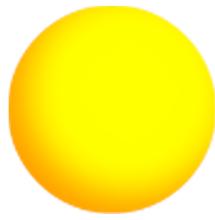


Adams homehardware

We're taking the **Crediton Climate Challenge!**

- Sell low-energy lightbulbs
- Minimise travel for deliveries
- Recycle cardboard and scrap metal
- Employ mostly local staff who walk to work
- Use paper bags for smaller items.





Brighter Working

Web Design & Development

We're taking the **Crediton Climate Challenge!**

Brighter Working are committed to reducing their carbon footprint and seek to continually improve their energy efficiency.

- We generate solar power from our roof
- Energy efficient heating (air-source heat pumps)
- Low energy light bulbs throughout
- Only use recycled printer paper
- Re-use and Recycle all paper waste
- Paperless billing
- Work from home - no commuting!
- Most national & international meetings done remotely via teleconferencing - no travel!
- Help other organisations to do the same





Bulworthy Project

We're taking the **Crediton Climate Challenge!**

- All of our electricity is generated by solar power.
- All of our heating and hot water are generated by wood and solar.
- The food for our Barbecue Cafe is sourced from small local farms.
- The fuel for our Barbecue Cafe is our own charcoal.
- The charcoal that we produce is from sustainable forestry and land management within a few miles of Rackenford.
- We combine journeys to minimize car use as much as possible.
- We manage our 12 and half acre woodland to maximise habitats.

Planning to do:

- Produce more food on site for our Barbecue Cafe.
- Erect a wind turbine
- Installing a rainwater harvesting system.



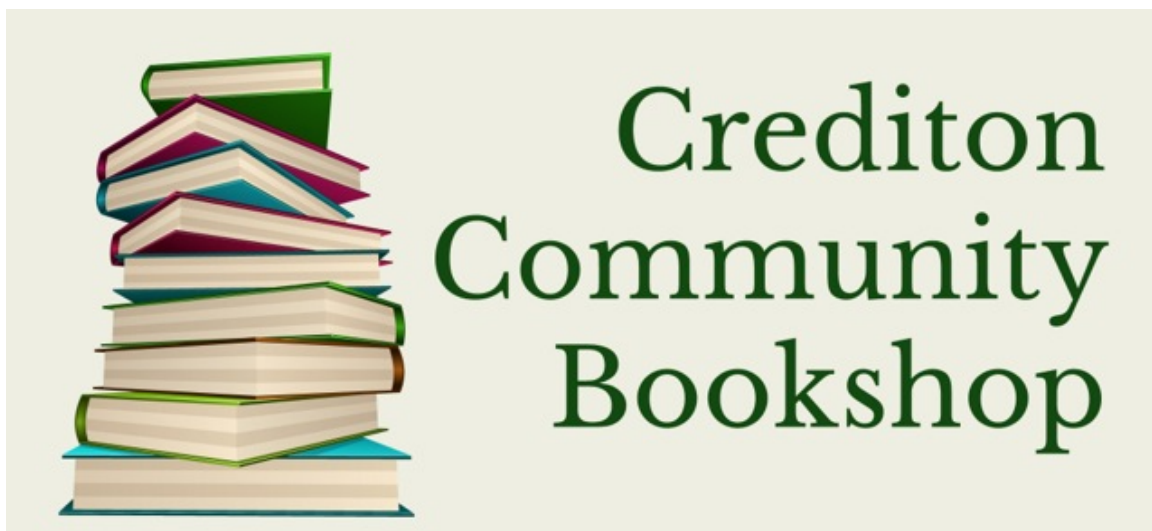
We're taking the **Crediton Climate Challenge!**



Crediton Coffee Company is committed to sourcing its coffee and milk from sustainable farms, packaging from recycled and recyclable materials and maintaining a low carbon footprint through use of low energy roasting equipment and low energy lighting.

