Environmental Guidance for Residents

There is now no doubt that global warming is causing more frequent weather extremes of longer duration. Despite public concern over climate change and biodiversity loss, the scale of the problem is not so huge that it is beyond the ability of individuals or the community to take actions to reduce their local impact.

As individuals, we can try to make our own lives more resilient to climate change by increasing the energy efficiency of our homes, changing how we choose to travel, and, if finances permit, investing in renewable energy sources. We can also make a significant local impact on the local ecology by turning our own gardens into better habitats for birds, bees, insects, hedgehogs and other wildlife we love to see in the garden.

Stevington Environment Group has produced this Environmental Guidance for the residents of Stevington village as a companion document to the Stevington Environmental Manifesto. Although the manifesto and the guidance for residents address the same environmental topic, they have differing perspectives. While the manifesto has been written to shape parish council policy, the guidance document has been written to support residents in taking practical actions to build their own resilience to climate change.

Although there are many things which we can each do as individuals, there are significant benefits if we work together on climate resilience. By working as a community, we reinforce a sense of community cohesion and pride, we can share experiences, gain expertise and develop best practice for climate action. We can also take on community scale projects which make the costs of energy-efficiency technologies and infrastructure more affordable. By making our homes and our village resilient to climate change and more energy efficient, we can make Stevington a more attractive place to live and our properties more desirable.

This environmental guidance document is laid out in two sections.
The first section is concerned with energy and covers energy efficiency and energy sources, renewable energy systems, travel and transport and consumption of consumer goods. The second section is concerned with our ecological environment and covers what we can do in our gardens, the importance of our food and water, the need to manage our footpaths, bridleways and greenspaces and the river Great Ouse.

Energy

As energy prices continue to rise, it is crucial that we consider not just how much energy we use but also the type of energy we use. Most homes currently use gas or oil as their main source of heating and may well continue to do so for the foreseeable future. However, residents need to be aware that the government, as part of its decarbonisation efforts, is currently consulting on proposals to phase out the installation of new gas and oil boilers in homes by the mid-2030s. Meeting the UK government goal of reducing carbon emissions by 68% by 2030 and achieving net zero emissions by 2050, may seem very difficult but there are a number of actions we can all take as individuals.

Home Energy Efficiency

One obvious action for homeowners is to reduce the amount of energy in the home that is simply wasted.

- **Insulation:** Check, and if possible, improve, the level of insulation in the home (roofs, walls and floors in that order of priority). If your house is less than 20 years old, then the level of insulation may already be acceptable as building standards for insulation have improved considerably over the last 20 years.
- **Energy-efficiency**: Look for energy-efficient appliances when replacing old ones. These use less energy and although more expensive to buy will help to reduce your energy bills in the long term. Checking how much energy appliances use can help you decide which is the better choice for your budget.
- Make sure that your boiler is serviced regularly as an efficient heating system that you can control easily can help reduce your fuel bills and reduce your carbon emissions.

Easy to implement energy saving and cost saving tips

- If you have not already done so, make sure all your light bulbs are LED bulbs
- Turn off lights and switch off TVs, computers and other electronic devices when not in use.
- Avoid leaving appliances on standby which could save you up to £65 a year
- Use a power strip to turn off multiple devices at once, to reduce standby power consumption.
- Unplug chargers when not in use as they still use energy even when not charging a device.
- Adjust your thermostat to a lower but still comfortable temperature in the winter but do not be afraid to manually override the settings if the weather keeps changing from freezing to mild.
- A heated thermal throw will keep you warm in a cool room
- Use smart heating controls systems to regulate the temperature in your home. This technology will allow you to heat the rooms you need warm and leave other areas cooler.
- Some smart systems, such as Hive and Nest, can give very precise control, even remotely, to improve the efficiency of your central heating, so consider upgrading if you have an older thermostat.
- Seal gaps around windows, doors, pipes and cables to prevent drafts and reduce heat loss.
- Use curtains or blinds to reduce heat loss through windows and uninsulated doors and use draught excluders around windows and doors to prevent cold air from entering your home.
- Keep radiators clear of any furniture or curtains to heat up your home more quickly and efficiently.
- Use rugs and carpets to insulate your floors and add warmth to your home.
- Consider washing clothes in cooler water instead of hot water.
- Use a drying rack or clothesline to dry clothes instead of a tumble dryer

Make sure to check if you are eligible for any financial help or grant, such as the Energy Company Obligation (ECO) scheme, which provides help to vulnerable households. Following these tips, you will not only keep your home warmer but should also reduce your energy bills.

