



How can the funeral industry achieve net zero?

An analysis of 16 different types of coffins and a multitude of accessories and packaging options; four final disposal options in the UK, and how these affect air, water and land over a period of time.



IN 2022, THE FUNERAL
ACTIVITIES INDUSTRY

Was the **UK's 1st ranked**
'other services' industry
by market size.



The role of the funeral industry in the net zero transition

As more people become environmentally conscious, there is growing interest in understanding the greener choices available for end-of-life arrangements. As one of the key industries in the UK - worth £2.7bn (Ibis World, February), the funeral industry can have a significant impact on the UK's overall carbon footprint.

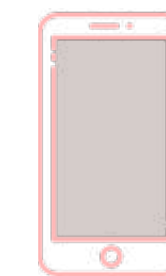
It therefore has a key role to play in meeting the UK Government's Net Zero target by 2050. This presents an imperative to commit to better understand the impact of current practices and the opportunities technology and other innovations can offer, both from the perspective of managing funeral operations, as well as the variety of options available to those seeking to arrange a funeral.

While some organisations advertise information about the environmental impact of certain options on offer, there has been no independently funded, expertly calculated data made publicly available, leaving the industry and customers with little support.

Thanks to community-funded research, we now have access to data that can help people and funeral directors when making these complex decisions.

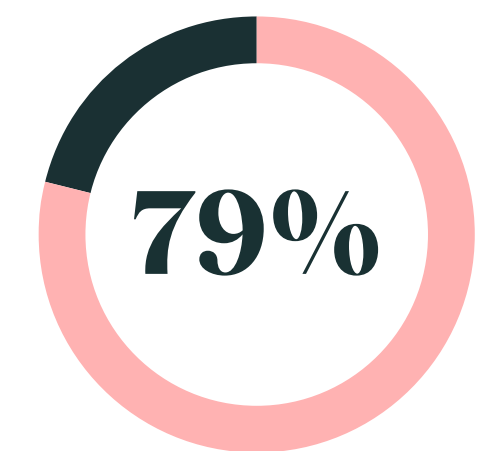
As a funeral care business, your impact on the environment depends on multiple factors including how you run your operations, the sustainability practices and credentials of your suppliers and the funeral choices made by the people you support.

The estimated **carbon** emissions per funeral in the UK can amount to **400kg** of CO₂e



That's equivalent to charging more than **48,000 smartphones**.

Cremation was chosen by **79%** of people in the UK in 2020.



44%

That's a **44%** increase in cremations over the last 60 years.



About the research

The research was carried out after a successful crowdfunding exercise, with interest from the community and industry. Supported by Planet Mark to carry out the relevant carbon emissions assessments and enlist the expertise of LCA (Life Cycle Analysis) professionals, we then proceeded to assess two key elements of the funeral process: the impact of different coffin materials and body committal/disposal options.

We acknowledge the research is limited, due to the lack of available data in terms of what happens to coffins during cremation or burial for example. There is still much to be learned, however the results provide

the most transparent and independent data publicly available at the moment.