- Low energy LED, dimmable lighting through the shop
- Unique design for roaster - low energy use (gas) for roasting through heat exchanger
- Unique design for roast gases exhaust - low energy electrostatic precipitation of smoke, clean air (40 watts)
- Environmental packaging for roasted coffee - brown paper with biodegradable starch lining (i.e. not foil packed)
- Recycled materials for cups and biodegradable lids (i.e. no plastics)
- Recycled, paper carrier bags (no plastics, no 5p charge)
- No food wastage - we buy 'fresh on the day' from local bakers (Olivers)
- Our green coffees are sourced from farms with sustainable and ethical policies for agriculture
- No printing of till receipts unless customer requires it - email instead
- Milk sourced locally from sustainable, organic dairy herds (Ashclyst Dairy, part of Killerton, National Trust Estate)

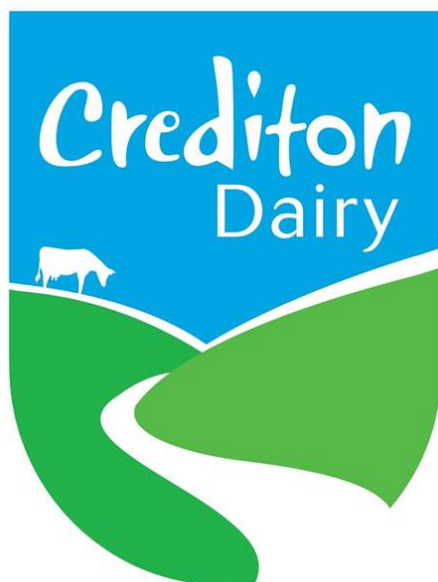




We're taking the **Credition Climate Challenge!**

- Ensuring recycling/re-use of all packing
- Encouraging prudent use of photocopying as appropriate
- Using biodegradable bags for customer purchases when paper isn't sufficient if customers require any packaging at all
- Using crockery or biodegradable cups etc for any events we run rather than plastic throw-away
- Switching off computers at the end of the day
- Recently hosted an event to discuss flood issues in the Credition area





We're taking the **Credition Climate Challenge!**

Targets set in 2008 for achievement by 2015. We are on track to achieve these and are in the process of setting ourselves new targets for the next 5 - 10 year period.

- To reduce energy consumption by 20% and increase energy consumption from renewable sources by 10%
- To reduce water consumption by 20%
- To reduce the levels of chemical oxygen demand before primary treatment by 20%
- To reduce waste to landfill to zero
- To increase recycling by 20%
- Our Climate Change Agreement (CCA) has an overall target to reduce CO₂ emissions by 40% by 2020 within our own operations.
- Credition Dairy is also reducing food miles by concentrating our milk pool recruitment to within a 30 mile radius of the dairy.





Crediton Parish Church & Boniface Centre

We're taking the **Crediton Climate Challenge!**

Present Position

- Low energy lighting
- Improved control of gas heating
- Solar pv panels installed at Boniface Centre - 36,750kw generated so far and 56.7 tons of CO2 avoided
- Energy efficient hand dryers installed at Boniface Centre
- Crediton registered as a Fairtrade Church
- Church wildlife conservations areas
- Recycling at Crediton Church & Boniface Centre

3-YEAR PLANS:

- Consider low-energy alternatives at all buildings
- Register as Fairtrade Benefice

5-YEAR PLANS:

- Explore installation pv panels where appropriate
- Boniface Centre - continual assessment of energy efficiency as equipment replaced





We're taking the **Crediton Climate Challenge!**

- I heat my workshop using waste offcuts of the wood I use when building my furniture.
- Where possible I produce paperless quotations and billing.
- I recycle and reuse as much timber as possible.
- I only use reclaimed timbers or new timbers from sustainable sources.
- I keep my client base local to minimize commuting.
- I use water based paints and varnishes where possible.
- I intend to combine a highly insulated house with a workshop to further reduce fuel use for heating and commuting.



The Devon Chef - Private Chef services & cookery classes



We're taking the **Crediton Climate Challenge!**

- source most ingredients from Devon producers
 - most food waste goes to composting
 - use seasonal herbs, vegetable and salad leaves from our own garden whenever possible
 - discuss with fish supplier to ensure only using fish that is in season
 - water butts are using to collect rain water for use on vegetable garden
 - discuss dishes with customers to educate them about ingredients and our suppliers
 - installed solar and PV panels to provide renewable electricity and hot water
- use electric oven for cooking during day light hours to maximise use of renewable electricity wherever possible



