



# Ware Town Council Eco-audit Report Contents:

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### ***Eco- Audit Report for: Ware Town Council***

**FAO: Terry Philpott, Town Clerk**

## **Introduction**

We would like to thank Terry Philpott, Sean Higgins, Matthew Watkins and the rest of the town-council staff for kindly facilitating the eco-audit process.

The key context for this eco-audit is the statement by the UN Secretary General in Sept. 2018, that humanity must be radically cutting fossil-fuel emissions within two years, if we were not to face potential extinction. In December 2020, he called for all nations to declare a climate emergency.

The 2018 IPCC report stated CO<sub>2</sub> emissions need to be halved by 2030, to have a two-thirds chance of avoiding temperatures catastrophically rising above 1.5C.

It is therefore welcome that Ware town-council has resolved to include environmental responsibility into its future planning.

We hope this report will enable Ware council to implement this strategy. In addition to demonstrating best practice in its own operations, being the closest tier of government to the community, means it has many constructive opportunities to enable the town itself reduce its carbon and ecological impact targets.

The data in this report takes the year prior to the pandemic as the suitable baseline year to measure future progress.

# 1. Headline Eco-Data Figures 2019/20

## Combined data for all premises<sup>1</sup>

### Building Energy Consumption

Electricity CO <sub>2</sub> (tons) (229,000 kwh)	63
Gas CO <sub>2</sub> (tons) (526,750 kwh)	100

### Building Energy Carbon Footprint (tons) **163**

Flights CO <sub>2</sub> (tons)	0
Vehicles	3.2
<b>Total Transport Carbon Emissions</b>	<b>3.2</b>

### Total Energy Carbon Emissions **166**

Mains water consumption (litres):	6,300,000
<b>Water supply CO<sub>2</sub> (tons)</b>	<b>6.3</b>

A4 Sheets equivalent of paper	120,000
% Made from recycled paper	12.5
Trees consumed (gross)	12
Trees saved by using recycled paper	1.5
Trees consumed (net)	10.5
<b>Paper carbon emissions (tons)</b>	<b>2.5</b>

<b>Council municipal waste (tons)</b>	<b>210</b>
Non-recycled waste (tons)	203
Recycled waste (tons)	7.5
<b>Waste CO<sub>2</sub> (tons)</b>	<b>59</b>
<b>Recycling rate (%)</b>	<b>3.5</b>

<b>Catering waste (tons)</b>	<b>266</b>
Recycled (tons)	152
Non-recycled waste (tons)	114
<b>Catering waste CO<sub>2</sub> (tons)</b>	<b>33</b>
<b>Catering recycling rate (%)</b>	<b>57</b>

<b>Total waste (catering + council - tons)</b>	<b>476</b>
Total non-recycled waste (tons)	317
Total recycled waste (tons)	159
<b>Total waste CO<sub>2</sub> (tons)</b>	<b>92</b>
<b>Total recycling rate (%)</b>	<b>33</b>

**Bank:** Nat West, CCLA (reserves)

<sup>1</sup> Figures for the Bowls Pavilion were not available but as the council owns the premises, they are part of the council's carbon emissions.

### Utility Costs

Electricity	£34,500
Gas	£21,000
Water	£14,000

### Breakdown of Electricity Use (Tons CO<sub>2</sub>)

Electricity consumption was estimated from expenditure not actual meter readings.

Priory	32.00
Fletchers Lea	11.00
Lido	18.00
Priory grounds	1.00
Cemetery	0.25
<b>Total</b>	<b>62.25</b>

### Breakdown of Gas Usage (tons CO<sub>2</sub>)

Gas consumption was estimated from expenditure not actual meter readings.

The Priory	52
Fletchers Lea	17
The Lido	31
<b>Total</b>	<b>100</b>

### Water Costs

Lido	£10,000
Priory grounds	£ 1,250
Allotments	£ 1,030
Cemetery	£ 890

Note: There was a reported serious leak at the Lido, which explains some of the high consumption.

## Paper Usage

In-house photo-copying	100,000 A4 sheets	0% recycled paper
External printing	20,000 A4 sheets	75% recycled paper

## Total Measured Carbon Emissions (Tons CO<sub>2</sub>)

Gas	100
Waste	92
Electricity	63
Water	6
Vehicles	3
Paper	2
<b>Total</b>	<b>266</b>

## Data Analysis

### Carbon Footprint

Your annual energy carbon footprint for building energy is 166 tons, which is about the equivalent of the average annual energy emissions of about 55 UK homes.

For the Priory, the emissions of 82 tons, are the equivalent of about 27 UK homes.

Your total calculated measured carbon emissions come to 266 tons or about 88 homes energy emissions.

This does not include day to day consumption of other materials, that it would be too expensive to calculate exactly, but for most organisations another estimated 40% can be added for this, but it would vary widely from year to year.

### Electricity

Switching to a genuinely green electricity supplier would make all your emissions for electricity net zero. The government requires such green electricity to be reported both voluntarily as net zero and as if from national grid.

There is some potential for solar electric panels at Fletchers Lea.

Electricity consumption is much higher at the Lido than we would have expected. We have listed what we think are the reasons for this in the detailed electricity section below.

