

READ ALL ABOUT CRAIGENGAR'S ECO-FRIENDLY PRACTICES.

A printed copy of this 5 page document is available in the house for interested guests:

Background to our Green Credentials (up-bringing and experience)

As owner I look on myself as a natural re-cycler. Our finances were tight when I was a child and my acquired "green" habits endure! I also had the luck to marry Farmer Hew who, along with son Angus, has diversified from farming into waste management, with a huge emphasis in recycling, at Levenseat, 10 miles away from Craigengar Lodge.

Our spectacular lodge is sited in the middle of our farm at Crosswoodhill. Levenseat, green but industrial, has recently become one of the most sophisticated eco-friendly waste recycling plants in the UK for domestic waste, with the residue going to a gasification waste to energy plant.

To reach this goal we travelled a long "green" re-cycling road both at Crosswoodhill and Levenseat; Craigengar Lodge has undoubtedly reaped the benefits.

Back in 2008 Crosswoodhill was thrilled to receive a Gold Award from the Green Tourism Business Scheme (GTBS) This spurred us on to experiment with energy-saving measures that were new and exciting for us when we came to design and build this new house, Craigengar, in 2009.

Our Green Tourism Gold Award has been re-validated this year, 2017.

Craigengar Lodge benefits from an enviable "green location".

Sited on the Pentland Hills, Craigengar Lodge is a real green haven, isolated from noise pollution. Guests feel transported into another peaceful, tranquil world even though Craigengar is only 18 miles from the heart of Edinburgh. Relax inside the house and, if wanted, allow the sheep (they need no encouragement) to graze and also relax within the fenced immediate area around Craigengar Lodge. Our sheep love to peer in through the huge picture windows and inspect the new 2 legged- arrivals from the outside-in. Step outside onto the huge expanse of decking or into the fields and the fresh air invigorates body and soul! Encircled by fields of grazing sheep and cattle, and with visiting wildlife, fields, hills and water stretching as far as the eye can see, guests are captivated by the views. Every year house-martins and sometimes swallows build their nests under the eaves of Craigengar's curved roof. Guests are fascinated as they watch the birds dive and swoop. And at night guests can take turns with the binoculars to

stargaze and wonder at the huge dark skies. Craigengar offers guests a huge variety of books about stargazing, trees, vegetation, wild flowers, natural habitats and walks from their new home. This all ties into the broader wellness and mindfulness trend, which is a global phenomenon.

Interpretative Signs:

A number of guests over the years mentioned to us how useful they would find a few signs dotted around the farm for informing and encouraging extended walks over the hill and round the nearby reservoir. These illustrated signs are now in place and we hope they enhance your enjoyment of exploring our farmland and then striding across the hills beyond. We provide a compass and maps.

Guests love to watch the shepherd and his dogs at work and the sheep-pens are just 2 minutes' walk away.

Below is a selection of energy - saving measures which help make Craigengar so eco-friendly. We hope you too find them thought-provoking, green and inspiring.

First, the immediate fenced-off area around the house

Outside:

You'll notice how much larch timber we have used for the cladding. This is nicely weathering.

In various areas close to the house we have used natural stone slabbing.

Recycling of tyres in the parking area.

The immediate access area to the house sloped downwards far too steeply to allow cars to park. Somewhat innovatively we have used **tyre bales** to build up the land contours and create a large parking area. This reduces by 80% the amount of virgin aggregate required and also helps drainage.

All the sand and gravel backfill from the drains laid is recycled material from our Waste Management site at Levensat, a few miles away. There we produce recycled sand and gravel, mostly from gully waste loads tipped there, and use this sand and gravel to produce our own concrete.

Other recycled products we produce include compost, topsoil, crushed aggregates, shredded wood, Levco blocks, tyre bales. For those interested, we have included leaflets in our Green File in the house on all of these recycling activities.

We use all of these products on the farm; using our own compost saves us otherwise using 5,000 tonnes of artificial fertiliser a year. We use our recycled top soil for landscaping, our shredded wood for bedding our cattle, our crushed aggregates for our roads and tracks and hardstanding and our Levco blocks for walls (they are like huge lego blocks which can be dismantled.) And as previously described, recycled gravel and tyre bales are a very green way to improve the contours of the area immediate adjacent to this house.

When the guests open the gates to invite the sheep into the immediate area around the lodge, leaving aside the entertainment value, we find the grazing sheep do an excellent job of “mowing the lawn”!

