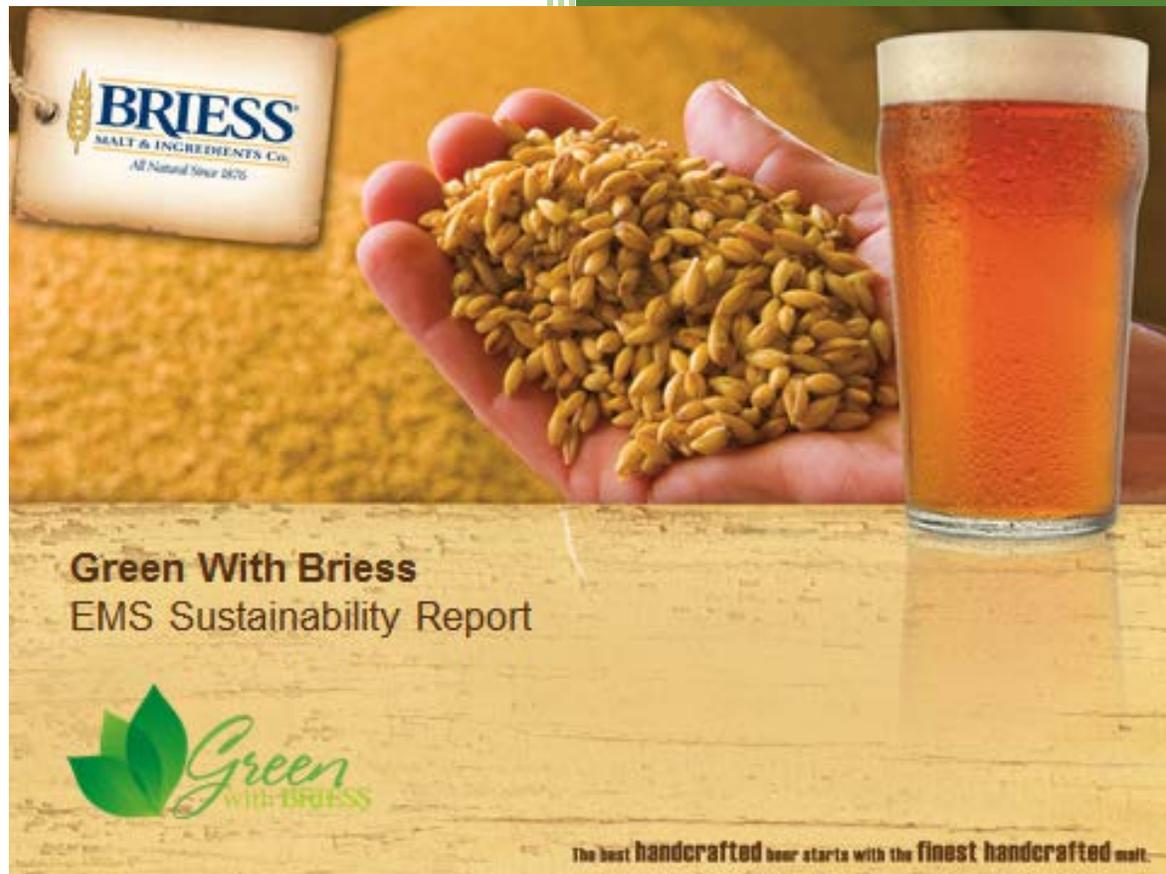




2016

# Green Tier Annual Report





## **2015 Green Tier Annual Report**

### **Executive summary**

Briess Malt & Ingredients Company is the leading producer of specialty malts and value added ingredients for the brewing, distilling, food and pet food industries in North America. Briess was accepted into the WI DNR Green Tier program in 2012 and was recognized as a “Green Professional” in the Wisconsin Green Master’s program in 2013, for demonstrating continued commitment to sustainability in the business sector. For more information please visit our website at [www.brewingwithbriess.com/About/Green.htm](http://www.brewingwithbriess.com/About/Green.htm).

