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How-to Guide

Developing Energy and Greenhouse Gas Emissions Management Actions

Disclaimer: This guideline does not aim to serve as the only approach on developing a sustainable procurement policy. The scope of the guideline is not exhaustive and does not guarantee the score of an EcoVadis assessment. For specific document standards required by EcoVadis' assessment, please refer to EcoVadis Document Guide in EcoVadis Help Center "What type of supporting documents can I provide?" (Link).

Why is it Important to Reduce Energy Use and Greenhouse Gas Emissions?

What are Energy Use and Greenhouse Gas Emissions?

A company's energy use includes the direct production and consumption of energy as well as the purchase of energy. In other words, the burning of fossil fuels or other energy sources by the organization itself, as well as the purchase of electricity or power from third-party energy providers. Similarly, greenhouse gas (GHG) emissions are considered to be part of a company's 'footprint' if they are released by the company's direct burning of fuel or as a result of the company's purchase of power that is produced elsewhere. Direct emissions are often referred to as Scope 1 emissions and indirect emissions, e.g. from purchased electricity, are called Scope 2 emissions. Scope 3 emissions are those created in a company's supply chain and can generally only be measured and addressed through engagement with supply chain partners.

Why is it Important to Manage Energy Use and GHG Emissions?

Energy use and GHG emissions are among the most important environmental issues for companies in any industry, regardless of location. Energy use generally results in the release of greenhouse gases, mainly Carbon Dioxide, but also Methane, Nitrous Oxide, and other compounds, into the atmosphere, contributing to global climate change.[1] Companies are increasingly being held accountable for their 'Carbon footprints'. As climate change accelerates and its impacts become clearer, it is likely that pressure from a variety of stakeholders, including the government and the public, will continue to increase. Companies that do not manage their energy consumption and subsequent greenhouse gas emissions risk backlash later on or falling behind more prepared competitions as this issue has become more and more of a company's unspoken license to operate.

It is also important to note that the business case for energy reduction goes beyond risk aversion. Reducing energy consumption can help cut operational costs considerably.[2]

Getting Started

If you're starting from scratch on these issues, an effective way to begin is to understand where you stand. Compile data to find out energy use and calculate GHG emissions of your business operation. There are various tool to calculate GHG emissions based on energy usage (by the type of energy, etc.). Keep in mind that different industries and geographies will result in different energy needs and GHG emissions.

See page four of this guide for details on best practices and potential 'low hanging fruit' actions to take.

[1] EPA, Overview of Greenhouse Gases
[2] Scientific American, How Companies Could Cut Greenhouse Gas Emissions and Make Money

How Important are Energy Use and GHG Emissions to my Company?

The issues of energy consumption and greenhouse gas emissions are relevant to virtually all industries and professional activities. However, energy use and subsequent emissions vary greatly across different sectors and as a result, need to be approached in different ways.

Here are a few examples that demonstrate how the industry and location of a company can make a difference to energy usage and GHG emissions.

Industry	Main Energy/GHG Emissions
Manufacturing Operations	• High process energy inputs resulting in high GHG emissions • Often includes the direct burning of fossil fuels • High potential for inefficiencies as energy may be lost during processes through heat, motion, etc.
Wholesale Activities	• High energy costs in large storage facilities • If transport is involved, associated energy use and emissions can be substantial
Professional/Office Activities	• Relatively low energy consumption: Lighting, tempurature control, and IT equipment are responsible for the majority of energy use

Questions to Ask Yourself

- Do my company's main activities involve high level of energy use?
- Are there particular areas of my company's operations that are prone to energy inefficiencies ?
- Does my company's location impact energy needs and/or offer any potential advantages for increase efficiencies?

Best Practices for Reducing Energy Use and GHG Emissions

Best practices for decreasing energy and GHG footprints can be broadly divided into; (a) increasing efficiency and (b) production of renewable energy. Both of these types of action effectively decrease overall GHG emissions.

Monitoring Energy Use and GHG Emissions	Effective management of energy use and GHG emissions starts with monitoring. Through measuring, the company can set realistic reduction targets and identify of areas where efficiency can be improved easiest. ➔ Compiling data on the amount of energy consumed/ purchased. GHG emissions can be estimated based on energy consumption data using online tools.
Employee Awareness	Raising employee awarenes is one of the simplest yet most effective ways to reduce energy use. ➔ Hold regular trainings with employees, stressing the importance and impact of good daily habits.
Innovative Technology	Replacing or modify old equipment with more energy efficient models and technology is a key way to lower energy use and GHG emissions. ➔ Invest in a waste heat recovery /combined heat & power system (CHP). ➔ Replace old lighting fixtures with more efficient LED options.
Process Optimization	Processes optimization to achieve equal or greater outputs with lower energy inputs. ➔ Reduce energy use for transport by training drivers on eco-driving techniques and using tools for routing efficiency. ➔ Undertake a process review to reveal inefficiencies and potential improvement areas.
Purchase of Renewable /Green Energy	Opt for clean/renewable power when purchasing energy sources to lower GHG emissions ➔ Purchase renewable certificates (RECs). ➔ Consult with your power provider to discuss greener options.
Production of Renewable Energy	Companies with money to invest in projects can produce their own renewable energy on-site. This tends to be worthwhile monetarily in the long-term. ➔ Install solar panels on rooftops. ➔ Construct biofuel power station - could use production waste as input.
Emissions Offsetting	An alternative way to neutralize the company's carbon footprint is through carbon offsetting. There numerous companies that offer carbon neutrality service.