1 HOME PAGE

Eco Burial Chambers™ a 'greener beyond life' solution for an industry as old and constant as humankind itself.

Local authorities have a crucial role to play in achieving the UK's 2050 Net Zero greenhouse gas emissions targets.*Cremation is increasing air pollution, there is another way*

Together we can solve diminishing burial spaces while also contributing towards your social value and net zero goals.

2 ABOUT

Clean Wave.org Ltd was founded by Alexander Morgan in 2021 to develop and launch eco-focused 'circular economy' solutions. The first of which is **Eco Burial Chambers™**.

This business focuses on the provision of above ground burial chambers, created using 3D concrete printing technology and, using environmentally friendly part-plastic building materials.

The finishing of these structures is completed by traditional stone masonry specialists. The founder is the 3rd generation of stone masons that have owner/operated The Loving Memory Gravestone Company in the UK since 1981.

We offer public and private cemetery estate end-to-end turnkey services including design, estimating, engineering, construction, niche manufacturing and installation, granite accessory supply and installation.

3 OUR MISSION

Eco Burial Chambers™ a 'greener beyond life' solution for an industry as old and constant as humankind itself.

Local authorities have a crucial role to play in achieving the UK's 2050 Net Zero greenhouse gas emissions targets.

Eco Burial Chambers™ offers an Eco burial infrastructure solution to meet your future needs, with increased burial spaces within the same footprint and no budget impacts.

I have a challenge that requires political influence. 'something that needs great mental or physical effort in order to be done successfully and therefore tests a person's ability ' We achieve a 30% reduction in CO2 emissions through circular materials and further 90% reduction in CO2 emissions using Eco Elite Cement. For example, a 5.5 cubic meter volume of cement results in a remarkable 99.99% reduction in CO2 emissions, from 4,686.62 kg to 328.06 kg equal to 430 trees CO2 absorption per year.

3.1 LOCAL AUTHORITY

As a Local Authority you are looking to balance social value with the budgets allocated.

You will also need a structured approach to cemeteries management to meet demand for space and future CO2 targets.

As a local authority finance manager you are probably having to make difficult decisions to limit budget impacts over the longer term.

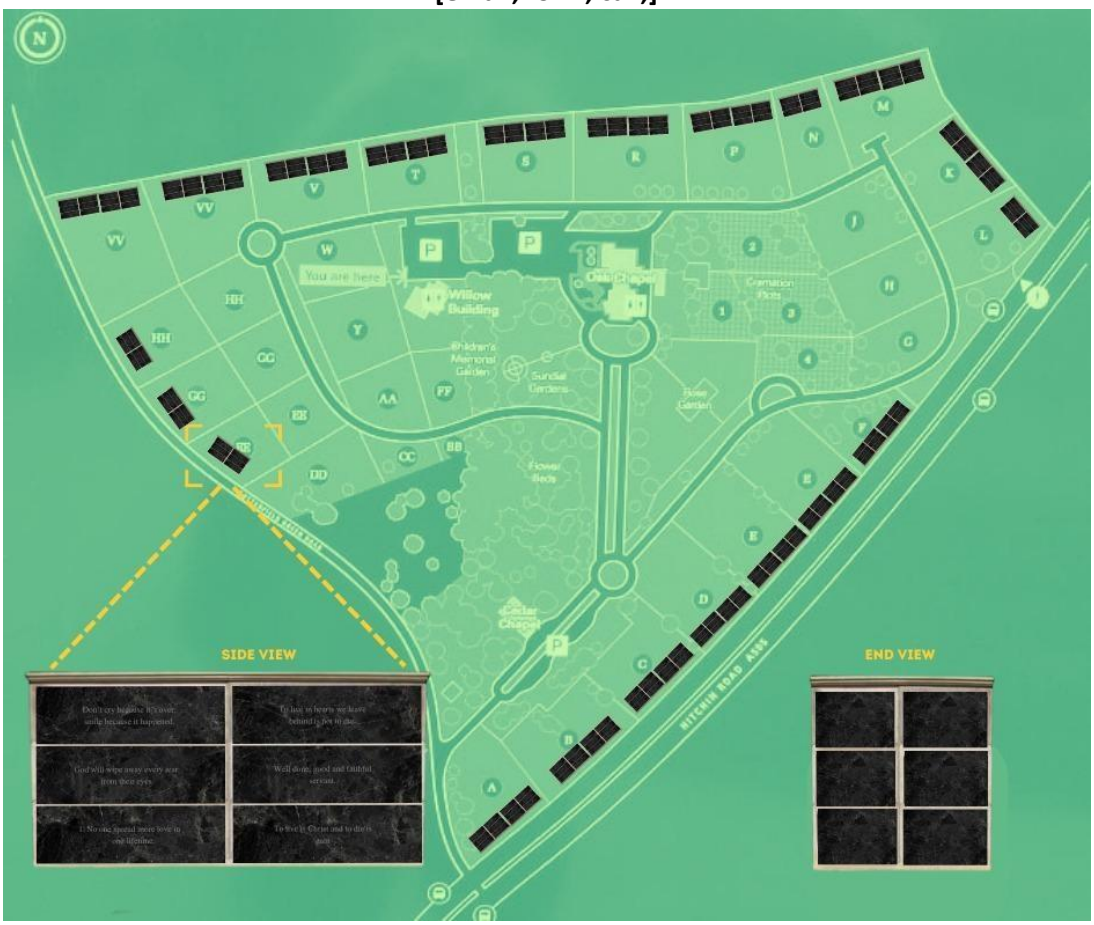
Eco Burial Chambers™ offers an Eco burial infrastructure solution to meet your future needs, with increased burial spaces within the same footprint and no budget impacts.

