

Ten Essential Facts about Thorium

1. Thorium is a naturally occurring, slightly radioactive metal, and it has been considered as an alternative nuclear fuel to uranium.
2. Unlike uranium, thorium is non-proliferative: The key advantage of the thorium fuel cycle is that it does NOT produce plutonium and is non-proliferative for that reason.
3. The energy contained in one kilogram of thorium equals that of four thousand tons of coal.
4. The energy stored in the earth's thorium reserves is thought to be greater than that available from all other conventional (fossil) and nuclear fuels combined.
5. Thorium is cheaper and more abundant than uranium (approx three times more abundant in the Earth's crust than all forms of uranium combined).
6. The thorium fuel cycle produces less radioactive waste than uranium (1,000 to 10,000 times less than in conventional reactors).
7. Unlike natural uranium where only the 0.7% sliver of isotope 235 is fissionable, thorium is fully used in the fuel cycle.
8. Unlike uranium, thorium can burn plutonium waste from traditional nuclear reactors with additional energy output.
9. Unlike uranium, thorium is not suitable for the production of weapons-grade materials.
10. Global reserves of thorium (India, Australia, Norway and the U.S. possess the largest reserves) could cover the world's energy needs for thousands of years.