

## RECYCLING AMERICIUM & PLUTONIUM



Power for space applications



Medical devices (eg pacemakers)



Smoke detectors



Valuable commodity chemicals

December 2020

## RECYCLING CONSTRUCTION MATERIALS

Concrete from decommissioned nuclear facilities can be recycled for use as a road base



Metal waste from nuclear applications can be recycled for use in the car industry

## CIRCULAR ECONOMY & THE NUCLEAR INDUSTRY

### RECYCLING NUCLEAR WASTE

## SEPARATION TECHNOLOGIES

The sector has developed & implemented technologies which enable the separation of different types of waste



Thanks to these waste separation technologies **the industry is capable of recycling much greater volumes** of the waste which it generates

## IMPLEMENTATION OF CLEARANCE

Measures the radioactivity or contamination of the waste

Enables clearance of materials which are not contaminated

And these can then go for uncontrolled recycling!



## INNOVATION

Research is currently ongoing into converting carbon-14 into diamond batteries



Thanks to their extremely long life they could be used in healthcare, spaceflight, and research in extreme conditions.