



ISSDC

Cemeteries
& Crematoria

Discover what's beneath.

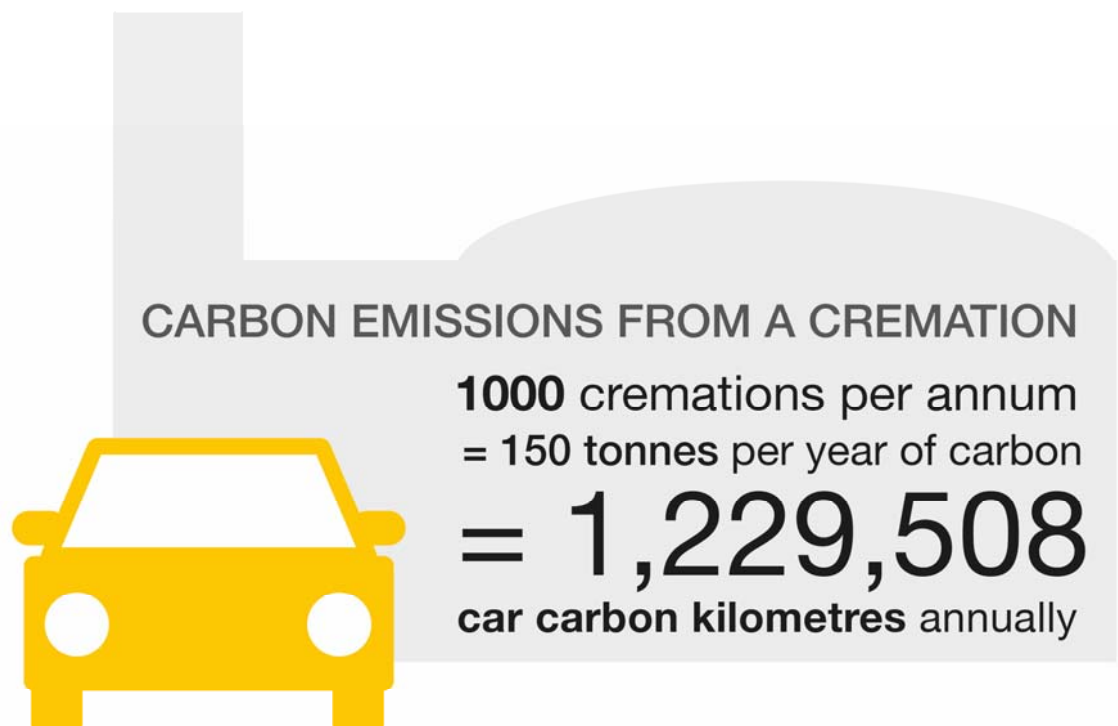
Gas, Granite and Groundwater

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Part of the CDS Group

GAS – cremation and the carbon crisis



GAS – cremation and the carbon crisis

- In 2018 in the UK there were 481,712 cremations
- Each cremation produces on average 150kg of CO₂ from gas consumption
 - = **72,256** tonnes of CO₂ PA
 - = **592,268,852** carbon car kilometres (14,807 times around the world)

- = **272,045 kg (NOX)** PA from chipboard coffins
- = **1,787,159,227** car kilometre equivalents of NOX (44,680 times around the world)

GAS – cremation and the carbon crisis

- Electric cremation using zero carbon energy from sustainable sources will reduce carbon production from fuel consumption by **100%**!
- The remaining carbon is resultant from the body and the coffin, approximately 40kg.



Granite carbon

Discover what's beneath.

