CITY SWITCH

Creating an **energy efficient office**

Contents

Quick wins

Quick wins in the office are usually related to changing behaviour or simple equipment modifications or updates.

If you don't have access to lights or air-conditioning, skip to the planning for the future chapter. It explains how to talk with your facilities manager or landlord to make efficiency upgrades on your behalf.

Lighting

Lighting represents up to one-third of the energy costs in an office-based business.

Making lighting more energy efficient can be as simple as changing a lightbulb or dusting the dead bugs off the lights.

Some lighting upgrades can be quick and provide a speedy return on investment and ongoing savings. For example, energy-efficient lighting can have flow-on effects as new LEDs don't produce excess heat and an air-conditioner doesn't need to work as hard.

Your lights may not need upgrading at all. But maybe you can make better use of the natural light from windows. Many offices are over lit and considerable energy can be saved by removing unnecessary lights. To tell if your office is overlit, see our tips for using a lux meter on page 14.

Lighting **Checklist**

✓	Is natural light used as much as possible? Consider repositioning furniture and other objects or moving partitions so they don't block natural light.
✓	Is task lighting used when suitable, instead of lighting whole rooms or areas? If you buy new lamps so you can switch off overheads, make sure they're LEDs.
✓	Are there lights in unnecessary or obscure places - such as near windows or above shelving? Consider the lighting conditions throughout the whole day before determining if a light is unnecessary, particularly for east or west-facing windows.
✓	Are light switches labelled to avoid lights being turned on unnecessarily? There's no need to light up the whole building if you're only using one room or area.
✓	Are there signs near light switches to remind users to turn off lights when they're not needed? Eye-catching signs should be placed near light switches to prompt employees to do the right thing.
✓	Are lights left on in unoccupied areas? Unnecessary lights should be switched off during the day, or timers installed where possible, for example, in meeting and storage rooms.
✓	Have your employees received training or advice about using lighting controls and switching off lights when they're not needed? Send regular communications to foster an energy-efficiency culture.

You may not have control over the following, so consult with your facilities manager if you need help in these areas:

✓	Remove some of the lights from multi-light fixtures while ensuring you've still got enough light. Lights closest to windows or the middle light in grouped lights can typically be removed.
✓	Are lights with dimmers correctly adjusted? Consider reducing the brightness level to match the lux recommendation for the type of task performed. This can be done manually or through the lighting control system.
✓	Have older light types been upgraded? LEDs consume a fraction of the energy and have a much longer lifespan, reducing ongoing maintenance costs.
✓	How often are lights, light fittings and lighting design features cleaned? Lighting fixtures can trap dust, dirt and dead insects that block light. They should be cleaned on a regular basis to ensure light output is maximised.
✓	Are lighting control devices and systems maintained in line with the manufacturer's instructions?

Heating, ventilation and air-conditioning (HVAC)

Thermal comfort affects productivity. Each of us has our own preferred room temperature. This is influenced by our body's metabolism and type, and by the clothing we wear.

This makes it almost impossible to find a temperature that will satisfy everyone in the same space at the same time. But there are simple strategies that can help you cut energy use, while also supporting office productivity and wellbeing.

Heating, ventilation and air-conditioning (HVAC) **Checklist**

✓	Do you have control over the thermostat? Set temperatures to 20 to 22°C in winter and 24 to 26°C in summer and expand the band. **Read page 15 for more information about the deadband.** Train your green champions to operate advanced features of the HVAC and lighting system. Or talk to the current operators to ensure they're aware of your energy efficiency policy.
✓	Are the blinds up or down? During summer, close blinds on windows to reduce air conditioning loads. During winter, open blinds to allow natural heating from sunlight.
✓	Are people dressed to suit the environment? Encourage employees to dress for the season. Many companies are moving away from dress codes that cause people in suits to sweat through summer and those in skirts to shiver in winter. Dress in layers that can be removed or added as the internal office temperature fluctuates.
✓	Are there any personal heaters hiding under desks? Ensure employees aren't operating personal heaters and other appliances that could affect the operation of building HVAC systems. Register any complaints about the temperature so you can negotiate adjusting the office layout or relocating a team.
✓	Did someone forget to switch off when they went home? Ensure HVAC systems are switched off after-hours, windows are closed and cleaning teams understand how and when to operate air-conditioning.
✓	Are there employees working in the building after-hours? Encourage employees working after-hours to use areas served by supplementary HVAC systems so the entire building network need not be in use. Where possible, allow people to work from home after-hours.
✓	Are people uncomfortable with office temperatures? Thermal comfort is influenced by both physical and psychological factors. Giving people some control over their environment can widen comfort tolerances.
✓	Rethink the office layout. Is one team sitting underneath a cold blast of air? Is another squeezed into a stuffy space? Identify areas where there are temperature complaints and work out a plan to adjust the layout.
✓	Be flexible. As your teams embrace flexible or agile working, consider how temperature can be adjusted to suit the task. Creative tasks can be completed in warmer environments, while less strenuous tasks might need cooler temperatures.

