TEN TOP TIPS FOR BUSINESSES

We are facing the biggest challenge of our time. Climate change is happening and expectations on corporate responsibility are increasing. These tips are designed to get your business started with 10 easy steps to creating a more ecologically sensitive business model.

European Union
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CORNWALL NEW ENERGY

1. Get Vision.

If you're only doing one thing - let it be this. Monitor and track energy consumption to see exactly how much energy your business is using and which process is costing the most. Having this knowledge makes it easy to measure direct savings against your business. Monitoring and making adjustments within the business can save 10-30% off a typical energy bill.

2. Use Less.

Using less energy is critical to being efficient. The most important thing you can do for your business is to use less energy. Use a monitoring device to track electricity use and make savings where you can. Adjust controls for space heating and hot water and make sure it's not wasted. Why not set a challenge to save 1 tonne of carbon a year? 1 tonne of CO_2e = 3,532 kWh of grid supplied UK electricity, or 4,893 kWh of natural gas.

3. Improve Building Fabric.

Energy savings can be made by introducing technically feasible energy efficiency measures to the existing fabric. This may include loft or roof insulation, internal or external breathable building render with insulation or even insulating under the floor.

4. Switch to LED.

'LED' lights are a quick and cost effective way to reduce electricity consumption.

Many lighting designers offer a free survey to determine the energy savings and costs of switching to LED. LED bulbs last up to 20 times longer than traditional bulbs and use at least 80% less energy than a tungsten halogen bulb.

5. Recover Heat.

Heat recovery ventilation (HVR) or mechanical ventilation heat recovery (MVHR) systems retain heat from exhaust air leaving a building, and add it to fresh air being brought in from outside. Heat recovery technology reduces space heating demand and creates a healthy indoor air quality. It will also help reduce mould, condensation and damp.

6. Reduce Commuter Fuel.

Set a target to travel less and offer incentives to your staff to car share or cycle to work.

If your business owns a fleet of vehicles or company cars, consider switching to electric vehicles which could reduce your running costs and improve air quality. For every litre of diesel used in a vehicle, 2.6 kg CO_2e is released into the atmosphere. For every litre of petrol; 2.2 kg CO2.

7. Go Smart.

Smart technology and remote control systems are particularly useful for hotels and holiday accommodation to ensure the heating and lights are not left on all day. Plenty of companies offer smart energy management systems which can effectively demonstrate the savings made.

Examples include trigger buttons for heating systems on a timer, and PIR motion detectors for lighting.

8. Be Green.

Energy companies are now offering green tariffs for renewable electricity and green gas contracts. Your money goes towards wind and solar farms, bringing the cost down for the future! Green gas supports bio-methane plants creating gas from decomposing natural waste. This gas can be mixed in the main pipelines to supply homes and businesses. Hydrogen can also be classified in this category and is likely to become more commonplace in the future.

9. Install Renewable Energy

If you can generate energy on-site, you will secure your business against future energy price rises and reduce your running costs considerably. Solar PV, air source or ground source heat pumps, and CHP systems are all popular choices for low or zero carbon energy systems.

10. Talk to an Expert.

Talking to an expert about a bespoke energy solution can really help to reduce green house gas (GHG) emissions for your business; a key driver in securing longevity and making your business a success for the future. An effective energy strategy will also save money by being efficient, reducing bills, and allowing you to put the extra capital into other areas of growth. Appointing an energy expert can help you make key decisions on where to direct your efforts for the best results.

Installer Index for CNE supported businesses in Cornwall

Clean Earth Energy Tel: 0800 975 5635

Drive Energy / Ecodrive Tel: 0800 242 743

GreenGen Tel: 0800 093 3299

Naked Solar: Tel: 01637 697 009

Natural Generation Tel: 01872 571 700

Shaw Electric Tel: 01209 418 157

TEE Ltd Tel: 01872 553541

ZLC Energy Tel: 01726 390 390

Kensa Heat Pumps : 0345 222 4328

Renewable + Low Carbon Technology

Innovation.

"The clear and present danger of climate change means we cannot burn our way to prosperity. We already rely too heavily on fossil fuels. We need to find a new, sustainable path to the future we want. We need a clean industrial revolution" Ban Ki-moon, UN Secretary General

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PRP

COMMUNITY ENERGY PLUS · CWcommunity works · UNIVERSITY OF EXETER · BRE NATIONAL SOLAR CENTRE

Hydrogen:

H_2 is a zero carbon fuel when it's created through a process called electrolysis, using electricity generated from renewable sources. It can be stored in a fuel cell, and be used as a fuel for heating, hot water, and transport. Currently hydrogen is expensive, but with the price of clean electricity coming down, this technology is expected to grow within the zero carbon energy sector soon.

Electric Vehicles

Consider switching your fleet to EVs and installing charge points. This can add brand recognition and attract new visitors to your business. EVs offer fuel savings as well as making a significant contribution to cleaner air. Maintenance costs are likely to be less too.

Anaerobic Digestion.

The breakdown of biodegradable materials to manage waste and create fuel in the form of biogas or biomethane. Biogas can be used for heating, cooking and transport, it can integrate with the main gas distribution network and be used to supply homes and businesses.

Solar thermal.

Generating hot water from the sun, this is a comparatively low cost technology for businesses with a high hot water demand. Space is needed for storage in buffer tanks, and regular servicing of the system is essential.

