



GRAND RAPIDS

2030

DISTRICT



IT PAYS TO BUILD BEYOND CODE

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



Cheri Holmon

USGBC WEST MICHIGAN



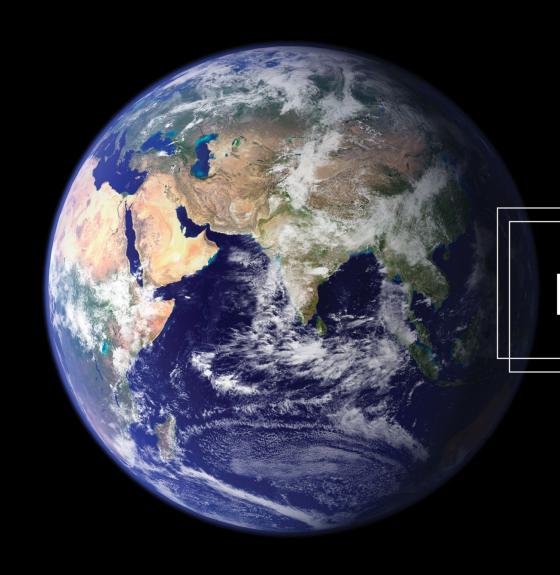
Melcowe!





LEED is an internationally recognized mark of excellence for buildings, communities and professionals that are transforming the building industry.





LEED IS GLOBAL

2.4 MILLION + SQUARE FEET DAILY

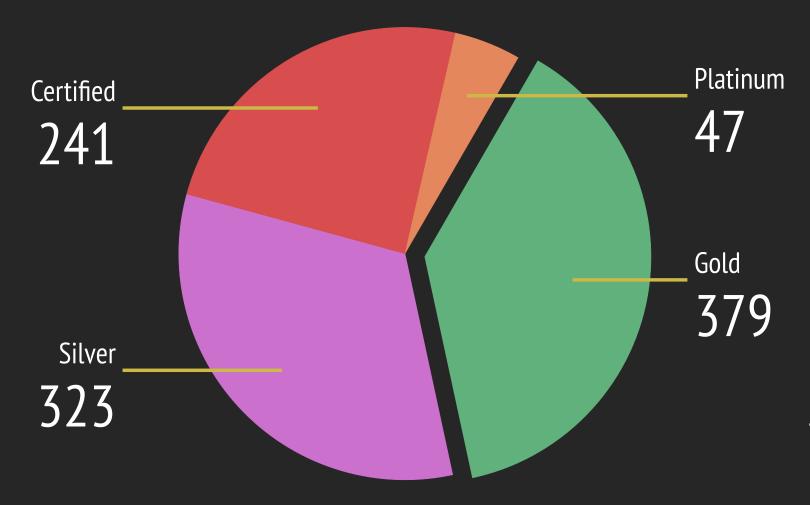




LEED shows the elements that go into a high-performance and sustainable built environment.

- 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



Total Buildings:

896



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





square footage 191,979,708

competing in 2018



2017 Battle of the Buildings







46 BUILDINGS

REDUCED THEIR ENERGY MORE THAN

10%



11 BUILDINGS

REDUCED THEIR ENERGY MORE THAN

20%



2017

Overall Biggest Loser

34.37%



2017 ENERGY SAVINGS

Competitor's combined total:

59,233

metric tons of CO2e avoided



COMPETITORS AVOIDED

87.6 Million

IN UTILITY COSTS IN 2017









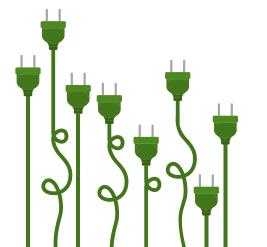
HEAR STORIES & DISCOVER NEW IDEAS WITH:

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

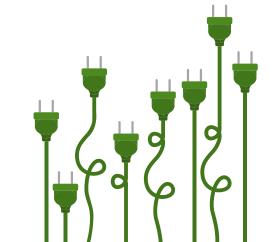
WITH LUNCH FEATURING

MAJORA CARTER

APRIL 25, 2019



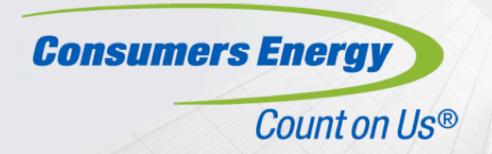
WWW.MICHIGANBATTLEOFTHEBUILDINGS.ORG



& MORE!