For more information on reducing your costs and your home carbon footprint, the Energy Saving Trust (https://energysavingtrust.org.uk/) gives very useful advice.

Keeping cool and comfortable in summer

As well as keeping warm in the winter, to maintain our well-being we also need to keep ourselves cool and comfortable during the hot spells by reducing humidity and the internal temperature of our homes. Unfortunately, there is far less information or guidance about this as it has rarely been needed in the past. However, a number of suggestions, which may help you to keep cool and comfortable, are listed below.

Inside the home

- Consider installing air cooling technologies (essentially heat pumps in reverse)
- Consider using dehumidifiers. These can help remove excess moisture from the air. However, make sure these devices are regularly cleaned and filters are replaced. Dirty filters will reduce effectiveness
- Use blinds, shades or insulating curtains to block the sun's rays at windows. Drawing curtains on the sunny side of the house and then opening them in cooler hours can cut temperature by up to 2°C
- Use natural ventilation by opening windows and doors during the cooler parts of the day and closing them during the hottest parts
- Use exhaust fans in bathrooms and kitchens to remove humid air from those rooms
- Keeping internal doors open to allow air to circulate through the house
- Use fans or air conditioning. Fans are an energy-efficient option. If air conditioning is used opt for energy-efficient models and maintain them regularly to ensure they function optimally
- Wear loose and light-coloured clothing made of natural fabrics and staying hydrated

Outside the home

- Install awnings and shutters over windows and doors to provide shade and let less light into the house.
- Plant trees or installing shading devices to block the sun's rays on the outside of the building
- Plant climbers to provide shade for interiors in the summer and then warmth in winter when they shed their leaves and let light through.
- The colour of the roof and exterior walls can also affect how cool a building is in the summer. Lighter colours, such as white, will reflect more of the sun's rays and help keep the building cooler. Darker colours, such as black, absorb more of the sun's rays and may make the building warmer.
- Moving house plants outside may make a difference and reduce humidity, but with only a few plants, the impact may be minimal.

Green & Renewable Energy providers

Traditional electrical energy suppliers often rely on fossil fuels to generate electricity. By using green energy providers, we can reduce our carbon footprint and support the development of clean energy technologies and infrastructure.

Some green energy suppliers offer incentives and discounts for customers who install renewable energy systems such as solar panels and heat pumps on their properties. This is worth investigating if you are considering installing this type of technology. A significant proportion of green energy providers are certified by independent organizations such as the Carbon Trust, the Renewable Energy Association, or Eco-Label. These companies can provide you with assurance that the energy supplied is genuinely renewable and meets strict environmental and sustainability criteria.

Renewable Energy Sources

Globally, there are many renewable energy sources available such as solar energy, wind energy, hydroelectric energy, nuclear and biomass energy. However, not all of these sources are suitable for installation everywhere. The two main types of renewable energy sources that Stevington home owners may be able to use are:

- **Solar panels**: Solar panels work by converting sunlight into direct current (DC) electricity through the use of photovoltaic (PV) cells. A typical UK rooftop installation can provide around 3,400 kilowatt-hours (kWh) of electricity per year, depending on factors such as the size of the installation, the orientation of your roof and any shading from nearby buildings, structures or trees.
- **Heat pump**: this is a device that extracts heat from the air or ground outside the home and transfers it into the building via a heat exchanger. A well-designed and well-installed heat pump can provide three or more units of heat for every unit of electrical energy used. However, you need to be aware that home insulation is crucial for the effectiveness of a heat pump. Poor insulation will lead to heat losses, which means that the heat pump has to use more energy to maintain the desired temperature, reducing its efficiency and increasing energy bills.

These new technologies are expensive to buy and take some years for the free clean energy provided by these technologies to repay the initial financial investment. It is worthwhile exploring financial support options such as the Renewable Heat Incentive (RHI) scheme which provides financial assistance to households and businesses installing renewable heating systems. https://www.gov.uk/domestic-renewable-heat-incentive

Energy Storage

Investing in home energy storage systems such as batteries can help you overcome the variability of solar energy by storing excess energy generated when the sun is shining and then using the stored energy in the darker evenings. If you are on a suitable tariff, you may even be able to buy and store energy when it is available at a cheaper rate (overnight) and then use it during the day. You should investigate the costs and benefits of battery storage if you are considering installing solar panels. A reputable solar energy company should be able to provide advice on the cost vs benefits of investing in a battery system. Alternatively, there are energy consultants that can provide advice.

