

Department of Nuclear Energy

For TC Europe
Vienna – 29 May 2009

Alan McDonald



IAEA

International Atomic Energy Agency

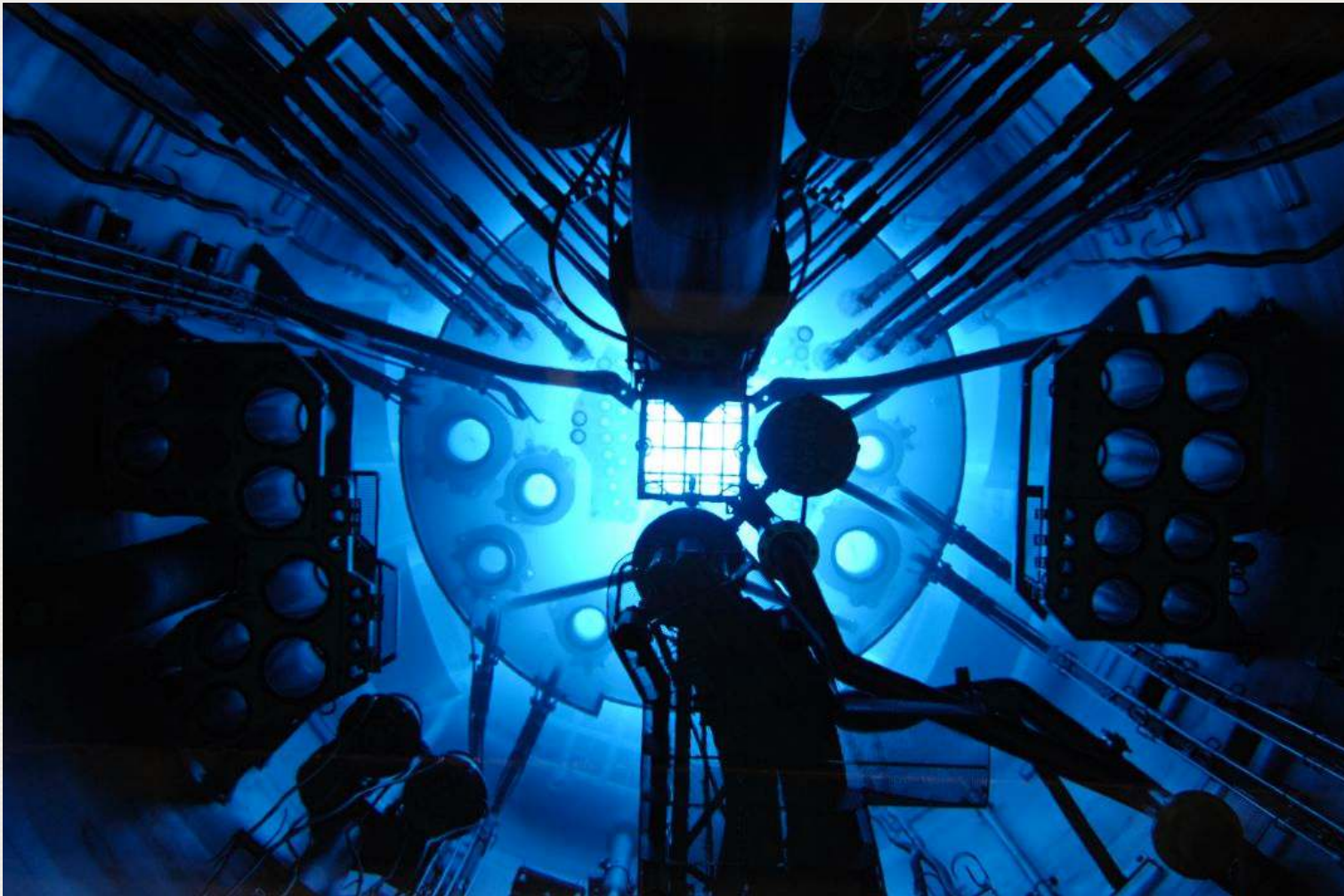
Dept. of Nuclear Energy

- “The Agency shall seek to accelerate and enlarge the contribution of atomic energy to peace, health and prosperity throughout the world.”