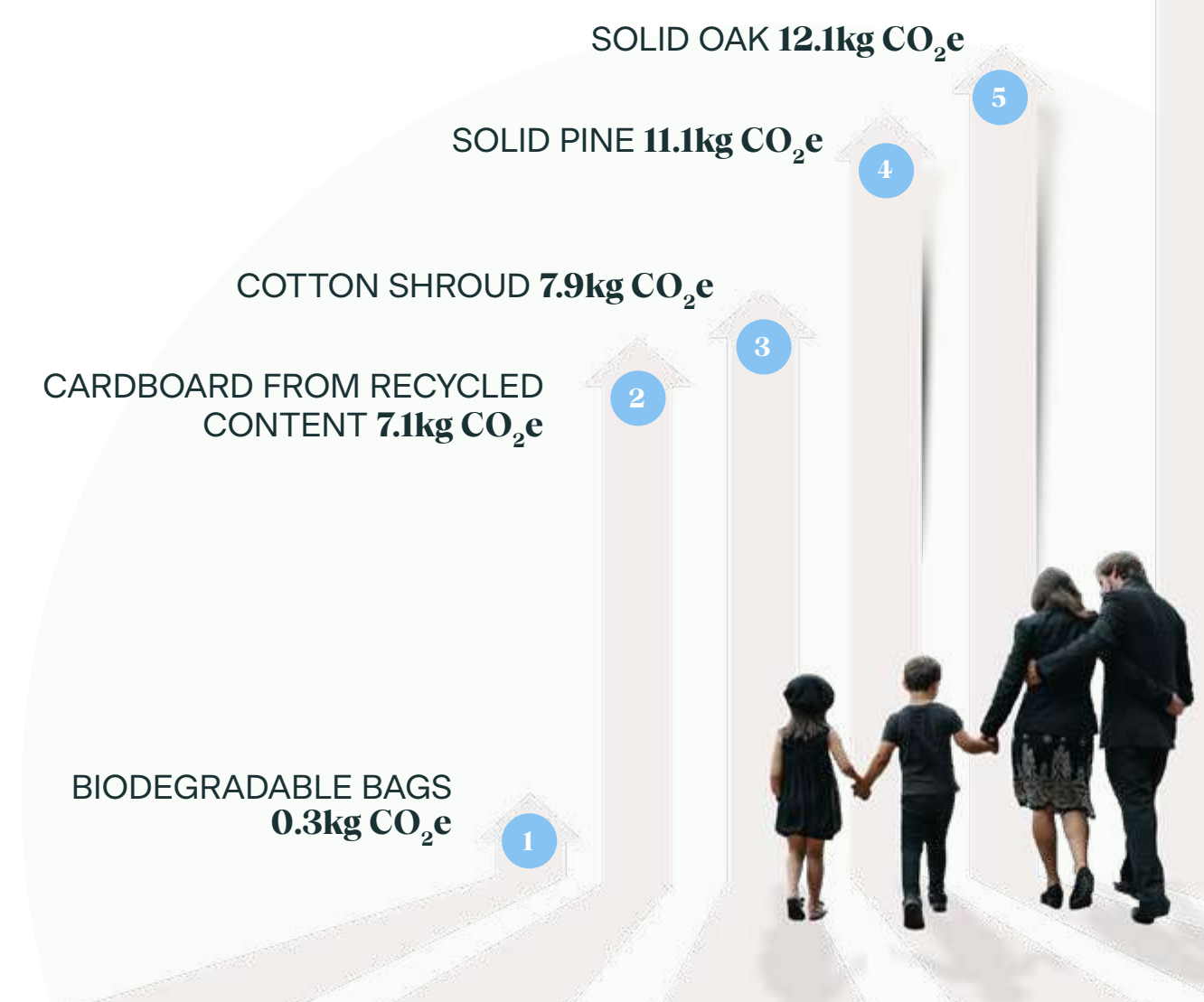
We believe our research provides a strong foundation for understanding the environmental impact of funerals. It is our hope that this will also inspire further research in other areas of the funeral process to provide even more precise and accurate data.

It is important to consider all aspects of a funeral, as every choice made can have a significant environmental impact, from the selection of coffins and body committal and disposal methods, to the impact of flowers, travel, headstones and ongoing visits to a memorial location.

1. Coffins

THE 5 MOST SUSTAINABLE COFFIN OPTIONS, ANALYSED

Traditional coffins are often made from materials that are not sustainable, such as hardwoods, metals, or plastics. However, there are several more **sustainable options** available that can help reduce the environmental impact of burial.



- ### Other coffin options available
- 6 Wooden Shroud (100% sheeps wool) | **13.2kg CO₂e**
 - 7 Woollen Textile with cardboard sides & MDF base | **14.9kg CO₂e**
 - 8 Cardboard with MDF base | **15.3kg CO₂e**
 - 9 Bamboo from Vietnam | **23kg CO₂e**
 - 10 Wicker (British Willow) | **28.7kg CO₂e**
 - 11 Oak Veneer, Chipboard sides & base | **31.3kg CO₂e**
 - 12 Oak Veneer, Chipboard sides & MDF base | **31.6kg CO₂e**
 - 13 Elm Veneer, Chipboard sides & base | **32.4kg CO₂e**
 - 14 Vinyl wrapped MDF | **32.9kg CO₂e**
 - 15 Mahogany Veneer, Chipboard sides, MDF base | **37.3kg CO₂e**

2. Committal

OPTIONS FROM BEST
TO WORST

Second to **traditional burial and natural burial**, with a manually dug grave - resomation, also known as alkaline hydrolysis is considered least carbon intensive, sustainable option for the disposal of human remains.

