

Sawbridgeworth Town Council Eco-audit Report Contents:

Introduction

- 1 Headline Figures 18/19
- 2 Policy & Management Recommendations
- 3 Human Resources
- 4 Top Ten Priorities
- 5 Heating
- 6 Electricity
- 7 Lighting
- 8 Waste Reduction/ Recycling
- 9 Cemeteries / Grounds Maintenance
- 10 Purchasing/ Miscellaneous
- 11 Transport
- 12 Events Tick List
- 13 Eco-audit Implementation



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Eco- Audit Report for: Sawbridgeworth Town Council

FAO: Richard Bowran, Town Clerk

Introduction

We would like to thank Richard Bowran, the town-council staff and town-councillors for kindly organising and facilitating the eco-audit process.

The key context in which this eco-audit takes place is the statement by the UN Secretary General in September 2018, that humanity has to have started radical cuts in fossil-fuel emissions within two years, if we were not to face potential extinction and the 2018 report of the IPCC that stated carbon emissions need to be cut by nearly half by 2030, to have a two thirds chance of avoiding temperatures catastrophically rising above 1.5C.

This requires unparalleled civilisational changes. We hope this report will enable Sawbridgeworth Town Council to plan how they can make a positive contribution to this national effort.

Being the closest tier of local government to the community, it means it has many constructive opportunities to enable it to move towards a zero-carbon and zero ecological impact targets.

1. Headline Eco-Data Figures 2018/19

Building Energy Consumption

| Electricity kwh: | 18,700 |
|--|-------------|
| Electricity CO ₂ (tons) | 5.2 |
| Gas kwh | 21,000 |
| Gas C0₂ (tons) | 4 |
| Building Energy Carbon Footprint (tons) | 9.2 |
| Flights CO ₂ (tons) | 0 |
| Diesel vehicles CO ₂ (tons) | 15.5 |
| Total Energy carbon footprint (tonnes): | 24.7 |
| Square meterage | 238 |
| Mains water consumption (litres): | 51,000 |
| Water supply CO _{2 (} tons) | 0.05 |
| A4 Sheets virgin photocopying paper | 27,500 |
| % made from recycled paper | 0 |
| Trees consumed | 3 |
| Total annual office waste (tons) | 6.25 |
| Non-recycled waste (tons) | 6.25 |
| Recycled (kg) | 0 |
| Waste CO ₂ (tons) | 2 |
| Recycling rate (%) | 0 |
| Cemetery general waste (tons) | 28 |
| Cemetery waste CO ₂ (tons) | 8 |

Utility Bills

| Electricity | £3 | 3,000 ¹ |
|-------------|----|--------------------|
| Gas | £ | 840 ¹ |
| Water | £ | n/a |
| | | |

| Bank: | Lloyds |
|--------------|--------|
| Investments: | CCLA |

Data Analysis

Carbon Footprint

Your annual energy carbon footprint for building energy is 9.2 tons, which is about the equivalent of the average emissions of about 3 UK homes.

The quickest way to get to net zero for energy consumption would be to switch to a green electricity supplier and to switch your gas heating and diesel vehicles to electric.

It would also mean that the council needs to look at how it can maximise the production of the electricity required to do this locally.

It is positive that the council is looking at how it can work towards being a zero carbon council itself, as this gives it credibility as it seeks to provide leadership in the community on the issues.

The challenge then will be to enable the local community to do likewise. A rough estimate of the town's households' gross carbon emissions would be about 165,000 tons.

Electricity

Switching to a genuine green electricity tariff would make all your electricity consumption net zero.

Air-conditioning can often increase energy usage by up to 100%. As part of the building has air-conditioning, this explains the higher than typical electricity consumption.

Thus, it is important you implement the recommendations on air-conditioning operations, listed below.

Electricity consumption is 79 kwh/m², which is above the typical consumption for such offices of 70 and a good performing office would be 42.

Gas

Gas consumption was 88kwh/m², typical is 120 kwh/m² and good is 72.

