Scotland eauc
The Alliance for Sustainability Leadership in Education

Saving Energy in the FHE sector

An overview of different measures and guidance documents

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1. The issue

The UK FHE sector has managed to reduce its emissions by 29% since 2012, a recent 2021 study shows. However, lower emissions are resulting less from the reduction of energy use than one would assume, and are more due to other factors, such as the National Grid being powered less by coal.

Thus, while many institutions have already undertaken a variety of measures, there still is potential for reducing energy use - not only to decrease emissions and **further decarbonise estates,** but also to lower costs during the **current energy crisis**, which puts additional pressure on institutions everywhere in the UK.

2. This guide

This guide aims to **give a brief overview** of behaviour change and energy management measures and **signpost to useful guidance** on saving energy. In the light of the 2022 energy crisis, this guide focuses on cost savings, but of course reducing energy will also reduce carbon emissions.

This guide written for individuals and teams looking for **guidance on where to start** or who want to expand their energy saving measures.

As all institutions are different, please refer to **links and further guidance to tailor measures to your institution**. We recommend to keep using the EAUC Energy and Water Community of Practice and the EAUC-Scotland Topic Support Network to ask questions and learn from other institutions.

3. Energy reduction measures

When talking about energy reduction measures, often two strands of solutions are discussed: saving on individuals' energy use through **behaviour change**, or reducing the institution's energy costs through changes in **energy management.**

Unsurprisingly, most benefits are gained if institutions implement measures in **both areas**. However, the focus often lies on only one of the two strands, meaning institutions may not save as much energy, costs, and emissions as they could.

Which measures are most effective depends on many factors within an institution. Some measures will take effect quicker, others might take longer but will result in greater savings. It is important to keep in mind both kinds of energy reduction measures, and look at how they might **interact with each other.**

In the following sections, we briefly outline opportunities, challenges, and examples of behaviour change and energy management measure.

Which measures are already being implemented in your institution, and where could your institution make changes?

Spotlight: The first step

Unsure where to start? With the energy crisis looming, it can be tempting to tackle the issues first that are talked about most in your institution. However, this may not be where you can save energy most effectively.

As some of the best guidance outlines (e.g. Carbon Trust and IARU guides), the first step should be **thinking about where your institution is spending a lot on energy**, and what could be done to reduce this.

Once you have identified areas where energy could be saved, consider using a matrix or point system that can help you **decide which measures to prioritise.** See the next page for an example matrix.

This may require research and communication, but don't be afraid to start with rough estimates to **give you an idea where further research would be worth your time.** You might consider the following factors:

1. Potential cost saving impact: Is this where a lot of money is spent on energy, and where energy could be reduced without affecting safety, wellbeing, or general functioning?

2. Feasibility: How easy will it be to make changes here? Does making changes require a lot of time and effort? Do you have experience with this that you can build on? How easy is it to get the right people involved?

3. Likelihood of successful change: How likely is it that your efforts will actually result in reduced costs? This can be based on previous experience, a pre-intervention survey, or research.

4. Cost/Affordability: How affordable will the measures be? Rough estimates might be enough to start with. You can have this as a separate factor, or integrate it in feasibility.

Spotlight: The first step

This is an example matrix we have designed based on our experience with institutions - **please feel free to adapt this to your institution.**

In this example, we imagined a medium-sized institution with no dedicated energy staff that wants to prioritise initiatives that are likely to be worth their time. Therefore, after we estimated the factors from low (1) to high (3), we gave more power to likelihood of successful change (C) by multiplying it with the two other factors taken together (A+B).

Energy saving area/measure	A. Potential cost saving impact	B. Feasibility	C. Likelihood of successful change	TOTAL: (A+B)*C
1) office lights: install automatic timers	1 (low)	2 (medium)	3 (high)	**9**
2) student accom: general behaviour change campaign	2 (medium)	2 (medium)	1 (low)	**4**
3) temperature controlled offices: reduce thermostat by 1 degree	2 (medium)	2 (medium)	3 (high)	**12**
4) heating: refurbish old building	3 (high)	-1 (extremely low - costs, time, etc)	3 (high)	**6**

For this example, these estimates indicate that this institution might want to prioritise and look further into energy management solutions (1 and 3). However, if an institution feels confident about, or has positive experience with, designing behaviour change campaigns while having a more complex building infrastructure, the figures would change and indicate prioritising behaviour change campaigns.