Nuclear Power



Research Reactors



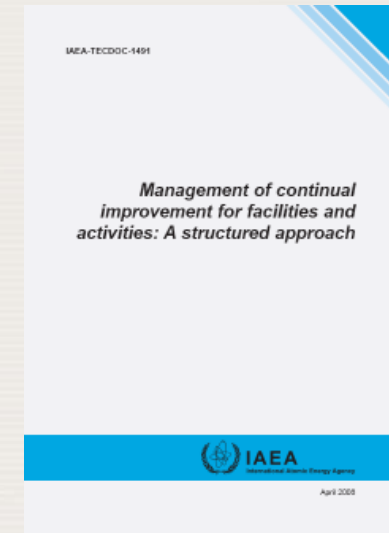
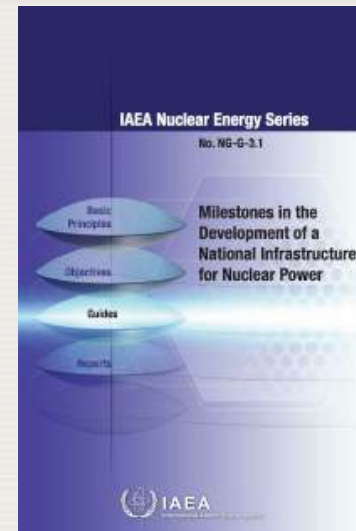
Waste: technical incl. non-power



