Beer the change ...

Brewery Vivant’s 2013 Sustainability Report

The title of our report is a shameless interpretation of the quote that has given us the most inspiration in our pursuit of operating sustainably, “Be the change you want to see in the world” by Mahatma Gandhi.

We made this report black in hopes you will avoid printing it. Please contact sustainability@breweryvivant.com for a printable version.
March 30, 2014

We sure had a lot of fun and action in 2013! We increased our capacity to around 5500 barrels by adding a 60 barrel fermenter to our line up. I’m still amazed that the installers were able to squeeze that in to our very limited space… We also added a 60,000 pound grain silo which will eliminate thousands of grain bags, saves much needed floor space, and reduces physical labor for our brewers. On top of that, we expanded our kitchen prep area significantly by moving a cooler outside of the building.

Another change for us was moving our Wood Aged Beer Festival from our patio to our parking lot. This allowed us to welcome a lot more attendees and to give them a better experience. Our goal for WABF was to be zero waste and we came about as close as we could. Our kitchen served food on a stick to reduce the need for utensils and plates and our extra cups were all compostable. The only waste from the event was from the port-a-potties and cigarette butts – pretty awesome!

With the start of 2014, we are excited to announce a few cool things happening at Vivant. It has been our dream to have a Vivant farm where we can grow produce for the pub and the brewery. We aren’t quite there yet, but we are taking a first step by turning a large area of our yard at home into the Vivant Garden. This first year will be a learning experience for us to test out a bunch of plants and see what works best. We are also planting fruit bushes and trees and a pumpkin patch to source our own pumpkins for the Local First Fork Fest vendor pumpkin carving contest in October. Additionally, we are starting an employee incentive program where we will challenge and reward our staff to live more sustainably. We have a list of 12 things we are asking them to do that mirror some of our company goals and should improve their quality of life. Those that take on the challenge will be rewarded with funding for things like local produce, composting, and other costs associated with making sustainable choices.

The last thing we want to highlight is the revamping of our sustainability goals. Through publishing this report and talking about our program at various venues, we came to realize that some of our goals don’t meet our criteria and that there are things that weren’t on the original list that have become very important to us. As you look through the report you will notice the new ones and we hope you will be excited to see them. The ones we have removed are still values that we hold, so don’t worry that we are slipping in our commitment!

As always, we hope you find value in this information. If you have feedback for us or would like a printable version, please email us at sustainability@breweryvivant.com.

Cheers,

Jason, Kris, Oliver and Siena Spaulding
Owners
Brewery Vivant

Members of the East Hills Business District, Local First, Grand Rapids Chamber of Commerce and the Michigan Brewer’s Guild
Summary

For those of you with a short attention span, here is a summary of how we are doing towards all of our goals and other key sustainability statistics. The % Change column shows the straight difference from 2012 to 2013. The % Change/Sales shows the change normalized to account for our increase in beer brewed and restaurant sales which we feel accounts for the numbers in a more accurate way.

<table>
<thead>
<tr>
<th>Category</th>
<th>2013</th>
<th>2012</th>
<th>% Change</th>
<th>% Change/Sales</th>
</tr>
</thead>
<tbody>
<tr>
<td>90% OF ALL PURCHASES FROM 250 MILES</td>
<td>61.4%</td>
<td>59.0%</td>
<td>2.4%</td>
<td></td>
</tr>
<tr>
<td>75% OF ALL PURCHASES FROM MICHIGAN</td>
<td>57.7</td>
<td>58.5</td>
<td>0.8%</td>
<td></td>
</tr>
<tr>
<td>50% FOOD FROM 250 MILES</td>
<td>12.1%</td>
<td>11.3%</td>
<td>-</td>
<td>0.8%</td>
</tr>
<tr>
<td>25% BEER FROM 250 MILES</td>
<td>2.9%</td>
<td>2.1%</td>
<td>-</td>
<td>0.8%</td>
</tr>
<tr>
<td>10% PROFITS TO CHARITY</td>
<td>11.0%</td>
<td>11.6%</td>
<td>-</td>
<td>0.6%</td>
</tr>
<tr>
<td>25% OF DONATIONS TO EAST HILLS</td>
<td>20.5%</td>
<td>9.2%</td>
<td>-</td>
<td>11.3%</td>
</tr>
<tr>
<td>10% PROFIT TO EMPLOYEES</td>
<td>8.2%</td>
<td>2.0%</td>
<td>-</td>
<td>6.21%</td>
</tr>
<tr>
<td>200 EMPLOYEE VOLUNTEER HOURS</td>
<td>130</td>
<td>60</td>
<td>117%</td>
<td></td>
</tr>
</tbody>
</table>
### Continued