## **Gas**

The gas-boilers have just been replaced at the Priory. It would be a waste of capital to replace them with a net-zero electric option at this stage. The priority therefore is to maximise efficient usage, through zoning and management of timing and temperature controls.

Fletchers Lea has a higher gas consumption than we would expect. It is the equivalent of about 12 homes worth. This is due to the inefficient underfloor heating system and the large high spaces that have to be wastefully heated. Switching to an infra-red panel system would reduce wastage and allow it to be net-zero if combined with a green electricity tariff.

The gas-boiler at the Lido is old. Due to summer operating hours and the flat-roof available this looks like an excellent opportunity to install a combined air-source heat pump, complementing a solar thermal panel system on the roof. Combined with a green tariff this could make the Lido net-zero.

## **Waste/ Recycling**

There is currently no recycling scheme in operation in any of the council's premises.

The former catering company had a good environmental policy and had a recycling system in place for mixed dry recycling, glass and food-waste. However, the new catering companies' contracts requires them to remove the waste and so no recycling system likely to be in place.

The government treats recycled waste as net zero for carbon emissions, but this still means that the carbon emissions from non-recycled waste are the 2<sup>nd</sup> largest source of your measured emissions.

Carry out a waste-analysis of your non-recycled waste stream to identify what is consists of and devise a strategy to reduce its production in the first place. Staff said they were in the process of setting a recycling scheme up with the district council.

## **Water**

The 6.6 million litres of water used is largely due to the 4.4 million litres used by the Lido, where staff just discovered an ongoing leak.

Whilst your carbon emissions at 6 tons from water are modest, it is important to reduce water wasted, due to impacts of extraction on the ecology of rivers and streams. The Thames valley is officially regarded by the Environment Agency as "water stressed". This is due to the low amount of rainfall per capita population.

## **Paper**

Office paper consumption = 100,000 A4 sheets. All non-recycled.

External printing = 20,000 A4 sheets. (75% recycled paper).

Your estimated paper carbon emissions at 2.3 tons equate to that of the annual heating gas emissions from one UK household.

The quickest way to reduce this is to switch to using post-consumer recycled paper for your photocopying and printed materials.

Also examine ways to reduce the amount of paper being consumed.

Your paper usage also results in the annual felling of about 11 trees annually. Each mature tree stores about 1 ton of carbon.

Switching to 100% post-consumer waste-paper would reduce trees felled to zero and reduce the carbon emissions by about 50%.

## **Transport**

Transport emissions are modest at 3.2 tons. When replacing the council truck, seek to replace it with an EV option.

Car mileage 4,000 miles = 1.2 tons CO<sub>2</sub>

Van 769 litres diesel = 2.0 tons CO<sub>2</sub>

## 2. Policy & Management Recommendations

### Suggested Next Steps

1. Submit the eco-audit report to the Town Councillors with recommendations for action.
2. The Town Clerk to ensure annual eco-audit report is produced and presented to the council, including the above eco-data bench-mark measurements.

The report would include a summary of any other relevant environmental information, including progress on implementing eco-audit recommendations and progress made on initiatives involving the local community.

3. Request the councillors to appoint a green champion to support the Town Clerk in the implementation of the recommendations.
4. The Clerk to ensure that procedures that address waste reduction, recycling, green-purchasing and energy-efficiency monitoring are in place.
5. Ensure that a spreadsheet reporting implementation progress of eco-audit report recommendations, is a standard item on the relevant committee meeting agenda.
6. Include eco-issues in future tenant and room-hire agreements, such as electrical, water and heating efficiency and participation in the recycling service when introduced.
7. Any future contracts that the council signs should include criteria that facilitate it working towards its carbon and ecological targets.
8. Include a new climate and ecology advice section on your website, where local town residents can get information on the various ways that they can reduce their carbon and ecological impacts.
9. Consider staging a Climate & Ecology Ware Community Engagement Day in conjunction with local community groups, to see if you can stimulate some collective partnership actions locally.
10. Consider approaching the museum to see if they will stage exhibitions on different aspects of life in Ware over the generations but adding an environmental context and education element to them on how they can now be done sustainably e.g., transport, packaging, food, heating etc.



## 3. Human resources

1. Staff contracts should be amended in consultation with the staff to include a new provision along the lines of: *“The Ware TC is committed to being an environmentally responsible council. You will be expected to help in delivering this commitment, in how you fulfil your day-to-day duties, as a member of our staff”*.
2. Similarly, job-specifications should be changed where relevant, which will help ensure new eco-procedures are passed on to new staff.

For example, the job specification for the town-clerk should include section requiring them to report annually to the council on its environmental performance, including the data sets outlined above.

3. Then targets for implementation of the green strategy can be included in relevant staff annual appraisals and include environmental training / awareness in any personal developmental plans.

For example, the facilities manager to improve the efficiency of the premises and the hiring manager the eco-performance of the events that the council hosts etc.

4. Induction procedures for new staff should include procedures adopted to implement this policy of environmental responsibility e.g., including how to use energy & water efficiently, green purchasing and waste-reduction & recycling procedures.

