

HOW CAN MOUSTADAMA IMPROVE ENERGY EFFICIENCY IN YOUR INDUSTRY?

MOUSTADAMA assists industrial facilities as they adopt clean technology solutions and energy management systems that **boost their energy security while reducing energy bills**. The Programme guides enterprises through an approach that first applies energy efficiency methods to decrease energy use, and then considers renewable energy options to meet the remaining supply gap.

STEP-BY-STEP METHOD TO INCREASE EFFICIENCY AND SAVE MONEY

- **Energy audits** are undertaken to identify the significant energy uses, areas of inefficiencies in an industry's production chain and pinpoint potential energy saving measures
- **Intervention business models** are outlined offering energy efficiency and renewable energy solutions, along with the required investment cost and estimate energy savings and returns
- Energy efficiency and **Energy Management System (EnMS) measures** are compiled

Training programs on EnMS, Energy System Optimization (ESO) and financial analysis are offered to foster the capacity building of a high-performant workforce that will operate and maintain energy efficient and cost-effective industrial facilities.

MOUSTADAMA supports **demonstration projects that showcase the benefits of energy efficiency and renewable energy solutions** in targeted industries. The Programme offers the industries an overview of the energy balance inside their facilities and ways to use energy efficiently. These energy audits provide a detailed proposal including description of corrective measures that could include **no-cost and low-cost solutions, as well as those that require further investment**, such as new equipment settings, machinery repair or replacement of outdated components, to achieve even greater optimization of energy usage.

Energy experts from the Programme, along with the internal team within the industrial facility, monitor and evaluate the energy performance and verify the savings after the new measures have been implemented.

For lasting solutions, the Programme emphasizes industrial staff training through workshops on best energy practices and proper handling and operation of equipment. Through its online **TAQAT Platform**, the Programme connects industries with certified energy management (EnMS) experts, and the broader community of energy-related energy providers, suppliers, and industry peers.

WHY SHOULD YOU IMPLEMENT ENERGY EFFICIENCY MEASURES AT YOUR FACILITY?

- 1 Reduced energy bills translate into increased profitability.** By saving money on monthly energy costs, industries can free financial resources for additional investments, for boosting growth and for creating new jobs.
- 2 Energy efficiency measures also enable companies to make their energy predictable;** the fewer the leaks, drafts and other sources of energy waste, the fewer the surprises with skyrocketing energy bills. Moreover, energy efficiency can free businesses from volatile fossil fuel prices and imports, curb expenses and enhance market competitiveness.
- 3 Investment in energy efficiency are investments in your workers.** Such factors as cleaner filters and insulated rooms can protect your staff from work-related respiratory illnesses.
- 4 Energy efficiency practices are good for the planet.** On a global scale, by making changes in the way a facility uses energy, industry can contribute to global environmental benefits through reductions in greenhouse gas emissions.



Contact MOUSTADAMA to get started in your industrial facility's energy efficiency journey.

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POWER UP ضوِّيها



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DOING MORE WITH LESS. SUSTAINABLE ENERGY SOLUTIONS ENHANCE INDUSTRY PRODUCTIVITY AND REDUCE ENERGY COSTS.

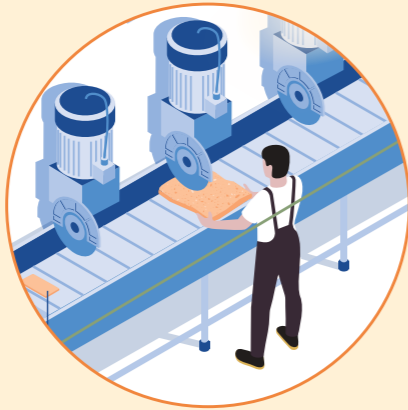
Low-cost and even no-cost changes in the way small and medium-sized industries consume energy can save up to 20 % of their energy expenditures. Simple improvements in operations, maintenance and equipment can turn energy-saving opportunities into realities.

WHAT CAN YOU DO TO REDUCE ENERGY CONSUMPTION AND IMPROVE YOUR ENTERPRISE'S COMPETITIVENESS?

Simple measures can save small changes that can bring big benefits.

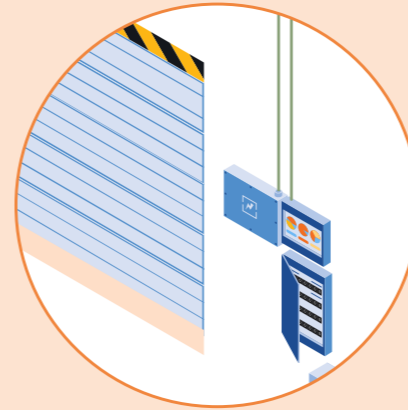
CHANGE THE SPEED

Use controllers to adjust speeds or turn off **motors** when not needed. Less energy is consumed when motors run at less than full speed or are turned off completely at certain times in a manufacturing cycle.