Visionary Partners







BERGMANN Kilowatt Combatant



Happy Hour Sponsor



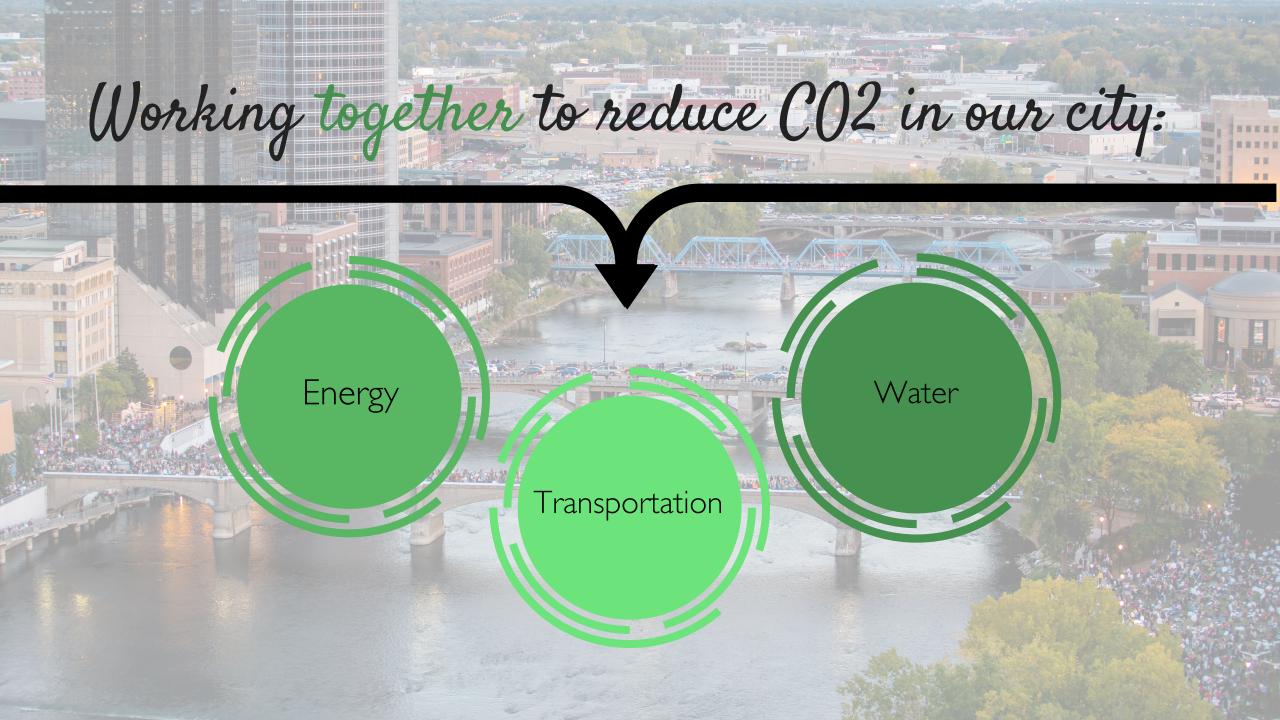
Parking Sponsor



Battle Supporter



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.



collaboration

2030 DISTRICT

City of Grand Rapids Zero Cities Project utility Companies CE ZNE Pilot

Network of 2030 Districts Detroit - Ann Arbor

Professional Partners

State of Michigan codes/Policies

Community
Partners

2030 DISTRICTS Developers/Building Owners















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.



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 to be considered for this for this program. A limited number of buildings will be accepted based on available funding.





