India US Civil Nuclear Deal

Why in News?

Recently National Security Adviser of United States Jake Sullivan announced that Washington was finalising steps to "remove" hurdles for civil nuclear partnership between Indian and American firms.

What is the US India civil nuclear deal?

- **Origin** - India and the U.S. unveiled an ambitious plan to cooperate in civil nuclear energy in July 2005.

  The framework for this agreement was a July 18, 2005, joint statement by then Indian Prime Minister Manmohan Singh and then U.S. President George W. Bush.

- **Signed** - The historic civil nuclear agreement was finally sealed in ***2008*** later following a series of negotiations.
- **123 Agreement** - It is also known as 123 Agreement as the deal was signed under section 123 of the United States Atomic Energy Act of 1954.
- **Features of the deal**
  - India agreed to separate its civil and military nuclear facilities and to place all its civil nuclear facilities under International Atomic Energy Agency (IAEA) safeguards.
  - United States agreed to work toward full civil nuclear cooperation with India.




The NSG waiver made India the only known country with nuclear weapons which is not a party to the Non-Proliferation Treaty (NPT) but is still allowed to carry out nuclear commerce with the rest of the world.

What are the benefits of the deal?

- **Enables nuclear trade** – The deal will enable India to secure more resilient critical minerals and clean energy supply chains from the USA.
- **Reduces "Entity List" restriction** - After the U.S.-India civil nuclear deal, all but a handful of Indian companies dealing with nuclear matters were removed from the list.

U.S. companies are prohibited from doing business with companies on the " Entity List" unless a special licence is granted.

Recently three entities are Bhabha Atomic Research Centre (BARC), Indira Gandhi Atomic Research Centre (IGCAR) and the Indian Rare Earths (IRE) are removed from the "Entity list".

- **Facilitates technology cooperation** – The deal was expected to pave the way for allowing the U.S. to share civilian nuclear technology with India.
- **Augmentation of Indian civil nuclear sector** - Many nuclear plants will be built using U.S. equipment, technology, and allied services.
- **Increased electricity production** - More electricity would be generated by plants to fuel Indian industry and benefit the average Indian.
- **Climate change mitigation** - Nuclear energy would not generate greenhouse gases

and help wean India away from an over-reliance on climate changing, and often toxic, fossil fuels.

- **Employment growth** - Employment opportunities would be created both in the U.S. and India.
- **Improves India US relationship** – Successful implementation of the deal will improve the "***Comprehensive global strategic partnership of India -US***".

What are the challenges in implementing the deal?

- **Non implementation** - Even though U.S. President Barack Obama announced in 2016 that Westinghouse would build six new nuclear plants in India, this has not happened yet.
- Energy and commercial promises of the U.S.-India deal have never been fulfilled.
- **US regulatory challenges** – Stringent US regulations are preventing civil nuclear cooperation between India's leading nuclear entities and U.S. companies.
- **"Entity List" restriction** - At the conclusion of the civil nuclear deal in 2008, there were approximately 200 Indian entities on the so-called "Entity List" kept by the U.S. Department of Commerce.
- **Licensing challenges** – The licences for doing business with "Entity List" companies are seldom granted.
- **India Russia relationship** – Defence and energy related Indian companies that have relationship with Russian entities are kept in the "Entity List" and are not granted license engage with US companies.
- **Changed US administration** – The new administration change in USA might affect the terms of conditions under the deal.
- **Liability risks** - In 2010, India enacted the Civil Liability for Nuclear Damage Act , placing major liability obligations not on the operators of a civil nuclear facility but on the suppliers.
- Neither of the major U.S. suppliers , GE and Westinghouse, was willing to assume these liability risks.

  Through India's public sector General Insurance Corporation, and four other government companies, a 20-year insurance premium would be charged to cover the supplier's liability for an accident.

- **Technology hurdles** - Since the conclusion of the deal, civil nuclear technology has evolved rapidly and U.S. companies are reluctant in transferring the latest technology.
- **Cost overruns** - This technology and its implementing equipment must be offered at a reasonable price that will not increase electricity costs to the Indian consumer.

What can be done?

- Ameliorate liability concerns for nuclear damages by engaging in dialogue with stakeholders.
- Build confidence with the new government to facilitate the tech transfer and affordable cost.

- Engage in dialogue with US authorities to remove Indian research and development companies from “Entity List”.

References

1. The Hindu | Time to seize the U.S.-India nuclear deal
2. The Hindu | Three Indian nuclear entities no more on U.S. restrictions list

