

Barakah Nuclear Energy Plant

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About Barakah Nuclear Energy Plant:

- It is situated in Al Dhafra, within the **Emirate of Abu Dhabi, UAE**, on the Arabian Gulf, about 53 km west-southwest of the city of Ruwais.
- It is the **first nuclear energy plant in the Arab World**.
- Construction of the plant commenced in July 2012. It started operations in 2020 when the first of its four reactors went into service.
- The plant consists of **four nuclear reactors**, which once fully operational will prevent the release of up to 21 million tonnes of carbon emissions every year.
- It will produce 40 terawatt-hours (TWh) of electricity annually.
- It is expected to **provide up to 25% of the electricity needs of the UAE**, nearly the equivalent of New Zealand's annual consumption.
- The station will power companies, including the Abu Dhabi National Oil Company (ADNOC), one of the world's biggest oil producers, Emirates Steel, and Emirates Global Aluminium.

Q1: What is Nuclear Energy?

Nuclear energy is a form of energy released from the nucleus, the core of atoms, made up of protons and neutrons. This source of energy can be produced in two ways: fission – when nuclei of atoms split into several parts – or fusion – when nuclei fuse together.

Source: [Oil-rich UAE completes Arab world's first nuclear plant](https://www.vajiramandravi.com/current-affairs/barakah-nuclear-energy-plant/)

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