The apparent good performance is due to fact that significant proportion of premises is heated using the electric air-conditioning units.

The main issues with reducing gas consumption are ensuring recommended temperatures are not exceeded, ensuring the timers are set in line with occupation and empty spaces not heated. To achieve zero carbon for energy, the gas boilers will need to be replaced with electrical heating of some form, powered by green electricity.

Waste/ Recycling

There is no commercial recycling service provided by the district council. However, you could start using the community paper & card recycling bins in the adjacent car-park.

The national average municipal recycling rate is 43%. So, this should be your first target to hit.

Water

Water consumption at the council offices are modest and equate just to one person's average home consumption.

We did not get figures for water consumption at any other grounds or premises.

2. Policy & Management Recommendations

Suggested Next Steps

- Submit the eco-audit report to the Town Councillors with recommendations for action, including a request for explicit commitment for the council to be environmentally responsible and to establish a target date to be net zero carbon for energy.
- 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 brief 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 implementation of the recommendations.
- 4. The Clerk to ensure that procedures that address waste reduction, recycling, greenpurchasing 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 management committee meeting agenda.
- 6. Include eco-issues in future tenant and room-hire agreements, such as electrical and heating efficiency and participation in the recycling service.
- 7. Include a new Zero Carbon Sawbridgeworth section on your new website, where local residents can get information on the various ways that they can reduce their carbon and ecological impacts.
- 8. Consider staging a Zero Carbon Sawbridgeworth Community Engagement Day in conjunction with local community groups, to see if you can stimulate some collective actions locally.

3. Human resources

- 1. Staff contracts should be amended in consultation with the staff to include a new provision along the lines of: "*The Sawbridgeworth TC is committed to being an environmentally responsible organisation.* 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.

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.

- 3. Induction procedures for new staff should include procedures adopted to implement this policy of environmental responsibility e.g. including how to use the air-conditioning, green purchasing and waste-reduction & recycling procedures.
- 4. It is important that your in-house cleaning staff are included in any new procedures that are being introduced to make the council eco-friendlier.

4. Top Ten Priorities for First Year

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

- 1. Do not heat the building above 19C or cool it below 25C.
- 2. Ensure heating and air-conditioning systems are off, when spaces are unoccupied, especially at weekends.
- 3. Sign up to a 100% green electricity tariff.
- 4. Switch your all your paper products to 100% recycled paper.
- 5. Consult the local wildlife trust on developing a biodiversity action plan for your open spaces.
- 6. Programme the switchover of diesel and gas vehicles/appliances to green electricity.
- 7. Develop an action plan in conjunction with the local community on how to achieve a Zero Carbon Sawbridgeworth.
- 8. Explore options for solar panel installation.
- 9. Implement a comprehensive recycling system at the council offices.
- 10. Implement annual environmental reporting to the council on the council's own progress and the local communities.

5. Heating

Current Good Practice

- 1. The windows and doors in the new part of the building are double glazed and in good condition.
- 2. The loft-space above the police-flat has been insulated. Ensure that the hatch-cover has also be done.

Suggested Next Steps

1. The building is open from 7.30am to 4.30pm Tuesday to Friday. You have programmed the heating in the part of the premises heated by the electric air-conditioning units, to come on when you arrive, which is good practice.

Ideally it should go off about 3pm or 3.30pm as most of this part of the building has modern insulation standards.

On Monday's it is open until 10pm, so have it programmed to go off about 8.30pm.

Ensure all heating systems are programmed to be off or on frost protection (the radiator system) at weekends.

This could save up to 7.5 hours off your heating week.

Experiment with these timings as they will vary according to the building's thermal insulation.

- 2. The council offices' gas boiler controls were reported to be faulty. This is a priority for repair. Once fixed, apply the same principles as in section above on air-condition heating timers. Although this part of the building is likely to require a bit longer heating day, due to poorer insulation in older part of the building.
- 3. Recommended CIBSE/CCC winter heating room temperature for sedentary activities such as office-work is 18/19C.