3.1 Behaviour change measures

In a nutshell

There is potential to save energy through behaviour change of students and staff - however, it is important to not just consider behaviour change, but also long-term behaviour maintenance.

Achieving behaviour change requires thought and effort. Consider behaviour change theories (one of the most popular theories is summarised on p. 8) and factors that facilitate behaviour maintenance (see checklist on p. 12).

Switch off campaigns have been shown to be widely successful. This chapter showcases some of the mechanisms behind this success and some lessons learned.

3.1 Behaviour change measures

Definition

Behaviour change measures mainly refer to **changing the behaviour of individuals to reduce energy consumption.** From initiating energy saving competitions in student halls, to ensuring lab and IT equipment is shut down when not in use, to switching off fridges over longer break periods, there is a variety of behaviours that can be encouraged, or discouraged, to save energy. However, simply putting up a sign rarely leads to lasting behaviour change. **Behaviour change, and longer-lasting behaviour maintenance,** often require more elements than reminders to take effect.

Opportunities

- Can have immediate effects.
- Can result in significant energy savings.
- Often does not require large financial investments.
- Can engage and empower people to be part of climate solutions.

Challenges

- Behaviour change interventions require thought and planning to be effective - putting up posters and stickers often is not enough to see significant results.
- Behaviour change persistence fluctuates, so energy savings may not be highly stable over time (see also behaviour maintenance on p. 10).
- Behaviour change campaigns can have low engagement or sometimes even backfire if not carefully planned.

3.1 Behaviour change measures
Examples and cases

Saving competitions: Student halls - StudentSwitchOff

In most student residences, students already prepay for their energy consumption, so there is no financial incentive. Emphasising the climate action element in combination with a competition element has proven successful as part of the StudentSwitchOff campaign, For example, roughly 74,000 kWh (about £7400) were saved at the University of Strathclyde in 2019-2020 through this intramural competition.

Saving competitions: Winter break - UCL Christmas Switch Off

UCL ran a Christmas Switch Off Campaign in 2021/22 over the festive period (23rd December - 3rd January). Their campaign was mainly aimed at staff and communications included digital screens, Teams backgrounds, email footers, and checklists for offices, labs and student halls. 200 pledges resulted in saving over 815,000 kWh, a total of £114,374 saving compared to term time energy costs. They also gave out prizes to the departments with the most pledges. Find more examples of other institutions' Christmas switch offs here.

Poster campaigns: Often few effects - EAUC experience

At our networking events and general interactions with the FHE sector, we often hear that a simple poster campaign or sending out emails to students and staff is not effective. Psychological research shows habits can be tough to change: putting up signs is often not enough, even if some thought has gone into them. The coming sections showcase some alternatives to poster campaigns, and we recommend this guide by the International Association of Research Universities (IARU) to help make most of your campaign efforts.

3.1 Behaviour change measures
Psychology of behaviour change

Humans are complex, and so is our behaviour. There are over 80 theories of behaviour change, showing how behaviour change can be a difficult endeavour. This explains why **behaviour change campaigns can be ineffective if not carefully planned.**

Below, we briefly discuss one of the most popular behaviour change theories that can help you plan behaviour change measures. We highly recommend **the IARU guide for a well drawn out structural approach** to behaviour change interventions.

Intention to Action: Theory of Planned Behaviour

In short, the theory of planned behaviour states that a behaviour is driven by an intention. An intention is influenced by:

- **Perceived behavioural control**
- **Subjective norms**
- The **attitude** towards the behaviour

To change a behaviour, influencing intention by **targeting these factors** can be a good starting point. Changing people's perceived behavioural control (yes, I can save energy by doing X), subjective norm (it is normal and socially desirable to do X), and attitude (X is a good thing to do) can help change their intention and behaviour. A 2020 study found especially perceived behavioural control played an important role.

While these are by far not the only factors influencing behaviour (for example, habits, motivation, and energy knowledge also have effects on behaviour), many **successful behaviour change interventions** aim to influence at least one of these factors.

Which of the three intention-influencing aspects does your behaviour change campaign tackle?

