BetterBev New England
Environmentally Sustainable Craft Beverage Program

Environmental Best Practices Checklist

This checklist covers a variety of topics and has points associated with each item. Facilities can choose which activities to implement. The goal is a score of 70 points or higher. Use the checklist as a guide; at the site visit we'll discuss how your brewery operates to fully understand the environmental practices and principles being incorporated. Links to some resources and examples are included to provide additional suggestions and refer you to assistance providers and programs that we are working with (utility company incentives, Toxic Use Reduction Institute, Center for Eco-Technology, state funding opportunities).

Information and data on a facility's annual water-to-beer ratio, energy, water, and CO2 usage will be helpful as well as other supporting documentation. The overall goal is to ensure continuous improvement by measuring and quantifying a brewery's environmental efforts. A new application should be submitted every two years and show improvement from the previous submission. The checklist and program may be modified as the industry evolves, and new technologies become available.

Category	Points		Notes
RAW MATERIALS (Max 32 points)			
Resources: • Northeast Grain Shed • SqFt calculator • Craft Malt Finder - Craft Maltsters Guild to find local/regional malt			
Use locally or regionally sourced grain/malt (within 250 – 500 miles)	0-10		1 point for every 10% local grain/malt, .5 for regional
Grain/malt is organic or supporting regenerative agriculture	0-5		1 point for every 20%
Use locally sourced hops (within 250 miles)	0-4		1 pt for any amount; 2 pts-at least 25%, 3 pts-at least 50%, 4 pts-almost all
Brew special release beer(s) that highlight local ingredients	0-4		1 pt per special release that highlights local ingredients (annually)
Miscellaneous raw materials efficiency/conservation measure (ex: repitching yeast)	0-4		1-2 pts for each innovative practice
WATER USE (Max 26 points)			
Resources: • EPA WaterSense products, best practices			

Water to beer ratio below industry average of 7 to 1	0-8		2 pts for 7:1; 4 pts for 6:1; 5 pts for 5:1; 8 pts for 4:1 ratio
Track water use at least quarterly through metering/utility bills & setting reduction goals	0-3		1 pt for annual tracking, 2 pts for quarterly tracking; 3 pts for tracking AND setting reduction goals
Reuse water (reuse final rinse for other initial rinses, etc.)	0-4		0 if no reuse; 2 pts if reuse; 4 pt for recycle loop for rinsing
Use an ionized air rinsing system instead of water rinse	0 or 3		3 pts if using ionized air rinsing
Use SOPs for cleaning & high-pressure low-flow spray hose nozzle, broom or squeegee	0 or 3		SOP - 2 points; 1 pt for others
Miscellaneous water conservation or efficiency measure(s) (Ex: low flow toilets, aerators, automatic shut off sensor faucets)	0-5		1-2 pts for any innovative practice
WASTEWATER REDUCTION and STORMWATER MANAGEMENT (Max 24 points)			

Resources:
  • CT brewery wastewater case studies: Groton, Bloomfield, Canaan
  • CT wastewater discharge permits
  • CT stormwater management plan			

Aware of and in compliance with stormwater and municipal wastewater regulations	0-4		2 pts if aware and in compliance with stormwater, 2 pts for wastewater.
Side stream yeast, hops and trub for off-site disposal	0 - 4		4pts for sending to anaerobic digester or composting IF at a permitted facility or land application with required approvals

Innovative practices to prevent wastewater generation/discharge and/or stormwater run-off	0 to 6		1-6 pts for any innovative practice (e.g., intentionally avoiding the use of phosphoric acid, turning bright tanks without using any chemicals)
Neutralize pH of cleaning/sanitizing wastewater before discharging	0 or 2		2 pts if neutralizing pH before discharging
Miscellaneous wastewater side streaming/treatment and/or stormwater run-off measure(s) (ex: off spec beer collected & reused by distillery, rainwater collection, low impact development techniques, install wastewater pretreatment on-site)	0-8		1 or more pts per action
ENERGY/EMISSIONS (Max 79 points)			
Resources & Examples: • Energize CT incentives • Small Business Energy Advantage • DSIRE - state renewable & efficiency incentives • ENERGY STAR equipment • Energy Treasure Hunts • CT Brewery Treasure Hunt example • Solar for CT Breweries fact sheet • Barrington Brewery Solar hot water example • Island Dog Brewery using Fermentation Board • CO2 Capture at Grey Sail Brewery example • CO2 Capture equipment ○ Earthy Labs ○ Dalum Beverage Equipment			
Electricity			
Sourced from renewables (on-site power, community solar, other PPA/RECs)	0-10		1 pt for every 10% renewable energy
Use electric powered delivery vehicles (electric forklift, floor scrubbers, pallet jacks, lawn equipment, pressure washers)	0-4		1 pt for each