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

Thus. As parts of council offices are being heated to 22C, you are wasting between 30 to 40% of your heating bills.

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

- 4. Get a digital thermometer for the premises and have named staff member assigned to implement the CIBSE recommended heating and cooling temperatures.
- 5. Turn heating in bathrooms/staircases/corridors etc. to frost-protection.

They do not need to be heated to the same temperature as occupied parts of the premises.

- 6. Ensure that all relevant hot-water pipes and central heating pipes are insulated e.g. there were exposed pipes coming from the gas boiler.
- 7. Install heat reflectors behind radiators on outside walls.
- 8. The older part of the building has solid walls. Solid wall insulation is quite expensive and has a very long pay-back period of up to 50 years. So, it is not a priority. However, if you are doing a complete refurbishment of any rooms, then that is a good opportunity to include it, as the costs will be markedly less.
- 9. For the council to achieve net zero carbon for building energy would require three steps:
 - i. Sign up for 100% green electricity supplier.

ii. The conversion of the council offices and OPC central heating boilers to electric heating, whether electric boiler, air-source heat-pumps or infra-red panels.

iii. Installation of more solar PV systems on the relevant roofs, council car-parks (e.g. at cemetery) or grounds.

The replacement of your boilers (which are about 11 years old), would be an ideal opportunity to carry out a feasibility study into the best electricity heating options for you.

- 10. Consider setting a target of 2025 at the latest to be net zero-carbon for your energy consumption.
- 11. The small meeting room is empty about 80% of the time but is kept heated.

Thus, this might be a good place to experiment with infra-red heating panels, which can be turned on and off in the room when needed. <u>https://www.theecostore.co.uk/eco-store/buy-infrared-heating-panels/</u>

12. The council chamber is also only occupied about 80% of the time and due to the high ceiling is a reasonably large space to heat, so it is important it is done efficiently.

A lot of churches with high-ceilings have switched to infra-red panels as they heat the people present and the fabric of the building rather than the air, so energy is not wasted heating the air in the high-ceiling.

- 13. Old People's Centre: get them to check if the cavity walls and ceiling have been insulated.
- 14. The hall in the Old People's Centre also has high-ceilings and they have problems with a lot of heat loss, due to frequent exit door opening for people with disabilities, this could also therefore be considered for infra-red heating panels.
- 13. Advise the OPC to programme their heating timers along same lines as the council offices but the temperature to be 21C, as older non-ambient people use the centre. This is the CIBSE recommended temperature for such people.
- 14. The upstairs police flat is also occupied very randomly and so it is impossible to set good timer settings for the gas-boiler for them. Thus, the controllability for the infra-red panels might work well here also.
- 15. Install two catches on the sash-windows in the police flat, which have slipped.

6. Electricity

Existing Good Practice

- 1. The new cemetery bathroom is solar powered.
- 2. The new xmas lights are LED, using in total a very modest 2.6 kw and go off at 11pm, rather than on all night.
- 3. The new extension is just 6 years old and so has good double-glazed windows and insulated cavity walls.
- 4. The kitchen freezer is off when empty.

Suggested Next Steps

1. Switch to a green electricity supplier who sources all of their electricity from zero carbon sources such as hydro, wind and solar panels, as this would make all of the electricity used by the council offices carbon-neutral.

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

Good Energy and Ecotricity are the top two rated green electricity suppliers, if you would like additional quotes to Orsted Energy.

2. The roof of the council offices has some reasonable potential for the installation of a solar array. But this would require the adjacent trees to be pruned, to ensure no loss of output due to over-shadowing from the south.

The Solar Shed installs large and small arrays and we have found their site surveys to be honest about a site's feasibility or not.

