

YOUR COMPETITIVE ADVANTAGE

Energy efficiency solutions for Australian transport and logistics SMEs



How to guide: overview

Overview of the energy management process

This document provides an overview of good energy management principles and the energy management process.

It is intended as an introduction to (and reference document for) the four How-To Guides and six Fact Sheets developed for the Energy Efficiency Solutions for Australian Transport and Logistics SMEs program.

Combined with the other resources developed by Supply Chain and Logistics Association of Australia (SCLAA) and its project partners, it aims to help SMEs in the supply chain and logistics sector to find energy efficiency improvements and energy cost reductions.

The full suite of resources is available from <http://energy-efficiency.sclaa.com.au>

► The Big Picture

Before beginning to examine data or look for energy efficiency opportunities, your business needs to understand what it is trying to achieve and how it will achieve it.

For the greatest chance of success, energy efficiency activities and projects should be part of a wider business strategy or plan. The plan might be to reduce overall energy consumption, reduce costs, or even to engage employees and boost staff morale. Whatever its purpose, a formal, management-endorsed strategy that includes energy efficiency will ensure that people across the organisation know what they are doing and why they are doing it.

These questions are not fluffy or redundant, they are strategically important. They tell everyone about:

- › The company's commitment to the project
- › Objectives/targets – or what we hope to achieve
- › How success is defined or progress is tracked (metrics, indicators)
- › Who is responsible for which activities
- › What resources have been approved or allocated

Questions to prompt responses for each of these requirements follow below.

Understanding a project in these terms may seem overly formal for an SME, however informal or ad-hoc efforts are less likely to succeed, and less likely to lead to ongoing improvements.

Commitment: Is there support for energy efficiency at the top level of the company, and within the management team? Is the commitment clearly communicated to staff? Is the verbal or written commitment supported by financial or staff resources?

Objectives: What does the company hope to achieve through energy savings? Is it efficiency, financial savings, reputation benefits, competitive advantage, lower emissions?

People need something to aim for, so formalising an objective (or target) focuses their effort. A target also gives the company a way to measure whether or not they have been successful in their efforts.

Metrics: What indicators will be used to measure and track progress towards the target or objective? How often will the metrics be measured and reported?

Metrics should be relevant to business performance, ideally relating to “production” or output. A good test is to ask what the metric tells us, and whether that is useful to the strategy: i.e if the metric improves, does it indicate a more efficient/productive business; more profit; better customer/supplier terms; etc.

Responsibility: Who will drive the improvements? Is it part of their formal duties, or do they need additional recognition (in support personnel, change of position title and job description, or extra pay).

Who will monitor, collect, analyse and report data? Do they have the information and skills they need?

Supporting resources: Do people have the skills, equipment and budget to achieve the objective? Will they require support personnel or external specialists to succeed?

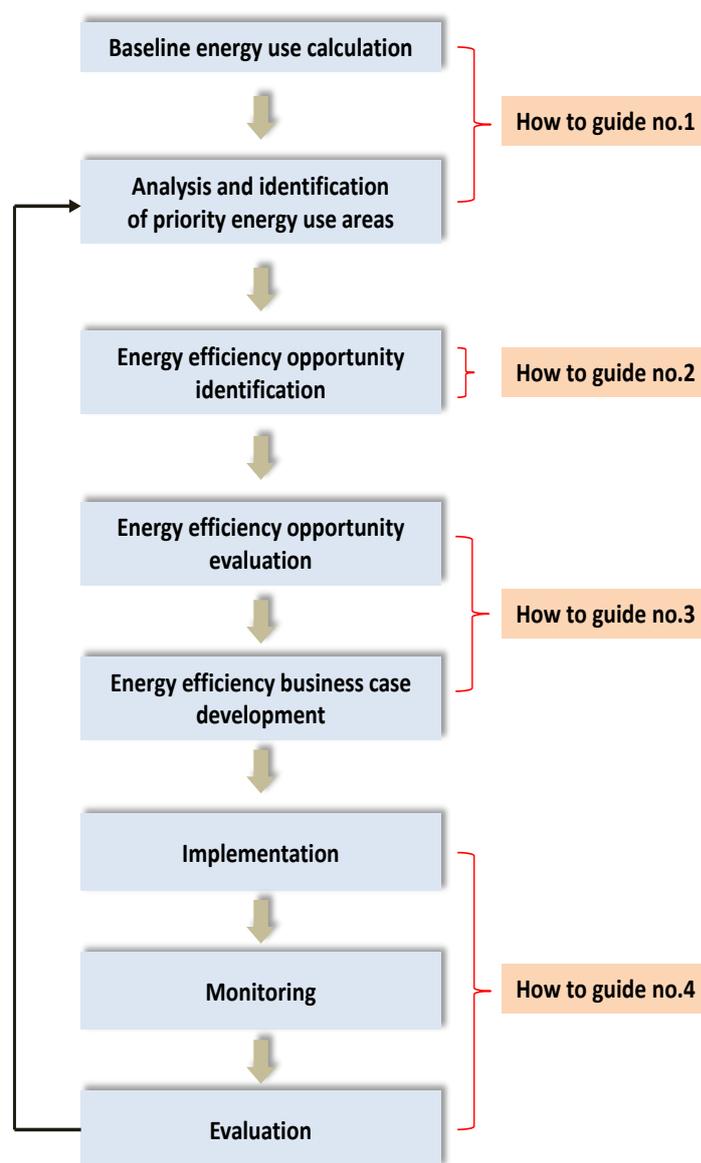
Apart from ensuring that a project can actually be completed, adequate resourcing also demonstrates to staff that the company is committed to its objective and that it supports their effort.

