1. Fusion: Combination reaction of atomic particles.

2. Fission: Forced splitting of atomic particles

3. Half-life: Stabilization of molecules by splitting. It can be defined as natural (slow) fission.

The most important factors that make nuclear energy important: 1 kg nuclear fuel contains hundred time more energy than a chemical fuel at the same amount does, there are enough radioactive fuel to last for thousands of years, and it is not environmentally hazardous as much as others apart from radioactive waste.

Nuclear energy remains a serious option which is emphasized persistently by planners in developed and developing countries. Despite all opposing views, tendency to nuclear plants increases in the world.