Briess currently has three facilities; Distribution Center/Extract, Chilton Malt House, and Waterloo Malt House, under the Green Tier Program. High importance for this year is incorporate Manitowoc, Insta Grains, Special Product facilities to our Environmental Management System program.

Throughout the development of the Environmental Management System, particular attention was paid to the core operational processes. The core operational processer at Briess includes purchasing, product testing, malting, blending, roasting, malt extraction, spray drying, warehousing, packaging, and shipping. Focusing on these core processes allows Briess Industries, Inc. to continue operating in an environmentally conscious manner, an integral part of day to day operations and a long term business plan at Briess.

### **Environmental Mission Statement**

Briess Industries, Inc. respects the environment and makes a conscious effort to minimize the environmental impact associated with our operations. We continuously seek improvements and foster partnerships that make more efficient use of natural resources to reduce pollution, emissions and waste. We are dedicated to maintaining a healthy balance between environmental stewardship, social equity, and economic stability for the wellbeing of our community as a sustainable business.

## Chilton Malt House

- Core operations includes product testing, malting, steeping, roasting/ drying, and shipping.
- In 2015, Distribution Center/ Extract will continuously seek improvements for more efficient use of natural resources to reduce pollution, emissions and waste.
- Plant Performance:
  - We met our target reduction for electrical, fuel, and water consumption
  - **Objective:** Natural Gas Consumption
    - **2015 Target:** 2% Reduction
    - **2015 Performance compared to 2014:**
      - 2.4% Decrease in total therm
    - **2016 Target:** 2% Reduction
  - **Objective:** Electrical Consumption
    - **2015 Target:** 2% Reduction
    - **2015 Performance compared to 2014:**
      - 5.32% Decrease in total kWh
    - **2016 Target:** 2% Reduction
  - **Objective:** Water Consumption
    - **2015 Target:** 2% Reduction
    - **2015 Performance compared to 2014:**
      - 30.5% decrease in total gallons
    - **2016 Target:** 2% Reduction
  - **Objective:** Waste
    - **2015 Performance compared to 2014:**
      - 2014- 3,620,500 lbs of Mixed Malted Sprouts
      - 2015- 6,368,444 lbs of Mixed Malted Sprouts
        - 76% increase in total pounds of Mixed Malted Sprouts
          - All 6,368,444 lbs of mixed malted sprouts are recycled to farmers for cattle feed.

## Waterloo Malt House

- Core operations includes product testing, malting, steeping, roasting/ drying, and shipping.

