

Pollution Prevention (P2) for Facilities Management

Pollution prevention (P2) is any practice that reduces, eliminates or prevents pollution at its source. Several P2 opportunities exist in the management of facilities. This fact sheet is intended to assist facility managers, facility maintenance or facility operation personnel implement activities that reduce pollution at the source.

Energy Efficiency with Energy Star

- See Energy Star's [Guidelines for Energy Management](#)¹ which can help you create a management program focused on energy performance.
- [Save Energy](#)² by finding useful resources to help you:
 - ⇒ Invest in energy-efficiency measures that have a rapid payback.
 - ⇒ Educate and engage employees and occupants.
 - ⇒ Purchase energy-saving products.
 - ⇒ Get help from an expert.
- Use Energy Star's [Portfolio Manager](#)³; an online tool to track your building's energy and water consumption as well as greenhouse gas emissions.
- [Find the financing](#)⁴ you need for your energy saving plans:
 - ⇒ Calculate returns on energy investments.
 - ⇒ Find rebates, incentives and financing.
 - ⇒ Learn about public sector financing options.
- Find [certified products](#)⁵ such as lighting, office equipment, heating and cooling and other building products that are energy efficient for your facility.

Heating and Cooling

Heat and cool efficiently to save money!

- Install a programmable thermostat.
- Seal your heating and cooling ducts.
- Change your air filters regularly.
- Upgrade older heating cooling, ventilation and air conditioning systems (HVAC).
- See the *U.S. Small Business Administration's tips for HVAC Systems*⁶
- Keep your cooling and heating maintenance system at peak by using Energy Star's [Maintenance Checklist](#)⁷.

Green Buildings

Green building refers to the whole-systems approach through design and building techniques to minimize environmental impact.

Leadership in Energy and Environmental Design (LEED) buildings are resource efficient, using less water and energy, while reducing greenhouse gas emissions.

See the U.S. Green Building Council [LEED](#)⁸ website.

State of Arizona Green Building links:

- [U.S. Green Building Council Arizona](#)⁹.
- [City of Scottsdale Green Building Program](#)¹⁰.
- [City of Mesa Green Building & Green Business](#)¹¹.

Water Efficiency

It is important for building managers to promote water efficiency and to find ways to reduce water use. There are many resources that can get you started in conserving water in your building.

- EPA's [WaterSense](#)^{®12} program - Provides tools and guidance on water saving products and practices.
 - ⇒ [Products](#)¹³ - Find water efficient products.
 - ⇒ [Planning](#)¹⁴ - Review water use and develop implementation plans to achieve water management goals.
 - ⇒ [Metering](#)¹⁵ - Monitor water use and quickly find leaks and other sources of wasted water.
- See the Arizona Municipal Water Association's [Facility Manager's Guide to Water Management](#)¹⁶.
- Check out the Alliance for Water Efficiency [Resource Library](#)¹⁷ for more information on various topics including fixtures, appliances and equipment.
- Listen in to past [training webinars](#)¹⁸ from WaterSense for more water saving tips.

Safer Cleaning

Cleaning with products that contain less toxic chemicals not only reduces chemical use but also improves air quality and the health of employees. EPA's *Safer Choice*¹⁹ program can help you identify safer products for cleaning including:

- Carpet cleaners, floor care products and window/glass cleaners.
- Dry erase board cleaners, odor removers and other business products.

For additional Resources check out:

- OSHA's *Protecting workers who use Cleaning Chemicals*²⁰.
- See ADEQ's *Pollution Prevention for Janitorial Services* for more information.
- See EPA's *Recommendations of Specifications, Standards and Ecolabels*²¹.

The Importance of Indoor Air Quality

Indoor air quality can affect the health, productivity and well-being of building tenants. Healthy indoor air quality can be hampered by the following:

- Biological - Dust mites, pollen, inadequate humidity control, pests from plants, water intrusion.
- Chemical - Emissions (gases and vapors) from products used such as white board spray cleaners, permanent markers, electronic equipment cleaners, cleaning chemicals used by employees to clean desks and work area.
- Particles - Dust or dirt from outside or during construction from installing drywalls or sanding wood.

See the following documents to improve indoor air quality in your building.

- *OSHA's Indoor Air Quality in Commercial and Institutional Buildings*²¹
- *Establishing Indoor Air Quality Programs for Building and Facility Management*²²

Resources

¹ Energy Star. Guidelines for Energy Management: https://www.energystar.gov/sites/default/files/buildings/tools/Guidelines%20for%20Energy%20Management%206_2013.pdf.

² Energy Star. Save Energy: <https://www.energystar.gov/buildings/facility-owners-and-managers/existing-buildings/save-energy>.

³ Energy Star. Portfolio Manager: <https://www.energystar.gov/buildings/facility-owners-and-managers/existing-buildings/use-portfolio-manager>.

⁴ Energy Star. Find Financing: <https://www.energystar.gov/buildings/facility-owners-and-managers/existing-buildings/find-financing>.

⁵ Energy Star. Certified Products: <https://www.energystar.gov/products?s=mega>.

⁶ U.S. Small Business Administration. HVAC Systems: <https://www.sba.gov/managing-business/running-business/energy-efficiency/energy-efficient-upgrades/hvac-systems>.

⁷ Energy Star. Maintenance Checklist: https://www.energystar.gov/index.cfm?c=heat_cool_pr_maintenance.

⁸ U.S. Green Building Council. LEED: <http://www.usgbc.org/leed>.

⁹ USGBC Arizona: <http://www.usgbc.org/usgbc-arizona>.

¹⁰ City of Scottsdale Green Building Program: <http://www.scottsdaleaz.gov/green-building-program>.

¹¹ City of Mesa Green Building & Green Business: <http://www.mesaaz.gov/business/green-building-green-businesses>.

¹² EPA. WaterSense: <https://www3.epa.gov/watersense/index.html>.

¹³ EPA. WaterSense Products: <https://www.epa.gov/watersense/watersense-products>.

¹⁴ EPA. WaterSense. Planning: <https://www.epa.gov/watersense/best-management-practices>.

¹⁵ EPA. WaterSense: Metering: <https://www.epa.gov/watersense/best-management-practices>

¹⁶ Arizona Municipal Water Users Association. *Facility Manager's Guide to Water Management*: http://www.amwua.org/resource_documents/facility_managers_guide.pdf.

¹⁷ Alliance for Water Efficiency. Resource Library: http://www.allianceforwaterefficiency.org/Commercial_Institutional_and_Industrial_Library_Content_Listing.aspx.

¹⁸ EPA WaterSense. Training Webinars: <https://www.epa.gov/watersense/webinars>.

¹⁹ EPA. Safer Choice: <https://www.epa.gov/saferchoice>.

²⁰ EPA. Recommendations of Specifications, Standards and Ecolabels: <https://www.epa.gov/greenerproducts/recommendations-specifications-standards-and-ecolabels-federal-purchasing>.

²¹ OSHA. Protecting Workers Who Use Cleaning Chemicals: <https://www.osha.gov/Publications/OSHA3512.pdf>.

²² OSHA. Indoor Air Quality in Commercial and Institutional Buildings: <https://www.osha.gov/Publications/3430indoor-air-quality-sm.pdf>.