

Western New York Sustainable Business Roundtable

Creating an environmentally and economically resilient Buffalo-Niagara

MATERIALITY

Measure What Matters

12.3.14

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Measure What Matters

- **WHY?** Metrics embed sustainability into planning, decision making, and culture
- **Entity specific:** What do your stakeholders care most about?
- **Based on quantitative and qualitative factors**
- **Be prepared to educate and collaborate with your colleagues**
- **Start with baseline and set improvement targets**
 - What levels can we achieve while growing our business?
 - What will the projects involved cost us?
 - How quickly can we achieve the goals?
 - How will others perceive the goals?
- **Awareness of emerging metrics to consider**
 - Absolute
 - Intensity
- **Frame of reference**
 - Where do we stand relative to our competitors?
 - Look at competitors, customers and similar companies (i.e. size, revenue, location, industry)
 - Benchmark data becoming easier to collect thanks to the internet and growing trend towards corporate reporting

SMARTT metrics

- Specific
- Measurable
- Actionable
- Relevant
- Timely
- **Transparent**

Metrics to consider in support of **WNY-Sustainable Business Roundtable Pledge**

We commit to becoming a thriving and resilient business by establishing and implementing a sustainability plan that:

- **reduces waste and pollution**

- Reduce waste to landfill by 50% in 2015, compared to 2014 baseline*
 - Adopt green cleaning practices*

- **protects our waterways**

- Gallons of water saved per year*

- **optimizes use of energy and materials**

- Track kwh saved monthly per unit produced*
 - Incorporate sustainability criteria into procurement policy*

- **invests in our communities**

- Measure volunteer hours for company employees each year*

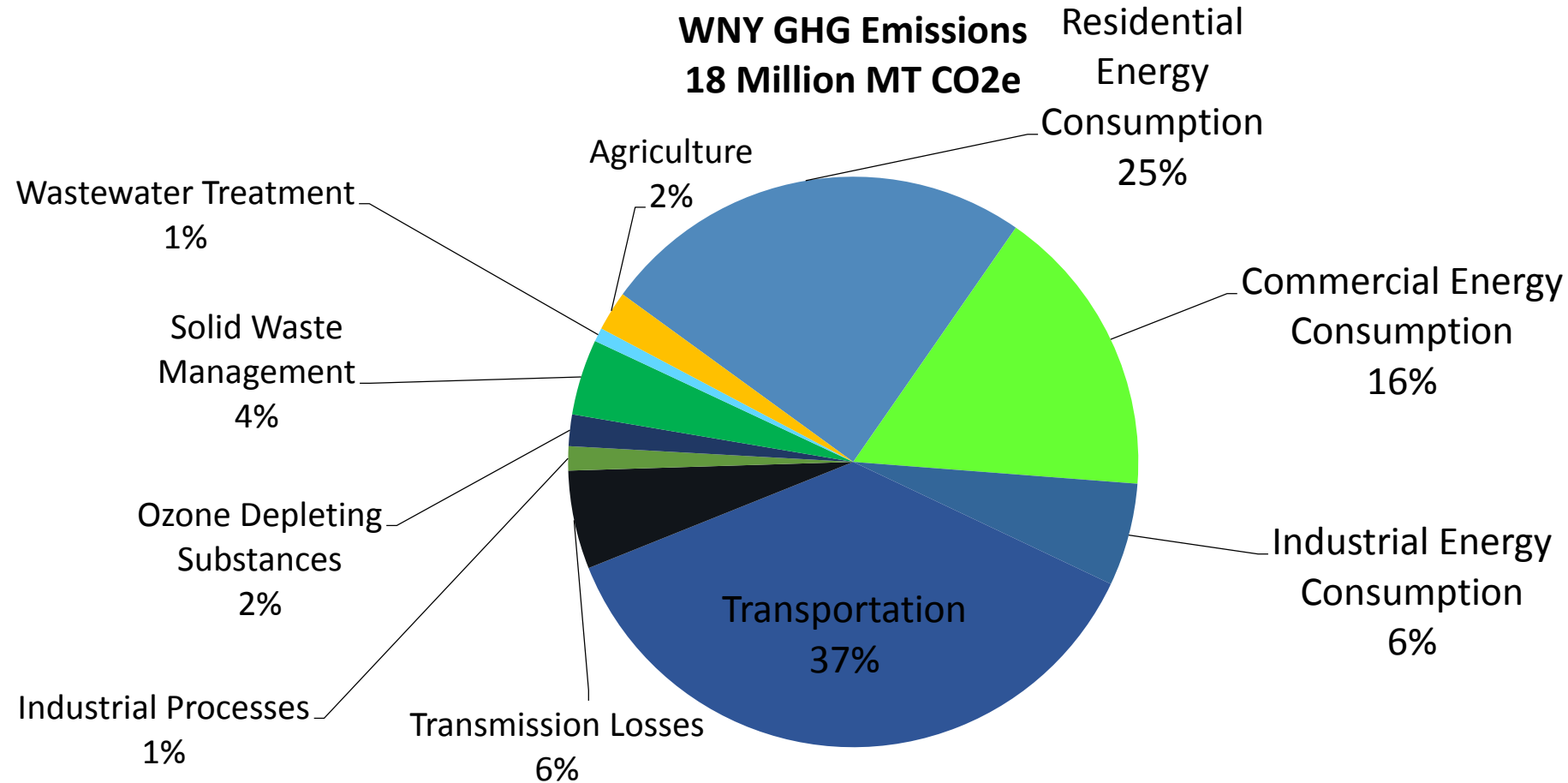
We will accomplish this in a **transparent** and **measurable** way that, collectively, with the efforts of other WNY organizations, reduces the severity of global climate change.