Mu Ross

DTEENERGY

ENERGY EFFICIENCY PROGRAM FOR BUSINESS



Program Overview

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
- o Cash incentives:
 - Target specific energy-saving equipment and technologies
 - Encourage energy-efficient building and systems design

Program Overview



Program Funding – 2017

- PA 341 & 342 became effective April 2017
 - o Increases the state's renewable energy portfolio
 - Increases energy efficiency expectations
 - 35% of electric needs to be met by EE & renewables
 - Drives changes in our Program



Impact of our Program

Since 2009:

\$186 million incentives paid. **53,000** projects completed.





Impact of our Program

Since 2009 - savings:

- 7,500 GWh in electricity
- 20 million Mcf in natural gas
- \$500 million in total energy costs



Energy savings = 5 million tons of CO₂ not being pumped into the atmosphere

^{*}Household data based on estimates from the U.S. Energy Information Administration.

^{*}CO₂ calculations based on U.S. Environmental Protection Agency guidelines.



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!

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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

Prescriptive



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

Custom



- 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



New Construction Major Renovation

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*



How it works



LEED/
New Construction

LEED Whole Building

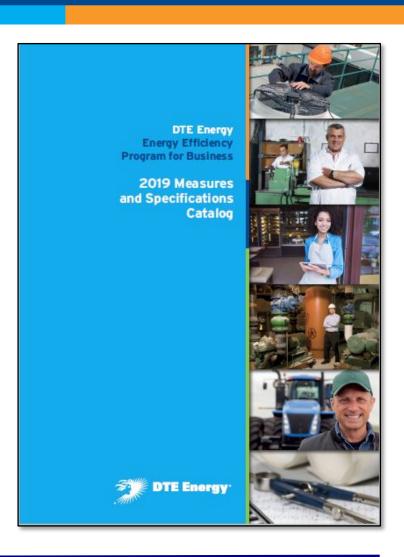
I EED Lovel	Incentive								
LEED Level	Electric	Gas							
Certified/Sliver	\$0.04/kWh	\$3/Mcf							
Gold	\$0.05/kWh	\$3.50/Mcf							
Platinum	\$0.06/kWh	\$4/Mcf							





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



2. Complete all relevant worksheets for your project.

or Email to: saveenergy@dteenergy.com

Contact us by phone at 313.664.1900 #3

or Fax to: 313,664,1950

constantee that funds will be available

3. Submit your Application electronically by clicking "Email Application" on Page 4.

P.O. Box 11289 Detroit, MI 48211

DTE Energy Efficiency Program for Business

* A Reservation Application may not be required for your project, but is strongly encouraged to reserve funds. Submission of a Reservation Application does not



LEED Design Review & Assistance Application

Now a stand alone application



The DTE Energy Efficiency Program for Business offers businesses like yours incentives for pursuing Leadership in Energy and Environmental Design (LEED) cerification on your new construction project. Just follow the simple steps in this application to begin the process. We look forward to working with you.

To submit your application*

- 1. Complete the Customer Information (Page 3).
- a. Ensure that you have completed the Customer information (Page 3).
- b. Ensure that you have completed the LEED Contact Information (Page 4).

Detroit, MI 48211

- 2. Complete all relevant worksheets for your project (Pages 5-6).
- 3. Submit your Application electronically by clicking "Email Application" (Page 6). or Fax to: 313.664.1950
- or Email to: saveenergy@dteenergy.com

or Print and mail to: DTE Energy Efficiency Program for Business P.O. Box 11289

Contact us by phone at 866.796.0512 (Option 3)

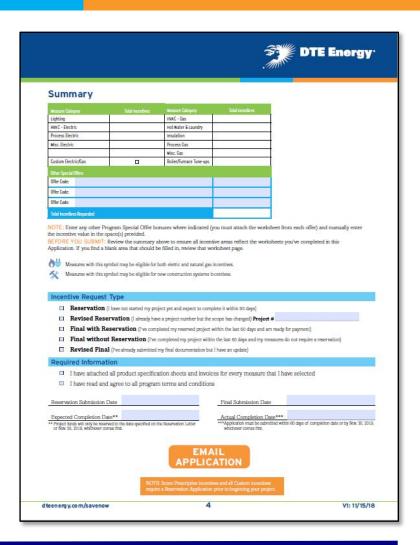
* A Reservation Application may not be required for your project, but is strongly encouraged to reserve funds. Submission of a Reservation Application