Contact Us

For further advice please email:

CornwallNewEnergy@prp-co.uk

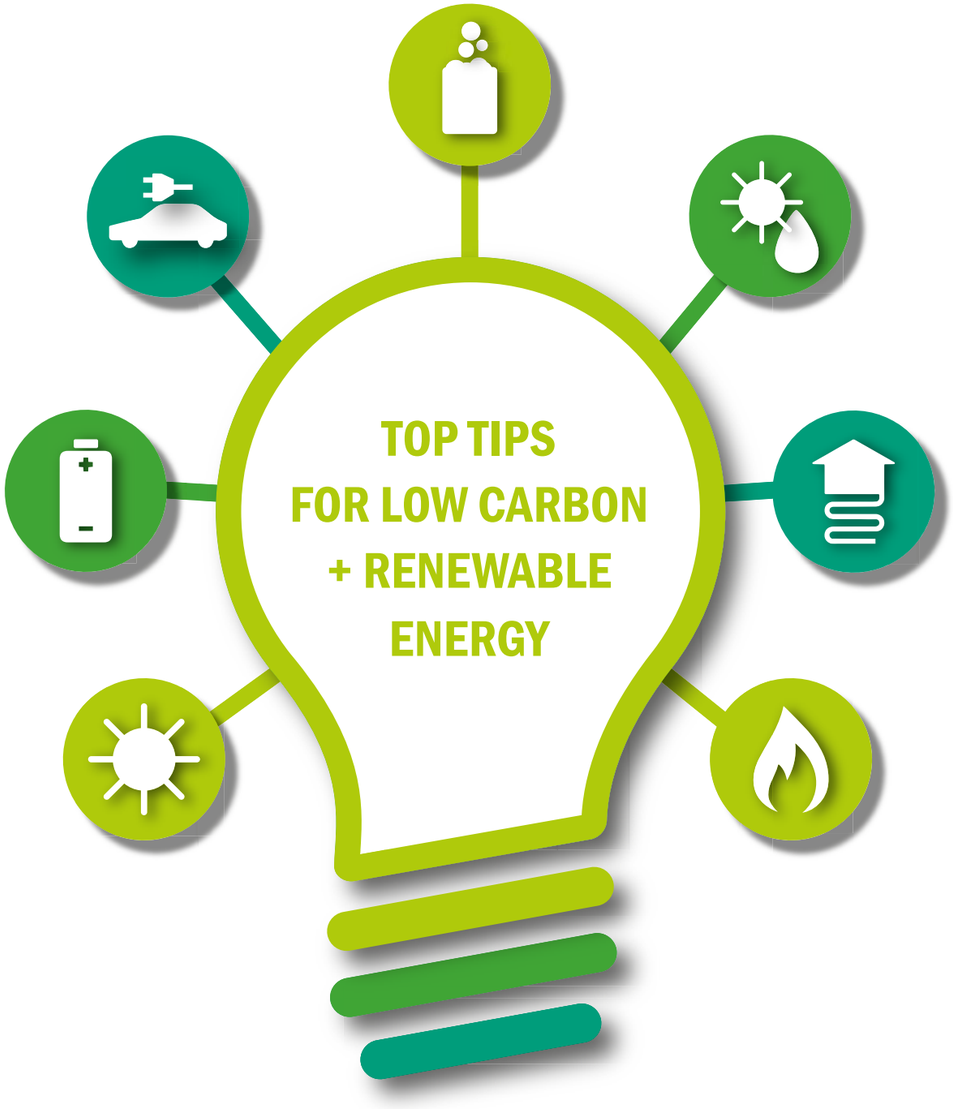
advice@cep.org.uk

Vehicle to Grid:

V2G is a technology which uses car batteries to charge and store electricity for use in the building to offset electricity spikes at peak times. It is an emerging technology that is still being tried and tested with compatible vehicles.

Battery storage.

There are some cases where businesses may want to time shift their electricity use to avoid high tariffs during peak times. Batteries are useful for taking control of time of use, storing during off peak and using during peak hours. If storing unused renewable energy, the benefit can be even greater. However this technology is still currently expensive to install and there is an environmental impact involved with mining components for Lithium Ion batteries.



Heat Pumps.

Heat pumps use electricity to run a pump which extracts heat from either the ground (ground source) or air (air source) for heating and hot water. The high efficiency of these systems means for every 1 kWh of electricity used to run the pump, you get between 3 -5 kWh of heat out.

Local Energy Markets:

Trading platforms for businesses to trade and save energy, avoiding high tariffs in peak times.

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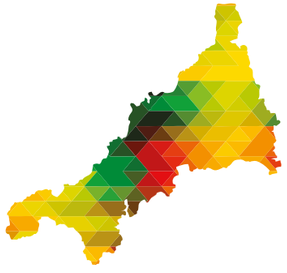

Solar PV.

Solar PV is a great match for supplying daytime electricity straight to the point of use - your business. Solar works well for most businesses, it's easy to install if you have a suitable unshaded roof or ground space, and can protect against price rises in the future.

Combined Heat + Power (CHP).

CHP allows for heat and power to be generated simultaneously, using excess heat from the production of electricity on site. It's not renewable, but it is an efficient way to use mains gas for businesses which have a high and constant heat load. Generating heat and power efficiently has a lower carbon footprint than importing electricity from the national grid. As gas gets greener with the mix of biogases going into the network, this technology has potential to become much cleaner in the future.