



New Glarus Brewing Company

Green Tier Breweries

Annual Report 2015

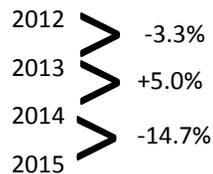
An Efficient Brewing Process — The New Glarus Brewing Company is located in New Glarus, WI. It was established in 1993 by Deb and Dan Carey. 100+ people are currently employed. The brewery's mission is to produce world-class, hand-crafted beer. In 2015 the brewery sold 194,894 barrels of beer +20.1%. New Glarus applied for the Green Tier program in 2012 and was accepted in August of 2013.

"To truly become number one, you must constantly strive to surpass yourself... not the competition." -Deb Carey

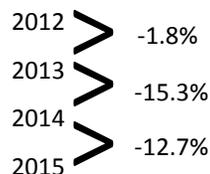
Sustainability affects every process and person in a brewery and community. Our brewery has embarked on a quest to reduce consumption through process improvements and system upgrades. The individuals involved are what make this standard equipment unique: Brewers challenge the process to utilize resources more effectively, Team Leaders dream up ways to reduce our use of resources, Programmers modify systems, Welders modify pipes and fittings, Lab Technicians evaluate cleaning programs, Gift Shop Staff communicate our story to visitors and Maintenance Technicians install equipment and support operations. Improving sustainability is a team effort.

Energy Consumption

Gas (Next target is a 3% reduction)



Electric (3% reduction)





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An Efficient Brewing Process – continued

2015 Items in Review

- Pre-Run Vessel & Heat Recovery
 - We are collecting more vapor during the boil process and using this heat to pre-heat wort prior to the kettle boil stage. The energy storage tank, at 95°C, will increase the useful energy level of heat reclaimed from the vapor condenser. The additional volume gives us the needed capacity to utilize all vapor energy from boiling. We are reducing kettle fouling, which reduces CIP's, and decreases water use, chemical use and brewing time. All these items increase efficiency in the Brewhall.
- Vertical Docks
 - Warehouse air movement & infiltration around docks and levelers. These areas can let in cold outside air which increases heating costs unnecessarily. The goal is to reduce cold air infiltration with minimal impact to fork truck operation. Vertical docks were installed in the 2015 warehouse addition.
- CIP 1 & 2 System Recovery Tank
 - CIP system 1 & 2 each received water/chemical recovery tanks. This reduced water and chemical use. These tanks will hold solutions so the system does not have to reheat water as often. The solution can be up-concentrated to utilize chemical more than once, thereby reducing chemical usage.
- A continued use of LED lighting in new construction. (High Bay & Low Level Areas)
- Boiler Burner Upgrade
 - We converted the burner from linkage controls to linkage—less controls. A VFD was installed on the draft fan and we installed automated oxygen trim controls to burn efficiently at high or low demand conditions along with adjusting to air temperature variations.

2016 Goals

- Explore Reverse Osmosis– Boiler Feed water
- Maintain LED Lighting Strategy
- Look at water saving—Bottle Packaging Line
- Garbage Stream Analysis
- Hilltop—Aluminum Baler



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Sustainable Brewing Process – These are the actions you have or will take in your processes that drive you as close to truly sustainable as possible.

Water Target; Reduce water ratio to 3.5:1, ultimate goal is 2.5:1

What is your past, current and future BBL beer to BBL water?

- 2012 > -3.8%
- 2013 > -1.0%
- 2014 > -5.5%

What actions have you taken to get you to this point?

- CIP system 1 & 2 system upgrades, chemical & water tanks.
 - Improvements start with the addition of recovery tanks on CIP system 1 and 2. This means that there is no need to empty the entire system between chemical washes; saving a great deal of chemical and water waste. The caustic recovery tanks recover caustic to be reused in a required pre-flush rinse on the next equipment CIP. The only time there is a need to completely empty the system is when the CIP system itself needs to be cleaned.
- Brewhall Heat Recovery System reduced CIP's for a fouled kettle, decreasing water and chemical use.