Install EV charges for public / employees	0-2		
Use Energy Star equipment (office, kitchen, other)	0-3		1 pt for each
Natural Gas			
Electric or Steam Brewing (more efficient for systems up to 10-barrels)	0, 3 or 5		1 pt – for setting goals; 3 pts for steam, 5 pts- electric brewing
Use efficient hot water heating (on demand tankless, heat pump, solar)	0 - 3		3 pts for any of these.
CO2 Use and Emissions / Refrigeration			
Install a CO2 Recovery System and reuse CO2 (e.g., using spunding valves)	0 or 6		6 points for CO2 recovery; 3 pts for using spunding valves; 2 pt if balancing fermenter and bright by connecting them during processing.
Track CO2 use / ratio below industry average of 6.7 lbs/bbl (1 pt each from 6-4)	0-3		1 point if 6, 2 points if 5, 3 points if ratio is 4 or below
Use nitrogen where possible in operations instead of CO2	0-4		1 pt for each: pushing beer, purging tanks, maintaining head pressure, purging kegs
Regularly check for refrigerant leaks / Use refrigerant tracking technology	0-2		2 pts for using refr. tracking techn.; 1 pt for monthly check for refrigerant leaks; 1 pt for floating head pressure controls
Post "no idling" signs for fleet vehicles, guest vehicles, delivery trucks and tour buses.	0-1		
Conservation / Efficiency			
Track energy use / ratio below industry average (50-66 kWh+Therms) per bbl	0-5		1 pt for tracking energy use/bbl; 1pt if 66; 2 pts if 62, 3 pts if 58, 4 pts if 54, 5 pts if 50 or below

Energy audit from utility company or Energy Treasure Hunt and implement recommendations	0-10		3 pts for audit/hunt, 1 – 2 pts per action implemented
Use of conservation measures (programmable thermostats, occupancy sensors, LED lighting, insulation, natural lighting, refrigerator curtains, recover/recycle heat, etc.)	0-10		2 pt for each measure
Perform regular maintenance, check for leaks, clean/change filters annually; set air compressor on low setting & maintain monthly)	0-5		1 pt. for each: change HVAC filters every other month, set compressor to minimum pressure needed and isolate when not actively in use; check for leaks, address leaks immediately; 1 pt for added expansion tanks
Miscellaneous energy efficiency/conservation or emission reduction measure(s) (high efficient HVAC, fabric filters to control particulate matter emissions from grain handling and drying)	0-6		1 – 4 pts for each practice
CLEANING AND SANITIZING (Max 22 points)			
Resources & Examples: o Island Dog Alternative Cleaner Trial o Toxic Use Reduction Institute Safer Chemical Guide for Breweries o Alternative Cleaners, Sanitizers – TURI webinar o Merrimack Ales safer cleaner, sanitizer example o Green Seal, EcoLogo, EPA Safer Choice, Design for the Environment products			
Develop SOPs for cleaning & sanitizing / Properly store chemicals	0-2		1 point for each SOPs - cleaning, sanitizing
Use TURI recommended (or other less toxic) cleaning products	0-4		4 pts if using; 2 pts if conducted TURI assessment; 0 if none