3.1 Behaviour change measures

The psychology behind switch off competition success

Switch off campaigns can be an excellent way to engage both students and staff in energy saving behaviours. The most effective switch off campaigns combine a variety of factors beyond providing information and include the following elements:

Competitive element

Having a competition that allows for comparisons and banter taps into a sense of entertainment - potentially shaping a more positive attitude towards the behaviour. Rewards/prizes can increase this further.

Accountability element

Being part of a team and having energy use monitored increases social pressure, as well as being able to see the effects of actions, increasing perceived behavioural control.

Social identity element

Forming teams to participate in the competition builds a group identity. This makes energy-saving norms more salient and provides a source of social belonging and sense of community.

Communications element

Sending out communications in a variety of ways, as well as providing clear instructions, checklists, and training, can empower individuals to execute energy saving behaviours, and increase their perceived behavioural control.

UCL's Christmas switch off campaign made excellent use of their communications. Through creative approach to spreading awareness, they got people excited to take part as departmental teams, setting up incentives for making pledges and providing checklists for offices and labs. You can read more about the power of student engagement in this study from 2018.

3.1 Behaviour change measures
Switch off competition: Lessons learned

Inter-Hall energy saving competition

University of Stirling Students' Union

STIRLING STUDENTS' UNION
making students' lives better

In autumn 2017, a campaign run by the University of Stirling's Students' Union achieved savings of 12,151 kWh (in current energy prices, this would be roughly £3,900) within only 19 days, with savings further adding up during the duration of the campaign. The SU is considering running a similar campaign for reducing waste, and have summarised some of their lessons.

Lessons learned

- **Nominate leaders**. Some halls reduced their energy use by up to 17%, while other halls did not reduce their energy use at all. This seemed to depend on some students leading energy changing behaviours in their building and championing the campaign. Consider speaking with students in advance and nominating one or several of residents per building to lead and motivate others to join the campaign.
- **Find an incentive**. In the Student Union's experience, both students' sustainability concerns and the fact their building could win £500 played a role in residents' motivation. This could be expanded further by having the students decide what they would like to spend the money on or, following the example of the SOS-UK Student Switch Off campaign, providing vouchers as a prize for groups or buildings that save the most.
- **Consider politics.** There is the concern that asking halls residents to reduce costs for pre-paid bills might be more difficult during events or crises like the 2022 cost of living crisis. This similarly applies to staff. Possibilities regarding the energy crisis include to communicate switch off campaigns in combination with cost of living support, for example energy literacy programmes (see p. 12) or free breakfasts, to make sure students and staff feel supported. Consider focus groups or surveys prior to introducing the campaign to gauge how it may be received.

3.1 Behaviour change measures
Psychology of behaviour maintenance

Why changing behaviour is not enough: behaviour maintenance

Changing a behaviour is an important first step - but whether this behaviour is maintained in the long run often receives less attention, despite being equally important. Changing a behaviour one time will rarely make a difference if people fall back into old habits. Efforts need to be made to not just change, but **maintain energy saving behaviour and build energy saving habits.**

The coming and going of staff and students

Universities and colleges have high student and staff turnovers, with hundreds to thousands of individuals leaving and joining an institution every year. While there are challenges with this (e.g. students or staff with good energy saving habits leaving, creating a need for repetition of campaigns), there are also opportunities.

1. Less unlearning required: Research has shown that it is easier for people to adopt and maintain environmental behaviours when there are no old habits that need to be changed, which will often be the case for individuals joining an institution.

2. Implicitly learning from norms: If behaviour change and maintenance campaigns have previously been effective, they may set new norms among staff and students. This is powerful as newcomers will learn these behaviours implicitly due to social influence.

How to increase behaviour maintenance

On the next page, we have collected various measures that can help institutions to incorporate behaviour maintenance into their campaigns. As always, different measures will suit different institutions - choose the ones you find most feasible and effective (see Spotlight on p. 3**).**

3.1 Behaviour change measures

Maintaining behaviour - best practice

Recent research has looked more deeply into behaviour maintenance aspects in general, and specifically related to building pro-environmental habits. We have summarised the findings for the FHE context:

Behaviour is more likely to be maintained when you...