## 4. Top Dozen Priorities for First Year

The following items are suggested as your top dozen priorities for first year:

1. Ensure heating and hot-water timers, temperature settings and zoning controls are set correctly.
2. Introduce recycling scheme for all your premises.
3. Get quotes for zoning system at the Priory.
4. Carry out feasibility study and quotes for hybrid renewable energy system for water-heating at the Lido.
5. Switch all your paper products to 100% post-consumer recycled paper.
6. Switch to a green electricity tariff.
7. Draw up plans to consult on the conversion of your old cemetery into community memorial eco-park.
8. Complete the switchover of all lighting to LEDs within a year.
9. Get quotes for infra-red heating in Fletcher's Lea and carry out trial of infra-red heating panels e.g., at reception or café.
10. Carry out a survey of your non-recycled waste stream and develop a plan to reduce its production in the first place and to increase the volume being recycled.
11. Implement annual financial year-end environmental reporting to the council on its own environmental performance progress and the local community's.
12. Develop an action plan in conjunction with the local community on how to achieve a Low Carbon Ware.

# 5. Heating

## The Priory

### Current Good Practice

1. New efficient gas-boiler has been installed.
2. Tenants are heat-metered, which means that they are accountable for heat used and so more likely to be efficient in its usage.
3. Heating was off in Oriel Suite corridor.
4. Conservatory windows already double-glazed.
5. Heating was off in kitchen-corridor, freezer room and kitchen bathroom.
6. A heat-extractor from the frequently over-heating events space in the conservatory has been installed, which heats the ground-floor.

### Suggested Next Steps

#### 1. Heating Systems

The tea-room has a high ceiling, has 5 outside surfaces and the external doors are open to service customers.

This makes it expensive and very wasteful to heat conventionally. We would suggest that this space is a good place to trial infra-red heating panels to see how they work for you.

<https://www.herschel-infrared.co.uk/>

These panel heaters can have mirrors, designs or colours placed on them, so that they can fit in better with the aesthetics of the premises.

They generally consume about 500watts per panel and can have efficient temperature and timer controls.

2. If replacing the kitchen ovens at any stage in the future, switch to electric ovens, so that combined with a genuine green tariff, they can become net zero carbon.
3. The receptionist is often cold due to door opening and closing frequently. Consider getting an infrared panel to heat them rather than the air. Another good place to trial the technology.

## Temperature / Timings / Controls

1. Recommended winter-heating room-temperature by the government's CCC for sedentary activities such as office-work is 18C. CIBSE recommend 19C.

**Important: *Each extra degree wastes up to 10% of your heating bill.***

As parts of the Priory are being heated to 23C, you are wasting up to 40 or 50%, even when occupied.

The recommended temperature for the non-ambient elderly is 21C.

If particular staff have a need for extra warmth, examine if it is possible to place their desks by the radiators or get a plug-in infrared panel heater to place beside them. These can be stood on wooden stands or mounted on the wall or ceiling by the staff member.

2. Get a digital thermometer for the premises and have named staff member assigned to implement the CIBSE recommended heating temperatures, as far as practical with current controls.
3. It is crucial for a building with very varied occupancy rates, that there is an effective and easily programmable zoning system installed. **Urgent.** This will stop empty spaces being expensively heated for long periods of time. For example, the Priory Hall is heated all week 8am to 8pm to 20C even though often empty.
4. Ensure that the facilities management team are properly trained in the complex controls for the new heating boilers.
5. Time the heating to come on to coincide with occupation needs e.g., 30 minutes prior to start-time and to go off prior to end of occupation e.g., an hour prior to cessation. These times will vary according to thermal capacity of the spaces.
6. For the function rooms that are rented out with very high ceilings or large spaces e.g., the Hadsley or Page Croft Rooms, consider installing infra-red panels, as these heat the people and fabric in the room rather than the air above.
7. The opening hours for the rented-out offices is 8am to 8pm.

Explore if they are actually being used out of office hours or at weekends. If only very sparsely used, consider reducing the hours of operation in consultation with tenants or when the leases come up for review.

8. Turn heating in bathrooms/staircases/corridors/ kitchens etc. down to frost-protection.

They do not need to be heated to the same temperature as occupied parts of the premises. Some corridors & the stairwell were at 19C and some bathrooms at 23C on the day of the site visit.

Heating bathrooms above frost-protection is a significant waste of energy, as the windows are often left open for ventilation and people only use them for a brief time.

## **Insulation**

1. Place heat-reflectors behind any radiators on outside walls, especially important in solid walled buildings like the Priory.
2. Ensure radiators on outside walls are not blocked by furniture or boxes etc.
3. Ensure that loft spaces are insulated to modern standards (300mm). There is loft insulation available made from recycled plastic bottles.  
<https://naturalinsulations.co.uk/product/supasoft-insulation/>
4. Ensure the loft-hatches e.g., in council chamber ceiling are also insulated at the same time and draught-proofed if necessary. Also keep closed.
5. Exit-door by stairs to Oriel suite needs draught-proofing and a door-brush.
6. Insulate all the hot-water pipes & joints attached to the new boilers that need it.
7. Some sash windows have slipped, allowing cold air in at the top and centre-gap. Install 2 evenly spaced catches, to avoid all the weight falling on one, which then fails.

