

How seizing green energy solutions can help to boost your business's finances



Feeling the pressure?

You're not alone.



As the cost-of-living crisis continues, people in the UK are facing challenges across the board. But for businesses, it's no surprise things are proving particularly stressful.

Globally, inflation remains stubbornly high – with the UK's own numbers proving especially tricky to budge. And of course, with the Bank of England continuing to use interest rate rises to try and tackle that, it's putting more pressure on borrowing costs.

Higher costs are being felt by businesses in other ways too – with raw materials, import charges and energy expenses all on the up. On top of that, staff shortages are putting personnel costs up, as companies try to attract and retain the best people.

In addition, consumers feeling pressure on their disposable income has a knock-on effect on their spending patterns – adding even more pressure for businesses.

In the face of these financial demands, it's vital that businesses are able to attract more customers, explore new revenue streams, and spend carefully.

This need to spend money wisely is keenly felt as businesses face increasing demands to do their part in the fight against climate change.

Businesses are experiencing pressure from governments to reduce their carbon emissions and achieve net zero targets. There's pressure from customers who closely scrutinise supply chains as they increasingly demand stronger sustainability credentials. In fact, according to research from Deloitte, a third of consumers look for brands with strong sustainability targets, and this is set to increase.¹

Pressure from consumers is combined with stricter guidelines from marketing/advertising authorities to ensure that businesses using green messaging practice what they preach. So, it's imperative that businesses wanting to show the public their green credentials can back them up with action.

Keeping and attracting staff is also a key concern, with an increasing number of employees taking the environmental impact of their employers into account when considering new opportunities.²

1 Deloitte, How consumers are embracing sustainability, 2022. <https://www2.deloitte.com/uk/en/pages/consumer-business/articles/sustainable-consumer.html>

2 IBM Institute for Business Value, Balancing Sustainability and Profitability, 2022. <https://www.ibm.com/downloads/cas/5NGR8ZW2>



The good news?

Green energy solutions like solar panels, electric vehicle charge points and low carbon heating systems can help you turn the challenges of tackling climate change and the pressures mentioned previously, into business advantages that will help relieve the financial strain on your business – and help the planet too.



How can green energy solutions help businesses to keep costs down, or even generate revenue?

Whether you want to feel more in control of your energy use, increase your revenue, or improve your sustainability credentials, adopting green energy solutions can help.



Solar panels can give you the opportunity to generate your own energy and become less vulnerable to fluctuating prices.



Installing EV charge points can attract more customers, or even generate revenue for your business.



Switching to low carbon heating systems (such as heat pumps) can reduce your emissions as well as your running costs.

But there's a lot of information out there, which can make it difficult to know where to start.

So, how can businesses take proactive steps to set themselves up for stability both financially and in terms of energy?

The pages that follow outline four stages to tackling the problem, starting with

short-term wins to help you take control of your energy costs today, and moving onto advice on how to make informed long-term investments in green energy solutions and ultimately take control of your business's energy future.



This guide is designed as a starting point, helping you to pinpoint the needs of your business, weigh up what solutions are right for you, and understand how you can start the implementation process.

If you're ready to take the next step, the team at ScottishPower is here to help you seize the possibilities of green energy solutions.



Short-term wins

Taking control of
your energy usage



Taking control of your energy usage is one way you can start to relieve some pressure on your finances.

Your first port of call should be to get to grips with how energy is currently being used by your business. By understanding your business's energy usage, you can easily reduce bills, plan better for the future and adapt to any changes.



Here are some questions to ask yourself:



Taking control of your energy usage



What tools do you already have that can help you to understand where energy is used in your business?

- Many businesses are unaware of how to use the tools they already have to monitor and control their energy usage. Something as simple as taking regular meter readings and understanding their impact is a good place to start, even without additional portals or dashboards. If you do have energy portals that provide visibility of your energy consumption, ensuring there are members of your team who are trained on how to use and interpret the data is vital. You could also consider installing a smart meter, allowing you to see accurate information on the energy your business is using and removing the need to submit manual meter readings.
- Understanding the fundamentals of good energy management can help you to identify areas of your business that use a lot of energy. It can also allow you to predict the impact that making changes to your business will have. For example, introducing a new product line may bring with it additional costs and emissions that should be taken into account. By understanding the impact, you are better able to predict and mitigate any challenges.