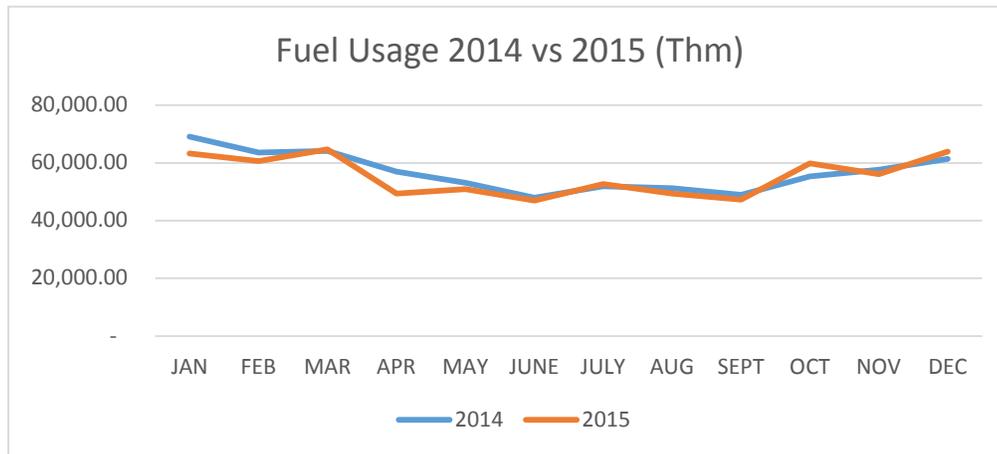
- In 2015, Distribution Center/ Extract will continuously seek improvements for more efficient use of natural resources to reduce pollution, emissions and waste.
- Plant Performance:
  - We met our target reduction for electrical and fuel consumption however we did not meet our target for water consumption.
  - We have our own well we pull water from
    - The used water is treated in our waste water treatment plant on site
    - Treated water is released back into the stream
      - Sludge is recycled to farmers for land spreading
  - **Objective:** Natural Gas Consumption
    - **2015 Target:** 2% Reduction
    - **2015 Performance compared to 2014:**
      - 11.78% Decrease in total therm
    - **2016 Target:** 2% Reduction
  - **Objective:** Electrical Consumption
    - **2015 Target:** 2% Reduction
    - **2015 Performance compared to 2014:**
      - 2.36% Decrease in total kWh
    - **2016 Target:** 2% Reduction
  - **Objective:** Water Consumption
    - **2015 Target:** 2% Reduction
    - **2015 Performance compared to 2014:**
      - 4.1% Increase in total gallons
    - **2016 Target:** 2% Reduction
  - **Objective:** Waste
    - **2015 Performance compared to 2014:**
      - 2014- 2,893,724 lbs of Mixed Malted Sprouts
      - 2015- 3,033,580 lbs of Mixed Malted Sprouts
        - 5% increase in total pounds of Mixed Malted Sprouts
          - All 3,033,580 lbs of mixed malted sprouts are recycled to farmers for cattle feed.

## Distribution Center/ Extract

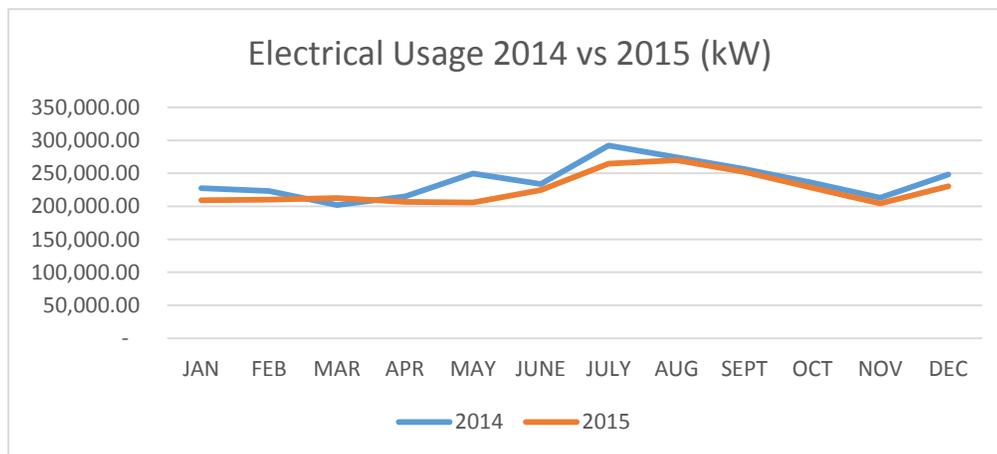
- Core operations includes malt extraction, blending, spray drying, packaging, warehousing, and shipping.
- In 2015, Distribution Center/ Extract will continuously seek improvements for more efficient use of natural resources to reduce pollution, emissions and waste.
- Plant Performance:
  - We met our target reduction for electrical, fuel, and water consumption
  - **Objective:** Natural Gas Consumption
    - **2015 Target:** 2% Reduction
    - **2015 Performance compared to 2014:**
      - 4.48% Decrease in total therm
    - **2016 Target:** 2% Reduction
  - **Objective:** Electrical Consumption
    - **2015 Target:** 2% Reduction
    - **2015 Performance compared to 2014:**
      - 2.87% decreased in total kWh
    - **2016 Target:** 2% Reduction
  - **Objective:** Water Consumption
    - **2015 Target:** 2% Reduction
    - **2015 Performance compared to 2014:**
      - 6.16% decrease in total gallons
    - **2016 Target:** 2% Reduction
  - **Objective:** Waste
    - **2015 Performance compared to 2014:**
      - 2014- 39,996,520 lbs of Spent Grains
      - 2015- 36,074,666 lbs of Spent Grains
        - 10% decrease in total pounds of Spent Grains
          - All 36,074,666 lbs of spent grains are recycled to farmers for cattle feed.

