11:30 AM | Lunch & Networking

11:45 AM | Welcome and Intro
Cheri Holman - USGBC West Michigan

12:00 PM | Incentives for Building Beyond Code
Dru Ross - DTE Energy
Mark Bates - Consumers Energy

12:30 PM | Nichols LEED v4 Story
Renae Hesselink, LEED AP BD+C, CITS, PCQI - Nichols

12:45 PM | Q&A

1:00 PM | Tour of City Flats Hotel's Green Features (Optional)
Maggie Kopas - City Flats Hotel
LEED is an internationally recognized mark of excellence for buildings, communities and professionals that are transforming the building industry.
PROJECT CERTIFICATION
LEED IS GLOBAL
2.4 MILLION + SQUARE FEET DAILY
LEED is more than credits.
LEED shows the elements that go into a high-performance and sustainable built environment.

- Integrative Process
- Location and Transportation
- Sustainable Sites
- Water Efficiency
- Energy and Atmosphere
- Materials and Resources
- Indoor Environmental Quality
- Innovation
- Regional Priority
LEED Certified Buildings in Michigan

- Certified: 241
- Silver: 323
- Gold: 379
- Platinum: 47

Total Buildings: 896

*Based on data received from USGBC National’s Project List on February 14, 2019*
WHAT GREEN BUILDING CERTIFICATION PATHWAY MAKES SENSE FOR MY ORGANIZATION?

and other questions you may have about certifications - answered

JUNE 27
8:30 AM - 12:30 PM

M-TEC

622 GODFREY AVE SW,
GRAND RAPIDS, MI 49503
JOIN US!
www.usgbcwm.org
$70 Annual Membership
An awards and recognition program for energy use reduction open to all Michigan area commercial, industrial & multi-family buildings.

ENROLL FOR FREE

JOIN BY MARCH 31, 2019

WWW.MICHIGANBATTLEOFTHEBUILDINGS.ORG

SPONSORED BY DTE Energy Consumers Energy
square footage

191,979,708

competing in 2018
2017 Battle of the Buildings Water Category
NEW IN 2018

INDUSTRIAL/Manufacturing

PILOT
46 BUILDINGS
REDUCED THEIR ENERGY
MORE THAN 10%
11 BUILDINGS
REDUCED THEIR ENERGY
MORE THAN
20%
Michigan Battle of the Buildings

2017

Overall Biggest Loser

34.37%
2017 ENERGY SAVINGS
Competitor's combined total: 59,233 metric tons of CO2e avoided
COMPETITORS AVOIDED

$7.6 Million

IN UTILITY COSTS IN 2017
Will Allen
MANAGING PARTNER AND CO-FOUNDER
NASCENT GROUP HOLDINGS, LLC
Save the Date

APRIL 25, 2019

JW MARRIOTT
THE FIFTH ANNUAL

Michigan

ENERGY SUMMIT

APRIL 25, 2019

WWW.MICHIGANBATTLEOFTHEBUILDINGS.ORG

HEAR STORIES & DISCOVER NEW IDEAS WITH:

AMWAY HOTEL | CONSUMERS ENERGY
DTE ENERGY | MICHIGAN STATE UNIVERSITY
MONROE COUNTY COMMUNITY COLLEGE & MORE!

WITH LUNCH FEATURING

MAJORA CARTER
The Grand Rapids 2030 District is a public-private partnership committed to creating high-performing buildings that increase marketability and profitability for property owners, improve their environmental impact, and strengthen the greater community’s vibrancy.
Working together to reduce CO2 in our city:

- Energy
- Transportation
- Water
City of Grand Rapids
Zero Cities Project

2030 Districts Network of
Detroit - Ann Arbor

State of Michigan
Codes/Policies

Utility Companies
CE ZNE Pilot

Professional Partners

Community Partners

Developers/Building Owners

Collaboration
19 established districts and growing
GR2030 ENERGY ASSISTANCE PROGRAM

The Grand Rapids 2030 District is providing a unique opportunity for small business, non-profits, houses of worship, multi-family & educational institutions to lower their monthly utility costs.