Office and kitchen equipment

Computers and equipment such as printers and photocopiers can contribute from 35 to 50% of office energy use.

These items can be considered office equipment too. They can be large consumers of energy:

- microwaves
- dishwashers
- refrigerators
- instant water heaters
- televisions.

When purchasing new equipment, try to buy models with a high energy rating. Learn more about energy ratings and use the energy rating calculator.

Office and kitchen equipment **checklist**

✓	Do computer monitors switch off or go into standby mode when not in use for longer than 5 minutes? Monitors can account for up to 25% of an office's energy use. Monitors should be in standby mode or off completely - screen savers do not save any energy. Monitors and other screens in spaces that aren't regularly used, such as server and meeting rooms, should always be turned completely off when not required.
✓	Are computer monitors set to full brightness? Turning down the brightness on a monitor screen can cut energy use by a quarter. It is also better workplace health and safety as it can reduce eyestrain.
✓	Do people need that many monitors? Ask employees to consider whether they really need a second or third screen, or use a smaller screen. Bigger isn't always better.
✓	Do computers automatically shutdown when inactive for longer than 30 minutes? If not, do they go into standby, hibernate or power-saving mode? For some computers, restart can be programmed to automatically occur when moving the mouse or hitting a key.
✓	Do printers and photocopiers have the power-saving mode activated? It can be inconvenient to switch these machines off at the wall, so ensure energy saving features are used instead.
✓	Is equipment switched off at the wall at the end of the day? Most office equipment uses electricity unless it is switched off at the power outlet. Some office equipment can't, or shouldn't, be switched off at the wall. Remember to check the manual or with your IT department before doing this.
✓	Have you minimised unnecessary printing and paper waste? For example, black and white and double-sided as the default setting on printers? This will reduce paper, printing time and energy use.
✓	Are there signs displayed near office equipment to remind employees how to be energy efficient with the equipment?
✓	Is the fridge positioned out of direct sunlight and clear of the wall? Ensure the thermostat is set from 3°C to 5°C. Freezers should be set from -15°C to -18°C.
✓	Is the dishwasher full? It wastes a lot of energy and water to run a dishwasher with only a few dishes in it. Work with your team to find ways to ensure everyone only puts the dishwasher on with a full load.
✓	Is all office equipment maintained according to the manufacturer's instructions to ensure efficient operation?
✓	Have all employees and IT providers been made aware of your energy efficiency plans and been trained about the importance of using energy-saving features on appliances?
✓	Is your procurement officer aware of your energy policy? All new or replacement equipment should have the highest energy efficiency star rating that is affordable.

Beyond the quick wins

If you've completed the quick wins, you and your green team should be feeling positive about the changes you've made around the office. It's time to move on to some more advanced activities.

There are several steps you can take that are still relatively easy but require either a bit more planning, some discussion with others or an extra investment. For example, installing timers and sensors and talking to your facilities manager about expanding the deadband.

You will not necessarily be able to undertake all these actions. Some of them may be outside of your control. Do what you can and plan to discuss the rest with your facilities manager or landlord.

Collaborative decision-making is best practice. And all these decisions and plans for the future of your organisation are much easier - and more likely to get approved - **if you have a devoted sustainability committee to share the load.**

Keeping your team informed of your plans and your progress is integral to continuous improvement and employee buy-in. You can keep people informed through a sustainability newsletter, noticeboards or team meetings.

Some of the suggestions here will require extra investment. To help you understand if they're worth doing, you can develop a business case to present to decision makers.

You may be able to access government support for your energy efficiency upgrades by applying for grants or incentives. Visit the relevant website for your state or territory to learn more about incentives which may be applicable to your energy efficiency plans.

ACT

NSW

QLD

SA

VIC

Don't forget to check your local government website too as many local councils also fund energy efficiency projects in their local area.