Additionally, when you choose our solution, ongoing facility costs will be reduced as well as local authority Co2 targets contributed to.

Together we can solve diminishing burial spaces while also contributing towards your social value and net zero goals.

How to increase cemetery space availability and economic viability with Eco infrastructure solutions. – Find out more

[email, form, call,]



3.2 CEMETERY ESTATES

As a cemetery manager, you are looking to administer available spaces while maintaining good order of the cemetery estate.

You already take a structured approach to planning burial plots to meet demand but, that is likely to reach your capacity within less than five years.

You are already unlikely to be able to expand the cemetery footprint due to your geographical location.

Eco Burial Chambers™ offers an Eco burial infrastructure solution to meet your future needs, that provides increased burial spaces within the same footprint and, in turn offers you increased [rent] per m2 pro rata.

Additionally, ongoing facility costs will also be reduced through our after install facilities management service.

Together we can reverse diminishing burial spaces, help increase income, all while contributing towards net zero goals for the planet.

CTA - How to increase cemetery space availability and income with Eco infrastructure solutions. – Find out more

[email, form, call,]

3.3 FUNERAL SERVICES

As a funeral service you want to provide customers with interment options to suit budgets and wishes.

You are aware of the growing scarcity of space for burial plots and growing need to provide environmentally friendly alternatives to cremation.

You are looking for additional price-competitive solutions to meet demand, as well as opportunities to secure multi-plot pre-sales.

Eco Burial Chambers™ works with cemeteries to deliver increased volume of internment plots by combining the latest technologies and eco-friendly materials.

Becoming a preferred funeral services partner to Eco Burial Chambers™ you will widen your business offering to meet the growing number of environmentally aware customers' needs.

Together we can direct long term commercial growth and ecological responsibility within the funeral services sector.

3.4 FUNERAL PLANNING

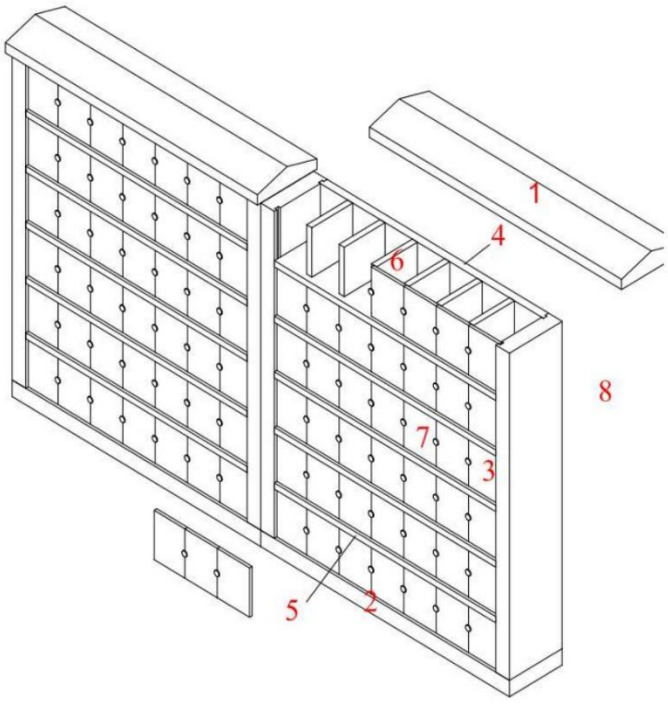
When thinking about planning a funeral you are looking for environmentally friendly burial options.