BLACK
GRANITE
IMPORTED
HEADSTONES

680 tonnes
of granite headstones
in 10 acres

=

282 tonnes
of carbon

=

2,311,475

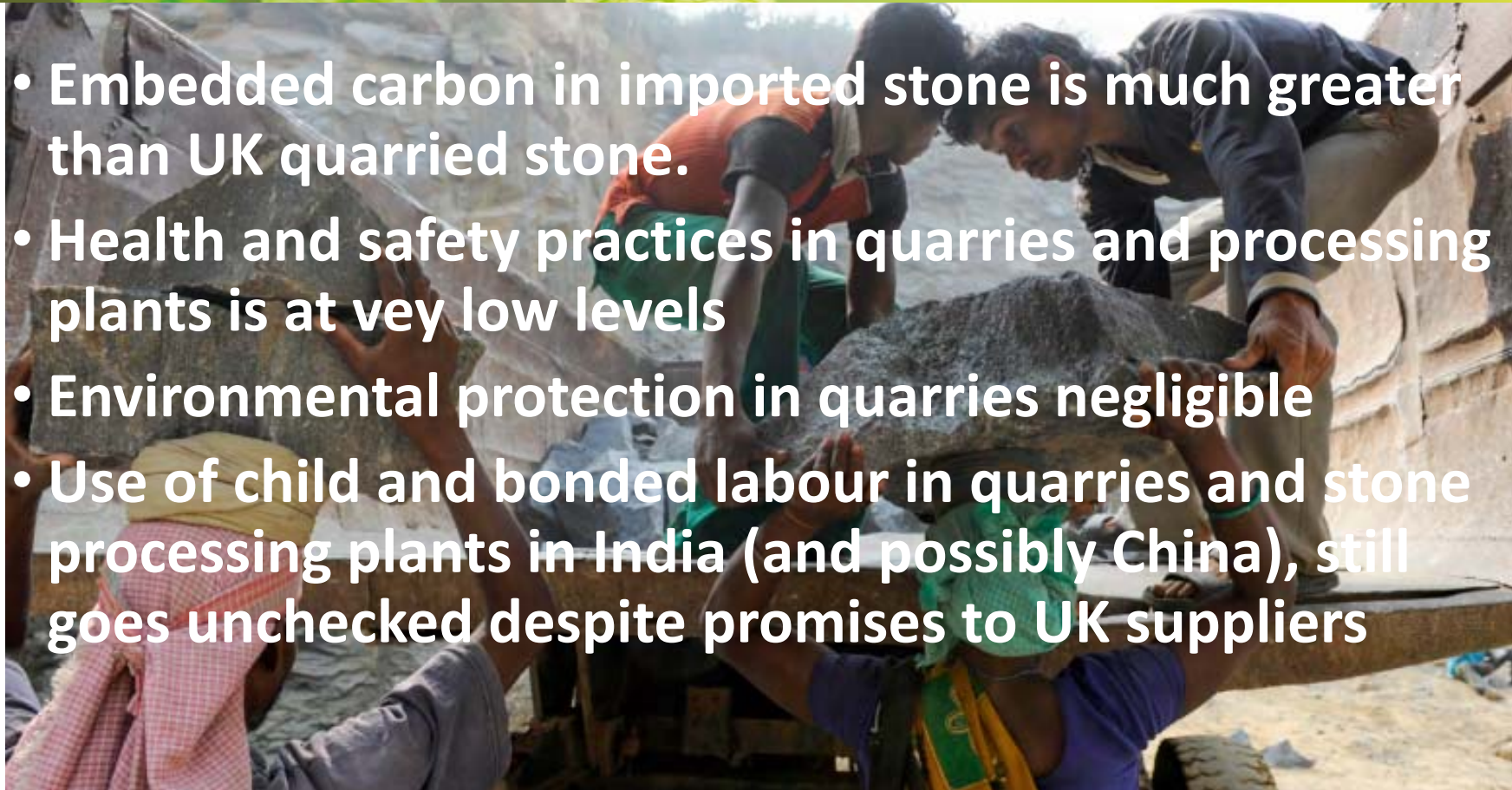
carbon kilometres for
an average family car



- In the UK it is calculated that there is **6,079 tonnes** of embodied carbon through the use of granite memorials for burial annually.
- To sequester this amount of carbon, requires **4,600** acres of mature trees.
- Or approximately **99,000** acres of saplings

