



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 Coffee Roasters

Improve your bottom line by adopting strategies that increase efficiency, eliminate waste, reduce regulations, and attract new business.

Reduction Opportunities

ENERGY

- Conduct an industrial energy audit.
- Upgrade lights to LEDs and install occupancy sensors.
- Regularly clean and maintain the roaster, the burners, and exhaust systems.
- Dry green beans before roasting by reusing exhaust heat or storing them in a dry place.
- Roast more light roasts, blend with dark roasts for darker profiles.
- Bypass afterburner for first 75 percent of roast when VOC levels are lower.
- Install recirculating system to reuse hot exhaust air.
- Install grinders and motors with variable frequency drives.
- Replace thermal afterburners with catalytic afterburners.
- Properly size your roaster.

EMISSIONS

- Increase airflow to provide faster roast at a lower temperature.
- Bypass afterburners for first portion of roast to reduce CO and NO_x emissions.
- Install a control system that can modulate the burner flame as needed by your roast profile.
- Install and maintain energy efficient burners.
- Install a low NO_x burner on your afterburner.
- Install infrared burners.
- Consider installing a wet scrubber and electrostatic filter.

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—roast only what you need to roast.
- Implement a recycling and composting program with ample bins, signage, and employee training.
- Recycle coffee bags.
- Recycle chaff to compost or animal bedding.
- Donate unsold product to food rescue 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

