



# 2016 Sustainability Report



Munters Corporation  
Buena Vista, Virginia Factory  
**225 South Magnolia Road.**  
**Buena Vista, Virginia 24416**  
**Date: 12-31-2016**

## **“We take our Corporate Social Responsibilities seriously.”**

As a global leader in energy efficient air treatment solutions, we at Munters take our Corporate Social Responsibility seriously. We understand how we impact the world we all live in.

This is why at Munters we work every day to create “Your Perfect Climate”. For our customers we provide products and solutions that reduce their energy consumption. This contributes to the reduction of the world’s emissions.

In our manufacturing we have a sustainable approach, focusing on efficient usage of natural resources, while reducing and recycling our waste. Because at Munters, one of our core values is to think “there is always a better way”.

We have made significant improvements but we pledge to always seek opportunities to improve our products as well as our manufacturing practices.

Munters will continue to be a part of creating a sustainable future for everyone.

**John-Peter Leesi**

CEO, Munters AB

# 2016 Objectives & Targets Summary

*EH&S Corporate Objectives for manufacturing sites: (baseline 2013, target EOY 2016)*

## Corporate Objective #1

Implement or refine an *Environmental, Health, & Safety Management Program*

**Target:** Refine the current EH&S Program(s) and further integrate into our daily business management systems.

**Result:** Means and Measurements completed. We updated and implemented new SOPs to maintain compliance with our Air Emission Permits, Stormwater Pollution Prevention Plan and other regulatory requirements. Audits by the Virginia Department of Environmental Quality confirmed our SOPs are effective and that the plant is in compliance.

## Corporate Objective #2

Drive continuous improvements through a prioritized *EH&S Facility Risk-Aspect List*

**Target:** To assess, select and prioritize our EH&S Risk-Aspects and drive risk reduction within each chosen aspect. Risk reduction shall be measured by the aspect scoring system.

**Result:** Considerable progress was made with full implementation of our SWPPP. The results of an audit of our facility from the Virginia Department of Environmental Quality showed that we are in compliance with the regulations. Targets for 2016 in the Welding area and with our Hearing Conservation program were met and exceeded. The EH&S Aspect list was revised and updated in December 2016 to determine the next areas of focus to further reduce our risks for 2017.

## Corporate Objective #3

Reduce *TRIR Rate* by 10% (*e.g. outside medical treatment, lost work days, restricted duty*)

**Target:** Reduce our 2013 TRIR Rate from 6.53 to 5.87 by improving our injury root cause analysis process and our corrective actions effectiveness, with emphasis on injury trends.

**Result:** Target was achieved in 2015 with a TRIR of 4.76 which exceeded the initial goal of 5.87 (27% reduction). In 2016 we achieved a further reduction (24%) with a TRIR of 3.62. We will continue to focus on safety awareness and effective corrective actions in all our activities.

## Corporate Objective #4

Reduce *Energy / Resource Use* (*e.g. electricity, natural gas, propane, diesel, oil, water*)

**Target:** Reduce electricity use throughout our administration and manufacturing facilities through curtailment practices, more efficient machinery, and refined lighting and HVAC use.

**Result:** Targets met. We continue participation with curtailment practices and light bulb reduction plan. The capital project to upgrade the entire plant and office areas with LED lighting was approved and completed 12/27/2016. We should show a good reduction in electricity in 2017.

### Corporate Objective #5

Reduce **Water** consumption and/or waste of processes or factory (*reduces, reuse, recycle or capture*)

**Target:** Reduce municipal water use by means of implementing water capturing methods and establishing more efficient use of water within our production process.

**Result:** A 15,000 gallon tank of non-potable water is recycled/reused for leak testing of the evaporative cooling units in the test area. A system for capturing the water for the drain pan/ floor leak testing has been built and implemented.

