

Nuclear Power : An inevitable option for sustainable development

**Anil Kakodkar,
Chairman, Atomic Energy Commission, India**

IAEA Scientific Forum 2007 on Global Challenges and
Development of Atomic Energy, Vienna

September 18-19 , 2007

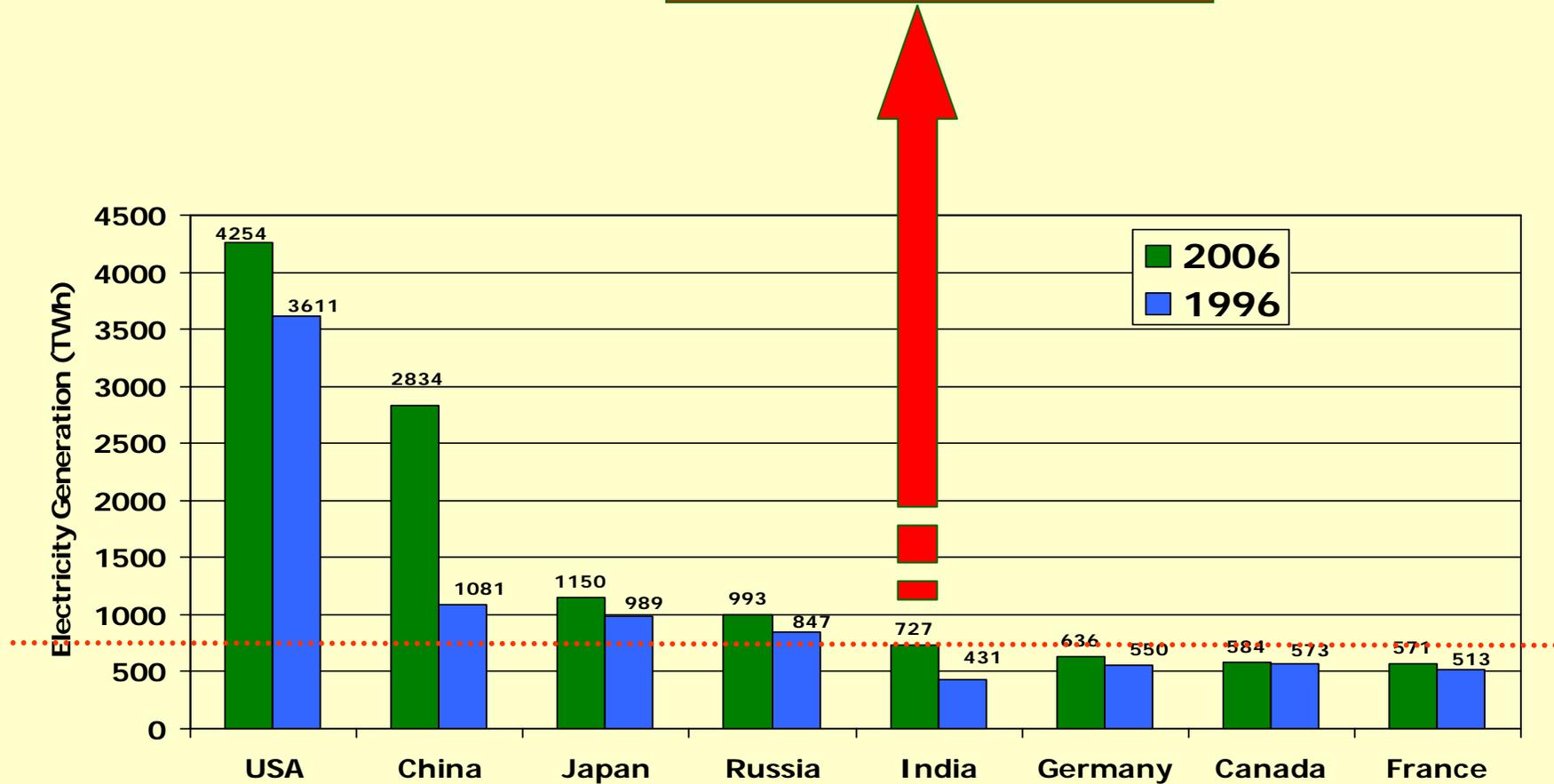
Evolving paradigm

- **Greater confidence in developing societies moving up on the socio-economic development path**
- **Vastly enhanced energy demand and buying power**
- **Sustainability of energy resources (even Uranium in once-through mode inadequate)**
- **Global environment on the cliff edge**