They also have experience in installing arrays in open fields. So, you might like to ask them about an array at the cemetery car park.

https://www.thesolarshed.co.uk/about-us/

https://www.bre.co.uk/filelibrary/nsc/Documents%20Library/BRE/89087-BRE_solarcarpark-guide-v2_bre114153_lowres.pdf

- 3. We suggest you get an electrician to examine if it is practical to introduce submetering for the police tenants upstairs, to enable them to be responsible for energy consumption.
- 4. Get a timer for the drinks hot-water boiler in the kitchen, which is on 24/7, so that it is only on during opening hours.
- 5. 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.
- 6. Switch to the cloud for your server. The cloud uses up to 90% less energy.
- 7. Put a 7-day timer on the kitchen mains-connected water-cooler, so that it is only on during opening hours.
- 8. The council chamber bathrooms were at 24C on site visit. They have separate electric heaters. Turn them down to frost protection, as they do not need to be as warm as occupied spaces.

Cooling

Air-conditioned buildings can use up to 100% more energy than non-air-conditioned buildings. It is crucial therefore that you use it in an energy efficient manner.

1. One of the most important ways to do this, is that air-conditioning should only be used to cool premises down to the CIBSE recommended temperature of 25C and no colder.

Staff reported that they were currently setting the air-con units at about 19/20C, this therefore could be wasting up to 100% of the energy used.

It is strange but often people who are cold in winter at 19C and want heating to be raised to 22/23C, often want air-conditioning to be cooled to 18C in summer, both of which are very wasteful in energy and carbon!

Train any staff who may be operating the air-conditioning units, in their efficient operation.

2. Do not let untrained people have access to the air-conditioning controls.

If controls are accessible to the public, ideally place a security box around them, for example in the council chamber. https://www.securitysafetyproducts.co.uk/security/protective-coverscages/thermostop-thermostat-cover-small.php

- 3. Clarify how the timer works on the air-conditioning system in the council chamber so you can ensure it is not on when empty.
- 4. Ideally, all other means should be tried to cool the building before using the main airconditioning units, which on average consume up to 2,000 watts each!

Usually, the best method of avoiding their usage, is to create cross currents of freshair.

These require open windows or doors on opposite sides of the rooms. Ensure such actions are in line with fire regulations,

5. Air-extractors use a fraction of the energy of the air-conditioning units in the council chamber.

So, always use these in preference to the air-con units when possible.

6. It's important that staff know that if they turn on the air-conditioning that the doors and windows must be closed, otherwise it's as wasteful as having them open with the heating on in winter, as the money spent cooling the air is lost as it escapes.

7. Lighting

Current Good Practice

- 1. The lighting is generally already quite efficient.
- 2. Council chamber bathroom lights are on movement sensors.
- 3. The fluorescent lamps in the police-flat are already the more efficient T5 version.

Suggested Next Steps

- 1. When replacing any lighting, ensure you do so in future only with LED lamps, which use about 40 to 50% less electricity than fluorescent tubes and energy saving lamps.
- 2. Encourage staff to maximise use of natural light in the office.
- 3. The admin office has 6 x 18-watt bulbs consuming 108 watts in total. These could be replaced with 2 x 5-watt led desk-lamps, consuming just 10 watts and would allow more personal choice over lighting levels.
- 4. Install light movement-sensors in the downstairs corridor.

8. Waste Reduction/ Recycling

Current Good Practice

- 1 You have installed hand-driers in the bathrooms, which eliminates need for wasteful paper-towels.
- 2 You have a mains-supplied water-cooler, rather than a bottled water one.
- 3 The council has switched to mulching mowers which has reduced grass cuttings waste.

Recommended Next Steps

- 1. There is no proper recycling system in place at present, as East Herts DC only supplies a general commercial waste collection service. Whilst you are investigating a commercial recycling supplier, make use of the district council's recycling facilities in the neighbouring car-park.
- The cemetery produces currently 12 x 6-yard skips/year of waste for landfill. This equates to about 28 tons of waste and 8 tons of CO2 emissions. This is the equivalent of the annual household electricity emissions for 11 homes. Consider practicality of the introduction of a ban on plastic items, so that only compostable materials are left and so can be composted on site.
- 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. Install refillable soap-dispensers in the bathrooms. These reduce plastic waste and would also address the problem of bottled soaps being taken.
- 5. Avoid buying anti-bacterial soap, as it should only be used in clinical situations.