Quick reference guide

You may need to do some research to accomplish these next steps.
Some people you may need to contact include:

General Manager Name: _____ Mobile: _____

Facilities Manager Name: _____ Mobile: _____

Purchasing Officer Name: _____ Mobile: _____

Landlord Name: _____ Mobile: _____

Electrician Name: _____ Mobile: _____

Remember the facilities management team will have a wealth of data at its fingertips. Together, you can identify opportunities to enhance the workplace and support your team, while also cutting costs and emissions.

Advanced lighting

There may be many types of light fittings in an office and almost all will benefit from an upgrade to LED.

In most cases a direct upgrade to LED will be the simplest and most cost-effective option, but the following options could also be considered:

- Fluorescent lights with ferro-magnetic ballasts should have voltage reduction devices installed to reduce energy use. This typically reduces energy consumption by 20 to 30%.
- Fluorescent lights with electronic ballasts are more energy efficient than standard ferro-magnetic ballasts.

Does your office have any form of lighting control?
Lights can be controlled in a number of ways:

- **Timer switches** allow lights to be turned on for a fixed duration, or automatically switched on and off at certain times throughout the day. Wall-mounted push-button timers that turn lights on for a short amount of time are best installed in transitory areas, such as bathrooms and store rooms. Lighting control systems are best for the main office space.
- **Occupancy sensors** will automatically turn lights on for as long as there is movement in a room. There are 3 types of occupancy sensors: passive infrared, ultrasonic, and microwave. While costs vary, expect to pay several hundred dollars for a room of 60m². Occupancy sensors should not be used where unexpected switching off of lights could jeopardise safety. For example, in workshops.
- **Daylight sensors** measure natural light levels. They automatically turn lighting on and off and can also control dimming functions. These devices should be used near windows or in areas that receive high levels of natural light.

- **Dimming devices** allow light levels to be adjusted to the required level, either automatically with a daylight sensor or manually. Dimming lights increases energy efficiency except when used with incandescent or halogen lights. Dimming systems are available for retrofitting existing installations. This is particularly applicable to fluorescent and LEDs.

Consider whether there are any opportunities to maximise natural light in the office. **Could you install skylights or upgrade the window dressings on north facing windows?** Make a note of these ideas for your action plan and business case.

Purchase or borrow a light (lux) meter and measure existing illumination levels. Then compare your results with the AS/NZS 1680.2 recommended levels as shown below.

Kitchenettes and dining areas	240 lux
Offices	320 lux
Storerooms	80 lux
Corridors	40 lux
Detailed work	600 lux

Too much light

Is lighting in any area or room of the office excessive for the activity being undertaken? If yes, consider removing some bulbs or reduce the wattage in the relevant fixture.

Energy efficiency should always be considered when purchasing new lighting, but deciding on the right lighting technology for your office space is also important.

A qualified lighting consultant can help choose the best solutions for your situation by guiding you through lighting identification, technology choices and a business case, including schemes to help finance upgrades.

Advanced heating, ventilation, and air-conditioning (HVAC)

Developing a solid working relationship with the facilities manager can be helpful to optimise building heating and cooling efficiency.

- Understand and discuss HVAC temperature set-points with your facilities manager.
- Report any gaps in window and door seals to your facilities manager for attention.
- If your building is likely to be renovated soon, consider repositioning vents or other optimisation actions.

The deadband explained

Every building's HVAC system has a 'deadband'. This is the temperature band within which heating or cooling doesn't operate. Most HVAC systems operate on a very narrow deadband, in many cases less than 1°C. This means the system is often working harder than it should to maintain the required temperature.

Expanding your office air-conditioning deadband by just 1°C can reduce the amount of energy your HVAC system consumes by up to 10%. **Expanding the deadband by 3°C can cut HVAC energy costs by up to 30%** and make a significant contribution to emissions targets.

We know people who care about human-induced climate change are more accepting of temperature variations in the workplace. Signs and conversations to help people understand why expanding the band is important will reduce complaints and prepare people to dress appropriately for the temperature.

If you have control over the building management system (BMS), allow for a 3°C "drift" or speak with your facilities manager or landlord about the benefits.

Advanced office equipment

Conduct an overnight energy audit

- Visit the site after hours and walk through the office one room at a time.
- Collate a list of all things that were left on that should not have been and leave a post-it on the item to inform employees it was left on.
- Adjust or install automated systems.
- Install signs to educate and remind staff.

Use an appliance meter

These can be bought inexpensively from electronics stores or you can borrow one from the local library.

