

ENERGY EFFICIENCY GUIDE FOR ADMINISTRATIVE ACTIVITIES AT THE STEEL COMPLEX



MAPG-1002i

VERSIÓN 1



**ACEROS
AREQUIPA**

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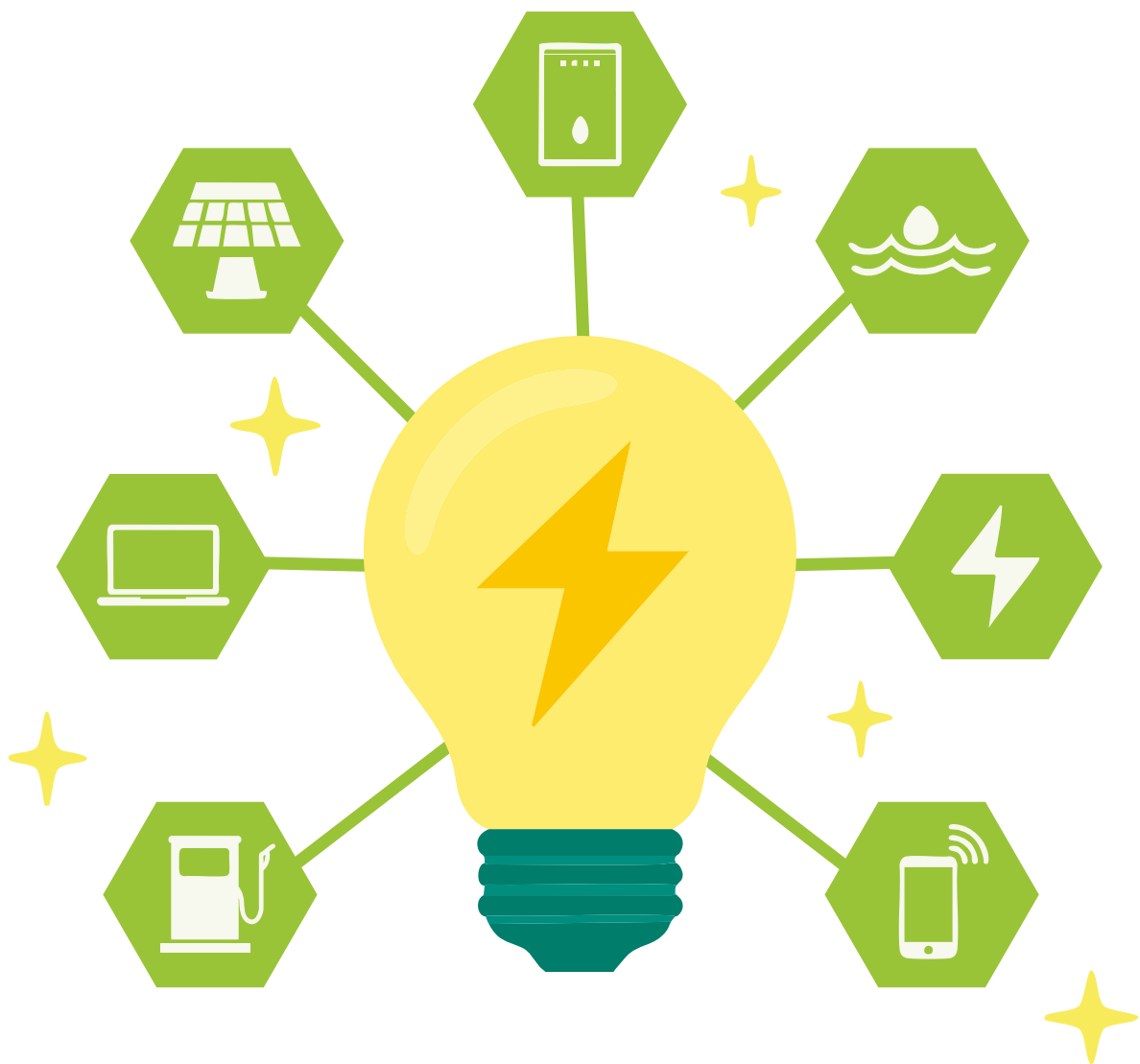
INTRODUCTION

The efficient use of energy in administrative activities is a key practice for reducing operating costs, improving environmental performance, and contributing to the sustainable growth of the company. Through simple and conscious actions, it is possible to optimize the use of energy resources.

This guide is based on the principles of the ISO 50001 standard, which promotes continuous improvement in energy management. Here you will find recommendations for the efficient use of systems such as lighting, air conditioning, fuel, and electrical and electronic equipment. Implementing these measures helps reduce energy consumption and strengthen a culture committed to saving energy and caring for the environment.

WHAT IS ENERGY EFFICIENCY?

Energy efficiency is defined as the ability of an organization to achieve the same—or even better—results using less energy. It is not just about reducing consumption, but about optimizing energy use in a planned, intelligent, and controlled manner in order to improve energy performance, reduce operating costs, and minimize environmental impact.



ENERGY EFFICIENCY MEASURES

3. 1. Lighting:

Lighting in offices is essential to ensure a comfortable and safe working environment. However, if it is not managed efficiently, it can represent unnecessary electricity consumption.

Did you know?

Only 94.0% of households in Peru have access to electricity through the public grid.¹



¹ Instituto Nacional de Estadística e Informática (INEI). (2024). Access to basic services in Peru 2023.

Some actions we can take to reduce electricity consumption for lighting in offices are:

1 Take advantage of natural light

- Open the curtains during the day.
- Arrange workstations near windows whenever possible.



2 Turn off lights that are not in use

- Turn off the lights when leaving meeting rooms, bathrooms, and unoccupied offices.



