Programme is the world's largest rural broadband project to provide uninterrupted broadband connectivity.

- The scheme under the Ministry of Communications seeks to empower rural India, fostering inclusive growth and bridging the gap between urban and rural communities.

What you need to know?

- The primary objective is to provide unrestricted access to broadband connectivity to all the telecom service providers.
- BharatNet is primarily funded through the Digital Bharat Nidhi (DBN), which was created after replacing the Universal Service Obligation Fund.
- The project is being executed by a Special Purpose Vehicle (SPV) namely Bharat Broadband Network Limited (BBNL)

What will be the impact?

- Digital Inclusion
- Bridging the resource gap in rural areas in Education and Healthcare sectors.
- Empowering Local Governance.
- Rural communities can participate in digital commerce and help in creating economic opportunities.



Note:

- **Is fund and cess the same? Please go through your basic sources. We will update later.**



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4 Biopharma SHAKTI (Source: *The Hindu Businessline*)

A budget 2026-27 scheme focusing on transforming India into a biomanufacturing hub. The initiative with a ₹10,000 crore, five-year outlay focuses on making India a global innovator. Biopharma involves production, manufacturing, or extraction of therapies through biological organisms, such as human cells, fungi, or microbes.



What you need to know?

- Under the control of Directorate General of Health Services, Ministry of Health.
- Powers as per the Transplantation of Human Organs (Amendment) Act 2011.
- Has included the component of tissue donation and registration of tissue Banks through National Biomaterial Centre.

Central Drugs Standard Control Organisation (CDSCO)

- CDSCO is the National Regulatory Authority responsible for ensuring the quality, safety, and efficacy of drugs, cosmetics, and medical devices. Headed by the Drugs Controller General of India in Delhi, it regulates imports, approves new drugs, and sets standards.



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5 Smoke Vortex (Source: *The Hindu*)

A vortex ring is a circular shaped ring of spinning gasses that move together as a unit.

What you need to know about VORTEX?

- Volcanoes produce massive, visible vortex rings formed by the condensation of steam.
- The ring is formed because the air inside the vortex moves faster than the surrounding air, creating an inward pressure that holds the shape together.