Materiality Exercise @ Rich Products

- As a frozen food manufacturer, we suspected energy was a significant part of Rich's environmental footprint.
- Energy audit of Rich's US manufacturing network revealed that 81% of Rich's energy costs were from electricity.
- How can we improve Energy Efficiency?
 - Gathered fact-based information to establish baselines for each facility
 - Collaborated with plant associates on opportunities for improvement
 - Estimated costs, ROI, and resources to implement the ideas
 - Included this as part of our strategic business planning process
- This put us in a better position to prioritize, fund, and sequence projects across the business.
- As a result, 100+ energy projects have been completed since 2010!

Graphics are helpful in conveying detailed info

WNY Regional GHG Inventory



Does not include Electricity Generation or Forest/urban tree sinks

First Step: Understanding current energy usage

2012 Energy Consumption / Cost

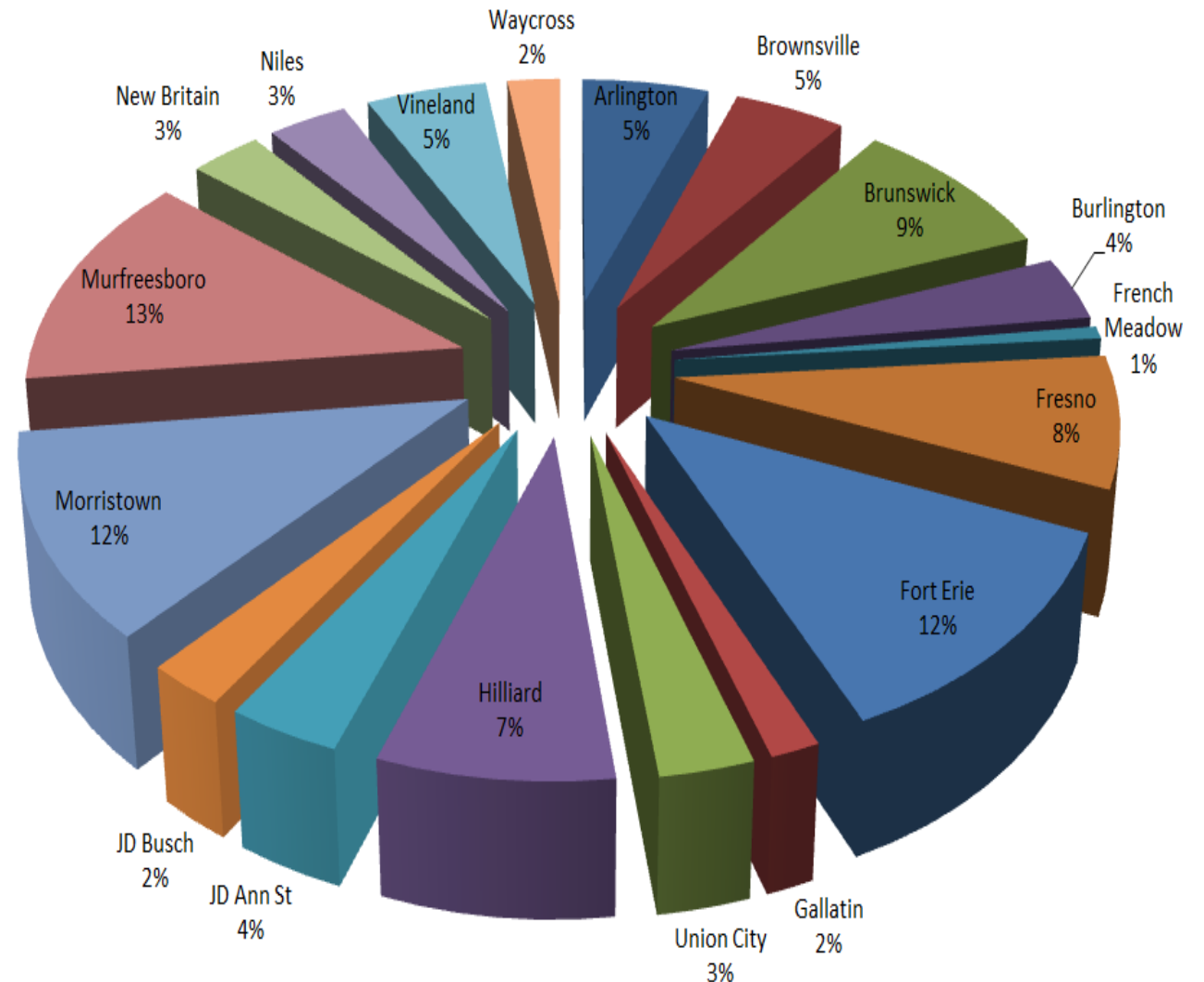
2012 Energy Consumption

Electricity Cost = \$20,983,649

Natural Gas Cost = \$5,675,095

TOTAL ENERGY COST = \$26,658,744

Electricity Cost

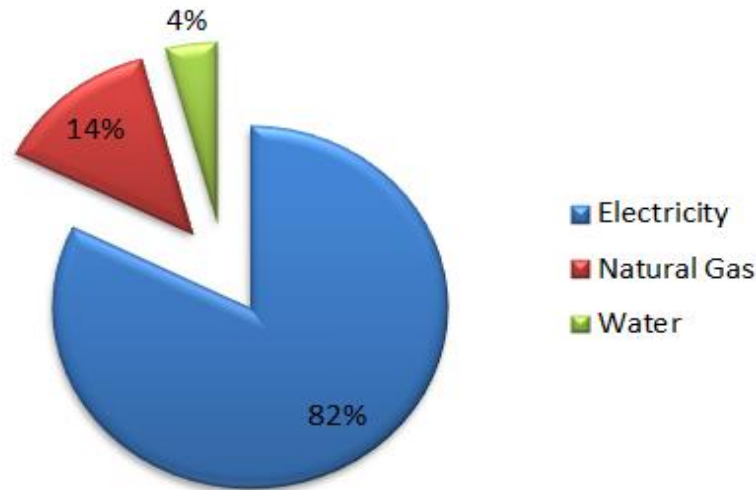


COMPARE WITH INDUSTRY DATA

1. Electricity is 83% of our total energy cost.
2. E&W combined was 1.6% of net sales.
Most companies are <5% energy:revenue ratio.
3. Gas = \$0.60/therm; Electricity = \$0.08/kwh
4. Energy Indicator national average food industry = 1.84
(1.68 for bakeries and 2.27 for seafood).
Increased from 0.78 (2002) to 1.84 (2006).
5. Food industry average: 47% of energy expense on electricity.
We spend 81% on electricity (due to frozen food environment)

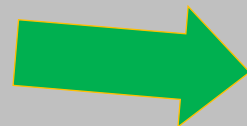
Second Step: Calculate potential savings & ROI on projects to achieve target

Arlington Plant: Energy Consumption (2012)