- **Make it enjoyable:** Make the behaviour enjoyable to perform (e.g. gamifications) and/or allow people to be satisfied with the outcomes.
- **Show the effects:** The quicker and more consistently effects of behaviour are seen, the more likely it is to be maintained.
- **Facilitate regular monitoring**: Providing information that helps people to monitor their behaviour can help to maintain good practice.
- **Set up action cues*:** Cues like signs, stickers function as signals that can initiate desired behaviours automatically (helps forming habits).
- **Change levels of friction for different behaviours**: Make energy saving behaviours as easy as possible so they become automatic (helps forming habits). Make behaviours that waste energy as difficult as possible (helps unlearning old habits).
- **Foster alignment with individual identity**: Allow people to identify with new behaviours and facilitate it becoming part of their values.
- **Highlight a collective identity:** Individuals tend to follow the social norms of their social group, so building a collective identity and sense of community can be very effective. See research at a US university.
- **Have change leaders:** People are more likely to continue following guidance from people they like and trust. Consider having people lead changes in their team/building, rather than a one-fits-all approach.

*make sure these cues are set up in the right place! The closer the cue is to where the behaviour is to be executed the better (digital screens in entrance halls therefore often will not be effective as a cue).

Spotlight: Energy literacy

Research at the University of Plymouth from 2015 shows that there are still significant gaps in energy literacy (meaning knowledge and competencies in energy use, impacts, and saving): “it was clear that students were not well enough informed about basic principles of energy to make rational behavioural choices, even where they possessed knowledge of energy issues at a general level.”

The energy crises affects everyone. **Building general energy literacy among staff and students is beneficial for all**. Effective campaigns that enhance energy literacy can help students and staff to reduce spending in their private residences*, and the resulting habits may translate into behaviour on campus. Furthermore, energy literacy support shows an institution's awareness of the impact of larger issues such as the 2022/23 energy crisis on students and staff, and can help build a positive relationship to stakeholders.

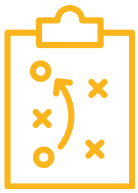
However, the authors also point out that "even knowledgeable students may be reluctant to make significant lifestyle changes in the absence of other motivations”, showing how behaviour change campaigns have to go beyond information and knowledge.

How to increase energy literacy at your institution:

- offer seminars or webinars on energy saving
- include energy saving events in induction week
- add energy saving guidance to fresher's packs
- send out communications about energy saving practice at home
- encourage the integration of energy issues and literacy in formal (curriculum) and informal learning (clubs, societies)

*Students in student halls may behave differently as their energy bills are prepaid. Information-focused campaigns may be more effective if they come together with a competition.

Summarised: Top tips
for changing and maintaining behaviour

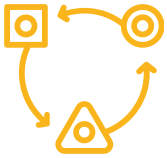


Assess where you could save energy and analyse which behaviours need to change and how to best change them (see IARU guide for structured approach)

Take into account attitudes, perceived behavioural control, and norms in your campaign (see p. 8. This guide by IARU provides overview of strategies to influence these factors).

Consider increasing student/staff energy literacy as this can be beneficial on and off campus (see research). However, information only rarely is enough to change behaviour.

Make sure to support behaviour maintenance and make behavioural changes last by helping with the formation of habits (see checklist on p. 11 and this research).



Design your campaign to be adaptable to changes of, for example, building use or technology, and be ready to regularly update and repeat campaigns (see Jisc guide).

Share your experience, learnings and knowledge with others and ask for advice in our Energy & Water Community of Practice and Energy Management TSN or Jisc mailing lists.

Involve students and staff in campaign creation. This can help to shape your campaign appropriately, as well as give the community a sense of ownership, improving compliance.

3.2 Energy management measures

In a nutshell

Energy management changes can lead to significant savings that are largely independent of individuals' behaviour. It is worth looking into how you can change heating, lighting, appliances, building use and more.

This chapter provides a few examples of energy management measures as well as ideas for setting up staff groups and suggestions for changed building use.