## **Fletchers Lea**

### **Suggested Recommendations**

1. The underfloor heating is run from a gas-boiler, which was installed in 2007.

Staff reported that it is very inefficient, taking up to 3 days to warm-up!

Thus the heating is left on overnight in winter.

In addition, as the building has very high ceilings, it wastes a lot of energy to warm up those spaces.

We would therefore suggest carrying out a feasibility study and get a quote for the installation of infra-red panel heaters, which heat the people and structure rather than the air.

Combined with a genuine green tariff, this would give you a more efficient and net-zero heating option.

## **The Lido**

### **Suggested Recommendations**

1. The main pool boiler is over 17 years old. Thus, it would not be wasting previously invested capital to upgrade it to a net zero carbon system.

As the open-air pool is only operational during the summer months, this makes it ideal for the use of a solar-thermal system, with back up by an air-source heat pump.

There is a significant amount of space available on the flat roof of the premises to facilitate the installation of the solar-thermal panels.

These could also supply the hot-water for the showers and bathrooms.

2. The existing boiler-room has some pipes and joints that need professional insulating.

## 6. Electricity

### Existing Good Practice

1. The air-conditioning system in the large events conservatory is rarely used, as staff usually open the doors to the park instead.  
Air-conditioning is an intensive energy user. An air-conditioned building will often have double the energy consumption of non-air-conditioned buildings.
2. Due to lockdown, all the drinks-coolers have been turned off.

### Suggested Next Steps

#### The Priory

1. Switch to a green electricity-tariff. Switching to a green electricity supplier who sources all of their electricity from zero carbon sources such as hydro, wind and solar panels, would ensure all of the electricity used by council premises is carbon-neutral.

Orsted Energy undertake to match regional renewable electricity price quotes:  
<https://orstedbusiness.co.uk/en>

Good Energy and Ecotricity are the top rated green-electricity suppliers and SSE also have good quality renewable energy tariffs, if you would like additional quotes to Orsted Energy.

2. Ensure laptops/computers are set to energy saving mode and lower the screen brightness to appropriate level for users, unless people have specific eye-problems.
3. Install timers on local Sadia electric hot-water heaters and set in line with occupation.
4. You have a large electric immersion heater that appears to be working in tandem with the central-heating system.

Ensure that they are not duplicating each other and that the heating timers are set in line with opening hours.

5. Get timers for the drink-coolers, so that drinks are only cooled when needed during operational hours.

6. Your freezers look to be very old. Modern freezers use less than a third of the energy of older freezers. This is the one item, that we recommend replacing with newer models. Also check efficiency of the walk-in cold room and regularly check its door-seals.
7. There are electric convector heaters in the Lord Wale Suite. Consider replacing with more efficient infra-red panel heaters and installing controls so that they cannot be left on over-night.

## **Fletchers Lea**

### **Suggested Recommendations**

1. Install timers in the 5 drink-coolers in the bar, so that the drinks are only cold when needed.
2. There may be some potential for a solar PV installation on smaller south facing roof on Fletchers Lea and along either side of the top of the pitched main-roof.  
<https://www.thesolarshed.co.uk/> We have found this company to be honest in their assessments of solar potential, being willing to tell clients when premises are not suitable.  
The scheme could be made larger possibly by installing solar-car ports in the car-park if the shading and listing status allows.

## **Parks/Allotments - Renewables**

### **Suggested Recommendations**

1. Assess potential for installation of any small to medium sized wind-turbines at your Woodbury Hill allotments. There are a couple of potential spaces that might be suitable if a viability study confirms sufficient wind-resource at the site.

They would need to be some distance from any housing.

2. Assess potential for installation of solar PV systems at any car-parks or open spaces under the council's control.

The Solar Shed Company have experience in installing arrays in open fields. So, you might like to ask them about potential array at the cemeteries.

[https://www.bre.co.uk/filelibrary/nsc/Documents%20Library/BRE/89087-BRE\\_solar-carpark-guide-v2\\_bre114153\\_lowres.pdf](https://www.bre.co.uk/filelibrary/nsc/Documents%20Library/BRE/89087-BRE_solar-carpark-guide-v2_bre114153_lowres.pdf)



## The Lido

1. Turn the electric heating in the bathrooms down to frost-protection. As the windows are open for ventilation and only operational in summer months, this heating is not necessary. There were 3 electric heaters on in the Ladies. If there were left on over-winter or overnight, then that would also help explain high electricity consumption.
2. There is no heating in the maintenance team's workshop. Install an infra-red panel to keep staff warm when working.
3. Staff in reception can be cold due to constantly opening main-entrance door. Get an infra-red panel to efficiently keep the receptionist warm.
4. Get timers for the 2 electric immersion-heaters that currently supply hot-water for the showers and bathrooms, so that they only supply hot-water when required and not 24/7 as currently.
5. Importantly add their switch-off to the closing-down procedures for winter. The electricity consumption for the Lido is far higher than we would expect for such an establishment and we think this may have been one of the causes.