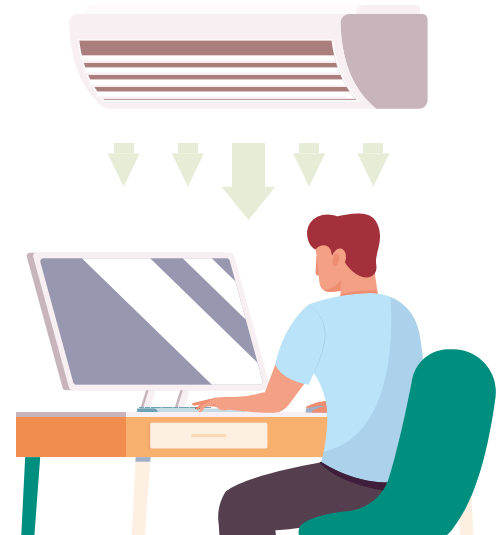
3 Use efficient lighting

- Replace fluorescent or incandescent bulbs with LED bulbs.



3.2 Air conditioning

Air conditioning is a system designed to maintain a comfortable temperature in enclosed spaces. Although it improves comfort in offices, its use represents a significant consumption of electrical energy.



Did you know?

The annual energy consumption of an air conditioner that runs 8 hours a day throughout the year is equivalent to the energy consumption of almost 5 average families in Peru.²



² Calculation based on the median national household electricity consumption (93 kWh/month), according to Osinergmin (ERCUE Electricity Study 2019–2020), and the consumption of the 18,000 BTU York split air conditioner (1.84 kWh), according to its technical specifications.

Some of the basic measures we can use to reduce energy consumption in workspaces are:

1 Adjust the temperature appropriately

- Keep the air conditioning between 23°C and 25°C. Lower temperatures consume more energy and do not necessarily provide more comfort.



2 Turn it off when not needed

- If there are no people in the room or it is the end of the day, turn it off.
- Use the timer function so that it turns itself off at the end of the workday.



3

Prevent cold air from escaping

- Close doors and windows when the equipment is turned on.
- Check that there are no gaps where cold air can escape.

**4**

Report

- Report any faults you detect in the air conditioning system.

**5**

Use efficient equipment

- If you are renovating, choose equipment with Inverter technology or an energy label of A or higher, as these consume less energy and last longer.



3.3 Fuel use

Diesel is a fuel widely used in vehicles for personnel transport, supervision, logistics, or technical visits. However, its constant use represents significant energy consumption.



Did you know?

Traveling 625 km in a diesel pickup truck can generate around 0.2 tons of CO₂e.³



³ Calculation based on the technical specifications of a Mitsubishi pickup truck and its estimated performance.

Here are some key actions to improve fuel efficiency.

1

Plan your routes properly

- Plan efficient routes and avoid unnecessary trips.
- When possible, take advantage of multiple drop-offs on a single trip.
- Turn off the engine if you are going to be stopped for more than 1 minute.



2

Drive efficiently

- Avoid sudden acceleration and braking.
- Drive at a constant speed and shift gears at the right time to optimize fuel consumption.



3

Check tire pressure

- Check tire pressure at least once a week. Underinflated tires increase rolling resistance and can significantly increase fuel consumption.

**4**

Take vehicles in for regular maintenance

- Make sure you comply with the preventive maintenance schedule.



5

5. Keep track of consumption

- Keep a record of the miles traveled and fuel loaded.
- Detect increases in consumption that could indicate faults or bad practices.



6

6. Promote carpooling

- Coordinate group trips when several people are going to the same destination.



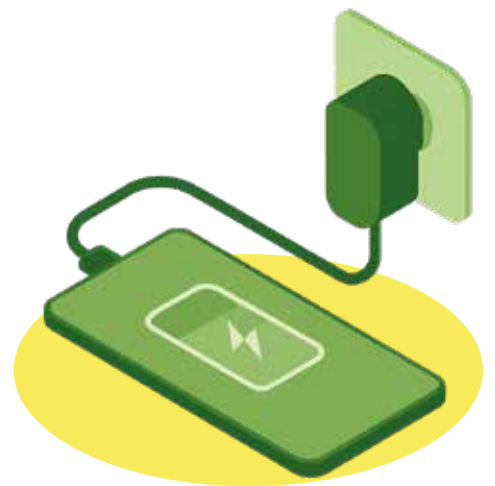
3.4 Use of electrical and electronic equipment

Electrical and electronic equipment such as computers, printers, projectors, chargers, and other office devices are essential for daily work, but they also represent a constant consumption of energy.



Did you know?

Leaving your cell phone charging for a long time can reduce the lifespan of the battery. This happens because keeping it connected at 100% for extended periods, along with high voltage, accelerates internal chemical reactions, degrading its components and decreasing its capacity, which causes the battery to last less over time.



Here are some simple and effective actions that can be implemented in the office:

1

Turn off equipment when not in use

- Turn off computers and monitors at the end of the day or during long periods of inactivity.
- Do not leave equipment in “standby mode” all day.



2

Activate energy-saving mode

- On computers and monitors, activate the automatic sleep or energy-saving function.
- Reduce screen brightness and turn off the monitor if you are away for more than 5 minutes.



3

Avoid unnecessary use of printers and photocopiers

- Only print when absolutely necessary.



4

Charge devices responsibly

- Unplug chargers once the equipment is fully charged.
- Do not leave laptops, cell phones, or tablets plugged in all day.



5

Keep equipment in good condition

- Report any faults for prompt repair or replacement.



6

Keep equipment on well-ventilated desks free of obstructions

- Avoid covering laptop air vents with documents, folders, or other objects. Good ventilation reduces overheating and improves energy efficiency.





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At CAASA, we protect the environment

TOGETHER WE BUILD A BETTER WORLD