Does your business have any wasteful practices that could be reduced or stopped?

- Once areas that use a lot of energy and wasteful practices have been identified, work to see how these could be improved. Find out if there are any quick wins which would immediately reduce wastage, for example:
 - making sure boilers are properly serviced and adjusted for optimum efficiency
 - reducing the use of portable heaters, which can be inefficient and costly
 - adjusting heating depending on the space (areas such as storerooms and corridors require less heat)
 - ensuring employees turn down thermostats rather than opening doors and windows to cool down rooms
 - upgrading or even just cleaning lighting
 - switching off unused lighting, computers, and other equipment overnight
- The Carbon Trust's [Better Business Guide to Energy Saving](#) offers more ideas on how to improve your business's energy efficiency.



Generating your own energy



Once you've got to grips with your energy usage and minimised your wastage, you might be ready to consider the next step: generating your own energy using solar panels.

The long-term switch to on-site renewable energy can help to protect your business from future price shocks, which better places you to weather economic uncertainty, as well as helping your business work towards hitting your net zero targets.

High energy prices have seen demand for solar panels soar across the UK³, helped by the fact that the cost of solar panels has dropped dramatically over the past decade⁴ making them a more cost-effective option than ever before.

³ Federation of Master Builders, The UK is seeing the biggest surge in residential solar panel installations in years as the breakeven point gets shorter, 21 Nov 22. <https://www.fmb.org.uk/homepicks/news/surge-in-solar-panel-installations/>

⁴ IRENA, Renewable Power Generation Costs in 2019, 2020. https://www.irena.org/-/media/Files/IRENA/Agency/Publication/2020/Jun/IRENA_Power_Generation_Costs_2019.pdf?rev=77ebbae10ca34ef98909a59e39470906



Here are some questions to ask yourself:



Do you have access to roof space or land that could be covered with solar panels?

- Roof space is a natural location for solar panels. But before you install solar panels on an existing building, it will need to be surveyed to ensure it can support the additional weight.
- If your business's roof isn't suitable for solar, are there other pieces of land you could use? For example, you could cover your car park with solar carports, which will protect cars from summer sun, while also producing electricity which can be used by your business or EV charge points.
- Planning permission is not always required, but businesses should always contact a planner at their local council for advice before proceeding.

Are you using energy constantly, or does usage fluctuate between night and day?

- Understanding your usage patterns will help you to grasp the ways in which solar panels can meet your energy needs. For example, you are still likely to need an incoming grid supply, especially if you need lots of power during the night as solar electricity cannot be generated when it's dark.

Could you maximise the benefits of generating your own energy by electrifying your heating system, or charging your fleet?

- Combining solar panels with a heating system that runs on electricity (such as a heat pump) can be an excellent way to maximise the energy you produce and the energy you use. This approach will optimise your energy management, reducing the effect of fluctuations in the energy market, while also helping you deliver on net zero targets.
- If you've transitioned to an electric vehicle fleet, or plan to in the future, you could also enjoy savings by using the power generated by your solar panels towards charging your vehicles.
- If you're considering this approach, it's worth taking into account long-term returns on investment over short-term gains.

What should you consider when looking for an installation partner?

- An expert in renewable energy solutions will be able to provide you with advice tailored to the needs of your business. They should have smooth and established processes to get your solution up and running with minimal impact to your business. Holistic providers like ScottishPower can design an integrated solution that allows you to make the most of the energy you're generating and ensures you can continue to meet the energy needs of your business in the longer term.



Increasing revenue



When it comes to new technologies, people often think of their potential to save money and reduce emissions, but it's sometimes forgotten that these solutions can also create opportunities to grow your revenue.

With solar panels installed, businesses can sell any unused energy generated back to the grid with a Smart Export Guarantee tariff.*

EV charge points offer another opportunity for revenue generation. We're now moving towards wider adoption of electric vehicles, so having the charging infrastructure in place is becoming vital.

Looking at behaviours of EV owners shows they're often keeping an eye out for convenient charge points. This can lead to the discovery of new places, offering businesses opportunities to attract new customers.

*Terms and conditions apply.



Supporting the rising number of EV owners by providing a public EV charging station can be a way to generate revenue. For example, qualifying businesses can host a charge point on behalf of ScottishPower's public charging network.

