

Module: Energy Supply

1) General definition of the subject

Reducing energy use is a top priority for many businesses, with energy bills and operating costs on the rise, introducing energy efficiency equipment and workspaces can help social enterprises to save money on energy bills.

On average small and medium sized enterprise (SME) could reduce energy bills by 18-25% by installing energy efficiency measures and implementing behavioral change.

Here you can find information and energy saving tips related to offices – which is a category common to any type of social business – and other useful information to approach energy efficiency related to enterprises' need.

2) How to increase your awareness on this subject

The importance of green energy supply

Switching your enterprise to renewable energy will bring benefits to both the Planet and to your business. Every business needs to rapidly lower emissions, and buy renewable energy as one of the most effective ways to contribute to fight climate change.

In fact, energy supply contributes both to direct emissions that come directly from the company operations (such as manufacturing, logistics, transportation, facilities etc.) and indirect emissions that come from the purchase of electricity (which can be either generated by the burning of fossil fuels like coal and gas, or through renewable sources like solar, wind or hydro). To be considered also those supply-chain emissions off control, but which produce an impact (such as purchased goods and services, business travel, employee commuting, investments, leased assets)

That is why purchase of your electricity is so important to reduce impact.

By switching your company electricity to 100% renewable energy you can rapidly reduce emissions to zero.

To accelerate emissions reduction target further, a good action is to electrify areas of your company operations that were previously powered by fossil fuels (for example, transitioning your corporate vehicle fleet from petrol or diesel to electric vehicles).

Analyzing and planning

Energy management practices and energy efficiency assessments are to be adapted to size, energy expenditure, and resources of the enterprise.

A scoping assessment can identify potential savings and secure resources for a more detailed assessment. In case of large enterprises, an Energy Manager as external professional can be appointed or a full-time position created to take care of energy efficiency and energy issues in general, through dedicated planning.

3) How to adapt this subject to your organization

Energy saving is not just about more efficient buildings or streamlined business processes. People are the most important resource when it comes to sustainability and efficiency.

Training the workforce and management and involving them in energy-saving initiatives are effective actions to change mindsets and behaviors in the workplace.

Some examples of energy-saving tips that you can share with you team:

- **Turn off lights when not in use** is one of the most basic steps to take to reduce energy usage and save money on the electricity bill. In a typical office, lights stay on in areas like break rooms, bathrooms, or conference rooms, even when those spaces aren't being used. Sensor lights can help to keep the lights on when needed, but off when they're not.
- **Take advantage of natural sunlight.** Take advantage of natural light so not to turn on the lights at all in areas where windows can give all the needed illumination. Natural light can play a significant role in people' mood and can contribute to lower stress levels and anxiety.
- **Power down computers and other office equipment at the end of the day.** Training team to be in the habit of shutting them down before leaving the office is a significant energy saving habit. Just like turning off and unplugging as many devices as possible at the end of the day. A great office energy-saving tip is to have computer peripherals (printers, monitors, etc.) connected to power strips so that the flip of a single switch can shut down several devices at a time.

4) What you could do

For any company to start out on your energy efficiency journey, the first step is to understand the energy use and what actions can help to increase energy efficiency in order to improve usage and equipment and to make more informed decisions, especially when significant investments are required (like the change of fixtures or the construction of an insulating envelope around the building).

While conducting an analysis of consumption data in order to monitor and evaluate where and how to intervene, some effective measures can be applied.

Here some examples.

- **Purchase energy-efficient office equipment.** An ENERGY STAR® certified computer uses 25%–40% less energy, on average, than a standard model. Before you buy or lease office electronics (desktops, integrated desktops, notebook/laptop computers, workstations, small-scale servers), check to see if they are ENERGISTAR-rated.
- **Reduce Peak Demand.** Peak demand times, when energy usage is at its highest, are typically normal office hours (from 9 a.m. to 5 p.m.). Energy demand can be reduced during this time by staggering work hours / start times, running heavy equipment and factory equipment during the evening and early morning hours, and conserving energy throughout the day.
- **Program thermostats.** This is one of those office energy saving tips that is especially relevant for a 9-5 workplace. Using programmable or smart thermostats to manage the temperature during "off" hours can make a big difference.
- **Energy-efficient light bulbs.** One of the most common types of energy-efficient lighting is LED (light-emitting diode) lighting and it's one of the easiest and simplest energy saving ideas in the workplace. LED bulbs use about 75% less energy and last up to 25 times longer than incandescent bulbs.
- **Green inside and outside the building.** Indoor plants contribute to energy efficiency by providing natural cooling, improving air quality, reducing noise, and increasing humidity. Benefits of indoor plantation include stress reduction and better air quality. Also landscaping around the building is a great opportunity to create

energy-savings: strategically planting trees to block winds or provide shade on hot summer days can help reduce heating and cooling costs.

5) Resources

What is energy efficiency?

<https://youtu.be/Dk5wfKPx0q4?si=cUmTDkm8WPVyRcCC>

Top 10 Energy Saving Tips for the Office

<https://youtu.be/z7yDjWqAW2w?si=nJ85agUFrwwsugYM>

Top 5 Energy Saving Tips for Manufacturing

<https://youtu.be/iVnnEGC--vQ?si=ntRhQATQSVaOhFC8>

EnergyAware- raising energy awareness in the workplace

<https://youtu.be/B4b5OiXflgY?si=0SuJ3RSHfNsZzwUI>

A guide to energy efficiency and cost savings in your workplace (English):

<https://www.lbhf.gov.uk/business/business-connects/support-and-advice-businesses/cost-doing-business/guide-energy-efficiency-and-cost-savings-your-workplace>

Influencing staff: an energy managers guide

<https://www.theema.org.uk/wp-content/uploads/2014/01/Engaging-with-Staff-Report-Ver-2.1.pdf>

[Teaming up to save energy](#)

https://www.energystar.gov/sites/default/files/buildings/tools/Teaming_Up_To_Save_Energy_508_0.pdf