## 7. Lighting

### The Priory

#### Current Good Practice

1. LED lighting is already being gradually installed across the premises.

#### Suggested Next Steps

1. Set a target of completing the switchover to LEDs for the end of the next financial year. If financing is an issue, consider including in a Salix loan application.
2. Install light-sensors in relevant bathrooms and lightly used corridors and stairwells etc.

3. The recessed fluorescent lamps in the Priory Hall consume about 2,000 watts.

Consider options to replace with non-recessed fittings with LED lamps. These could be more in keeping with the heritage ambience of the room.

## **Fletchers Lea**

### **Suggested Recommendations**

1. Replace the 12 inefficient halogen-lamps in the high ceiling and the 22 x 50-watt halogen (1,100-watt total) lamps in the bar with LEDs.
2. The 24 x 26-watt fluorescent lamps recessed in the low-ceiling consume 624 watts. Ideally LED lamps in non-recessed fittings would replace these.
3. In the rear rooms there are 18 inefficient lumieres with 4 x 18-watt fluorescent lamps in each = 1,296 watts in total.

Ideally these would be replaced with 18 x 16-watt LED lamps in non-boxed fittings = 288 watts total.

## **The Lido**

### **Current Good Practice**

1. Lights & floodlights have already been switched to efficient LEDs.
2. Bathroom lights have movement sensors.

### **Suggested Next Steps**

1. Get light and movement sensors so lights are not left on in relevant changing rooms when empty or when lit naturally.

# 8. Water

## Current Good Practice

1. The Lido last year used 4.4 million litres of water. This excessive consumption led staff to discover a significant leak in the paddling pool. This is now being addressed and so future consumption should be significantly lower.
2. The Lido showers and sinks already have push-button controls.
3. The refurbished bathrooms in the Priory have had tap sensors installed, so they cannot be left running.
4. New urinals in Priory are push-button operated.

## Recommended Next Steps

1. The urinals at the un-refurbished gents at the Priory and at the Lido look like they have no modern efficiency controls.

These could be wasting up to 250,000 litres/year each. Install these as a matter of urgency if missing. **Urgent**

2. Ensure Lido showers have efficient shower heads which reduce hot & cold water consumption by up to 30%.  
<https://aqualogic-wc.com/shop/product/vandal-resistant-standard-shower-head-9-litres-per-minute/>

## 9. The Bowls Building

**The Bowls Building is let out on a long-term lease to the bowling club.**

As the council owns the property their carbon emissions do come under your eco-audit calculations also.

This is a list of suggestions you could pass on to them.

1. The hot-water pipes need insulating.
2. Get a timer for the hot-drinks machine, so that it is only on when needed.
3. Get programmable timers for the electric-radiators so that they are only on when needed.
4. The urinal in the gents looks like it has no modern efficiency controls. This could be wasting up to 250,000 litres/year if so. (The taps already have push-button controls, which is good.) **Urgent.**
5. Get the roof and walls for this wood building checked to see if they have been insulated to modern standards.
6. Replace fluorescent lighting with led options.
7. Due to the nature of the building, it may be that the heated spaces often have their doors open to the bowling green. If this is so, it might be worth considering replacing the convector heating with more efficient infra-red panels.

## 10. Waste Reduction/ Recycling

### The Priory

#### Current Good Practice

- 1 You have installed hand-driers in the town-hall & Lido bathrooms, which eliminated need for wasteful paper-towels.
- 2 Real mugs and glasses are used for staff drinks and in the bars.
- 3 Management reported that they are currently in process of moving to a paperless office.
- 4 Refillable soap-dispensers rather than bottled-soap are used in the Priory.

#### Recommended Next Steps

1. There is currently no formal recycling scheme at any of the council's premises. The former caterers did recycle their waste, including food-waste, but this unfortunately has not been included in the contract for the new caterers.

Management indicated that the district council might be able to provide the service. If not approach the company that provided the recycling service to the catering company for a quote.

We recognise the challenge of getting the park waste to be placed in the correct bins by the public, but getting the waste from the Priory itself sorted would be a good step in the right direction.

2. The new caterers are required to take all waste away but no requirement to recycled like former caterers did.  
Crucial that a requirement to recycle waste is included in any future catering contracts, so that you get back to the positive levels of recycling under the former catering company.
3. Train those entrusted with purchasing authority, such as furniture or equipment, in green purchasing policies, i.e., reduce, re-use, recycle and how to implement them. For example, first checking to see if the item is actually required or is available pre-used on eBay or elsewhere.
4. Promote copying onto scrap-paper when clean paper is not needed for internal purposes.

5. Buy pens that can use refills.
6. By getting your cleaners to use e-cloths for bathroom surfaces, kitchens and windows, you can eliminate most of the need for bottled liquid cleaning products.  
<https://www.e-cloth.com>
7. Government guidance on cv19 advises the provision of hand-drying facilities in bathrooms but does not differentiate between hand-driers and paper-towels.

Environmentally hand-driers are preferable and thus we recommend not providing paper-towels.

