NUCLEAR ENERGY

THE BETTER ENERGY

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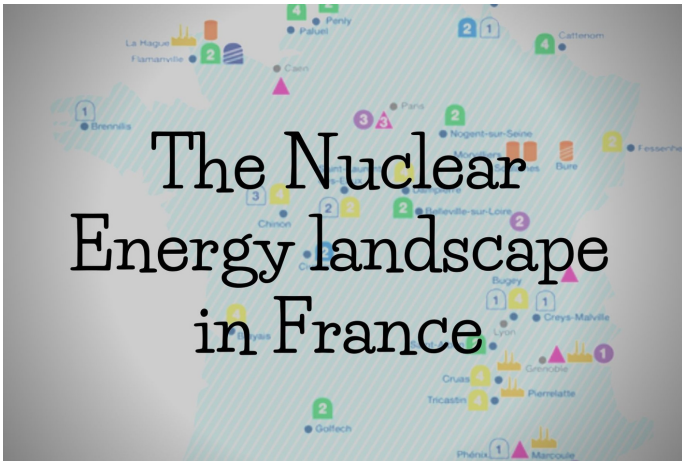
Nuclear Energy - The Better Energy is an initiative to create awareness about the applications of peaceful Nuclear Energy. We proudly present our April newsletter.

NUCLEAR 101

Nuclear 101 is a section where we will bring to you some of the most basic concepts of Nuclear Physics explained in a non-specialist way

With a massive fleet of 58 fission powered nuclear reactors currently in operation, France records the highest percentage of 71.7% of the country's total energy production.
The current fleet of French Pressurized Water Reactors (PWRs) is managed and operated by the country's main electricity generation and distribution company - Electricité de France (EDF). All these power plants are subjected to a systematic feedback process and a comprehensive periodic safety reassessment process every ten years under the scrutiny of the ASN. Additionally, like several other countries, France follows a closed nuclear fuel cycle, wherein it recovers uranium and plutonium by recycling or reprocessing spent fuel. France's national spent fuel policy, its tight legislation and the support of the Nuclear Safety Authority together ensure an efficient and secure energy supply whilst reducing



the amount of fuel required for energy generation and also the consequent radioactive waste burden. Currently, under construction in the Southern France region, is also a 500 MW experimental nuclear fusion reactor is sought to be the world's largest magnetic confinement plasma physics experiment that aims to demonstrate the principle of efficient energy production from the fusion process.

Source: https://thebetterenergy.net/french-nuclear-policy

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Highlighted Articles

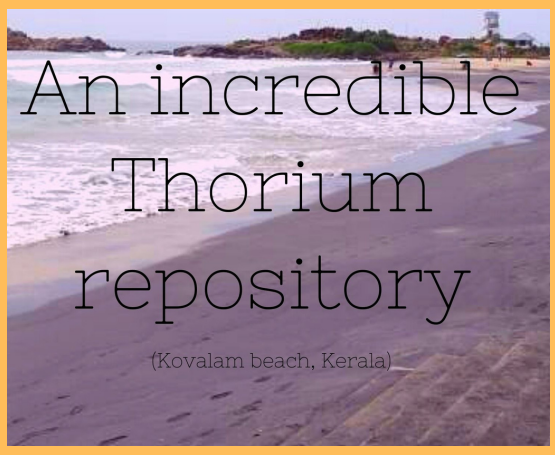
Indian Contribution to ITER Project (Part II)

ITER Organization is the leading team responsible for operation and construction of the International Thermonuclear Experimental Reactor in France. India is one of the ITER-members and has created a domestic agency to deliver the promise towards fulfilling ITER goals.

Written by Pranjal Singh, this is the second installment of the article to bring to light the invaluable contributions of India towards this mega science project aiming to make nuclear fusion a reality on earth. (Cover image from www.iter-india.org)

HTTPS://THEBETTERENERGY.NET/ITER-INDIA

An incredible Thorium repository



Do you have a wanderlust in exploring incredible India!? Globetrotting in such a discrete and diversified land of India could be mind-boggling as each region of this country is demographically and culturally distinct. In the extreme north, stands the great Himalayas with head held high while on the southern end we have the Indian Ocean and Sri Lanka linked via the Palk Strait. The eastern and western parts are surrounded by spectacular sea beaches.

Written by Nilormi Das, this article explores some of these tropical beaches of the west coast and their contribution to the Indian Nuclear Power Program.

READ FULL ARTICLE HERE: HTTPS://THEBETTERENERGY.NET/KERALA

DID YOU KNOW?

India is credited as the world's first country to have designed an experimental reactor especially based on the thorium-based nuclear fuel cycle. The evidence comes in the form of KAMINI (Kalpakkam Mini reactor) which is a research reactor stationed at IGCAR, Kalpakkam. It started operation on October 29, 1996 and produces 30 kW of thermal power. KAMINI uses light water as coolant and moderator and U-233 as primary fuel. This U-233 is provided by the thorium fuel cycle generated by the Fast Breeder Test Reactor.

Source: https://thebetterenergy.net/indian-nuclear-policy

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