Use TURI recommended (or other less toxic) sanitizing products	0-4		4 pts if using; 2 pts if conducted TURI assessment; 0 pts if none
Dilutions are standardized (they are automated, come ready to use, not diluted by workers)	0 or 2		2 pts if dilutions are standardized: 1 pt for regular titrations
Cleaning is automatic & regularly verified (meters calibrated, manual titration)	0 or 2		2 pts if cleaning is automatic
Reuse cleaning solution and sanitizing rinse	0 or 2		2 pts if reusing cleaning solutions & sanitizing rinse
Ordering cleaners and sanitizers in refillable containers	0-2		1 pt for each cleaner and sanitizers in refillable containers
Miscellaneous cleaning/sanitizing measure	0-4		1-2 pts for any innovative cleaning/sanitizing practice; 2 pt for moving away from phosphorous
SOLID WASTE REDUCTION (Max 23 points)			
Resources: • Recycling in CT (mandatory items) • Permitted organics/food waste processing facilities in CT • Commercial Organics Recycling Law (ct.gov) • Waste Audits - Center for Eco-Technology can assist CT businesses			
Spent grains used for animal feed, upcycled, compost	5, 4 or 0		animal feed locally or upcycling 5 pts; composting or anaerobic digestion- 4 pts; 0 if sent hauled as trash
Track waste generation / ratio at or below industry average (26 lbs per barrel)	0-1		1 pt for tracking

Separating waste for reuse and recycling, use proper signage, be aware of and in compliance with CT's commercial organics recycling law, kitchen food waste diverted from trash	0-5		1 pt for each: recycling, reuse, food waste diversion (composted or hauled to anaerobic digestor), signage, organics recycling awareness; 0 pts if only trash
Reusable serve and drink ware in taproom, beer garden, events	0-3		1 pt for each
Reuse of any item(s) that would otherwise become single-use waste (ex: polypropylene grain bags)	0- 3		
Electric hand dryers in bathroom(s) instead of paper towels	0-1		
Miscellaneous recycling waste and reduction measures (shrink wrap recycling, donations)	0-5		1 or more points for any innovative waste prevention measure
PACKAGING FORMAT AND MATERIALS (Max 37 points)			
Resources: • [PakTech plastic can carrier recycling](#) • [BarTrack Sensor Technology webinar recording](#) • [Pallet Wrapz](#), [ReUSA-Wraps](#) examples of reusable pallet wrap			
Percentage of beer sold on-premises: draft in refillable kegs	0-10		1 pt for every 10%
On-premises beer is served straight from bright tank(s)	0-4		1 pt for every 25%
Percentage of distribution beer sold in refillable kegs	0-4		1 pt for every 25%
Percentage of distribution beer sold locally (within 250 miles)	0-4		1 pt every 25%
Use pre-printed cans instead of shrink-wrap or vinyl labels	0 or 2		2 pt for more than 50%; 1 pt for less than 50%; 0 pts for none
Use a centrifuge to increase wort yield	0 or 3		3 pts if using a centrifuge

Install a system to reduce beer waste (e.g., BarTrack)	0 or 3		3 if using a system to track beer loss
Can carriers: biodegradable, reuse take-back program, recycle take-back program	0-2		2 pts for reusing or biodegradable; 1 pts for recycling; 0 for none
Miscellaneous packaging and materials measure (ex: grain silo, reusable pallet wraps)	0-5		1 - 2 pts for any innovative measure
Environmental Culture (Max 26 points)			

Resources & Examples:
• B-Corp
• 1% For the Planet
• Allagash's Green Team
• Sustainability Mission/Vision examples
    ○ Throwback
    ○ Hill Farmstead
    ○ Catskill
    ○ Portico's Handprint			

Sustainability credential such as B-Corp, 1% FTP, etc.	0-4		4 pts for either one
Participation in CT/NE Environmentally Sustainable Brewery Program and/or Benchmarking	0-4		2 pts for participation, 2 for benchmarking and providing data to CTDEEP
Using sustainable suppliers: Safer Choice cleaners, FSI certified paper products, other	0-3		1 pt for each
Partnership/collaboration with environmental/conservation group	0-3		1 pt for each formal collaboration
Policy, education/training, communication of measures with staff (e.g., Green Team meeting monthly)	0-3		3 if they do it, 2 if it's a formal policy

Efforts to reduce miles driven by trying to attract cyclers, public transit, incentivize carpooling for employees	0-2		1 pt for each
Promote verifiable sustainability efforts on website or social media (e.g., mission statement)	0-2		1 pt for each - mission statement, social media posts to educate public
Miscellaneous sustainability focused actions/measures (e.g., educating customers about sustainable living, encouraging reuse and recycling; landscaping with native / pollinator friendly plants, supporting diversity DEI, Pink Boots, etc.)	0-5		1 – 2 pts for any innovative sustainability measure
OTHER ACTIONS (points negotiable)			

Note: Products and vendors listed in Resources and Examples are provided for informational purposes only and do not imply endorsement.

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