<table>
<thead>
<tr>
<th>ZERO WASTE TO LANDFILL</th>
<th>2013</th>
<th>2012</th>
<th>% Change</th>
<th>% Change /Sales</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recycling (cu ft)</td>
<td>4,132</td>
<td>3,714</td>
<td>11.3%</td>
<td>10.6%</td>
</tr>
<tr>
<td>Compost (cu ft)*</td>
<td>12,636</td>
<td>12,636</td>
<td>0%</td>
<td>19.7%</td>
</tr>
<tr>
<td>Cattle Feed (lbs)</td>
<td>257,950</td>
<td>228,210</td>
<td>13.0%</td>
<td>6.2%</td>
</tr>
<tr>
<td>Trash (cu ft)*</td>
<td>2,808</td>
<td>4,104</td>
<td>31.6%</td>
<td>45.0%</td>
</tr>
</tbody>
</table>

| WATER TO BEER 3:1      | Ratio| Water Usage (million gallons) | 4.97:1| 1.2 | 1.1 | 9.7% | 12.4% |

| 10% ONSITE RENEWABLE ENERGY | 0 | 0 |

<table>
<thead>
<tr>
<th>ANNUAL REDUCTION IN CARBON FOOTPRINT/SALES</th>
<th>Electricity (kwh)</th>
<th>289,506</th>
<th>284,200</th>
<th>1.90%</th>
<th>18.3%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural Gas (ccf)</td>
<td>30,384</td>
<td>26,210</td>
<td>15.90%</td>
<td>6.9%</td>
<td></td>
</tr>
<tr>
<td>Carbon Footprint (co2e)*</td>
<td>454.6</td>
<td>368.2</td>
<td>23.50%</td>
<td>0.8%</td>
<td></td>
</tr>
</tbody>
</table>

*The 2012 numbers were corrected in this report due to calculation errors last year.*
Economic

61.4%

Goals:
90% of purchases from 250 miles
75% of purchases from Michigan
50% of food inputs from 250 miles
25% of beer inputs from 250 miles

Percent of expenses to locally owned businesses

Because it is important to us to support our local economy, this year we added a couple of new goals around the percent of money we spend within a set boundary. We chose to have a goal of 90% of our supplier spend for the Great Lakes region, or 250 miles, and 75% of our supplier spend to be within Michigan specifically.

You can see that we are still struggling with our food and beer inputs. We believe that our food number is actually much higher, but when we purchase from a distributor rather than the grower, we are unable to adequately track the location where the food was grown. Because of that we count all of those dollars as not local.

Our beer input purchases were slightly higher this year as we were able to purchase some Michigan grown hops and have been exploring some grain grown and malted in Michigan and Wisconsin. We hope to see these budding industries in Michigan grow exponentially over time.

Expenses within 250 miles

<table>
<thead>
<tr>
<th>Year</th>
<th>2013</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>61.4%</td>
<td>59.0%</td>
</tr>
</tbody>
</table>

Expenses within Michigan

<table>
<thead>
<tr>
<th>Year</th>
<th>2013</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>57.7%</td>
<td>58.5%</td>
</tr>
</tbody>
</table>

Food purchases grown within 250 miles

<table>
<thead>
<tr>
<th>Year</th>
<th>2013</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>12.1%</td>
<td>11.3%</td>
</tr>
</tbody>
</table>

Beer inputs grown within 250 miles

<table>
<thead>
<tr>
<th>Year</th>
<th>2013</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2.9%</td>
<td>2.1%</td>
</tr>
</tbody>
</table>
So Close to Cow Neutral Again!

28.7 Cows consumed
A typical cow yields 320 pounds of edible meat. We sold 18,385 burgers in 2013. That equals 28.7 cows consumed by our patrons.

28.3 Cows Fed
Over the course of 2013, we gave away 257,950 pounds of spent grain to a local cattle farmer. At 25 pounds of grain eaten per cow, we fed 28.3 cows. Bring along another beer drinking friend next time you come into the pub for a pint and let’s see if we can finally hit cow neutral in 2014!
178,776 Beers Consumed
That’s equal to 5.5 beers consumed by every resident of the 49506 zip code.

1 glass = 10,000 beers consumed

$38,307
Total savings for our Monks
Our monks are our best customers. Through our Monk Club they get a personalized goblet, discounts on every beer they purchase and special benefits throughout the year.

56 Styles
Total styles of beer
We brewed or wood-aged 56 unique and tasty styles of beer in 2013. We sold more FarmHand pints than any other beer, with Triomphe a close second.
Economic

Shower Me With Your Love

We made 104,501 gallons of beer in 2013. If all 535 of our Monks took 10 minute showers, each of them could shower 7.8 times in our beer. Yummy.