🌿 FOUR SEASONS 🌿

We're taking the **Crediton Climate Challenge!**

- Low energy LED lights in shop and energy efficient chiller-halving energy bill
- Goods bought as locally as possible to cut down on transportation costs and carbon emissions
- New organic range of products-'clean grown'
- As far as possible does not throw away class 2 food, eg.carrots that are a bit marked are sold to people with horses and pets. Class 2 vegetables are either sold at lower cost or given away
- Recyclable bags and biodegradable plastic bags
- Produce bought loose rather than in packets to eliminate packaging
- Composting of unsaleable goods encouraged





We're taking the **Crediton Climate Challenge!**

Energy and environmental improvements we have made and are making:

- 120 KW Solar PV installed on our south facing roof.
- Inverters being installed on all motors and pumps.
- Waste heat being used to heat factory space during winter months.
- Sub metering for consumption monitoring.
- High frequency lighting now being replaced by energy efficient LED lighting.
- 60% of water used recycled.
- Rubbish compactors
- Recycling of all Cardboard, Paper, Plastics and metals
- Purpose built effluent plant.
- Accredited to ISO 14001 environmental standard for the last 11 years.





We're taking the **Crediton Climate Challenge!**

- We source our electricity from Ecotricity who only use electricity from 100% renewable resources.
- We use low energy light bulbs where possible.
- Our shop fridge and freezer are energy efficient to comply with government guidelines.
- We offer a refill service on many cleaning products; washing up liquid, laundry liquid, shampoos and conditioners.
- We, and our staff, are encouraged to put on an extra layer of clothing rather than use the heating we have in the shop.
- The majority of the products we sell are organic which reduces the use of chemicals that have to be transported to the farms and use a lot of energy in their production.
- We only sell vegetarian food; meat production contributing around 15% of carbon emissions worldwide.
- We buy in from local suppliers where we can and none of the food we sell is air freighted.
- We do not offer our customers plastic bags and over 90% of our food packaging is biodegradable; paper or cellophane. All the takeaway cups and containers we use are compostable.





We're taking the
Crediton Climate Challenge!

HedgerowPrint

- Always use papers from sustainable forestry.
- Use 100% recycled paper stocks whenever possible
- Use vegetable based inks on our presses.
- Offer the carbon neutral scheme to offset carbon footprint of paper production.
- Recycle all paper and card waste
- Recycle all aluminium waste
- Recycle all wood waste
- Reduce landfill waste to minimum
- Continually invest in the last technology for the following reasons:
 - Lower energy consumption
 - Reduce/eliminate chemical usage
 - Reduce waste
- Heavily insulated our building to reduce heat loss so reduce energy consumption
- Plan delivery schedules and routes to minimise mileage and carbon footprint





We're taking the **Crediton Climate Challenge!**

- Seasonal menus written monthly this helps use produce readily available and local
- Use of fish and crop forecasts to tie in with menu writing
- Recycle and sort all of our own waste. Utilise all food trimmings in kitchen for less wastage. Any wastage is composted. Coffee grinds used in the garden
- Use of electricity and gas always monitored
- Recycled water from the restaurant used for the garden and plants
- Suppliers using returnable boxes for deliveries
- Grow some of our own vegetables and herbs for the restaurant
- Inspect our suppliers to make sure they maintain their sustainability practices
- Use of day boat fish rather than large trawling beamers because of the impact on the seabeds
- Recycle paper from old menus to be reused for office work
- Water butts to collect rainwater for the garden
- All staff trained in our wastage procedures (only let staff use the dishwasher once it is full & taught not to run taps when not necessary etc) & taught WHY we have these procedures and our beliefs in being as sustainable as possible
- Use of eco friendly food ware when outside catering
- Educating customers when writing a bespoke menu as to why we use the seasons. It is not just fashionable it has a serious impact upon our environment





We're taking the **Crediton Climate Challenge!**

- Supporting British Clothing Manufacturers - 2 of our 4 suppliers are based in the Southwest
- Some of our clothing is produced by two Fair Trade Certified Co-operatives or is made from renewable natural sources (such as soya, organic cotton and bamboo) & modal (an eco-friendly, man-made material originating from beech wood).
- We recycle all of our waste and reuse packaging where possible
- Paperless invoicing to our online customers
- We offer strong re-usable carrier bags if customers need one
- We mainly use good quality wooden clothes hangers instead of cheap plastic ones
- We use string for attaching price labels to clothing
- Our loyalty cards are made of card rather than plastic
- We plan to change lightbulbs to energy-saving ones and get our next batch of business cards and stationery printed onto recycled card/paper.