We also understand that budgets may be limited for underground / multi plot internment, but cremation has C02 emission implications.

Eco Burial Chambers™ works with cemeteries and funeral homes to deliver increased volume of internment plots by combining the latest technologies and eco-friendly materials.

Our eco burial solution delivers you the opportunity to pre-purchase single or multi-plot internment spaces, even where cemetery space is limited.

In addition to securing internment space you will also help reduce emissions for the planet.



4 NET ZERO

Local authorities have a crucial role to play in achieving the UK's 2050 Net Zero greenhouse gas emissions targets.
Air pollution is the contamination of air due to the presence of substances in the atmosphere that are harmful to the health of humans and other living beings, or cause damage to the climate, increases the chances of a person developing lung cancer and cardiovascular disease and may be associated with cognitive decline, including dementia.

New health technologies - developed to prevent - promote health
Note 1: A health technology is an intervention developed to prevent, diagnose or treat medical conditions; promote health; We can start to solve

Fine particulate matter <2.5 µm (PM2.5) air pollution is a leading cause of global morbidity and mortality. The largest portion of deaths is now known to be due to cardiovascular disorders. Several air pollutants can trigger acute events (e.g., myocardial infarctions, strokes, heart failure).

In UK 36 local authorities, every single care home is located in areas with PM2.5 levels above the limits recommended by the WHO. These include Epping Forrest, Luton, Thurrock, Reading, Slough, Spelthorne, Broxbourne, Dartford and Watford.

On average, a cemetery buries 1,000 gallons of embalming fluid in just one acre of land.
Each cremation releases between .8 and 5.9 grams of mercury as bodies are burned. This amounts to between 1,000 and 7,800 pounds of mercury released each year 75% goes into the air and the rest settles into the ground and water.

Whilst local authorities are directly responsible for local emissions, through their policies &partnerships they have strong influence over more than a third of emissions in their area

CONSIDERING COSTS AND BENEFITS

The Average cost of a basic cremation in the UK is £3290.98

67.1 million deaths in 2022 one cremation produces an average of 977.86kg of Co2 the United Kingdom poisoned the air with 531,264,492.98 kg of Co2 from cremation in 2020

Statistics from the Cremation Society show at about 50–70% of all deaths are cremated.
And projections show that, in 2040, the rate of **cremations will almost reach 80%**

32,729,500,000.00 of Co2 from cremation globally in 2022

I offer-
Council Revenue - Opportunity
Social value - Toxic Emission abatement - Circular plastic - Reduce incineration – Apprentice employment
Resident Value - Virgin Burial Space Available, Family Heritage Preservation
UK Product – Backed UK Assured Start Up - Funeral planning - funeral directors / undertakers

Finished Memorials – About – https://clean-wave.org/about/ [what I fixed last year]

a. Minimum order Trade
b. Granite Cover
c. 5 carbon abatement certificates at
d. Cemeteries [council] owners resell

5 HOW MUCH CO2 IS PRODUCED FROM PLASTIC?

Carbon Calculations: According to the EPA, approximately 1 ounce of carbon dioxide is emitted for 1 ounce of polyethylene (PET) produced. Other sources pin the production ratio of carbon emissions to plastic production closer to 5:1.

Recycling all plastic waste would reduce carbon dioxide equivalent emissions to 4.9 gigatons in 2050, or 25 percent from business-as-usual emissions.

Estimates vary with the type of recycling process used, but researchers agree that recycling and remanufacturing plastic saves at least 30 percent of the carbon emissions that original processing and manufacturing pro

5.1 GRIND WASTE, REBUILD

Work index was calculated from the grind ability by the empirical equation:

$$W_i = \left(\frac{16}{G:82}\right)\frac{\sqrt{\gamma}}{100}$$

Where

W_i = The work index
G = Ball mill grind-ability
γ = Micron size of the mesh of grind.

The work index is defined as the kWH required to grind one tonne of material to 80 per cent passing 100 γ.

Approximate power required to grind the material to fineness of 400 m^2/kg (Blaine's) was calculated from the equation.

$$W = \frac{10\,W_i}{\sqrt{P}} - \frac{10\,W_i}{F}$$

Where

W = The work in kWH/tonne.
W_i = The work index.

P and F are the 80 per cent passing size in micron of the product and feed material.