104,501 = 7.8
Gallons of beer Showers per Monk

*This assumes each shower uses 2.5 gallons of water per minute

BRC

Best Canned Beer

Outside Magazine included Big Red Coq on their list of Best Canned Beers in America. “Best served as a reward for your Class-V descent than as a primer.” BRC strikes a chord with adventurers with its bold hop character and represents the midwest beer scene on the national stage. Pretty rad.

3371
Total barrels sold

We sold 1038 barrels or 31% of our beer in the pub and 2334 or 69% of our beer into distribution.
Economic

22+ Farmhand

Beers at WABF

On October 5, 2013 we held our 3rd annual Wood Aged Beer Festival. Because of its growing popularity, we moved it from our patio to our parking lot which is much larger. We estimate that 1750 people attended WABF and enjoyed partaking in the 22 wood aged beers we created just for the festival.

235

How often our cooks got some love

We have an option on our menu for customers to “Tip the Kitchen” and buy them a pitcher. Two hundred and thirty five of you loved your meal so much, you showed extra love to the cooks. If you’ve ever heard the bell ring in our pub, this is why. Thank you.

170

Steins sold

We source our ceramic steins from Joshua Mogck, who is a local artist and also the brother of one of our crew. We love supporting the talents of local artists and crafters and we’re glad that you do too!
Equity

Goals:
10% of profits to local charities, 25% in the East Hills neighborhood
200 employee volunteer hours
10% of profits to employees

11.0 %

Percent of profits donated
In 2013 we donated 11.0% of our profits to charity. This is a slight decrease from last year's adjusted number of 11.6%, but still above our goal. Of the total amount, 20.5% was donated to organizations within the East Hills neighborhood, just below our new goal of 25% but more than double the 9.2% from 2012.

Some of the organizations we have donated to are: Blandford Nature Center, Cherry Park, Children’s Workshop, Community Media Center, Dwelling Place, East Hills Council of Neighbors, Feeding America, Friends of GR Parks, FRESH, Gourmet Gone Wild, Habitat for Humanity, John Ball Zoo, Kids Food Basket, League of Conservation Voters, Local First, Migrant Legal Aid, The Network, One Billion Rising, St Cecilia, The Red Project, Urban Forest Project, West MI Environmental Academy, West Michigan Pride, WMEAC, WYCE

$721

Donated to Brewer’s Grove
Over the summer, many area breweries raised money to support the planting of a grove of trees at Riverside Park. We chose to brew a special beer for this and donate $1 of every one we sold, for a grand total of $721. During the fall, members from each brewery then did the actual planting. It’s great to be a part of such a giving industry!

$1552

Donated with your help
In April we donated 25% of our food sales on one day, $588, to The Red Project during their Dining Out for Life Fundraiser. We also teamed up with Twisted Rooster and Crooked Goose to do a tap takeover in the spring and fall and each donated the equivalent of 10% of their sales during the takeover. Our portion of this was $964.

*We think it is important to support the causes our staff is passionate about even if they are outside of our usual criteria.
Equity

515

Rewarded resident recyclers

Mygrcitypoints is a program from the City of Grand Rapids and Local First that rewards residents for recycling their household waste. In 2013, we donated 4 different awards; 414 beer samplers, 100 beer tours, 1 Monk Club membership and 1 special prize where the winner got to name a barrel of wood aged beer and celebrate its introduction with a small party. If you drank our Abyss, that was the winner’s beer and it was fantastic! The estimated value of these awards is over $5000.

$944

Donated to Congress Elementary

We love to support our neighborhood school and all the good programs they have going. This year that meant helping with the cost of their new community garden, signage for the school, sprucing up the playground and purchasing new soccer nets.

$740

For Cherry Park Incentive

This year on mygrcitypoints there was a way for residents to donate their points to a park of their choice with the highest three parks getting a prize. We teamed up with our neighbor, The Green Well, and encouraged people to donate to our local Cherry Park through offering different levels of gift certificates based on their donation number. By doing this, we were able to secure Cherry Park the third spot in the competition, thus getting $10,000 from the city for a small makeover.
Equity

130 Hours!

Employees time donated

We have a new goal of volunteering in our local community for 200 hours per year. This year we volunteered a total of 130 hours. We focused a lot on Congress Elementary by helping construct their community garden, planting 10 trees, sprucing up the playground and helping out with their Kid’s Day. Staff time was also spent working on a Habitat for Humanity house and raking leaves in our neighborhood and planting trees in the Brewer’s Grove. We had 18 different staff members of 48 total take part in at least one of these activities.