APPLY NOW!

This program will provide a **FREE** building audit to uncover systems and/or processes that are increasing your energy bills. A team of experts will work with you to develop a strategic plan and connect you with resources that will increase the profit from energy efficiency upgrades.

**Benefits for qualified businesses include:**

- **FREE** energy baseline/energy benchmark of your property
- **FREE** customized building audit and financial analysis
- Energy savings through profitable upgrades and property value increase from lower operating costs.
- Show leadership with public acknowledgement of your participation in pilot program
- Access to special incentives that can drastically reduce the cost of new equipment.

Apply at [www.2030districts.org/grandrapids](http://www.2030districts.org/grandrapids) to be considered for this program. A limited number of buildings will be accepted based on available funding.

This program is supported by the U.S. Department of Energy.
Program Overview
Program Funding – 2008

**Michigan Public Act 295**

- *Energy Optimization Surcharge* added to all ratepayers’ bills to:
  - Help customers save energy, manage costs
  - Help reduce generation, offset new capacity

- Surcharge is rebated through the program

- Cash incentives:
  - Target specific energy-saving equipment and technologies
  - Encourage energy-efficient building and systems design
Program Funding – 2017

• PA 341 & 342 became effective April 2017
  o Increases the state’s renewable energy portfolio
  o Increases energy efficiency expectations
    ▪ 35% of electric needs to be met by EE & renewables
  o Drives changes in our Program
Since 2009:
$186 million incentives paid.
53,000 projects completed.
Energy savings = 5 million tons of CO$_2$ not being pumped into the atmosphere

*Household data based on estimates from the U.S. Energy Information Administration.  
*CO$_2$ calculations based on U.S. Environmental Protection Agency guidelines.
Program Overview

Deadlines

The Program Year ends Nov. 30

- No Reservations will be extended beyond Nov. 30
- Final Applications must be submitted within 60 days of project completion date or
- Nov. 30, whichever comes first
- Incomplete Final Applications may be subject to cancellation
- Any Application submitted after Nov. 30 may be cancelled

Watch the gauges!
Three Types of Incentives

**Prescriptive**
- Defined incentives:
  - Per item/kWh/Mcf energy saved

**Custom**
- Projects don’t fit a prescriptive approach
  - Calculated incentives
  - Per-kWh/Mcf of energy saved

**New Construction Major Renovation**
- New facilities/renovations of facilities
- Change of use or Adding load
  - Systems Approach
  - LEED Whole Building
How it works

Pre-determined measures from the Michigan Energy Measures Database (MEMD) with specific energy savings and cash incentives in the categories of electric and gas:

**ELECTRIC**
- Lighting
- HVAC
- Miscellaneous
- Process

**NATURAL GAS**
- Hot Water & Laundry
- HVAC
- Insulation
- Process
- Boiler/Furnace Tune-up
How it works

• Capital investment projects that are **NOT** eligible for a Prescriptive incentive may qualify
• Custom incentives are determined on a case-by-case basis

- Require a reservation application
- Before any work begins pre-inspection and approval is needed
- Paid per-kWh or per-Mcf saved
  - Examples include:
    - Heat recovery
    - Lighting retrofits not 1-for-1
How it works

Ideal for new facilities or major renovations of existing facilities that have a change of use or adding load

**Systems Approach**
- Smaller/less complex projects (< 20,000 sq. ft.) without modeling
- Projects that are further along in the design process

**LEED Whole Building**
- A stand alone application
- Incentives paid on the savings validated by GBCI*
**LEED Whole Building**

<table>
<thead>
<tr>
<th>LEED Level</th>
<th>Incentive</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Electric</td>
</tr>
<tr>
<td>Certified/Sliver</td>
<td>$0.04/kWh</td>
</tr>
<tr>
<td>Gold</td>
<td>$0.05/kWh</td>
</tr>
<tr>
<td>Platinum</td>
<td>$0.06/kWh</td>
</tr>
</tbody>
</table>