The FDA says that traditional soap works just as well for ordinary bathroom usage.

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

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

Also, would be good to switch to a refill system to reduce plastic bottle wastage. A plant based soap for refills is available from Bio-D <u>https://biodegradable.biz/shop/hand-soaps/bio-d-geranium-sanitising-hand-wash-5l/</u>

- 6. For those councillors who are comfortable using a laptop or tablet, provide agenda papers electronically.
- 7. Promote copying onto scrap-paper when clean paper is not needed for internal purposes.
- 8. Get refillable whiteboard markers and refillable pens. <u>https://www.greenstat.co.uk/refillable-pens</u> <u>https://www.greenstat.co.uk/markers-and-highlighters</u>
- 9. By getting your cleaner to use e-cloths for bathroom surfaces, kitchens and windows, you can eliminate almost all of the need for bottled liquid cleaning products. <u>https://www.e-cloth.com</u>

10. Lobby East Herts DC to introduce a trade waste recycling service, to complement its existing general trade-waste service.

9. Cemeteries / Grounds Maintenance

Existing Good Practice

- 1. The new cemetery bathroom contains a water and resource efficient composting toilet.
- 2. Most of the playground equipment is made from renewable wood sources.
- 3. Grass cuttings are composted on site at the playground.
- 4. The cemetery is already offering a form of woodland burial, with a tree being planted for each four cremation containers. Each tree will store a ton of carbon when they are mature. This is a big positive for the council and maybe you could add the annual and cumulative number of trees planted here to your eco-data.
- 5. The Rivers Heritage Site & Orchard which is on a short lease to the council is an amazing community asset, providing local fruit and juice and wildlife habitat.

Suggested Next Steps

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

Blank open green spaces of just grass are in reality ecological deserts. Thus, see if you can increase the amount of wildlife friendly areas by reducing the amount of "cleaning and tidying up".

But it is important to indicate to the public that they are deliberately left wild by having a nice tidy border or fencing around them and maybe a sign explaining the purpose.

The UK is one of the most wildlife denuded countries in the world. It would be good for the town council to do its bit to help protect and restore some local wildlife.

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

- 3. Get advice from the local wildlife trust before taking action on the woodland copse on the cemetery boundary, other than rubbish removal.
- 4. Boundary fencing around the cemetery could include an edible forestry approach, with hedges including hazelnut and walnut trees etc
- 5. Consider options for on-site composting of leaves on your various green spaces, rather than transporting them to the cemetery.
- 6. Contact the Herts & Middlesex Wildlife Trust for advice on any actions you could take to improve / conserve the large open meadow at the Rivers Orchard. It is possible this meadow has never had artificial fertilisers or pesticides used on it.
- 7. See if you can eliminate usage of the herbicide glyphosphate, which is a recognised potential carcinogen.

Increased raking of the gravel would reduce need for its usage.

https://www.bbc.co.uk/news/world-us-canada-45155788

Alternatively, you might consider jointly buying with adjacent town-councils a completely chemical free steam weed-killing machine: <u>https://multevo.co.uk/products/waterkracht/</u>

8. There are now a good range of electric leaf-blowers etc on the market. So, when replacing any diesel-powered equipment, do so with electric options.

One of our clients with large school grounds, have made the switch and are happy with the results. <u>https://bestofmachinery.com/best-electric-leaf-blowers/</u>

- 9. Consider devising a similar positive scheme for tree planting for the coffin burials, e.g. one tree for each four coffin plots, to replace the headstone approach.
- 10. There are about 3 acres of cemetery space currently awaiting future burials, which has a regular grass-cut.

Consider switching this to a wild-flower meadow, which would significantly increase its biodiversity value and reduce mowing frequency and costs.

By maintaining a neat mown border around its edges and a sign explaining the purpose of the wildflower meadow, it will let the public know that you have not simply neglected it.