Be Complete

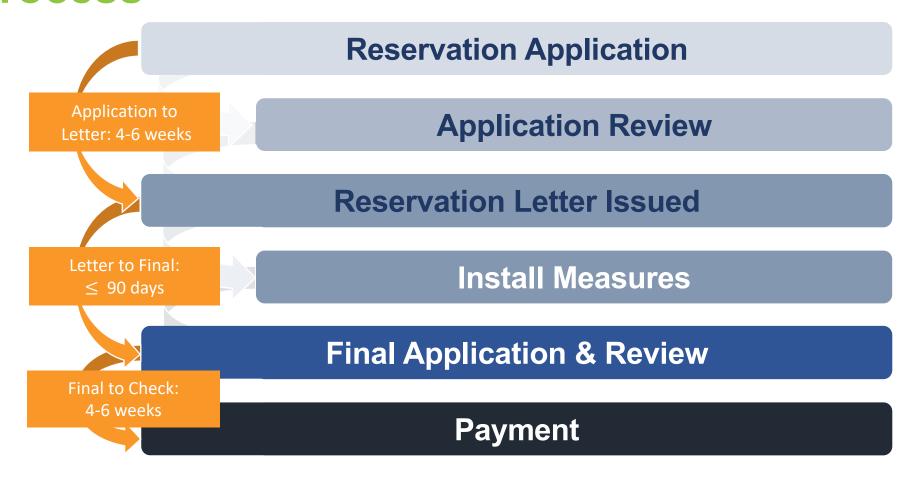
Don't forget these:

- Customer Information Sheet
- Invoices; manufacturer's spec sheets
 - 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



ENERGY EFFICIENCY PROGRAM FOR BUSINESS



Thank You!