However, it's important to keep in mind that other choices, such as travel, memorial location, use of renewable energy (for **cremation**) can affect overall emissions. For a more thorough breakdown, download our full report.

High
CO₂e

Natural gas cremation

126kg CO₂e

Highly intense process due to energy required to reach combustion. This has the highest carbon footprint for the energy consumption stage of the life cycle. In addition to this, the air pollution associated is likely to be significant. However, This can be carried out more sustainably if fuelled by electricity from a sustainable source.

Resomation

20kg CO₂e

Using the chemical process of alkaline hydrolysis to reduce the body to organic matter, with no tissue residual. Although this method has low carbon emissions associated with it, this report did not analyse the impact of chemicals used or effluent disposal, as there is no publicly available data on these aspects.

Traditional burial

4.1kg CO₂e

While the immediate carbon emissions associated with this method are small, the use of fuel-powered machinery for digging results in a key contribution (4.1kg CO₂e). Unlike natural burial, (shallower and allows organisms to aid decomposition) it may take around 100 years for the body to fully degrade.

Natural burial

0.kg CO₂e

Interment of the body without chemical intervention, to allow decomposition through a natural process with minimum impact and likely over a shorter period of time. There is minimal release of CO₂ into the atmosphere as the carbon is sequestered into other living organisms.

Low
CO₂e

How can you **use this information** in your business?

As a manufacturer and supplier of coffins, you can:

- Analyse the information on life-cycle-analysis provided for the different types of coffins and accessories to determine opportunities for engaging with your supply chain. Together, you can explore solutions that can strengthen resilience in both businesses, given the evolving regulations under various jurisdictions and a growing appetite for transparency in provenance from the end client in general.
- Develop alternative, environmentally friendly solutions such as biodegradable bags.

Crematoria and burial grounds:

- Can also leverage this information through partnerships with local funeral directors and celebrants, helping to provide educational resources to visitors, which can encourage more sustainable funeral practices. They can also consider promoting low carbon transportation: Encouraging visitors to use public transportation, cycling or walking can significantly reduce the carbon footprint associated with travel to crematoria and burial grounds.



Actions to consider when preparing for **decarbonising your business:**

By formalising climate-action plans, the industry can demonstrate thought-leadership, prove effective in attracting and retaining talent, and offer a differentiated proposition that aligns with individual values and evolving regulation.

We are making the **full report available** to everyone who wants to know more about greener funeral choices. We also hope to encourage others in the funeral industry to make their data publicly available, and to help **funeral directors** and **regulators** understand how they can reduce their GHGe and meet the UK's collective obligations to reach net zero by 2050.

Run an assessment of your own operating processes

Fuel and energy consumed, water and waste streams, etc. - you are likely to find opportunities to not only reduce carbon emissions, but costs too.

Assist the industry

By supporting further research that provides accessible information to help make evidence-based environmental choices. alternative options.

Partnerships

Develop business partnerships that enhance your product offering and benefit the community and planet.

Encourage change

Participate in initiatives that support policy makers and industry bodies to set Standards that can guide both industry and consumers.

Act ahead of requirements

Keep informed and act ahead of requirements mandated in legislation. The requirements for measuring emissions from cremators are currently under review and updated targets are due to be published soon.



FULL CIRCLE
FUNERALS. YOUR WAY

This research was initiated by Full Circle Funerals, the first UK Funeral Director to achieve B Corp certification, and funded by the community via Crowdfunding. Thank you all those from the industry who contributed to the peer reviewing process.



PlanetMark

Get in touch with [Planet Mark](#) if you are interested in finding out more about how to assess the environmental impact of your business and developing a plan to achieve net zero emissions.