

SUSTAINABLE BREWERY GUIDE

ABOUT

With commercial beer production at an all-time high in New Jersey there is ample opportunity for breweries to increase their environmental efforts and sustainability practices. This guide helps brewery owners and operators evaluate their business practices and take practical actions to go green.



COMPRESSED AIR

- Use **low-pressure fans** instead of compressed air for blowing off water.
- Set air pressure at the **lowest level** to maintain operations.
- **Reduce** compressed air usage whenever possible.

BOILERS & CO₂

- Use **economizers** to transfer heat from boiler exhaust gas to preheat boiler feed water.
- Upgrade to **ultra low oxides** of nitrogen burners.
- Install a **carbon dioxide recovery system**.
- Conduct boiler **maintenance**.

Visit www.energystar.gov/sites/default/files/buildings/tools/LBNL-50934.pdf to learn more about energy efficiency improvements.

INSULATION

- Install **strip curtains**, plastic swing doors, or automatic door closers for refrigerators.
- **Insulate** all hot and cold pipes, valves, flanges, tanks, and heat exchangers.
- Install **door seals** to keep cold air in.

For more resources, visit www.brewersassociation.org/attachments/0001/1533/energy_insulation.pdf.

PACKAGING

- Choose **low-weight bottles** and cans to reduce energy used in transportation.
- Switch to tap handles made from **recycled or salvaged materials**.
- Purchase **recycled glass** bottles, aluminum cans, and boxes.

To learn more, visit www.epa.gov/smm.

WASTE

- Sell or donate **spent grain, fruit pulp and pomace** to local farmers and livestock owners.
- Collect and **reuse yeast** for the next brew.
- Switch to **reusable plastic pallets**.
- Work with suppliers to **reduce unnecessary plastic wrapping**.

Visit recycle.nj.gov to learn more about recycling requirements.

ENERGY

- Upgrade to **LED lighting**.
- Track monthly **energy use**.
- **Turn off equipment** not in use.
- Install energy-efficient equipment
-look for the **ENERGY STAR® seal**.

Visit www.njcleanenergy.com to learn more about financial incentives.

WATER

- Use a **leak detection checklist** regularly.
- Install a **condensate recovery system**.
- **Cool boil** unfermented beer with cold water and collect heated water for use in the next brew.
- Upgrade to **WaterSense® products**.

Visit www.epa.gov/watersense to learn about water efficient products.

CLEANING

- Install a **clean-in-place system** for more efficient cleaning.
- Upgrade to **high-efficiency spray nozzles**.
- Select products with the **EPA Safer Choice, Green Seal, or Ecologo label**.

To learn more, visit:
www.epa.gov/saferchoice.

LEADERSHIP

- Adopt a company sustainability **policy statement**.
- Set annual environmental **goals** and advertise **results**.
- Create a green team to **engage employees** on how to conserve & use resources more efficiently.

Join the New Jersey Sustainable Business Registry. Visit:
registry.njsbdc.com.

CASE STUDY



Flying Fish Brewery's sustainability philosophy recognizes that what is good for the environment is also good for business. The state-of-the-art brewery, located in Somerdale, New Jersey has implemented many green practices that limit resource use including:

- **Spent barley goes to local dairy farmers to reduce food waste**
- **Utilizing a brew kettle that recaptures all of the steam created during the brew process**
- **Reusing process water for cleaning operations**
- **Constructing a native rain garden**

Flying Fish has significantly reduced its energy use through the installation of passive light tubes, high-efficiency lighting and **463 solar panels**. [Learn More!](#)



RESOURCES

Brewers Association Sustainability Manuals
www.brewersassociation.org/best-practices/sustainability

Sustainable Breweries - EMAP Webinar youtu.be/gQqATRVl6Ew

ENERGY STAR Guide for Breweries
energystar.gov/buildings/tools-and-resources/energy-efficiency-improvement-and-cost-saving-opportunities-breweries

NJ Sustainable Business Guides
dep.nj.gov/sustainability/steps-to-sustainability/sustainability-guides-and-case-studies/