Sewage Treatment:

The sewage treatment is via a SBR Unit – an activated sludge which creates a discharge which is between 10 and 100 times less polluting than the discharge from a septic tank.

Labour and materials:

Whenever possible we aim to buy locally and employ local people. Almost everyone who has worked for more than a week or so on this building project in its various phases, and subsequently, has lived within a 20 mile radius... including our architect, steel erectors and roof installers, joiners, stair manufacturers plumbers, lighting and electrical team, tilers and decorators. We did however have to outsource from further away our underfloor heating specialists.

Identifying how important it was to us to be green inside the house:

Heat Gain via Method 1: Geo-thermal heating with a heat pump

3 bore holes, each 100 metres deep, were drilled down into the earth close to the house. These tap into the latent heat in the earth beneath. Cold water is pumped down the boreholes where it is warmed. The heat pump then extracts that gain in temperature and uses it to heat the house. The result is wonderfully warm to-the-feet underfloor heating on both the ground and upper floors. Using this system the energy gain is in a ratio of 4:1. So for every unit of energy in, you get 4 to 5 units of energy out.

Added Heat gain via Method 2: Solar panels

6 solar panels on the end elevation of the house help produce hot water. The sun heats up the hot water in the panels and this is piped into the hot water and heating systems.

These two systems very effectively provide all the routine heating.

For those wanting **an additional heat source** within the house we provide a **woodburning stove**. Lovely for ambience, it also offers that extra bit of heat if required.

Keen to know about some of the other eco-friendly benefits within the house?

Here are some of them:

Villavent Air Exchange System.

This captures heat that would otherwise be vented outside and lost. This system vents the air from the bathrooms, kitchen and utility area through the circular ceiling vents. The air is ducted through the walls and ceilings to a heat exchange unit which removes the heat from this air, expels the stale air and heats up the fresh air which is then vented quietly to the various parts of the house including the living area and bedrooms. We built this fairly innovatory system into the original structure when constructing the house.

Insulation:

We upgraded the insulation in all areas of the house, eg, the walls, ceiling and floors, over and above Building Control's requirements. For example where a minimum of 100 mm of insulation was stipulated we have 180mm insulation.

Triple glazing of windows:

The large windows are all triple glazed to conserve heat / reduce heat loss.

Lights:

All the light fittings used are low energy or high efficiency type lighting. For example, the LED lighting used has a lifespan of 1000s of hours. Additionally, we have used motion detector lights outside. Inside the user friendly lights in the spacious wardrobes are fine tuned to the time required before automatically switching off.

We have also installed a Mood Lighting System which allows soft lighting, and a resultant saving in electricity, at the touch of a button.

Appliances:

When selecting kitchen and laundry appliances we were careful to select models rated A (rather than B whenever possible). We have also installed an induction hob.

When purchasing audio-visual equipment we were aware of the same energy-conscious constraints.

Water:

The water in Craigengar comes from our own spring on the hill. We do not use public water supplies. There is a significant overflow of water which returns to the burn. The water after it has been used goes through an SBR Unit (see below under Sewage Treatment) and ultimately returns to the same watercourses. For this reason we don't need to be as "water-conscious" as do businesses on mains supplies.

Strictly speaking we do not need dual flush toilets as no water is wasted, but we installed these buttons for the peace of mind of green conscious guests who have not had time to read these notes and are unaware of the above explanation regarding our water supply.

Interior natural stone:

The Bastille flagstones in the kitchen and hall areas are natural stone. The heavily veined dark marble tiles in the entrance area, bathroom and utility areas are also a natural product, as are many of the tiles used in the bathrooms.

Examples of how we encourage, with gentle guidance, our guests to be eco-friendly within the lodge.

When I welcome our guests on arrival, whilst showing them round Craigengar I explain about separating their waste into various differently coloured bins for cardboards, plastics, etc. I also show them the containers for empty glass bottles and jars as well as a separate container for their aluminium drink cans. After guests have departed I will then remedy any mis-sorts (waste is deposited in clear plastic bags to make this job easy) and we can then dispose of the waste correctly. I use a variety of local bottle banks to avoid getting a reputation locally as a hardened drinker!

We also encourage guests to use the clothes airers we supply instead of the tumble drier and make use of the warm atmosphere in the utility areas.

As well as our Environmental Statement, our Green File, kept in the house, offers our guests a lot more eco-friendly information and includes a Scotland-Responsible Visitor Guide, info on local food suppliers, farm shops and charity shops, suggestions for doing their bit for the environment and lots of other ideas to catch their imagination.