My proprietary recycled plastic eco concrete [Biffa-Hanson-CCW-EBC-TLMGco]

https://cleanwave977987355.files.wordpress.com/2022/01/datasheet-concrete-ccw-poly-fibre.pdf

6 VOLUNTARY EMISSION REDUCTION ACTIONS

Allow you to take advantage of voluntary efforts to reduce greenhouse gas emissions

These projects can lead to the creation of carbon credits, each credit representing the removal of greenhouse gases equivalent to one tonne of CO2.

Carbon credits can then be sold to our customers, to help offset their unavoidable emissions. Make a quantifiable contribution to reduce emission 'after accreditation

1 tonne ground processed plastic = 5 VER European Union Emission Trading Scheme

- Increase response options and flexibility of carbon management
- Enhance public relations Generate goodwill by entering the carbon market
- Cement strategic interest in specific offset projects Manage corporate social responsibility commitments
- Become carbon neutral and/or sell carbon neutral products and services

6.1 ABOUT SPACES

3 million Deaths [Segment] 20% interested in Eco Burial Market 10% Can afford the cost £12,000

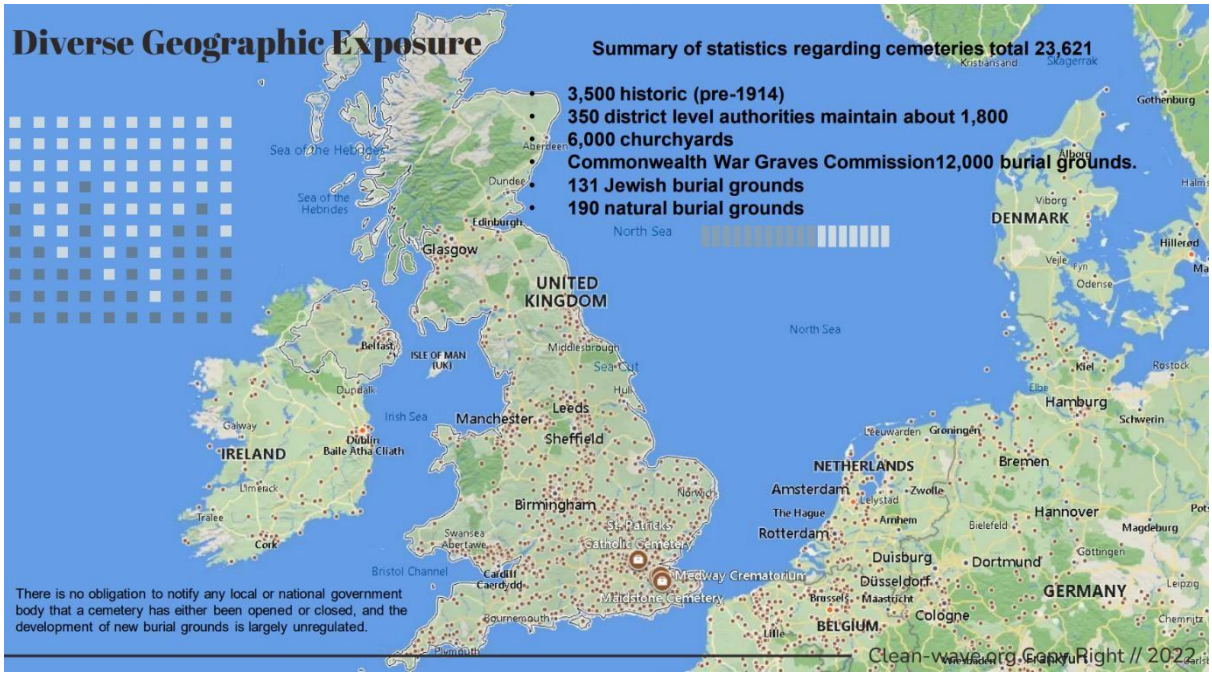
300,000 x £12,000 = £3.6 Billion

Other causes for concern Running out of space for burial space

Research on the provision of burial space nationwide is urgently required. The research on cemeteries which we have above recommended take place should address this requirement.

The Government notes that much work has been undertaken to identify available burial space within London, but that this is still subject to qualification. A national survey may well prove equally as difficult, and possibly inconclusive. This is not to detract from the need to undertake such a survey,

but the London experience suggests that the results may need to be treated with caution.



The Government agrees that burial authorities should be encouraged to introduce cemetery management plans, where they are not at present used, in **order to maximise the use of existing facilities, and to address future demand.**

If the public are to continue to have access to affordable, accessible burial in cemeteries fit for the needs of the bereaved, there appears to be no alternative to grave reuse. The Government's consultation paper on the reuse of graves which we understand is now also to include a number of other matters relating to cemetery provision should therefore be issued as soon as possible.

