



COLORADO
Department of Public
Health & Environment

TECHNICAL ASSISTANCE

We provide *free onsite assessments* that identify opportunities in water conservation, energy efficiency, and waste reduction.

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FACT SHEET

Sustainable Commercial Bakeries

Pollution prevention strategies at bakeries not only help the environment. They also can increase efficiency, reduce waste and improve your bottom line.

Reduction Opportunities

ENERGY

- Conduct an industrial energy audit.
- Regularly maintain operational equipment, motors, and refrigeration systems.
- Conduct regular air and water leak detection.
- Optimize production processes —ingredient handling and controls, process layout.
- Install efficient lighting and controls.
- Install seals, curtains, insulation.
- Install heat and water recovery systems.
- Install variable speed motors and compressors.
- Properly size boilers, motors, and compressors.
- Install energy efficient process equipment.
- Install efficient oven burners.
- Install oven combustion controls.

WATER

- Conduct a water audit.
- Conduct regular leak detection in lines, hoses, fittings, spray valves.
- Optimize dry cleaning methods before using water.
- Use water-saving cleaning techniques— short bursts, rinse in order, spot clean.
- Install stop/start controls on valves and nozzles.
- Install efficient toilets, showers, and faucets.
- Install low-flow, high-pressure spray nozzles.
- Install water meters to track use by production process and shifts.
- Use and optimize clean-in-place systems.
- Recover and reuse water—use final rinse for pre-rinse.

BENEFITS

Improve profitability while minimizing environmental impacts

- ✓ Reduce input costs—materials, energy, water.
- ✓ Reduce treatment and disposal costs.
- ✓ Reduce environmental compliance costs.
- ✓ Reduce liability.
- ✓ Increase worker safety.
- ✓ Attract new customers.

More Reduction Opportunities...

WASTE

- Conduct a waste audit.
- Implement inventory controls, tracking and analysis.
- Production planning—bake only what you need.
- Implement a recycling and composting program with bins, signage and employee training.
- Rework scraps/trim back into product where appropriate.
- Donate unsold product to food donation organizations.
- Use reusable pallets and containers.
- Use environmentally-friendly packaging.
- Use less-toxic chemicals: Look for EPA's Safer Choice label.
- Use low and non-phosphorus cleaning and sanitizing chemicals.

CORPORATE

- Track utility data to identify issues and opportunities.
- Formalize sustainable goals with management support.
- Provide sustainability training to employees.
- Involve the floor team to identify issues and solutions.
- Create a “green team,” and work with sustainability “champions” — workers interested in sustainability.
- Communicate and celebrate successes.



Helping Your Business Become Green

Colorado Pollution Prevention Program

► colorado.gov/cdphe/pollution-prevention