Planning, Information, Knowledge



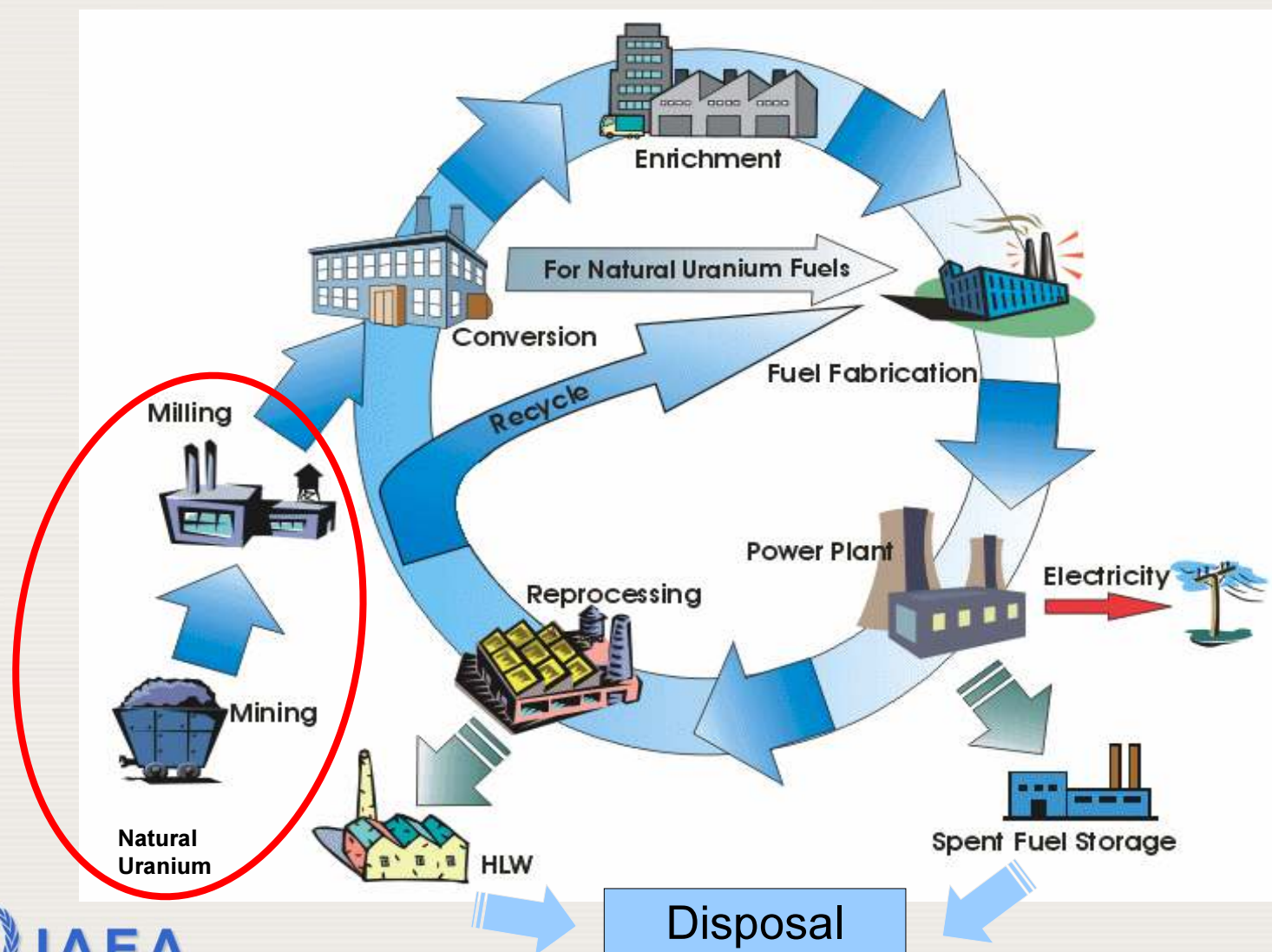
Products



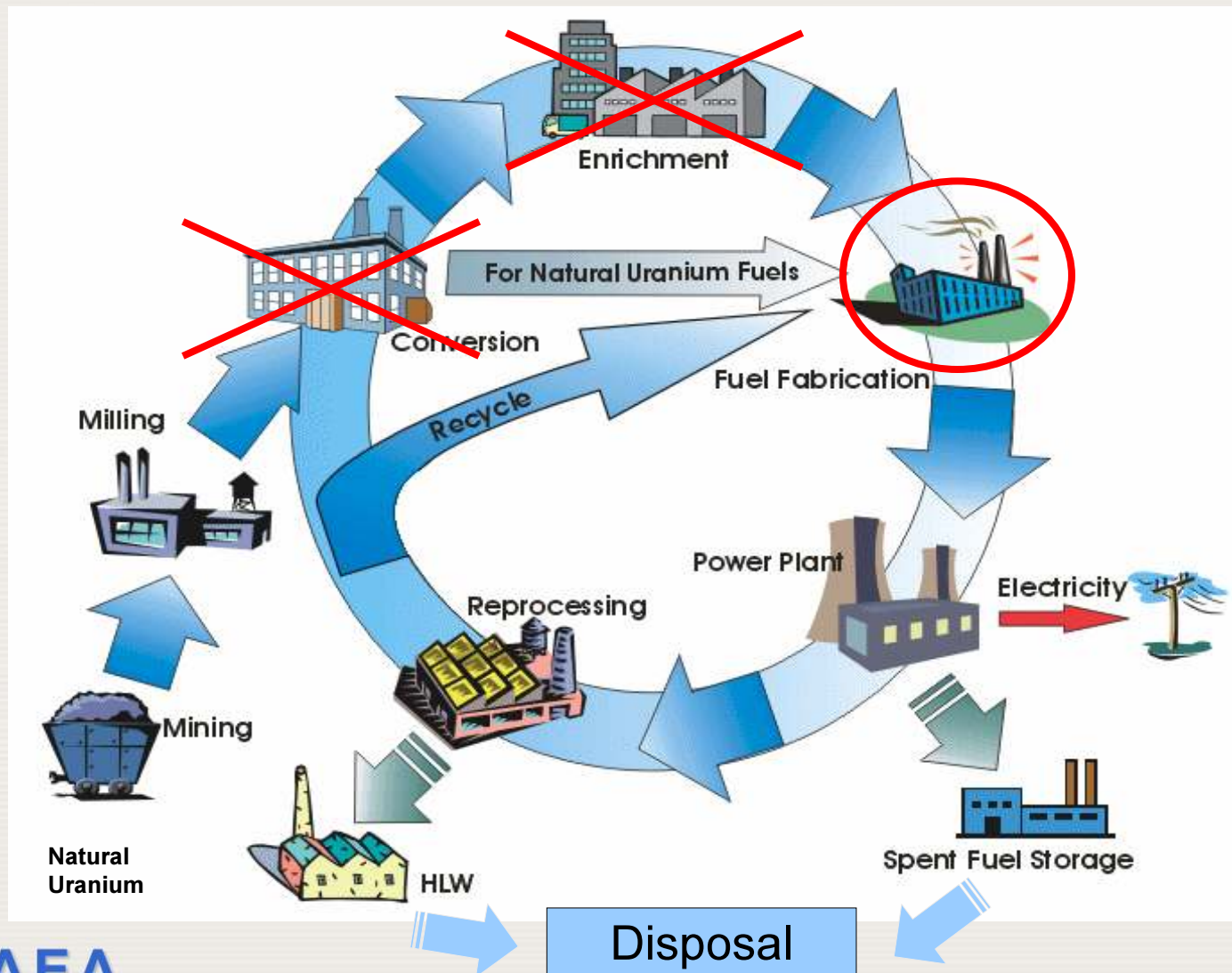
