

ENERGIZING PRODUCTIVITY FOR AGRIBUSINESS

ENERGY QUICK WINS



LIGHTING

De-lamping:

Remove excess bulbs and fixtures.

Daylight Harvesting:

Maximize the use of daylight by removing obstructions from daylight sources

Retrofit:

Replace inefficient bulbs and fixtures with energy efficient technologies.

Occupancy Sensors:

Install occupancy sensors in low use areas.

Task Lighting:

Replace or reduce energy intensive overhead lighting with smaller, directed task lighting.

LIGHTING Cont.

Wall and Ceiling Colour:

Paint walls and ceiling bright colours to help reflect and maximize lighting.

Exit Signs:

Replace old inefficient exit signs with low energy-use LED Signs or no energy-use Reflective Signs.

HVAC & WATER

Programmable Thermostats:

Install programmable thermostats and program to run only when areas are in use.

Lower Temperature:

Lower temperatures 1-2°C in the winter and increase temperatures 1-2°C in summer.

Hot Water Heater:

Lower temperature on hot water heaters.

Hot Water On-Demand:

Replace old inefficient hot water heaters with hot water on-demand heaters.

Water Pipes:

Insulate hot water pipes with approved insulating sleeves and jackets.

Vents and Fans:

Remove obstructions blocking vents and fans.

MOTORS

EE Motors:

Replace motors at end of life with energy efficient models.

VFDs:

Install variable frequency drives, or soft start drives, on motors.

Right Sizing:

Ensure motors are right-sized for application.

PLUG LOADS

Computers:

Establish a daily computer shut down policy and utilize sleep modes.

Equipment:

Purchase ENERGY STAR certified office equipment when replacing old items.

Phantom Power:

Unplug equipment when not in use or turn off power source for quick shut-off.

Timers:

Install timers on office equipment to shut off and turn on at predefined times.

Vending Machines:

Request energy efficient machines and/or install sensors to automatically control usage.



AIR COMPRESSORS

Line Leaks:

Identify line leaks during off hours and repair.

Right Size:

Ensure compressor is properly sized for applications; reduce size if possible.

Outside Air:

Intake outside air for compression.

Audit:

Conduct a full system audit to ensure system performance is optimized.

Preventative Maintenance:

Incorporate a system audit into your preventative maintenance program.

PSI Setting:

Optimize to application, reduce if possible.

Cleaning:

Avoid using compressed air to clean, use manual sweeping and wiping instead.

BUILDING ENVELOPE

Window Film:

Install thermal window film to reduce solar heat infiltration during summer months.

Dock Doors & Levellers:

Seal dock doors and levelling devices, and install curtains to retain temperature.

Caulking and Sealing:

Seal all windows and door frames using weather stripping, caulking and sealants.

MANAGEMENT

Peak Demand:

Perform peak shedding by staggering equipment start-up and installing timers to stagger usage.

Time of Use:

Optimize operation schedules to take advantage of cheaper peak rates.

Shut Down Procedures:

Establish separate shutdown procedures for weekdays, weekends and holidays.

Education/Awareness/Training:

Modify employee behaviour through education, awareness and training.

[Continued on Back.](#)



MANAGEMENT Cont.

Energy Management System:

Develop an energy management system to maximize energy performance.

Energy Management Team:

Establish an energy management team to elevate conservation initiatives.

Signage:

Place signage in high use areas to encourage energy efficient behaviours.

Power Factor:

Contact providers to ensure power factor is maximized.

Audit:

Engage energy provider or a third party to conduct a full energy audit of the facility.

Treasure Hunts:

Perform energy treasure hunts to identify energy reduction opportunities.



BOOST YOUR BUSINESS PRODUCTIVITY! GO LEAN AND GREEN.

ENERGY QUICK WINS: Companion tools are available online. Download the [Energy Calculator](http://agriculture.alberta.ca/productivity) at <http://agriculture.alberta.ca/productivity>.

CONTACT US: productivity@gov.ab.ca
310-FARM (3276)
agriculture.alberta.ca/productivity

Productivity Improvement is an initiative of Alberta Agriculture and Rural Development and supported by Growing Forward, a federal-provincial-territorial initiative.

**Government
of Alberta** 