## 2014 vs 2015 Usage Data

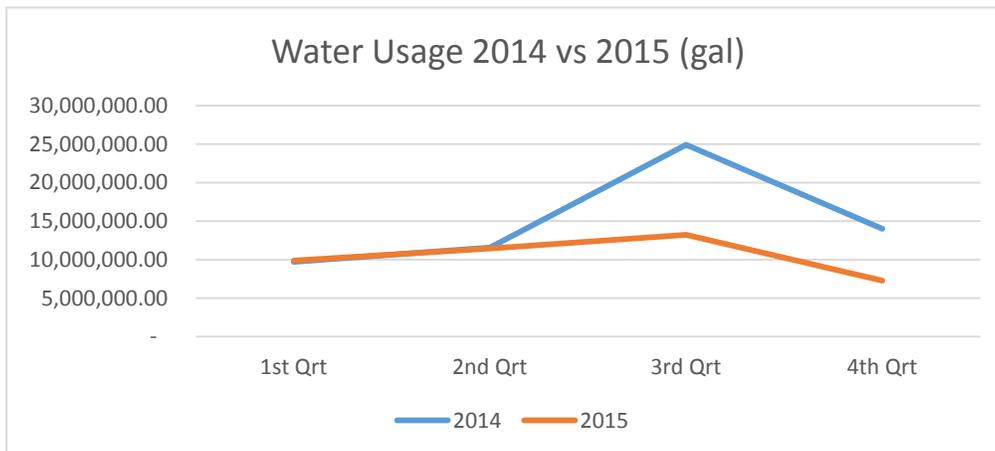
### Chilton Malt Center



- 2.4% Decrease in fuel usage

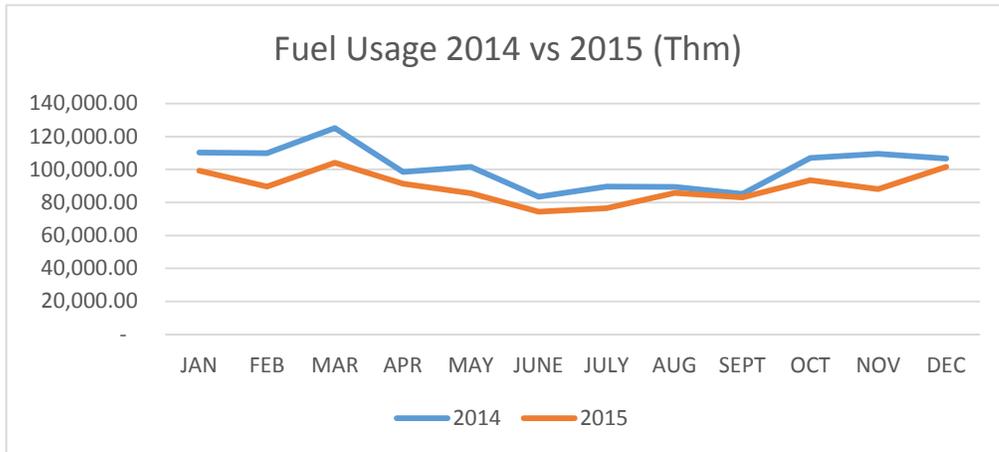


- 5.3% Decrease in electrical usage

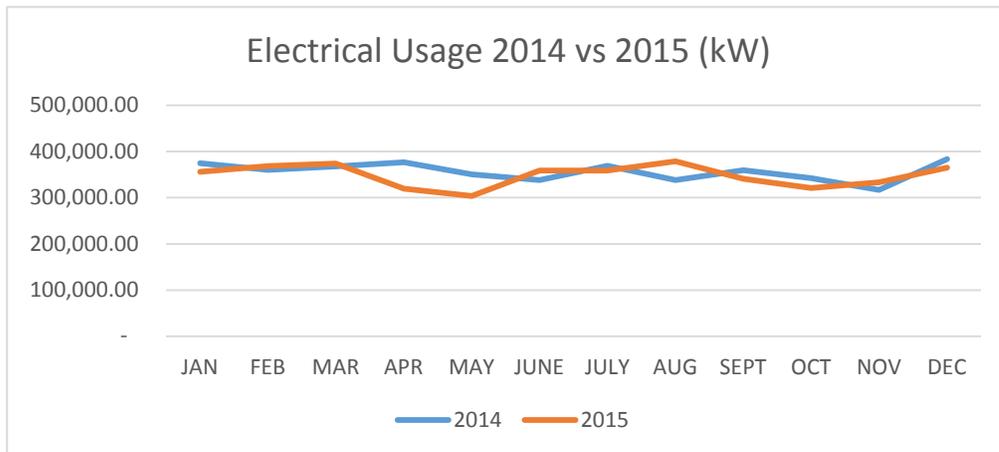