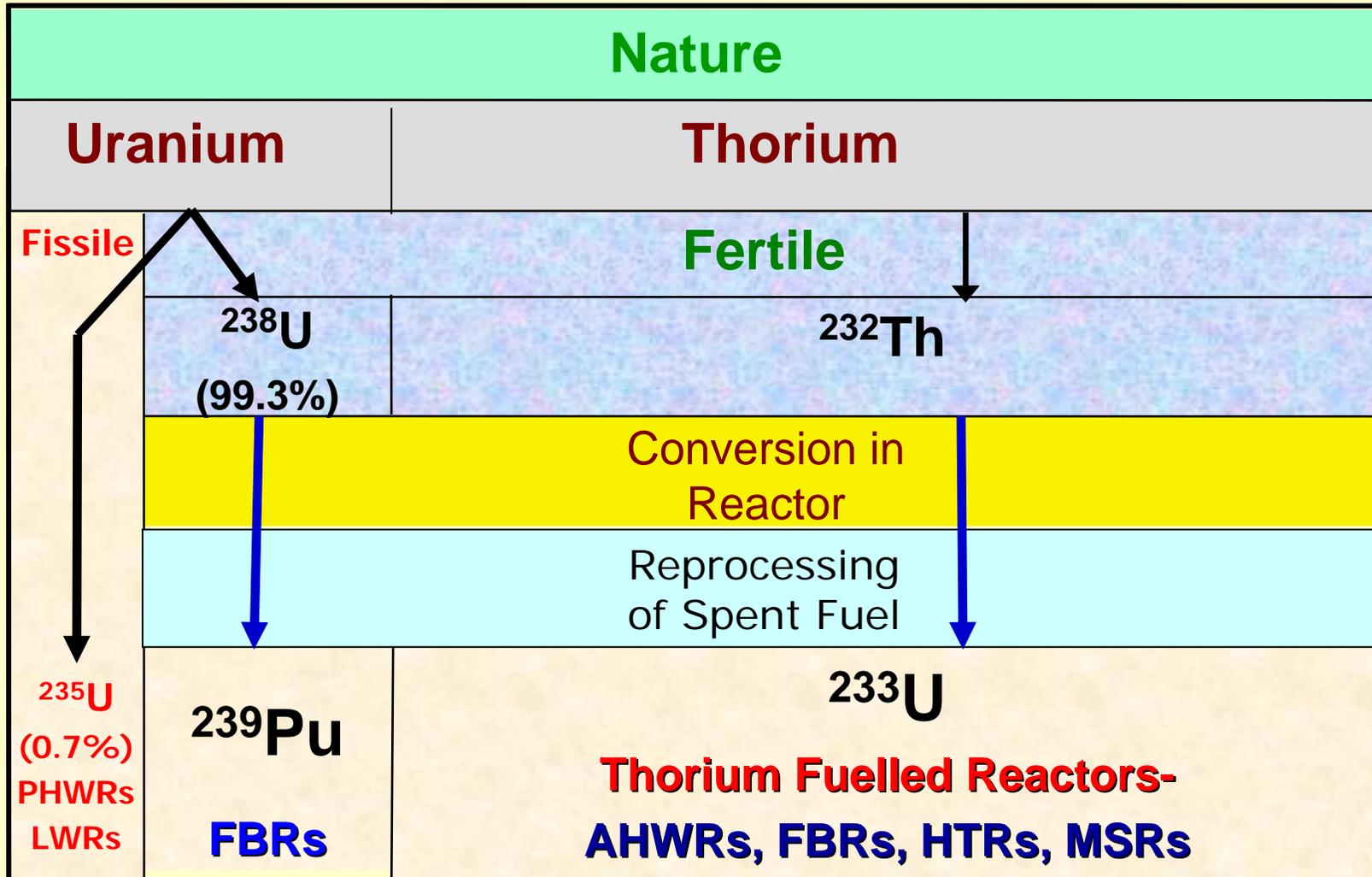
Indian target - in global context

(Source of data: BP Statistical Review of World Energy 2007)