Arlington Plant Energy Savings Potential

Average Energy Cost	\$1,607,473
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Savings (3%)	48,224
Savings (5%)	80,374
Savings (10%)	160,747

Metrics: Energy

- ☐ Baseline @ each facility
- ☐ Intensity
 - ☐ KWH per lb of product manufactured
 - ☐ KWH per case of product manufactured
- ☐ Total Usage
 - ☐ Electricity
 - ☐ Natural Gas
- ☐ Track Cost Savings; report @ monthly “E&W deep dives”
- ☐ Convert to CO₂e to quantify GHG emission reduction

Enablers:

- ✓ Automated Energy Management System
- ✓ Targets & reporting built into business planning process (ROCS)

Share Success Stories: Internally & Externally

Refrigerated Energy Management System

Union City, CA



- EMS projects utilize technology to track, collect and analyze energy data
- Information used to identify and target opportunities
- Drives efficiency of refrigeration system based on production schedule, equipment load and demand
- In Union City, automated REMS now controls the engine room (compressors and condensers), spiral freezers, holding freezer, dock, yeast cooler, HVAC and exhaust units
- Look closely at exact refrigeration temperatures / energy needs relative to quantity of product in refrigeration unit
- Manually or automatically shut down motors and machines during downtime in order to reduce energy usage

Include TRENDS in sustainability plan updates & Determine potential impact to your business

11.11.14 Historic Climate Change Deal

- U.S. President Barack Obama and Chinese President Xi Jinping announced both countries will curb their greenhouse gas emissions over the next two decades.
- United States pledged to cut its 2005 level of carbon emissions by 26-28% before the year 2025.
- China would peak its carbon emissions by 2030 and will also aim to get 20% of its energy from zero-carbon emission sources by the same year.