low carbon hub

# Community Building Energy Efficiency Checklist

Do you manage a community building in Oxfordshire and want to save energy? This quick-win checklist, created by our team of experts, is designed to guide you through the first big steps of your energy efficiency journey.

‘For this energy transition to happen it’s going to need change in the way that every household and every organisation uses energy.'

Mairi Brookes, Low Carbon Hub

‘It’s all about us making slight tweaks to our behaviour that together add up to quite a powerful difference.’

Sarah, Community participant in Smartflex heat pump trial

# Get data

To start your energy efficiency journey, you need data – the more, the better. Any information about your current energy use will help establish a baseline to measure the impact of your efficiency changes. This data is also crucial for setting long-term goals and planning bigger improvements.

Get hold of actual data (not estimates) of energy used, in units like kWh, such as meter readings/bills. Some smart meters can provide half-hourly meter readings which will help you measure energy usage throughout the day (a third-party app may be needed if your electricity provider does not make that data available to you).

## Checklist

- ☐ Do you know the building's recent annual kWh for electricity and fossil fuels (gas, oil, LPG)?
- ☐ Do you know the building's current electricity and fossil fuels costs, including price per kWh?
- ☐ Do you record or confirm meter readings regularly?
- ☐ Do you know the building's recent annual tonnes of $CO_2e$ (carbon dioxide equivalent) from energy consumption?

## Analyse energy use

Set up a routine to gather and check your energy data. It's best to do this regularly, like once a month, to take account of seasonal patterns. With more detailed data, you can analyse energy use patterns based on building usage on various months, weeks, days or even the periods when your building is closed.

**Notes**

List any other way of collecting or measuring your energy usage data

# Get organised

Think about what you want to achieve and focus on defining your energy management approach. This will help ensure effective communication, tracking, and continuous energy efficiency improvements.

## Checklist

- [ ] Do you know the insulation levels in the building's walls, roofs, and floors?
- [ ] Do you review controls for external lighting to ensure they are off when not needed?
- [ ] Do you know how the building is heated, including the different systems and where controls are located?
- [ ] Do you know the set temperature and heating times?

## Set goals

- [ ] Develop a strategy, with clear targets for managing your building's energy use going forward.
- [ ] Have documented procedures to manage day-to-day energy use, including logging any improvements made, so you can check them against the data collected.
- [ ] Agree whose responsibility it will be to oversee day-to-day energy use, for example, a building caretaker.
- [ ] Decide how to measure overall progress against your targets and set up regular reviews – this can also help with communications.
- [ ] Agree whose responsibility it will be to lead on strategy and reviews, for example, a committee member or trustee, an interested volunteer, green champion, or the building caretaker.

**Notes**

What are your goals for improving the energy performance of your building? Reduce costs? Cut carbon? Reduce draughts?

# Get people onboard

When implementing any energy efficiency measure, remember the importance of people – your team and community members. Effective communication about your goals and the reasons behind them is essential, as their active involvement will drive success. Don't forget to share and celebrate your successes!

## Internal communications

Getting your community members, building users, trustees, and volunteers on board is one of the simplest ways to implement energy-efficient behaviour. They are involved in your community building every day, so if everyone makes small changes, it will lead to significant results. You could even include energy-saving targets in role descriptions.

- [ ] Ensure your management committee regularly reviews the strategy for improving the building's energy efficiency and aims to achieve Net Zero carbon emissions as soon as possible.
- [ ] Regularly update and reiterate training when necessary, such as when new individuals join, when new technologies are adopted, or when a reminder is beneficial.
- [ ] Share any targets with everyone involved in running the building, and provide updates on progress. Remember to say 'thank you' when improvements are made or targets are met.
- [ ] Include everyone in the building, even those not directly involved in running community activities, such as cleaners.