*Green Building Certification Institute*
Catalog & Applications
Catalog

• Prescriptive, Custom, & New Construction specifications
• Agriculture program specifications
• LEED Design Review & Assistance specifications
Applications

• Prescriptive, Custom & New Construction
  measure worksheets
• Agriculture Application
• LEED Design Review & Assistance Application

Use it as a:
• Reservation Application
• Final Application
LEED Design Review & Assistance Application

• Now a stand alone application
Don’t forget these:

- Customer Information Sheet
- Invoices; manufacturer’s spec sheets  
  o Include reference numbers
- 3rd-party payment authorization (if applicable)
- Prescriptive/Custom Worksheets
- **Signed** Final Application Agreement
- DLC Product Codes (for lighting projects, if applicable)
The Process

- Reservation Application
- Application Review
- Reservation Letter Issued
- Install Measures
- Final Application & Review
- Payment

Application to Letter: 4-6 weeks
Letter to Final: ≤ 90 days
Final to Check: 4-6 weeks
Thank You!
Consumers Energy                Business Energy
Efficiency Programs
2019 Program Overview
No Project Left Behind

- Prescriptive
- Custom
Contractor Versus Trade Ally
Becoming an Energy Hero
The Power of Non-Energy Impacts

Create appeal and visual interest to products

Enhance customer experience

Increase worker/operational productivity

Safe parking lots

Comfort in working environment
Winning Essentials:
“The How To”
Program Effective Dates

December 1

November 30
Customer Opportunities
Consumers Energy Service Territory

Yellow: Electric
Green: Combination
Blue: Natural Gas
Project Eligibility for Incentives
Projects That Do Not Qualify
### Incentive Caps and Limits

<table>
<thead>
<tr>
<th>Facility Incentives</th>
<th>Cap per Program Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prescriptive</td>
<td>75% of the total project cost</td>
</tr>
<tr>
<td>Custom</td>
<td>50% of the total project cost</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Customer Limits</th>
<th>Cap per Program Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Large Natural Gas</td>
<td>$1M across all facilities per customer</td>
</tr>
<tr>
<td>Large Electric</td>
<td>$2M across all facilities per customer</td>
</tr>
</tbody>
</table>
Tools and Resources
Commitment to Innovation
Commitment to Unique Markets
Buy Michigan

• Earn a 30 percent bonus when you install Michigan-made energy efficiency products
• Over 1,000 bonuses have been paid out to customers
• Find a manufacturer at: ConsumersEnergy.com/buymichigan
Your Energy Efficiency Journey Begins

Contact: Mark A. Bates  
Business Energy Advisor  
517-228-8800  
Mark.bates@cmsenergy.com  
877-607-0737

ConsumersEnergy.com/startswithaving
Renae Hesselink
Nichols
Nichols
LEED and Energy Reduction Journey
Nichols - Why Sustainability & LEED?

• One-third of the credits for certification can be obtained from a Green Cleaning Policy and Program

• Best Practice Management

• IAQ for our Associates, Cleaning Contractor Associates and Visitors

• Customer Demand

• Community Leader

• Industry Leader

• Walk the Talk
Leadership in Energy & Environmental Design
What is LEED?
Leadership in Energy and Environmental Design

A leading-edge system for certifying the greenest performing buildings in the world

What is LEED?

LEED Version 4.0

- Location and Transportation
- Sustainable Sites
- Water Efficiency
- Energy and Atmosphere
- Materials and Resources
- Indoor Environmental Quality
USGBC has four levels of LEED:
IMPACTS OF
U.S. BUILDINGS
ON RESOURCES

40% primary energy use*

72% electricity consumption*

39% CO₂ emissions*

13.6% potable water consumption**

Sources:
Global CO$_2$ Emissions by Sector

#1. Buildings
#2. Transportation
#3. Industry

Green Buildings Can Reduce...