► Energy efficiency is business improvement

Energy is one of the biggest operating costs in the supply chain and logistics sector. Improving energy management results in a better business – leaner, more profitable, more competitive, more resilient.

Looking at the typical process for energy efficiency improvement (see Figure 1), provides a good guide to where your business currently sits, and more importantly what it needs to do to take a progressive, planned approach to business improvement.

Figure 1: Typical process for energy management and efficiency improvement



Baseline energy use. To improve any aspect of business performance, we need a reference point, a measure of current or historic performance. This is true for energy use, profitability, or employee productivity.

This is the baseline. The baseline needs to be established so the effect of any improvements can be evaluated. You can't get to where you want to go if you don't know where you are now.

Data is the most important consideration in the baseline process, and this is discussed in How-To Guide No.1.

Another important role of the baseline assessment is to identify priority areas for action (step two in the flowchart).

In terms of energy use, this would include major energy consuming activities, areas of obvious poor performance or low efficiency, and very old or poorly controlled equipment/processes.

Opportunity identification. One of the most important steps in improving energy efficiency is to know what opportunities are available. This requires a good understanding of your operations, and the processes and equipment available to improve them.

How-To Guide No.2 looks at identifying opportunities. Fact Sheets 1 and 2 are useful starting points to identify the most common opportunities for SMEs.

Suppliers can also alert you to the latest or most efficient options, but their performance and savings claims need to be evaluated with a critical eye (ideally with independent case studies for support).

Opportunity evaluation: Knowing the options isn't enough: you have to know which are most suitable (and beneficial) to your business/facility. How-To Guide No.3 discusses the evaluation process in more detail.

Developing a business case: Developing a business case for energy efficiency improvements is similar to the process for other capital expenditure or special projects. Don't forget to quantify all the benefits (e.g. LED lights might not be viable if you only look at energy savings, but the whole-of-life assessment improves dramatically when you consider the longer life, greater reliability, lower maintenance, and reductions in associated costs such as the need to hire scissor lifts).

Implementation: Implementation involves procurement (or process development, for non-capital projects) and commissioning (see Fact Sheet No.5). Don't forget that people will need training on new equipment or processes, and discussing improvements within the organisation (via newsletters or toolbox talks) can have a positive effect on staff morale (see How-To Guide No.4).

Monitoring & evaluation: After implementing changes, the performance metrics needs to be monitored to assess changes (see How-To Guide No.4). Ultimately, it is this data that will indicate whether the improvement has been successful or not in reducing energy use (and costs).

► What Next?

- Understand why the business wants to improve energy efficiency. Set a goal or target.
- Get senior management support for any projects or improvements that require major investment.
- Use the How-To Guides and Fact Sheets to guide your energy efficiency activities.
- Enter your company data in the on-line assessment tool to get a high-level priority list of energy efficiency opportunities for your operation.
- Engage a professional energy assessor to conduct an energy audit to identify opportunities. Ask suppliers about the real costs/savings of specific improvements.



Learn more on how to make your business more energy efficient at sclaa.com.au

Brought to you by



in partnership with



SUPPLY CHAIN & LOGISTICS ASSOCIATION OF AUSTRALIA

Suite 154
4/16 Beenleigh Redland Bay Road
Loganholme QLD 4129
Australia

P 1300 364 160
F 1300 364 145
www.sclaa.com.au

Technical information developed by



Australian Government
Department of Industry

ACKNOWLEDGEMENT STATEMENT

This Activity received funding from the Department of Industry as part of the Energy Efficiency Information Grants Program.

DISCLAIMER

The views expressed herein are not necessarily the views of the Commonwealth of Australia, and the Commonwealth does not accept responsibility for any information or advice contained herein.