$8.99

Minimum wage

The minimum wage we pay at Vivant is equal to the Living Wage for Kent County. This is the estimated hourly wage for a 40-hr per week job required to live given the local cost of living.

$1,250

Community sponsorships

This year we were excited to be a key sponsor for two great events in our community. One was for Dwelling Place which is an organization that helps house the homeless and revitalize neighborhoods. The second was for the annual Pride Festival in downtown Grand Rapids that celebrates the community’s commitment of uniting together to rid prejudices and build bridges of understanding across West Michigan.
Environment

Goals:
Zero waste
Water to beer ratio of 3:1
10% on-site renewable energy generation
Annual reduction of our carbon footprint

4132 cu. ft.

Total amount recycled
In 2013 we estimate that we recycled 1732 cubic feet of ours pub’s waste and 2400 of our brewery’s waste. At the end of the year we installed a grain silo. This will likely reduce the amount we recycle moving forward since grain bags are one of the biggest packaging waste products we have.

4.97:1

Water : Beer
Though we brewed over 26% more beer this year than last, we only used 9% more water. We estimate that overall we use 4.97 gallons of water to brew one gallon of beer. Most of the extra water needed is used in cleaning the brewery and sanitizing our tanks and equipment.

25

Gallons of trash
We had a zero waste goal for our Wood Aged Beer Fest and contracted The High Five Program to help us out. We ended up producing 325 gallons of waste of which 165 (51%) was recycled, 135 (42%) was composted and 25 (8%) was sent to the landfill.
Environment

454.6

Metric tonnes of CO2e

We produced 454.6 metric tonnes of carbon dioxide equivalents in 2013. This is an increase of 23.5% from 2012, however if we account for the increase in our overall sales volume, our carbon footprint actually went down 0.8%.

Our carbon footprint is made up of our natural gas usage and company owned vehicle miles (scope 1), electricity usage (scope 2) and employee miles traveled to and from events and sales calls (scope 3).

42.6%

Staff living within one mile of the brewery

Almost 90% of our staff live within 5 miles of the brewery, making it easy for them to walk, bus, or ride their bike to work and cutting down on their CO2 emissions.

10

Trees planted at Congress Elementary

In October we financed and planted 10 trees at our neighborhood school. This increases the tree canopy in the area and beautifies the school’s property.
Environment

418.97g CO₂e

Carbon footprint of Farm Hand

Through an audit, we were able to get more accurate numbers for the carbon footprint of our Farm Hand beer. The biggest contributors to Farm Hand’s carbon footprint are still the natural gas in the brewing process, the refrigeration of the beer once it is packaged, the production of aluminum for our cans, and the growing of the malted barley. We will continue to use this information to focus on reducing the carbon footprint of our beer moving forward.

26%

More beer

Compared to 2012, we sold 26% more beer but only used 2% more electricity and 16% more natural gas.

51,541

Cans saved

You bought 12,853 1/2 gallon growlers of beer and 86 24oz growlers of beer, most often FarmHand. By choosing the reusable growler, you helped us save over 50,000 cans. This is an increase over 2012 of 212%! 

- Raw Material: 87.22g CO₂e
- Packaging: 82.25g CO₂e
- Brewing Energy: 158.18g CO₂e
- Non-brewing Energy: 44.58g CO₂e
- End of Life: 0.0g CO₂e
- Refrigeration: 34.2g CO₂e
- Transportation: 12.54g CO₂e
Education

1475 Educated Patrons

Our brewery tour guides talk about our brewing process and what makes Vivant beer unique in the marketplace, including why we chose to can rather than bottle. They also like to talk about the history of our building, what it means to be LEED certified, and what some of our sustainability goals are. In 2013, 1475 people took our tour. We hope we inspired them to do more than just drink more of our beer.

26

Number of Greenies

In 2013 we showed our green-ness for St. Patrick’s Day through a sustainability focused tour rather than through dying our beer green (which would be sacrilegious if you ask the brewers!). 26 people attended and took part in a lively discussion about our values and practices.

100%

Staff Educated

Sustainability is something we take seriously and we expect the same from our employees. Because of this, all of our employees are required to take a class about our sustainability goals and practices and how they can help us improve. This is a great way to get everyone on the same page and to hear from them what their biggest challenges are in this area.
We would like to thank all of our amazing employees for taking our sustainability goals and programs seriously and working on them every day. We have made great strides this year and we are excited to see what next year brings!

If you have any suggestions on how we can decrease our negative impact and increase our positive impact on the community, please let us know by sending an email to sustainability@breweryvivant.com

Cheers!