### Corporate Objective #6

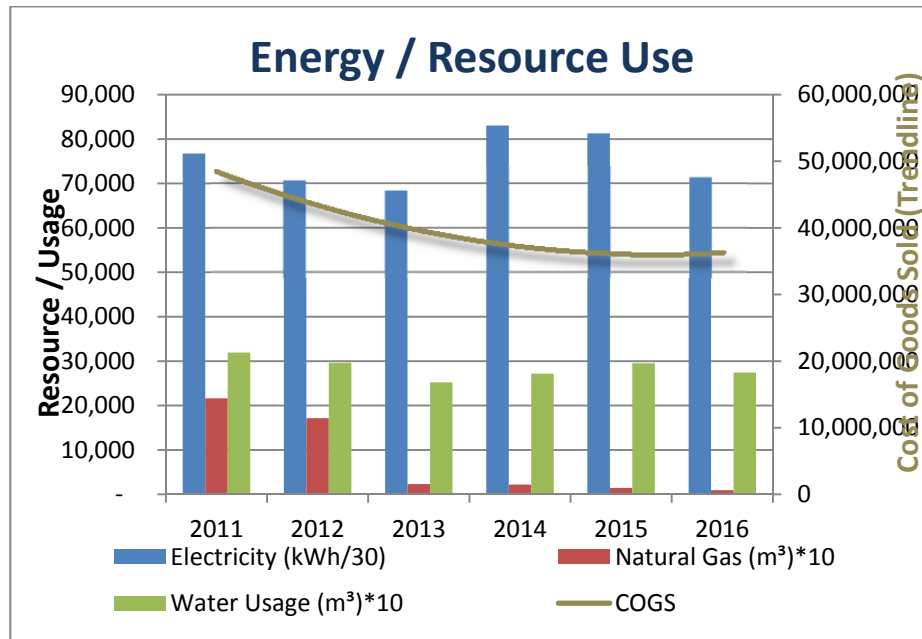
Reduce **Non-Recycled** type waste (*non-recycled wastes, reduce, reuse or recycle*)

**Target:** Redirect our non-recycled wood waste to a wood recycle center. Further reduce wood waste by using reusable containers with suppliers.

**Result:** Recycling collection areas are set up throughout the facility for cans, plastic and paper. A group of employees has taken on the responsibility of taking the recyclables to the recycling center in town. Jemison, our supplier of sheet metal has reduced the number of wood pallets used to ship sheet metal to us by "kitting" the material. In addition, they are reusing the wood pallets once we have consumed the material. BASF, reuses the 250 gallon metal containers to provide us with the foam for our foam injection and foam spray processes.

# Performance Data Summary

## Environmental Performance Data



Resource / Usage	2011	2012	2013	2014	2015	2016
Electricity (kWh/30)	76,750	70,640	68,400	83,040	81,280	71,335
Natural Gas (m³)*10	21,617	17,161	2,306	2,213	1,453	958
Water Usage (m³)*10	31,928	29,608	25,226	27,158	29,530	27,416
Cost of Goods Sold	48,401,000	46,900,000	33,373,000	37,217,000	42,323,000	33,297,000

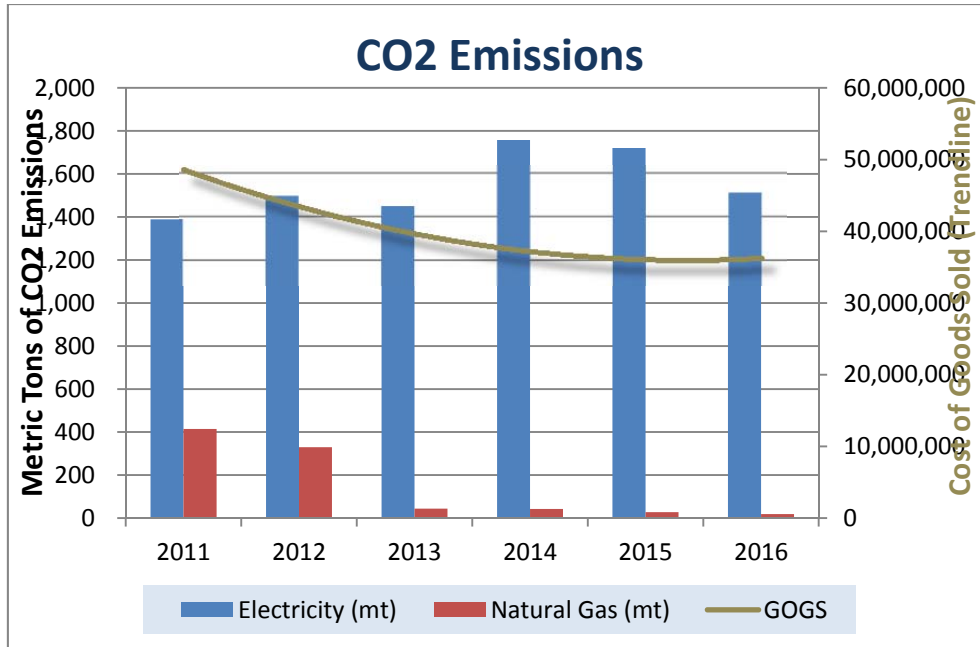
**Notes:**

\* Trend line represents finished goods / \$\$\$ manufactured. (COGS) Cost of Goods Sold or Units Manufactured.