- Measure the energy use of equipment under various settings. For example, standby versus turned on.
- Based on your findings, calculate annual energy use and potential savings. Multiply this by the number of units over the organisation. Use the energy use calculation from the appliance meter example on the next page.
- Get management support and form a plan to roll-out agreed settings over the organisation.

An example of a plug-in appliance power meter

Appliance meter - example

Dave conducted a computer audit of his office. He counted the total number of computers and measured the average hourly power use using an appliance meter. He counted 20 desktop computers that had an hourly average power consumption of 100 Watts. He also observed employees used their computers actively for about 8 hours per day.

Desktop computers:

20 computers
x 100 Watts per computer
x 5 work days a week
x 8 hours per day
x 48 work weeks per year
x 1 kWh / 1000 Watt-hours
= 20 x 100 x 8 x 5 x 48 / 1000
= **3,840kWh/year**

Laptop computers:

20 computers
x 40 Watts per computer
x 8 hours per day
x 5 work days per week
x 48 work weeks per year
x 1 kWh / 1000 Watt-hours
= 20 x 40 x 8 x 5 x 48 / 1000
= 1,536 kWh/year

This is an annual saving of **2,304 kWh** or **$691.20** at an energy cost of **$0.30/kWh**.

General maintenance tips

- Is there any equipment which is surplus to requirements? Identify unused equipment and switch off at the wall until it can be removed from the office.
- All office equipment should be cleaned, maintained, and serviced according to manufacturer's instructions to ensure it is working properly and efficiently.
- Consult the operating manual or check with your IT team to determine the energy efficiency settings of equipment and appliances. Make sure these are activated.
- Visit the kitchen several times during the day to observe the sun patterns and make sure it is not impacting any major appliances such as fridges. A fridge should be positioned out of direct sunlight and away from heat sources in a well-ventilated area to maximise energy efficiency. There should be space between the refrigerator coils and the wall to assist ventilation and cooling. **Coils and freezers should be regularly cleaned to ensure the refrigerator is working efficiently.**

General purchasing tips

- Invest in power boards with a switch to make it easier to turn off equipment with hard-to-reach wall plugs or invest in a timer to automatically switch them off at certain times.
- Multifunctional devices (MFDs) are machines that can do several tasks such as print, fax, photocopy and scan. Having these consolidated into one piece of equipment and one location is more energy efficient as it reduces the number of devices in operation and on standby. This is also better for indoor air quality.
- Laptops are more efficient than desktop computers, saving up to 70% of energy use.
- If your fridge is old, check the seals. If you can slide a $5 note out from the door when it is shut, the door is no longer sealing properly and it will be leaking cold air. Replace the seals or invest in a new, more energy efficient fridge. When replacing your fridge consider the size of your office and staff base and make sure the fridge is suitably sized.
- Investigate whether you can invest in new equipment. Consider the star ratings and purchase the highest rated equipment you can afford. Although the most energy efficient equipment may be more expensive, it will save money in the long term if used correctly.

You may have to review your purchasing policy to ensure that purchasing energy efficient equipment is standard practice. Have a conversation with the facilities manager and/or purchasing officer about your plans.