1391 Judson Road

- Built in 1995 as a warehouse for cross-docking
- 46 dock doors (front and back) – now 22
- 104,000 square feet, 12,000 is now office space
- Regional Distributor
- Achieved LEED EB O+M June 2010, Recertified LEED EBOM V4.0 October 2015
Results and Benefits

From our first LEED EBOM Gold Certification 2010:

- Findings regarding our 3 water systems that support the property
- Energy Star Score of 79, Energy Reduction of 34%
- Waste Reduction
  - Reduced net waste hauling fees by 97%
  - net income gained
- Water Use Reduction 41%
LEED EBOM is a continuous improvement process: since 2010 we have.....

- Reduced energy consumption, 7% in 2014 and winner in the Michigan Battle of the Buildings and 2nd place in 2015 with a 10.84% decrease
- Energy Star score 89
- Demand Ventilation on HVAC system – this automated fresh air coming into the warehouse and offices, was a manual process
- Purchased Renewable Energy Credits
- Composting – started in June 2012 – reducing landfill by approximately 12 yards/annually (4200 pounds)
- 87% waste diversion from landfill
NICHOLS
Norton Shores, Michigan

HAS FULFILLED THE REQUIREMENTS OF THE FOLLOWING LEVEL OF CERTIFICATION ESTABLISHED BY THE U.S. GREEN BUILDING COUNCIL IN THE LEED GREEN BUILDING RATING SYSTEM™ AND VERIFIED BY THE GREEN BUILDING CERTIFICATION INSTITUTE.

LEED FOR EXISTING BUILDINGS: OPERATIONS AND MAINTENANCE

GOLD

October 2015

S. Richard Perruzzi, President & CEO
Mahesh Ramangar, President
Nichols Leed O+M Scorecard

Nichols v4 O+M Recertification

**LEED v4 O+M: WDC**

**Attestation**

12012013

**Location and Transportation**

- **Alternative Transportation**

**Sustainable Sites**

- **Site Vehicular Policy**
- **Site Development: Protect or Restore Riparian**
- **Reclaimed Water**
- **Identify Human Behavior**
- **Light Fixtures Reduction**
- **Site Stormwater**
- **Site Improvement Plan**

**Water Efficiency**

- **Indoor Water Use Reduction**
- **Innovative Use Reduction**
- **Indoor Water Use Reduction**
- **Outdoor Water Use Reduction**
- **Water Meters**

**Energy and Atmosphere**

- **Energy Efficiency Baseline Practice**
- **Minimum Energy Performance**
- ** Existing Energy Performance**
- **Existing Buildings Commissioning: Analyze**
- **Existing Building Commissioning: Implementation**
- **Ongoing Commissioning**
- **Advanced Energy Monitoring**
- **Demand Response**
- **Peak Energy and Carbon Intensity**

**Materials and Resources**

- **Ongoing Purchasing and Waste Policy**
- **Facility Maintenance and Renovation Policy**
- **Purchasing: Ongoing**
- **Purchasing: Leasing**
- **Purchasing: Fixed Maintenance and Renovation**
- **Innovative Waste Synergies: Ongoing**

**Adaptive Environmental Quality**

- **Maximum P3 Performance**
- **Environmental Tobacco Smoke Control**
- **Smoking Policy**
- **P3 Wage: Ongoing**
- **P3 Wage: Implementation**
- **ProjectEnergy: Building Performance Management**
- **ProjectEnergy: Building Performance Management: Implementation**

**Innovation**

- **LEED Accredited Professional**

**Regional Priority Credits**

- **Site Development: Protect or Restore Riparian**
- **Passive Solar**
- **Lighting Controls**
- **Lighting: Ongoing**
- **Renewable Energy and Carbon Offset**
- **Total Water Use: Ongoing**
- **Total Water Use: Ongoing**

**TOTAL**

68 of 110

- **65-69 Points**
- **70-79 Points**
- **80+ Points**

| Energy Efficiency Best Mgmt Practices | Y |
| Minimum Energy Performance | Y |
| Optimize Energy Performance | 16 / 20 |
| Building-Level Energy Metering | Y |
| Fundamental Refrigerant Mgmt | Y |
| Existing Building Commissioning - Analysis | 2 / 2 |
| Existing Building Commissioning - Implementation | 2 / 2 |
| Ongoing Commissioning | 0 / 3 |
| Advanced Energy Metering | 0 / 2 |
| Demand Response | 0 / 3 |
| Renewable Energy and Carbon Offsets | 4 / 5 |
| Enhanced Refrigerant Mgmt | 1 / 1 |
Energy Upgrade Summary