Mark Bates

CONSUMERS ENERGY

Consumers Energy

Business Energy Efficiency Programs

2019 Program Overview

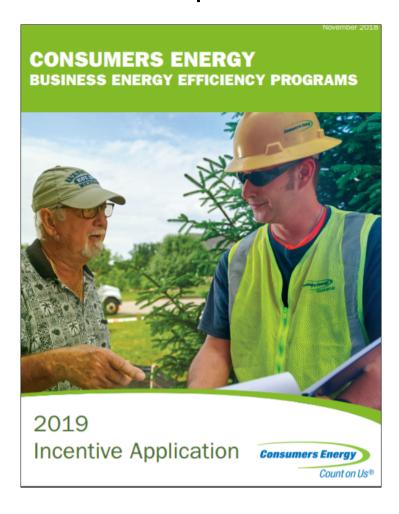


https://www.youtube.com/watch?v=cWLGl D-BYo

CONSUMERS ENERGY & YOUR BUSINESS

No Project Left Behind

Prescriptive



Custom



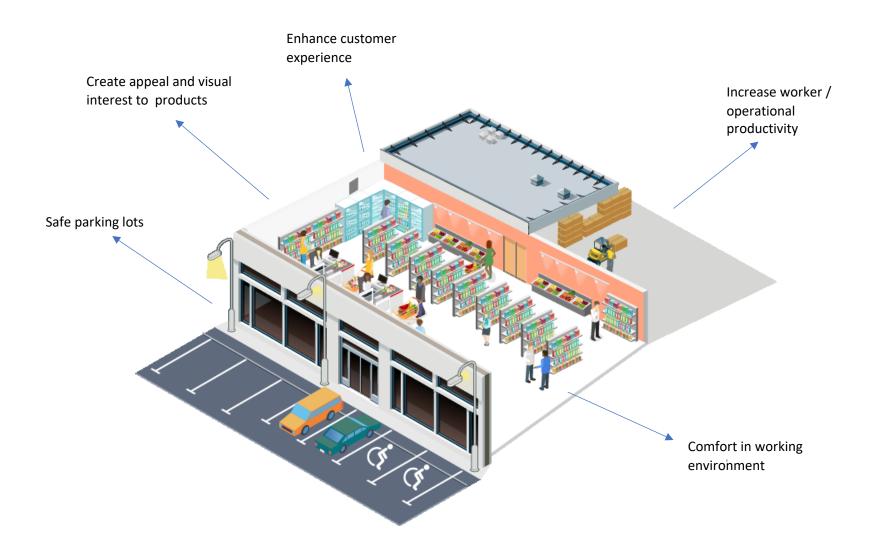
Contractor Versus Trade Ally



Becoming an Energy Hero



The Power of Non-Energy Impacts



Winning Essentials: "The How To"



Program Effective Dates



Customer Opportunities

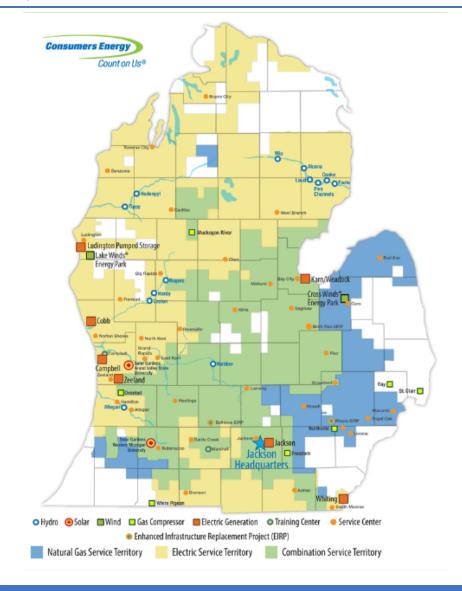


Consumers Energy Service Territory

Yellow: Electric

Green: Combination

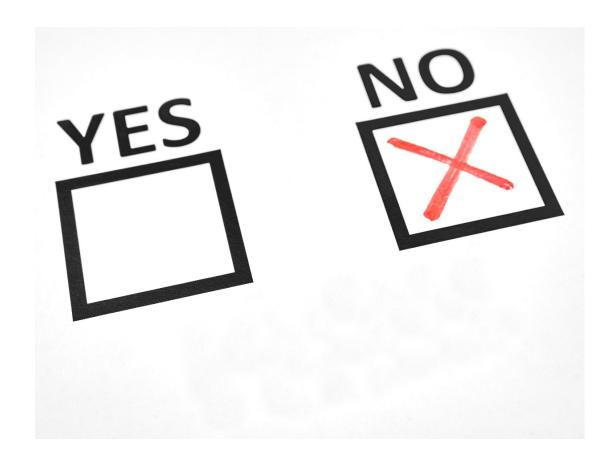
Blue: Natural Gas



Project Eligibility for Incentives



Projects That Do Not Qualify



Incentive Caps and Limits

Facility Incentives	Cap per Program Year
Prescriptive	75% of the total project cost
Custom	50% of the total project cost
Customer Limits	Cap per Program Year
Large Natural Gas	\$1M across all facilities per customer
Large Electric	\$2M across all facilities per customer

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

BUY LOCAL AND SAVE



Choose Eligible Energy Saving Upgrades

The Buy Michigan program is available to your business if you take part in our Large Business Rebate Program. If you'd like to participate, plan to make your upgrades using equipment made in Michigan.

Claim Your Buy Michigan Bonus

Fill out the rebate application with the amount you spent on Michigan-made equipment. Please also include the affidavits your manufacturers will supply to you, confirming that the equipment was made right here in Michigan. We'll include the 30% bonus in your rebate check.



Your Energy Efficiency Journey Begins

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

ConsumersEnergy.com/startsaving





Renae Hesselink

NICHOLS



Nichols LEED and Energy Reduction Journey



YOU FIRST





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

© U.S. Green Building Council, 2008



YOU FIRST

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











IMPACTS OF U.S. BUILDINGS ON RESOURCES

40% primary energy use*

72% electricity consumption*

39% CO₂ emissions*

13.6% potable water consumption**



Global CO₂ Emissions by Sector

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



CO₂ EMISSIONS WATER USE SOLID WASTE



24%*-50%**

33%***-39%**

40%**

70%**

Green Buildings Can Reduce...