Granite carbon

- Embedded carbon in imported stone is much greater than UK quarried stone.
- Health and safety practices in quarries and processing plants is at very low levels
- Environmental protection in quarries negligible
- Use of child and bonded labour in quarries and stone processing plants in India (and possibly China), still goes unchecked despite promises to UK suppliers



Groundwater-protection

- Cemeteries discharge the chemical remnants of their embalmed dead and the treatment of their coffins not just in the short timeframes of body decomposition, but long after the cemeteries closure.
- In groundwater toxins may come from;
 - Natural decay
 - Embalming
 - Coffins

Groundwater-protection

- Natural decay

NITROGEN IN THE BODY

Approx **2 kg** per body
assume 16,000
burials in 10 acres =
32 tonnes of nitrogen =
sufficient to fertilise
392 acres of wheat



Groundwater-protection

- **Embalming Fluid**
- Safety data sheet

Skin Sens. 1;H317	May cause an allergic skin reaction.
Muta. 2;H341	Suspected of causing genetic defects.
Carc. 1B;H350	May cause cancer.
STOT SE 2;H371	May cause damage to organs. Specific Target Organs: (Not Available)
Aquatic Chronic 2;H411	Toxic to aquatic life with long lasting effects.

2.2. Label elements

Using the Toxicity Data listed in section 11 and 12 the product is labeled as follows.

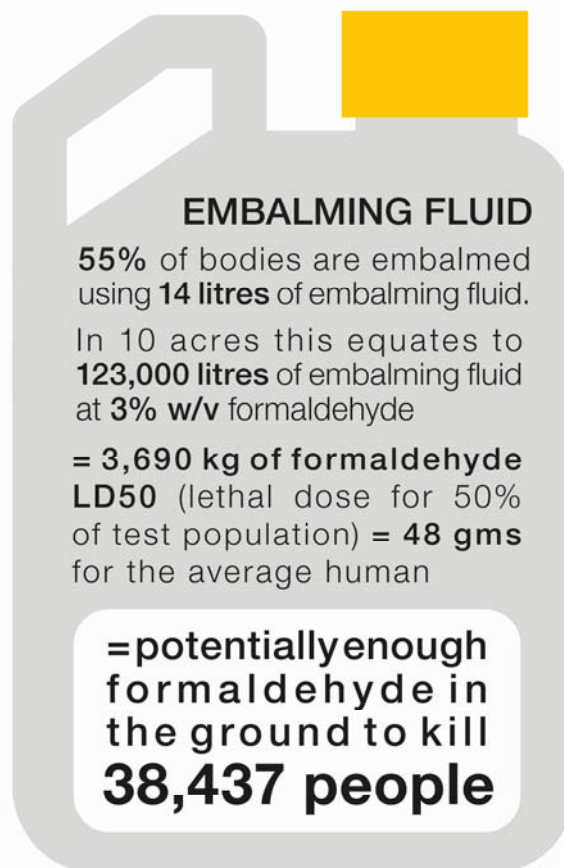


Danger

H226 Flammable liquid and vapor.
H302 Harmful if swallowed.
H312 Harmful in contact with skin.
H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H332 Harmful if inhaled.
H341 Suspected of causing genetic defects.
H350 May cause cancer.
H371 May cause damage to organs.
H411 Toxic to aquatic life with long lasting effects.

Groundwater-protection

- Embalming



Groundwater-protection

- Coffins
- **Melamine-urea formaldehyde (MUF) resin used as the bonding agent.**

CHIPBOARD/MDF COFFINS

Assuming most coffins are constructed from Chipboard/MDF:

42,000m²

of Chipboard/MDF would be used in a 10 acre cemetery

196,779 trees
felled for UK
chipboard
coffins PA

**= that's
four rugby
pitches**



**OUR WORLD
OUR FUTURE
OUR CHILDREN
OUR CHOICE**

A high-resolution image of Earth from space, showing the Western Hemisphere. The Americas are visible, with North America in the upper left and South America in the lower right. The Earth is set against a deep blue background filled with numerous bright stars. The text "YOUR DECISION!" is overlaid in a bold, red, sans-serif font across the center of the planet.

YOUR DECISION!



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THANK YOU

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