Every institution is different in their conditions, size, staff availability. Please refer to further guidance linked across this chapter and the guidance and advice section to tailor energy management measures to your institution

3.2 Energy management measures

Definition

In this guide, we refer to energy management measures when we talk about reducing how much energy buildings and appliances consume, and increasing energy efficiency. This includes all energy, from grid electricity to renewables to gas - the focus here is less on carbon emissions and more on energy used overall. **The goal of energy management is to reduce energy through measures not dependent on individual behaviour**. This includes for example lowering heating thermostats or automatically switching off lights. Energy management measures thus refer to measures in the institution's control.

Opportunities

- Some measures can have immediate effects.
- Can result in significant savings.
- Savings mostly remain stable over time.
- Requires less user buy-in than behavioural campaigns.

Challenges

- Some energy management measures can require large investments of finances, staff and time.
- Some measures take more time (e.g. refurbishments) and don't have an immediate effect on energy costs.
- Some measures, e.g. reducing temperature or lighting, need to take needs of users into account.
- Institutions with heritage/listed buildings might have less possibilities to implement infrastructure changes.

3.2 Energy management measures

Examples and cases

Borders College: Heating from waste water

In 2017, Borders College completed the installation of the UK's first heating plant using sewage/waste water as a sustainable heat source within a joint FE/HE Campus with multiple building types, ages and construction designs. The new Energy Centre was completed in 2016 and started operation in March of that year. When fully optimised, the system can provide a minimum of 95% of campus heat requirements.

University of Reading: Replacing appliances

In recent years, the University of Reading's energy team has made impressive progress on improving appliance efficiency and saving energy costs. For example, replaced catering ovens in 2021 used 73% less energy (saving £45,513*). Air conditioning replacements in Summer 2021 led to 91% annual savings (£10,508*), and replacing drying cabinets and freezers led to over savings of over £20,000 annually. All of these measures also significantly reduced carbon emissions, putting Reading in a good place on their journey to Net Zero.

*2021 energy prices, likely to be higher in 2022

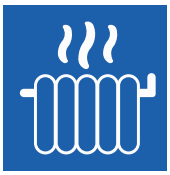
City of Glasgow College: Installing software to reduce IT energy use

City of Glasgow college ran a Climate Week 2022 Switch Off poster campaign at their campus. While around 24,000 kWh were saved compared to the same time period in 2019, the organisers estimate that a large proportion of these savings came from new software being installed on the college's around 3000 IT devices. This software shuts off devices automatically in the evenings for all devices connected to the college WiFi. While there is no specific data yet, it is estimated that this resulted in significant energy savings, reducing costs and emissions.

3.2 Energy management measures

Potential measures to implement

There is a large variety of measures that can be implemented to reduce energy use. While every institution is different, these are some general examples of energy reduction measures. **For more details, see for example The Carbon Trust guidance.**



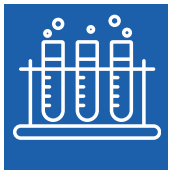
Lower heating thermostats. Set temperature must allow comfortable working/studying (WHO: 18ºC)*. Every 1ºC reduction can save ~10% in heating bills (household data) - consider in agreement with stakeholders.

Automatically turn lights off. In some buildings, lights are turned on during the day even when there is enough daylight, or get left on when vacant. Automatic systems and sensors can help regulate this.

Install device management software. A PC or a monitor on standby still uses energy, and even more when not on standby. Install software/settings to shut down devices after a period of inactivity.

Switch off digital screens. Digital screens often run 24/7. An average screen at 30 Watt and £0.34 per kWh costs about £89 per year. This could be halved for every screen by time-switching screens off.

Check water boiler temperature. While generally boilers need to be set to a certain temperature to prevent legionella, every degree above the required minimum requires extra energy and can be reduced.



Assess lab equipment efficiency. Save on average £3,700 per lab group per year by using the Laboratory Efficiency Assessment framework (LEAF). It includes online calculators, toolkits and resources.

Regarding **ventilation**: We recognise there is potential for saving energy by reducing or changing ventilation. However, institutions have highly individual conditions and guidelines, so we cannot list specific energy saving guidance here. You can get peer-to-peer advice e.g. on CIBSE guidance through our Energy and Water Community of Practice, our Energy Management TSN, and by emailing the respective mailing list.

*While this is the WHO recommendation, there is evidence that workers are most productive and comfortable at 22ºC. Staff and student wellbeing should always be an important factor in energy management decisions.