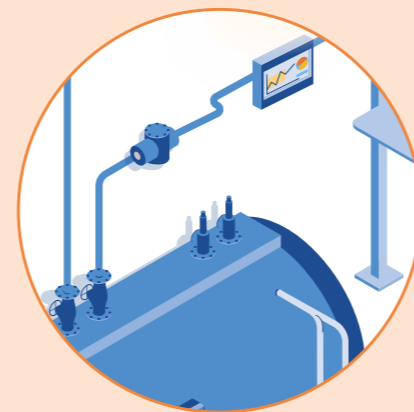
HOW TO BE COOL

Check door gaskets and auto closers in **refrigeration systems** to ensure they are in working order. A Chilled Unit Energy Saver can control the efficient operation of the refrigeration system and maintain optimum temperatures.



GO SMARTER

Replace blower fans in **fan and HVAC systems** with energy efficient ones that are lighter and smaller. Install an automatic control to reduce energy use. Install fixed or adjustable shaded curtains on windows and doors.



PLUG THE HOLES

Repairing leaks and insulating pipes promote energy efficiency. Insulating hot water and steam pipes reduces heat loss and allows industrial facilities to lower water temperature and steam pressure settings.

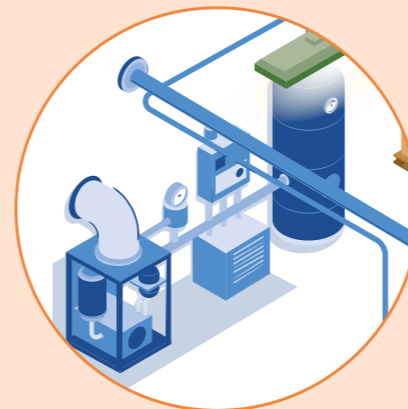
CONTROL THE AIR

Repair leaks, clean filters and adjust pressure to optimum setpoint in the **compressed air system**. Close outlet valves that are used for cleaning. Replace them with small blower devices that use less energy.



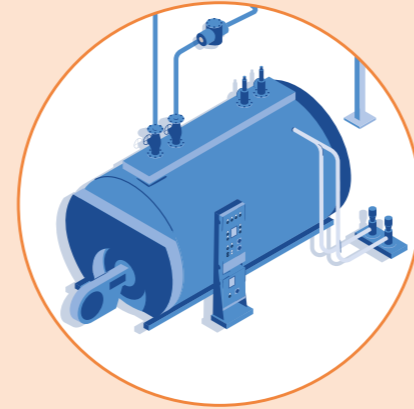
BRING IN THE NEW BUT KEEP THE OLD

Investing in more **energy-efficient components, equipment** and facilities has the potential to reduce energy use and increase savings over time. **Maintaining existing equipment** by regularly cleaning and planning maintenance can enhance performance and the longevity of the equipment, which can lead to energy efficiency savings.



BOILER ALERT

Save energy by maintaining and cleaning the **boiler**, and even downsizing when possible. Insulate boilers, pipe networks and valves: do this regularly and keep the check going. A water feed treatment system can control deposits, eliminate impurities, and prevent corrosion.



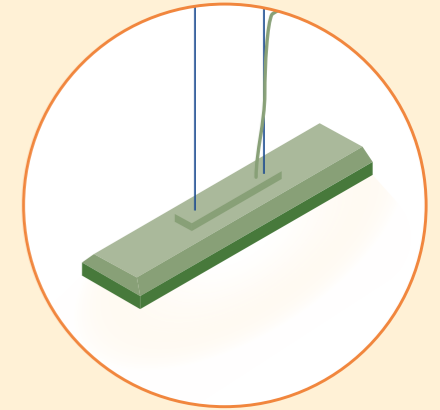
KEEP TABS

Install metering devices to measure energy usage in addition to the primary utility meter. **Submeters** allow for monitoring energy use for departments, individual pieces of equipment or other loads to account for their actual energy usage.



MAKE THE SWITCH

Replace old lights with new LED bulbs that use up to 60 per cent less energy and last up to 25 times longer. Install sensors and timers to automate lighting.



ENGAGE THE TEAM

Change happens through collaboration. Involve all staff and regularly communicate the shared benefits of reducing energy costs and following energy efficiency practices.



Take a 3-D look at the energy-wasting 'hotspots' and how to fix them in your facility.