Landsc@re

Landscore Primary School

We're taking the **Crediton Climate Challenge!**



Lords Meadow

We're taking the Crediton Climate Challenge!

Lords Meadow Energy Efficiency and Renewable Energy Upgrades

In November 2012, Mid Devon Council, in partnership with energy services company Anesco, entered into a ground breaking energy services contract (ESCO) to save the council energy and carbon emissions.

The ESCO involved installing a range of new energy efficient and renewable energy equipment in several of the buildings owned by the council. Anesco funded the initial upfront costs of this equipment and the savings over the next 12 years will be shared between Anesco and Mid Devon Council. After 12 years, the Council will keep 100% of the savings for the remaining life of the equipment.

Several items of new energy equipment were installed in April and March 2013 at Lord Meadow Leisure Centre. Some of those will give savings from electricity use and others will give savings from heating use. This poster describes the systems installed and the savings being made.

Heating Savings Equipment

199 kW Biomass Boiler – Renewable heating system using wood chip as a fuel

Biomass boilers use wood as a fuel which is a low carbon source of energy. The biomass boiler at Lords Meadow works alongside the existing gas boilers to reduce the carbon emissions from the site.



Gas boiler optimisation

Boiler optimisation units were fitted on the gas boilers at Lords Meadow. They recognise when the boilers are operating below full capacity and adjust the temperature of the boiler by a small amount so they operate more efficiently, using less gas and saving carbon.

Air handling unit upgrade

Air handling units (AHUs) are used to control the temperature, humidity and flow of air in buildings. The air handling unit at Lords Meadow were upgraded to more energy efficient models as part of the ESCO. This will mainly reduce the amount of heating required but also save some electricity.

Valve insulation

The pipework insulation in the boiler room was topped up with new valve insulation, reducing heat losses.

Electricity Savings Equipment

Lighting upgrades

Most of the lights and fittings in the centre were replaced with the latest energy efficient fluorescent and LED bulbs.



Variable Speed Drives (VSD)

VSDs allow the flow rate of pumps to be controlled, so they use less power than fixed speed pumps, but still operate efficiently. VSDs were used at Lord Meadow to control the water pumps in the pool.

Pool dosing system upgrade

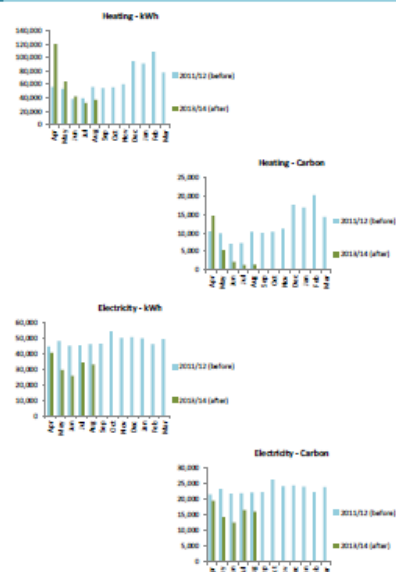
The system that doses chemicals into the pool was upgraded to a more energy efficient system.



Vending machine controls

Vending machine controls are used to reduce the energy used by vending machines. They switch off vending machines when the areas around the machines are not occupied, but they also periodically repower the machines to keep the products cool.

Energy (kWh) and Carbon Savings



We're taking the Credition Climate Challenge!



Carpet Cleaning

- The carpet products we use are Eco - friendly and made from natural ingredients, derived from renewable/sustainable sources & fully Biodegradable
- Exhibits anti-bacterial & anti-viral properties thanks to the solutions unique natural-molecular cleaning action.
- Non-toxic to humans and pets & aquatic life
- NO harmful ingredients, NO ammonia, NO bacteria or enzymes, NO isopropyl alcohol, NO phosphates, NO synthetic chemicals, NO soap or detergents, NO animal products, NO artificial ingredients
- Non flammable, Non-reactive with chemicals, such as chlorine bleach
- Solutions are non re-soiling, leaves no sticky residues

Painting decorating

- We offer a choice of natural paints - Cleaner. Healthier. Safer
- Made from naturally occurring renewables such as plant and citrus oils, tree resins, Chalk and clay
- Natural paints do not cause any pollution they regulate humidity, control condensation
- They do not contain plastic so are anti static so do not attract dust

