

IAEA

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INTERNATIONAL ATOMIC ENERGY AGENCY (IAEA)

Context:

The 2024 edition of the IAEA's *Climate Change and Nuclear Power* report has been published.

Background:

- Nuclear power is gaining renewed attention as nations focus on enhancing **energy security** and reducing **carbon emissions**. To achieve **net-zero emissions by 2050**, a rapid expansion of clean energy technologies is essential. In this context, **nuclear energy** is expected to play a crucial role. The IAEA forecasts that **nuclear power capacity** could increase by **2.5 times** the current levels by the middle of the century, under its **high-case scenario**.

About the International Atomic Energy Agency (IAEA):

- Established in **1957**, the IAEA operates as an independent international organization within the **United Nations (UN)** framework.
- The IAEA's inception is linked to U.S. President Dwight D. Eisenhower's **Atoms for Peace** speech delivered to the UN General Assembly on **December 8, 1953**.
- The agency's core mission is to promote the **peaceful use of nuclear energy** while ensuring that nuclear technology is not used for **military purposes**, particularly for nuclear weapons.
- **Headquarters:** The IAEA, governed by its own founding treaty, reports to both the UN **General Assembly** and the **Security Council**. It is based at the UN Office in **Vienna, Austria**.

Key Objectives:

1. Promote the **safe** and **peaceful** use of nuclear energy for power generation, healthcare, and agriculture.
2. Monitor and verify compliance with **nuclear non-proliferation treaties**, such as the **Non-Proliferation Treaty (NPT)**.
3. Ensure that nuclear materials are not diverted for **military or weapons-related activities**.

Functions:

- **Safeguards and Verification:** Inspects nuclear facilities to verify that nuclear materials are not diverted to **weapons programs**.
- **Technical Cooperation:** Assists member states in the peaceful application of **nuclear technology** in sectors like healthcare, agriculture, and industry.
- **Safety and Security:** Promotes **nuclear safety standards** and supports countries in securing nuclear materials and facilities.

- **Nuclear Energy Development:** Facilitates knowledge sharing and best practices for the peaceful use of nuclear energy.

Membership:

- Membership is open to all **UN members** and other states willing to comply with the agency's statutes.

Nobel Peace Prize:

- In **2005**, the IAEA and its Director General, **Mohamed ElBaradei**, were awarded the **Nobel Peace Prize** for their efforts in preventing the misuse of nuclear energy for military purposes.

India and the IAEA:

- India is one of the **founding members** of the IAEA.
- After the **1968 ratification** of the **Treaty on the Non-Proliferation of Nuclear Weapons**, non-nuclear-armed states are required to negotiate a **safeguards agreement** with the IAEA, which monitors nuclear programs and inspects facilities.
- In **2009**, India signed a safeguards agreement with the IAEA under the **India-U.S. Civil Nuclear Agreement**, allowing the agency to inspect its **civilian nuclear installations**.
- India actively contributes to IAEA efforts in areas such as **nuclear safety, security, and technical cooperation**.



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