

Waste

Tonnes of waste generated by a 1,000 MW power station every year

Coal

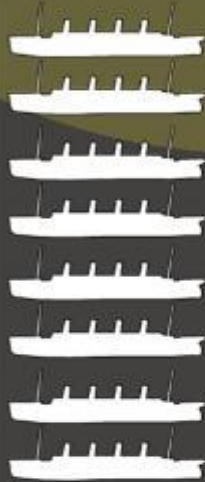
400,000

(tonnes of ash)

Nuclear

27

One coal-burning power station pumps out about **eight Titanic's** worth of ash every year



One coal power station will also produce:

- 3.7million** tonnes of carbon dioxide (greenhouse gas)
- 10,000** tonnes of sulphur dioxide (acid rain)
- 10,200** tonnes of nitrogen oxide (smog)
- 720** tonnes carbon monoxide
- 77kg** of mercury (highly toxic)
- 100kg** of arsenic
- 52kg** of lead

Fossil fuels also contain radioactive material...

Radioactive waste

Tonnes of radioactive waste generated by a 1,000 MWh power station every year

Nuclear

27

Coal

18

Chernobyl

7

The worst accident in the history of nuclear power, Chernobyl, released about seven tonnes of radioactive material into the atmosphere

Unlike radioactive waste from Nuclear power stations, which is stored in controlled conditions, most of the radioactive waste from coal burning power stations is released into the **atmosphere** among the clouds of ash

It has been estimated that during 1982, coal burning in America released **155 times** more radioactive material into the atmosphere than was released during the partial nuclear melt-down at **Three Mile Island** in 1979

On average, coal-burning power stations release **100 times more radiation** into the atmosphere than a nuclear plant producing the same energy

Globally, coal-powered stations release **12,000 tonnes** of the radioactive element, **thorium** and **5,000 tonnes** of **uranium** into the atmosphere every year

People living next coal-burning power stations are exposed to the **same, or higher,** levels of radiation as those living next to nuclear power stations

Graphic: **BEN GILLILAND**

Sources: *The Lancet*, Paul Scherrer Institut, International Energy Agency, Oak Ridge National Laboratory, UN, WHO, www.world-nuclear.org