* Turner, C. & Frankel, M. (2008). Energy performance of LEED for New Construction buildings: Final report.

** Kats, G. (2003). The Costs and Financial Benefits of Green Building: A Report to California's Sustainable Building Task Force.

*** GSA Public Buildings Service (2008). Assessing green building performance: A post occupancy evaluation of 12 GSA buildings.



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





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
 - 2009/2010 Michigan Recycling Coalition Certified Recycler recognition
- Water Use Reduction 41%



Results and Benefits - 2nd Time Around

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



YOU FIRST



Nichols LEED O+M V4 Scorecard - Final Gold.pdf - Adobe Acrobat Reader DC

File Edit View Window Help

Home Tools

Nichols LEED O+M... ×



Nicho



















Nichols v4 O+M Recertif LEED v4 O+M: WDC Attempted: 65, Denied: 5, Pending: 0, Awarded: 60 of 3		
	40515	
Alternative Transportation	4 OF 15	
SUSTAINABLE SITES	4 OF 10	
Site Mgmt Policy	Y	
Site Development - Protect or Restore Habitat	0/2	
Rainwater Mgmt	3/3	
Heat Island Reduction	0/2	
Light Pollution Reduction	1/1	
Site Mgmt	0/1	
Site Improvement Plan	0/1	
-		
WATER EFFICIENCY	8 OF 12	
Indoor Water Use Reduction	Y	
Indoor Water Use Reduction	5/5	
Building-Level Water Metering	Y	
Outdoor Water Use Reduction	2/2	
Cooling Tower Water Use	0/3	
Water Metering	1/2	
ENERGY AND ATMOSPHERE	25 OF 38	
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	
MATERIALS AND RESOURCES	4 OF 8	
Ongoing Purchasing and Waste Policy	4 OF 8	
Facility Maintenance and Renovation Policy	Y	
Purchasing - Ongoing	0/1	
Purchasing - Ongoing Purchasing - Lamps	1/1	
Purchasing - Facility Maintenance and Renovation	1/2	
Solid Waste Mgmt - Ongoing	2/2	
Solid Waste Mgmt - Facility Maintenance and Renovation	0/2	
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Project ID: 1000039304 Status Certified Certification level: Gold Certification date: 10/12/2015

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Ν	linimum Energy Performance	Υ
C	ptimize Energy Performance	16 / 20
В	uilding-Level Energy Metering	Υ
F	undamental Refrigerant Mgmt	Υ
E	xisting Building Commissioning - Analysis	2/2
Е	xisting Building Commissioning - Implementation	2/2
C	Ingoing Commissioning	0/3
Д	dvanced Energy Metering	0/2
D	emand Response	0/3
F	tenewable Energy and Carbon Offsets	4/5
E	nhanced 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



Interesting Fact

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

Metrics Summary						
Metric /	Dec 2007 (Energy / Baseline)	Jan 2019 (Energy / Current)	Change 2			
ENERGY STAR Score (1-100)	61	76	15.00 (24.60%)			
Source EUI (kBtu/ft²)	90.9	65.6	-25.30 (-27.80%)			
Site EUI (kBtu/ft²)	43.6	39.9	-3.70 (-8.50%)			
Energy Cost (\$)	99,224.66	81,771.92	-17452.74 (-17.60%)			
Total GHG Emissions Intensity (kgCO2e/ft²)	5.3	3.7	-1.60 (-30.20%)			



Electric kWh Used

8/14/2006	93400	2/15/2018	42200
9/11/2006	71000	3/18/2018	42400
10/12/2006	79400	4/17/2018	42000
11/10/2006	76200	5/16/2018	34000
12/12/2006	80600	6/17/2018	35200
1/12/2007	68600	7/17/2018	36400
2/12/2007	101400	8/15/2018	35000
3/13/2007	85200	9/16/2018	35200
4/12/2007	81200	10/14/2018	31600
5/11/2007	71200	11/13/2018	33400
6/12/2007	75873	12/13/2018	41400
7/12/2007	80200	1/15/2019	42400
8/12/2007	78200	2/17/2019	47400
9/12/2007	67400		
10/11/2007	47400		
11/7/2007	43400		



Energy Star Certification



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

Nichols

2018

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.