There's no upfront investment required from your business, and you'll get a share of the revenue. Operational expenses like electricity costs and maintenance are covered by ScottishPower as part of the agreement, and we'll also handle customer support.



Here are some questions to ask yourself:

Increasing revenue



How big is the need for chargers in your area and are EV registrations rising?

- There are some areas which are underserved by chargers, but EV ownership is really accelerating, making them the perfect places to install a public charging point. Areas that lots of people commute to or leisure destinations may also be ideal, as public charge points are particularly necessary when drivers are away from their homes.



Are you located in a 'low emissions' area?

- The creation of low or ultra-low emission zones in many cities is likely to lead to an increase in EV ownership and rental. Supporting your customers by providing a charging station could be beneficial for your own business.



Do you qualify to host a fully-funded public EV charge point?

- Qualifying businesses can host an EV charge point, where a public charging network provider, such as ScottishPower, pays for the installation, hardware, and ongoing operational costs, while your business receives a share of the revenue. These chargers do not draw from your existing power, but rather from a separate connection.
- Your premises may be suitable if:
 - you own your land, or it's available for a 10-year lease
 - there's unrestricted public access (24/7, 365 days a year)
 - it's located in a high-traffic area
 - it offers access to amenities such as retail shops, restaurants, or other customer facilities



Increasing Revenue (cont'd)

What type of charger would best suit your customers' needs?

- While many people think they require a rapid charge point, these can actually put more strain on the grid network and may need more installation work. Rapid charging may also be unsuitable for your customers – in places where they expect to stay for a long period of time, having to move the car after 20 to 30 minutes of charging is inconvenient (for example, while out for a day's shopping, eating at a restaurant, or watching a film at the cinema). So it's important to think about the average length of time customers spend at your business, and how you can best serve them.
- If you're self-funding the installation, the energy will likely come from your existing supply, which means you'll need to check whether you have the capacity to facilitate charging, especially if you plan to install rapid charge points. This will also impact the number of chargers you'll be able to install.

Will you charge your customers or employees to use the chargers? If so, how much?

- If you plan to charge staff or customers, self-funded chargers will need a back-office platform to manage the units and perform the administration for payment processes. This will also allow you to set the tariff and assign access to these units.

What should you consider when you look for an installation partner?

- Selecting the right installation partner is key. You'll need a partner who's able to cater to your business's size and specific needs.
- The charge points will need to be maintained to ensure reliable and safe operation. ScottishPower charge points have over 95% uptime, and we're working to increase this all the time. Make sure you check the reliability of your partner's network – you won't be able to generate revenue from chargers that don't work.
- It's also important to ensure the partner is able to deliver a quality and safe installation. Even slow chargers require large currents and are potentially dangerous if they're not installed properly and well maintained.

EV charge point installation approximate timeline

The installation itself is quite quick, with only a small amount of downtime for a portion of your car park. However, the planning process can take a while due to lead times for hardware and the need to connect to the grid.

3 weeks (approx)

Initial enquiry
Internal conversations
Lease signed

.....

3-6 Months (approx)

Application for grid connection

.....

2-3 Months (approx)

Hardware ordered
Planning permission granted (if needed)

.....

1-2 Weeks (approx)

Installation

.....

In total between 4-10 months



Ensuring green choices are a wise investment



Whether you're installing green energy solutions to take control of your energy costs, to generate revenue, or to reduce your carbon emissions, you'll want to make sure that any investment makes good business sense.

Things to consider include payback periods, maintenance costs, equipment lifespan, and adaptability to meet the future needs of your business.

The return on investment can be difficult to calculate, as long-term energy prices are complex to predict given their reliance on global pressures. Reducing this uncertainty may lead to a full-service solution, such as the creation of your own energy supply (through solar), which can power, or help to power, an electrified heating system or EV chargers.



Additionally, changing your business's vehicles to an electric fleet may be costly, but it could be worthwhile in the long term, especially as petrol and diesel powered vehicles are set to be phased out over the course of this decade. Providing places to charge EVs will become a core infrastructure component for many for many businesses, especially as staff begin to change their personal vehicles to electric.