## Communicate with your community

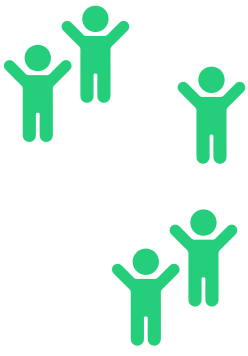
It can be useful to have evidence of your building's environmental impact to demonstrate to your community and the public your commitment to reducing energy usage and fighting climate change.

- [ ] Communicating your energy efficiency drive can help attract more community-wide engagement and draw in people interested in sustainability.
- [ ] Added publicity opportunities: Is there a local Net Zero plan where you are? Oxfordshire has a Pathways to a Zero Carbon Oxfordshire (PDF) strategy set out. Several communities and Parish Councils are developing their own local plans. Is there one in your area?

**Notes**

How will you engage the team and community in energy efficiency goals, communicate energy-saving targets effectively, or involve everyone in energy efficiency efforts?

**Don't forget to share and celebrate your successes!**



# Get implementing!

Once you have your data, an energy strategy, and everyone on board, it's time to start making improvements. In the meantime, consider low-cost measures that will help you take control of energy use – quick wins for reducing energy bills, cutting carbon emissions, and having a more comfortable community building.

## Small actions, big results

There are lots of measures that help you take control of energy use. Here are just some to get your started:

- [ ] Check your energy supplier. Is your energy sourced from renewable sources? If not, consider switching to a provider specialising in renewable energy at a competitive tariff.
- [ ] Check the building for draughts and add appropriate draught-proofing, looking in particular at windows and external doors. Long-term, do they need upgrading?
- [ ] Replace old-style lighting with LED lights, which can use 60% less energy. This, coupled with an extended lifespan, will save your organisation a significant amount of energy.
- [ ] Install thermal blinds or curtains to help retain heat in cold weather and prevent overheating from direct sunlight. Thermal blinds can offer up to 20-40% reduction in heat loss in the colder months, as well as reducing heat entering your building in the summer.
- [ ] Upgrade heating controls so they can be easily set to match the times people are in the building, and you are not heating empty rooms.
- [ ] Review hot water used in your building, including boilers for drinks, so they are well managed and not left on 24/7.
- [ ] Switch off items that are unnecessarily on standby, and actively manage other appliances. Timers or smart plugs can be useful controls to help you stop wasting energy.

**Notes**

# Further improvements

Has your community group considered....

- [ ] installing solar PV panels to generate renewable green electricity that could be used by your building?*
- [ ] allocating a budget for energy efficiency improvements where possible?
- [ ] investigating financial support for installing energy efficiency measures, such as zero-interest loans or funding via community initiatives?
- [ ] a plan to replace fossil fuel heating with an alternative and to prepare for this when possible?
- [ ] setting up a carbon and energy reduction committee to review the building's progress and reporting to stakeholders?
- [ ] engaging with members and volunteers on any carbon and energy plans?
- [ ] setting up an energy or environment team actively promoting energy efficiency within the building?
- [ ] comissioning an independent energy assessment? Energy Solutions Oxfordshire can advise on costs, and latest grants available

*For hosting rooftop solar you will need to have a very large roof – at least 250 $m^2$, or roughly the size of two tennis courts.

**Notes**



**See our communities webpages for more links and useful info**

# Success stories

### Small actions leading to big results....

At Low Carbon Hub we work with community groups across Oxfordshire which have a focus on low carbon and sustainability actions. Our community groups are at the heart of the work we do. Do take a look on our website at some of the **amazing work** they've been up to.

# What next?

You've started on your energy efficiency journey, but now want to go further? Low Carbon Hub's **Energy Solutions Oxfordshire** (ESOx) service can help take your energy efficiency to the next level. Our independent team of experts will conduct a thorough assessment of your community building and provide a tailored action plan, complete with practical tips and solutions to help you achieve real results.

By working with ESOx, your can make a measurable impact on your community building's energy efficiency and reduce your carbon footprint.

**Note**: Organisations typically save 19% on energy bills when implementing ESOX's recommendations.

**For more information see: energysolutionsoxfordshire.org**

ENERGY SOLUTIONS OXFORDSHIRE

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