10. Purchasing/Miscellaneous

Current Good Practice

- 1. You already have helped establish a local farmers market, which helps to encourage local food production and reduce food-miles.
- 2. You are in the process of establishing a "Green Market" to encourage the greater use of more sustainable products.
- 3. Council chamber bathrooms have water-efficient w.c.s but check them regularly as they are prone to un-noticed leaks at the back of the bowl.

Suggested Next Steps

- 1. Switch to 100% post-consumer-waste recycled photocopying paper. Evolve is one of the better-quality brands on the market. Whilst your paper consumption is fairly modest at 27,500 sheets/year, this would save 3 mature trees per annum.
- 2. Request recycled paper for any external printing work for flyers, posters etc.

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

Don't forget to include "printed on 100% recycled paper" on the artwork.

- 3. Ensure bathroom tissue is made from 100% recycled paper.
- 4. Buy bin-bags made from recycled plastic.
- 5. 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.
- 6. Buy organic and fair-trade tea/coffee, sugar and organic milk. If not available locally, try: traidshop.co.uk
- 7. For your remaining cleaning products switch to Bio-D, which are made in the UK, unlike Ecover's. <u>https://biodegradable.biz/laundry/laundry-liquid-with-juniper-seaweed-5l.html</u>

8. Check with your plumber to see if the sinks have flow-restrictors to reduce water wastage.

11. Transport

The council has 3 diesel buses currently.

One is used for a regular community transport route. It is a 16-seater that does 16,500 miles / year, using about 3,900 litres/year, emitting 10.1 tons of CO2.

The Ford (3,000 miles) & Mercedes (2,000 miles) transits are hired by community groups and do a combined 5,000 miles and emit about 2.5 tons CO2.

The plan is to sell the Mercedes Transit.

Existing Good Practice

- 1. The clerk has submitted a grant application for a community electric bus. The predictable & fairly modest mileage is ideal for such a vehicle.
- 2. The district council has DEFRA funding for an electric vehicle charging-point.
- 3. The town council puts a considerable effort into providing a local bus service, which reduces the need for residents' cab or car use.
- 4. The local school runs a travel challenge to encourage kids to come to school without being driven.

Suggested Next Steps

- 1. When replacing the (rented) Ford Ranger and Land-rover consider switch to electric options, as the daily mileage will always be modest.
- 2. Or more radically consider feasibility of switching to an electric cargo-bike for at least one of the vehicles. The embedded carbon footprint of a Ford Ranger or Land Rover can be over 30 tons!
- 3. When you are installing the charging points for the electric council bus, seek to include extra charging points for the council's other future electric vehicles.

- 4. Install a few more bike-stands outside the council offices and make them more accessible.
- 5. Lobby the district council to create a car free area in the centre of the town and to increase the number of protected cycleways to reduce pollution.
- 6. Stage a family-friendly cycle-event each year.
- 7. The town council could lobby against centralisation of public and commercial services wherever practical. Whilst it may reduce costs for the service providers, it means added cars on the roads and increased time and car running costs for residents.

For example, it would be great if the local swimming pool could be retained.

12. Events Tick List

The council organises a number of events over the year, so it is important that you pay attention to their environmental impacts.

All events have different environmental impacts but this suggested generic tick-list could be considered by those arranging events by the council or room-hirers:

- 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 heating and air-conditioning efficiently with the correct temperatures and doors and windows operated sensibly. Train them also in how to minimise need for air-conditioning if it is installed.
- 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 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. The UN has estimated that the meat industry contributes about 18% of total global climate-crisis gases. It also makes it easier to cater for different religious and cultural tastes.
- 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.
- 14. If serving fish ensure it's 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 by providing local public transport and cycle route information.
- 16. If providing any printed literature, ensure that it is on recycled paper and labelled.

13. Eco-audit Implementation

- 1. E-mail eco-audit report to all town councillors & staff members.
- 2. Add implementation of eco-audit report recommendations as a standard agenda item for staff/management meetings.

- 3. Create a spread-sheet with traffic light coding for each specific recommendation, identifying whether done, being implemented, postponed or rejected.
- 4. As the council-officers are a public building 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 January 2020