Planning, Information, Knowledge



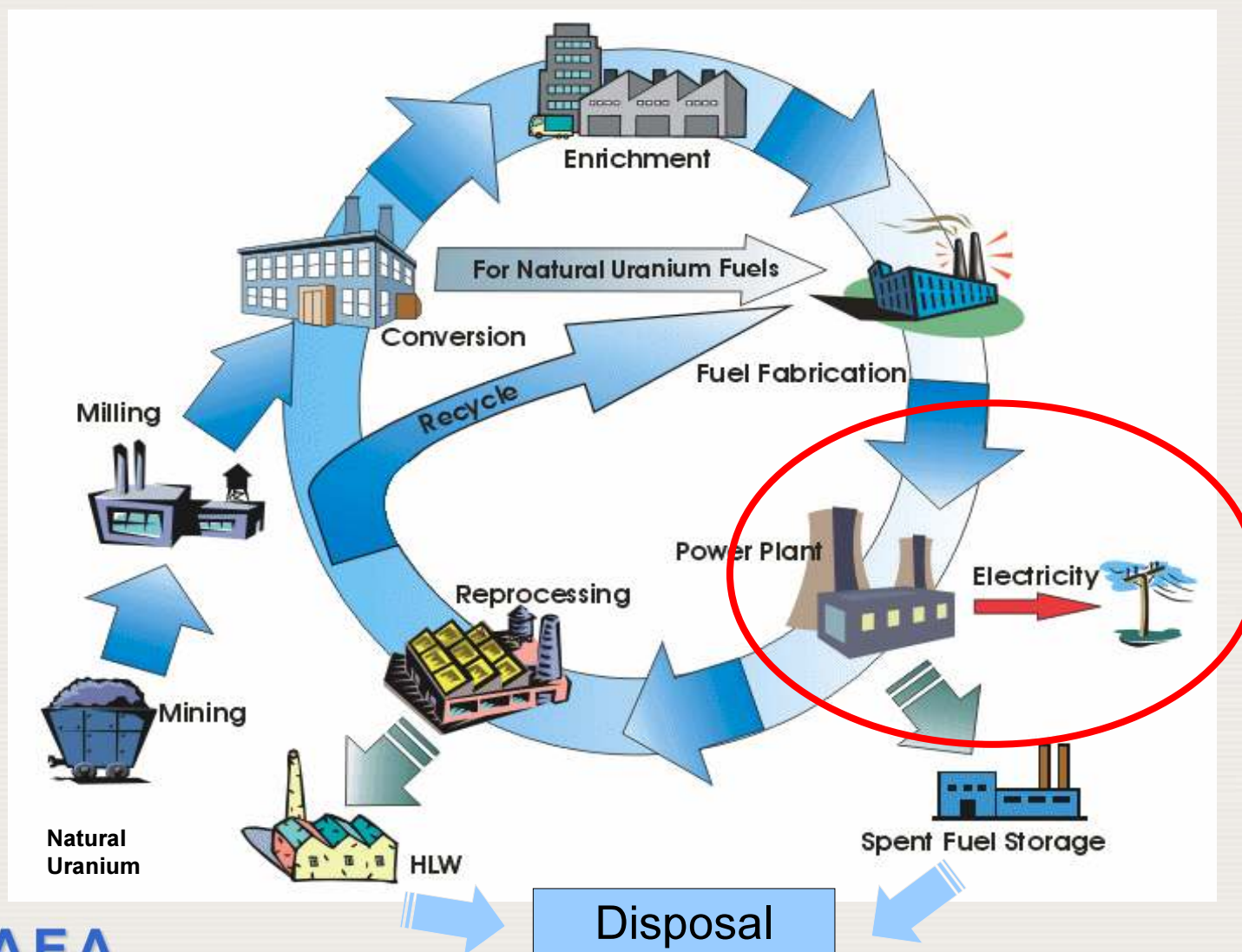
Nuclear Fuel Cycle



Nuclear Fuel Cycle



Nuclear Fuel Cycle