Target: 7000 TW(e)h +
Requirement for fossil
fluid fuel replacement

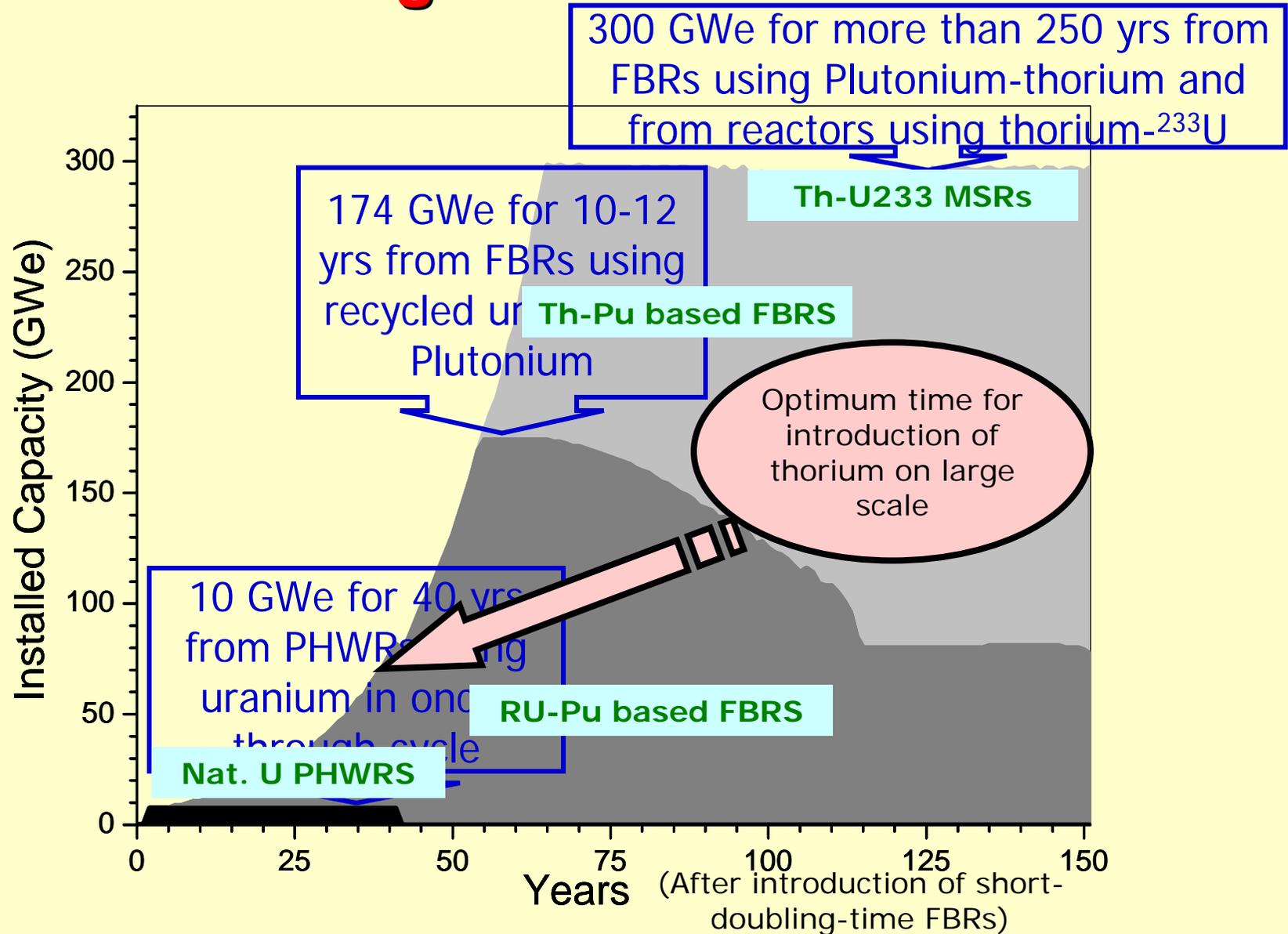


The pathways for utilisation of nuclear fuel resources



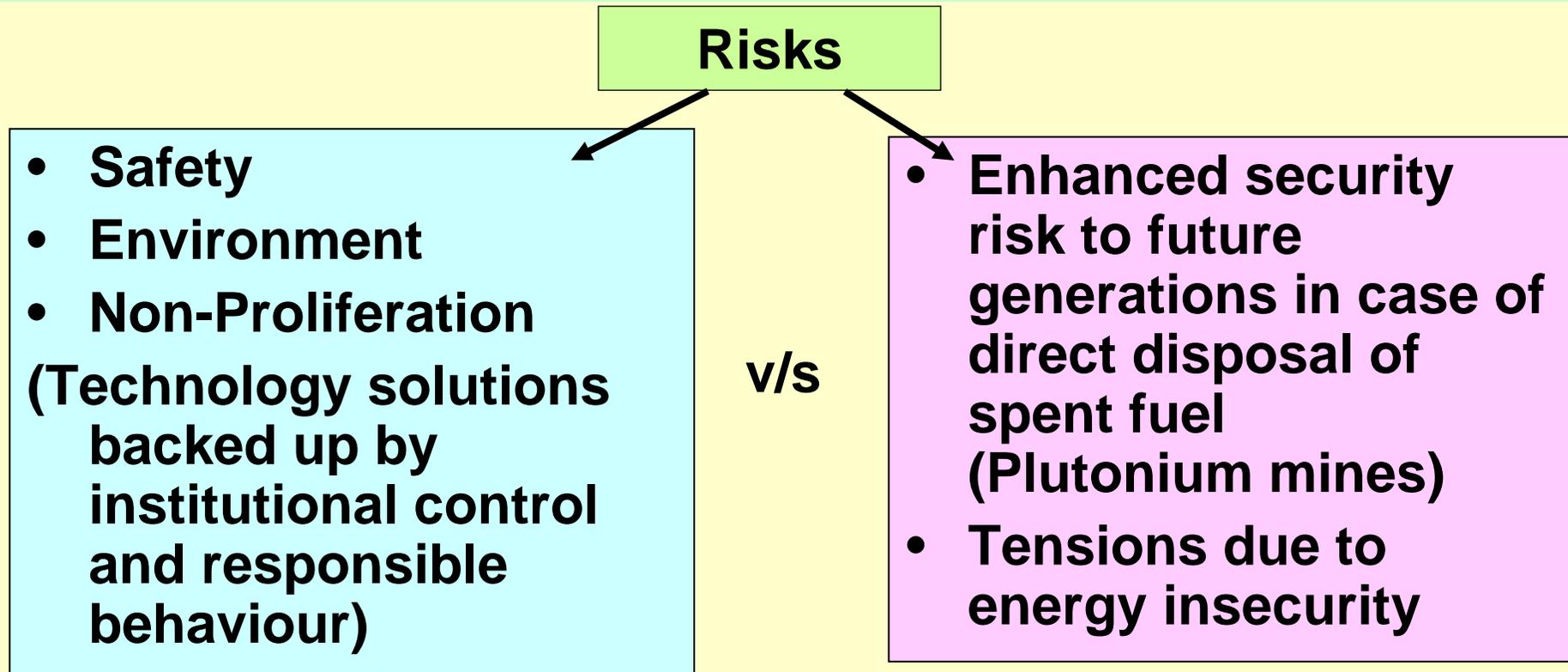
- Thorium cannot straightway be used as nuclear fuel as it has no fissile isotopes.
- Fast Breeder Reactors operating with Plutonium as fuel, produce more Plutonium than they consume.

Development of an optimum strategy for utilisation of given nuclear resources



Global Nuclear Renaissance

- Reformation of global thinking necessary
- Consensus on closed nuclear fuel cycle



However, inclusive partnerships on objective, reliable and predictable basis with holistic mutual understanding and trust is a pre-requisite

Thank You