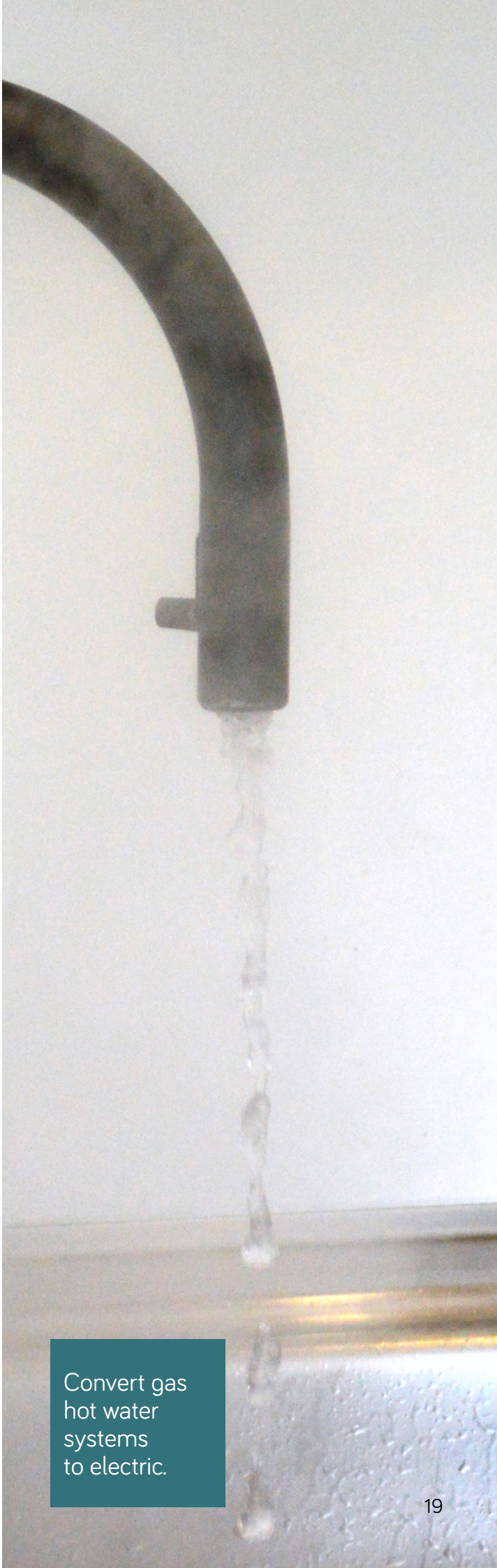
Renewable energy and electrification

Once you have made as many efficiency changes as possible, work to convert any gas or diesel appliances to electric models.

You might also investigate if you can install a solar system. The ultimate goal would be to have all your appliances electric and running on renewable energy.

We recommend you complete your energy efficiency upgrades before investing in a solar system. Because your efficiency upgrades will reduce your energy needs and therefore the size of the system you'll need.

If you're not an owner/occupier, discuss the option of a solar system with your landlord. Describe how this will significantly reduce energy costs and reduce – or maybe even remove – your reliance on grid electricity.



Convert gas hot water systems to electric.

Plan for the future

Establishing processes for continuous improvement reinforces smart energy management as a part of company culture and supercharges ongoing energy performance.

It's important to get everyone involved with your energy efficiency action plan. If people understand why they're changing their behaviour, they're more likely to persevere and form new habits which will make a big difference.

You have hopefully completed your energy audits in the **quick wins** and **beyond quick wins** chapters which give you an understanding of your energy performance and upgrade opportunities. You have begun building an action plan which you can use to create your business case for more significant investments.

This section will step you through the next parts of the process, including how to finalise your business case, integrate energy efficiency as part of your company culture and get certified by a NABERS assessor.

Benchmarking

Benchmarking is an important part of continuous improvement and can be done for internal or external purposes. You can use the results to compare your own performance from year to year and to compare your performance against other similar buildings or organisations. This will help you identify trends and review the impact of changes you make.

The NABERS website provides an excellent calculator for different building types. To use the calculator, you'll need to know details of your energy use – electricity, gas and diesel – and the office's total floor area in m2.

You may need to consult your facilities manager to find out the floor area of your office. Visit the NABERS **website** to do your own rating estimate. You can also register to get an official rating by an independent assessor. This is especially beneficial if you're a tenant because your rating will apply only to the services that you can directly control, such as lighting, office equipment and supplementary HVAC.

You can find benchmark data for other buildings on the NABERS **database**.

Develop an energy policy

Developing and following an energy policy demonstrates an organisation, including senior management, is committed to improving energy performance. This should tie into your net zero policy if you've already documented one.

Your policy should specify the energy objectives of the organisation, how those objectives align with the broader goals of the organisation and the timeframe in which those objectives should be achieved, as well as target metrics.

Once established, the energy policy should be communicated to all employees and stakeholders and published on your company's website. As with any business policy, the energy policy should be regularly reviewed and updated when necessary.