- 30.5% Decrease in water usage

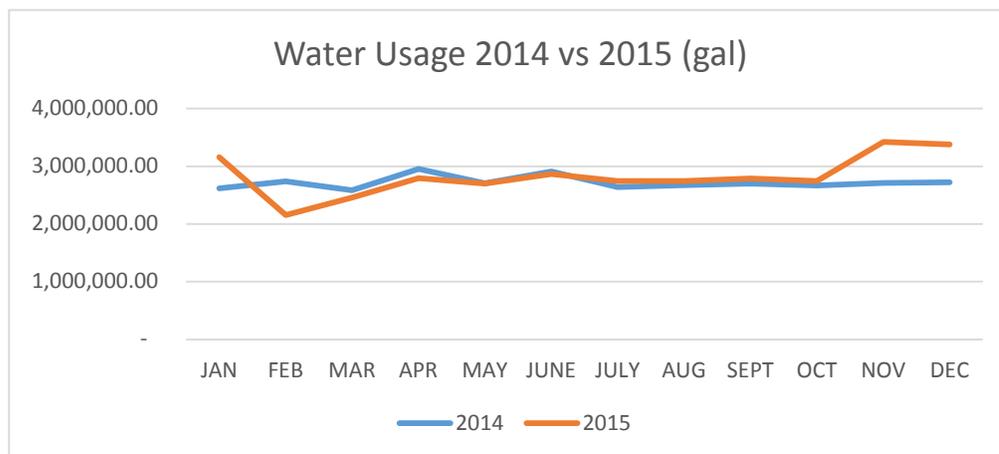
## Waterloo Malt Center



- 11.8% Decrease in fuel usage

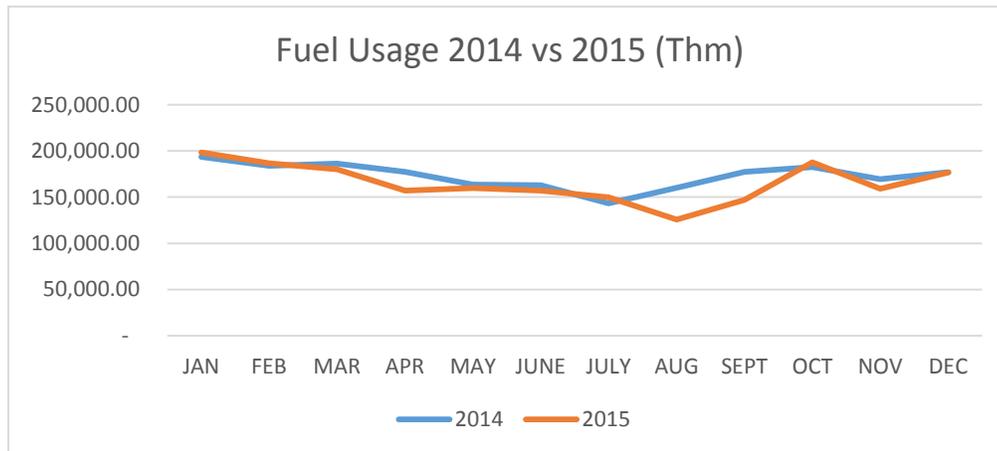


- 2.4% Decrease in electrical usage

