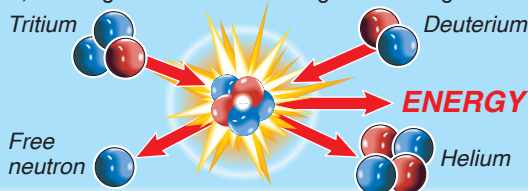


# Energy for the 21st century

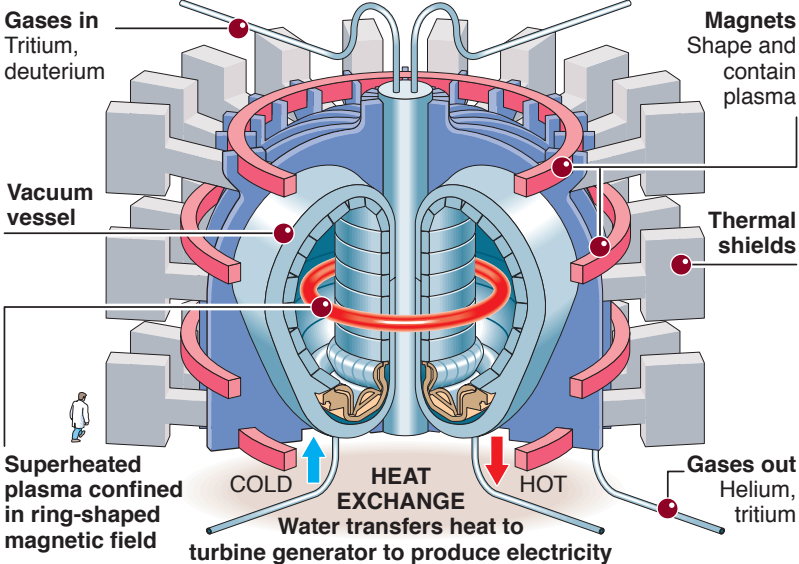
**Nuclear fusion – the process by which the sun produces heat and light – could provide an almost limitless source of energy with no damage from greenhouse gases or acid rain**

Hydrogen ions fuse at 10-15 million degrees C in sun's core, creating helium and releasing heat and light



## CREATING NUCLEAR FUSION ON EARTH

Fusion occurs at useful rate only at temperatures of over 100m°C – created by passing huge current through gases and turning them into ionised plasma



**FUEL SUPPLY:** Ingredients for nuclear fusion are clean and almost inexhaustible

### Deuterium

Hydrogen ion easily derived from water. Supplies would last indefinitely



### Tritium

Hydrogen ion created in fusion process



### Lithium

Metal needed for production of tritium – known reserves of at least 1,000 years



### WASTE

Non-polluting helium is main by-product.

**Small quantity of radioactive waste will be safe to handle within 50-100 years**