Local travel and transport

Cars, vans and lorries, which use petrol or diesel internal combustion engines are a significant source of emissions and air pollution. Despite the small size of our village, there is a surprisingly large and growing volume of traffic flow through Stevington. Most residents use at least one car and we also increasingly have shopping delivered to our front doors. There is little residents can do about the carbon emissions of these delivery vehicles, there are however actions individuals can take to reduce their own local personal transport-related carbon emissions. Some of the actions that you might consider to reduce your personal carbon footprint include

- Switching to low-carbon modes of transportation like walking or cycling for local journeys
- Lift sharing or using one of the many car-sharing groups listed on www.como.org.uk also consider posting car share group information on the village Facebook pages
- Using the bus where this is feasible
- Explore the feasibility of an electric or hybrid vehicle when buying a new car
- Set up informal support networks for EV users or WhatsApp groups for car-sharing

Taking holidays and making longer journeys

Travel abroad, and sometimes travel within the UK, can require air transport. Unfortunately, aircraft do use large amounts of aviation fuel which can add significantly to your personal carbon footprint. Where possible, you should consider using alternative means of travel such as the train or a coach. Eco-tourism is growing in popularity with many eco-friendly holiday options available that allow you to experience nature and wildlife in a sustainable way, from camping and glamping to eco-lodges and sustainable resorts. Options are available to suit all budgets. Finally, how about taking a holiday closer to home? "Staycations" can be a great way to explore your own country and support local businesses while reducing your carbon footprint by avoiding air travel altogether.

Consumption

You may not realise it, but our own consumption of food and consumer goods have a significant impact on our personal carbon footprint.

Food

The food we eat and where we purchase it from can have a significant impact on our carbon footprint. This needs to be considered as we do our shopping. The production of meat, for example, generates much higher levels of greenhouse gases than plant-based foods and food transportation and any packaging can also generate emissions. Just as important however is the food we throw away. It was reported by the BBC News that in the UK we are wasting 6.5 million tonnes of food every year and 4.5 million of this was perfectly edible! We can reduce our food related carbon footprint if we:

- Reduce food waste: only buy what we need and use up our leftovers
- Reduce the amount of meat we eat
- Eat more plant-based food
- Support suppliers using sustainable agriculture practices.

Consumer goods

Everything we buy and use from our clothes to home goods and cars requires energy, lots of it, to extract the materials, to manufacture the goods and transport them to point of sale or use. The energy used in production and transport of goods is almost entirely based on fossil fuels. Just buying products generates significant greenhouse gas emissions somewhere in the world. By choosing products manufactured in the UK or with lower carbon footprints, buying second-hand items, and recycling and properly disposing of items, we can significantly reduce our impact. Actions to consider here are:

- Reduce your consumption of goods – ask yourself “do I really need to buy this item?”
- Consider the full lifecycle of a product before purchase; how it is made, transported, used, and how is it disposed of after use
- Look for products that are made from sustainable materials, have minimal packaging and can be recycled or reused.
- Consider the carbon footprint of products before purchase and support companies with sustainable practices. Look for labels or certifications that indicate a product was made with sustainable practices, e.g., Fair Trade Certified or Forest Stewardship Council (FSC) labels.
- Reduce waste by adopting circular economy principles such “reduce, reuse, recycle”
- Support organisations such as Emmaus in Carlton to recycle working goods you no longer need
- Shop locally to reduce the carbon footprint of products, as they have not been transported long distances. Look for locally made products, and support small businesses in our area.

Ecology

In the UK, biodiversity loss is a major problem and this is now understood to be mainly caused by human activities such as urbanisation, land-use changes and our historical intensive farming practices. As a result of these activities, we have seen massive reductions in bumble bees, butterflies, moths and insects which pollinate our plants. Wildlife habitats have become fragmented, ecosystems less diverse and many of our native plant and animal species are disappearing.

What is less clear is the extent to which this is happening locally in Stevington. What we do know, as a fact, is that between 2009 and 2015, our local Stevington ecological environment was in good shape. The community conducted a major project on the natural history of the parish which led to the publication of a superb book written by Jacky Gooding, Roger Day and other members of the Stevington community (http://www.stevingtonhistoricaltrust.org.uk/Publications.htm). Over the past 10 years however, many of us have noticed reductions in insects and pollinators, wild flowers and other important species. We must act now to manage and rebuild the ecology of our unique parish.

Things we can do ourselves

There are many things we can each do as individuals. Many of our houses have large gardens which ecologists are telling us are extremely important to support wildlife, even a small garden can make a difference. So below we suggest some practical actions that residents and homeowners can take in their gardens to help create more wildlife friendly habitats.