General Cleaning

- We have reduced the amount of plastics by using concentrated products, and dilute
- We are working towards using more eco friendly products





We're taking the **Crediton Climate Challenge!**

- 50% of electricity generated by own solar and wind
- Electrical usage constantly monitored
- Deliveries all in re-usable crates
- LED lighting throughout building
- Delivery routes planned for most efficient use of fuel
- New fleet of efficient delivery vans
- Deliveries using same firm to reduce lorry journeys
- All bi-products recycled, no landfill involved in any waste.
- Waste heat used for heating offices and crate washing therefore zero carbon involved in heating
- Employing very locally to minimise travel and re-invest in local economy
- Selling own produce to minimise food miles
- Continued investment in IT to reduce paper use and increase efficiencies.
- Farm in stewardship
- Locally sourced meats sold only within region
- Minimal waste due to effective stock control and purchasing control.





We're taking the **Crediton Climate Challenge!**

Paperchain has Ethical & Social Values at the heart of everything we do...

- Collection bins recyclable and made from recycled cardboard or FSC certified wood.
- Purchase of Fair Trade products wherever possible
- Email invoices wherever possible
- Materials for recycling segregated at source [good quality material keeps in the loop for longer]
- The waste we produce is firstly re-used, then recycled with virtually none going to landfill
- The waste our customers produce is firstly re-used, then recycled
- All printing on recycled paper and postage sent in recycled envelopes
- More people power than machines [less resources & fossil fuels used, more employment opportunities]
- Collection rounds optimised to minimise fuel consumption
- Bank with Co-operative Bank [committed to leading the way on ethical, environmental & community matters]
- Telephony with the Phone Co-operative [operates both ethically and democratically for the good of its employees, customers, members and the wider community.
- Website, hosting & email with Cosmic, an Ethical Business & local Social Enterprise
- Local, ethical suppliers used as priority number one
- Bike to work scheme offered to encourage commuting by bicycle
- All computers, machines and lights turned off when not in use



PECK
STRONG

Baking Brilliance

We're taking the **Crediton Climate Challenge!**

- We generate over 50% of our ELECTRICITY ourselves through a 216 panel 50kw Photo Voltaic system which we have installed on our roof. We source the remainder of our electricity from 100% renewable sources
- We use LED LIGHTING within our Kitchens that emulates natural daylight conditions: bringing our electricity consumption to around 25% of typical lighting systems, as well as contributing towards an excellent working environment for our staff
- The GAS SUPPLY to our ovens is modified by gas savers
- Our WATER is heated mainly by warm air recovered from our fridge compressors, while the ambient heating in our kitchen is supplemented by heat recovered from our cooling room
- We use the minimum PACKAGING to achieve the most robust job. All our boxes are made from 80% recycled cardboard and are 100% recyclable
- And where cakes are, of necessity, wrapped in transparent film, plant-derived CELLOPHANE is used as a natural alternative to the more standard polypropylene
- All materials we use for CLEANING are derived from plants. They are quickly bio-degradable, have a minimal impact on aquatic life and are produced within an ecologically designed factory
- After we have taken every measure we can to REDUCE our CARBON FOOTPRINT, we OFFSET our remaining footprint (representing transport and site energy usage) through contributing to the funding of a project that exists specifically to reduce Carbon emissions in Nicaragua.



Crediton
Climate
Challenge



Queen Elizabeth's
School

We're taking the **Crediton Climate Challenge!**

- Changing the boilers to more efficient ones
- 50KW solar panels on the sports hall
- Kitchen composters on both sites
- In all the buildings we have refurbished we have focussed heavily on thermal efficiency/energy reduction measures such as low energy lighting, improved insulation when we have replaced roofs, cavity insulation and double glazing.
- Collaborating with Sustainable Crediton on a potential community solar PV renewable energy project