3.2 Energy management measures
Having energy-dedicated people

With all energy management guides stating that 'what gets measured gets managed', the need for a person/team to gather information on measurements and decisions is clear. While not all institutions can afford to hire energy-dedicated staff, there are various staffing options to take charge of your energy use.

Energy managers & officers
Especially for large institutions with a higher turnover, hiring staff for a dedicated energy team may pay off (see for example the University of Edinburgh). However, it can be difficult to find experienced energy managers due to competition with the private sector.

Sustainability team
If your institution already has a team or individual(s) who work on sustainability projects, it likely will be of value for senior management to see how they can be supported to look more closely into energy use.

Sustainability champions
Sustainability champions often are staff volunteers and sustainability leads within their department (institutions can sign up to the Green Impact programme to connect and train sustainability champions). Check possibilities for sustainability champions to come together and discuss energy use, and consider ways to support staff financially (e.g. University of Leeds 0.05 FTE sustainability architects)

Energy taskforce
Especially if your institution is rather small, consider putting together an energy task force in which you bring together staff from various departments and fields, including maintenance, to discuss solutions, responsibilities, and support needs to work on reducing energy together.

Involving students
Many successful energy saving campaigns have been led by students. Students can also help with energy management aspects (for example by providing information on where energy could be saved, or feedback on social impact of reduction measures). Make sure to involve students where possible, as this can support good relationships and compliance.

3.2 Energy management measures

Reducing opening times

Some institutions are thinking about reducing opening times for their buildings - for other institutions, this may be out of the question as they have made prior commitments regarding access to buildings. But even then, there may still be options to reduce building use. Find some examples below, derived from member contributions at our energy community of practice and mailing list.

Can you close buildings earlier/open them later?

If this seems impossible at first, make sure you look at all your buildings, Libraries may have to stay open if you promised 24/7 access (linking in with Student Experience), but can smaller buildings stay closed longer?

Can you close off certain parts of a building?

If you can't reduce opening hours, you might be able to reduce the number of rooms used in a building to save on lighting and heating costs. For example, you could reduce access to a few levels of your library after/before a certain time.

Can you monitor occupancy and speak to students and staff?

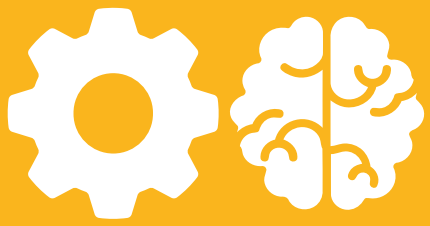
Some buildings might generally not be used at certain times, yet lights, heating, and ventilation may turn on automatically. See if you can speak to the users of these buildings to discuss if you can adjust building opening times or heating/ventilation times in line with occupancy.

Can you heat/ventilate at different times?

Even if you can't change opening or closing times and monitoring building use is too difficult, you could discuss reducing heating times or temperatures in buildings or certain floors and rooms. Ventilation times need to be in line with your institution's Covid-19 protocols but can still be worth a closer look and discussion.

Get in touch with scotland@eauc.org.uk if you have other ideas to help institutions, big and small, to save energy through changed building use.

3.3 Combining measures



Behaviour change campaigns and energy management measures can be **combined for maximum effect.**

Prevent backfiring: Some energy management measures may lead to new behaviours that counteract management measures (see example below). This can be prevented by ensuring staff and students are engaged in behaviour change measures.

Set the standard: Some behaviour change measures may work better if there already are energy management solutions in place. For example, if the institution shows it is doing its part to contribute to reduced energy use, this can set the social norms towards energy saving behaviours.

A common example: Thermostats versus electric heaters

If heating is decreased in buildings, some users might start bringing in heaters, **increasing electricity use and decreasing financial and carbon savings**. This has had the effect that some institutions don't attempt reducing thermostat temperatures in the first place.

However, if people bringing in heaters impact how much the group can save in a competition, this **behaviour is discouraged**. Instead, staff may support each other to come up with other more efficient or less energy intensive solutions.

If your policies allow for people to bring in personal heaters, encourage and support staff to use safer and more efficient heaters (consider e.g. infra red). Even with the extra electricity needed for those heaters, the overall thermostat reduction may still save costs.