\* All data is raw, not normalized: therefore increases are due to thru put increases.

**Summary:**

Munters, Virginia continues to participate in the energy curtailments with Enernoc since 2014. In 2015 and 2016 we pursued capital project approval to reduce electricity costs by replacing the HID and fluorescent lighting through the plant and office areas with new efficient LED lighting. The project was approved and completed in December 2016. We should see a good reduction of electricity consumption in 2017. We are looking at other means to reduce electricity with our compressed air system which is comprised of two air compressors. They could be reconfigured to provide more efficient use during second shift operations. In addition we continue to fix airline leaks as they occur. Natural Gas usage was considerably lower mainly due to warmer winters both in 2015 and 2016. Plant temperature settings are timed to be lower during off hours.



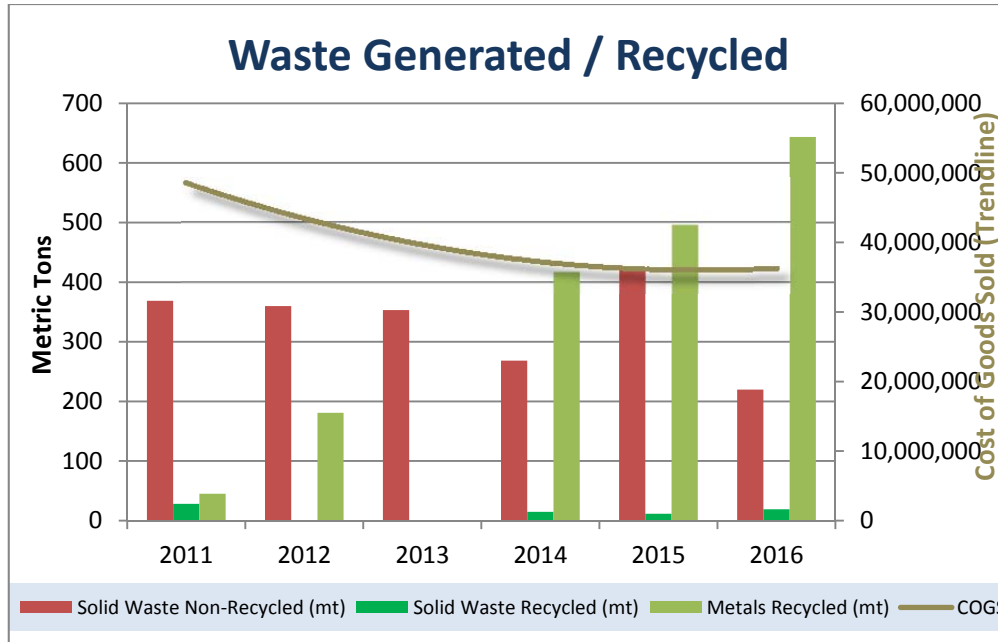
CO2 Emissions	2011	2012	2013	2014	2015	2016
Electricity (mt)	1,389	1,495	1,448	1,758	1,720	1,510
Natural Gas (mt)	415	329	44	42	28	18
Total CO2 Emissions (mt)	1,804	1,824	1,492	1,800	1,748	1,528
Cost of Goods Sold	48,401,000	46,900,000	33,373,000	37,217,000	42,323,000	33,297,000

**Notes:**

- \* Trend line represents finished goods / \$\$\$ manufactured. (COGS) Cost of Goods Sold or Units Manufactured.
- \* All data is raw, not normalized: therefore increases are due to thru put increases unless otherwise noted.
- \* All emissions calculated through EPA's emission calculators (mt/CO2) <http://www.epa.gov/cleanenergy/energy-resources/calculator.html>

**Summary:**

Munters Virginia largest contributor to CO2 emissions is electricity and gas for heating. For this reason we focus our emission improvement targets towards reducing electricity needs of our lighting. A capital project was approved to retrofit the entire plant and office areas with new LED lighting. The project was completed in December 2016 and we should see a good reduction of electricity consumption in 2017. Efforts can be seen from a Natural Gas aspect. We lower thermostat temperatures during off hour in the plant, but most gains are from warmer than normal winters as we have seen in 2015 and 2016.