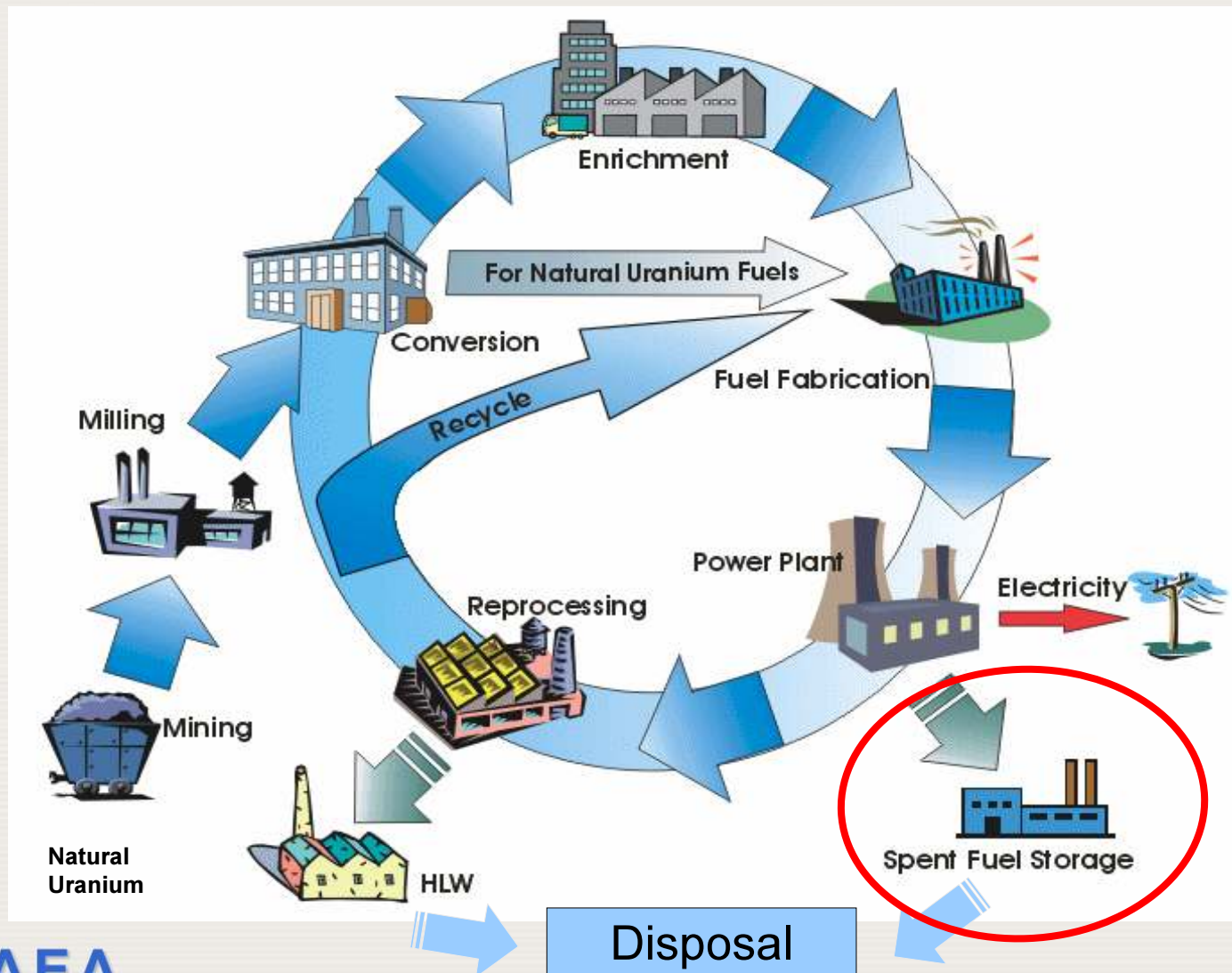
Milestones

Issues	Ready to make a knowledgeable commitment to a nuclear programme	