We're taking the
**Crediton Climate
Challenge!**

- We are in the process of replacing all lighting with low energy LEDs
- Rather than send unsold items to landfill we offer them free of charge
- We lower our carbon footprint by combining deliveries and collections efficiently
- We only print receipts if required
- We now send all unsold clothes to small villages in Africa using the charity Seeway.org
- Our metal cardboard wood fabrics & plastics are all recycled
- We are part of the reuse scheme
- We always use local Crediton companies when ever possible
- We have an advertising point in the shop for local companies
- We create local employment and take volunteers from all walks of life
- We support the local community providing low cost reusable rewearable and rereadable items at low cost to keep as much out of landfill as possible





We're taking the **Crediton Climate Challenge!**

The most significant thing we have done at Rookbeare is tree planting to absorb CO₂. 3 acres in 1994 and a further 14 acres in 2000. Attached to a small copse this makes 20 acres of oak and ash, protected by a deer proof fence. Carbon Trust calculations tell us that we are now absorbing more CO₂ than we cause to be emitted by electricity use producing ice cream and sorbet.

On the manufacturing side we always give energy conservation priority so eg storage freezers have extra insulation, compressors are more efficient etc. Last year we had to redo our tubs to comply with new legislation so took the opportunity to replace plastic lids with paper ones.

Last year we restored a Victorian barn for office and meeting rooms. This has solar PV in the south facing roof and solar thermal/wood boiler for heating.



We're taking the **Crediton Climate Challenge!**



Ruth's Real Food has always been committed to having as low an impact on the world and its natural resources as possible. We continually look for ways of doing things better, including reducing our carbon footprint and our energy efficiency.

- We work from home so no commuting.
- We have energy efficient heating (ground source heat pump)
- We source as many of our ingredients as we can locally reducing food miles.
- Our own kitchen garden provides some of our fresh fruit and vegetables.
- We use paperboard oven trays for our meals as they are better for the environment than other containers in the market. The paperboard is sourced only from those suppliers who have FSC/PEFC chain of custody.
- We use sustainable insulation for shipping food not polystyrene. Recycled cardboard boxes are lined with specially designed sheep's wool liners which can be recycled or composted.
- We aim for no food waste - leftovers are used up by the family and any remaining kitchen waste is composted.
- We re-use and recycle all paper waste.
- We recycle all tins, glass and plastics.
- We use paper carrier bags.
- We try to work with suppliers who share our ethos.





Sandford Church

We're taking the **Crediton Climate Challenge!**

Present Position

- Low energy lighting
- Church wildlife conservations areas

3-YEAR PLANS:

- Consider low-energy alternatives at all buildings
- Register as Fairtrade Benefice

5-YEAR PLANS:

- Explore installation pv panels where appropriate





Shobrooke Church

We're taking the **Crediton Climate Challenge!**

Present Position

- Green Loo installed
- Energy efficient heating installed
- Church wildlife conservations areas

3-YEAR PLANS:

- Introduce low-energy lighting
- Consider low-energy alternatives
- Register as Fairtrade Benefice

5-YEAR PLANS:

- Explore installation pv panels where appropriate





Tesco Crediton Superstore

We're taking the **Crediton Climate Challenge!**

- Constructed from Timber from Sustainable Forestry
- Constructed to maximise natural light, reducing the need for generated power
- Rainwater harvested & used to flush all toilets instore
- All back offices, colleague canteen, changing areas & colleague toilets have automatic lighting. If no movement is detected lights switch off and come on automatically as the room is entered.
- All shop floor chillers & freezers have 'maximum fill lines' to ensure they are not using more energy than is required.
- Shop entrance is protected by an 'Air Curtain' to help maintain as much as possible, a constant temperature reducing heat loss & energy use.
- All warehouse fridges & freezers have both insulated main doors and curtain doors to maintain temperature and minimise energy use.
- Each relevant department - Counter's, Bakery, Back Door, has standard practice procedures for minimising energy use.
- All waste is divided into; Paper/Cardboard, General & Food. This is either recycled or sent for energy generation or converted to fertiliser.
- All bakery waste is sent for conversion into animal feed.
- All new uniform, where appropriate made from 100% recycled materials.





We're taking the **Crediton Climate Challenge!**

- We installed a 10KW Solar Panel system in August 2012 which has enabled us to self generate much of the electricity we use.
- We have a system in place for using rain water as much as possible to water our plants
- The gas heating in the shop is closely monitored to prevent excessive use
- Carrier bags given to customers is kept to a minimum
- We are investigating the use of LED lighting in our shop and office to save electric
- We regularly recyle our plastic & cardboard