What actions will you take to achieve your goals? (To reduce water use)

- Water Reduce Goal
 - Packaging Line water use evaluation.

Reduce-Reuse-Recycle

Divert waste from landfill

- Less than 9 yards per week to landfill, which includes Gift Shop and visitor garbage.
- 2013—22.8 tons of paid for recyclables. NGB segregated cardboard and stretch film and sold them instead of paying to haul it away.
- 2014—45.25 tons of paid for recyclables. NGB started segregating some high use plastics and paper.
- 2015—65.1 tons of paid for recyclables.
- Pallet recycle reuse and repair program is ongoing.



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Reduce-Reuse-Recycle-continued

What have you been doing to drive down the amount of waste from your processes?

- Scrap pallet re-use and recycle operations
- Working with suppliers to improve product quality
- Electronics recycling
- We have changed some ingredients from small bags to super sacks and some to bulk

Sustaining Community

What have you done and are you planning to do to increase your interaction with the community and employees?

- Events sponsored in part by New Glarus Brewing. (See next page)

New Glarus Brewing Company has been a proud supporter of events in our village. The brewery is a major sponsor for Oktoberfest, the Beer, Bacon & Cheese/Polkafest event, and the annual Bike Rodeo for Kids. We are grateful to the village that we've called home for over 20 years and we donate money, beer and merchandise, as well as our time, to help support the village's many events and organizations.

- 100+ employees and growing.
- Use of local skilled labor in construction/maintenance of the brewery.
- Gift Shop staff advocates "Local" businesses & information.

People Planet Profit

- We use local suppliers for raw materials.
- We currently have 325 suppliers in WI.
- We use Green Tier Company Suppliers; currently 6.
- Our suppliers use recycled contents; cullet glass 30-35%, paper related 34 %.



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Your support of New Glarus Brewing Company
resulted in donations to the following friends

Merry Christmas!

Albany FFA
Albany PTO
Albertson Memorial
Argyle Post Prom
Argyle Booster Club
Argyle Rod and Gun Club Benefit
Argyle Lion Club
Alphorn Triathlon
American Cancer Society
American Red Cross
Angels Among Us
Alzheimer's Walk
American Diabetes Association
American Family Children Hospital
American Heart Association
Benefit for Brad & Sara Kaster
Benefit for Savannah Grindle
Benefit for Ron Cotton Family
Benefit for Chris Johnston
Benefit for Mat Hastings
Benefit for Jackson Trimborn
Benefit for Jason McNett
Benefit for Carly Hicks
Benefit for Jessi's Wish
Benefit for William Ernst Sturzenegger
Benefit for The Williams Family
Benefit for Blain Hall
Benefit for Arvid Bryhn
Benefit for Steve Larson

Benefit for Sophia Ann Sies
Benefit for Glen Pretti
Belleville High School Post Prom
Belleville Fire Department
Belleville Wildcats
Belleville Community Club
Belleville Chamber
Brodhead FFA
Brodhead Fire Department
Brodhead School
Brooklyn Sportsman Club
Blackhawk FFA
Blackhawk Post Prom
Browtown Fire District
Big Brothers / Big Sisters Green County
Boys and Girls Club Dane County
Brodhead Post Prom
Black Hawk Prom Party
Breast Cancer for Women Golf Outing
Camp Gray
Carbone Cancer Center
Boxers and bras
Chicog Fire Dept. (Betty)
Take Steps for Crohn's & Colitis
Daniel James Johnson Memorial
Dane County Saferide
Dane County Domestic Abuse Intervention Services
Dodge County Safe Ride
Downtown Kiwanis
Ducks Unlimited
Eagle's Pass for Parkinson Disease
Epilepsy Foundation Heart of WI
Farmfest for Life
Feed My People Food Bank
FLOG Golf Outing
Green County Breakfast on the Farm
Green Cares Food Pantry
Green County Family Promise
Green County 4-H
Green County EMS
Green County Ag Chest
Green County Alliance on Mental Illness
Green County Community
Green County Emergency Management
Green County Fair
Green County Family YMCA
Green County Foster Care
Green County Habitat for Humanity
Green County Humane Society
Green County Human Services
Green County Sexual Assault Response Program
Green County Tourism
Green County Fall Nationals
Green County UW Alumni Foundation
Glenda K Scott 5K
Gio's Garden
Green Haven
Hollandale Fire Dept