If your goal is to reduce carbon emissions, then we suggest you consider solutions that provide the greatest return on investment in terms of carbon reduction. Heating systems, for example, are a critical element in the UK's plan to reduce energy demand and often provide businesses with the best value for money investment.

Heat pumps are a low-carbon technology that can be used to heat your business by transferring heat from a source outside, such as the air or the ground, to inside. They are very efficient, running approximately 3 times more efficiently than a standard gas boiler. Other electrification solutions also exist depending on your business needs.

Combining all of these concerns to create an integrated solution can be challenging, so exploring options and viability of concepts is key. ScottishPower can help you to navigate the complexities of these solutions, providing not only products but also consultation and advice, so you can understand the business case for these solutions.



Questions to ask yourself:

Ensuring green choices are a wise investment



How can you produce a business case to invest in green energy solutions? To help you secure investment from within your business or external funding.

- Having a full understanding of these solutions, including what they could provide for your business and the potential payback periods, is crucial to building a business case.
- Calculating the long-term return can be difficult and time consuming, and many business owners will struggle to find the time to explore these solutions. An expert green energy solutions partner, like ScottishPower, can help you with the maths and evaluate different options to ensure you make the right choice for your business.
- If you're financing solutions through a loan, you'll need to provide this information to your lender as well. There are tools available to assist with this, but an advisor can help you to calculate costs, savings, and payback periods for any given solution. Plans that involve revenue generating solutions, such as public EV charge points can be taken into consideration to offset the investment cost for solutions like heat pumps.

How can you buy and implement green energy solutions in the most effective way?

- Buying, installing, and integrating multiple solutions can be difficult from a procurement and project management perspective. Additionally, when it comes to maintenance, having a single contact can be easiest and most effective.
- From the perspective of long-term solutions, being assured that your chosen partner will be around for the entire lifetime of the equipment is another key consideration.

Can I find financing and grants to help with the cost?

- Grants are available for many energy solutions, but it can be time-consuming to wade through the information and find the right grant for your business.
- Some solution providers, like ScottishPower, are experienced in helping you to identify suitable funding, and will provide support throughout the application process to try to ensure funding is granted.





Could you benefit from a Power Purchase Agreement?

- A Power Purchase Agreement (PPA) enables businesses to fix their energy prices over a longer period of time, usually 10 to 20 years, offering greater certainty over electricity costs. PPA providers like ScottishPower can also include support to electrify heating systems as part of this agreement, helping to reduce capital investment.



How can I ensure I'm getting the most out of my solution?

- Measuring and monitoring on a regular and ongoing basis is important to ensure a solution is performing at its best, and any optimisations are being made. As your business evolves, so too will your energy needs, and monitoring through data is a great way to predict impacts and optimise your usage.
- Maintenance and upkeep is another element that should be considered from the outset. Consider using a supplier who includes this in their offering and/or will be available to help with any problems in the long term.



If you're ready to take the next step, there are lots of free resources available to help you move forward and seize the possibilities of green energy solutions for your business.



What next?

Useful
Links



The Carbon Trust

Green Business Fund Guides

A series of helpful guides packed with expert advice for businesses on energy efficient technology and renewable energy, as well as sector-based advice covering retail, hospitality, manufacturing and much more.

The Energy Saving Trust

Business Energy Efficiency

Offers a number of resources for businesses looking to improve their energy efficiency and adopt green energy solutions.

The Scottish Business Climate Collaboration (SBCC)

Climate Action Hub

This free-to-use platform supports businesses to understand climate risk and develop decarbonisation plans to support the global ambition of achieving net zero. It's jointly funded by the Scottish Government and SBCC members, including ScottishPower.

The green energy experts at ScottishPower are here to help your business

The experts at ScottishPower have plenty of ideas for ways your business can go green. We're here to help you see what's possible and unlock revenue potential.

We have over 20 years of experience in identifying, developing and operating renewable technologies, as well as the expertise to help your business seize the possibilities of green energy solutions.

Our dedicated green energy solutions team is ready to work alongside you to help you shape the best investment decisions and support your journey to net zero.

We'll work with you to offer a flexible cost solution that's tailored to your needs, and we can advise you on what government funding or support schemes are available.

Talk to our team of experts by contacting smart.solutions.sales@scottishpower.com

Or visit www.scottishpower.co.uk/greener-business