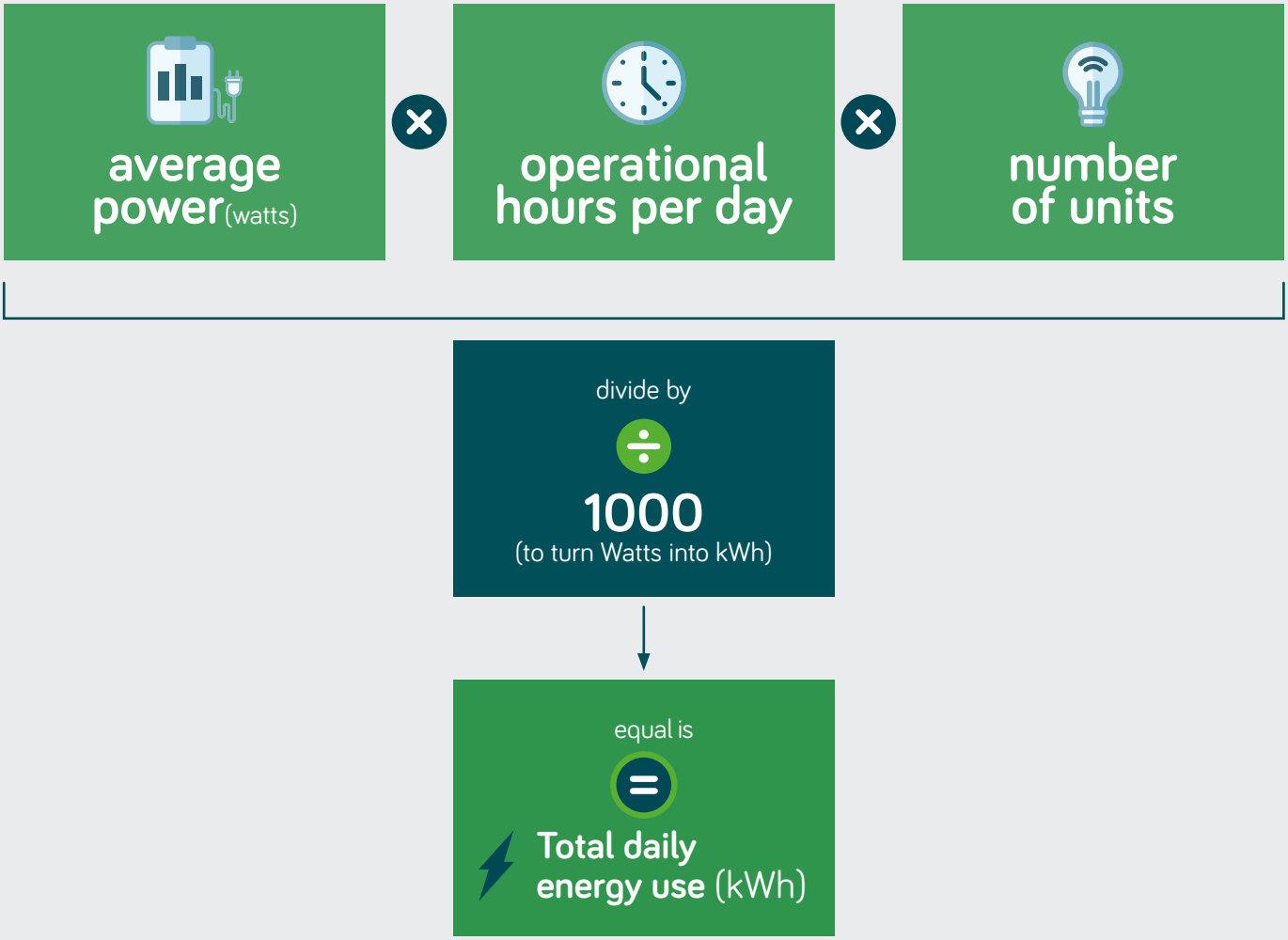
Making your business case

Having a well-written business case will help you present your efficiency requests to senior management, financial advisors and grant approvers. It's handy to keep it updated as you make changes to your office environment so it's always ready to go for any new requests or grant opportunities.

Writing a business case can be easier than you think. Start with your energy use and potential energy savings and think about your action plan. There are many other templates available. The general format is as follows:

- **Executive summary or recommendation**
- **Project objectives**
  - What are the key drivers?
  - Who are the main stakeholders?
  - What is the current energy usage and context?
  - Why do you want to do this?
- **Cost comparison**
  - How much are you currently spending?
  - How much can you improve?
  - How much money will this save? You can use graphs or tables to show your calculations in an easy-to-read format.
- **Strategic opportunity**
  - Summarise the main benefits and risks for your organisation.
  - Provide a couple of options and rank them in importance.
- **Next steps**
  - Procurement process and timeline

Energy use calculation



Energy savings calculation

Do the energy use calculation above with the new data – new hours of operation, new operational power, or new number of units – and subtract this number from your original energy use calculation to get kWh saved.

To convert this figure into dollars saved simply multiply kWh by the electricity cost on your bill.

Costings

Once you understand how much electricity you're using you can work out how much money upgrades can save.