4. Guidance & advice

In the following we have collected some of the most useful initiatives, organisations, and guides. If you have any other guidance you would like included in this document, please get in touch with scotland@eauc.org.uk.

Organisations

Resources and advice: EAUC and EAUC-Scotland

The EAUC is a non-profit, member-based charity run by members for members, supporting UK & Irish universities and colleges with sustainability resources, advice, and support events. The EAUC-Scotland, specifically focuses on supporting Scottish institutions.

Resources and advice: Energy Saving Trust

The Energy Saving Trust provides businesses, including FHE, with energy efficiency strategies, research, and communications.

Funding: Salix Finance

Salix Finance provides interest-free Government funding to the public sector to improve energy efficiency.

Advice and services: The Energy Consortium (TEC)

TEC provide services in energy procurement, risk management and cost reduction on a not-for-profit basis to their members.

Advice and services: AUDE

AUDE, the Association of University Directors of Estates, provides fully funded campus energy infrastructure and decarbonisation solutions to their members in collaboration with SSE.

Initiatives

Peer Support: Energy & Water Community of Practice and Topic Support Network

As mentioned in this guide, the EAUC's Energy and Water Community of Practice, and EAUC-Scotland's Energy management Topic Support Network are excellent platforms to connect with peers via regular network meetings and mailing lists.

Knowledge Hub: Sustainability Exchange

Sustainability Exchange is like a "Sustainability Google" and provides numerous sustainability resources and materials in one place.

Engagement support platforms: Jump

Jump provides incentive-based bespoke platforms to help organisations achieve and track sustainability impact and save money.

Campaign support: Student Switch Off by SOS-UK

SOS-UK have been running their student switch off campaign with success for several years, reducing energy use at student halls.

Action framework: Green Impact by SOS-UK

This initiative is an UNESCO award-winning workplace programme helping staff and students understand sustainability, giving a framework for taking action, and celebrating achievements.

Staff training: Green Champions Training by Business Energy Scotland

The Green Champions Training Course is a free CPD Certified online training course for Scottish organisations to help organisations improve their resource efficiency and environmental performance.

Guides

Guide: IARU - Behaviour change interventions for reduced energy use

This 2017 guide by the International Association of Research Universities is designed to provide sustainability practitioners, policymakers and building users with a framework for designing successful initiatives to reduce energy use at universities.

Guide: JISC - Engaging users to reduce energy use

This 2013, but still relevant guide summarises a variety of measures to keep users motivated and engaged in energy saving. Additionally, there are links to guides on energy management.

Guide: The Carbon Trust - Better Business guide to energy saving

This guide from 2018 is ideal if you are looking for advice on sources of energy use and solutions in energy saving. It addresses an energy walkaround, lighting, heating, refrigeration, and more.

Guide: The Carbon Trust - Effective Energy Management for Business

This guide from 2019 is helpful if you already have some energy saving measures in place and are looking to improve energy management. Use together with assessment tool below.

Tool: The Carbon Trust - Energy management self assessment tool

To be used with the Effective Energy Management guide listed above, this tool provides an excellent structured approach in form of an Excel spreadsheet to assess overall energy management, including policies, procurement, and communications.

Top 5 Tips

Consciously choose your priorities. If you are short on time, don't be afraid to estimate where your time and efforts are best spent based on data and experience. Where do cost/carbon savings and institutional strengths and conditions align most? Prioritise these areas.

Consider both behaviour change and energy management. Institutions sometimes focus only on one of these strands. Assess which interventions are most likely to be effective, where their caveats lie, and consider combining different measures for maximum effect.

Think beyond behaviour change and include behaviour maintenance. To continuously reduce your energy use, make sure to include considerations of how to support people maintaining energy saving behaviours and building desirable habits.

Get community and management buy in. For energy saving measures to be implemented, you will often need support from management. For them to be successful and not backfire, you will need support from the student/staff community.

Share your experiences and learn from others. You can avoid mistakes and grow your network by sharing with and learning from other institutions. Join the EAUC's Communities of Practice, Topic Support Networks (Scotland), and mailing lists for peer-to-peer support.

Finding this guide useful? Need more information? Have an example to share?

Please get in touch if you have any feedback by emailing scotland@eauc.org.uk!

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