Ready to invite bids for the 1 st nuclear power plant	Ready to commission and operate the 1 st nuclear power plant
1.			
...			
19.			

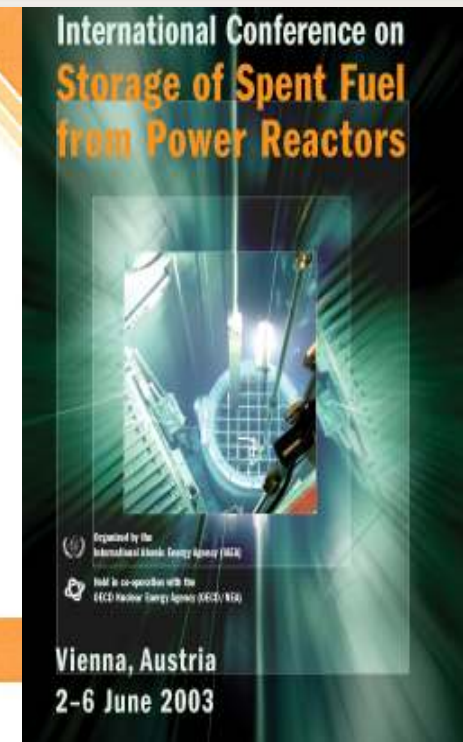
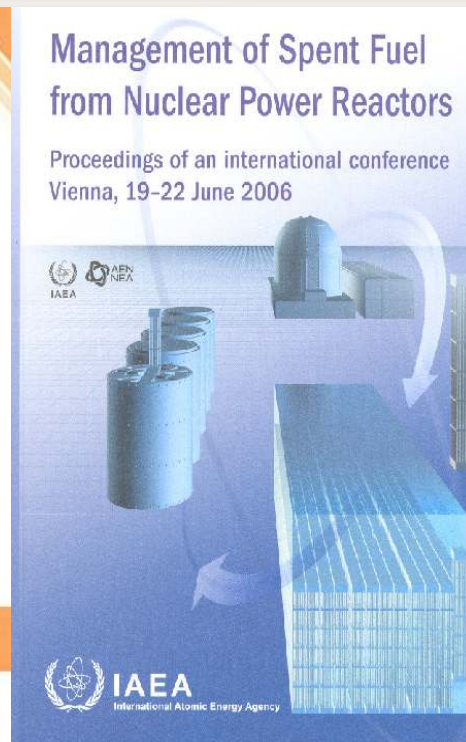
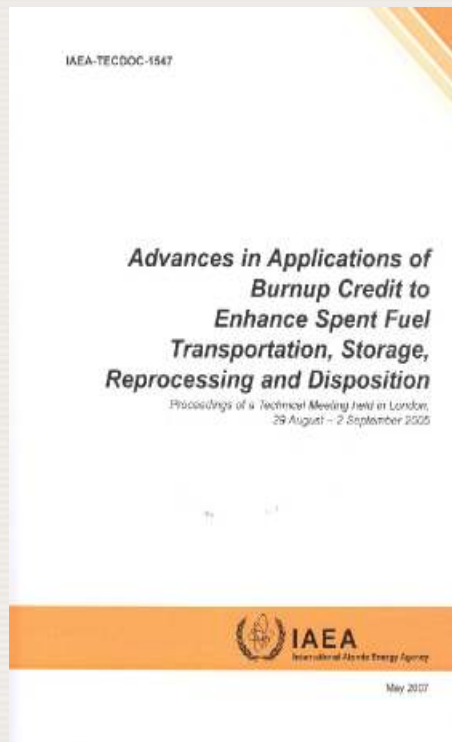
Issues

