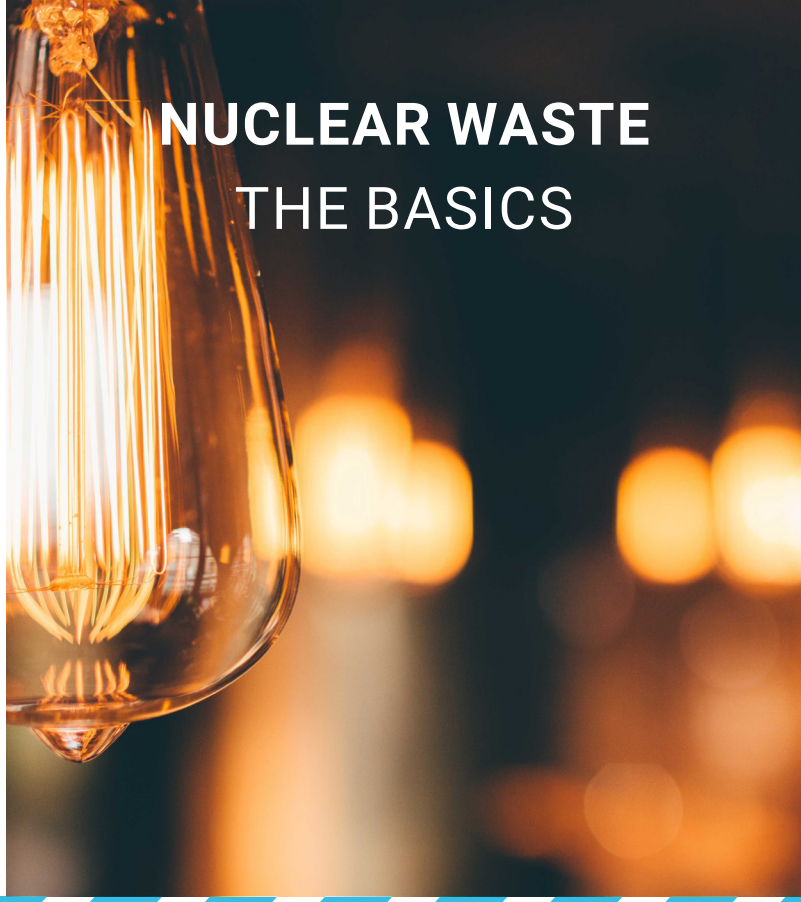
FORATOM
THE VOICE OF THE EUROPEAN NUCLEAR INDUSTRY

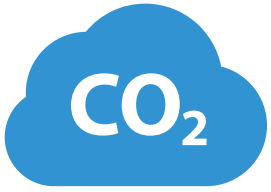
NUCLEAR WASTE
THE BASICS



NUCLEAR IS LOW-CARBON

NUCLEAR IS A LOW CARBON SOURCE OF ELECTRICITY, EMITTING:

- 3 times less CO2 than solar energy
- 30 times less CO2 than natural gas
- and 65 times less CO2 than coal



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TAKING RESPONSIBILITY

THE NUCLEAR INDUSTRY TAKES FULL RESPONSIBILITY FOR ITS WASTE

- It ensures the correct handling and full traceability of all the waste it generates.
- The waste is managed to make sure that it does not pose a risk to people and the environment
- It applies the polluter pays principle

WASTE RECYCLING

MOST OF THE WASTE GENERATED IS RECYCLED

At the end of its life, most of the waste generated by a nuclear site can be recycled as it is construction waste.

Only 10-15% of the buildings and material from a typical nuclear power plant are considered as nuclear waste at the end of its life.

WASTE GENERATION

- A nuclear power plant generates much lower volumes of waste by quantity of electricity produced when compared to other energy sources.
- One 1000 MW nuclear reactor produces about 27t. of radioactive waste a year, compared to 400,000t. of ash and 10,000t. of sulphur from a coal power plant.
- Estimates suggest that by 2050, there will be 43 million tonnes of wind turbine blade waste worldwide
- Worldwide solar PV waste is estimated to reach around 78 millions tonnes by 2050

NUCLEAR WASTE & SPENT FUELS ARE ALSO A RESOURCE!

- Concrete from decommissioned nuclear facilities can be recycled for use as a road base.
- Radioactive waste can be recycled in medical applications (eg pacemakers).
- Spent fuel can be used to produce new fuels.
- Plenty of useful radioisotopes could be recovered from spent fuel for further use in the space industry, metallurgy, geological research, etc.