2007 – Distribution Center Lighting Upgrade, metal halide to florescent – 6 lamp fixtures

2014 – Demand Ventilation – warehouse
• Project cost $7224.87, Incentive received $9753.30

2016 – Office Lighting Upgrade from 4 lamp florescent to LED & dock lighting at 22 dock doors to LED
• Project Cost apx $25,000, Incentive appx $800

2017 – sensors on irrigation system
If Nichols was using the same amount of energy today in the Norton Shores facility that we were using in 2007 at today’s prices of electric and natural gas, we would be spending $30,000 annually more than we are.

So we are cost avoiding $30,000 annually just by saving energy!
## Energy Star Metrics Summary

<table>
<thead>
<tr>
<th>Metric</th>
<th>Dec 2007 (Energy Baseline)</th>
<th>Jan 2019 (Energy Current)</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENERGY STAR Score (1-100)</td>
<td>61</td>
<td>76</td>
<td>15.00 (24.60%)</td>
</tr>
<tr>
<td>Source EUI (kBlu/ft²)</td>
<td>90.9</td>
<td>65.6</td>
<td>-25.30 (-27.80%)</td>
</tr>
<tr>
<td>Site EUI (kBlu/ft²)</td>
<td>43.6</td>
<td>39.9</td>
<td>-3.70 (-8.50%)</td>
</tr>
<tr>
<td>Energy Cost ($)</td>
<td>99,224.66</td>
<td>81,771.92</td>
<td>-17452.74 (-17.60%)</td>
</tr>
<tr>
<td>Total GHG Emissions Intensity (kgCO2e/ft²)</td>
<td>5.3</td>
<td>3.7</td>
<td>-1.60 (-30.20%)</td>
</tr>
<tr>
<td>Date</td>
<td>kWh Used</td>
<td>Date</td>
<td>kWh Used</td>
</tr>
<tr>
<td>------------</td>
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<td>----------</td>
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<tr>
<td>8/14/2006</td>
<td>93400</td>
<td>2/15/2018</td>
<td>42200</td>
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<td>1/12/2007</td>
<td>68600</td>
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<td>6/12/2007</td>
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<tr>
<td>11/7/2007</td>
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</tr>
</tbody>
</table>
Energy Star Certification

In recognition of superior energy performance, the U.S. Environmental Protection Agency awards the ENERGY STAR® to

Nichols

Buildings that earn EPA's ENERGY STAR use 35 percent less energy and generate 35 percent fewer greenhouse gas emissions than similar buildings across the nation.

2018
What is Next?

- March 2019 – completed a distribution center upgrade with sensors @ the fixture
  - Project Cost $40,000, expected incentive just under $7000
- Data in to ARC
- LEED O +M recert by October 2020
Green CREDENTIALS

WAXIE and NICHOLS earn LEED certification – and enhance green credibility with customers
Michigan Pollution Prevention Partnership (MBP3)

- We have been a member and recognized for two years (2015, 2016, 2018)
- We submit an annual report of our Environmental performance results
- This keeps us in good-standing with customers
ISSA’s Distributor Efficiency Analytics & Learning (DEAL) program. DEAL is a comprehensive program that uses ‘big data’ and educational sessions to help association members operate their buildings and vehicles more efficiently, reduce waste, conserve natural resources, and save money.

Collectively, ISSA’s members operate more than 5,000 buildings and 25,000 delivery trucks. By implementing more sustainable operating procedures, member companies could save an estimated US$21 million annually.
Thank you!

Renae Hesselink, LEED AP BD+C
Vice President of Sustainability
Nichols
renae.Hesselink@enichols.com
(231) 799-3517
Thank You!

WWW.USGBCWWM.ORG