- National position
- Nuclear safety
- Management
- Legislative framework
- Regulatory framework
- Financing
- Human resource development
- Safeguards
- Security and physical protection
- Emergency planning
- Radiation protection
- Nuclear fuel cycle
- Nuclear waste
- Environmental protection
- Site and supporting facilities
- Industrial involvement
- Procurement
- Electric grid
- Stakeholder involvement

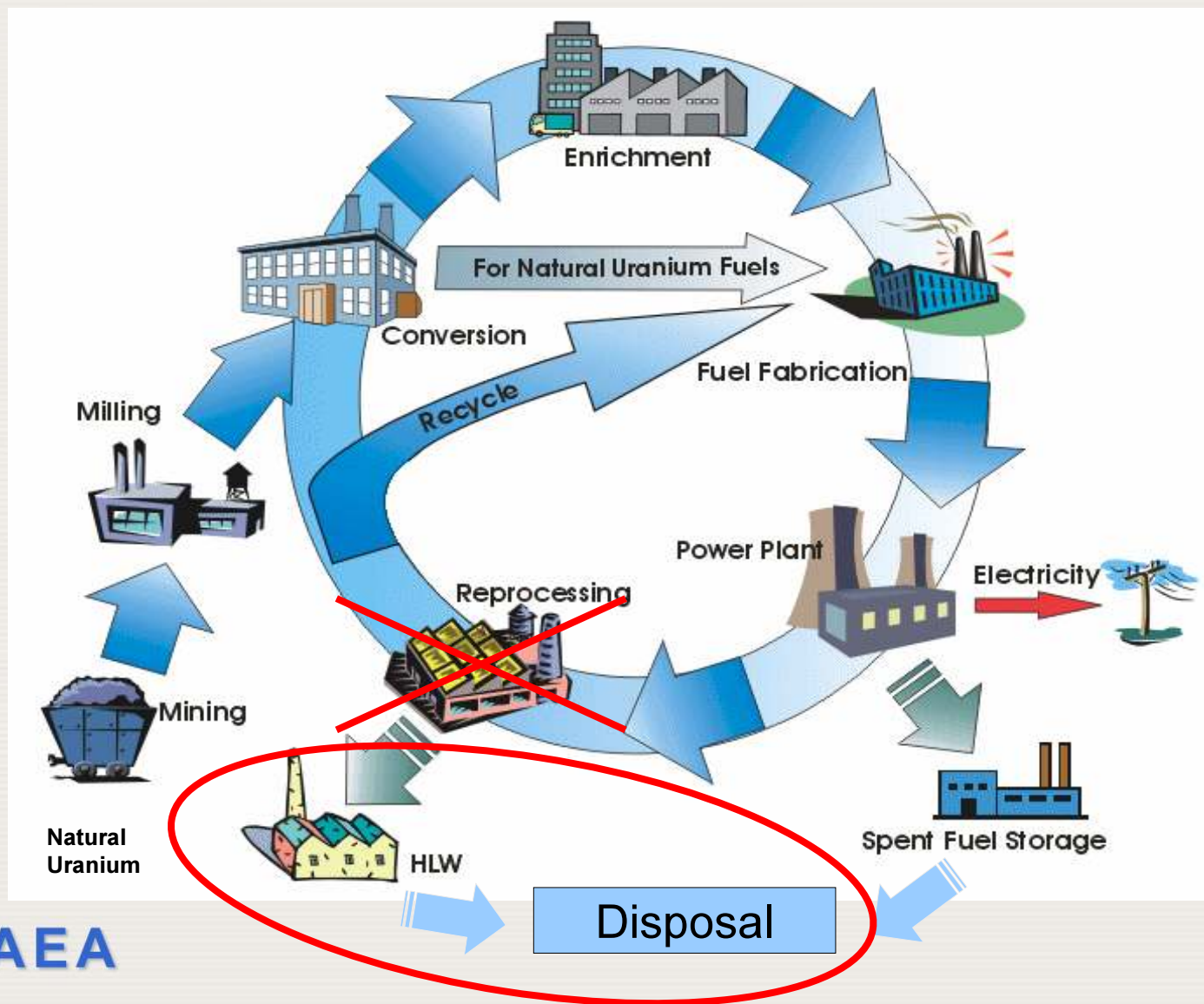
Nuclear Fuel Cycle



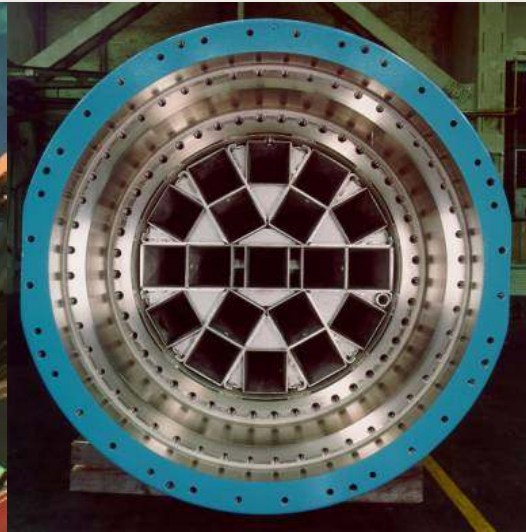
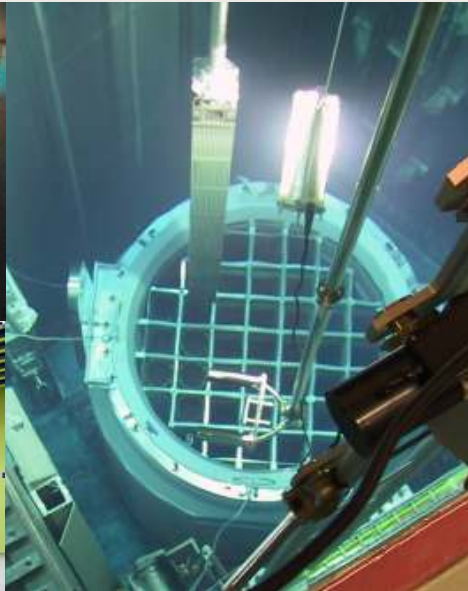
Spent Fuel



Nuclear Fuel Cycle



Spent Fuel



Deep geological disposal



Recovery of cobalt source, Thailand



Borehole disposal (BOSS)



Research reactor fuel repatriation



IAEA



...atoms for peace.