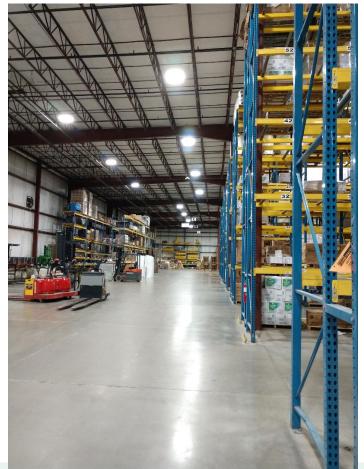
What is Next?



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



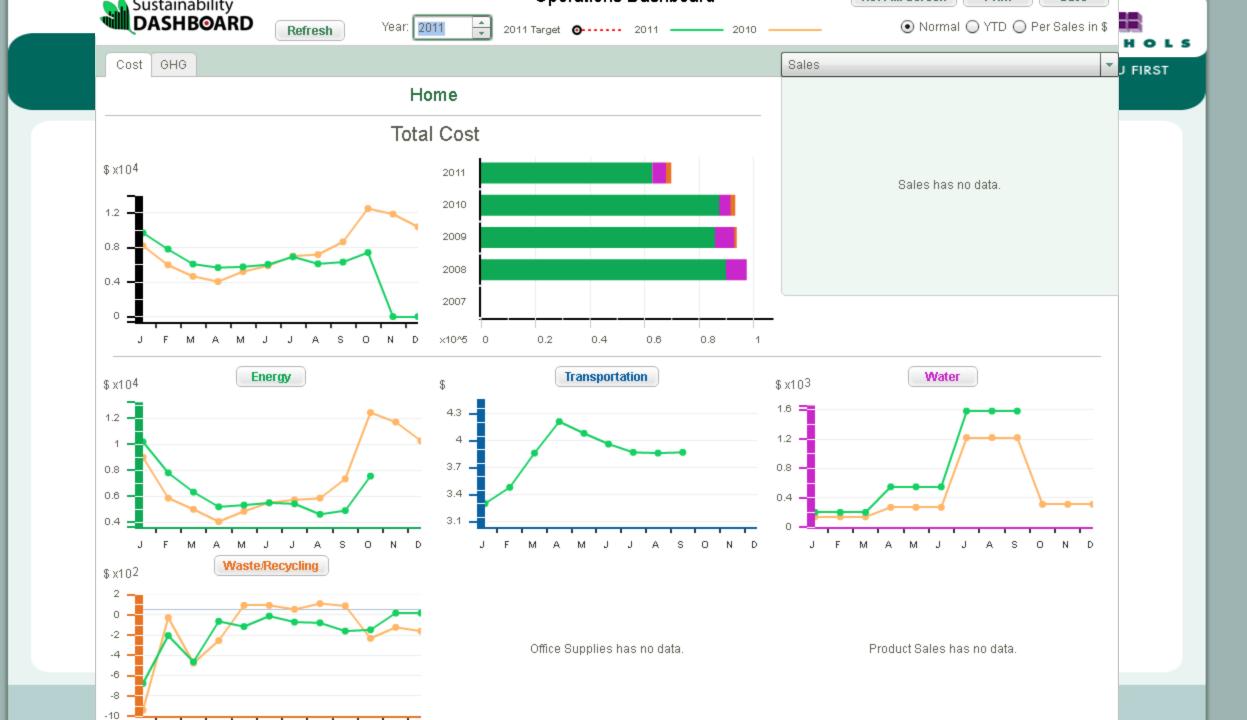


CHARL CHOOLINGS

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







International Sanitary Supply Association

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.USGBCWM.ORG