Waste Recycled	2011	2012	2013	2014	2015	2016
Solid Waste Non-Recycled (mt)	369	360	353	268	422	220
Solid Waste Recycled (mt)	28	0	0	15	12	19
Metals Recycled (mt)	45	181	0	417	495	644
Cost of Goods Sold	48,401,000	46,900,000	33,373,000	37,217,000	42,323,000	33,297,000

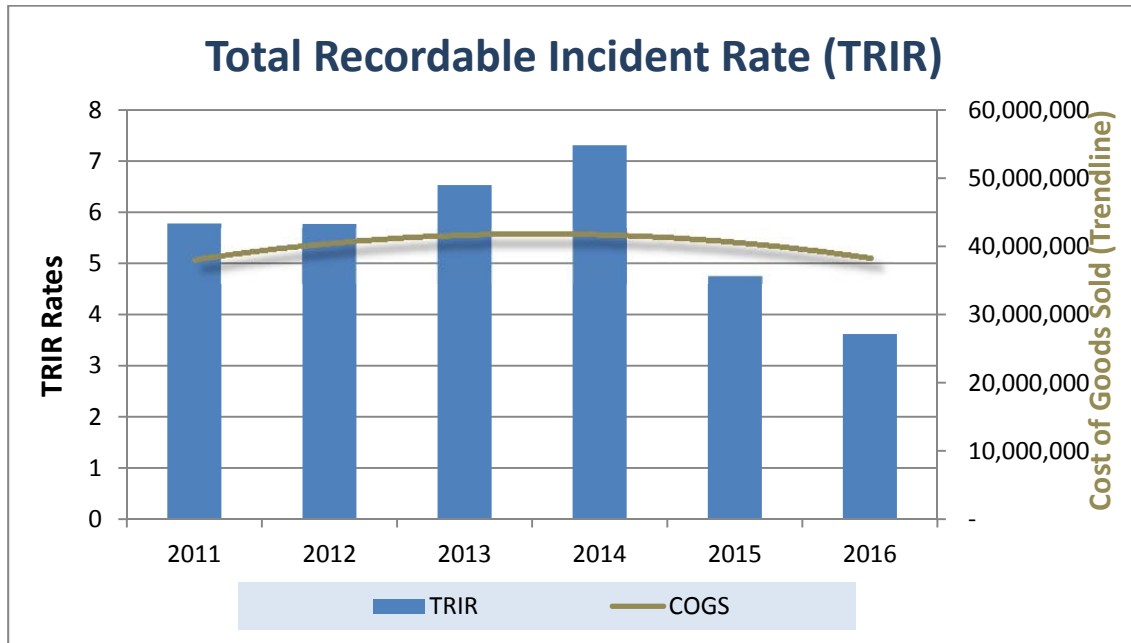
**Notes:**

- \* Trend line represents finished goods / \$\$\$ manufactured. (COGS) Cost of Goods Sold or Units Manufactured.
- \* All data is raw, not normalized: therefore increases are due to thru put increases unless otherwise noted.

**Summary:**

We have recycling collection areas set up throughout the facility for cans and plastic. A group of employees has taken on the responsibility of taking the recyclables to the recycling center in town. Jemison, our supplier of sheet metal has reduced the number of wood pallets or skids used to ship sheet metal to us by “kitting” the material. BASF, provides us with reusable 250 gallon metal containers for our foam injection and foam spray processes. We have partnered with Gerdau to help us with our metal recycling efforts and improve our handling our drop andscrap metals from our metal fabrication processes.

## Safety & Health Performance



Safety Rates	2011	2012	2013	2014	2015	2016
TRIR	5.78	5.77	6.5	7.31	4.76	3.62
Cost of Goods Sold	32,586,000	48,401,000	46,900,000	33,373,000	37,217,000	42,323,000

**Notes:**

\* Trend line represents finished goods / \$\$\$ manufactured. (COGS) Cost of Goods Sold or Units Manufactured.

\*TRIR Industry Average (US) = 5.9 (Based on BLS 2011 Q1 NAICS tables – 333415 /50-250)

**Summary:**

2014 ended with a higher than expected TRIR of 7.31 (an 11.8% increase), A review of past recordable incidents was tabulated and action plans developed to reduce recordable incidents by an aggressive 50%. During 2015 we improved our safety awareness as well as risk assessment in our manufacturing processes. We achieved our target for end of year with a TRIR of 4.76 which exceeded the initial goal of 5.87 (27% reduction). 2016 we achieved a further reduction (24%) with a TRIR of 3.62. We will continue to focus on safety awareness and effective corrective actions in all our activities moving into 2017.