

The IAEA & HEU Take-back Operations

More than half of all the 245 operational research reactors worldwide are still fuelled with high-enriched uranium (HEU). This is considered a high-risk material since it can also be used in the making of a nuclear explosive device. In conjunction with the US Global Threat Reduction Initiative programme, the IAEA works with its Member States both to return the fresh or spent fuel to the countries of origin and to convert their research reactors to low-enriched uranium (LEU) fuel, which does not pose a proliferation risk. The final goal of these 'take-back' efforts is to reduce and eventually eliminate HEU from international commerce.

The IAEA has so far facilitated similar shipments from Serbia, Romania, Bulgaria, Libya, Uzbekistan, Czech Republic, Latvia, Poland and Vietnam. This is being done through an IAEA Technical Cooperation project that runs with extra-budgetary funding from the US Department of Energy's National Nuclear Security Administration.

The latest shipment from the Czech Republic was the fifth spent HEU fuel shipment and altogether the eighteenth take-back mission of both spent and fresh HEU fuel. It brought the total amount of repatriated spent fuel to 590 kg.