<https://www.hse.gov.uk/news/assets/docs/talking-with-your-workers.pdf>

## 11. Purchasing

### The Priory

#### Suggested Next Steps

1. Switch to 100% post-consumer-waste recycled paper for internal photocopying and any external printing work for newsletters, flyers, posters, tickets etc.

FSC certified paper is usually the same Scandinavian virgin paper we have always used and usually has a far higher carbon & ecological footprint than paper made from recycled post-consumer waste.

<https://www.independent.co.uk/independentpremium/voices/recycling-forest-paper-printing-global-emissions-climate-change-a9563101.html>

*(Can be read for free by registering.)*

Some printers do not charge a premium for using recycled-paper. If you cannot find one locally, alocalprinter.co does recycled paper with vegetable-ink printing at a reasonable rate.

<http://www.alocalprinter.co.uk/eco-printing/green-printing-policy>

If both your photocopying and external printing were switched to recycled paper, it would save over the next decade an estimated 120 trees or the equivalent of a small woodland!!

These trees would also store up to 120 tons of carbon.

Do not forget to include “printed on 100% recycled paper” on the artwork when you switch to recycled-paper.

2. Ensure bathroom tissue, kitchen-roll and paper-towels are also all made from 100% post-consumer recycled paper and not just FSC certified paper for all premises.
3. Buy bin-bags made from recycled plastic for all premises.
4. Ensure those in charge of stationery purchasing, are aware of your green purchasing policies and ensure in future that items such as post-it notes, envelopes, small note-pads, new files, flipchart paper, etc are made from recycled materials.
5. Buy organic and fair-trade tea/coffee, sugar and organic milk. If not available locally, try: [traidshop.co.uk](http://traidshop.co.uk).
6. Avoid buying anti-bacterial soap for any of your premises, as it should only be used in clinical situations.

The FDA says that traditional soap works just as well for ordinary bathroom usage and to tackle cv19 which is a virus is not a bacterium.

The active ingredient Triclosan in many anti-bacterial soaps is polluting waterways and the seas.

<https://www.fda.gov/ForConsumers/ConsumerUpdates/ucm378393.htm>

A plant-based soap for refillable soap-containers is available from Bio-D

<https://biodegradable.biz/shop/hand-soaps/bio-d-geranium-sanitising-hand-wash-5l/>

7. For your remaining cleaning products consider switching to Bio-D, which are made in the UK.  
<https://biodegradable.biz/laundry/laundry-liquid-with-juniper-seaweed-5l.html>

## 12. Open Spaces / Cemeteries

### Existing Good Practice

The council owns or is responsible for the ground maintenance of several open spaces across the town.

These include the old-closed cemetery, a currently operating cemetery, Priory Park, allotments etc.

The grounds maintenance team is already supportive of placing a positive value on protecting and encouraging wildlife on your open-spaces. We make suggestions below on how this can be built on and expanded to make the spaces the council pays for the upkeep of, to be of greater value to the local community and wildlife.

Whilst we lay out some broad suggestions below, we recommend consulting with local wildlife specialist organisations to guide the details.

### **Current Good Practice**

1. Some areas in the cemeteries are already being used to encourage wildflowers.
2. Several your open spaces already have some natural woodland hedges along their boundaries e.g., the old cemetery and in Priory Park.
3. The council is working in conjunction with a wildlife group to improve wildlife in the old cemetery.
4. The new cemetery has some rare meadow saxifrage wildflowers growing there and the maintenance team are taking care to help protect them.
5. Pesticide usage by grounds maintenance team has already been reduced.
6. No peat fertiliser is being bought.
7. Garden waste is composted on site at the various open-spaces including St Mary's Churchyard, the Lido and Priory Park.
8. Staff are beginning to allow felled wood to decompose on-site to encourage wildlife and recycle nutrients.

### **Suggested Next Steps**

1. It is important to protect and enhance the existing and potential wild areas in your open spaces, as these are the spaces where wildlife, insects and birds can thrive.

Britain is one of the countries with the greatest wildlife losses on the planet.

Globally we have lost 60% of all wildlife populations since the 1960s, with some estimates of insect populations having collapsed by 80%.

Blank open green spaces of just grass are in reality ecological deserts. See if you can minimise the amount of space devoted to just grass.

Converting some of your grassed areas to wildflower meadows, with neatly trimmed borders, would help re-establish some local insect populations, needed by birds and small mammals to feed off.



But it is important to indicate to the public that any designated wildlife areas are being deliberately left wild, by having a nice tidy border or fencing around them and signs explaining their positive purposes.

2. For open grassed areas, that you wish to keep mown, explore mixing in more low-height flowering and herb cover plants e.g., clover and chamomile and any potential for reducing frequency of mowing.

These can provide food for bees and other insects, unlike plain mown grass.

3. Boundaries with natural woodland hedging, where appropriate, around the various open spaces could include an edible forestry approach, with hedges including hazelnut, wild pear, wild plum, mulberry, walnut trees etc., for example along the Priory Street boundary of the play space.

This could reduce noise and pollution from the road and make the space more attractive for users.

