



Carbon Footprint

What is Carbon Footprint?

A Carbon Footprint is the total set of greenhouse gas emissions caused directly and indirectly by an individual, organization, event or person.

What is Carbon Offsetting?

Everything that is produced in our manufacturing plant involves the consumption of energy, which in turn produces emissions. Carbon offsets can be used to compensate the emissions produced by offsetting the equivalent carbon dioxide saving elsewhere.

Our Carbon Offset Investment

Here at Ballygarvan Stonecraft we have a unique development plan introduced in 1994 by Ballygarvan Stonecraft's founder and proprietor Sean O Halloran. The company has been consciously investing and funding the development of Ballinreeshig Nature Farm And Outdoor Educational Centre here at Ballinreeshig, Ballygarvan.

Since 1994 a portion of the profits from Ballygarvan Stonecraft have been put into the farm, with the long term aim of developing techniques for sustainable living, organic food and herb production, ecological restoration and education. In doing this they have drawn on a wide range of sources including the Biodynamic (www.biodynamics.com) and Permaculture (www.permaculture.org.uk) movements as well as their own experience.



Projects currently underway at Ballinresshig nature farm

- Medicinal and culinary herb production
- Fruit and vegetable production
- Sustainable woodland management including the development of a tree nursery using native seed of local provenance
- Habitat restoration
- Reconstruction of ditches
- On farm composting
- Animal husbandry

Proposed projects in the near future at Ballinresshig nature farm

- Using alternative farming methods, both old fashioned and out there, such as, bio dynamics, renewable energies, reed beds, earth and cob building, eco everything!
- Build a Resource Centre for Education about organic green industry and sustainable living.
- Provide courses in old fashioned and new techniques such as:
 - ✓ Basket making
 - ✓ Working with horses
 - ✓ Wild food identification
 - ✓ Growing fruit and herbs
 - ✓ Organic gardening for beginners
 - ✓ Reed bed systems
 - ✓ Painting with watercolours in an organic garden
 - ✓ Natural cosmetics and soap-making
- Courses will also be provided in nutrition and naturopathy and many more alternative health methods.
- Farm shop and café. When these are established, additional courses can begin such as:
 - ✓ Cooking and healing with whole food
 - ✓ Storing and preserving fruit and vegetables
 - ✓ Food preservation
 - ✓ Introduction to vegan cooking



Mission statement:

To become more sustainable for ourselves and our community and to create a better quality of life in our community with the help of nature

Aims:

- To illustrate and strengthen connections between farm projects and the landscaping/concrete business
- To show history of farm and area
- To help make concrete business more ecological
- To educate people on sustainable living
- To provide a resource for people who are interested in passing their skills on to others

Context

Climate Change and Peak Oil

When this project began these phrases were not well known in the mainstream, now they are common fare in most newspapers. Government, business and public services are slowly coming to grips with the notion that radical change is required for the human race through the coming decades. Peak oil is the idea that we have reached the maximum regards oil production on earth. This means we must learn to use alternative sources of energy in Ireland. If climate change scientists are correct in their predictions, then it is imperative that we learn to live more within our means, in an effort to cut down on emissions.

Biodiversity

By creating an area of biodiversity in Ballinreesig Farm, we give future generations the opportunity to learn from nature and benefit from its services. The ecology of the farm is vital to its success. We want people to see, that if you work with nature it will be rewarding for our community, our environment and ourselves.



The Big Paradox

The business that has funded much of this, Ballygarvan Stonecraft, is one that cannot be considered ecologically friendly. But using its profits to plant trees and grow food, it is hopeful that we are balancing out some of its worse effects. We are also looking at the inputs and outputs of the business and aim to reduce the waste to as close to zero as possible.

Carbon Auditing

We plan to do a carbon audit of the whole business. This is where the ecological impact emitted by the entire series of enterprises including transport and manufacture of materials, heating, machinery use and manufacture is calculated. With regards to carbon emissions, it needs to be worked out how many trees needs to be planted to offset this.





The Environmental/Sustainability Plan

The plan contains a number of environmental indicators, which have been broken into further headings. This is not an environmental/sustainability plan for Ballygarvan Stonecraft, but it aims to reduce the environmental impact of this enterprise. Currently, on a yearly basis, Ballygarvan Stonecraft uses,

- Water
 - ✓ 13,000 litres approximately
- Electricity
 - ✓ 13,120 day time units
 - ✓ 5160 night time units
- Fuel
 - ✓ Road diesel = 18.235 litres
 - ✓ Green diesel (gas oil) = 9848 litres
- Cement
 - ✓ 389 tonnes
- Aggregates
 - ✓ Sand -1240.78 tonnes
 - ✓ Gravel- 1203.32 tonnes

These figures represent a big environmental impact and efforts are being made to offset this.

- Where possible materials are sought locally
- Water is taken from a stream and any excess is returned, unpolluted to its source
- Aggregates are purchased locally from John A. Wood, which is less than 3 km away.
- Products that are made here do not incur a Carbon Footprint as big as imported stone from overseas incurs.
- Electricity is sourced from Airtricity, who harness wind energy and hence reduce the use of non-renewable resources
- Cement is stored in a big silo to reduce the amount of transport and packaging. New alternatives to energy intensive cement are always being tested. An effort has also been made to minimise the amount of cement required in the production process.
- Research has been undertaken into the use of bio-fuels, but for the use of oil seems more environmentally friendly



In conclusion

Ballygarvan Stonecraft needs to continue to,

- ✓ Increase energy efficiency
- ✓ Reduce waste generation
- ✓ Increase efficiency of transport

Reducing your impact

Tips on how to reduce your impact

- Sign up to a green energy supplier i.e. (wind or hydro power) and it will reduce your electricity or heating footprint to 0%
- Turn down your central heating by 1 to 2 degrees c this will help your pocket as well as the environment.
- Turn down your water heating by 1 to 2 degrees c for extra savings and reduced electricity usage.
- Recycle as much as possible
- Do not leave appliances on Stand By mode i.e. (TV's, Gaming Console's, DVD players e.t.c)
- Fill your kettle with as much water as your need.
- Unplug mobile phone chargers as soon as it has finished charging.
- Hang out washing to dry when possible rather than using a tumble dryer.
- Only turn on washing machines or tumble dryers when they are full

Investment tips

- Making sure your attic or loft has the required insulation can prevent 25% of heat loss through the roof.
- Install thermostatic valves on your radiators.
- Fit energy saving light bulbs.
- Insulate your hot water tank.
- Replace old boiler with a new energy efficient condensing boiler.
- Replace old appliances with new one's with an energy efficiently rating of "A"