Hollandale Sportsman Club
Heartland Farm Sanctuary's Gala
Henry Villas Zoo
Heidi Festival
Iowa County Humane Society
Juda Fore Fathers
Juda Post Prom
Jayce Ensor/ Freeport Crush
Juvenile Diabetes Walk to Cure
Journey Mental Health
Justice For A Cure
Keep Wisconsin Warm
Lake Wausau Association
Logan's Hearts & Smiles
Lupus Foundation
Little Tumor Foundation
Little Hearts For Life
March of Dimes
Middleton Youth Baseball & Softball
MDA Tub Run
Monroe Justice for a Cure
Monroe Alpine Curling Club
Monroe Art Center
Monroe Blue's Hockey
Monroe Clinic Hospice
Monroe Clinic Volunteers
Monroe Fire Department
Monroe Green Haven
Monroe Gymnastics
Monroe Parks & Recreation
Monroe Red Cross
Monroe Relay For Life
Monroe Shriners
Monroe Youth Hockey
Monticello Foundation Golf Outing
Monticello Post Prom Party
Monticello Public Library
Monticello Community Club
Monticello FFA
Monticello Homecoming
Monticello Bucky/ Ron Scramble
Monticello Lions Club
Monticello Fire Dept. In Memory Of TJ Disch
Madison Children's Museum
Matt Grossen Memorial Golf Outing
Milwaukee Children's Hospital
Midwest Friesian Association
Mt Vernon Community Park
National Wild Turkey Federation
New Glarus PTO
New Glarus American Legion
New Glarus Bike Rodeo
New Glarus Car Show
New Glarus Chamber
New Glarus Community Foundation
New Glarus Depot Dash
New Glarus Area EMS
New Glarus Area EMS Running of the Swiss

New Glarus Lions Club
New Glarus FFA Alumni
New Glarus Fire Dept.
New Glarus Gift of Community
New Glarus High School
New Glarus Kinderchor
New Glarus Public Library
New Glarus Music Fest
New Glarus Oktoberfest
New Glarus Post Prom Party
New Glarus School Knight Pride
New Glarus School Caring for Kids
New Glarus School Wyalusing Park
New Glarus Police Department
New Glarus Small World Childcare
New Glarus Special Olympics
New Glarus Sports Boosters
New Glarus Saengerfest
New Glarus Teachers Golf Outing
New Glarus Winter Fest
New Glarus Yodel Club
Old World Wisconsin
Parkinson Disease
Pink Ribbon Riders / Breast Cancer
Project Home
Perinatal Foundation
Pleasant View Nursing Home
Potter Lawson / Second Harvest Food Drive
Ride Cruise Night Benefit
Ronald McDonald House
REAP Food Group
Rhumba 4 Rainbow Benefit
Salvation Army Red Kettle
Soup Raffle Chair
St Jude
St. Victors Fundraiser
Second Harvest Food Drive
Sugar River Chapter NWTFF
Sugar River Rapids
Tail Pine Conservancy
Tyler Pierce Memorial Suicide Fundraiser
Yellowstone Lake Police Fishing Derby
USS Houston Ship
UW Dairy Dash Fundraiser
WI Coalition Against Sexual Assault
Wisconsin Youth Symphony
Wisconsin Restaurant Association
Wis. Deer & Elk Farmers Association
Wis. Fairest of the Fair
Wis. Public Television
Women For Women Cancer
Worm Ride (Memorial Ride Elaine Graber)
Wine and Hops Fundraiser
Wisconsin Veterans Museum
Wis. Vietnam Veterans Chapter III
Wis. Army Chapter
Wyocena Fire Dept.
Wis. Wetlands Association



New Glarus Brewing Co.

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We're looking forward to a great 2016!