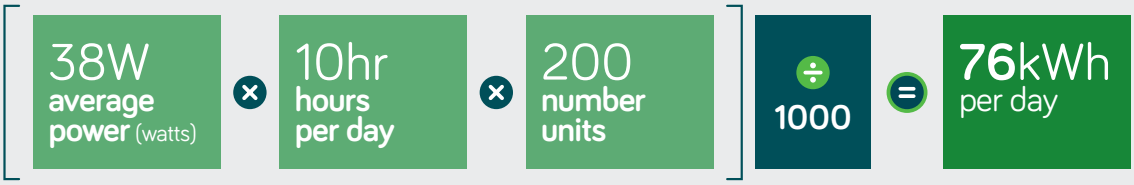
You will need to know how much you pay for electricity and the likely costs of upgrades to complete your business case.

Calculation example

Energy use of current bulbs

Lauren works in an office building and wants to upgrade the lights on her floor. In her audit she counts **200 single tube fluorescent light fixtures**.
Each tube is rated at **38 Watts** and there are people in the office from **8am-6pm**.

Using the calculation above, Lauren discovers they're using **76kWh** per day.



Electricity costs of current bulbs

The office operates **5 days** a week for **50 weeks** of the year, so this means the current fluorescent bulbs use a total of **19,000kWh per year**.
If the energy tariff is **40c per kWh** this equates to roughly **$7,600 per year**.

76kWh (per day) × 5 (days a week) × 50 (weeks a year) = **19,000kWh per year**

19,000kWh × 0.40 = **$7,600**

Costs of buying new bulbs

Lauren organises with the facilities manager to replace the light fittings with LED bulbs. The facilities manager says that each single tube fluorescent fixture costs **$75** to replace.

$75 × 200 = **$15,000 total investment**

Electricity bill savings with new bulbs

Using the same energy use calculation to calculate the savings, Lauren finds with the new bulbs they'll be using only **40kWh** per day – or **10,000kWh** per year – which is around **$4,000 per year**. This means they'll reduce their energy bill by **$3,600** a year by upgrading the light bulbs.

40kWh (per day) × 5 (days a week) × 50 (weeks a year) = **10,000kWh per year**

10,000kWh × $0.40 = **$4,000**

$7,600 − $4,600 = **$3,600 electricity bill saving**

Payback period

Based on the estimated saving of **$3,600** per year (excluding the cost of installation) it will take around **4 years** to recover the cost of the upgrade.

$15,000 (cost of new bulbs) ÷ $3,600 yearly energy bill savings = **4.2 years**

Company culture

Improving workplace sustainability requires action across the whole organisation. Based on the experience of CitySwitch members and international best practice, the keys to creating a greener office are:

- securing the support of senior management and other key personnel, such as finance and procurement
- building a team of green champions
- creating a program for staff engagement
- creating effective communication channels
- celebrating the wins.

There are lots of resources to help with getting your team on board.

It's also important to secure an ongoing allocation of resources to allow for continuous improvement and upgrades, instead of ad hoc projects. This demonstrates commitment from senior management and acknowledges the benefits of energy efficiency to the organisation.

Securing management support

Having senior management commitment is essential for success and should be communicated to all employees. Some ways to show senior management support include:

- a pledge from the CEO
- a formal campaign launch
- integrating sustainability performance measures into KPIs
- rewards and incentives.

This can help make it easier for employees to understand and identify with actions, and it also conveys the organisation's commitment. Senior management should lead by example by participating in discussions and activities. Energy efficiency campaigns don't have to be dry and serious. They can use humour and be an opportunity for senior management to walk the talk.

Green champions

Nominate a green champion to be the energy efficiency go-to. The green champion can also recruit and coordinate a green team for support and ideas. They can monitor behaviour, conduct audits, collate feedback, track employee habits and incentivise behaviour.

Profile of a typical green champion:

- A personal interest in sustainability
- Enthusiasm for energy efficiency and cutting waste
- Enjoys social connection and seeing results
- Someone who can observe and identify needs
- Capacity to act and influence

They don't need to be a technical expert, just motivated and curious.

Employee engagement

Behaviour change is complicated, but experts agree one of the simplest ways to encourage behaviour change is to motivate employees with incentives and provide the opportunity for change.

There are a range of techniques to consider. The main kinds of behaviour change and support:

- **Changing social norms.** Management support, public statements, program branding and the existence and actions of green teams or champions all help make energy efficiency the norm at work.
- **Positive peer pressure and competition.** Friendly competitions can be created between floors or departments where team members can exert positive pressure on their colleagues to do the right thing. Highlighting undesirable or negative habits can also create negative peer pressure against wasteful habits such as leaving lights on.
- **Feedback.** Feedback can be in the form of daily, weekly, or quarterly sharing of results.
- **Rewards.** There are many ways to reward staff, such as gift vouchers, or financial incentives through KPIs. Team rewards can include a group lunch or activity. The reward or incentive may simply be increased respect, credibility, or training and development opportunities.

