



New Pressurised Heavy Water Reactors

Why in news?

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The Union Cabinet approved of a plan to build 10 new pressurised heavy water reactors of 700 MWe (mega watt electric).

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What is the scope of this proposal?

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- This proposal marks the biggest expansion of the country's nuclear power capacity from the existing 6,780 MWe generated by 22 plants, which accounts for just 3% of the electricity generated.
- It could generate orders worth Rs 70,000 crore, create more than 30,000 jobs.
- It boosts the "Make in India" programme by opening opportunities for indigenous engineering companies.
- According to the International Energy Agency's World Energy Outlook 2015, the country's power sector needs to almost quadruple by 2040 to keep pace with electricity demand.
- This proposal can deliver clean energy to meet India's growing demands.

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What are the issues?

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- **Cost** - Compared with solar power tariffs nuclear energy appears prohibitively expensive.
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- This raised the question that why greater emphasis is not laid on meeting the challenging target for solar or wind power, which collectively account for 10 per cent of power generation
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- **Imports** - Indian nuclear power plants are heavily dependent on uranium imports.
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- Since 2008 India has emerged as one of the largest uranium importers.
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- Owing to unstable uranium supply, nuclear power generation has fallen well short of target.
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- This raises the question why India does not hasten the transition to thorium, the globally recognised alternate fuel to uranium.
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- India has the world's largest thorium deposits and a quarter of global reserves.
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- It appears, the Bhabha Atomic Research Centre is in the final stages of developing a thorium-based advanced heavy water reactor.
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- It would be useful to accelerate this process, turning the Make in India agenda into a reality and reducing fuel costs sharply.
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Source: Business Standard

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