4. You could also consider installing a natural woodland hedge along the dip by the fence at the Lido, which is not used by customers. Greening this boundary would add to the appeal of the pool.
5. Ensure you protect your wonderful legacy trees e.g., the ancient hedgerow and the old London Plane tree by the river by protecting the soil above their roots from being impacted. Rope them off and mulch them.
6. Ensure any remaining diesel or petrol grounds-maintenance equipment, such as blowers & trimmers are replaced with electric options.

Which Magazine have carried out a review of electric leaf-blowers:

<https://www.which.co.uk/reviews/leaf-blowers>

One of our clients with large school grounds, have made the switch to electric blowers etc and are happy with the results. Huntingdonshire ground maintenance team have made the switch to electric equipment and are happy with the results.

<https://bestofmachinery.com/best-electric-leaf-blowers/>

Electric equipment is safer, has less vibration for users and is quieter and so safer for hearing.

7. Consider replacing the grounds maintenance team's truck with an EV option, when up for replacement.
8. Ensure that any new play equipment is made from sustainable materials such as wood.

These thus become a carbon store, whereas equipment made from metal or plastics incur a much larger embedded carbon price and are more difficult or impossible to recycle and do not biodegrade.

We understand that there is a proposal to replace the play equipment in the Priory Park. This is a good opportunity to put sustainable purchasing policy into practice.

9. Likewise seek to use natural wood chips rather than unrecyclable artificial or rubber surfaces for playground spaces where fall-protection is needed.

10. The council could consider borrowing money to buy suitable land for the creation of a wood and use the money from woodland burials to fund the creation of the wood.

This would as well as providing choice for local residents, also provide wildlife habitat and would be a carbon sink for the town, with each mature tree storing up to 1 ton of CO<sub>2</sub>.

11. Include a requirement to keep allotments pesticide and herbicide free in the allotment conditions.

12. Also include condition to avoid systemic pesticide treated plants. Insect populations are estimated to have fallen by about 80%, leading to ongoing collapse in bird and mammal populations dependent on them.

13. England has lost a large proportion of its natural ponds, which has had a negative impact on biodiversity.  
Consider suitable locations for pond creation on your open spaces, including the cemeteries.

14. Decaying tree-trunks are valuable for providing habitat and nourishment to a host of wildlife, plants and fungi.

Rather than going to expense of disposing of dead or fallen trees, try and place them somewhere on site, where they can decay slowly.

15. Identify potential sites for small community orchards on your open spaces and work with local groups to plant and maintain them.

16. Ensure any bought plants are grown peat-free and neo-nicotinoid free.

## **Cemeteries**

You have two council owned cemeteries and a Church of England closed cemetery that you are legally responsible for the ground-maintenance of, two of which are predominantly closed to new burials.

## The Old Cemetery

This is a closed cemetery, other than a small section for cremated remains, for which the council is responsible for the grounds-maintenance.

### Suggested Recommendations

1. A suggested new strategic vision for this space would be to convert it into a memorial eco-park for the local community.

Naturally, such a proposal would have to be developed in consultation with the local community and done sensitively.

The rest of the recommendations below outline potential elements that you could include in such a new vision.

Part of St Mary's Churchyard has already been converted into a mini-park at the centre of town, which establishes a small precedent for converting a local graveyard into a public open-space.

2. Significant areas are still subject to an expensive high-frequency grass-mowing regime. Consider converting most of these to natural woodland and wildflower meadows, with the boundaries neatly maintained and with clear signage explaining the maintenance regime.
3. Consider moving most of the long-abandoned gravestones to the side of the cemetery, to increase the open space available for nature and community usage. The more elaborate memorials could be left in place to act as objects of historic interest. They currently require a high-labour strimming maintenance.
4. Install a wildlife pond.
5. Cut grassed paths through the new eco-park and create small areas of open cutgrass for kids to play, people to have picnics or sit-in and install some seating for the elderly.
6. A corner of the new eco-park could be used to create a community orchard.
7. Install a small children's play-area with wood-based equipment.
8. The small utilities lodge near the entrance could serve as a possible café for the new memorial park.

## **The New Cemetery**

This is a large town-council cemetery that has spare capacity for some years ahead.

Parts of the boundary already has a mature rural mixed hedge.

Rural hedges can provide invaluable habitat, protection and food for a wide variety of wildlife, including birds, insects and small mammals.

1. Consider if there are legal options for re-using abandoned graves in the oldest section of the cemetery to remove pressure to re-start burials in the old cemetery.
2. There is an expanse of grass which has medium maintenance, that is reserved for future burials.  
With sensitive treatment, this could be converted into a wildflower meadow, which would be a nice habitat for insects and the birds that feed off them and would add to the visual richness for visitors.  
This would need about a one-meter cut-grass neat border and signs to indicate the purpose of the meadow.
3. Consider banning plastic flowers here and at the cremations site in the old cemetery due to being non-compostable, the pollution associated with their production and decay and the risks to wildlife if parts are ingested.
4. Also do not allow plants with systemic pesticides to be placed on graves, as these are devastating for bees and a wide range of native insects.
5. Consider rule that only headstones are allowed. Imported marble, gravel and grave borders have high embedded carbon and cause substantial environmental damage at mines, as does concrete.