A switch-off campaign

Switch-off campaigns are a simple, low-cost approach to reducing energy use across a business.

Step 1. Measuring and auditing

Take a methodical approach to find out how much energy any piece of equipment left on at night and weekends uses, and how much greenhouse gas that produces.

Step 2. Identify actions

The audit allows you to identify precisely what savings could be achieved by the behaviour you are targeting. For example, switch off lights whenever not in use, switch off monitor at night, or turn off printer at the wall. Automate the switch-off process wherever viable.

Step 3. Communicate

Think of all the channels you have to communicate your message to employees. Messages in unexpected places, or in unexpected forms, often work well. Make sure the tone of the message resonates with your teams – avoid an authoritative tone. You can be playful. Give employees a reason to switch-off and explain what should be switched off and why.

Step 4. Follow up and rewards

Share the data on the difference the switch-off actions make. Rewards can be simple, such as chocolate, or more elaborate gift vouchers or experiences for when employees are working in teams or against time-based targets.

Make sure equipment that must be left on is identified. This includes servers, fridges, security systems, hot water units, exit signs and PBX systems.

Effective communication

Communicate the plans, actions and progress of your green team, and always ask for feedback and suggestions. You can use formal or informal methods of communication such as an official sustainability newsletter to all employees or a notice board and suggestion box in the lunchroom.

A regular recruitment drive for the green team is a good way to keep people informed and involved. Remember to document and act upon suggestions from employees to ensure transparency and trustworthiness. People will become disengaged very quickly if they feel their views are not being heard.

Celebrate the wins

It is quite common for a behaviour change program to open with an initial burst of activity and early achievements, then for activity to fall away. Some tips from CitySwitch members to keep the momentum going when enthusiasm wanes include:

- rewarding green team members or high achievers
- fun activities such as tree planting or a fundraising morning tea
- attending events outside the workplace. For example, seminars and networking events
- involvement in a yearly event. For example, Earth Hour or Ride/Walk to Work Day.

Monitor and review

Once you've established your energy policy, performed your energy audits and presented your business case to management, you will have hopefully secured some funds to make upgrades.

The next step is to schedule a repeat of the office audit. Record your energy efficiency wins to demonstrate your success on your next business case.

A regular review of the energy policy with senior management is also a good idea to ensure all stakeholders are equally committed to the energy efficiency transition and working towards the same goals.

Green tenancies

In Australia, all sellers and lessors of office spaces of 1000m2 or more must obtain and disclose a current Building Energy Efficiency Certificate (BEEC).

This includes an energy star rating and lighting assessment. The more tenants demand green office spaces, the more of a priority it is for facilities managers to provide high performing building services.

If you're not an owner/occupier, speak to your landlord about your energy efficiency goals and negotiate building upgrades that will be beneficial for your organisation as well as the landlord in the long term. You can do this with an environmental upgrade agreement to enable a fair and equitable distribution of costs.

NABERS certification

If you're not an owner/occupier and you're having trouble making some of the advanced lighting or HVAC changes, consider getting NABERS certified.

NABERS is the National Australian Built Environment Rating System. It's a 6-star rating system that measures and certifies a building's sustainability performance for the year. It provides a benchmark to compare your building against other similar buildings and helps you identify further energy saving initiatives. Over 10 years, NABERS energy rated buildings have saved an average of 30-40% on their energy use.

If you are an owner/occupier, a low impact building can give you a competitive advantage over others. Tenants can choose to have their tenancy rated through a standalone **NABERS tenancy energy rating** or work with building management to get rated at the same time as the base building with **NABERS co-assess**.

You can quickly estimate your NABERS rating on the website using information such as:

- your office floor space in m2
- how many hours the building is occupied
- how many computers are in use
- details from your energy bills - 12 months of gas, electricity and diesel use.

The **NABERS renewable energy indicator** displays the proportion of a building or tenancy's energy that comes from renewable energy generated on-site, as well as purchased renewable energy. It's included in all NABERS energy ratings and is designed to support the transition to renewable energy and to enable tenants to identify energy efficient buildings.

Thank you for caring for our environment and community

Got questions?

If you have suggestions of how we can improve this guide, or any of our resources, email us:
info@cityswitch.net.au

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