- Mow less often. This will help insects and emit less CO_2 if using a petrol mower
- Create a wildlife garden by planting native flowers, trees and shrubs to provide food and shelter for local wildlife and support pollinators (bees, butterflies, moths and other insects)
- Leave a wild corner in your garden where you do not mow the grass or disturb it, this will also create a natural habitat for wildflowers, insects, and other small creatures
- Build a birdhouse or install a bird feeder to attract birds to your garden by providing them with a safe place to nest and food to eat.
- Do not use pesticides or weed killer chemicals as these kill beneficial wildlife. For information about natural and organic alternatives visit www.gardenorganic.org.uk
- Provide a water source or create a small pond or water feature in your garden to provide water for wildlife; even a dish of water, that you fill up regularly can make a difference
- Consider installing a water butt to collect rain water to help conserve water
- Create a hedgehog highway. Make small holes in your garden fences to allow hedgehogs to move freely between gardens, this can help them to find food and mates.
- Get involved in local conservation efforts and join a local wildlife group or conservation organization to learn more about how you can help protect wildlife and their habitats.
- Build compost heaps to recycle organic waste from fruit and vegetable peelings, grass cuttings, fallen leaves etc; this will also provide manure to support plant growth

Bedfordshire Rural Community Charity (https://bedsrcc.org.uk/) provides excellent advice and support.

Local food and shopping

Although we have no local farm shops in Stevington, consider supporting local farm shops in neighbouring villages. This should reduce the carbon footprint of your food and support employment for local people. You could also consider using a small section of your garden to grow your own fruit and vegetables, a single fruit tree can make a difference and help biodiversity to grow in your garden. Please also support the local community shop in the Church Room as it expands the local services it provides.

Footpaths and bridleways

The footpaths and bridleways in Stevington play an essential role in connecting residents with nature and the rural landscape. They offer opportunities for outdoor recreation and exercise, as well as access to important habitats and wildlife corridors. However, there can be negative impacts on biodiversity if they are not managed properly. For example, trampling by humans and livestock can cause soil compaction and erosion, which can harm plant and animal communities. We need to manage these pathways sustainably so when using footpaths and bridleways please

- Respect boundaries and stick to designated paths to prevent trampling on sensitive habitats, especially during nesting and breeding seasons.
- Keep a safe distance from wildlife and do not disturb or damage their habitats.
- Take your litter home, litter not only looks unsightly but can also harm wildlife.
- Keep dogs under control and on a leash in sensitive areas to avoid disturbing wildlife.
- Do not pick wildflowers, these are an essential part of the ecosystem and provide food and habitat for insects and birds.
- Close all gates behind you when using footpaths and bridleways and follow any other signage or guidance provided by landowners or local authorities.
- Support projects or community actions to improve biodiversity of footpaths and green spaces
- Respect local bylaws and private property.

The river Great Ouse

The river Great Ouse defines the north east boundary of Stevington parish. The land on the right bank over the whole parish boundary is owned by farmers and other land owners. However, there is a popular sailing club and a lovely accessible public footpath along the river bank between the sailing club and Oakley bridge. The recommended actions listed above for footpaths and bridleways in general also apply to the footpath along the river bank but with the following additional points.

- Be aware of the potential risks of drowning or other accidents in the water
- Be mindful of the impact of human activity on the river and riparian zone ecosystems.

The river Great Ouse is an important natural asset, not just in Stevington parish but all along the Great Ouse Valley across Bedfordshire. As a river, it provides water for wildlife and for us. It provides water to irrigate crops, it acts as an important natural wildlife corridor, providing important habitats for a diverse range of plants and animal species. It also provides a scenic, peaceful environment for recreational activities such as wild swimming, fishing, canoeing and river side walking or simply observing the river's wildlife. This promotes our physical and mental well-being. Unfortunately, over the years our river has been degraded through a combination of river modification, pollution from water run-off into the river and, further upstream, we have experienced sewage discharges. You can help to stop all this by supporting or becoming volunteers for local charities such as the Bedfordshire Great Ouse Valley environmental Trust (www.bedsgovet.org), the Campaign for the Protection of Rural England (CPRE Bedfordshire https://www.cprebeds.org.uk) and the Wildlife Trust (BCN) (https://www.wildlifebcn.org/) who are all working to improve our river, its water quality, river wildlife and riparian zone ecology from further damage.

Farmers and landowners

As residents of Stevington, we greatly appreciate the hard work and dedication of our local farming community. We recognise that landowners and farmers as well as growing crops and managing livestock to feed us all, have a crucial role in improving biodiversity as they transition to more sustainable farming practices, planting more native trees and shrubs, promoting better habitats for pollinators and creating more wildlife friendly hedges and field boundaries, these actions are critical to reversing biodiversity loss.