

# ENERGY MANAGEMENT

## Your Guide to Take Action

What are the top actions you can take in your business starting **today**?

### 01 MANAGERIAL ACTIONS

Understand and manage energy use in your business

	ACTION	EXCEL SHEET	NOTES
<b>STEP 1</b>	<b>Understand how much energy is consumed in your business and how much it costs</b>		
	Log and analyse the annual consumption and cost of energy in your business	<b>2.</b> Annual Consumption & Cost Sheet	Once you input your annual cost and consumption data (from your bills), this sheet automatically calculates the Average Unit Price for each energy source. It also automatically converts all energy sources to the common currency of kWh which makes comparisons easier.
<b>STEP 2</b>	<b>Understand the large energy-using equipment in your business</b>		
	List all key energy-using equipment. For each item, estimate energy consumed based on the energy rating and hours of use	<b>3.</b> Log of Energy Users	
	If possible, use meters to accurately establish the exact amount of energy consumed		
<b>STEP 3</b>	<b>Review, evaluate and prioritise actions</b>		
	Review and analyse data to identify priority areas for attention		
	Develop your Energy Improvement Action Plan	<b>5.</b> Energy Improvement Action Plan Template	

# 02 TACTICAL OPPORTUNITIES

Reduce consumption and costs of energy in your business

	ACTION	IMMEDIATE	SHORT TERM	MEDIUM TO LONG TERM	NOTES
<b>STEP 1 Manage energy-using equipment</b>					
	<p>Turn them off:</p> <p>Nominate someone to draw up a schedule of times when key energy users should be turned on and turned off.</p> <p>Use signage and stickers to advise staff when to switch equipment on and off.</p>	X			
	<p>Turn them down:</p> <p>Train staff to turn down the air con system, the temperature and to only use dishwasher and washing machines when full</p>	X			
	<p>Turn them in:</p> <p>Review age and efficiency of equipment; replace old equipment with modern more efficient equipment</p>			X	
	<p>Create a preventative maintenance schedule. It is essential that key energy users such as boilers, refrigeration systems, air handling system are maintained</p>	X			
<b>STEP 2 Lighting</b>					
	<p>Carry out a survey of lighting and estimate how much you can save</p> <p>(See 4. Lighting Survey in Excel Workbook)</p>	X			
	<p>Replace halogen and CFL bulbs with energy-efficient LEDs</p>		X		
	<p>Install motion sensors in lesser-used areas</p>	X			

	<b>ACTION</b>	<b>IMMEDIATE</b>	<b>SHORT TERM</b>	<b>MEDIUM TO LONG TERM</b>	<b>NOTES</b>
<b>STEP 3 Space Heating &amp; Hot Water</b>					
	Control space heating with thermostatic controls and zone building. Train staff.	X			
	Avoid cooling and heating at the same time	X			
	Ensure you building is well insulated and that windows and doors are well sealed		X		
	Ensure hot water tanks and all pipes are insulated		X		
	Reduce flow rates on taps and showers		X		
<b>STEP 4 Cooling and refrigeration</b>					
	Ensure refrigeration systems are set at recommended temperatures: fridges at 4oc and freezers at -18oc	X			
	Maintain door seals. A faulty door seal could increase power consumption by 11%	X			
	Consider switching off vending machines and fridges containing non-perishable items when they are not in use for significant periods	X			
<b>STEP 5 Switch to renewable energy sources</b>					
	Get a Solar PV assessment for your property	X			
	Consider replacing oil boiler with biomass boiler		X		
	Consider using heat pumps to heat water		X		