These elaborate border and grave treatments also make it difficult for the team to maintain, as they require manual strimming or chemical treatment of gravel covered graves etc.

## **Allotments**

You have two allotment sites that are run by allotment societies.

1. Hosepipes are already banned, which ensures more efficient use of tap-water supplied.
2. Consider working with the allotment societies to move towards only organic production, with a ban on artificial fertilisers, pesticides and peat.

## 13. Events

The council organises a range of community events over the year and also runs a successful wedding and venue hire business.

These will have significant climate and ecological impacts, so it is important that you pay attention to reducing where practical their environmental impacts.

For example, let us say 1,000 people coming to a large outdoor event has a beef-burger, at 7.7kg of CO<sub>2</sub> per burger, this would emit 7.7 tons of carbon, which would be over twice your annual transport emissions.

If they ate a tofu-burger instead, at 0.16 kg of CO<sub>2</sub> per burger, this would emit 016 tons of CO<sub>2</sub>.

There are approximately 2,000 covers per year for main course meals (weddings etc).

### **Existing Good Practice**

1. None of the new catering companies offer steak on the menu offers.
2. They all offer a plant-based menu offer.

The following section is divided into two parts, the first is specific suggestions and the second is a generic tick-list for events.

### **Specific Recommendations**

1. When retendering your catering contracts, include a requirement to have at least one organic menu option, but ideally all the menus would be organic.
2. Ensure food-waste due to its high methane emissions at landfill is collected for recycling. Methane is up to 100 times more powerful greenhouse gas than CO<sub>2</sub>.

## Events – Generic Tick List

All events have different environmental impacts, but this suggested generic tick-list should be considered by those arranging events by the council.

1. Appoint a named staff member to be the Green Champion responsible for the environmental performance at each event.
2. They should be trained on how to use electricity and heating efficiently with the correct temperatures and doors and windows operated sensibly.
3. Natural light should be used where practical.
4. Any electrical equipment should be used efficiently and turned off when no longer needed.
5. Ensure recycling facilities are available, properly labelled and easily found.
6. Avoid use of disposable crockery and cutlery for food and drinks.
7. If using disposable serviettes, ensure they are made from recycled paper.
8. Consider food-miles when choosing wine and other drinks. Ideally if serving wine, it should be English and organic.
9. Use jugs of tap water, rather than bottled water.
10. Try to use local organic food and drink.  
UK soils are being lost at an alarming rate due to industrial agriculture, with some soils reported by UK government to have only about 40 crops left in them.
11. Avoid tropical or orange juices; try English apple or pear juices instead.

A litre of orange juice is estimated to represent 1,000 litres of imported water, usually from a water-scarce country such as Spain, California, Morocco or Israel.

12. Consider doing all-vegetarian catering at as many events as possible.

The UN has estimated that the meat industry contributes about 18% of total global climate-crisis gases.

13. If this is not possible at this stage, then seek to at least avoid beef and lamb, which together are responsible for a staggering 7.5% of all UK domestic carbon emissions.

There are now some very realistic plant-based meat substitutes.

14. If serving fish ensure it is MSC (Marine Stewardship Council) certified, as coming from a sustainable fishery which is not being over-exploited.
15. Encourage people coming to events to use sustainable transport methods.
16. If providing any printed literature, ensure that it is on recycled paper and labelled as such.

## 14. Cleaners

If you are putting your cleaning service out for tender, some items worth considering for inclusion are:

1. Will they supply bathroom tissue and hand-towels made from recycled-paper?
2. Will they use/supply eco-friendly cleaning materials?
3. Will they use e-cloths?
4. Will they train their staff in how to be energy, water and resource efficient in how they clean the premises?
5. Will they supply eco-friendly refill soap for dispensers?
6. Have they got an environmental policy?
7. Have they any evidence of the environmental policy being implemented e.g., annual eco-audit report data?
8. Do they use low emission vehicles or bikes if transport is used?
9. Will they supply bio-degradable or recycled black plastic bags and bin-liners?
10. Are their staff trained to not remove bin-liners daily but only when torn or genuinely messy?

11. Is it possible for them to clean during heating-hours in winter or not require the heating to be put on specially for them?
12. Will they use eco-cubes in the urinals?
13. Will they wash-up reusable glasses/mugs etc. if necessary.
14. Will they be conscientious and help ensure the recycled systems are working optimally?
15. Are they annually reporting on their carbon and ecological impacts?

## 15. Eco-audit Implementation

1. E-mail eco-audit report to all town councillors, staff member and members of the youth council.
2. Add implementation of eco-audit report recommendations as a standard agenda item for staff/management meetings.
3. Regularly report to the council, progress being made in implementing agreed recommendations from the eco-audit.
4. Create a spread-sheet with traffic light coding for each specific recommendation, identifying whether done, being implemented, postponed or rejected.
5. Use a newsletter to get information out about how residents can reduce their carbon and ecological impacts.
6. As the council buildings are publicly owned, they will qualify for interest-free loans from Salix Finance, which is a scheme run by the government to finance energy efficiency in public buildings. <https://www.salixfinance.co.uk/>

**Report by Donnachadh McCarthy, 3 Acorns Eco-audits, June 2021**