If the Home Office requires further research before commencing this already long-delayed consultation, it should specify exactly what is required and ensure that it is carried out speedily, with due regard for the consequences of further delaying a resolution of this matter. For the reasons stated above, and assuming that the necessary safeguards are included, we are ourselves of the opinion that legislation should be introduced allowing burial to take place in reused graves, and or building more burial spaces on top.

The Home Office does not believe that it would be appropriate to undertake public consultation on one aspect of burial reform alone – the re-use of graves when this should be considered within a wider context of a review of burial legislation and the management of burial facilities. The Home Office therefore proposes to consult on these wider issues at the same time as views are sought on

re-using graves. There would seem to be no reason to delay consultation pending the outcome of further research work, which is likely to focus on existing practice and problems.

Is there a crisis for British cemeteries?

Despite the perception that there is a national crisis to do with the conservation of historic cemeteries, and maintenance of operational ones, there is also a view that this is very much a London perspective, and that outside London there are many good examples of churchyard and cemetery management and maintenance.

Nevertheless it is clear that in many places there is a shortage of local burial space, and pricing policies are being used to manage demand. Some would argue that if local burial is to be a genuine choice, then some form of subsidy may need to happen – but from where? Also, local authority cemetery managers are talking about **a forthcoming upsurge in burial demand**, as the present older generation finally succumbs to the demands of longevity. One way in which **some public and private cemeteries are dealing with the lack of burial space is through 'cramming' new graves** into historic cemeteries, often in inappropriate places such as footpaths, and planting areas.

This then destroys the original design and aesthetic harmony of the cemetery.

Operating Metrics

Operating Data:	Year 1	Year 2	Year 3	Total
Interments performed	29,380	38,863	37,782	106,025
Mausoleum crypts	1	2	2	5
Niches	20	40	40	100
Interment rights sold	£6000	£12,000	£12,000	£30,000
Number of pre-construction pre-need contracts written	5 (10% deposit)	10 (10% deposit)	10 (10% deposit)	£250,000
Totals	£156,000	£312,000	£312,000	£780,000

The cemetery product revenue be deferred until

(i) the product is purchased,

(ii) the product is specifically identified to the customer, and

(iii)title is transferred Management uses "accrual" accounting to monitor its performance, recognizing revenue at the time a contract is finalized.

● The timing differences between criteria for recognition and the time sales are made create significant disparities in financial results across the two methods Cemetery operations are particularly affected due to the high level of pre-need sales.

Your order directly affects *cardiometabolic diseases.*
-386 cremations = Abate 377,453.96 kg Co2

7 CASH FLOWS OF A TYPICAL CONTRACT

A typical contract which the customer signs for a number of products, which will be delivered at various times and pays over a month term.

II. Assumes Interment rights passed onto cemetery at £900 (included with purchase of Niche)

III. Assumes the customer [council /cemetery] purchases the mausoleum consisting of

24 Niches Resale to residents
[£12,000] recommended retail price.
Wholesale offered to Cemetery's and Local Authorities.

IV. The customer makes – 50% down payment at time of sale

IIV. Niche Pre sales offered via funeral directors / Undertakers RRP £16,000

– Finance available – Off balance sheet transaction Gap Tranche Fund me to build for cemetery's first – as the cemetery resells the niche's – you receive your commission until repaid,

buy my shares for future dividends.

CONTRACT LINK

7.1 CHANGING DEMAND FOR ECO

This study investigated the use of basalt fiber bars as flexural reinforcement for concrete members and the use of chopped basalt fibers as an additive to enhance the mechanical properties of concrete. The material characteristics and development length of two commercially-available basalt fiber bars were evaluated. Test results indicate that flexural design of concrete members reinforced with basalt fiber bars should ensure compression failure and satisfying the serviceability requirements. ACI 440.1R-06 accurately predicts the flexural capacity of members reinforced with basalt bars, but it significantly underestimates the deflection at service load level. Use of chopped basalt fibers had little effect on the concrete compressive strength; however, significantly enhanced its flexural modulus.

Hanson
HEIDELBERGCEMENT Group

Response from our Technical team:

Fibrecrete contains virgin polypropylene micro or macro fibres. It's lower carbon than steel, but still an oil based product. Bassalt fibres are interesting as a sustainable option, but we've not looked into them in any great detail.

Recycled plastic is a more variable material we've not much information on its use and it's probably more aggregate replacement than suitable for use as a fibre. But I'm sure there's work being done on recycled plastic as a source of material to make fibres from.
Hanson concrete