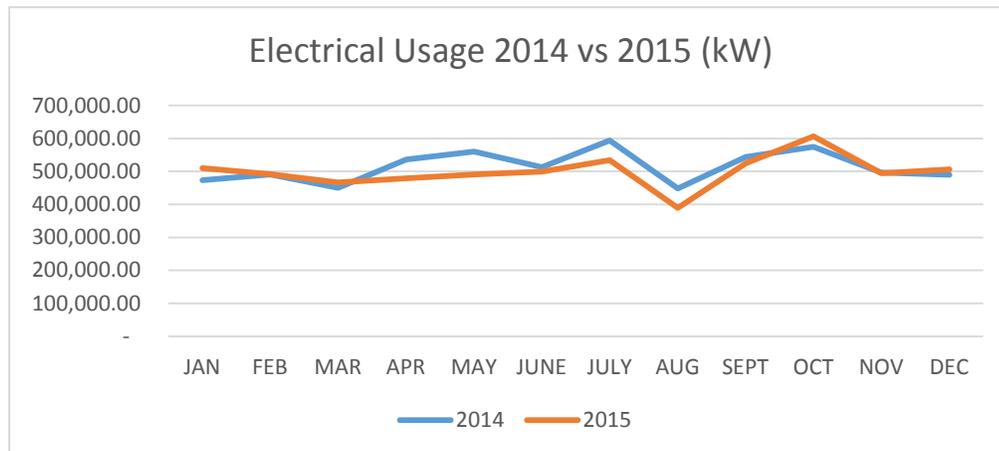


- 4.1% Increase in water usage

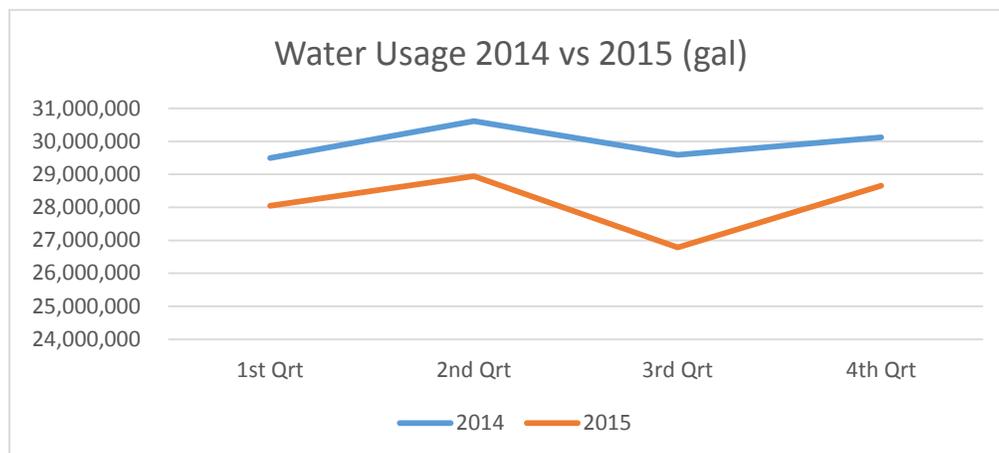
## Distribution Center/ Extract



- 4.5% Decrease in fuel usage



- 2.9% Decrease in electrical usage



- 6.2% Decrease in water usage